

# **AutoCAD® Civil 3D® 2014**

## **Australia & New Zealand**

### **Country Content**



| <b>Revision History</b> | <b>Status</b>            |
|-------------------------|--------------------------|
| 27 Feb '11              | Draft                    |
| Feb 13                  | Updated for 2014 Release |
|                         |                          |
|                         |                          |

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# 1 Overview

## 1.1 Introduction

This document is an overview of the Civil 3D 2014 Country Kit for Australia and New Zealand.

The DWT's are layer based to allow easy customization to specific standards easily, using a minimum number of layers to achieve this. The general styles are based from user feedback and suggestions which is how the Country Kit will continue to grow.

There are 3 Templates with the installation:

- *\_AutoCAD Civil3D 2014 ANZ Design\_ANZ.dwt*
- *\_AutoCAD Civil3D 2014 ANZ Survey Alpha Codes\_ANZ.dwt*
- *\_AutoCAD Civil3D 2014 ANZ Survey Numeric Codes\_ANZ.dwt*

The reasons for separating the Survey Templates from the general Design Template is to keep the number of layers down.

We were advised that there should be no more than 250 layers in the generic Design Template and managed to achieve this by going back to basics and reworking the entire DWT's.

## 1.2 Whats New 2014 Release

### Tool palette

- *Websites and Social Media Sites added*
- *Video slides changed to reflect 2014 release*

### Section Views

- *Staggering changed to both sides in all ANZ Band Sets*

### Title Blocks

- *North Point updated*
- *Map Projection field added*
- *VBA now .net*
- *Standard font is now Isocp.shx*

### Parcels

- *Labels for lines and shading styles created*
- *C-LABELS\_Parcels\_Seg layer added*
- *ANZ\_Lot Number & Area - Num Only Label added*
- *Curve Parcel Expressions added for labels*
- *ANZ\_Segments Table – Rad Table style added*
- *ANZ\_Chord Arc Rad table Style added*
- *ANZ\_Bearing & Distance table style added*
- *ANZ\_Area Simple table style added*
- *ANZ\_Area is now ANZ\_Area Detailed table style*

### Pipe Networks

- *Sump depth added to pit rules*

## 2 Fonts and Text Styles

The following 3 fonts are used for the styles. Changing the definition will alter the font in all styles in the template.

| <b>Text Style</b>      | <b>Description</b>                                   | <b>Font</b> |
|------------------------|--|-------------|
| Civil 3D Standard Text | Used for all styles                                  | ISOCP       |
| Civil 3D Heading Text  | Used for Table Headings<br>and Profile Band Headings | ISOCP       |
| Civil 3D Title Text    | Used for all Titles                                  | ISOCP       |

### 3 Layers

Design Template: \_AutoCAD Civil3D 2014 ANZ Design\_ANZ.dwt

| <i>Layer Name</i>                    | <i>Colour</i> | <i>Linetype</i> |
|--------------------------------------|---------------|-----------------|
| 0                                    | 7             | Continuous      |
| 0_constructionTriangle               | 8             | Continuous      |
| 0_island                             | 2             | Continuous      |
| 0_islandOffset                       | 2             | Continuous      |
| 0_markings                           | 253           | Continuous      |
| 0_trafficSigns                       | 1             | Continuous      |
| BORDER                               | 1             | Continuous      |
| C_POINTS_2D-BB-(Bottom of Bank)-PT   | 1             | Continuous      |
| C_POINTS_2D-BB-(Bottom of Bank)-TXT  | 1             | Continuous      |
| C_POINTS_2D-BK-(Back of Kerb)-PT     | 1             | Continuous      |
| C_POINTS_2D-BK-(Back of Kerb)-TXT    | 1             | Continuous      |
| C_POINTS_2D-CL-(Centreline)-PT       | 1             | Continuous      |
| C_POINTS_2D-CL-(Centreline)-TXT      | 1             | Continuous      |
| C_POINTS_2D-EB-(Electricity Box)-PT  | 1             | Continuous      |
| C_POINTS_2D-EB-(Electricity Box)-TXT | 1             | Continuous      |
| C_POINTS_2D-TB-(Top of Bank)-PT      | 1             | Continuous      |
| C_POINTS_2D-TB-(Top of Bank)-TXT     | 1             | Continuous      |
| C_POINTS_2D-TK-(Top Kerb)-PT         | 1             | Continuous      |
| C_POINTS_2D-TK-(Top Kerb)-TXT        | 1             | Continuous      |
| C_POINTS_3D-PT                       | 1             | Continuous      |
| C_POINTS_3D-TXT                      | 1             | Continuous      |
| C-ALIGNMENT_Design                   | 130           | Continuous      |
| C-ALIGNMENT_Pipe CL                  | 8             | Continuous      |
| C-ALIGNMENT_Plotting_Kerb>Returns    | 52            | Continuous      |
| C-ALIGNMENT_Plotting_Main Strings    | 93            | CENTER          |
| C-ALIGNMENT_Plotting_Offset Strings  | 130           | Continuous      |
| C-ALIGNMENTS                         | 7             | Continuous      |
| C-ASSEMBLIES                         | 7             | Continuous      |
| C-ASSEMBLIES_Points                  | 7             | Continuous      |
| C-BUILDINGSITES                      | 7             | Continuous      |
| C-BUILDINGSITES_Building Footprint   | 2             | Continuous      |
| C-BUILDINGSITES_Building Model       | 4             | Continuous      |
| C-BUILDINGSITES_Building Utilities   | 6             | Continuous      |
| C-BUILDINGSITES_Property Lines       | 9             | Continuous      |
| C-BUILDINGSITES_Site Model           | 3             | Continuous      |
| C-CORRIDORS                          | 7             | Continuous      |

|   |     |            |
|---|-----|------------|
| C-CORRIDORS_Transparent 50                            | 7   | Continuous |
| C-CORRIDORS_Transparent 80                            | 7   | Continuous |
| C-FEATURELINES_Edge of Paved Shoulder                 | 4   | Continuous |
| C-FEATURELINES_General                                | 52  | Continuous |
| C-FEATURELINES_Grading                                | 102 | Continuous |
| C-FEATURELINES_Rd_(Top)_Crown                         | 55  | Continuous |
| C-FEATURELINES_Rd_(Top)_Daylight - (Bottom of Batter) | 2   | Continuous |
| C-FEATURELINES_Rd_(Top)_Daylight - (Top of Batter)    | 73  | Continuous |
| C-FEATURELINES_Rd_(Top)_Ditch                         | 86  | Continuous |
| C-FEATURELINES_Rd_(Top)_Edge of Bitumen               | 130 | Continuous |
| C-FEATURELINES_Rd_(Top)_Footpath                      | 1   | Continuous |
| C-FEATURELINES_Rd_(Top)_Kerb (Back of Kerb)           | 22  | Continuous |
| C-FEATURELINES_Rd_(Top)_Kerb (Invert of Kerb)         | 93  | Continuous |
| C-FEATURELINES_Rd_(Top)_Kerb (Top of Kerb)            | 130 | Continuous |
| C-FEATURELINES_Rd_Bottom of Batter (Daylight)         | 6   | Continuous |
| C-FEATURELINES_RD_Extracted From Corridor             | 132 | Continuous |
| C-FEATURELINES_Rd_STRING (from marked Point)          | 224 | Continuous |
| C-FEATURELINES_Rd_String from GENERIC LINK            | 4   | Continuous |
| C-FEATURELINES_Rd_Sub_Base                            | 44  | DASHED     |
| C-FEATURELINES_Rd_Sub_Pave1                           | 44  | DASHED     |
| C-FEATURELINES_Rd_Sub_Pave2                           | 12  | DASHED     |
| C-FEATURELINES_Rd_Sub_SubBase                         | 132 | Continuous |
| C-GRADING_CUT   | 1   | Continuous |
| C-GRADING_Fill  | 5   | Continuous |
| C-GRADING_Offset                                      | 52  | Continuous |
| C-INTERSECTIONS                                       | 7   | Continuous |
| C-LABELS  | 7   | Continuous |
| C-LABELS_Alignment_CH_and_Offset                      | 7   | Continuous |
| C-LABELS_Alignment_Chainages etc                      | 7   | Continuous |
| C-LABELS_Alignment_General                            | 7   | Continuous |
| C-LABELS_Parcels                                      | 7   | Continuous |
| C-LABELS_Pipe   | 1   | Continuous |
| C-LABELS_Points (Cogo POINTS)                         | 7   | Continuous |
| C-LABELS_Profile                                      | 3   | Continuous |
| C-LABELS_Section                                      | 7   | Continuous |
| C-LABELS_Section_Chainages                            | 54  | Continuous |
| C-LABELS_Surfaces                                     | 3   | Continuous |
| C-LABELS_Surfaces_Contour_Major                       | 1   | Continuous |
| C-LABELS_Surfaces_Contour_Minor                       | 1   | Continuous |
| C-LABELS_Surfaces_Tick_Marks                          | 4   | Continuous |
| C-LINKS_(2D and 3D) Corr_Top                          | 132 | Continuous |

|  |     |            |
|--|-----|------------|
| C-LINKS_(2D and 3D)Corr_Pave                           | 132 | Continuous |
| C-LINKS_(3D) Corr_Datum                                | 132 | DASHED     |
| C-LINKS_(3D) Corr_SubStrata_Pave2                      | 12  | DASHED     |
| C-LINKS_Corr_General                                   | 132 | Continuous |
| C-LINKS_Corr_NO CODES                                  | 132 | Continuous |
| C-LINKS_Corr_SubStrata (3D)                            | 44  | DASHED     |
| C-LINKS_Cross Section Plotting (General)               | 155 | Continuous |
| C-LINKS_Cross Section Plotting (TOP)                   | 1   | Continuous |
| C-LINKS_Subassembly                                    | 142 | Continuous |
| C-LOTS_Fill  | 74  | Continuous |
| C-LOTS_Segments  | 82  | Continuous |
| C-MARKERS  | 7   | Continuous |
| C-MARKERS_Alignment                                    | 2   | Continuous |
| C-MARKERS_Alignment (Offsets)                          | 6   | Continuous |
| C-MARKERS_Profile                                      | 7   | Continuous |
| C-MARKERS_Standard                                     | 6   | Continuous |
| C-MARKER-Subassembly                                   | 6   | Continuous |
| C-MASSHAUL   | 7   | Continuous |
| C-MASSHAUL_Free Haul hatch                             | 8   | Continuous |
| C-MASSHAUL_Free Haul Line                              | 7   | Continuous |
| C-MASSHAUL_Line  | 1   | Continuous |
| C-MASSHAUL_Overhaul Hatch                              | 1   | Continuous |
| C-MASSHAULV_Grid Major                                 | 7   | Continuous |
| C-MASSHAULV_Grid Minor                                 | 7   | Continuous |
| C-MASSHAULVIEWS_Grid at Sample Lines                   | 7   | Continuous |
| C-MASSHAULVIEWS_Linework                               | 7   | Continuous |
| C-MASSHAULVIEWS_Text                                   | 7   | Continuous |
| C-MASSHAULVIEWS_Ticks                                  | 7   | Continuous |
| C-MASSHAULVIEWS-HGP                                    | 5   | Continuous |
| C-PARCELS  | 7   | Continuous |
| C-PIPE_Interference Clash Detection                    | 7   | Continuous |
| C-PIPE-LABL  | 150 | Continuous |
| C-PIPENETWORK_(PIPE - Crossing) Profile Wall (Hatch)   | 8   | Continuous |
| C-PIPENETWORK_(PIPE - Crossing) Profile Wall (Inside)  | 8   | DASHED     |
| C-PIPENETWORK_(PIPE - Crossing) Profile Wall (Outside) | 8   | DASHED     |
| C-PIPENETWORK_(PIPE) Model 3D Solid                    | 52  | Continuous |
| C-PIPENETWORK_(PIPE) Plan Centreline                   | 8   | Continuous |
| C-PIPENETWORK_(PIPE) Plan End Line                     | 92  | Continuous |
| C-PIPENETWORK_(PIPE) Plan Hatch                        | 92  | Continuous |

|   |     |            |
|---|-----|------------|
| C-PIPENETWORK_(PIPE) Plan SERVICES EXISTING         | 8   | Continuous |
| C-PIPENETWORK_(PIPE) Plan Wall (Inside)             | 92  | Continuous |
| C-PIPENETWORK_(PIPE) Plan Wall (Outside)            | 92  | Continuous |
| C-PIPENETWORK_(PIPE) Profile Centreline             | 142 | Continuous |
| C-PIPENETWORK_(PIPE) Profile Design EGL             | 3   | Continuous |
| C-PIPENETWORK_(PIPE) Profile Design HGL             | 2   | Continuous |
| C-PIPENETWORK_(PIPE) Profile End Line               | 142 | Continuous |
| C-PIPENETWORK_(PIPE) Profile Hatch                  | 8   | Continuous |
| C-PIPENETWORK_(PIPE) Profile SERVICES CROSSING      | 8   | DASHED     |
| C-PIPENETWORK_(PIPE) Profile Wall (Inside)          | 142 | Continuous |
| C-PIPENETWORK_(PIPE) Profile Wall (Outside)         | 142 | Continuous |
| C-PIPENETWORK_(PIPE) Section Hatch                  | 52  | Continuous |
| C-PIPENETWORK_(PIPE) Section SERVICES CROSSING      | 8   | Continuous |
| C-PIPENETWORK_(PIPE) Section Wall (Inside)          | 8   | Continuous |
| C-PIPENETWORK_(PIPE) Section Wall (Outside)         | 8   | Continuous |
| C-PIPENETWORK_(PIT) Model 3D Solid                  | 52  | Continuous |
| C-PIPENETWORK_(PIT) Plan Structure                  | 22  | Continuous |
| C-PIPENETWORK_(PIT) Plan Structure Hatch            | 22  | Continuous |
| C-PIPENETWORK_(PIT) Profile Structure               | 8   | Continuous |
| C-PIPENETWORK_(PIT) Profile Structure Hatch         | 8   | Continuous |
| C-PIPENETWORK_(PIT) Profile Structure Pipe Outlines | 8   | Continuous |
| C-PIPENETWORK_(PIT) Section Structure               | 144 | Continuous |
| C-PIPENETWORK_(PIT) Section Structure Hatch         | 144 | Continuous |
| C-PIPENETWORK_(PIT) Section Structure Pipe Outlines | 8   | Continuous |
| C-PIPENETWORK-STRC_Model 3D Solid                   | 5   | Continuous |
| C-PIPENETWORK-STRC_Plan Structure                   | 150 | Continuous |
| C-PIPENETWORK-STRC_Plan Structure Hatch             | 9   | Continuous |
| C-PIPENETWORK-STRC_Profile Structure                | 150 | Continuous |
| C-PIPENETWORK-STRC_Profile Structure Hatch          | 9   | Continuous |
| C-PIPENETWORK-STRC_Profile Structure Outline        | 150 | Continuous |
| C-PIPENETWORK-STRC_Section Structure                | 150 | Continuous |
| C-PIPENETWORK-STRC_Section Structure Hatch          | 9   | Continuous |
| C-PIPENETWORK-STRC_Section Structure Outline        | 9   | Continuous |
| C-PIPES   | 7   | Continuous |
| C-POINTCLOUDS                                       | 7   | Continuous |
| C-POINTCLOUDS_Lidar_Class_Building                  | 12  | Continuous |
| C-POINTCLOUDS_Lidar_Class_Ground                    | 44  | Continuous |
| C-POINTCLOUDS_Lidar_Class_Mass Points               | 249 | Continuous |
| C-POINTCLOUDS_Lidar_Class_Vegetation (High)         | 82  | Continuous |
| C-POINTCLOUDS_Lidar_Class_Vegetation (Low)          | 62  | Continuous |
| C-POINTCLOUDS_Lidar_Class_Vegetation (Medium)       | 72  | Continuous |



|   |     |            |
|---|-----|------------|
| C-PROFILES  | 7   | Continuous |
| C-PROFILES_3D_Design                                | 84  | Continuous |
| C-PROFILES_3D_Existing                              | 84  | Continuous |
| C-PROFILES_Design (Conceptual)                      | 7   | Continuous |
| C-PROFILES_Design (plotting)                        | 1   | Continuous |
| C-PROFILES_Design (Ref Planes 1%)                   | 1   | Continuous |
| C-PROFILES_Design (Ref Planes 2%)                   | 2   | Continuous |
| C-PROFILES_Design (Ref Planes 3%)                   | 3   | Continuous |
| C-PROFILES_Design (Ref Planes 4%)                   | 4   | Continuous |
| C-PROFILES_Design (Ref Planes 5%)                   | 5   | Continuous |
| C-PROFILES_Design (Superimposed)                    | 22  | Continuous |
| C-PROFILES_FeatureLines_RD                          | 7   | Continuous |
| C-PROFILES_Hatching - General                       | 94  | Continuous |
| C-PROFILES_Hatching - Cut Solid                     | 1   | Continuous |
| C-PROFILES_Hatching - Fill Solid                    | 5   | Continuous |
| C-PROFILES_Surfaces_Additional_01                   | 132 | Continuous |
| C-PROFILES_Surfaces_Additional_02                   | 214 | Continuous |
| C-PROFILES_Surfaces_Existing                        | 84  | HIDDEN     |
| C-PROFILES_Surfaces_Rock                            | 122 | Continuous |
| C-PROFILEVIEW_Linework (vert geom bands)            | 14  | Continuous |
| C-PROFILEVIEW_Superelevation_Left Inside Lane       | 4   | Continuous |
| C-PROFILEVIEW_Superelevation_Left Inside Shoulder   | 3   | Continuous |
| C-PROFILEVIEW_Superelevation_Left Outside Lane      | 5   | Continuous |
| C-PROFILEVIEW_Superelevation_Left Outside Shoulder  | 6   | Continuous |
| C-PROFILEVIEW_Superelevation_Reference Line         | 8   | Continuous |
| C-PROFILEVIEW_Superelevation_Right Inside Lane      | 4   | Continuous |
| C-PROFILEVIEW_Superelevation_Right Inside Shoulder  | 3   | Continuous |
| C-PROFILEVIEW_Superelevation_Right Outside Lane     | 5   | Continuous |
| C-PROFILEVIEW_Superelevation_Right Outside Shoulder | 6   | Continuous |
| C-PROFILEVIEW_Text (General)                        | 3   | Continuous |
| C-PROFILEVIEW_Text (Headings)                       | 7   | Continuous |
| C-PROFILEVIEW_Text (Main Heading)                   | 4   | Continuous |
| C-PROFILEVIEW-Grid                                  | 8   | Continuous |
| C-PROFILEVIEWS                                      | 7   | Continuous |
| C-PROJECTEDOBJECTS                                  | 7   | Continuous |
| C-PROJECTEDOBJECTS_Cross Sections                   | 4   | Continuous |
| C-QTO_Hatch   | 54  | Continuous |
| C-SAMPLELINES                                       | 7   | Continuous |
| C-SECTION_Sample Lines                              | 54  | Continuous |

|  |     |            |
|--|-----|------------|
| C-SECTIONS                                     | 7   | Continuous |
| C-SECTIONS_Points                              | 7   | Continuous |
| C-SECTIONS_Surfaces_Additional_01              | 132 | Continuous |
| C-SECTIONS_Surfaces_Additional_02              | 54  | Continuous |
| C-SECTIONS_Surfaces_Design                     | 22  | Continuous |
| C-SECTIONS_Surfaces_Existing Ground            | 84  | HIDDEN     |
| C-SECTIONS_Surfaces_Rock                       | 214 | Continuous |
| C-SECTIONVIEWGROUP                             | 92  | Continuous |
| C-SECTIONVIEWS                                 | 7   | Continuous |
| C-SECTIONVIEWS_Grid                            | 8   | Continuous |
| C-SECTIONVIEWS_Grid Sample Line Vertices       | 8   | Continuous |
| C-SECTIONVIEWS_Ordinate Lines (Vertical)       | 8   | Continuous |
| C-SECTIONVIEWS_Text (Band Entries)             | 3   | Continuous |
| C-SECTIONVIEWS_Text (Titles)                   | 7   | Continuous |
| C-SHAPES_Corridor Plan (pattern)               | 8   | Continuous |
| C-SHAPES_Corridor Plan (Solid) - Daylight Area | 82  | Continuous |
| C-SHAPES_Corridor Plan (Solid) - Footpath Area | 8   | Continuous |
| C-SHAPES_Corridor Plan (Solid) - Kerbed Area   | 12  | Continuous |
| C-SHAPES_Corridor Plan (Solid) - Paved Area    | 133 | Continuous |
| C-SHAPES_Subassembly                           | 3   | Continuous |
| C-SUBASSEMBLIES                                | 7   | Continuous |
| C-SUPERELEVATION_Graph                         | 7   | Continuous |
| C-SURFACE_Border                               | 1   | Continuous |
| C-SURFACE_Contour_Major                        | 22  | Continuous |
| C-SURFACE_Contour_Minor                        | 54  | Continuous |
| C-SURFACE_Contour_User                         | 1   | Continuous |
| C-SURFACE_Grid                                 | 1   | Continuous |
| C-SURFACE_Nodes                                | 1   | Continuous |
| C-SURFACE_Section View                         | 24  | Continuous |
| C-SURFACE_Triangles                            | 8   | Continuous |
| C-SURFACE_Watersheds                           | 1   | Continuous |
| C-SURFACES                                     | 7   | Continuous |
| C-SURVEY                                       | 7   | Continuous |
| C-SURVEY_Figures                               | 7   | Continuous |
| C-SURVEY_Figures-BB-(Bottom of Bank)-STRING    | 1   | Continuous |
| C-SURVEY_Figures-BK-(Back of Kerb)-STRING      | 1   | Continuous |
| C-SURVEY_Figures-CL-(Centreline)-STRING        | 1   | Continuous |
| C-SURVEY_Figures-EB-(Electricity Box)-STRING   | 1   | Continuous |
| C-SURVEY_Figures-TB-(Top of Bank)-STRING       | 5   | Continuous |
| C-SURVEY_Figures-TK-(Top Kerb)-STRING          | 1   | Continuous |
| C-TABLES                                       | 7   | Continuous |

|                   |   |            |
|-------------------|---|------------|
| C-TABLES_Fill     | 7 | Continuous |
| C-TABLES_Linework | 8 | Continuous |
| C-TABLES_Text     | 3 | Continuous |
| C-VIEWFRAMES      | 7 | Continuous |
| Defpoints         | 7 | Continuous |
| PANNEAUX          | 7 | Continuous |
| SHET-TITLE-TXT    | 7 | Continuous |

## Additional Layers in the Alpha Survey Template:

| <i>Layer Name</i>                      | <i>Description</i>              |
|--|---------------------------------|
| C_POINTS_2D-AG-(Artificial Grass)-PT   | Artificial Grass - Cogo Point   |
| C_POINTS_2D-AG-(Artificial Grass)-TXT  | Artificial Grass - Point Label  |
| C_POINTS_2D-AWN-(Awning)-PT            | Awning - Cogo Point             |
| C_POINTS_2D-AWN-(Awning)-TXT           | Awning - Point Label            |
| C_POINTS_2D-BA-(Barked Area)-PT        | Barked Area - Cogo Point        |
| C_POINTS_2D-BA-(Barked Area)-TXT       | Barked Area - Point Label       |
| C_POINTS_2D-BB-(Bottom of Bank)-PT     | Bottom of Bank - Cogo Point     |
| C_POINTS_2D-BB-(Bottom of Bank)-TXT    | Bottom of Bank - Point Label    |
| C_POINTS_2D-BBQ-(BBQ)-PT               | BBQ - Cogo Point                |
| C_POINTS_2D-BBQ-(BBQ)-TXT              | BBQ - Point Label               |
| C_POINTS_2D-BC-(Bottom Cutting)-PT     | Bottom Cutting - Cogo Point     |
| C_POINTS_2D-BC-(Bottom Cutting)-TXT    | Bottom Cutting - Point Label    |
| C_POINTS_2D-BD-(Bridge Deck)-PT        | Bridge Deck - Cogo Point        |
| C_POINTS_2D-BD-(Bridge Deck)-TXT       | Bridge Deck - Point Label       |
| C_POINTS_2D-BDA-(Broad Arrow)-PT       | Broad Arrow - Cogo Point        |
| C_POINTS_2D-BDA-(Broad Arrow)-TXT      | Broad Arrow - Point Label       |
| C_POINTS_2D-BDY-(Boundary)-PT          | Boundary - Cogo Point           |
| C_POINTS_2D-BDY-(Boundary)-TXT         | Boundary - Point Label          |
| C_POINTS_2D-BE-(Easement Line)-PT      | Easement Line - Cogo Point      |
| C_POINTS_2D-BE-(Easement Line)-TXT     | Easement Line - Point Label     |
| C_POINTS_2D-BG-(Boom Gate)-PT          | Boom Gate - Cogo Point          |
| C_POINTS_2D-BG-(Boom Gate)-TXT         | Boom Gate - Point Label         |
| C_POINTS_2D-BIN-(Bin)-PT               | Bin - Cogo Point                |
| C_POINTS_2D-BIN-(Bin)-TXT              | Bin - Point Label               |
| C_POINTS_2D-BK-(Back of Kerb)-PT       | Back of Kerb - Cogo Point       |
| C_POINTS_2D-BK-(Back of Kerb)-TXT      | Back of Kerb - Point Label      |
| C_POINTS_2D-BL-(Broken Paint Line)-PT  | Broken Paint Line - Cogo Point  |
| C_POINTS_2D-BL-(Broken Paint Line)-TXT | Broken Paint Line - Point Label |
| C_POINTS_2D-BLT-(Bolt)-PT              | Bolt - Cogo Point               |
| C_POINTS_2D-BLT-(Bolt)-TXT             | Bolt - Point Label              |

|   |                                  |
|---|----------------------------------|
| C_POINTS_2D-BM-(Benchmark)-PT           | Benchmark - Cogo Point           |
| C_POINTS_2D-BM-(Benchmark)-TXT          | Benchmark - Point Label          |
| C_POINTS_2D-BOL-(Bollard)-PT            | Bollard - Cogo Point             |
| C_POINTS_2D-BOL-(Bollard)-TXT           | Bollard - Point Label            |
| C_POINTS_2D-Bore-(Bore Hole)-PT         | Bore Hole - Cogo Point           |
| C_POINTS_2D-Bore-(Bore Hole)-TXT        | Bore Hole - Point Label          |
| C_POINTS_2D-BS-(Backsight)-PT           | Backsight - Cogo Point           |
| C_POINTS_2D-BS-(Backsight)-TXT          | Backsight - Point Label          |
| C_POINTS_2D-BSH-(Bush)-PT               | Bush - Cogo Point                |
| C_POINTS_2D-BSH-(Bush)-TXT              | Bush - Point Label               |
| C_POINTS_2D-BU-(Building)-PT            | Building - Cogo Point            |
| C_POINTS_2D-BU-(Building)-TXT           | Building - Point Label           |
| C_POINTS_2D-BUS-(Bus Shelter)-PT        | Bus Shelter - Cogo Point         |
| C_POINTS_2D-BUS-(Bus Shelter)-TXT       | Bus Shelter - Point Label        |
| C_POINTS_2D-BW-(Bottom of Wall)-PT      | Bottom of Wall - Cogo Point      |
| C_POINTS_2D-BW-(Bottom of Wall)-TXT     | Bottom of Wall - Point Label     |
| C_POINTS_2D-C-(Concrete)-PT             | Concrete - Cogo Point            |
| C_POINTS_2D-C-(Concrete)-TXT            | Concrete - Point Label           |
| C_POINTS_2D-CAM-(Security Camera)-PT    | Security Camera - Cogo Point     |
| C_POINTS_2D-CAM-(Security Camera)-TXT   | Security Camera - Point Label    |
| C_POINTS_2D-CB-(Concrete Block)-PT      | Concrete Block - Cogo Point      |
| C_POINTS_2D-CB-(Concrete Block)-TXT     | Concrete Block - Point Label     |
| C_POINTS_2D-CC-(Concrete Converter)-PT  | Concrete Converter - Cogo Point  |
| C_POINTS_2D-CC-(Concrete Converter)-TXT | Concrete Converter - Point Label |
| C_POINTS_2D-CL-(Centreline)-PT          | Centreline - Cogo Point          |
| C_POINTS_2D-CL-(Centreline)-TXT         | Centreline - Point Label         |
| C_POINTS_2D-CP-(Control Point)-PT       | Control Point - Cogo Point       |
| C_POINTS_2D-CP-(Control Point)-TXT      | Control Point - Point Label      |
| C_POINTS_2D-CR-(Crown Road)-PT          | Crown Road - Cogo Point          |
| C_POINTS_2D-CR-(Crown Road)-TXT         | Crown Road - Point Label         |
| C_POINTS_2D-CROSS-(Point Cross)-PT      | Point Cross - Cogo Point         |
| C_POINTS_2D-CROSS-(Point Cross)-TXT     | Point Cross - Point Label        |
| C_POINTS_2D-CULV-(Culvert)-PT           | Culvert - Cogo Point             |
| C_POINTS_2D-CULV-(Culvert)-TXT          | Culvert - Point Label            |
| C_POINTS_2D-D-(Driveway)-PT             | Driveway - Cogo Point            |
| C_POINTS_2D-D-(Driveway)-TXT            | Driveway - Point Label           |
| C_POINTS_2D-DD-(Dish Drain)-PT          | Dish Drain - Cogo Point          |
| C_POINTS_2D-DD-(Dish Drain)-TXT         | Dish Drain - Point Label         |
| C_POINTS_2D-DH-(Drill Hole)-PT          | Drill Hole - Cogo Point          |
| C_POINTS_2D-DH-(Drill Hole)-TXT         | Drill Hole - Point Label         |
| C_POINTS_2D-DHW-(Drill Hole & Wing)-PT  | Drill Hole & Wing - Cogo Point   |

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| C_POINTS_2D-DHW-(Drill Hole & Wing)-TXT         | Drill Hole & Wing - Point Label         |
| C_POINTS_2D-DJP-(Drain Junction Pit)-PT         | Drain Junction Pit - Cogo Point         |
| C_POINTS_2D-DJP-(Drain Junction Pit)-TXT        | Drain Junction Pit - Point Label        |
| C_POINTS_2D-DL-(Double Line)-PT                 | Double Line - Cogo Point                |
| C_POINTS_2D-DL-(Double Line)-TXT                | Double Line - Point Label               |
| C_POINTS_2D-DP-(Drain Down Pipe)-PT             | Drain Down Pipe - Cogo Point            |
| C_POINTS_2D-DP-(Drain Down Pipe)-TXT            | Drain Down Pipe - Point Label           |
| C_POINTS_2D-DPY-(Dumpy)-PT                      | Dumpy - Cogo Point                      |
| C_POINTS_2D-DPY-(Dumpy)-TXT                     | Dumpy - Point Label                     |
| C_POINTS_2D-DR-(Drain)-PT                       | Drain - Cogo Point                      |
| C_POINTS_2D-DR-(Drain)-TXT                      | Drain - Point Label                     |
| C_POINTS_2D-EB-(Electricity Box)-PT             | Electricity Box - Cogo Point            |
| C_POINTS_2D-EB-(Electricity Box)-TXT            | Electricity Box - Point Label           |
| C_POINTS_2D-ECM-(Elect Cable Marker)-PT         | Elect Cable Marker - Cogo Point         |
| C_POINTS_2D-ECM-(Elect Cable Marker)-TXT        | Elect Cable Marker - Point Label        |
| C_POINTS_2D-EF-(Edge of Formation)-PT           | Edge of Formation - Cogo Point          |
| C_POINTS_2D-EF-(Edge of Formation)-TXT          | Edge of Formation - Point Label         |
| C_POINTS_2D-EG-(Edge of Garden)-PT              | Edge of Garden - Cogo Point             |
| C_POINTS_2D-EG-(Edge of Garden)-TXT             | Edge of Garden - Point Label            |
| C_POINTS_2D-EM-(Edge of Median)-PT              | Edge of Median - Cogo Point             |
| C_POINTS_2D-EM-(Edge of Median)-TXT             | Edge of Median - Point Label            |
| C_POINTS_2D-EP-(Edge of Pavement)-PT            | Edge of Pavement - Cogo Point           |
| C_POINTS_2D-EP-(Edge of Pavement)-TXT           | Edge of Pavement - Point Label          |
| C_POINTS_2D-EPG-(Edge of Playground)-PT         | Edge of Playground - Cogo Point         |
| C_POINTS_2D-EPG-(Edge of Playground)-TXT        | Edge of Playground - Point Label        |
| C_POINTS_2D-EPIL-(Electricity Pillar)-PT        | Electricity Pillar - Cogo Point         |
| C_POINTS_2D-EPIL-(Electricity Pillar)-TXT       | Electricity Pillar - Point Label        |
| C_POINTS_2D-EPL-(Electricity Pylon Leg)-PT      | Electricity Pylon Leg - Cogo Point      |
| C_POINTS_2D-EPL-(Electricity Pylon Leg)-TXT     | Electricity Pylon Leg - Point Label     |
| C_POINTS_2D-EPT-(Electricity Pit)-PT            | Electricity Pit - Cogo Point            |
| C_POINTS_2D-EPT-(Electricity Pit)-TXT           | Electricity Pit - Point Label           |
| C_POINTS_2D-ES-(Edge of Seal)-PT                | Edge of Seal - Cogo Point               |
| C_POINTS_2D-ES-(Edge of Seal)-TXT               | Edge of Seal - Point Label              |
| C_POINTS_2D-ET-(Edge of Track)-PT               | Edge of Track - Cogo Point              |
| C_POINTS_2D-ET-(Edge of Track)-TXT              | Edge of Track - Point Label             |
| C_POINTS_2D-ETC-(Elect Transformer Cabinet)-PT  | Elect Transformer Cabinet - Cogo Point  |
| C_POINTS_2D-ETC-(Elect Transformer Cabinet)-TXT | Elect Transformer Cabinet - Point Label |
| C_POINTS_2D-ETR-(Edge of Trees)-PT              | Edge of Trees - Cogo Point              |
| C_POINTS_2D-ETR-(Edge of Trees)-TXT             | Edge of Trees - Point Label             |
| C_POINTS_2D-EUR-(Edge Unsealed Road)-PT         | Edge Unsealed Road - Cogo Point         |
| C_POINTS_2D-EUR-(Edge Unsealed Road)-TXT        | Edge Unsealed Road - Point Label        |

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| C_POINTS_2D-F-(Fence)-PT              | Fence - Cogo Point            |
| C_POINTS_2D-F-(Fence)-TXT             | Fence - Point Label           |
| C_POINTS_2D-FB-(Fuse Box)-PT          | Fuse Box - Cogo Point         |
| C_POINTS_2D-FB-(Fuse Box)-TXT         | Fuse Box - Point Label        |
| C_POINTS_2D-FHD-(Fire Hydrant)-PT     | Fire Hydrant - Cogo Point     |
| C_POINTS_2D-FHD-(Fire Hydrant)-TXT    | Fire Hydrant - Point Label    |
| C_POINTS_2D-FL-(Fence Line)-PT        | Fence Line - Cogo Point       |
| C_POINTS_2D-FL-(Fence Line)-TXT       | Fence Line - Point Label      |
| C_POINTS_2D-FLR-(Floor Level)-PT      | Floor Level - Cogo Point      |
| C_POINTS_2D-FLR-(Floor Level)-TXT     | Floor Level - Point Label     |
| C_POINTS_2D-FP-(Footpath)-PT          | Footpath - Cogo Point         |
| C_POINTS_2D-FP-(Footpath)-TXT         | Footpath - Point Label        |
| C_POINTS_2D-FPIT-(Flusher Pit)-PT     | Flusher Pit - Cogo Point      |
| C_POINTS_2D-FPIT-(Flusher Pit)-TXT    | Flusher Pit - Point Label     |
| C_POINTS_2D-FPL-(Full Paint Line)-PT  | Full Paint Line - Cogo Point  |
| C_POINTS_2D-FPL-(Full Paint Line)-TXT | Full Paint Line - Point Label |
| C_POINTS_2D-FPLUG-(Fire Plug)-PT      | Fire Plug - Cogo Point        |
| C_POINTS_2D-FPLUG-(Fire Plug)-TXT     | Fire Plug - Point Label       |
| C_POINTS_2D-G-(Gutter)-PT             | Gutter - Cogo Point           |
| C_POINTS_2D-G-(Gutter)-TXT            | Gutter - Point Label          |
| C_POINTS_2D-GAS-(Gas Manhole)-PT      | Gas Manhole - Cogo Point      |
| C_POINTS_2D-GAS-(Gas Manhole)-TXT     | Gas Manhole - Point Label     |
| C_POINTS_2D-GATE-(Gate)-PT            | Gate - Cogo Point             |
| C_POINTS_2D-GATE-(Gate)-TXT           | Gate - Point Label            |
| C_POINTS_2D-GIN-(Gal Iron Nail)-PT    | Gal Iron Nail - Cogo Point    |
| C_POINTS_2D-GIN-(Gal Iron Nail)-TXT   | Gal Iron Nail - Point Label   |
| C_POINTS_2D-GIP-(GIPIPE)-PT           | GIPIPE - Cogo Point           |
| C_POINTS_2D-GIP-(GIPIPE)-TXT          | GIPIPE - Point Label          |
| C_POINTS_2D-GMP-(Gas Marker Post)-PT  | Gas Marker Post - Cogo Point  |
| C_POINTS_2D-GMP-(Gas Marker Post)-TXT | Gas Marker Post - Point Label |
| C_POINTS_2D-GP-(Guide Post)-PT        | Guide Post - Cogo Point       |
| C_POINTS_2D-GP-(Guide Post)-TXT       | Guide Post - Point Label      |
| C_POINTS_2D-GR-(Guard Rail)-PT        | Guard Rail - Cogo Point       |
| C_POINTS_2D-GR-(Guard Rail)-TXT       | Guard Rail - Point Label      |
| C_POINTS_2D-GRAV-(Gravel)-PT          | Gravel - Cogo Point           |
| C_POINTS_2D-GRAV-(Gravel)-TXT         | Gravel - Point Label          |
| C_POINTS_2D-GRID-(Cattle Grid)-PT     | Cattle Grid - Cogo Point      |
| C_POINTS_2D-GRID-(Cattle Grid)-TXT    | Cattle Grid - Point Label     |
| C_POINTS_2D-GUL-(Gully Pit)-PT        | Gully Pit - Cogo Point        |
| C_POINTS_2D-GUL-(Gully Pit)-TXT       | Gully Pit - Point Label       |
| C_POINTS_2D-GV-(Gas Valve)-PT         | Gas Valve - Cogo Point        |

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| C_POINTS_2D-GV-(Gas Valve)-TXT                 | Gas Valve - Point Label                 |
| C_POINTS_2D-HW-(Headwall)-PT                   | Headwall - Cogo Point                   |
| C_POINTS_2D-HW-(Headwall)-TXT                  | Headwall - Point Label                  |
| C_POINTS_2D-HWB-(Bottom of Headwall)-PT        | Bottom of Headwall - Cogo Point         |
| C_POINTS_2D-HWB-(Bottom of Headwall)-TXT       | Bottom of Headwall - Point Label        |
| C_POINTS_2D-HWT-(Top of Headwall)-PT           | Top of Headwall - Cogo Point            |
| C_POINTS_2D-HWT-(Top of Headwall)-TXT          | Top of Headwall - Point Label           |
| C_POINTS_2D-INV-(Invert of Pipe)-PT            | Invert of Pipe - Cogo Point             |
| C_POINTS_2D-INV-(Invert of Pipe)-TXT           | Invert of Pipe - Point Label            |
| C_POINTS_2D-JBX-(Junction Box)-PT              | Junction Box - Cogo Point               |
| C_POINTS_2D-JBX-(Junction Box)-TXT             | Junction Box - Point Label              |
| C_POINTS_2D-K-(Top of Kerb)-PT                 | Top of Kerb - Cogo Point                |
| C_POINTS_2D-K-(Top of Kerb)-TXT                | Top of Kerb - Point Label               |
| C_POINTS_2D-KI-(Kerb Inlet)-PT                 | Kerb Inlet - Cogo Point                 |
| C_POINTS_2D-KI-(Kerb Inlet)-TXT                | Kerb Inlet - Point Label                |
| C_POINTS_2D-KL-(Kerb Lintel)-PT                | Kerb Lintel - Cogo Point                |
| C_POINTS_2D-KL-(Kerb Lintel)-TXT               | Kerb Lintel - Point Label               |
| C_POINTS_2D-KP-(Kilometer Post)-PT             | Kilometer Post - Cogo Point             |
| C_POINTS_2D-KP-(Kilometer Post)-TXT            | Kilometer Post - Point Label            |
| C_POINTS_2D-L-(Lip)-PT                         | Lip - Cogo Point                        |
| C_POINTS_2D-L-(Lip)-TXT                        | Lip - Point Label                       |
| C_POINTS_2D-LB-(Log Barrier)-PT                | Log Barrier - Cogo Point                |
| C_POINTS_2D-LB-(Log Barrier)-TXT               | Log Barrier - Point Label               |
| C_POINTS_2D-LPL-(Light Pole)-PT                | Light Pole - Cogo Point                 |
| C_POINTS_2D-LPL-(Light Pole)-TXT               | Light Pole - Point Label                |
| C_POINTS_2D-MB-(Letter Box Australia Post)-PT  | Letter Box Australia Post - Cogo Point  |
| C_POINTS_2D-MB-(Letter Box Australia Post)-TXT | Letter Box Australia Post - Point Label |
| C_POINTS_2D-MBR-(Monkey Bars)-PT               | Monkey Bars - Cogo Point                |
| C_POINTS_2D-MBR-(Monkey Bars)-TXT              | Monkey Bars - Point Label               |
| C_POINTS_2D-MBX-(Mailbox)-PT                   | Mailbox - Cogo Point                    |
| C_POINTS_2D-MBX-(Mailbox)-TXT                  | Mailbox - Point Label                   |
| C_POINTS_2D-MH-(Manhole)-PT                    | Manhole - Cogo Point                    |
| C_POINTS_2D-MH-(Manhole)-TXT                   | Manhole - Point Label                   |
| C_POINTS_2D-MO-(Monument)-PT                   | Monument - Cogo Point                   |
| C_POINTS_2D-MO-(Monument)-TXT                  | Monument - Point Label                  |
| C_POINTS_2D-NS-(Natural Surface)-PT            | Natural Surface - Cogo Point            |
| C_POINTS_2D-NS-(Natural Surface)-TXT           | Natural Surface - Point Label           |
| C_POINTS_2D-OBV-(Obvert of Pipe)-PT            | Obvert of Pipe - Cogo Point             |
| C_POINTS_2D-OBV-(Obvert of Pipe)-TXT           | Obvert of Pipe - Point Label            |
| C_POINTS_2D-OPT-(Optus Pit)-PT                 | Optus Pit - Cogo Point                  |
| C_POINTS_2D-OPT-(Optus Pit)-TXT                | Optus Pit - Point Label                 |

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| C_POINTS_2D-P-(Pavement)-PT                  | Pavement - Cogo Point                |
| C_POINTS_2D-P-(Pavement)-TXT                 | Pavement - Point Label               |
| C_POINTS_2D-PB-(Petrol Bowser)-PT            | Petrol Bowser - Cogo Point           |
| C_POINTS_2D-PB-(Petrol Bowser)-TXT           | Petrol Bowser - Point Label          |
| C_POINTS_2D-PBOX-(Planter Box)-PT            | Planter Box - Cogo Point             |
| C_POINTS_2D-PBOX-(Planter Box)-TXT           | Planter Box - Point Label            |
| C_POINTS_2D-PBX-(Phone Box)-PT               | Phone Box - Cogo Point               |
| C_POINTS_2D-PBX-(Phone Box)-TXT              | Phone Box - Point Label              |
| C_POINTS_2D-PEG-(Peg)-PT                     | Peg - Cogo Point                     |
| C_POINTS_2D-PEG-(Peg)-TXT                    | Peg - Point Label                    |
| C_POINTS_2D-PH-(Phone)-PT                    | Phone - Cogo Point                   |
| C_POINTS_2D-PH-(Phone)-TXT                   | Phone - Point Label                  |
| C_POINTS_2D-PIT-(Pit)-PT                     | Pit - Cogo Point                     |
| C_POINTS_2D-PIT-(Pit)-TXT                    | Pit - Point Label                    |
| C_POINTS_2D-PLP-(Power Light Pole)-PT        | Power Light Pole - Cogo Point        |
| C_POINTS_2D-PLP-(Power Light Pole)-TXT       | Power Light Pole - Point Label       |
| C_POINTS_2D-PM-(Permanent Mark)-PT           | Permanent Mark - Cogo Point          |
| C_POINTS_2D-PM-(Permanent Mark)-TXT          | Permanent Mark - Point Label         |
| C_POINTS_2D-PMP-(Pump)-PT                    | Pump - Cogo Point                    |
| C_POINTS_2D-PMP-(Pump)-TXT                   | Pump - Point Label                   |
| C_POINTS_2D-PMT-(Parking Meter)-PT           | Parking Meter - Cogo Point           |
| C_POINTS_2D-PMT-(Parking Meter)-TXT          | Parking Meter - Point Label          |
| C_POINTS_2D-POLE-(Pole)-PT                   | Pole - Cogo Point                    |
| C_POINTS_2D-POLE-(Pole)-TXT                  | Pole - Point Label                   |
| C_POINTS_2D-PPL-(Power Pole)-PT              | Power Pole - Cogo Point              |
| C_POINTS_2D-PPL-(Power Pole)-TXT             | Power Pole - Point Label             |
| C_POINTS_2D-PR-(Pram Ramp)-PT                | Pram Ramp - Cogo Point               |
| C_POINTS_2D-PR-(Pram Ramp)-TXT               | Pram Ramp - Point Label              |
| C_POINTS_2D-PTH-(Path)-PT                    | Path - Cogo Point                    |
| C_POINTS_2D-PTH-(Path)-TXT                   | Path - Point Label                   |
| C_POINTS_2D-PTR-(Power Transformer Pole)-PT  | Power Transformer Pole - Cogo Point  |
| C_POINTS_2D-PTR-(Power Transformer Pole)-TXT | Power Transformer Pole - Point Label |
| C_POINTS_2D-PV-(Petrol Valve)-PT             | Petrol Valve - Cogo Point            |
| C_POINTS_2D-PV-(Petrol Valve)-TXT            | Petrol Valve - Point Label           |
| C_POINTS_2D-PX-(Pedestrian Crossing)-PT      | Pedestrian Crossing - Cogo Point     |
| C_POINTS_2D-PX-(Pedestrian Crossing)-TXT     | Pedestrian Crossing - Point Label    |
| C_POINTS_2D-RFP-(Round Post)-PT              | Round Post - Cogo Point              |
| C_POINTS_2D-RFP-(Round Post)-TXT             | Round Post - Point Label             |
| C_POINTS_2D-RHY-(Recycle Water Hydrant)-PT   | Recycle Water Hydrant - Cogo Point   |
| C_POINTS_2D-RHY-(Recycle Water Hydrant)-TXT  | Recycle Water Hydrant - Point Label  |
| C_POINTS_2D-RKR-(Rocker)-PT                  | Rocker - Cogo Point                  |



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| C_POINTS_2D-RKR-(Rocker)-TXT                   | Rocker - Point Label                   |
| C_POINTS_2D-RLC-(Red Light Camera)-PT          | Red Light Camera - Cogo Point          |
| C_POINTS_2D-RLC-(Red Light Camera)-TXT         | Red Light Camera - Point Label         |
| C_POINTS_2D-RSB-(Rail Signal Box)-PT           | Rail Signal Box - Cogo Point           |
| C_POINTS_2D-RSB-(Rail Signal Box)-TXT          | Rail Signal Box - Point Label          |
| C_POINTS_2D-RSN-(Ramset Nail)-PT               | Ramset Nail - Cogo Point               |
| C_POINTS_2D-RSN-(Ramset Nail)-TXT              | Ramset Nail - Point Label              |
| C_POINTS_2D-RSP-(Rail Signal Pole)-PT          | Rail Signal Pole - Cogo Point          |
| C_POINTS_2D-RSP-(Rail Signal Pole)-TXT         | Rail Signal Pole - Point Label         |
| C_POINTS_2D-RSV-(Recycle Water Stop Valve)-PT  | Recycle Water Stop Valve - Cogo Point  |
| C_POINTS_2D-RSV-(Recycle Water Stop Valve)-TXT | Recycle Water Stop Valve - Point Label |
| C_POINTS_2D-RTP-(Recycle Water Tap)-PT         | Recycle Water Tap - Cogo Point         |
| C_POINTS_2D-RTP-(Recycle Water Tap)-TXT        | Recycle Water Tap - Point Label        |
| C_POINTS_2D-RW-(Retaining Wall)-PT             | Retaining Wall - Cogo Point            |
| C_POINTS_2D-RW-(Retaining Wall)-TXT            | Retaining Wall - Point Label           |
| C_POINTS_2D-RWM-(Recycle Water Meter)-PT       | Recycle Water Meter - Cogo Point       |
| C_POINTS_2D-RWM-(Recycle Water Meter)-TXT      | Recycle Water Meter - Point Label      |
| C_POINTS_2D-S-(Spot Level)-PT                  | Spot Level - Cogo Point                |
| C_POINTS_2D-S-(Spot Level)-TXT                 | Spot Level - Point Label               |
| C_POINTS_2D-SD-(Slippery Dip)-PT               | Slippery Dip - Cogo Point              |
| C_POINTS_2D-SD-(Slippery Dip)-TXT              | Slippery Dip - Point Label             |
| C_POINTS_2D-SEAT-(Seat)-PT                     | Seat - Cogo Point                      |
| C_POINTS_2D-SEAT-(Seat)-TXT                    | Seat - Point Label                     |
| C_POINTS_2D-SEP-(Septic Tank)-PT               | Septic Tank - Cogo Point               |
| C_POINTS_2D-SEP-(Septic Tank)-TXT              | Septic Tank - Point Label              |
| C_POINTS_2D-SEWER-(Sewer)-PT                   | Sewer - Cogo Point                     |
| C_POINTS_2D-SEWER-(Sewer)-TXT                  | Sewer - Point Label                    |
| C_POINTS_2D-SF-(Safety Fence)-PT               | Safety Fence - Cogo Point              |
| C_POINTS_2D-SF-(Safety Fence)-TXT              | Safety Fence - Point Label             |
| C_POINTS_2D-SFP-(Subsoil Flushing Point)-PT    | Subsoil Flushing Point - Cogo Point    |
| C_POINTS_2D-SFP-(Subsoil Flushing Point)-TXT   | Subsoil Flushing Point - Point Label   |
| C_POINTS_2D-SHD-(Shed)-PT                      | Shed - Cogo Point                      |
| C_POINTS_2D-SHD-(Shed)-TXT                     | Shed - Point Label                     |
| C_POINTS_2D-SHRUB-(Shrub)-PT                   | Shrub - Cogo Point                     |
| C_POINTS_2D-SHRUB-(Shrub)-TXT                  | Shrub - Point Label                    |
| C_POINTS_2D-SHRUB1-(Shrub)-PT                  | Shrub - Cogo Point                     |
| C_POINTS_2D-SHRUB1-(Shrub)-TXT                 | Shrub - Point Label                    |
| C_POINTS_2D-SIN-(Sign)-PT                      | Sign - Cogo Point                      |
| C_POINTS_2D-SIN-(Sign)-TXT                     | Sign - Point Label                     |
| C_POINTS_2D-SIP-(Star Iron Post)-PT            | Star Iron Post - Cogo Point            |
| C_POINTS_2D-SIP-(Star Iron Post)-TXT           | Star Iron Post - Point Label           |

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| C_POINTS_2D-SJB-(Traffic Signal Junction Box)-PT  | Traffic Signal Junction Box - Cogo Point  |
| C_POINTS_2D-SJB-(Traffic Signal Junction Box)-TXT | Traffic Signal Junction Box - Point Label |
| C_POINTS_2D-SLH-(Sewer Lamp Hole)-PT              | Sewer Lamp Hole - Cogo Point              |
| C_POINTS_2D-SLH-(Sewer Lamp Hole)-TXT             | Sewer Lamp Hole - Point Label             |
| C_POINTS_2D-SLR-(Solar)-PT                        | Solar - Cogo Point                        |
| C_POINTS_2D-SLR-(Solar)-TXT                       | Solar - Point Label                       |
| C_POINTS_2D-SMH-(Sewer Manhole)-PT                | Sewer Manhole - Cogo Point                |
| C_POINTS_2D-SMH-(Sewer Manhole)-TXT               | Sewer Manhole - Point Label               |
| C_POINTS_2D-SP-(Sprinkler head)-PT                | Sprinkler head - Cogo Point               |
| C_POINTS_2D-SP-(Sprinkler head)-TXT               | Sprinkler head - Point Label              |
| C_POINTS_2D-SPL-(Stay Pole)-PT                    | Stay Pole - Cogo Point                    |
| C_POINTS_2D-SPL-(Stay Pole)-TXT                   | Stay Pole - Point Label                   |
| C_POINTS_2D-SQP-(Square Post)-PT                  | Square Post - Cogo Point                  |
| C_POINTS_2D-SQP-(Square Post)-TXT                 | Square Post - Point Label                 |
| C_POINTS_2D-SSM-(State Survey Mark)-PT            | State Survey Mark - Cogo Point            |
| C_POINTS_2D-SSM-(State Survey Mark)-TXT           | State Survey Mark - Point Label           |
| C_POINTS_2D-STN-(Station)-PT                      | Station - Cogo Point                      |
| C_POINTS_2D-STN-(Station)-TXT                     | Station - Point Label                     |
| C_POINTS_2D-SVP-(Sewer Vent)-PT                   | Sewer Vent - Cogo Point                   |
| C_POINTS_2D-SVP-(Sewer Vent)-TXT                  | Sewer Vent - Point Label                  |
| C_POINTS_2D-SWG-(Swing)-PT                        | Swing - Cogo Point                        |
| C_POINTS_2D-SWG-(Swing)-TXT                       | Swing - Point Label                       |
| C_POINTS_2D-T-(Tree)-PT                           | Tree - Cogo Point                         |
| C_POINTS_2D-T-(Tree)-TXT                          | Tree - Point Label                        |
| C_POINTS_2D-T1-(Tree)-PT                          | Tree - Cogo Point                         |
| C_POINTS_2D-T1-(Tree)-TXT                         | Tree - Point Label                        |
| C_POINTS_2D-T3-(Tree Coconut)-PT                  | Tree Coconut - Cogo Point                 |
| C_POINTS_2D-T3-(Tree Coconut)-TXT                 | Tree Coconut - Point Label                |
| C_POINTS_2D-T4-(Tree Palm)-PT                     | Tree Palm - Cogo Point                    |
| C_POINTS_2D-T4-(Tree Palm)-TXT                    | Tree Palm - Point Label                   |
| C_POINTS_2D-TAP-(Tap)-PT                          | Tap - Cogo Point                          |
| C_POINTS_2D-TAP-(Tap)-TXT                         | Tap - Point Label                         |
| C_POINTS_2D-TB-(Top of Bank)-PT                   | Top of Bank - Cogo Point                  |
| C_POINTS_2D-TB-(Top of Bank)-TXT                  | Top of Bank - Point Label                 |
| C_POINTS_2D-TC-(Top Cutting)-PT                   | Top Cutting - Cogo Point                  |
| C_POINTS_2D-TC-(Top Cutting)-TXT                  | Top Cutting - Point Label                 |
| C_POINTS_2D-TCM-(Telstra Cable Marker)-PT         | Telstra Cable Marker - Cogo Point         |
| C_POINTS_2D-TCM-(Telstra Cable Marker)-TXT        | Telstra Cable Marker - Point Label        |
| C_POINTS_2D-TD-(Table Drain)-PT                   | Table Drain - Cogo Point                  |
| C_POINTS_2D-TD-(Table Drain)-TXT                  | Table Drain - Point Label                 |
| C_POINTS_2D-TEP-(Telstra Pillar)-PT               | Telstra Pillar - Cogo Point               |

|   |   |
|---|---|
| C_POINTS_2D-TEP-(Telstra Pillar)-TXT                | Telstra Pillar - Point Label                |
| C_POINTS_2D-TK-(Top Kerb)-PT                        | Top Kerb - Cogo Point                       |
| C_POINTS_2D-TK-(Top Kerb)-TXT                       | Top Kerb - Point Label                      |
| C_POINTS_2D-TM-(Top of Median)-PT                   | Top of Median - Cogo Point                  |
| C_POINTS_2D-TM-(Top of Median)-TXT                  | Top of Median - Point Label                 |
| C_POINTS_2D-TMP-(Telstra Standard 1.1 Main Pit)-PT  | Telstra Standard 1.1 Main Pit - Cogo Point  |
| C_POINTS_2D-TMP-(Telstra Standard 1.1 Main Pit)-TXT | Telstra Standard 1.1 Main Pit - Point Label |
| C_POINTS_2D-TNK-(Tank)-PT                           | Tank - Cogo Point                           |
| C_POINTS_2D-TNK-(Tank)-TXT                          | Tank - Point Label                          |
| C_POINTS_2D-TPL-(Telstra Pole)-PT                   | Telstra Pole - Cogo Point                   |
| C_POINTS_2D-TPL-(Telstra Pole)-TXT                  | Telstra Pole - Point Label                  |
| C_POINTS_2D-TPT-(Telstra Pit)-PT                    | Telstra Pit - Cogo Point                    |
| C_POINTS_2D-TPT-(Telstra Pit)-TXT                   | Telstra Pit - Point Label                   |
| C_POINTS_2D-TR-(Tree)-PT                            | Tree - Cogo Point                           |
| C_POINTS_2D-TR-(Tree)-TXT                           | Tree - Point Label                          |
| C_POINTS_2D-TSC-(Traffic Signal Controller)-PT      | Traffic Signal Controller - Cogo Point      |
| C_POINTS_2D-TSC-(Traffic Signal Controller)-TXT     | Traffic Signal Controller - Point Label     |
| C_POINTS_2D-TSP-(Traffic Signal Post)-PT            | Traffic Signal Post - Cogo Point            |
| C_POINTS_2D-TSP-(Traffic Signal Post)-TXT           | Traffic Signal Post - Point Label           |
| C_POINTS_2D-TTP-(Twin Telstra Pit)-PT               | Twin Telstra Pit - Cogo Point               |
| C_POINTS_2D-TTP-(Twin Telstra Pit)-TXT              | Twin Telstra Pit - Point Label              |
| C_POINTS_2D-TW-(Top of Wall)-PT                     | Top of Wall - Cogo Point                    |
| C_POINTS_2D-TW-(Top of Wall)-TXT                    | Top of Wall - Point Label                   |
| C_POINTS_2D-TXP-(Telstra Single Pit)-PT             | Telstra Single Pit - Cogo Point             |
| C_POINTS_2D-TXP-(Telstra Single Pit)-TXT            | Telstra Single Pit - Point Label            |
| C_POINTS_2D-UP-(Underground Pipeline)-PT            | Underground Pipeline - Cogo Point           |
| C_POINTS_2D-UP-(Underground Pipeline)-TXT           | Underground Pipeline - Point Label          |
| C_POINTS_2D-VA-(Valve)-PT                           | Valve - Cogo Point                          |
| C_POINTS_2D-VA-(Valve)-TXT                          | Valve - Point Label                         |
| C_POINTS_2D-VT-(Vehicular Track)-PT                 | Vehicular Track - Cogo Point                |
| C_POINTS_2D-VT-(Vehicular Track)-TXT                | Vehicular Track - Point Label               |
| C_POINTS_2D-WC-(Water Course)-PT                    | Water Course - Cogo Point                   |
| C_POINTS_2D-WC-(Water Course)-TXT                   | Water Course - Point Label                  |
| C_POINTS_2D-WGS-(Wings at 90 degs)-PT               | Wings at 90 degs - Cogo Point               |
| C_POINTS_2D-WGS-(Wings at 90 degs)-TXT              | Wings at 90 degs - Point Label              |
| C_POINTS_2D-WGSS-(Wings x 3 to point)-PT            | Wings x 3 to point - Cogo Point             |
| C_POINTS_2D-WGSS-(Wings x 3 to point)-TXT           | Wings x 3 to point - Point Label            |
| C_POINTS_2D-WHY-(Water Hydrant)-PT                  | Water Hydrant - Cogo Point                  |
| C_POINTS_2D-WHY-(Water Hydrant)-TXT                 | Water Hydrant - Point Label                 |
| C_POINTS_2D-WMH-(Stormwater Water Manhole)-PT       | Stormwater Water Manhole - Cogo Point       |
| C_POINTS_2D-WMH-(Stormwater Water Manhole)-TXT      | Stormwater Water Manhole - Point Label      |

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|---|---------------------------------|
| C_POINTS_2D-WMP-(Water Marker Post)-PT  | Water Marker Post - Cogo Point  |
| C_POINTS_2D-WMP-(Water Marker Post)-TXT | Water Marker Post - Point Label |
| C_POINTS_2D-WMR-(Water Meter)-PT        | Water Meter - Cogo Point        |
| C_POINTS_2D-WMR-(Water Meter)-TXT       | Water Meter - Point Label       |
| C_POINTS_2D-WSV-(Water Stop Valve)-PT   | Water Stop Valve - Cogo Point   |
| C_POINTS_2D-WSV-(Water Stop Valve)-TXT  | Water Stop Valve - Point Label  |
| C_POINTS_2D-WTP-(Water Tap)-PT          | Water Tap - Cogo Point          |
| C_POINTS_2D-WTP-(Water Tap)-TXT         | Water Tap - Point Label         |
| C_POINTS_2D-WW-(Wing Wall)-PT           | Wing Wall - Cogo Point          |
| C_POINTS_2D-WW-(Wing Wall)-TXT          | Wing Wall - Point Label         |
| C_POINTS_3D-PT                          | 3D – Cogo Point                 |
| C_POINTS_3D-TXT                         | 3D - Point Label                |

Additional Layers in the Numeric Survey Template:

| <i>Layer Name</i>                      | <i>Description</i>                 |
|--|------------------------------------|
| 001_Permanent_Survey_Mark_Cogo Point   | Permanent Survey Mark Cogo Point   |
| 001_Permanent_Survey_Mark_Point Label  | Permanent Survey Mark Point Label  |
| 002_Bench_Mark_Cogo Point              | Bench Mark Cogo Point              |
| 002_Bench_Mark_Point Label             | Bench Mark Point Label             |
| 003_Title_Peg_Cogo Point               | Title Peg Cogo Point               |
| 003_Title_Peg_Point Label              | Title Peg Point Label              |
| 004_Instrument_Station_Cogo Point      | Instrument Station Cogo Point      |
| 004_Instrument_Station_Point Label     | Instrument Station Point Label     |
| 005_Survey_Mark_Cogo Point             | Survey Mark Cogo Point             |
| 005_Survey_Mark_Point Label            | Survey Mark Point Label            |
| 006_Photo_Control_Point_Cogo Point     | Photo Control Point Cogo Point     |
| 006_Photo_Control_Point_Point Label    | Photo Control Point Point Label    |
| 007_Check_Profile_Cogo Point           | Check Profile Cogo Point           |
| 007_Check_Profile_Point Label          | Check Profile Point Label          |
| 008_Trig_Point_Cogo Point              | Trig Point Cogo Point              |
| 008_Trig_Point_Point Label             | Trig Point Point Label             |
| 009_Rivet_Cogo Point                   | Rivet Cogo Point                   |
| 009_Rivet_Point Label                  | Rivet Point Label                  |
| 010_Pin_Cogo Point                     | Pin Cogo Point                     |
| 010_Pin_Point Label                    | Pin Point Label                    |
| 011_Check_Measurement_Cogo Point       | Check Measurement Cogo Point       |
| 011_Check_Measurement_Point Label      | Check Measurement Point Label      |
| 012_General_Reference_Mark_Cogo Point  | General Reference Mark Cogo Point  |
| 012_General_Reference_Mark_Point Label | General Reference Mark Point Label |
| 013_Reference_Mark_Rod_Cogo Point      | Reference Mark Rod Cogo Point      |
| 013_Reference_Mark_Rod_Point Label     | Reference Mark Rod Point Label     |

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| 014_Reference_Mark_Pipe_Cogo Point             | Reference Mark Pipe Cogo Point             |
| 014_Reference_Mark_Pipe_Point Label            | Reference Mark Pipe Point Label            |
| 015_Reference_Mark_Star_Picket_Cogo Point      | Reference Mark Star Picket Cogo Point      |
| 015_Reference_Mark_Star_Picket_Point Label     | Reference Mark Star Picket Point Label     |
| 016_Dumpy_Cogo Point                           | Dumpy Cogo Point                           |
| 016_Dumpy_Point Label                          | Dumpy Point Label                          |
| 017_Nail_Cogo Point                            | Nail Cogo Point                            |
| 017_Nail_Point Label                           | Nail Point Label                           |
| 018_Spike_Cogo Point                           | Spike Cogo Point                           |
| 018_Spike_Point Label                          | Spike Point Label                          |
| 100_Contour-Edge_Cogo Point                    | Contour-Edge Cogo Point                    |
| 100_Contour-Edge_Point Label                   | Contour-Edge Point Label                   |
| 101_Contour-Standard_Cogo Point                | Contour-Standard Cogo Point                |
| 101_Contour-Standard_Point Label               | Contour-Standard Point Label               |
| 102_Bank-Top_Cogo Point                        | Bank-Top Cogo Point                        |
| 102_Bank-Top_Point Label                       | Bank-Top Point Label                       |
| 103_Bank-Toe_Cogo Point                        | Bank-Toe Cogo Point                        |
| 103_Bank-Toe_Point Label                       | Bank-Toe Point Label                       |
| 104_Spot_Height_(Natural_Surface)_Cogo Point   | Spot Height (Natural Surface) Cogo Point   |
| 104_Spot_Height_(Natural_Surface)_Point Label  | Spot Height (Natural Surface) Point Label  |
| 105_Spot_Height_(Existing_Surface)_Cogo Point  | Spot Height (Existing Surface) Cogo Point  |
| 105_Spot_Height_(Existing_Surface)_Point Label | Spot Height (Existing Surface) Point Label |
| 106_Change_of_Grade_Cogo Point                 | Change of Grade Cogo Point                 |
| 106_Change_of_Grade_Point Label                | Change of Grade Point Label                |
| 107_Floor_Level_Cogo Point                     | Floor Level Cogo Point                     |
| 107_Floor_Level_Point Label                    | Floor Level Point Label                    |
| 108_Roof_Level_Cogo Point                      | Roof Level Cogo Point                      |
| 108_Roof_Level_Point Label                     | Roof Level Point Label                     |
| 108-Roof Level - String                        | Roof Level - String                        |
| 109_Ground_String-Profile_Cogo Point           | Ground String-Profile Cogo Point           |
| 109_Ground_String-Profile_Point Label          | Ground String-Profile Point Label          |
| 109-Ground String-Profile - String             | Ground String-Profile - String             |
| 110_Ground_String-Breakline_Cogo Point         | Ground String-Breakline Cogo Point         |
| 110_Ground_String-Breakline_Point Label        | Ground String-Breakline Point Label        |
| 110-Ground String-Breakline - String           | Ground String-Breakline - String           |
| 111_Relief-Unclassified_Cogo Point             | Relief-Unclassified Cogo Point             |
| 111_Relief-Unclassified_Point Label            | Relief-Unclassified Point Label            |
| 201_Tree_Cogo Point                            | Tree Cogo Point                            |
| 201_Tree_Point Label                           | Tree Point Label                           |
| 202_Plantation_Cogo Point                      | Plantation Cogo Point                      |
| 202_Plantation_Point Label                     | Plantation Point Label                     |

|                                      |                                  |
|--------------------------------------|----------------------------------|
| 203_Edge_of_Vegetation_Cogo Point    | Edge of Vegetation Cogo Point    |
| 203_Edge_of_Vegetation_Point Label   | Edge of Vegetation Point Label   |
| 203-Edge of Vegetation - String      | Edge of Vegetation - String      |
| 204_Single_Shrub_Cogo Point          | Single Shrub Cogo Point          |
| 204_Single_Shrub_Point Label         | Single Shrub Point Label         |
| 204-Single Shrub - String            | Single Shrub - String            |
| 205_Conifer_Cogo Point               | Conifer Cogo Point               |
| 205_Conifer_Point Label              | Conifer Point Label              |
| 205-Conifer - String                 | Conifer - String                 |
| 206_Dead_Tree_Cogo Point             | Dead Tree Cogo Point             |
| 206_Dead_Tree_Point Label            | Dead Tree Point Label            |
| 206-Dead Tree - String               | Dead Tree - String               |
| 207_Garden_Bed_Cogo Point            | Garden Bed Cogo Point            |
| 207_Garden_Bed_Point Label           | Garden Bed Point Label           |
| 207-Garden Bed - String              | Garden Bed - String              |
| 208_Sprinkler_Head_Cogo Point        | Sprinkler Head Cogo Point        |
| 208_Sprinkler_Head_Point Label       | Sprinkler Head Point Label       |
| 208-Sprinkler Head - String          | Sprinkler Head - String          |
| 230_Tree-Top_Cogo Point              | Tree-Top Cogo Point              |
| 230_Tree-Top_Point Label             | Tree-Top Point Label             |
| 230-Tree-Top - String                | Tree-Top - String                |
| 301_Drain-Concrete_Earth_Cogo Point  | Drain-Concrete Earth Cogo Point  |
| 301_Drain-Concrete_Earth_Point Label | Drain-Concrete Earth Point Label |
| 301-Drain-Concrete Earth - String    | Drain-Concrete Earth - String    |
| 302_Watercourse_Cogo Point           | Watercourse Cogo Point           |
| 302_Watercourse_Point Label          | Watercourse Point Label          |
| 302-Watercourse - String             | Watercourse - String             |
| 303_Pondage_Cogo Point               | Pondage Cogo Point               |
| 303_Pondage_Point Label              | Pondage Point Label              |
| 303-Pondage - String                 | Pondage - String                 |
| 304_Drain-RCP_Cogo Point             | Drain-RCP Cogo Point             |
| 304_Drain-RCP_Point Label            | Drain-RCP Point Label            |
| 304-Drain-RCP - String               | Drain-RCP - String               |
| 305_Box_Culvert_Cogo Point           | Box Culvert Cogo Point           |
| 305_Box_Culvert_Point Label          | Box Culvert Point Label          |
| 305-Box Culvert - String             | Box Culvert - String             |
| 306_Round_Culvert_Cogo Point         | Round Culvert Cogo Point         |
| 306_Round_Culvert_Point Label        | Round Culvert Point Label        |
| 306-Round Culvert - String           | Round Culvert - String           |
| 307_Drain-Under_Ground_Cogo Point    | Drain-Under Ground Cogo Point    |
| 307_Drain-Under_Ground_Point Label   | Drain-Under Ground Point Label   |

|                                       |                                   |
|---------------------------------------|-----------------------------------|
| 307-Drain-Under Ground - String       | Drain-Under Ground - String       |
| 308_Drain-SEP_Cogo Point              | Drain-SEP Cogo Point              |
| 308_Drain-SEP_Point Label             | Drain-SEP Point Label             |
| 308-Drain-SEP - String                | Drain-SEP - String                |
| 309_Drain-GP_Cogo Point               | Drain-GP Cogo Point               |
| 309_Drain-GP_Point Label              | Drain-GP Point Label              |
| 309-Drain-GP - String                 | Drain-GP - String                 |
| 310_Drain-JP_Cogo Point               | Drain-JP Cogo Point               |
| 310_Drain-JP_Point Label              | Drain-JP Point Label              |
| 310-Drain-JP - String                 | Drain-JP - String                 |
| 311_Drain-DP_Cogo Point               | Drain-DP Cogo Point               |
| 311_Drain-DP_Point Label              | Drain-DP Point Label              |
| 311-Drain-DP - String                 | Drain-DP - String                 |
| 312_Drain-Unclassified_Cogo Point     | Drain-Unclassified Cogo Point     |
| 312_Drain-Unclassified_Point Label    | Drain-Unclassified Point Label    |
| 312-Drain-Unclassified - String       | Drain-Unclassified - String       |
| 313_Watercourse-Dry_Cogo Point        | Watercourse-Dry Cogo Point        |
| 313_Watercourse-Dry_Point Label       | Watercourse-Dry Point Label       |
| 313-Watercourse-Dry - String          | Watercourse-Dry - String          |
| 314_Watercourse-Perennial_Cogo Point  | Watercourse-Perennial Cogo Point  |
| 314_Watercourse-Perennial_Point Label | Watercourse-Perennial Point Label |
| 314-Watercourse-Perennial - String    | Watercourse-Perennial - String    |
| 315_Swamp_Cogo Point                  | Swamp Cogo Point                  |
| 315_Swamp_Point Label                 | Swamp Point Label                 |
| 315-Swamp - String                    | Swamp - String                    |
| 316_Wing_Wall-Right_Cogo Point        | Wing Wall-Right Cogo Point        |
| 316_Wing_Wall-Right_Point Label       | Wing Wall-Right Point Label       |
| 316-Wing Wall-Right - String          | Wing Wall-Right - String          |
| 317_Wing_Wall-Left_Cogo Point         | Wing Wall-Left Cogo Point         |
| 317_Wing_Wall-Left_Point Label        | Wing Wall-Left Point Label        |
| 317-Wing Wall-Left - String           | Wing Wall-Left - String           |
| 318_End_Wall_Cogo Point               | End Wall Cogo Point               |
| 318_End_Wall_Point Label              | End Wall Point Label              |
| 318-End Wall - String                 | End Wall - String                 |
| 319_Flusher_Pit_Cogo Point            | Flusher Pit Cogo Point            |
| 319_Flusher_Pit_Point Label           | Flusher Pit Point Label           |
| 320_Rock_Beaching_Cogo Point          | Rock Beaching Cogo Point          |
| 320_Rock_Beaching_Point Label         | Rock Beaching Point Label         |
| 320-Rock Beaching - String            | Rock Beaching - String            |
| 321_Invert-Pipe_or_Pit_Cogo Point     | Invert-Pipe or Pit Cogo Point     |
| 321_Invert-Pipe_or_Pit_Point Label    | Invert-Pipe or Pit Point Label    |

|                                |                            |
|--------------------------------|----------------------------|
| 322_Water_Level_Cogo Point     | Water Level Cogo Point     |
| 322_Water_Level_Point Label    | Water Level Point Label    |
| 322-Water Level - String       | Water Level - String       |
| 323_Weir_Cogo Point            | Weir Cogo Point            |
| 323_Weir_Point Label           | Weir Point Label           |
| 323-Weir - String              | Weir - String              |
| 330_Pipe-UG_Cogo Point         | Pipe-UG Cogo Point         |
| 330_Pipe-UG_Point Label        | Pipe-UG Point Label        |
| 330-Pipe-UG - String           | Pipe-UG - String           |
| 401_Bitumen-CL_Cogo Point      | Bitumen-CL Cogo Point      |
| 401_Bitumen-CL_Point Label     | Bitumen-CL Point Label     |
| 401-Bitumen-CL - String        | Bitumen-CL - String        |
| 402_Bitumen-Spot_Cogo Point    | Bitumen-Spot Cogo Point    |
| 402_Bitumen-Spot_Point Label   | Bitumen-Spot Point Label   |
| 402-Bitumen-Spot - String      | Bitumen-Spot - String      |
| 403_Bitumen-Edge_Cogo Point    | Bitumen-Edge Cogo Point    |
| 403_Bitumen-Edge_Point Label   | Bitumen-Edge Point Label   |
| 403-Bitumen-Edge - String      | Bitumen-Edge - String      |
| 404_Formation-CL_Cogo Point    | Formation-CL Cogo Point    |
| 404_Formation-CL_Point Label   | Formation-CL Point Label   |
| 404-Formation-CL - String      | Formation-CL - String      |
| 405_Formation-Edge_Cogo Point  | Formation-Edge Cogo Point  |
| 405_Formation-Edge_Point Label | Formation-Edge Point Label |
| 405-Formation-Edge - String    | Formation-Edge - String    |
| 406_Kerb-Lip_Cogo Point        | Kerb-Lip Cogo Point        |
| 406_Kerb-Lip_Point Label       | Kerb-Lip Point Label       |
| 406-Kerb-Lip - String          | Kerb-Lip - String          |
| 407_Kerb-Invert_Cogo Point     | Kerb-Invert Cogo Point     |
| 407_Kerb-Invert_Point Label    | Kerb-Invert Point Label    |
| 407-Kerb-Invert - String       | Kerb-Invert - String       |
| 408_Kerb-Back_Cogo Point       | Kerb-Back Cogo Point       |
| 408_Kerb-Back_Point Label      | Kerb-Back Point Label      |
| 408-Kerb-Back - String         | Kerb-Back - String         |
| 409_Kerb-Top_Cogo Point        | Kerb-Top Cogo Point        |
| 409_Kerb-Top_Point Label       | Kerb-Top Point Label       |
| 409-Kerb-Top - String          | Kerb-Top - String          |
| 410_Footpath_Cogo Point        | Footpath Cogo Point        |
| 410_Footpath_Point Label       | Footpath Point Label       |
| 410-Footpath - String          | Footpath - String          |
| 411_Driveway_Cogo Point        | Driveway Cogo Point        |
| 411_Driveway_Point Label       | Driveway Point Label       |



|                                   |                               |
|-----------------------------------|-------------------------------|
| 411-Driveway - String             | Driveway - String             |
| 412_Track_Cogo Point              | Track Cogo Point              |
| 412_Track_Point Label             | Track Point Label             |
| 412-Track - String                | Track - String                |
| 413_Road-Unclassified_Cogo Point  | Road-Unclassified Cogo Point  |
| 413_Road-Unclassified_Point Label | Road-Unclassified Point Label |
| 413-Road-Unclassified - String    | Road-Unclassified - String    |
| 414_Detector_Pad_Cogo Point       | Detector Pad Cogo Point       |
| 414_Detector_Pad_Point Label      | Detector Pad Point Label      |
| 415_Lane_Marks_Cogo Point         | Lane Marks Cogo Point         |
| 415_Lane_Marks_Point Label        | Lane Marks Point Label        |
| 415-Lane Marks - String           | Lane Marks - String           |
| 416_Delineators_Cogo Point        | Delineators Cogo Point        |
| 416_Delineators_Point Label       | Delineators Point Label       |
| 416-Delineators - String          | Delineators - String          |
| 417_Line_Marking_Cogo Point       | Line Marking Cogo Point       |
| 417_Line_Marking_Point Label      | Line Marking Point Label      |
| 417-Line Marking - String         | Line Marking - String         |
| 418_Parking_Bays_Cogo Point       | Parking Bays Cogo Point       |
| 418_Parking_Bays_Point Label      | Parking Bays Point Label      |
| 418-Parking Bays - String         | Parking Bays - String         |
| 419_Concrete-Edge_Cogo Point      | Concrete-Edge Cogo Point      |
| 419_Concrete-Edge_Point Label     | Concrete-Edge Point Label     |
| 419-Concrete-Edge - String        | Concrete-Edge - String        |
| 420_Traffic_Arrow_Cogo Point      | Traffic Arrow Cogo Point      |
| 420_Traffic_Arrow_Point Label     | Traffic Arrow Point Label     |
| 420-Traffic Arrow - String        | Traffic Arrow - String        |
| 421_Paving-Edge_Cogo Point        | Paving-Edge Cogo Point        |
| 421_Paving-Edge_Point Label       | Paving-Edge Point Label       |
| 421-Paving-Edge - String          | Paving-Edge - String          |
| 422_Crossing_Cogo Point           | Crossing Cogo Point           |
| 422_Crossing_Point Label          | Crossing Point Label          |
| 422-Crossing - String             | Crossing - String             |
| 501_Guardrail_Cogo Point          | Guardrail Cogo Point          |
| 501_Guardrail_Point Label         | Guardrail Point Label         |
| 501-Guardrail - String            | Guardrail - String            |
| 502_Km_Post_Cogo Point            | Km Post Cogo Point            |
| 502_Km_Post_Point Label           | Km Post Point Label           |
| 503_Sign_Cogo Point               | Sign Cogo Point               |
| 503_Sign_Point Label              | Sign Point Label              |
| 504_Letter_Box_Cogo Point         | Letter Box Cogo Point         |

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|--|------------------------------------|
| 504_Letter_Box_Point Label             | Letter Box Point Label             |
| 505_Traffic-Signal_Pole_Cogo Point     | Traffic-Signal Pole Cogo Point     |
| 505_Traffic-Signal_Pole_Point Label    | Traffic-Signal Pole Point Label    |
| 506_Traffic-Signal_Box_Cogo Point      | Traffic-Signal Box Cogo Point      |
| 506_Traffic-Signal_Box_Point Label     | Traffic-Signal Box Point Label     |
| 507_Traffic-Signal_Pit_Cogo Point      | Traffic-Signal Pit Cogo Point      |
| 507_Traffic-Signal_Pit_Point Label     | Traffic-Signal Pit Point Label     |
| 508_Emergency_Phone_Cogo Point         | Emergency Phone Cogo Point         |
| 508_Emergency_Phone_Point Label        | Emergency Phone Point Label        |
| 509_Road_Furn-Unclassified_Cogo Point  | Road Furn-Unclassified Cogo Point  |
| 509_Road_Furn-Unclassified_Point Label | Road Furn-Unclassified Point Label |
| 510_Monument_Cogo Point                | Monument Cogo Point                |
| 510_Monument_Point Label               | Monument Point Label               |
| 511_Joint_Use_Pole_Cogo Point          | Joint Use Pole Cogo Point          |
| 511_Joint_Use_Pole_Point Label         | Joint Use Pole Point Label         |
| 512_Cable_Pit_Cogo Point               | Cable Pit Cogo Point               |
| 512_Cable_Pit_Point Label              | Cable Pit Point Label              |
| 513_Detector_Pit_Cogo Point            | Detector Pit Cogo Point            |
| 513_Detector_Pit_Point Label           | Detector Pit Point Label           |
| 514_Red_Light_Camera_Cogo Point        | Red Light Camera Cogo Point        |
| 514_Red_Light_Camera_Point Label       | Red Light Camera Point Label       |
| 515_Security_Camera_Cogo Point         | Security Camera Cogo Point         |
| 515_Security_Camera_Point Label        | Security Camera Point Label        |
| 516_Sign-Side_Mounted_Cogo Point       | Sign-Side Mounted Cogo Point       |
| 516_Sign-Side_Mounted_Point Label      | Sign-Side Mounted Point Label      |
| 517_Sign-Centre_Mounted_Cogo Point     | Sign-Centre Mounted Cogo Point     |
| 517_Sign-Centre_Mounted_Point Label    | Sign-Centre Mounted Point Label    |
| 518_Sign-Multiple_Mounted_Cogo Point   | Sign-Multiple Mounted Cogo Point   |
| 518_Sign-Multiple_Mounted_Point Label  | Sign-Multiple Mounted Point Label  |
| 519_Sign-Curved_Cogo Point             | Sign-Curved Cogo Point             |
| 519_Sign-Curved_Point Label            | Sign-Curved Point Label            |
| 520_Traffic-Signal_Wiring_Cogo Point   | Traffic-Signal Wiring Cogo Point   |
| 520_Traffic-Signal_Wiring_Point Label  | Traffic-Signal Wiring Point Label  |
| 521_Bollard_Cogo Point                 | Bollard Cogo Point                 |
| 521_Bollard_Point Label                | Bollard Point Label                |
| 522_Rubbish_Bin_Cogo Point             | Rubbish Bin Cogo Point             |
| 522_Rubbish_Bin_Point Label            | Rubbish Bin Point Label            |
| 523_Guide_Post_Cogo Point              | Guide Post Cogo Point              |
| 523_Guide_Post_Point Label             | Guide Post Point Label             |
| 524_Seat_Cogo Point                    | Seat Cogo Point                    |
| 524_Seat_Point Label                   | Seat Point Label                   |

|                                       |                                   |
|---------------------------------------|-----------------------------------|
| 524-Seat - String                     | Seat - String                     |
| 525_Train_Stop_Cogo Point             | Tram Stop Cogo Point              |
| 525_Train_Stop_Point Label            | Tram Stop Point Label             |
| 525-Train Stop - String               | Tram Stop - String                |
| 526_Bus_Stop_Cogo Point               | Bus Stop Cogo Point               |
| 526_Bus_Stop_Point Label              | Bus Stop Point Label              |
| 526-Bus Stop - String                 | Bus Stop - String                 |
| 527_Parking_Meter_Cogo Point          | Parking Meter Cogo Point          |
| 527_Parking_Meter_Point Label         | Parking Meter Point Label         |
| 531-KerbSpecial - String              | KerbSpecial - String              |
| 531-KerbSpecial_Cogo Point            | KerbSpecial Cogo Point            |
| 531-KerbSpecial_Point Label           | KerbSpecial Point Label           |
| 601_House_Cogo Point                  | House Cogo Point                  |
| 601_House_Point Label                 | House Point Label                 |
| 601-House - String                    | House - String                    |
| 602_Minor_Building_(Shed)_Cogo Point  | Minor Building (Shed) Cogo Point  |
| 602_Minor_Building_(Shed)_Point Label | Minor Building (Shed) Point Label |
| 602-Minor Building (Shed) - String    | Minor Building (Shed) - String    |
| 603_Building_Cogo Point               | Building Cogo Point               |
| 603_Building_Point Label              | Building Point Label              |
| 603-Building - String                 | Building - String                 |
| 604_Verandah_Cogo Point               | Verandah Cogo Point               |
| 604_Verandah_Point Label              | Verandah Point Label              |
| 604-Verandah - String                 | Verandah - String                 |
| 605_Bridge-Abutment_Cogo Point        | Bridge-Abutment Cogo Point        |
| 605_Bridge-Abutment_Point Label       | Bridge-Abutment Point Label       |
| 605-Bridge-Abutment - String          | Bridge-Abutment - String          |
| 606_Bridge-Edge_Cogo Point            | Bridge-Edge Cogo Point            |
| 606_Bridge-Edge_Point Label           | Bridge-Edge Point Label           |
| 606-Bridge-Edge - String              | Bridge-Edge - String              |
| 607_Bridge-Underside_Cogo Point       | Bridge-Underside Cogo Point       |
| 607_Bridge-Underside_Point Label      | Bridge-Underside Point Label      |
| 607-Bridge-Underside - String         | Bridge-Underside - String         |
| 608_Pier_Column_Cogo Point            | Pier Column Cogo Point            |
| 608_Pier_Column_Point Label           | Pier Column Point Label           |
| 609_Retaining_Wall_Cogo Point         | Retaining Wall Cogo Point         |
| 609_Retaining_Wall_Point Label        | Retaining Wall Point Label        |
| 609-Retaining Wall - String           | Retaining Wall - String           |
| 610_Structure_Cogo Point              | Structure Cogo Point              |
| 610_Structure_Point Label             | Structure Point Label             |
| 610-Structure - String                | Structure - String                |

|   |                                     |
|---|-------------------------------------|
| 611_Swimming_Pool_Cogo Point            | Swimming Pool Cogo Point            |
| 611_Swimming_Pool_Point Label           | Swimming Pool Point Label           |
| 611-Swimming Pool - String              | Swimming Pool - String              |
| 612_Stock_Pile_Cogo Point               | Stock Pile Cogo Point               |
| 612_Stock_Pile_Point Label              | Stock Pile Point Label              |
| 613_Bore_Cogo Point                     | Bore Cogo Point                     |
| 613_Bore_Point Label                    | Bore Point Label                    |
| 614_Windmill_Cogo Point                 | Windmill Cogo Point                 |
| 614_Windmill_Point Label                | Windmill Point Label                |
| 615_Quarry_Cogo Point                   | Quarry Cogo Point                   |
| 615_Quarry_Point Label                  | Quarry Point Label                  |
| 615-Quarry - String                     | Quarry - String                     |
| 616_Sports_Arena_Cogo Point             | Sports Arena Cogo Point             |
| 616_Sports_Arena_Point Label            | Sports Arena Point Label            |
| 616-Sports Arena - String               | Sports Arena - String               |
| 617_Wall_Cogo Point                     | Wall Cogo Point                     |
| 617_Wall_Point Label                    | Wall Point Label                    |
| 617-Wall - String                       | Wall - String                       |
| 618_Chimney_Cogo Point                  | Chimney Cogo Point                  |
| 618_Chimney_Point Label                 | Chimney Point Label                 |
| 619_Retaining_Wall-Crib_Cogo Point      | Retaining Wall-Crib Cogo Point      |
| 619_Retaining_Wall-Crib_Point Label     | Retaining Wall-Crib Point Label     |
| 619-Retaining Wall-Crib - String        | Retaining Wall-Crib - String        |
| 620_Retaining_Wall-Rock_Cogo Point      | Retaining Wall-Rock Cogo Point      |
| 620_Retaining_Wall-Rock_Point Label     | Retaining Wall-Rock Point Label     |
| 620-Retaining Wall-Rock - String        | Retaining Wall-Rock - String        |
| 621_Retaining_Wall-Concrete_Cogo Point  | Retaining Wall-Concrete Cogo Point  |
| 621_Retaining_Wall-Concrete_Point Label | Retaining Wall-Concrete Point Label |
| 621-Retaining Wall-Concrete - String    | Retaining Wall-Concrete - String    |
| 622_Retaining_Wall-Wood_Cogo Point      | Retaining Wall-Wood Cogo Point      |
| 622_Retaining_Wall-Wood_Point Label     | Retaining Wall-Wood Point Label     |
| 622-Retaining Wall-Wood - String        | Retaining Wall-Wood - String        |
| 623_Garage_Cogo Point                   | Garage Cogo Point                   |
| 623_Garage_Point Label                  | Garage Point Label                  |
| 624_Petrol_Bowser_Cogo Point            | Petrol Bowser Cogo Point            |
| 624_Petrol_Bowser_Point Label           | Petrol Bowser Point Label           |
| 625_Fuel_Tank-Above_Ground_Cogo Point   | Fuel Tank-Above Ground Cogo Point   |
| 625_Fuel_Tank-Above_Ground_Point Label  | Fuel Tank-Above Ground Point Label  |
| 625-Fuel Tank-Above Ground - String     | Fuel Tank-Above Ground - String     |
| 626_Fuel_Tank-Under_Ground_Cogo Point   | Fuel Tank-Under Ground Cogo Point   |
| 626_Fuel_Tank-Under_Ground_Point Label  | Fuel Tank-Under Ground Point Label  |

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|--|--|
| 626-Fuel Tank-Under Ground - String            | Fuel Tank-Under Ground - String            |
| 627_Petrol_Valve_Cogo Point                    | Petrol Valve Cogo Point                    |
| 627_Petrol_Valve_Point Label                   | Petrol Valve Point Label                   |
| 628_Pump_Cogo Point                            | Pump Cogo Point                            |
| 628_Pump_Point Label                           | Pump Point Label                           |
| 630_Ladder_Cogo Point                          | Ladder Cogo Point                          |
| 630_Ladder_Point Label                         | Ladder Point Label                         |
| 631_Steps_Cogo Point                           | Steps Cogo Point                           |
| 631_Steps_Point Label                          | Steps Point Label                          |
| 640_House_Floor_Level_Cogo Point               | House Floor Level Cogo Point               |
| 640_House_Floor_Level_Point Label              | House Floor Level Point Label              |
| 641_Door_Cogo Point                            | Door Cogo Point                            |
| 641_Door_Point Label                           | Door Point Label                           |
| 642_Window_Cogo Point                          | Window Cogo Point                          |
| 642_Window_Point Label                         | Window Point Label                         |
| 643_Eve_Cogo Point                             | Eve Cogo Point                             |
| 643_Eve_Point Label                            | Eve Point Label                            |
| 644_Roof_Apex_Cogo Point                       | Roof Apex Cogo Point                       |
| 644_Roof_Apex_Point Label                      | Roof Apex Point Label                      |
| 644-Roof Apex - String                         | Roof Apex - String                         |
| 645_Down_Pipe_Cogo Point                       | Down Pipe Cogo Point                       |
| 645_Down_Pipe_Point Label                      | Down Pipe Point Label                      |
| 645-Down Pipe - String                         | Down Pipe - String                         |
| 710_Electricity-Cabinet_Cogo Point             | Electricity-Cabinet Cogo Point             |
| 710_Electricity-Cabinet_Point Label            | Electricity-Cabinet Point Label            |
| 710-Electricity-Cabinet - String               | Electricity-Cabinet - String               |
| 711_Light_Pole_Cogo Point                      | Light Pole Cogo Point                      |
| 711_Light_Pole_Point Label                     | Light Pole Point Label                     |
| 712_Electricity-Pole_Cogo Point                | Electricity-Pole Cogo Point                |
| 712_Electricity-Pole_Point Label               | Electricity-Pole Point Label               |
| 712-Electricity-Pole - String                  | Electricity-Pole - String                  |
| 713_Electricity-Pole_with_Light_Cogo Point     | Electricity-Pole with Light Cogo Point     |
| 713_Electricity-Pole_with_Light_Point Label    | Electricity-Pole with Light Point Label    |
| 713-Electricity-Pole with Light - String       | Electricity-Pole with Light - String       |
| 714_Electricity-Transmission_Tower_Cogo Point  | Electricity-Transmission Tower Cogo Point  |
| 714_Electricity-Transmission_Tower_Point Label | Electricity-Transmission Tower Point Label |
| 714-Electricity-Transmission Tower - String    | Electricity-Transmission Tower - String    |
| 715_Electricity-Unclassified_Cogo Point        | Electricity-Unclassified Cogo Point        |
| 715_Electricity-Unclassified_Point Label       | Electricity-Unclassified Point Label       |
| 715-Electricity-Unclassified - String          | Electricity-Unclassified - String          |
| 716_Electricity-Pit_Cogo Point                 | Electricity-Pit Cogo Point                 |

|   |   |
|---|---|
| 716_Electricity-Pit_Point Label             | Electricity-Pit Point Label             |
| 716-Electricity-Pit - String                | Electricity-Pit - String                |
| 717_Electricity-Over_Head_Cogo Point        | Electricity-Over Head Cogo Point        |
| 717_Electricity-Over_Head_Point Label       | Electricity-Over Head Point Label       |
| 717-Electricity-Over Head - String          | Electricity-Over Head - String          |
| 718_Electricity-Under_Ground_Cogo Point     | Electricity-Under Ground Cogo Point     |
| 718_Electricity-Under_Ground_Point Label    | Electricity-Under Ground Point Label    |
| 718-Electricity-Under Ground - String       | Electricity-Under Ground - String       |
| 720_Optus_Pit_Cogo Point                    | Optus Pit Cogo Point                    |
| 720_Optus_Pit_Point Label                   | Optus Pit Point Label                   |
| 721_Telstra-Pit_Cogo Point                  | Telstra-Pit Cogo Point                  |
| 721_Telstra-Pit_Point Label                 | Telstra-Pit Point Label                 |
| 722_Telstra-Pillar_Cogo Point               | Telstra-Pillar Cogo Point               |
| 722_Telstra-Pillar_Point Label              | Telstra-Pillar Point Label              |
| 723_Telstra-Marker_Post_Cogo Point          | Telstra-Marker Post Cogo Point          |
| 723_Telstra-Marker_Post_Point Label         | Telstra-Marker Post Point Label         |
| 724_Telstra-Pole_Cogo Point                 | Telstra-Pole Cogo Point                 |
| 724_Telstra-Pole_Point Label                | Telstra-Pole Point Label                |
| 725_Phone_Box_Cogo Point                    | Phone Box Cogo Point                    |
| 725_Phone_Box_Point Label                   | Phone Box Point Label                   |
| 726_Telstra-Pit_Large_Cogo Point            | Telstra-Pit Large Cogo Point            |
| 726_Telstra-Pit_Large_Point Label           | Telstra-Pit Large Point Label           |
| 727_Communications-Over_Head_Cogo Point     | Communications-Over Head Cogo Point     |
| 727_Communications-Over_Head_Point Label    | Communications-Over Head Point Label    |
| 727-Communications-Over Head - String       | Communications-Over Head - String       |
| 728_Communications-Under_Ground_Cogo Point  | Communications-Under Ground Cogo Point  |
| 728_Communications-Under_Ground_Point Label | Communications-Under Ground Point Label |
| 728-Communications-Under Ground - String    | Communications-Under Ground - String    |
| 731_Gas-Valve_Cogo Point                    | Gas-Valve Cogo Point                    |
| 731_Gas-Valve_Point Label                   | Gas-Valve Point Label                   |
| 732_Gas-Marker_Post_Cogo Point              | Gas-Marker Post Cogo Point              |
| 732_Gas-Marker_Post_Point Label             | Gas-Marker Post Point Label             |
| 732-Gas-Marker Post - String                | Gas-Marker Post - String                |
| 733_Gas-Unclassified_Cogo Point             | Gas-Unclassified Cogo Point             |
| 733_Gas-Unclassified_Point Label            | Gas-Unclassified Point Label            |
| 733-Gas-Unclassified - String               | Gas-Unclassified - String               |
| 734_Gas-Under_Ground_Cogo Point             | Gas-Under Ground Cogo Point             |
| 734_Gas-Under_Ground_Point Label            | Gas-Under Ground Point Label            |
| 734-Gas-Under Ground - String               | Gas-Under Ground - String               |
| 741_Sewer-Pit_Cogo Point                    | Sewer-Pit Cogo Point                    |
| 741_Sewer-Pit_Point Label                   | Sewer-Pit Point Label                   |

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| 742_Sewer-Unclassified_Cogo Point    | Sewer-Unclassified Cogo Point    |
| 742_Sewer-Unclassified_Point Label   | Sewer-Unclassified Point Label   |
| 742-Sewer-Unclassified - String      | Sewer-Unclassified - String      |
| 743_Sewer-Under_Ground_Cogo Point    | Sewer-Under Ground Cogo Point    |
| 743_Sewer-Under_Ground_Point Label   | Sewer-Under Ground Point Label   |
| 743-Sewer-Under Ground - String      | Sewer-Under Ground - String      |
| 744_Sewer-Vent_Cogo Point            | Sewer-Vent Cogo Point            |
| 744_Sewer-Vent_Point Label           | Sewer-Vent Point Label           |
| 750_Drinking_Fountain_Cogo Point     | Drinking Fountain Cogo Point     |
| 750_Drinking_Fountain_Point Label    | Drinking Fountain Point Label    |
| 751_Stop_Valve_Cogo Point            | Stop Valve Cogo Point            |
| 751_Stop_Valve_Point Label           | Stop Valve Point Label           |
| 752_Fire_Plug_Cogo Point             | Fire Plug Cogo Point             |
| 752_Fire_Plug_Point Label            | Fire Plug Point Label            |
| 753_Fire_Hydrant_Cogo Point          | Fire Hydrant Cogo Point          |
| 753_Fire_Hydrant_Point Label         | Fire Hydrant Point Label         |
| 754_Water-Meter_Cogo Point           | Water-Meter Cogo Point           |
| 754_Water-Meter_Point Label          | Water-Meter Point Label          |
| 755_Water-Unclassified_Cogo Point    | Water-Unclassified Cogo Point    |
| 755_Water-Unclassified_Point Label   | Water-Unclassified Point Label   |
| 755-Water-Unclassified - String      | Water-Unclassified - String      |
| 756_Water-UG_Cogo Point              | Water-UG Cogo Point              |
| 756_Water-UG_Point Label             | Water-UG Point Label             |
| 756-Water-UG - String                | Water-UG - String                |
| 757_Water-Marker_Post_Cogo Point     | Water-Marker Post Cogo Point     |
| 757_Water-Marker_Post_Point Label    | Water-Marker Post Point Label    |
| 758_Tap_Cogo Point                   | Tap Cogo Point                   |
| 758_Tap_Point Label                  | Tap Point Label                  |
| 759_Electrolysis_Point_Cogo Point    | Electrolysis Point Cogo Point    |
| 759_Electrolysis_Point_Point Label   | Electrolysis Point Point Label   |
| 760_Tank_Cogo Point                  | Tank Cogo Point                  |
| 760_Tank_Point Label                 | Tank Point Label                 |
| 761_Stay_Cogo Point                  | Stay Cogo Point                  |
| 761_Stay_Point Label                 | Stay Point Label                 |
| 762_Pit-Unclassified_Cogo Point      | Pit-Unclassified Cogo Point      |
| 762_Pit-Unclassified_Point Label     | Pit-Unclassified Point Label     |
| 763_Pole-Unclassified_Cogo Point     | Pole-Unclassified Cogo Point     |
| 763_Pole-Unclassified_Point Label    | Pole-Unclassified Point Label    |
| 764_Utility-Unclassified_Cogo Point  | Utility-Unclassified Cogo Point  |
| 764_Utility-Unclassified_Point Label | Utility-Unclassified Point Label |
| 764-Utility-Unclassified - String    | Utility-Unclassified - String    |

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| 765_High_Pressure_Oil_and_Gas_Pipe_Cogo Point  | High Pressure Oil and Gas Pipe Cogo Point  |
| 765_High_Pressure_Oil_and_Gas_Pipe_Point Label | High Pressure Oil and Gas Pipe Point Label |
| 765-High Pressure Oil and Gas Pipe - String    | High Pressure Oil and Gas Pipe - String    |
| 766_Oil_Pipe_Marker_Post_Cogo Point            | Oil Pipe Marker Post Cogo Point            |
| 766_Oil_Pipe_Marker_Post_Point Label           | Oil Pipe Marker Post Point Label           |
| 767_Air_Conditioning_Cogo Point                | Air Conditioning Cogo Point                |
| 767_Air_Conditioning_Point Label               | Air Conditioning Point Label               |
| 768_Trough_Cogo Point                          | Trough Cogo Point                          |
| 768_Trough_Point Label                         | Trough Point Label                         |
| 769_Pole-Top_Cogo Point                        | Pole-Top Cogo Point                        |
| 769_Pole-Top_Point Label                       | Pole-Top Point Label                       |
| 771_Cabinet_Cogo Point                         | Cabinet Cogo Point                         |
| 771_Cabinet_Point Label                        | Cabinet Point Label                        |
| 801_Rail-Line_Cogo Point                       | Rail-Line Cogo Point                       |
| 801_Rail-Line_Point Label                      | Rail-Line Point Label                      |
| 801-Rail-Line - String                         | Rail-Line - String                         |
| 802_Rail-Boom_Gate_Cogo Point                  | Rail-Boom Gate Cogo Point                  |
| 802_Rail-Boom_Gate_Point Label                 | Rail-Boom Gate Point Label                 |
| 803_Rail-Signal_Pole_Cogo Point                | Rail-Signal Pole Cogo Point                |
| 803_Rail-Signal_Pole_Point Label               | Rail-Signal Pole Point Label               |
| 804_Rail-Signal_Box_Cogo Point                 | Rail-Signal Box Cogo Point                 |
| 804_Rail-Signal_Box_Point Label                | Rail-Signal Box Point Label                |
| 805_Rail-Stanchion-R_Cogo Point                | Rail-Stanchion-R Cogo Point                |
| 805_Rail-Stanchion-R_Point Label               | Rail-Stanchion-R Point Label               |
| 806_Rail-Unclassified_Cogo Point               | Rail-Unclassified Cogo Point               |
| 806_Rail-Unclassified_Point Label              | Rail-Unclassified Point Label              |
| 807_Tram-Pole_Cogo Point                       | Tram-Pole Cogo Point                       |
| 807_Tram-Pole_Point Label                      | Tram-Pole Point Label                      |
| 808_Tram-Unclassified_Cogo Point               | Tram-Unclassified Cogo Point               |
| 808_Tram-Unclassified_Point Label              | Tram-Unclassified Point Label              |
| 809_Tram-Line_Cogo Point                       | Tram-Line Cogo Point                       |
| 809_Tram-Line_Point Label                      | Tram-Line Point Label                      |
| 809-Tram-Line - String                         | Tram-Line - String                         |
| 810_Tram-Shelter_Cogo Point                    | Tram-Shelter Cogo Point                    |
| 810_Tram-Shelter_Point Label                   | Tram-Shelter Point Label                   |
| 810-Tram-Shelter - String                      | Tram-Shelter - String                      |
| 811_Rail-Stanchion-L_Cogo Point                | Rail-Stanchion-L Cogo Point                |
| 811_Rail-Stanchion-L_Point Label               | Rail-Stanchion-L Point Label               |
| 812_Rail-Platform_Cogo Point                   | Rail-Platform Cogo Point                   |
| 812_Rail-Platform_Point Label                  | Rail-Platform Point Label                  |
| 812-Rail-Platform - String                     | Rail-Platform - String                     |



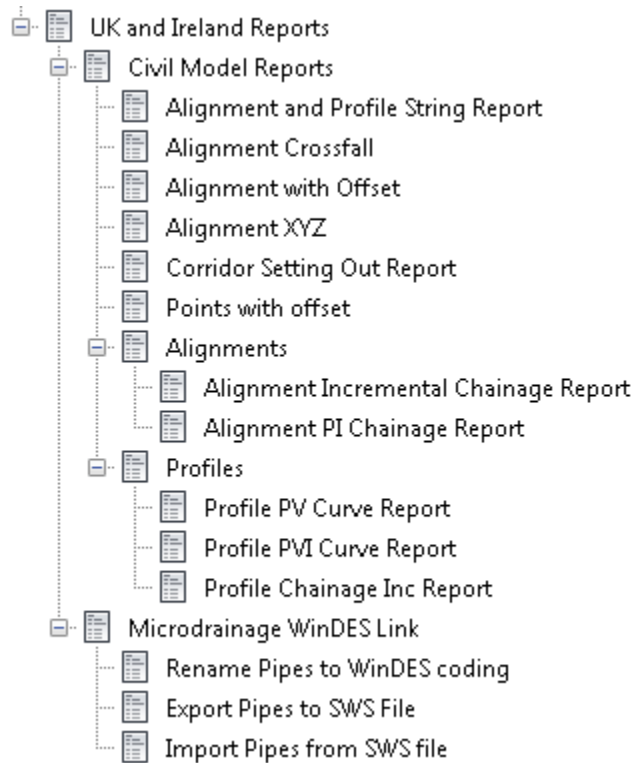
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|--|--------------------------------------|
| 813_Relay_Cogo Point                     | Relay Cogo Point                     |
| 813_Relay_Point Label                    | Relay Point Label                    |
| 814_Train_Stop_Cogo Point                | Train Stop Cogo Point                |
| 814_Train_Stop_Point Label               | Train Stop Point Label               |
| 815_Control_Cabinet_Cogo Point           | Control Cabinet Cogo Point           |
| 815_Control_Cabinet_Point Label          | Control Cabinet Point Label          |
| 820_Rail-Catenery_Wire_Cogo Point        | Rail-Catenery Wire Cogo Point        |
| 820_Rail-Catenery_Wire_Point Label       | Rail-Catenery Wire Point Label       |
| 820-Rail-Catenery Wire - String          | Rail-Catenery Wire - String          |
| 821_Rail-Contact_Wire_Cogo Point         | Rail-Contact Wire Cogo Point         |
| 821_Rail-Contact_Wire_Point Label        | Rail-Contact Wire Point Label        |
| 821-Rail-Contact Wire - String           | Rail-Contact Wire - String           |
| 830_Rail-Line-V_Nose_Cogo Point          | Rail-Line-V Nose Cogo Point          |
| 830_Rail-Line-V_Nose_Point Label         | Rail-Line-V Nose Point Label         |
| 830-Rail-Line-V Nose - String            | Rail-Line-V Nose - String            |
| 831_Rail-Line-Blade_Cogo Point           | Rail-Line-Blade Cogo Point           |
| 831_Rail-Line-Blade_Point Label          | Rail-Line-Blade Point Label          |
| 831-Rail-Line-Blade - String             | Rail-Line-Blade - String             |
| 901_Boundary_Cogo Point                  | Boundary Cogo Point                  |
| 901_Boundary_Point Label                 | Boundary Point Label                 |
| 901-Boundary - String                    | Boundary - String                    |
| 902_Boundary-Intersection_Cogo Point     | Boundary-Intersection Cogo Point     |
| 902_Boundary-Intersection_Point Label    | Boundary-Intersection Point Label    |
| 902-Boundary-Intersection - String       | Boundary-Intersection - String       |
| 903_Fence_Cogo Point                     | Fence Cogo Point                     |
| 903_Fence_Point Label                    | Fence Point Label                    |
| 903-Fence - String                       | Fence - String                       |
| 904_Gate_Cogo Point                      | Gate Cogo Point                      |
| 904_Gate_Point Label                     | Gate Point Label                     |
| 905_Round_Post_Cogo Point                | Round Post Cogo Point                |
| 905_Round_Post_Point Label               | Round Post Point Label               |
| 906_Square_Post_Cogo Point               | Square Post Cogo Point               |
| 906_Square_Post_Point Label              | Square Post Point Label              |
| 907_Steel_Post_Cogo Point                | Steel Post Cogo Point                |
| 907_Steel_Post_Point Label               | Steel Post Point Label               |
| 908_Star_Post_Cogo Point                 | Star Post Cogo Point                 |
| 908_Star_Post_Point Label                | Star Post Point Label                |
| 909_Brick_or_Concrete_Corner_Cogo Point  | Brick or Concrete Corner Cogo Point  |
| 909_Brick_or_Concrete_Corner_Point Label | Brick or Concrete Corner Point Label |
| 910_Post_Cogo Point                      | Post Cogo Point                      |
| 910_Post_Point Label                     | Post Point Label                     |

|                        |                    |
|------------------------|--------------------|
| 911_Paling_Cogo Point  | Paling Cogo Point  |
| 911_Paling_Point Label | Paling Point Label |

## 4 Reports

The extra reports in the ANZ Country kit have been adopted from the UK/IE template by Jack Strongitharm

It is strongly recommended to install the UK/IE kit to experiment with other styles.



| Report Name                               | Description  |
|---|--|
| <b>Civil Model Reports</b>                |  |
| Alignment Incremental Chainage Report     | Creates a report at chainages specified of the alignment and profile geometry with levels and bearings |
| Alignment PI Chainage Report              | Reports the intersection points of alignments  |
| Alignment Superelevation Crossfall Report | Superelevation data from an alignment  |
| Profile PV Curve Report                   | Reports the vertical profile point information   |
| Profile PVI Curve Report                  | Reports the vertical profile point information   |
| Profile Chainage Inc. Report              | Reports the profile data at a chainage interval  |
| Geometry Detailed Report                  | Coordinates, levels, bearings and element types along an alignment and profile                         |
| Geometry Simple Report                    | Coordinates and levels along an alignment and profile  |
| Corridor Setting Out Report               | Reports a corridor for offset and slope  |
| Points Offsets from an Alignment Report   | Will report the offset and chainage value of COGO points from an Alignment                             |

|  |   |
|--|---|
| Surface Sampling along an Alignment Report | Require sample lines and will read a surface at 5m interval offsets |
|  |   |

## 5 Drawing Settings > Object Layers

| Object                    | Default Layer                       |
|---------------------------|-------------------------------------|
| Alignment                 | C-ALIGNMENTS                        |
| Alignment-Labeling        | C-LABELS_Alignment_General          |
| Alignment Table           | C-TABLES                            |
| Assembly                  | C-ASSEMBLIES                        |
| Building Site             | C-BUILDINGSITES                     |
| Corridor                  | C-CORRIDORS                         |
| Corridor Section          | C-CORRIDORS                         |
| Feature Line              | C-FEATURELINES                      |
| General Note Label        | C-LABELS                            |
| General Segment Label     | C-LABELS                            |
| Grading                   | C-GRADINGS                          |
| Grading-Labeling          | C-LABELS                            |
| Grid Surface              | C-SURFACES                          |
| Grid Surface-Labeling     | C-LABELS_Surfaces                   |
| Interference              | C-PIPE_Interference Clash Detection |
| Mass Haul Line            | C-MASSHAUL                          |
| Mass Haul View            | C-MASSHAUL                          |
| Match Line                | C-VIEWFRAMES                        |
| Match Line-Labeling       | C-VIEWFRAMES                        |
| Material Section          | C-SECTIONS                          |
| Material Table            | C-SECTIONS                          |
| Parcel                    | C-PARCELS                           |
| Parcel-Labeling           | C-LABELS_Parcels                    |
| Parcel Segment            | C-PARCELS                           |
| Parcel Segment-Labeling   | C-LABELS_Parcels                    |
| Parcel Table              | C-TABLES                            |
| Pipe                      | C-PIPES                             |
| Pipe-Labeling             | C-LABELS_Pipe                       |
| Pipe and Structure Table  | C-TABLES                            |
| Pipe Network Section      | C-PIPES                             |
| Pipe or Structure Profile | C-PIPES                             |
| Point Table               | C-TABLES                            |
| Profile                   | C-PROFILES                          |
| Profile-Labeling          | C-LABELS_Profile                    |
| Profile View              | C-PROFILEVIEWS                      |
| Profile View-Labeling     | C-LABELS_Profile                    |

|                                     |                   |
|-------------------------------------|-------------------|
| Sample Line                         | C-SECTIONS        |
| Sample Line-Labeling                | C-LABELS_Section  |
| Section                             | C-SECTIONS        |
| Section-Labeling                    | C-LABELS_Section  |
| Section View                        | C-SECTIONVIEWS    |
| Section View-Labeling               | C-LABELS_Section  |
| Section View Quantity Takeoff Table | C-TABLES          |
| Sheet                               | C-VIEWFRAMES      |
| Structure                           | C-PIPES           |
| Structure-Labeling                  | C-LABELS_Pipe     |
| Subassembly                         | C-SUBASSEMBLIES   |
| Surface Legend Table                | C-TABLES          |
| Survey Figure                       | C-SURVEY_Figures  |
| Survey Network                      | C-SURVEY          |
| Tin Surface                         | C-SURFACES        |
| Tin Surface-Labeling                | C-LABELS_Surfaces |
| View Frame                          | C-VIEWFRAMES      |
| View Frame-Labeling                 | C-LABELS          |

**5.1 Ambient Settings**

The following are the new drawing level ambient settings introduced in Tuckerman.
















| Node                             | Screen grab / DWF / DWG  |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |
|----------------------------------|--|----------|-------|----------------|--|---------------------------|---------|-------------------|----|----------------------------------|----|-------------------|----|---------------|-----|-------------------------------|------------------------|--------------------------|----|-------------------|-----------------------|--------------|-------|---------------|-------|------------------------|----|----------------------|-----|
| General                          | <table border="1"> <thead> <tr> <th>Property</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td> <b>General</b></td> <td></td> </tr> <tr> <td>Plotted Unit Display Type</td> <td>decimal</td> </tr> <tr> <td>Set AutoCAD Units</td> <td>No</td> </tr> <tr> <td>Save Command Changes to Settings</td> <td>No</td> </tr> <tr> <td>Show Event Viewer</td> <td>No</td> </tr> <tr> <td>Show Tooltips</td> <td>Yes</td> </tr> <tr> <td>Imperial to Metric conversion</td> <td>Use International Foot</td> </tr> <tr> <td>New Entity Tooltip State</td> <td>On</td> </tr> <tr> <td>Driving Direction</td> <td>Left Side of the Road</td> </tr> <tr> <td>Drawing Unit</td> <td>meter</td> </tr> <tr> <td>Drawing Scale</td> <td>0.500</td> </tr> <tr> <td>Scale Inserted Objects</td> <td>No</td> </tr> <tr> <td>Independent Layer On</td> <td>Yes</td> </tr> </tbody> </table> | Property | Value | <b>General</b> |  | Plotted Unit Display Type | decimal | Set AutoCAD Units | No | Save Command Changes to Settings | No | Show Event Viewer | No | Show Tooltips | Yes | Imperial to Metric conversion | Use International Foot | New Entity Tooltip State | On | Driving Direction | Left Side of the Road | Drawing Unit | meter | Drawing Scale | 0.500 | Scale Inserted Objects | No | Independent Layer On | Yes |
| Property                         | Value  |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |
| <b>General</b>                   |  |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |
| Plotted Unit Display Type        | decimal  |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |
| Set AutoCAD Units                | No   |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |
| Save Command Changes to Settings | No   |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |
| Show Event Viewer                | No   |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |
| Show Tooltips                    | Yes  |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |
| Imperial to Metric conversion    | Use International Foot   |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |
| New Entity Tooltip State         | On   |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |
| Driving Direction                | Left Side of the Road  |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |
| Drawing Unit                     | meter  |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |
| Drawing Scale                    | 0.500  |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |
| Scale Inserted Objects           | No   |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |
| Independent Layer On             | Yes  |          |       |                |  |                           |         |                   |    |                                  |    |                   |    |               |     |                               |                        |                          |    |                   |                       |              |       |               |       |                        |    |                      |     |



|           |          |                        |                   |              |                |
|-----------|----------|------------------------|-------------------|--------------|----------------|
| Labelling | Property |                        | Value             |              |                |
|           | +        | General                |                   |              |                |
|           | -        | Labeling               |                   |              |                |
|           |          | Labeling Prompt Method |                   | Command Line |                |
| Unitless  | Property |                        | Value             |              |                |
|           | +        | General                |                   |              |                |
|           | +        | Labeling               |                   |              |                |
|           | -        | Unitless               |                   |              |                |
|           |          | Precision              |                   | 3            |                |
|           |          | Rounding               |                   | round normal |                |
|           | Sign     |                        | sign negative '-' |              |                |
| Distance  | Property |                        | Value             | Override     | Child Override |
|           | +        | General                |                   |              |                |
|           | +        | Labeling               |                   |              |                |
|           | +        | Unitless               |                   |              |                |
|           | -        | Distance               |                   |              |                |
|           |          | Unit                   | meter             |              |                |
|           |          | Precision              | 3                 |              | ↓              |
|           |          | Rounding               | round normal      |              |                |
|           | Sign     | sign negative '-'      |                   |              |                |

| <p>Dimension</p>       | <table border="1"> <thead> <tr> <th>Property</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>+ General</td> <td></td> </tr> <tr> <td>+ Labeling</td> <td></td> </tr> <tr> <td>+ Unitless</td> <td></td> </tr> <tr> <td>+ Distance</td> <td></td> </tr> <tr> <td>- Dimension</td> <td></td> </tr> <tr> <td>    Unit</td> <td>millimeter</td> </tr> <tr> <td>    Precision</td> <td>3</td> </tr> <tr> <td>    Rounding</td> <td>round normal</td> </tr> <tr> <td>    Sign</td> <td>sign negative '-'</td> </tr> </tbody> </table>                                       | Property          | Value | + General |       | + Labeling |   | + Unitless |              | + Distance |                   | - Dimension |  | Unit         | millimeter | Precision | 3     | Rounding  | round normal | Sign     | sign negative '-' |      |                   |
|------------------------|---|-------------------|-------|-----------|-------|------------|---|------------|--------------|------------|-------------------|-------------|--|--------------|------------|-----------|-------|-----------|--------------|----------|-------------------|------|-------------------|
| Property               | Value   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| + General              |   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| + Labeling             |   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| + Unitless             |   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| + Distance             |   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| - Dimension            |   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| Unit                   | millimeter  |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| Precision              | 3   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| Rounding               | round normal  |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| Sign                   | sign negative '-'   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| <p>Coordinate</p>      | <table border="1"> <thead> <tr> <th>Property</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>+ General</td> <td></td> </tr> <tr> <td>+ Labeling</td> <td></td> </tr> <tr> <td>+ Unitless</td> <td></td> </tr> <tr> <td>+ Distance</td> <td></td> </tr> <tr> <td>+ Dimension</td> <td></td> </tr> <tr> <td>- Coordinate</td> <td></td> </tr> <tr> <td>    Unit</td> <td>meter</td> </tr> <tr> <td>    Precision</td> <td>3</td> </tr> <tr> <td>    Rounding</td> <td>round normal</td> </tr> <tr> <td>    Sign</td> <td>sign negative '-'</td> </tr> </tbody> </table> | Property          | Value | + General |       | + Labeling |   | + Unitless |              | + Distance |                   | + Dimension |  | - Coordinate |            | Unit      | meter | Precision | 3            | Rounding | round normal      | Sign | sign negative '-' |
| Property               | Value   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| + General              |   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| + Labeling             |   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| + Unitless             |   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| + Distance             |   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| + Dimension            |   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| - Coordinate           |   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| Unit                   | meter   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| Precision              | 3   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| Rounding               | round normal  |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| Sign                   | sign negative '-'   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| <p>Grid Coordinate</p> | <table border="1"> <tbody> <tr> <td>- Grid Coordinate</td> <td></td> </tr> <tr> <td>    Unit</td> <td>meter</td> </tr> <tr> <td>    Precision</td> <td>4</td> </tr> <tr> <td>    Rounding</td> <td>round normal</td> </tr> <tr> <td>    Sign</td> <td>sign negative '-'</td> </tr> </tbody> </table>  | - Grid Coordinate |       | Unit      | meter | Precision  | 4 | Rounding   | round normal | Sign       | sign negative '-' |             |  |              |            |           |       |           |              |          |                   |      |                   |
| - Grid Coordinate      |   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| Unit                   | meter   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| Precision              | 4   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| Rounding               | round normal  |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |
| Sign                   | sign negative '-'   |                   |       |           |       |            |   |            |              |            |                   |             |  |              |            |           |       |           |              |          |                   |      |                   |



| Elevation                      | <table border="1"> <thead> <tr> <th colspan="2">Elevation</th> </tr> </thead> <tbody> <tr> <td>Unit</td> <td>meter</td> </tr> <tr> <td>Precision</td> <td>3</td> </tr> <tr> <td>Rounding</td> <td>round normal</td> </tr> <tr> <td>Sign</td> <td>sign negative '-'</td> </tr> </tbody> </table>   | Elevation |  | Unit | meter         | Precision | 3 | Rounding | round normal | Sign   | sign negative '-' |      |                   |                                |    |                                |     |
|--------------------------------|---|-----------|--|------|---------------|-----------|---|----------|--------------|--------|-------------------|------|-------------------|--------------------------------|----|--------------------------------|-----|
| Elevation                      |   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Unit                           | meter   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Precision                      | 3   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Rounding                       | round normal  |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Sign                           | sign negative '-'   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Area                           | <table border="1"> <thead> <tr> <th colspan="2">Area</th> </tr> </thead> <tbody> <tr> <td>Unit</td> <td>square meter</td> </tr> <tr> <td>Precision</td> <td>3</td> </tr> <tr> <td>Rounding</td> <td>round normal</td> </tr> <tr> <td>Sign</td> <td>sign negative '-'</td> </tr> </tbody> </table>   | Area      |  | Unit | square meter  | Precision | 3 | Rounding | round normal | Sign   | sign negative '-' |      |                   |                                |    |                                |     |
| Area                           |   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Unit                           | square meter  |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Precision                      | 3   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Rounding                       | round normal  |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Sign                           | sign negative '-'   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Volume                         | <table border="1"> <thead> <tr> <th colspan="2">Volume</th> </tr> </thead> <tbody> <tr> <td>Unit</td> <td>cubic meter</td> </tr> <tr> <td>Precision</td> <td>3</td> </tr> <tr> <td>Rounding</td> <td>round normal</td> </tr> <tr> <td>Sign</td> <td>sign negative '-'</td> </tr> </tbody> </table>  | Volume    |  | Unit | cubic meter   | Precision | 3 | Rounding | round normal | Sign   | sign negative '-' |      |                   |                                |    |                                |     |
| Volume                         |   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Unit                           | cubic meter   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Precision                      | 3   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Rounding                       | round normal  |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Sign                           | sign negative '-'   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Speed                          | <table border="1"> <thead> <tr> <th colspan="2">Speed</th> </tr> </thead> <tbody> <tr> <td>Unit</td> <td>kilometer/hr.</td> </tr> <tr> <td>Precision</td> <td>0</td> </tr> <tr> <td>Rounding</td> <td>round normal</td> </tr> <tr> <td>Sign</td> <td>sign negative '-'</td> </tr> </tbody> </table>   | Speed     |  | Unit | kilometer/hr. | Precision | 0 | Rounding | round normal | Sign   | sign negative '-' |      |                   |                                |    |                                |     |
| Speed                          |   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Unit                           | kilometer/hr.   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Precision                      | 0   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Rounding                       | round normal  |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Sign                           | sign negative '-'   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Angle                          | <table border="1"> <thead> <tr> <th colspan="2">Angle</th> </tr> </thead> <tbody> <tr> <td>Unit</td> <td>degree</td> </tr> <tr> <td>Precision</td> <td>4</td> </tr> <tr> <td>Rounding</td> <td>round normal</td> </tr> <tr> <td>Format</td> <td>decimal</td> </tr> <tr> <td>Sign</td> <td>sign negative '-'</td> </tr> <tr> <td>Drop Decimal for Whole Numbers</td> <td>no</td> </tr> <tr> <td>Drop Leading Zeros for Degrees</td> <td>yes</td> </tr> </tbody> </table> | Angle     |  | Unit | degree        | Precision | 4 | Rounding | round normal | Format | decimal           | Sign | sign negative '-' | Drop Decimal for Whole Numbers | no | Drop Leading Zeros for Degrees | yes |
| Angle                          |   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Unit                           | degree  |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Precision                      | 4   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Rounding                       | round normal  |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Format                         | decimal   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Sign                           | sign negative '-'   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Drop Decimal for Whole Numbers | no  |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |
| Drop Leading Zeros for Degrees | yes   |           |  |      |               |           |   |          |              |        |                   |      |                   |                                |    |                                |     |

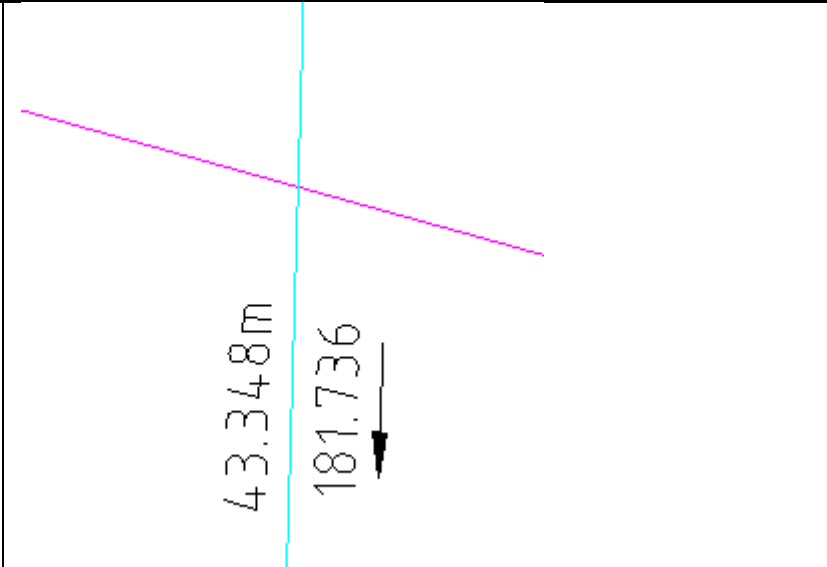
| <p>Direction</p>   | <table border="1"> <thead> <tr> <th colspan="2"> <b>Direction</b></th> </tr> </thead> <tbody> <tr> <td>Unit</td> <td>degree</td> </tr> <tr> <td>Precision</td> <td>6</td> </tr> <tr> <td>Rounding</td> <td>round normal</td> </tr> <tr> <td>Format</td> <td>DD° MM' SS.SS" (spac...</td> </tr> <tr> <td>Direction</td> <td>short name</td> </tr> <tr> <td>Capitalization</td> <td>upper case</td> </tr> <tr> <td>Sign</td> <td>sign negative '-'</td> </tr> <tr> <td>Measurement Type</td> <td>North Azimuth</td> </tr> <tr> <td>Bearing Quadrant</td> <td>1 - NE</td> </tr> <tr> <td>Drop Decimal for Whole Numbers</td> <td>no</td> </tr> <tr> <td>Drop Leading Zeros for Degrees</td> <td>yes</td> </tr> </tbody> </table> |  <b>Direction</b>     |  | Unit      | degree | Precision | 6            | Rounding | round normal | Format | DD° MM' SS.SS" (spac... | Direction | short name        | Capitalization | upper case | Sign                           | sign negative '-' | Measurement Type               | North Azimuth | Bearing Quadrant | 1 - NE | Drop Decimal for Whole Numbers | no | Drop Leading Zeros for Degrees | yes |
|--|--|--|--|-----------|--------|-----------|--------------|----------|--------------|--------|-------------------------|-----------|-------------------|----------------|------------|--------------------------------|-------------------|--------------------------------|---------------|------------------|--------|--------------------------------|----|--------------------------------|-----|
|  <b>Direction</b>     |  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Unit   | degree   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Precision  | 6  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Rounding   | round normal   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Format   | DD° MM' SS.SS" (spac...  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Direction  | short name   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Capitalization   | upper case   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Sign   | sign negative '-'  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Measurement Type   | North Azimuth  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Bearing Quadrant   | 1 - NE   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Drop Decimal for Whole Numbers   | no   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Drop Leading Zeros for Degrees   | yes  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| <p>Lat Long</p>  | <table border="1"> <thead> <tr> <th colspan="2"> <b>Lat Long</b></th> </tr> </thead> <tbody> <tr> <td>Unit</td> <td>degree</td> </tr> <tr> <td>Precision</td> <td>6</td> </tr> <tr> <td>Rounding</td> <td>round normal</td> </tr> <tr> <td>Format</td> <td>DD° MM' SS.SS" (spac...</td> </tr> <tr> <td>Direction</td> <td>prefix short name</td> </tr> <tr> <td>Capitalization</td> <td>upper case</td> </tr> <tr> <td>Drop Decimal for Whole Numbers</td> <td>no</td> </tr> <tr> <td>Drop Leading Zeros for Degrees</td> <td>no</td> </tr> </tbody> </table>   |  <b>Lat Long</b>      |  | Unit      | degree | Precision | 6            | Rounding | round normal | Format | DD° MM' SS.SS" (spac... | Direction | prefix short name | Capitalization | upper case | Drop Decimal for Whole Numbers | no                | Drop Leading Zeros for Degrees | no            |                  |        |                                |    |                                |     |
|  <b>Lat Long</b>      |  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Unit   | degree   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Precision  | 6  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Rounding   | round normal   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Format   | DD° MM' SS.SS" (spac...  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Direction  | prefix short name  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Capitalization   | upper case   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Drop Decimal for Whole Numbers   | no   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Drop Leading Zeros for Degrees   | no   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| <p>Grade</p>   | <table border="1"> <thead> <tr> <th colspan="2"> <b>Grade</b></th> </tr> </thead> <tbody> <tr> <td>Precision</td> <td>2</td> </tr> <tr> <td>Rounding</td> <td>round normal</td> </tr> <tr> <td>Format</td> <td>percent</td> </tr> <tr> <td>Sign</td> <td>sign negative '-'</td> </tr> </tbody> </table>   |  <b>Grade</b>       |  | Precision | 2      | Rounding  | round normal | Format   | percent      | Sign   | sign negative '-'       |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
|  <b>Grade</b>       |  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Precision  | 2  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Rounding   | round normal   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Format   | percent  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Sign   | sign negative '-'  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| <p>Slope</p>   | <table border="1"> <thead> <tr> <th colspan="2"> <b>Slope</b></th> </tr> </thead> <tbody> <tr> <td>Precision</td> <td>2</td> </tr> <tr> <td>Rounding</td> <td>round normal</td> </tr> <tr> <td>Format</td> <td>run:rise</td> </tr> <tr> <td>Sign</td> <td>sign negative '-'</td> </tr> </tbody> </table>  |  <b>Slope</b>       |  | Precision | 2      | Rounding  | round normal | Format   | run:rise     | Sign   | sign negative '-'       |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
|  <b>Slope</b>       |  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Precision  | 2  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Rounding   | round normal   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Format   | run:rise   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Sign   | sign negative '-'  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| <p>Grade/Slope</p>   | <table border="1"> <thead> <tr> <th colspan="2"> <b>Grade/Slope</b></th> </tr> </thead> <tbody> <tr> <td>Precision</td> <td>2</td> </tr> <tr> <td>Rounding</td> <td>round normal</td> </tr> <tr> <td>Format</td> <td>percent</td> </tr> <tr> <td>Sign</td> <td>sign negative '-'</td> </tr> </tbody> </table>   |  <b>Grade/Slope</b> |  | Precision | 2      | Rounding  | round normal | Format   | percent      | Sign   | sign negative '-'       |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
|  <b>Grade/Slope</b> |  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Precision  | 2  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Rounding   | round normal   |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Format   | percent  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |
| Sign   | sign negative '-'  |  |  |           |        |           |              |          |              |        |                         |           |                   |                |            |                                |                   |                                |               |                  |        |                                |    |                                |     |

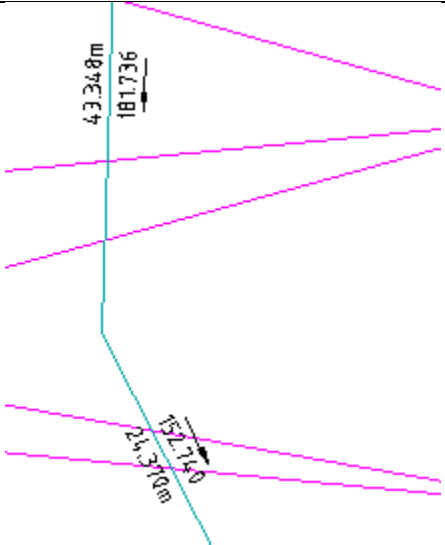
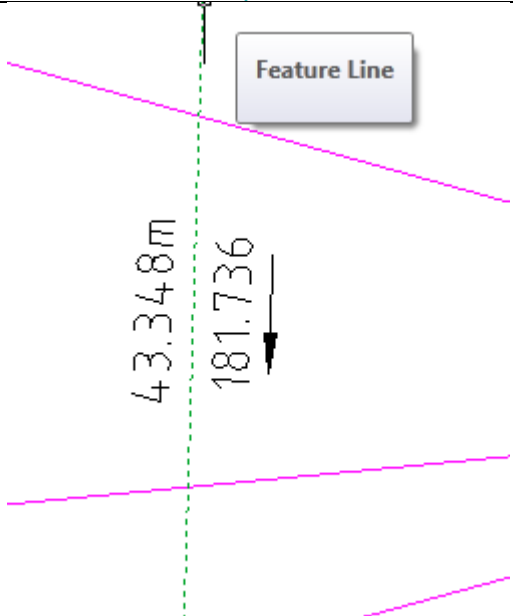
|                             |  |                          |
|-----------------------------|--|--------------------------|
| <p>Station</p>              | <p> <b>Station</b></p>              |                          |
|                             | <p>Unit</p>  | <p>meter</p>             |
|                             | <p>Format</p>  | <p>decimal</p>           |
|                             | <p>Precision</p>   | <p>3</p>                 |
|                             | <p>Rounding</p>  | <p>round normal</p>      |
|                             | <p>Sign</p>  | <p>sign negative '-'</p> |
|                             | <p>Station Delimiter Character</p>   | <p>plus sign '+'</p>     |
|                             | <p>Station Delimiter Position</p>  | <p>1+00</p>              |
|                             | <p>Drop Decimal for Whole Numbers</p>  | <p>no</p>                |
|                             | <p>Drop Leading Zeros Right of Station C...</p>  | <p>yes</p>               |
|                             | <p>Minimum Display Width</p>   | <p>0</p>                 |
| <p>Transparent Commands</p> | <p> <b>Transparent Commands</b></p> |                          |
|                             | <p>Prompt for 3D Points</p>  | <p>False</p>             |
|                             | <p>Prompt for Y before X</p>   | <p>False</p>             |
|                             | <p>Prompt for Easting then Northing</p>  | <p>True</p>              |
|                             | <p>Prompt for Longitude then Latitude</p>  | <p>False</p>             |

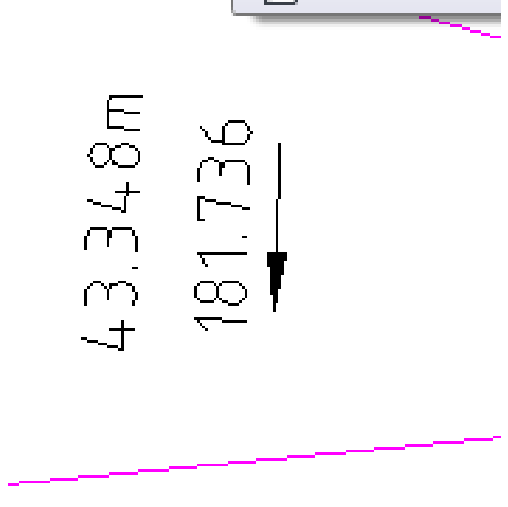
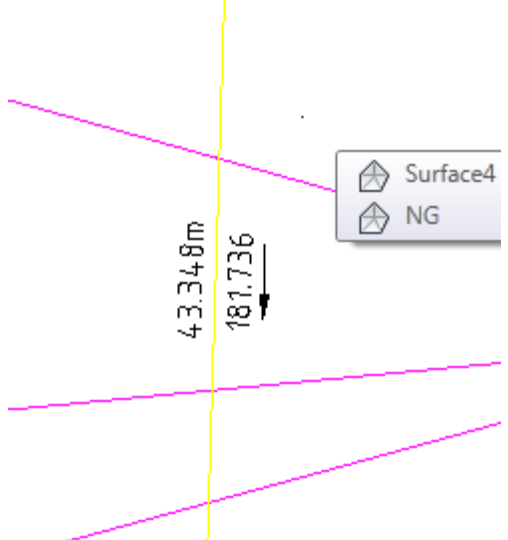
## 6 Object Styles

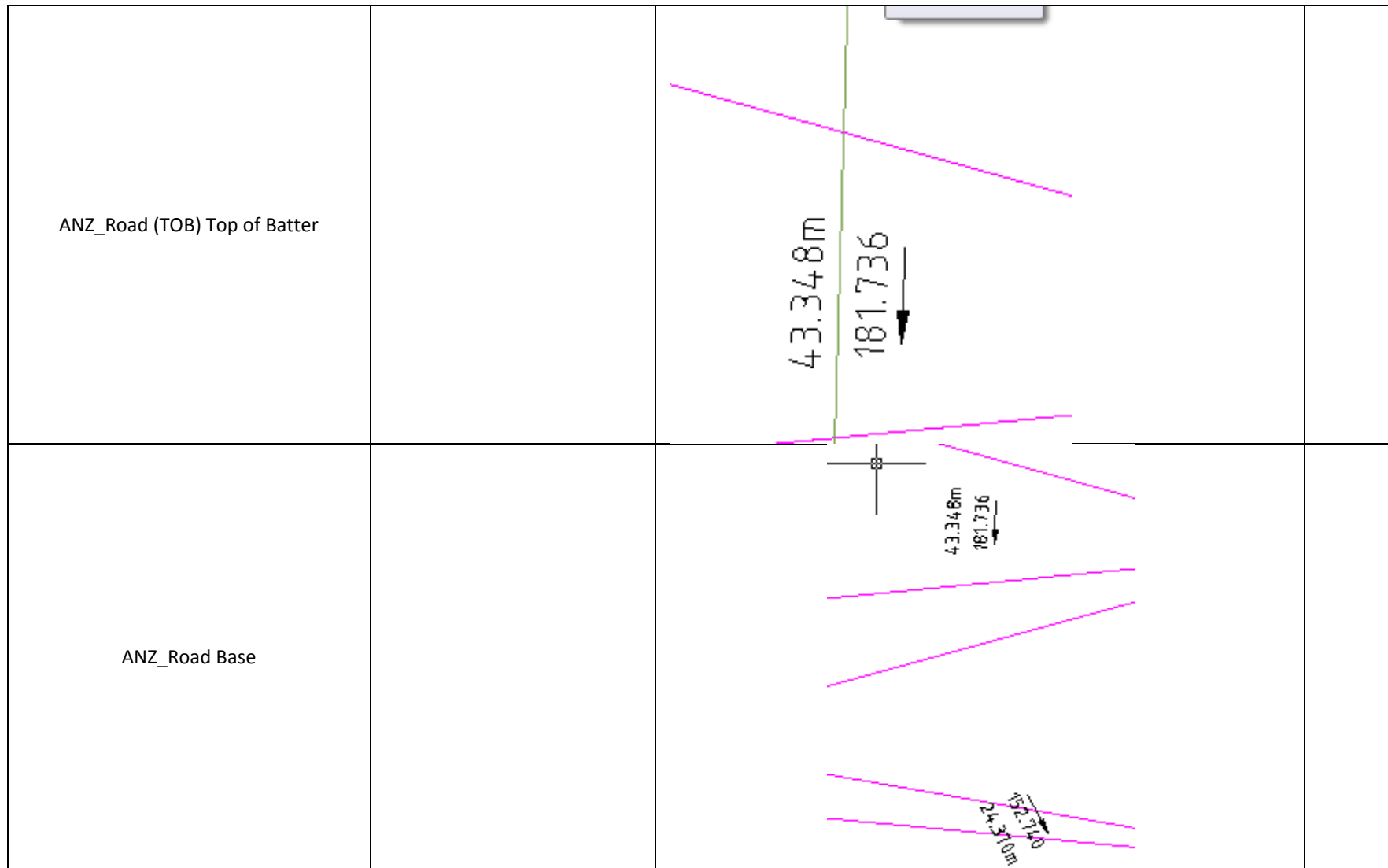
### 6.1 Multi-purpose Styles

Design Template: \_AutoCAD Civil3D 2014 ANZ Design\_ANZ.dwt

| Feature Line Styles | Description | Screen grab / DWF / DWG   | Default |
|---------------------|-------------|---|---------|
| ANZ_From Corridor   |             |  |         |

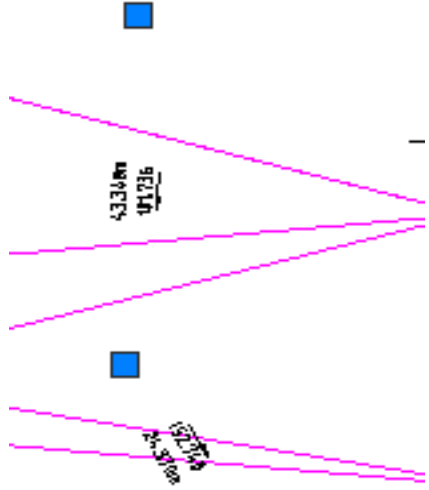
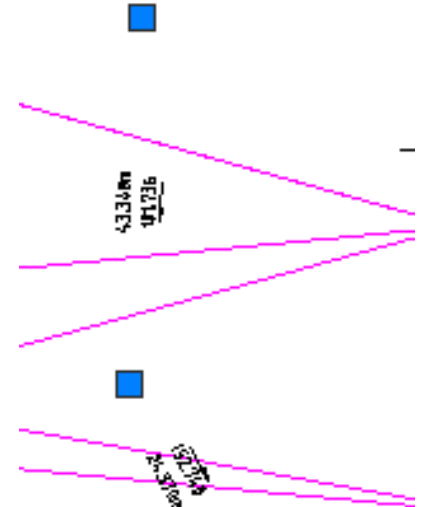
|                         |  |  |  |
|-------------------------|--|--|--|
| <p>ANZ_Generic Link</p> |  |   |  |
| <p>ANZ_Grading</p>      |  |  |  |

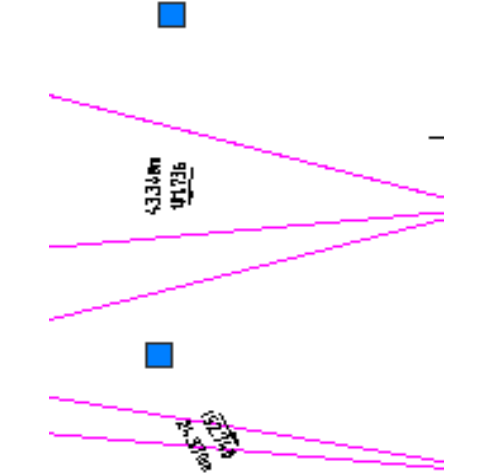
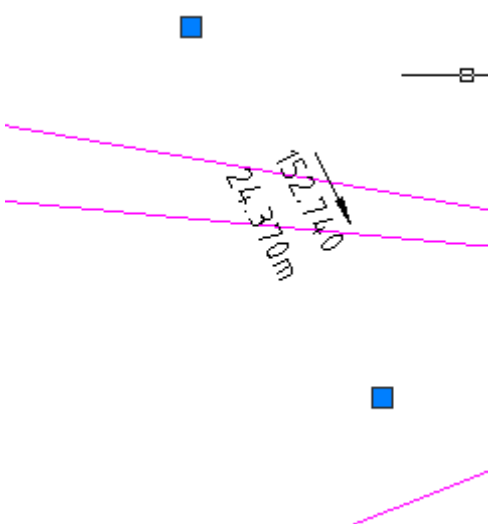
|  |  |  |  |
|--|--|--|--|
| <p>ANZ_No Display</p>                  |  |  <p>43.348m<br/>181.736</p>                         |  |
| <p>ANZ_Road (BOB) Bottom of Batter</p> |  |  <p>43.348m<br/>181.736</p> <p>Surface4<br/>NG</p> |  |

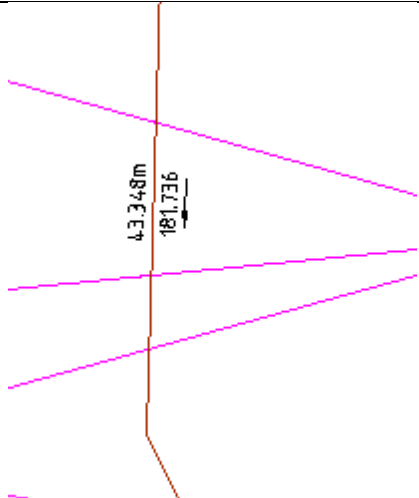
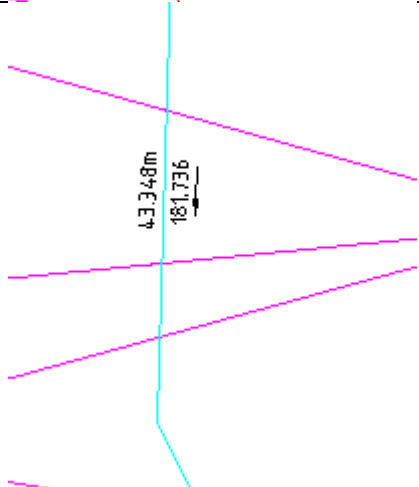


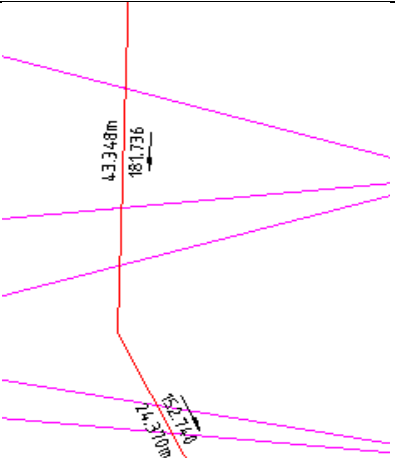
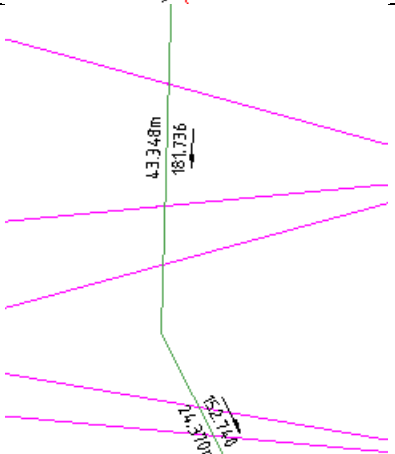


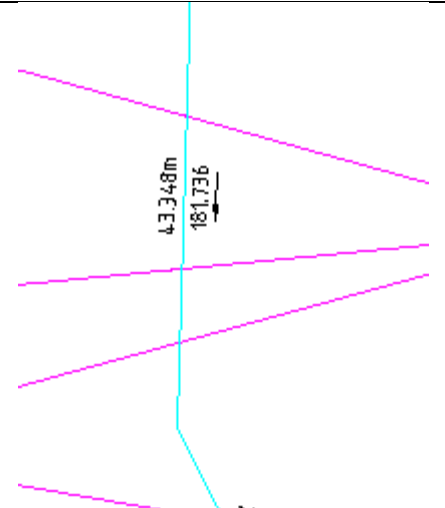
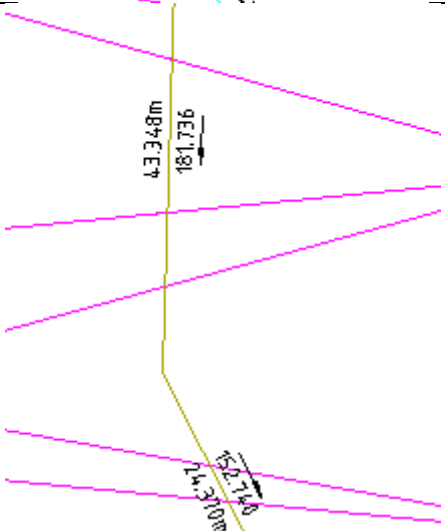


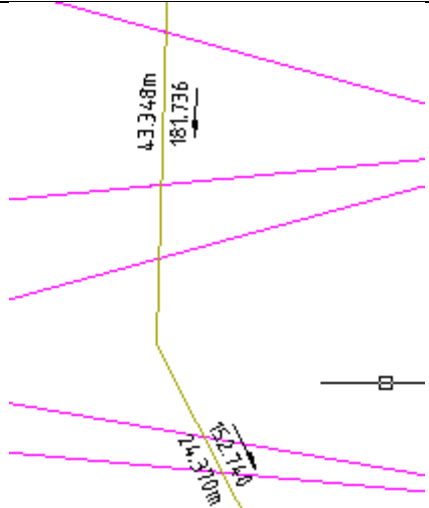
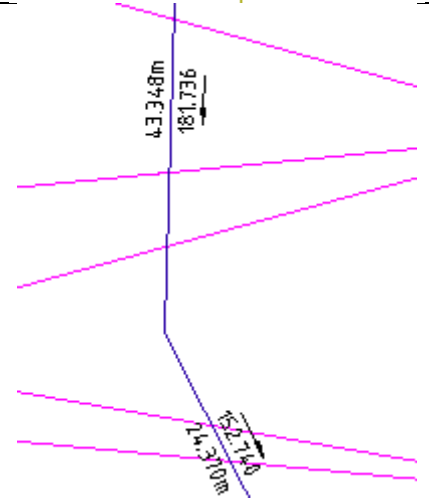
|                        |  |   |  |
|------------------------|--|---|--|
| <p>ANZ_Road Pave 1</p> |  |  <p>The diagram shows a road profile with a central blue square marker. The profile is defined by magenta lines. A vertical dimension line indicates a height of 433.0mm. A horizontal dimension line indicates a width of 101.736. The profile is symmetrical about a central vertical axis.</p>  |  |
| <p>ANZ_Road Pave 2</p> |  |  <p>The diagram shows a road profile with a central blue square marker. The profile is defined by magenta lines. A vertical dimension line indicates a height of 433.0mm. A horizontal dimension line indicates a width of 101.736. The profile is symmetrical about a central vertical axis.</p> |  |

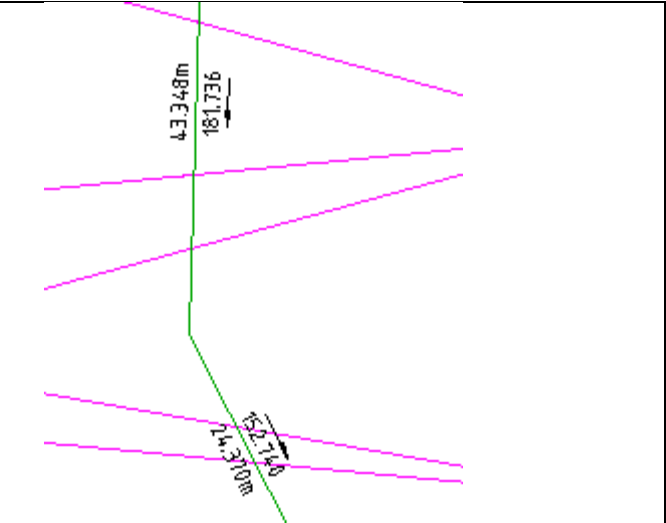
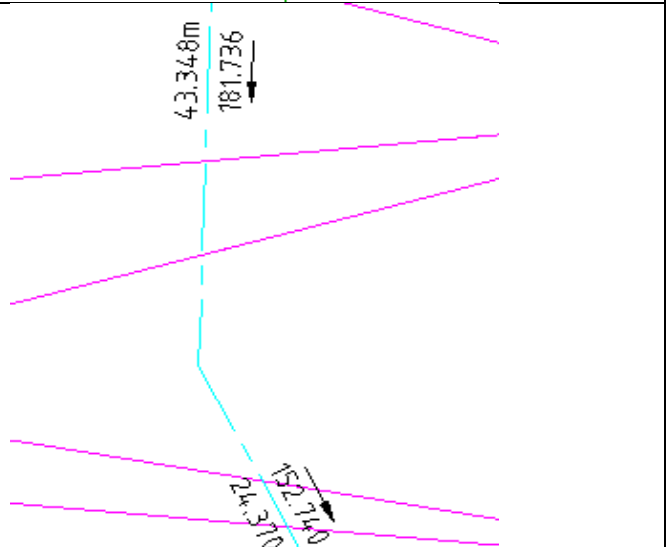
|  |  |   |  |
|--|--|---|--|
| <p>ANZ_Road STRING (From Marked Point)</p> |  |  <p>The diagram shows two sets of magenta lines representing road strings. The upper set has a dimension of 43.34m between two points. The lower set has a dimension of 47.126m between two points. There are blue square markers and a small horizontal line with a square end on the right side.</p> |  |
| <p>ANZ_Road Sub</p>                        |  |  <p>The diagram shows two sets of magenta lines representing road subs. The upper set has a dimension of 152.740m between two points. The lower set has a dimension of 24.370m between two points. There are blue square markers and a small horizontal line with a square end on the right side.</p> |  |

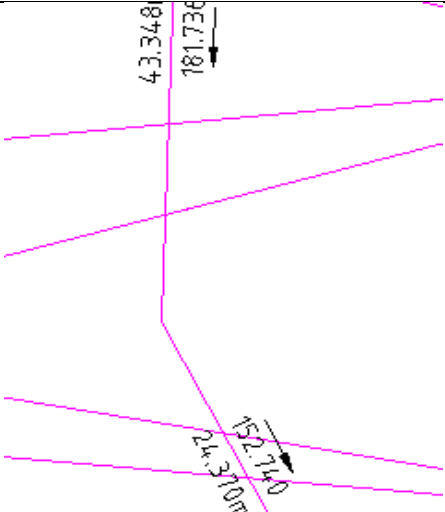
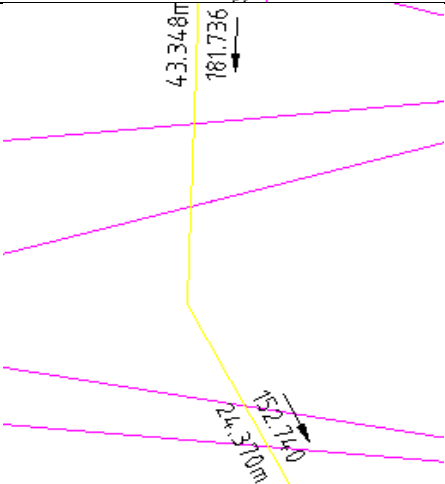
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|--------------------|--|--|--|
| <p>ANZ_Road_BK</p> |  |   |  |
| <p>ANZ_Road_EB</p> |  |  |  |

|              |  |  |  |
|--------------|--|--|--|
| ANZ_Road_FP  |  |   |  |
| ANZ_Road_INV |  |  |  |

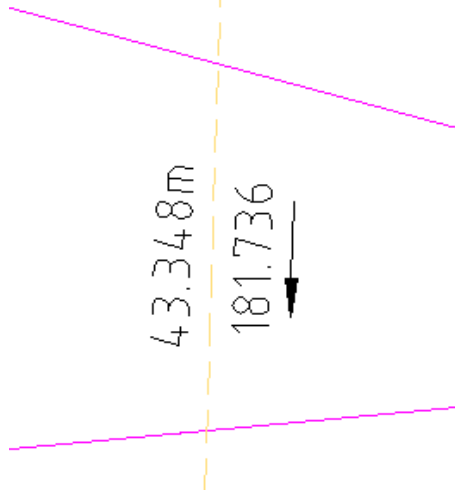
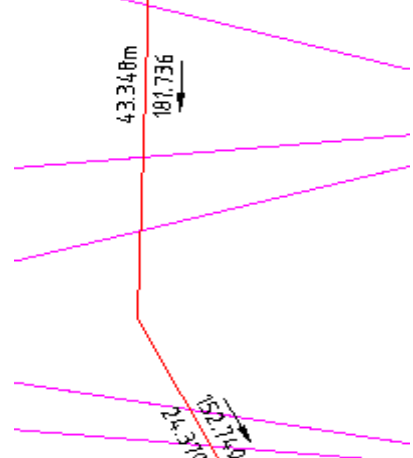
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|-------------------------|--|--|--|
| <p>ANZ_Road_TK</p>      |  |   |  |
| <p>Back of Footpath</p> |  |  |  |

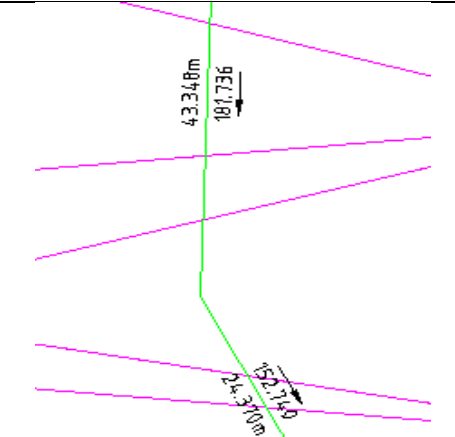
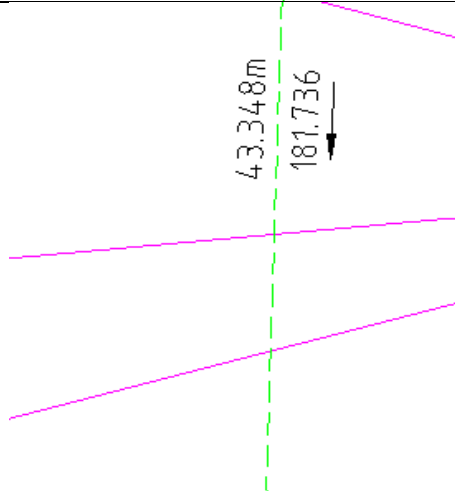
|                     |  |  |  |
|---------------------|--|--|--|
| <p>Back of kerb</p> |  |   |  |
| <p>Basic</p>        |  |  |  |

|                           |  |   |  |
|---------------------------|--|---|--|
| <p>Basic Feature Line</p> |  |  <p>The diagram shows a green line representing the Basic Feature Line. It starts with a horizontal segment of 43.348m, followed by a vertical segment of 181.736. The line then turns at an angle, with a segment of 152.140, and finally a short segment of 24.370. The line is surrounded by several magenta lines representing boundaries or features.</p> |  |
| <p>Corridor Crown</p>     |  |  <p>The diagram shows a cyan dashed line representing the Corridor Crown. It follows the same path as the Basic Feature Line, with segments of 43.348m, 181.736, 152.140, and 24.370. The line is surrounded by several magenta lines representing boundaries or features.</p>  |  |

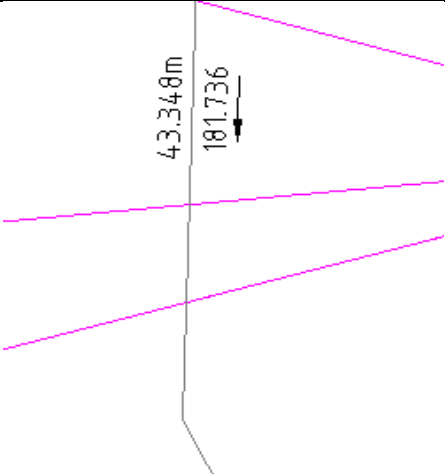
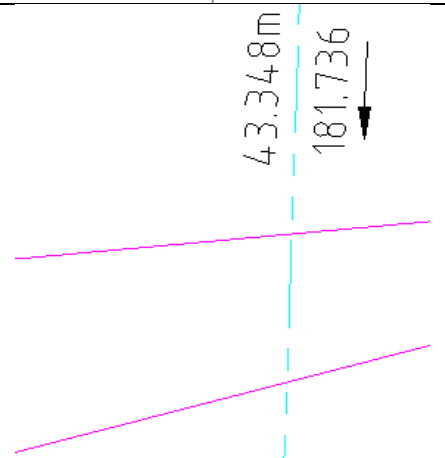
|                           |  |  |  |
|---------------------------|--|--|--|
| <p>Corridor Curb Line</p> |  |   |  |
| <p>Corridor Daylight</p>  |  |  |  |



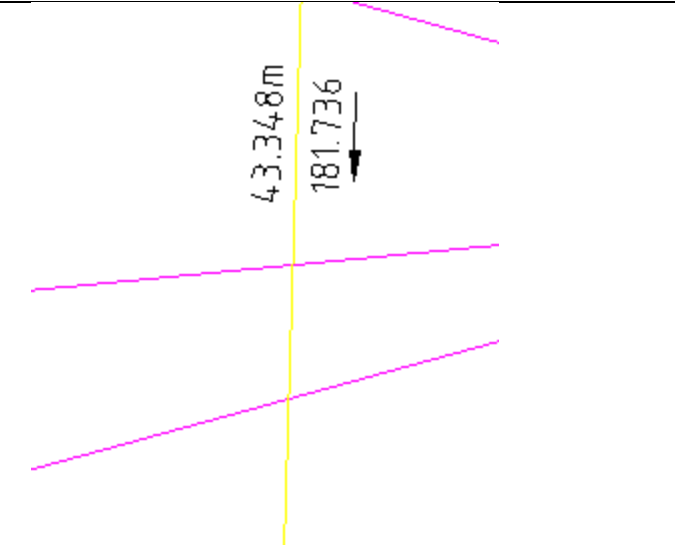
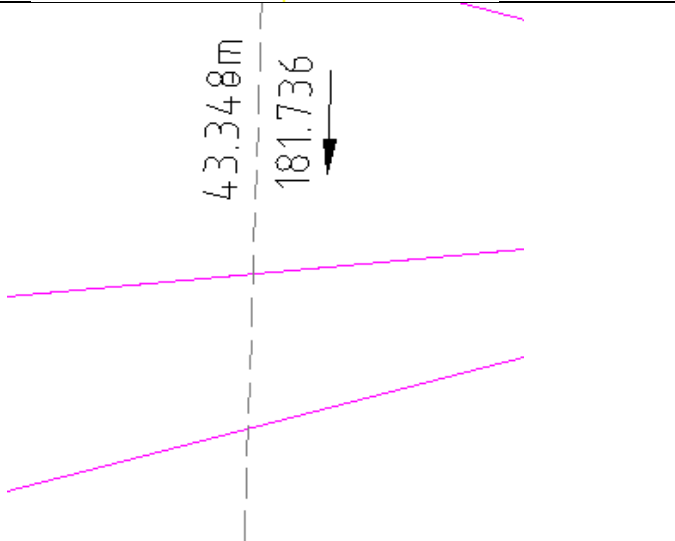
|                                     |  |  |  |
|-------------------------------------|--|--|--|
| <p>Corridor Daylight - Subgrade</p> |  |  <p>43.348m<br/>181.736</p>                           |  |
| <p>Corridor Daylight Line - Cut</p> |  |  <p>43.348m<br/>181.736<br/>24.370m<br/>152.710m</p> |  |

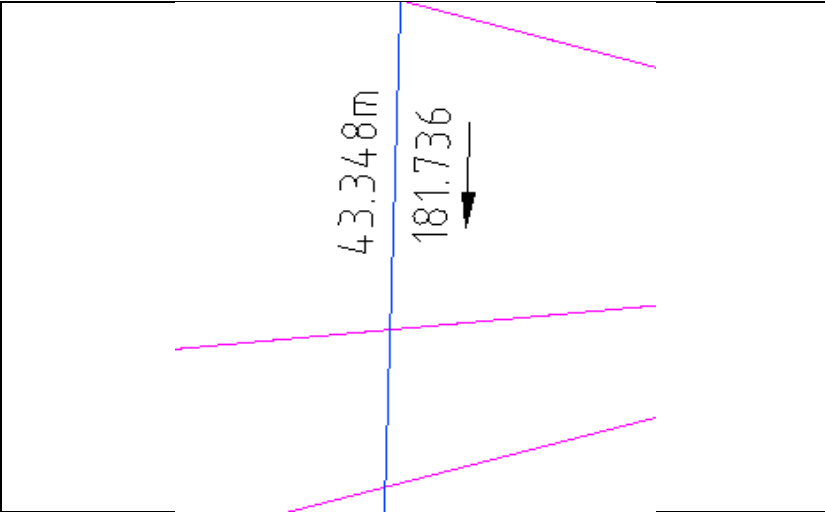
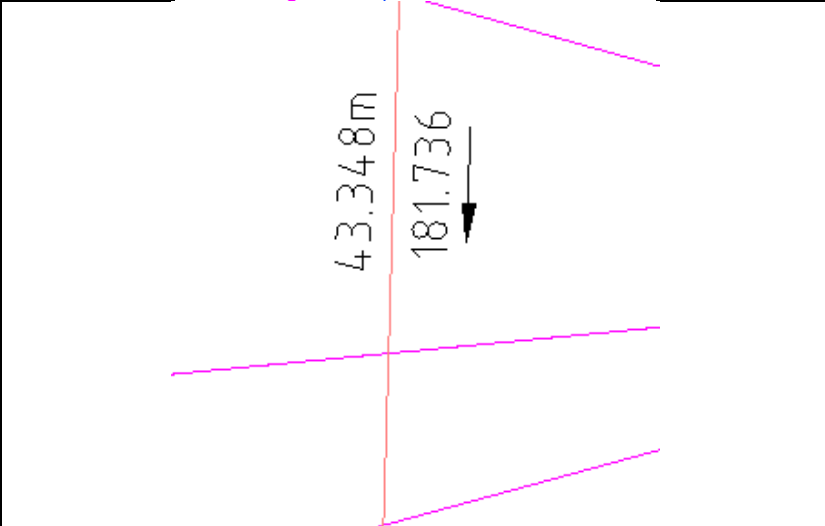
|                                      |  |  |  |
|--------------------------------------|--|--|--|
| <p>Corridor Daylight Line - Fill</p> |  |   |  |
| <p>Corridor Ditch</p>                |  |  |  |

|  |  |  |  |
|--|--|--|--|
| <p>Corridor Edge of Paved Shoulder</p> |  |   |  |
| <p>Corridor Edge of Travel Way</p>     |  |  |  |

|  |  |  |  |
|--|--|--|--|
| <p>Corridor Edge of Unpaved Shoulder</p> |  |  <p>The diagram shows a vertical line representing the edge of an unpaved shoulder. To the left of the line, there are two parallel magenta lines sloping upwards from left to right. To the right of the line, there are two more parallel magenta lines sloping downwards from left to right. A vertical dimension line is shown to the right of the main vertical line, with the value '43.348m' written vertically. Below this, another vertical dimension line is shown with the value '181.736' written vertically. Arrows indicate the extent of these dimensions.</p>       |  |
| <p>Corridor Flowline</p>                 |  |  <p>The diagram shows a vertical dashed cyan line representing the flowline of a corridor. To the left of the line, there are two parallel magenta lines sloping upwards from left to right. To the right of the line, there are two more parallel magenta lines sloping downwards from left to right. A vertical dimension line is shown to the right of the main dashed line, with the value '43.348m' written vertically. Below this, another vertical dimension line is shown with the value '181.736' written vertically. Arrows indicate the extent of these dimensions.</p> |  |

|                                    |  |  |  |
|------------------------------------|--|--|--|
| <p>Corridor Hinge - Cut Slope</p>  |  |   |  |
| <p>Corridor Hinge - Fill Slope</p> |  |  |  |

|                                   |  |   |  |
|-----------------------------------|--|---|--|
| <p>Corridor Hinge - Top Slope</p> |  |  <p>43.348m<br/>181.736</p>  |  |
| <p>Corridor Lane Break</p>        |  |  <p>43.348m<br/>181.736</p> |  |

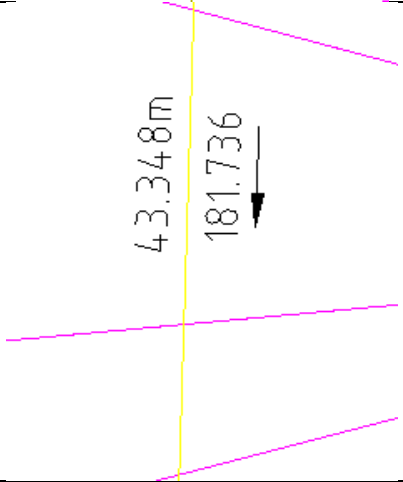
|   |  |  |  |
|---|--|--|--|
| <p>Corridor SubLayer - Feature Line</p> |  |  <p>The diagram shows a blue vertical line representing the feature line. To its left, the dimension 43.348m is written vertically. To its right, the dimension 181.736m is written vertically with a downward-pointing arrow. The diagram is bounded by magenta lines that are slightly angled.</p> |  |
| <p>Corridor Top Soil - Feature Line</p> |  |  <p>The diagram shows a red vertical line representing the feature line. To its left, the dimension 43.348m is written vertically. To its right, the dimension 181.736m is written vertically with a downward-pointing arrow. The diagram is bounded by magenta lines that are slightly angled.</p> |  |

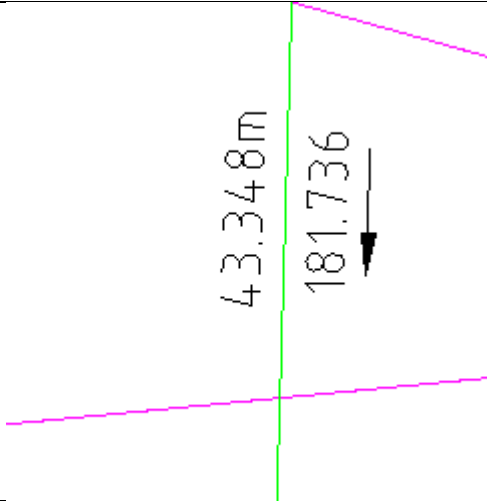
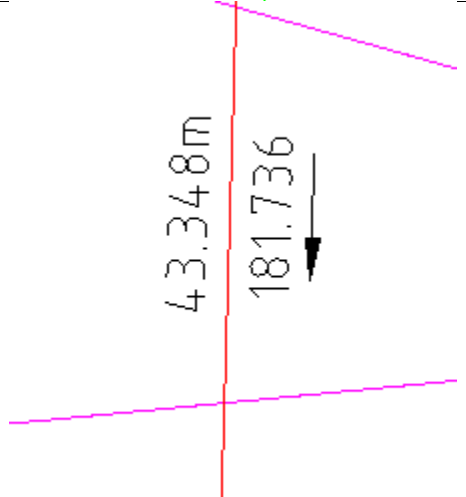
|          |  |  |  |
|----------|--|--|--|
| Crown    |  |   |  |
| Daylight |  |  |  |

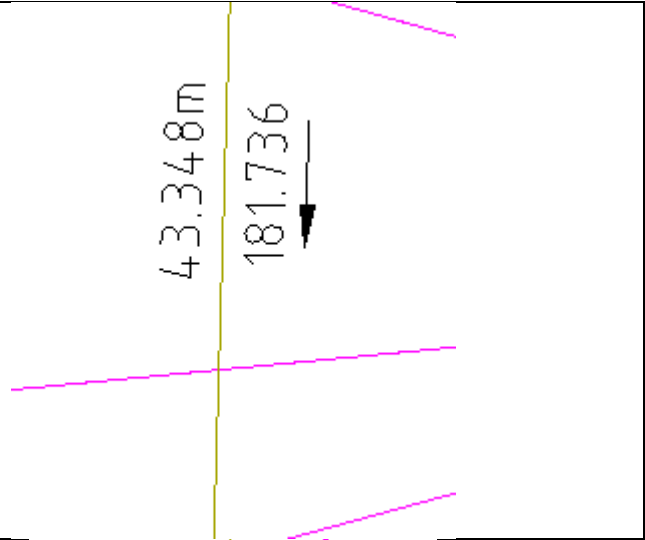
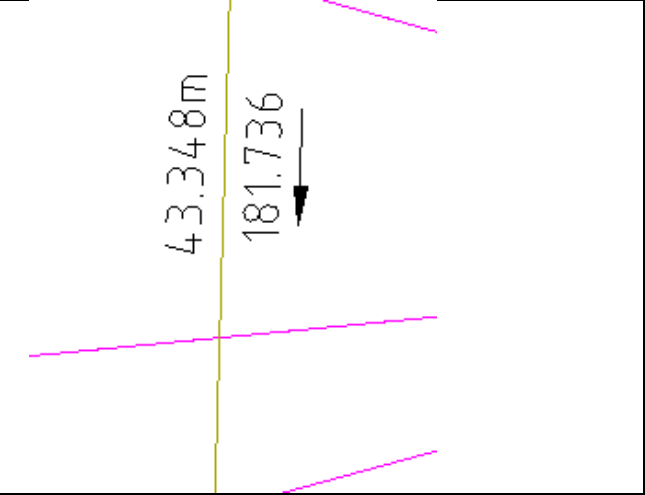


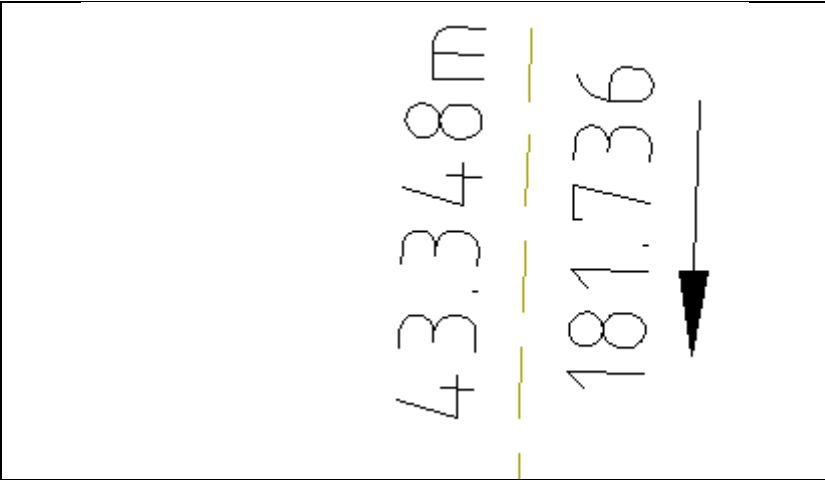
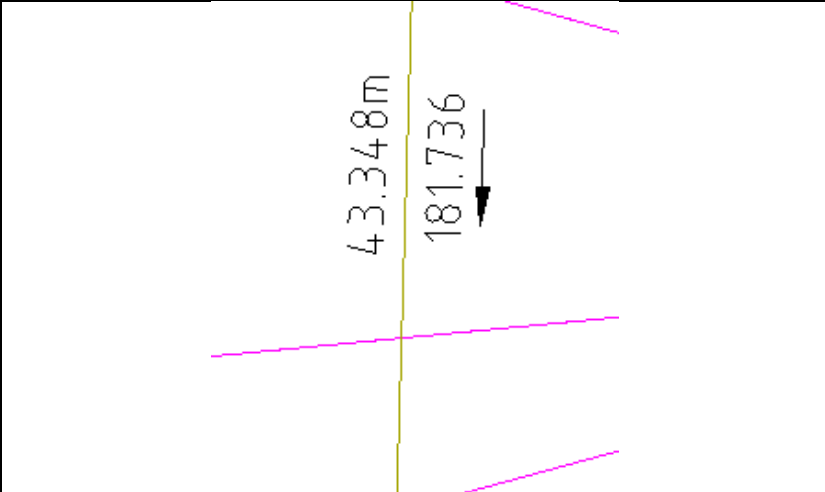
|                     |  |  |  |
|---------------------|--|--|--|
| Ditch               |  |   |  |
| Edge of Carriageway |  |  |  |



|                        |  |  |  |
|------------------------|--|--|--|
| Edge of Paved Shoulder |  |   |  |
| Flange                 |  |  |  |



|                  |  |  |  |
|------------------|--|--|--|
| Flowline         |  |   |  |
| Grading Daylight |  |  |  |

|                          |  |  |  |
|--------------------------|--|--|--|
| <p>Grading Ditch</p>     |  |   |  |
| <p>Hinge - Cut Slope</p> |  |  |  |

|                           |  |  |  |
|---------------------------|--|--|--|
| <p>Hinge - Fill Slope</p> |  |   |  |
| <p>Top Slope</p>          |  |  |  |

|            |  |   |  |
|------------|--|---|--|
| Lane break |  |   |  |
| Standard   |  |  |  |

|                      |  |  |  |
|----------------------|--|--|--|
| Standard Frozen temp |  |  <p>43.348m<br/>181.736</p> |  |
| SubLayer             |  |  <p>43.348m<br/>181.736</p> |  |

|                    |  |  |  |
|--------------------|--|--|--|
| <p>Top of Kerb</p> |  |   |  |
| <p>Top Soil</p>    |  |  |  |

| Code Set Styles                                       | Description | Screen grab / DWF / DWG | Default |
|---|-------------|-------------------------|---------|
| _ANZ_Corr (2D&3D) All Linework - No Shading (Default) |             |                         |         |
| _ANZ_Corr (2D&3D) Strings & Top Links Only            |             |                         |         |
| _ANZ_Corr Plotting (2D&3D) Strings Only - No          |             |                         |         |



|   |  |  |  |
|---|--|--|--|
| Sections (Links)  |  |  |  |
| _ANZ_Corr Plotting (2D:Paved Area Hatched)<br>(3D:Render)                 |  |  |  |
| _ANZ_Corr Plotting (2D:Solid Hatching)<br>(3D:Render)                     |  |  |  |
| _ANZ_SECTION EDITOR   |  |  |  |
| _ANZ_Subassemblies & Assemblies   |  |  |  |
| _ANZ_X Section Plotting (Lables & Full<br>Subassemblies) With Hatching    |  |  |  |
| _ANZ_X Section Plotting (Lables & Full<br>Subassemblies) Without Hatching |  |  |  |
| _ANZ_X Section Plotting (Lables & Top Links<br>Only)                      |  |  |  |
| _ANZ_X Section Plotting (Lables Only)                                     |  |  |  |
| 3D Render Basic Plan  |  |  |  |
| All Codes   |  |  |  |
| All Codes with Hatching   |  |  |  |

|                           |  |  |  |
|---------------------------|--|--|--|
|                           |  |  |  |
| All Codes with No Shading |  |  |  |
| ANZ_Default               |  |  |  |
| Basic                     |  |  |  |
| Codes with labels         |  |  |  |
| Standard                  |  |  |  |

| Marker Styles                           | Description | Screen grab / DWF / DWG | Default |
|---|-------------|-------------------------|---------|
| _No Markers                             |             |                         |         |
| Alignment Geometry                      |             |                         |         |
| All off                                 |             |                         |         |
| ANZ_All Off                             |             |                         |         |
| ANZ_Marked Point                        |             |                         |         |
| ANZ_Marked Point String                 |             |                         |         |
| ANZ_Projected Section (0.225m diam)     |             |                         |         |
| ANZ_Subassembly Marker Circle (Magenta) |             |                         |         |
| ANZ_Subassembly Marker Grey             |             |                         |         |
| ANZ_Surface Marker (blank)              |             |                         |         |
| ANZ_Surface Marker (Plus Symbol)        |             |                         |         |
| ANZ_Surface Marker (X Symbol)           |             |                         |         |
| ANZ_X-Section_Original CL               |             |                         |         |
| ANZ_X-Section_PGL_BDY-left              |             |                         |         |
| ANZ_X-Section_PGL_BDY-right             |             |                         |         |
| ANZ_X-Section_Shifted CL                |             |                         |         |
| Basic                                   |             |                         |         |

|                          |  |  |  |
|--------------------------|--|--|--|
| Basic Circle with Cross  |  |  |  |
| Basic Square             |  |  |  |
| Basic Triangle           |  |  |  |
| Basic X                  |  |  |  |
| Bench Point              |  |  |  |
| Channel                  |  |  |  |
| Crown                    |  |  |  |
| Curb                     |  |  |  |
| Daylight                 |  |  |  |
| Daylight - Subgrade      |  |  |  |
| Ditch Bottom             |  |  |  |
| Ditch Extents            |  |  |  |
| Edge of Carriageway      |  |  |  |
| Edge of Paved Shoulder   |  |  |  |
| Edge of Travel Way       |  |  |  |
| Edge of Unpaved Shoulder |  |  |  |
| Flange                   |  |  |  |
| Footpath                 |  |  |  |
| Gutter                   |  |  |  |
| Hinge                    |  |  |  |
| Kerb                     |  |  |  |
| Lane Break               |  |  |  |
| Marked point             |  |  |  |
| PI Point                 |  |  |  |
| Sidewalk                 |  |  |  |
| Slope Stake - Fill       |  |  |  |
| Standard                 |  |  |  |
| Standard – empty temp    |  |  |  |

|                      |  |  |  |
|----------------------|--|--|--|
| Subassemblies        |  |  |  |
| SubLayer             |  |  |  |
| Survey Known Point   |  |  |  |
| Survey Sideshot      |  |  |  |
| Survey Unknown Point |  |  |  |
| Uncoded              |  |  |  |
| Water                |  |  |  |

| Link Styles                                | Description | Screen grab / DWF / DWG | Default |
|--|-------------|-------------------------|---------|
| ANZ_Corr_Datum                             |             |                         |         |
| ANZ_Corr_Pave (2D & 3D Display)            |             |                         |         |
| ANZ_Corr_Pave (3D Display only)            |             |                         |         |
| ANZ_Corr_Sub-Strata                        |             |                         |         |
| ANZ_Corr_Sub-Strata_Pave2                  |             |                         |         |
| ANZ_Corr_Top                               |             |                         |         |
| ANZ_Cross Section Plotting (General)       |             |                         |         |
| ANZ_Cross Section Plotting (TOP)           |             |                         |         |
| ANZ_Empty                                  |             |                         |         |
| ANZ_No Codes                               |             |                         |         |
| ANZ_Subassembly Linework                   |             |                         |         |
| ANZ_Subassembly Linework (Daylight - CUT)  |             |                         |         |
| ANZ_Subassembly Linework (Daylight - FILL) |             |                         |         |
| ANZ_Subassembly Linework (TOP)             |             |                         |         |
| Barrier                                    |             |                         |         |
| Base                                       |             |                         |         |
| Basic                                      |             |                         |         |
| Channel                                    |             |                         |         |
| Curb-Top                                   |             |                         |         |

|               |  |  |  |
|---------------|--|--|--|
| Datum         |  |  |  |
| Daylight      |  |  |  |
| Daylight-Cut  |  |  |  |
| Daylight-fill |  |  |  |
| Footpath      |  |  |  |
| Grass Areas   |  |  |  |
| Gravel        |  |  |  |
| Kerb-Top      |  |  |  |
| Lot           |  |  |  |
| Mill          |  |  |  |
| Pave          |  |  |  |
| Pave1         |  |  |  |
| Pave2         |  |  |  |
| Sidewalk      |  |  |  |
| Standard      |  |  |  |
| Strip         |  |  |  |
| Subbase       |  |  |  |
| Top           |  |  |  |
| Uncoded       |  |  |  |
| Verge         |  |  |  |

| Shape Styles                              | Description | Screen grab / DWF / DWG | Default |
|---|-------------|-------------------------|---------|
| _No Shading                               |             |                         |         |
| ANZ_Blank                                 |             |                         |         |
| ANZ_Hatch_Plan View (Ansi 132)            |             |                         |         |
| ANZ_Hatch_Plan View (Ansi 134)            |             |                         |         |
| ANZ_Hatch_Plan View (Ansi 137)            |             |                         |         |
| ANZ_Hatch_Plan View (Solid) Daylight Area |             |                         |         |

|   |  |  |  |
|---|--|--|--|
| ANZ_Hatch_Plan View (Solid) Footpath Area           |  |  |  |
| ANZ_Hatch_Plan View (Solid) Kerbed Area             |  |  |  |
| ANZ_Hatch_Plan View (Solid) Paved Area              |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 134) BLUE               |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 134) colour 134 degrees |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 134) CYAN               |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 134) GREEN              |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 134) GREY               |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 134) GREY 90 degrees    |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 134) MAGENTA            |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 134) RED                |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 134) YELLOW             |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 137) BLUE               |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 137) colour 63          |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 137) CYAN               |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 137) GREEN              |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 137) GREY               |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 137) GREY               |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 137) RED                |  |  |  |
| ANZ_Hatch_Subassembly (Ansi 137) YELLOW             |  |  |  |
| ANZ_Hatch_Subassembly (Solid) BLUE                  |  |  |  |
| ANZ_Hatch_Subassembly (Solid) Colour 63             |  |  |  |
| ANZ_Hatch_Subassembly (Solid) Colour 144            |  |  |  |
| ANZ_Hatch_Subassembly (Solid) CYAN                  |  |  |  |
| ANZ_Hatch_Subassembly (Solid) GREEN                 |  |  |  |
| ANZ_Hatch_Subassembly (Solid) GREY                  |  |  |  |

|                                       |  |  |  |
|---------------------------------------|--|--|--|
| ANZ_Hatch_Subassembly (Solid) MAGENTA |  |  |  |
| ANZ_Hatch_Subassembly (Solid) RED     |  |  |  |
| ANZ_Hatch_Subassembly (Solid) YELLOW  |  |  |  |
| ANZ_Profile_Cut (Solid)               |  |  |  |
| ANZ_Profile_Hatching (ANSI)           |  |  |  |
| Ballast                               |  |  |  |
| Barrier                               |  |  |  |
| Base                                  |  |  |  |
| Basic                                 |  |  |  |
| Bridge                                |  |  |  |
| Concrete Hatch                        |  |  |  |
| Curb                                  |  |  |  |
| Cut Material                          |  |  |  |
| Fill Material                         |  |  |  |
| Footpath                              |  |  |  |
| Girder                                |  |  |  |
| Grass                                 |  |  |  |
| Grass Hatch                           |  |  |  |
| Gravel                                |  |  |  |
| Hatch Ansi 31                         |  |  |  |
| Hatch Ansi 31 Large Scale             |  |  |  |
| Hatch Ansi 32                         |  |  |  |
| Hatch Ansi 32 Large Scale             |  |  |  |
| kerb                                  |  |  |  |
| Milling                               |  |  |  |
| Multiple Boundary Material            |  |  |  |
| Overlay                               |  |  |  |
| Pave                                  |  |  |  |

|             |  |  |  |
|-------------|--|--|--|
| Pave Hatch  |  |  |  |
| Pave1       |  |  |  |
| Pave2       |  |  |  |
| Rail        |  |  |  |
| Sidewalk    |  |  |  |
| Standard    |  |  |  |
| Strip Hatch |  |  |  |
| SubBase     |  |  |  |
| Uncoded     |  |  |  |

| Slope Pattern Style | Description | Screen grab / DWF / DWG | Default |
|---------------------|-------------|-------------------------|---------|
| Basic               |             |                         |         |
| Fixed Length        |             |                         |         |
| Slope Schemes       |             |                         |         |
| Standard            |             |                         |         |
| Tadpoles            |             |                         |         |
| Triangles           |             |                         |         |

| Multipurpose Label Styles                                     | Description | Screen grab / DWF / DWG | Default |
|---|-------------|-------------------------|---------|
| Note  |             |                         |         |
| ANZ_Note (no border no masking)                               |             |                         |         |
| ANZ_Note (rounded border - background masking)                |             |                         |         |
| General Note  |             |                         |         |
| Standard  |             |                         |         |
| Line  |             |                         |         |
| ANZ_Featureline Vertex Level - Above the line                 |             |                         |         |
| ANZ_Featureline Vertex Level - Below the line                 |             |                         |         |
| ANZ_Featureline Vertex Level - Below the line                 |             |                         |         |
| ANZ_Featureline Vertex Level Object Rotation - Above the line |             |                         |         |
| ANZ_Featureline Vertex Object Rotation - Below the line       |             |                         |         |







|  |  |  |  |
|--|--|--|--|
| ANZ_Length and Angle                             |  |  |  |
| ANZ_Length and Slope                             |  |  |  |
| Bearing and Distance                             |  |  |  |
| Bearing Only                                     |  |  |  |
| Bearing Over Distance                            |  |  |  |
| Distance Only                                    |  |  |  |
| Geodetic Azimuth over Distance                   |  |  |  |
| Grade Only                                       |  |  |  |
| Grade over Distance                              |  |  |  |
| Slope Only                                       |  |  |  |
| Slope over Distance                              |  |  |  |
| Standard   |  |  |  |
| Curve  |  |  |  |
| ANZ_Curve Length and Radius                      |  |  |  |
| Distance-Radius and Delta                        |  |  |  |
| Distance Only                                    |  |  |  |
| Distance over Radius                             |  |  |  |
| Grade Only                                       |  |  |  |
| Grade over Distance                              |  |  |  |
| Radius Only                                      |  |  |  |
| Slope Only                                       |  |  |  |
| Slope over Distance                              |  |  |  |
| Standard   |  |  |  |
| Marker   |  |  |  |
| ANZ_MP   |  |  |  |
| ANZ_Offset & Level                               |  |  |  |
| Offset Elevation                                 |  |  |  |
| Standard   |  |  |  |
| Link   |  |  |  |
| ANZ_Length & Slope (Percent)                     |  |  |  |
| ANZ_Length & Slope (Percent) Section Editor      |  |  |  |
| ANZ_Percent Slopes                               |  |  |  |
| ANZ_Percent Slopes with Direction Arrow          |  |  |  |
| ANZ_Rise : Run Slopes (1:x)                      |  |  |  |
| ANZ_Rise : Run Slopes (1:x) with Direction Arrow |  |  |  |
| ANZ_Run : Rise Slopes                            |  |  |  |

|                         |  |  |  |
|-------------------------|--|--|--|
| Flat Grades             |  |  |  |
| Percent Slopes          |  |  |  |
| Rise : Run Slopes (1:x) |  |  |  |
| Standard                |  |  |  |
| Steep Grades            |  |  |  |
| Shape                   |  |  |  |
| ANZ_Shape Area and Name |  |  |  |
| ANZ_Shape Code          |  |  |  |
| Pavement Structure      |  |  |  |
| Standard                |  |  |  |

**6.2 Points**

ANZ DESIGN Template


| Point Styles   | Description | Screen grab / DWF / DWG     | Default                  |
|--|-------------|-----------------------------|--------------------------|
| <ul style="list-style-type: none"> <li>BB</li> </ul> |             | 1<br>✗ 0.000<br>Description | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>BK</li> </ul> |             | 1<br>✗ 0.000<br>Description | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>CL</li> </ul> |             | 1<br>✗ 0.000<br>Description | <input type="checkbox"/> |

|  |  |  |                          |
|--|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• EB</li> </ul>       |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• Standard</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• TB</li> </ul>       |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• TK</li> </ul>       |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |
|  |  |  |                          |






Additional Point in the ANZ Survey Alpha Codes Template:






| Point Styles | Description | Screen grab / DWF / DWG | Default |
|--------------|-------------|-------------------------|---------|
|--------------|-------------|-------------------------|---------|

|   |  |  |  |
|---|--|--|--|
| <ul style="list-style-type: none"> <li>AG</li> </ul>      |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> <input type="checkbox"/> |  |
| <ul style="list-style-type: none"> <li>All Off</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> <input type="checkbox"/> |  |
| <ul style="list-style-type: none"> <li>AWN</li> </ul>     |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> <input type="checkbox"/> |  |
| <ul style="list-style-type: none"> <li>BA</li> </ul>      |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> <input type="checkbox"/> |  |
| <ul style="list-style-type: none"> <li>BB</li> </ul>      |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> <input type="checkbox"/> |  |






|   |  |  |                          |
|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• BBQ</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BC</li> </ul>  |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BD</li> </ul>  |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BDA</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BDY</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>  | <input type="checkbox"/> |

|   |  |   |                          |
|---|--|---|--------------------------|
| <ul style="list-style-type: none"> <li>• BE</li> </ul>  |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>     | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BG</li> </ul>  |  | <p>1<br/> <del>o o</del> 0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BIN</li> </ul> |  | <p>1<br/> <del>(BIN)</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BK</li> </ul>  |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>     | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BL</li> </ul>  |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>     | <input type="checkbox"/> |






|  |  |   |                          |
|--|--|---|--------------------------|
| <ul style="list-style-type: none"> <li>• BLT</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>                          | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BM</li> </ul>   |  | <p>1<br/>  0.000<br/>                 Description</p>                          | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BOL</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Bol<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BORE</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>                          | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BS</li> </ul>   |  | <p>1<br/>  0.000<br/>                 Description</p>                        | <input type="checkbox"/> |






|   |  |  |                          |
|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• BSH</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BU</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BUS</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• BW</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• C</li> </ul>   |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |








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| <ul style="list-style-type: none"> <li>• CAM</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• CB</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• CC</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• CL</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• CP</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• CR</li> </ul>    |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• CROSS</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• CULV</li> </ul>  |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• D</li> </ul>     |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• DD</li> </ul>    |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• DH</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• DHW</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• DJP</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• DL</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• DP</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• DPY</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• DR</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• EB</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• ECM</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• EF</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• EG</li> </ul>   |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• EM</li> </ul>   |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• EP</li> </ul>   |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• EPG</li> </ul>  |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• EPIL</li> </ul> |  | <p>1<br/> <del>⊗</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>EPL</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>EPT</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>ES</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>ET</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>ETC</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• ETR</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• EUR</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• F</li> </ul>   |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• FB</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• FHD</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• FL</li> </ul>   |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                        | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• FLR</li> </ul>  |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                        | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• FP</li> </ul>   |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                        | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• FPIT</li> </ul> |  | <p>1<br/> <input checked="" type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• FPL</li> </ul>  |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                        | <input type="checkbox"/> |









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| <ul style="list-style-type: none"> <li>FPLUG</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>G</li> </ul>     |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>GAS</li> </ul>   |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>GATE</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>GIN</li> </ul>   |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• GIP</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• GMP</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• GP</li> </ul>   |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• GR</li> </ul>   |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• GRAV</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• GRID</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• GUL</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• GV</li> </ul>   |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• HW</li> </ul>   |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• HWB</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• HWT</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                        | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• INV</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                        | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• JBX</li> </ul> |  | <p>1<br/> <input checked="" type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• K</li> </ul>   |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                        | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• KI</li> </ul>  |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                        | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• KL</li> </ul>  |  | <p>1<br/> <del>0.000</del><br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• KP</li> </ul>  |  | <p>1<br/> <del>0.000</del><br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• L</li> </ul>   |  | <p>1<br/> <del>0.000</del><br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• LB</li> </ul>  |  | <p>1<br/> <del>0.000</del><br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• LPL</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• MB</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• MBR</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• MBX</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• MH</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• MO</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• NS</li> </ul>  |  | <p>1<br/> <del>0.000</del><br/>                 Description</p>                     | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• OBV</li> </ul> |  | <p>1<br/> <del>0.000</del><br/>                 Description</p>                     | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• OPT</li> </ul> |  | <p>1<br/> <input type="checkbox"/> OPTUS 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• P</li> </ul>   |  | <p>1<br/> <del>0.000</del><br/>                 Description</p>                     | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• PB</li> </ul>  |  | <p>1<br/> <input type="checkbox"/> FUEL 0.000<br/>                 Description</p>  | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• PBOX</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• PBX</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• PEG</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• PH</li> </ul>   |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• PIT</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |



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| <ul style="list-style-type: none"> <li>• PLP</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• PM</li> </ul>   |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• PMP</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• PMT</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• POLE</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• PR</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• PTH</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• PTR</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• PV</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>PX</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>RFP</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>RHY</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>RKR</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>RLC</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• RSB</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• RSN</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• RSP</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• RSV</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• RTP</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• RW</li> </ul>   |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>             | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• RWM</li> </ul>  |  | <p>1<br/> <input type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• S</li> </ul>    |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>             | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SD</li> </ul>   |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>             | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SEAT</li> </ul> |  | <p>1<br/> <del>SEAT</del> 0.000<br/>                 Description</p>          | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• SEP</li> </ul>   |  | <p>1<br/> <del>ST</del> 0.000<br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SEWER</li> </ul> |  | <p>1<br/> <del>SEW</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SF</li> </ul>    |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SFP</li> </ul>   |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SHD</li> </ul>   |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>   | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• SHRUB</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SHRUB1</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SIN</li> </ul>    |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SIP</li> </ul>    |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SJB</li> </ul>    |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• SLH</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SLR</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SMH</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SP</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SPL</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |


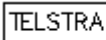










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|--|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• SQP</li> </ul>      |  | <p>1<br/> <input checked="" type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SSM</li> </ul>      |  | <p>1<br/> <input checked="" type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• STANDARD</li> </ul> |  | <p>1<br/> <input checked="" type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• STN</li> </ul>      |  |  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• SVP</li> </ul>      |  | <p>1<br/> <input checked="" type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |

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|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• SWG</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• T</li> </ul>   |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• T1</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• T3</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• T4</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |






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|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>TAP</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>TB</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>TC</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>TCM</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>TD</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• TEP</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• TK</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• TM</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• TMP</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• TNK</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• TPL</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• TPT</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• TR</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• TSC</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• TSP</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• TTP</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• TW</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• TXP</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• UP</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• VA</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |





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|--|--|---|--------------------------|
| <ul style="list-style-type: none"> <li>• VT</li> </ul>   |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>             | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• WC</li> </ul>   |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>             | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• WGS</li> </ul>  |  |   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• WGSS</li> </ul> |  |   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• WHY</li> </ul>  |  | <p>1<br/> <input type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |






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|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• WMH</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• WMP</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• WMR</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• WSV</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• WTP</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |








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|--|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• WW</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |
|--|--|--|--------------------------|

Additional Point in the ANZ Survey Numeric Codes Template:

| Point Styles  | Description | Screen grab / DWF / DWG  | Default                  |
|---|-------------|--|--------------------------|
| <ul style="list-style-type: none"> <li>• 1</li> </ul> |             | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 2</li> </ul> |             | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 3</li> </ul> |             | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 4</li> </ul> |             | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |






|   |  |  |                          |
|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• 5</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 6</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 7</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 8</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 9</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |






|  |  |  |                          |
|--|--|--|--------------------------|
| <ul style="list-style-type: none"><li>• 10</li></ul> |  | 1<br><input checked="" type="radio"/> 0.000<br>Description | <input type="checkbox"/> |
| <ul style="list-style-type: none"><li>• 11</li></ul> |  | 1<br><input checked="" type="radio"/> 0.000<br>Description | <input type="checkbox"/> |
| <ul style="list-style-type: none"><li>• 12</li></ul> |  | 1<br><input checked="" type="radio"/> 0.000<br>Description | <input type="checkbox"/> |
| <ul style="list-style-type: none"><li>• 13</li></ul> |  | 1<br><input checked="" type="radio"/> 0.000<br>Description | <input type="checkbox"/> |
| <ul style="list-style-type: none"><li>• 14</li></ul> |  | 1<br><input checked="" type="radio"/> 0.000<br>Description | <input type="checkbox"/> |

|   |  |  |                          |
|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• 15</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 16</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 17</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 18</li> </ul>  |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 100</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

|   |  |   |                          |
|---|--|---|--------------------------|
| <ul style="list-style-type: none"> <li>• 101</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 102</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 103</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 104</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 105</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |






|   |  |   |                          |
|---|--|---|--------------------------|
| <ul style="list-style-type: none"> <li>• 106</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 107</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 108</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 109</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 110</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |






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|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• 111</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 201</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 202</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 203</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 204</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• 205</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 206</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 207</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 208</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 230</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |



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|---|--|---|--------------------------|
| <ul style="list-style-type: none"> <li>• 301</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 302</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 303</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 304</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 305</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |

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|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• 306</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 307</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 308</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 309</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 310</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• 311</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 312</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 313</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 314</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 315</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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|---|--|---|--------------------------|
| <ul style="list-style-type: none"> <li>• 316</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                           | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 317</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                           | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 318</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                           | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 319</li> </ul> |  | <p>1<br/> <input checked="" type="checkbox"/> FP 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 320</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                           | <input type="checkbox"/> |

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|---|--|---|--------------------------|
| <ul style="list-style-type: none"> <li>• 321</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 322</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 323</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 330</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 401</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |


|   |  |   |                          |
|---|--|---|--------------------------|
| <ul style="list-style-type: none"> <li>• 402</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 403</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 404</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 405</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 406</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |






|   |  |   |                          |
|---|--|---|--------------------------|
| <ul style="list-style-type: none"> <li>• 407</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 408</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 409</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 410</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 411</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |






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|---|--|---|--------------------------|
| <ul style="list-style-type: none"> <li>• 412</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 413</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 414</li> </ul> |  | <p>1<br/> <del>Ⓢ</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 415</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 416</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |















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| <ul style="list-style-type: none"> <li>• 417</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 418</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 419</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 420</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 421</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• 422</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 501</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 502</li> </ul> |  | <p>1<br/> <del>○</del> 0.000<br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 503</li> </ul> |  | <p>1<br/> <del>○</del> 0.000<br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 504</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• 505</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 506</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 507</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 508</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 509</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• 510</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 511</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 512</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 513</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 514</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• 515</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 516</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 517</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 518</li> </ul> |  | <p>1<br/>    0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 519</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• 520</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 521</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 522</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 523</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 524</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• 525</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                        | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 526</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                        | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 527</li> </ul> |  | <p>1<br/> <input checked="" type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 531</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                        | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 601</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                        | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• 602</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 603</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 604</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 605</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 606</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |








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| <ul style="list-style-type: none"> <li>• 607</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 608</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 609</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 610</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 611</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• 612</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 613</li> </ul> |  | <p>1<br/> <del>⊗</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 614</li> </ul> |  | <p>1<br/> <del>I</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 615</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 616</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |



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| <ul style="list-style-type: none"> <li>• 617</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 618</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 619</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 620</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 621</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• 622</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                                       | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 623</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                                       | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 624</li> </ul> |  | <p>1<br/>                 FUEL<br/> <input type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 625</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                                       | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 626</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>                                       | <input type="checkbox"/> |

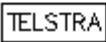




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| <ul style="list-style-type: none"> <li>• 627</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 628</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 630</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 631</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 640</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• 641</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 642</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 643</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 644</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 645</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• 710</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 711</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 712</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 713</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 714</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• 715</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 716</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 717</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 718</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>  | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 720</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |








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| <ul style="list-style-type: none"> <li>721</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>722</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>723</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>724</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>725</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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|---|--|--|--|
| <ul style="list-style-type: none"> <li>726</li> </ul> |  | <p>1<br/> <span style="border: 1px solid black; padding: 2px;">TELSTRA</span> 0.000 <input type="checkbox"/><br/>                     Description</p>          |  |
| <ul style="list-style-type: none"> <li>727</li> </ul> |  | <p>1<br/> <del>X</del> 0.000 <input type="checkbox"/><br/>                     Description</p>   |  |
| <ul style="list-style-type: none"> <li>728</li> </ul> |  | <p>1<br/> <del>X</del> 0.000 <input type="checkbox"/><br/>                     Description</p>   |  |
| <ul style="list-style-type: none"> <li>731</li> </ul> |  | <p>1<br/> <span style="border: 1px solid black; padding: 2px;">GAS</span> <del>X</del> 0.000 <input type="checkbox"/><br/>                     Description</p> |  |
| <ul style="list-style-type: none"> <li>732</li> </ul> |  | <p>1<br/> <span style="border: 1px solid black; padding: 2px;">GAS</span> <del>X</del> 0.000 <input type="checkbox"/><br/>                     Description</p> |  |




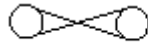

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| <ul style="list-style-type: none"> <li>• 733</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 734</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 741</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 742</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 743</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• 744</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 750</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 751</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 752</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 753</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |






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| <ul style="list-style-type: none"> <li>• 754</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 755</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 756</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 757</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 758</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• 759</li> </ul> |  | <p>1<br/> <del>⊗</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 760</li> </ul> |  | <p>1<br/> <del>⊗</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 761</li> </ul> |  | <p>1<br/> <del>⊗</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 762</li> </ul> |  | <p>1<br/> <del>⊗</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 763</li> </ul> |  | <p>1<br/> <del>⊗</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |

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| <ul style="list-style-type: none"> <li>• 764</li> </ul> |  | <p>1<br/> <del>0.000</del> <input type="checkbox"/><br/>                 Description</p> |  |
| <ul style="list-style-type: none"> <li>• 765</li> </ul> |  | <p>1<br/> <del>0.000</del> <input type="checkbox"/><br/>                 Description</p> |  |
| <ul style="list-style-type: none"> <li>• 766</li> </ul> |  | <p>1<br/> <del>0.000</del> <input type="checkbox"/><br/>                 Description</p> |  |
| <ul style="list-style-type: none"> <li>• 767</li> </ul> |  | <p>1<br/> <del>0.000</del> <input type="checkbox"/><br/>                 Description</p> |  |
| <ul style="list-style-type: none"> <li>• 768</li> </ul> |  | <p>1<br/> <del>0.000</del> <input type="checkbox"/><br/>                 Description</p> |  |

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|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• 769</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 771</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 801</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 802</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 803</li> </ul> |  | <p>1<br/>  0.000<br/>                 Description</p> | <input type="checkbox"/> |



|   |  |  |                          |
|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• 804</li> </ul> |  | <p>1<br/>  0.000<br/>                     Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 805</li> </ul> |  | <p>1<br/>  0.000<br/>                     Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 806</li> </ul> |  | <p>1<br/>  0.000<br/>                     Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 807</li> </ul> |  | <p>1<br/>  0.000<br/>                     Description</p>   | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 808</li> </ul> |  | <p>1<br/>  0.000<br/>                     Description</p> | <input type="checkbox"/> |

|   |  |   |                          |
|---|--|---|--------------------------|
| <ul style="list-style-type: none"> <li>• 809</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>             | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 810</li> </ul> |  | <p>1<br/> <input type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 811</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>             | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 812</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>             | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 813</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p>             | <input type="checkbox"/> |

|   |  |   |  |
|---|--|---|--|
| <ul style="list-style-type: none"> <li>• 814</li> </ul> |  | <p>1<br/>✕ 0.000 <input type="checkbox"/></p> <p>Description</p>                        |  |
| <ul style="list-style-type: none"> <li>• 815</li> </ul> |  | <p>1<br/><input type="checkbox"/> 0.000 <input type="checkbox"/></p> <p>Description</p> |  |
| <ul style="list-style-type: none"> <li>• 820</li> </ul> |  | <p>1<br/>✕ 0.000 <input type="checkbox"/></p> <p>Description</p>                        |  |
| <ul style="list-style-type: none"> <li>• 821</li> </ul> |  | <p>1<br/>✕ 0.000 <input type="checkbox"/></p> <p>Description</p>                        |  |
| <ul style="list-style-type: none"> <li>• 830</li> </ul> |  | <p>1<br/>✕ 0.000 <input type="checkbox"/></p> <p>Description</p>                        |  |


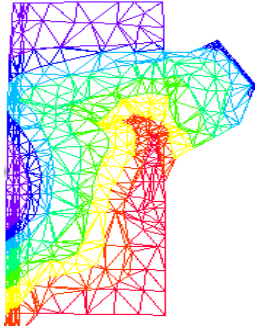
|   |  |   |                          |
|---|--|---|--------------------------|
| <ul style="list-style-type: none"> <li>• 831</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 901</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 902</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 903</li> </ul> |  | <p>1<br/> <del>X</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 904</li> </ul> |  | <p>1<br/> <del>8</del> 0.000<br/>                 Description</p> | <input type="checkbox"/> |


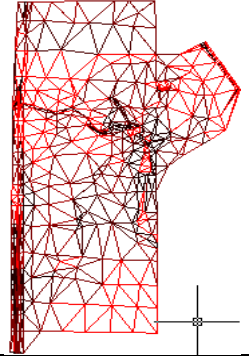
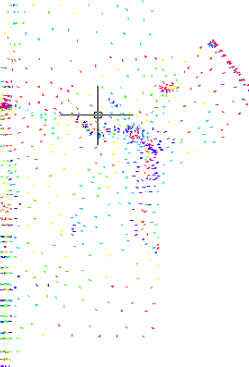
|   |  |  |                          |
|---|--|--|--------------------------|
| <ul style="list-style-type: none"> <li>• 905</li> </ul> |  | <p>1<br/> <input checked="" type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 906</li> </ul> |  | <p>1<br/> <input checked="" type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 907</li> </ul> |  | <p>1<br/> <input type="checkbox"/> 0.000<br/>                 Description</p>            | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 908</li> </ul> |  | <p>1<br/> <input checked="" type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• 909</li> </ul> |  | <p>1<br/> <input checked="" type="checkbox"/> 0.000<br/>                 Description</p> | <input type="checkbox"/> |


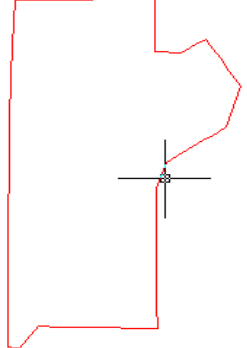

|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"> <li>910</li> </ul>      |  | 1<br><input checked="" type="checkbox"/> 0.000 <input type="checkbox"/><br>Description |  |
| <ul style="list-style-type: none"> <li>911</li> </ul>      |  |  |  |
| <ul style="list-style-type: none"> <li>All Off</li> </ul>  |  |  |  |
| <ul style="list-style-type: none"> <li>Standard</li> </ul> |  |  |  |

**6.3 Surfaces**

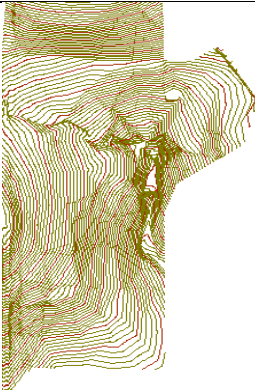
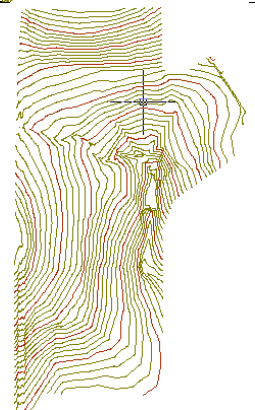
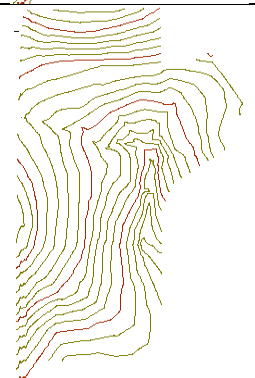
Design Template: \_AutoCAD Civil3D 2014 ANZ Design\_ANZ.dwt

| Surface Styles                | Description | Screen grab / DWF / DWG   | Default |
|-------------------------------|-------------|---|---------|
| ANZ_!_No Display              |             |   |         |
| ANZ_Analysis - Elevation (2D) |             |   |         |
| ANZ_Analysis - Elevation (3D) |             |  |         |


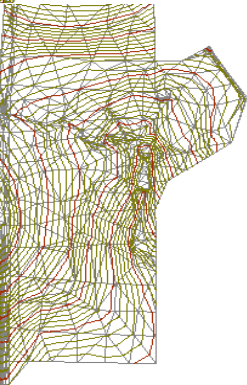
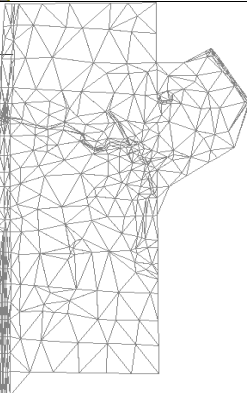
|                             |  |  |  |
|-----------------------------|--|--|--|
| ANZ_Analysis - Slope (2D)   |  |   |  |
| ANZ_Analysis - Slope (3D)   |  |   |  |
| ANZ_Analysis - Slope Arrows |  |  |  |

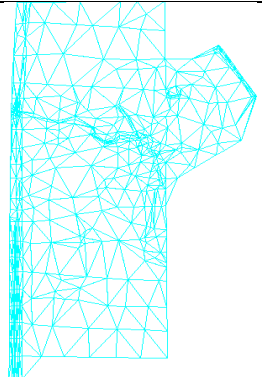
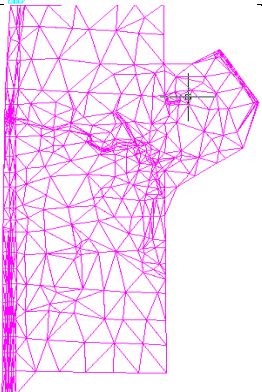

|  |  |  |  |
|--|--|--|--|
| ANZ_Analysis - Slope Arrows & Contours (.5m) |  |   |  |
| ANZ_Border (2D - Elevation 0)                |  |   |  |
| ANZ_Conts (.1m)                              |  |  |  |

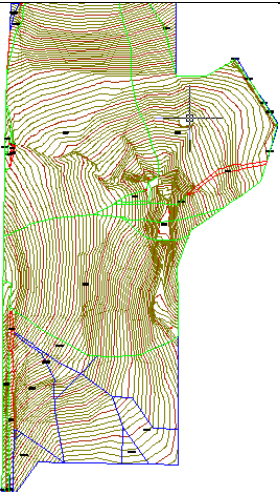
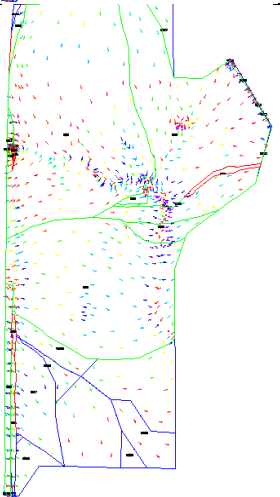


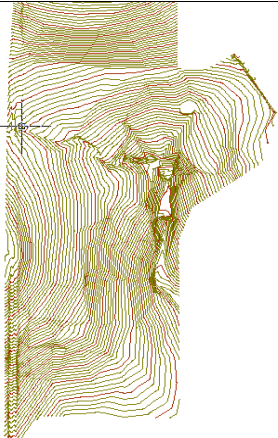
|                 |  |  |  |
|-----------------|--|--|--|
| ANZ_Conts (.5m) |  |   |  |
| ANZ_Conts (1m)  |  |   |  |
| ANZ_Conts (2m)  |  |  |  |

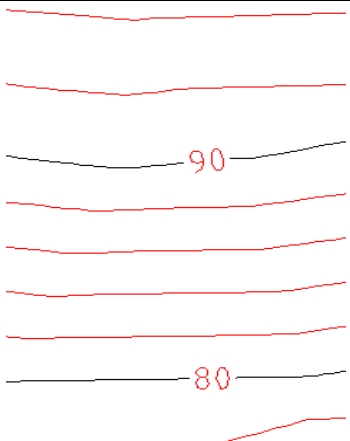
|                             |  |  |  |
|-----------------------------|--|--|--|
| ANZ_Conts (5m)              |  |   |  |
| ANZ_Conts + Triangles (.1m) |  |   |  |
| ANZ_Conts + Triangles (.2m) |  |  |  |

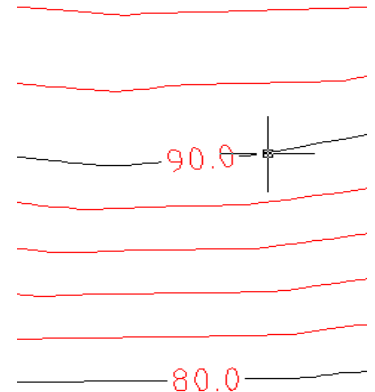
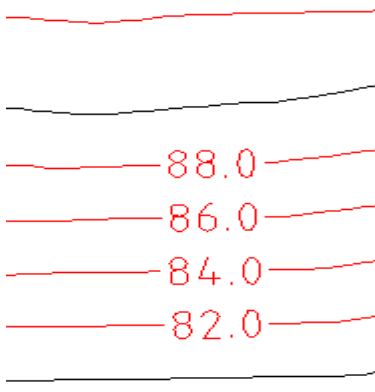
|                             |  |  |  |
|-----------------------------|--|--|--|
| ANZ_Conts + Triangles (.5m) |  |   |  |
| ANZ_Conts + Triangles (1m)  |  |   |  |
| ANZ_Triangulation           |  |  |  |

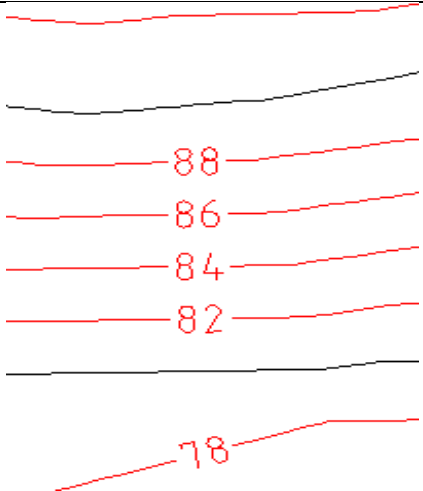
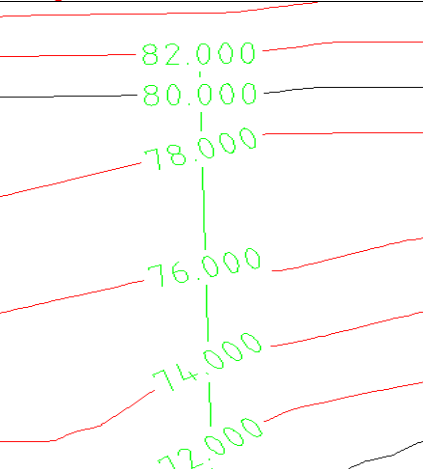
|                             |  |  |  |
|-----------------------------|--|--|--|
| ANZ_Triangulation (Cyan)    |  |   |  |
| ANZ_Triangulation (magenta) |  |   |  |
| ANZ_Watersheds              |  |  |  |

|                               |  |  |  |
|-------------------------------|--|--|--|
| ANZ_Watersheds + Conts (.5m)  |  |   |  |
| ANZ_Watersheds + Slope Arrows |  |  |  |

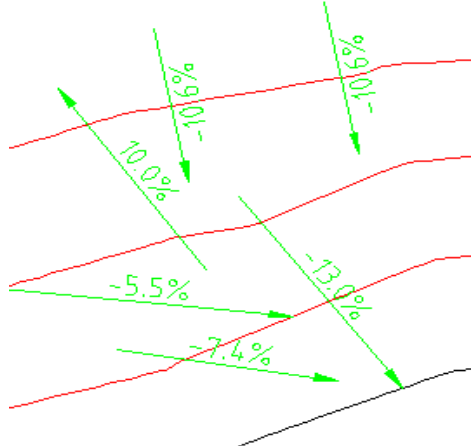
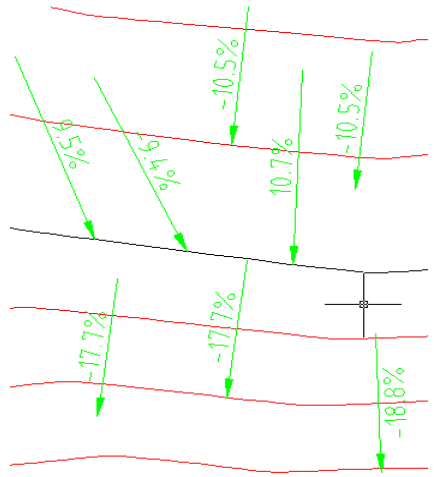
|          |  |   |  |
|----------|--|---|--|
| Standard |  |  |  |
|----------|--|---|--|

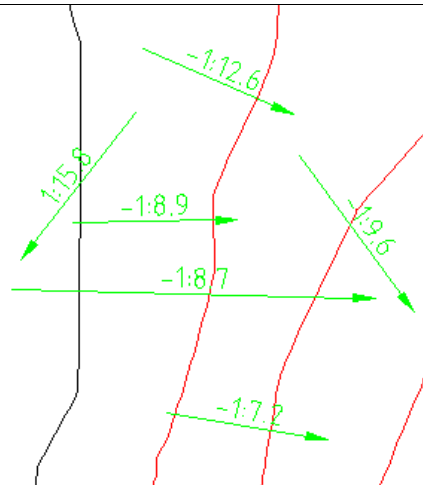
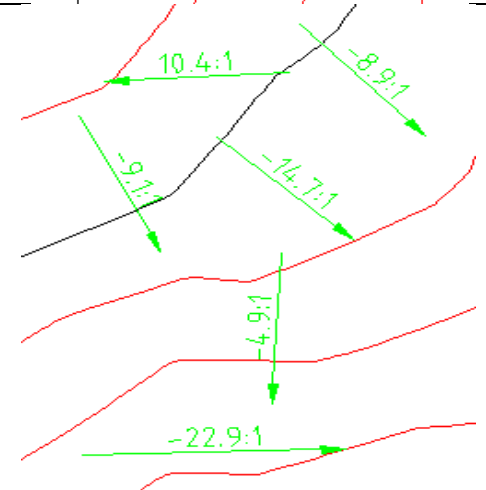
| Surface Label Styles Name/Type          | Description | Screen grab / DWF / DWG  | Default |
|---|-------------|--|---------|
| Contour                                 |             |  |         |
| ANZ_Design Contour Major (Precision 1m) |             |  |         |

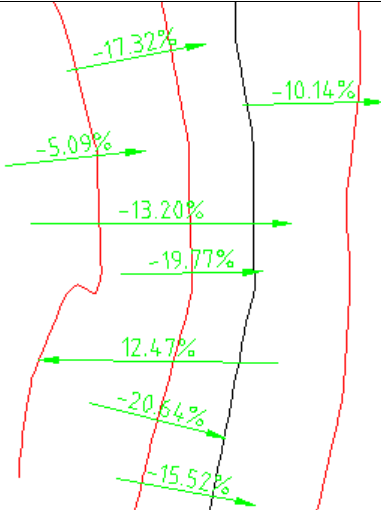
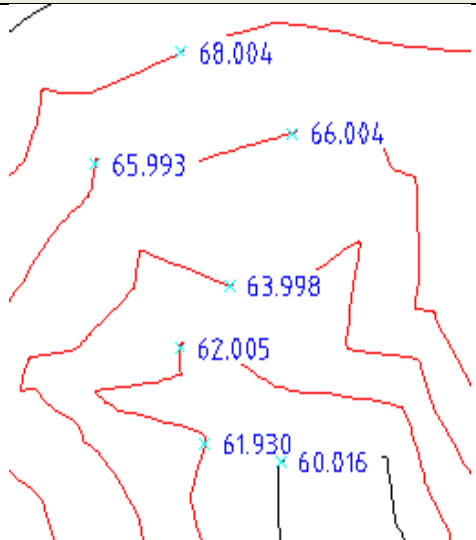
|   |  |  |  |
|---|--|--|--|
| ANZ_Design Contour Major (Precision 0.1m) |  |  <p>The plot shows several horizontal contour lines. A black line is labeled '90.0' and a grey line is labeled '80.0'. A crosshair symbol is positioned on the 90.0 line.</p>                           |  |
| ANZ_Design Contour Minor (Precision 0.1m) |  |  <p>The plot shows several horizontal contour lines. Four red lines are labeled '88.0', '86.0', '84.0', and '82.0' from top to bottom. A black line is at the top and a grey line is at the bottom.</p> |  |


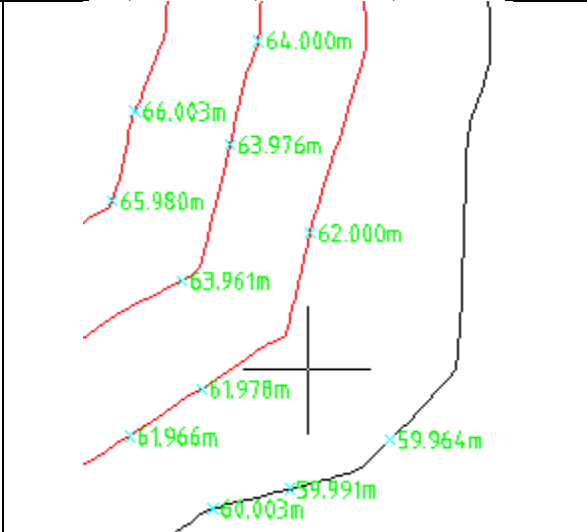
|   |  |  |  |
|---|--|--|--|
| ANZ_Design Contour Minor (Precision 1m) |  |   |  |
| Standard                                |  |  |  |
| Slope                                   |  |  |  |







































|  |  |  |  |
|--|--|--|--|
| <p>ANZ_Slope Percent (precision 0.1)</p>                     |  |   |  |
| <p>ANZ_Slope Percent (precision 0.1) - Always Downstream</p> |  |  |  |





































|                          |  |  |  |
|--------------------------|--|--|--|
| ANZ_Slope Rise:Run (1:x) |  |  <p>A diagram showing several red lines representing slopes. Green arrows indicate the slope values. The values are: 1:75.8 (vertical), -1:12.6 (steep downward), -1:8.9 (shallow downward), -1:8.7 (shallow downward), -1:9.6 (steep downward), and -1:7.7 (shallow downward).</p>       |  |
| ANZ_Slope Run:Rise (x:1) |  |  <p>A diagram showing several red lines representing slopes. Green arrows indicate the slope values. The values are: 10.4:1 (shallow downward), -8.9:1 (steep downward), -9.7:1 (steep downward), -14.7:1 (steep downward), -4.9:1 (shallow downward), and -22.9:1 (steep downward).</p> |  |


































|                         |  |  |  |
|-------------------------|--|--|--|
| Standard                |  |   |  |
| Spot Elevation          |  |  |  |
| ANZ_Cut Fill (Red Blue) |  |  |  |

|                                  |  |  |  |
|----------------------------------|--|--|--|
| ANZ_Spot Level & Coordinates     |  |  <p>Topographic map showing spot levels and coordinates for a terrain profile. The map features a red line representing the terrain profile. Three specific points are labeled with their elevation and coordinates:</p> <ul style="list-style-type: none"><li>Point 1: E: 58.018m, X: 2912.824, Y: 702.154</li><li>Point 2: E: 52.010m, X: 2938.467, Y: 677.508</li><li>Point 3: E: 58.001m, X: 2913.308, Y: 665.891</li></ul>   |  |
| ANZ_Spot Level (precision 0.001) |  |  <p>Topographic map showing spot levels with a precision of 0.001m. The map features a red line representing the terrain profile. A series of spot levels are labeled along the profile:</p> <ul style="list-style-type: none"><li>+64.000m</li><li>+66.003m</li><li>+63.976m</li><li>+65.980m</li><li>+62.000m</li><li>+63.961m</li><li>+61.978m</li><li>+61.966m</li><li>+59.964m</li><li>+59.991m</li><li>+60.003m</li></ul> <p>A black crosshair is visible on the map, centered near the +61.978m spot level.</p> |  |

























|                                  |  |  |  |
|----------------------------------|--|--|--|
| <p>Standard</p>                  |  |  |  |
| <p>Watershed</p>                 |  |  |  |
| <p>ANZ_Watershed Label Style</p> |  |  |  |
| <p>Standard</p>                  |  |  |  |








































| Surface Table Styles Name/Type     | Description   | Screen grab / DWF / DWG  | Default  |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
|------------------------------------|---|--|--|---------------------------|--|--|--------|-------------------|-------------------|-----------------------|-----------------------|---|------------------|---|--------|---|------------------|---|---|---|------------------|---|---|---|------------------|---|---|---|------------------|--|--|
| Direction                          |   |  |  |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| ANZ_Direction Ranges               |   | <table border="1"> <thead> <tr> <th colspan="4">Surface Analysis: Directions</th> </tr> <tr> <th>Number</th> <th>Color</th> <th>Minimum Direction</th> <th>Maximum Direction</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td>000° 00' 00"</td> <td>057° 17' 45"</td> </tr> <tr> <td>2</td> <td></td> <td>057° 17' 45"</td> <td>114° 35' 30"</td> </tr> <tr> <td>3</td> <td></td> <td>114° 35' 30"</td> <td>171° 53' 14"</td> </tr> <tr> <td>4</td> <td></td> <td>171° 53' 14"</td> <td>229° 10' 59"</td> </tr> <tr> <td>5</td> <td></td> <td>229° 10' 59"</td> <td>343° 46' 29"</td> </tr> </tbody> </table>                              | Surface Analysis: Directions   |                           |  |  | Number | Color             | Minimum Direction | Maximum Direction     | 1                     |  | 000° 00' 00"     | 057° 17' 45"  | 2      |  | 057° 17' 45"     | 114° 35' 30"  | 3   |  | 114° 35' 30"     | 171° 53' 14"  | 4 |  | 171° 53' 14"     | 229° 10' 59"  | 5 |  | 229° 10' 59"     | 343° 46' 29"   |  |
| Surface Analysis: Directions       |   |  |  |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| Number                             | Color   | Minimum Direction  | Maximum Direction  |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| 1                                  |    | 000° 00' 00"   | 057° 17' 45"   |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| 2                                  |    | 057° 17' 45"   | 114° 35' 30"   |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| 3                                  |    | 114° 35' 30"   | 171° 53' 14"   |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| 4                                  |    | 171° 53' 14"   | 229° 10' 59"   |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| 5                                  |    | 229° 10' 59"   | 343° 46' 29"   |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| Standard                           |   | <table border="1"> <thead> <tr> <th colspan="4">Directions Table</th> </tr> <tr> <th>Number</th> <th>Minimum Direction</th> <th>Maximum Direction</th> <th>Color</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N00° 00' 00.00"E</td> <td>N57° 17' 44.81"E</td> <td></td> </tr> <tr> <td>2</td> <td>N57° 17' 44.81"E</td> <td>S65° 24' 30.39"E</td> <td></td> </tr> <tr> <td>3</td> <td>S65° 24' 30.39"E</td> <td>S08° 06' 45.59"E</td> <td></td> </tr> <tr> <td>4</td> <td>S08° 06' 45.59"E</td> <td>S49° 10' 59.22"W</td> <td></td> </tr> <tr> <td>5</td> <td>S49° 10' 59.22"W</td> <td>N16° 13' 31.16"W</td> <td></td> </tr> </tbody> </table> | Directions Table   |                           |  |  | Number | Minimum Direction | Maximum Direction | Color                 | 1                     | N00° 00' 00.00"E  | N57° 17' 44.81"E |    | 2      | N57° 17' 44.81"E  | S65° 24' 30.39"E |  | 3   | S65° 24' 30.39"E  | S08° 06' 45.59"E |  | 4 | S08° 06' 45.59"E  | S49° 10' 59.22"W |  | 5 | S49° 10' 59.22"W  | N16° 13' 31.16"W |  |  |
| Directions Table                   |   |  |  |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| Number                             | Minimum Direction   | Maximum Direction  | Color  |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| 1                                  | N00° 00' 00.00"E  | N57° 17' 44.81"E   |   |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| 2                                  | N57° 17' 44.81"E  | S65° 24' 30.39"E   |   |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| 3                                  | S65° 24' 30.39"E  | S08° 06' 45.59"E   |   |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| 4                                  | S08° 06' 45.59"E  | S49° 10' 59.22"W   |   |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| 5                                  | S49° 10' 59.22"W  | N16° 13' 31.16"W   |  |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| Elevation                          |   |  |  |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| ANZ_Elevation Ranges & 2D Areas    |   | <table border="1"> <thead> <tr> <th colspan="5">Surface Analysis: Elevation Ranges</th> </tr> <tr> <th>Number</th> <th>Color</th> <th>Minimum Elevation (m)</th> <th>Maximum Elevation (m)</th> <th>2D Area (m<sup>2</sup>)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td>50.514</td> <td>58.900</td> <td>27734.7</td> </tr> <tr> <td>2</td> <td></td> <td>58.900</td> <td>63.100</td> <td>22061.5</td> </tr> </tbody> </table>  | Surface Analysis: Elevation Ranges   |                           |  |  |        | Number            | Color             | Minimum Elevation (m) | Maximum Elevation (m) | 2D Area (m <sup>2</sup> )   | 1                |  | 50.514 | 58.900  | 27734.7          | 2   |  | 58.900  | 63.100           | 22061.5   |   |   |                  |   |   |   |                  |  |  |
| Surface Analysis: Elevation Ranges |   |  |  |                           |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| Number                             | Color   | Minimum Elevation (m)  | Maximum Elevation (m)  | 2D Area (m <sup>2</sup> ) |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| 1                                  |  | 50.514   | 58.900   | 27734.7                   |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |
| 2                                  |  | 58.900   | 63.100   | 22061.5                   |  |  |        |                   |                   |                       |                       |   |                  |   |        |   |                  |   |   |   |                  |   |   |   |                  |   |   |   |                  |  |  |

| ANZ_Elevation Ranges & 2D Areas & Volumes |   | <table border="1"> <thead> <tr> <th colspan="6">Surface Analysis: Elevation Ranges</th> </tr> <tr> <th>Number</th> <th>Color</th> <th>Minimum Elevation (m)</th> <th>Maximum Elevation (m)</th> <th>2D Area (m<sup>2</sup>)</th> <th>Volume (m<sup>3</sup>)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td>50.514</td> <td>58.900</td> <td>27734.7</td> <td>1582073.1</td> </tr> <tr> <td>2</td> <td></td> <td>58.900</td> <td>63.100</td> <td>22061.5</td> <td>667382.1</td> </tr> </tbody> </table>   | Surface Analysis: Elevation Ranges  |                           |                          |  |        |                   | Number                | Color                 | Minimum Elevation (m) | Maximum Elevation (m)   | 2D Area (m <sup>2</sup> ) | Volume (m <sup>3</sup> )  | 1 |    | 50.514 | 58.900  | 27734.7 | 1582073.1   | 2      |   | 58.900 | 63.100  | 22061.5 | 667382.1  |  |
|---|---|--|---|---------------------------|--------------------------|--|--------|-------------------|-----------------------|-----------------------|-----------------------|---|---------------------------|---|---|---|--------|---|---------|---|--------|--|--------|---|---------|---|--|
| Surface Analysis: Elevation Ranges        |   |  |   |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| Number                                    | Color   | Minimum Elevation (m)  | Maximum Elevation (m)   | 2D Area (m <sup>2</sup> ) | Volume (m <sup>3</sup> ) |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| 1   |    | 50.514   | 58.900  | 27734.7                   | 1582073.1                |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| 2   |    | 58.900   | 63.100  | 22061.5                   | 667382.1                 |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
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| Surface Analysis: Elevation Ranges        |   |  |   |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| Number                                    | Color   | Minimum Elevation (m)  | Maximum Elevation (m)   |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| 1   |    | 50.514   | 58.900  |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| 2   |    | 58.900   | 63.100  |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
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| Elevations Table                          |   |  |   |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| Number                                    | Minimum Elevation   | Maximum Elevation  | Color   |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| 1   | 50.514  | 58.900   |    |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| 2   | 58.900  | 63.100   |    |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| 3   | 63.100  | 67.600   |   |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| 4   | 67.600  | 71.300   |  |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| Slope                                     |   |  |   |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
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| Surface Analysis: Slope Ranges            |   |  |   |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| Number                                    | Color   | Minimum Slope  | Maximum Slope   |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| 1   |  | 0.0%   | 10.0%   |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| 2   |  | 10.0%  | 20.0%   |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| 3   |  | 20.0%  | 30.0%   |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |
| 4   |  | 30.0%  | 760.0%  |                           |                          |  |        |                   |                       |                       |                       |   |                           |   |   |   |        |   |         |   |        |  |        |   |         |   |  |

| ANZ_Slope Ranges (Rise:Run (1:x)) |   | <table border="1"> <thead> <tr> <th colspan="4">Surface Analysis: Slope Ranges</th> </tr> <tr> <th>Number</th> <th>Color</th> <th>Minimum Slope</th> <th>Maximum Slope</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td>Horizontal</td> <td>1:10.0</td> </tr> <tr> <td>2</td> <td></td> <td>1:10.0</td> <td>1:5.0</td> </tr> <tr> <td>3</td> <td></td> <td>1:5.0</td> <td>1:3.3</td> </tr> <tr> <td>4</td> <td></td> <td>1:3.3</td> <td>1:0.1</td> </tr> </tbody> </table> | Surface Analysis: Slope Ranges  |  |  |  | Number | Color         | Minimum Slope | Maximum Slope | 1 |  | Horizontal | 1:10.0  | 2 |  | 1:10.0 | 1:5.0   | 3 |  | 1:5.0  | 1:3.3   | 4 |  | 1:3.3 | 1:0.1 |  |
|-----------------------------------|---|---|---|--|--|--|--------|---------------|---------------|---------------|---|---|------------|---|---|---|--------|---|---|---|--------|---|---|---|-------|-------|--|
| Surface Analysis: Slope Ranges    |   |   |   |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| Number                            | Color   | Minimum Slope   | Maximum Slope   |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| 1                                 |  | Horizontal  | 1:10.0  |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| 2                                 |  | 1:10.0  | 1:5.0   |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| 3                                 |  | 1:5.0   | 1:3.3   |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| 4                                 |  | 1:3.3   | 1:0.1   |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
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| Surface Analysis: Slope Ranges    |   |   |   |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| Number                            | Color   | Minimum Slope   | Maximum Slope   |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| 1                                 |  | Horizontal  | 10.0:1  |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| 2                                 |  | 10.0:1  | 5.0:1   |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| 3                                 |  | 5.0:1   | 3.3:1   |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| 4                                 |  | 3.3:1   | 0.1:1   |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
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| Slopes Table                      |   |   |   |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| Number                            | Minimum Slope   | Maximum Slope   | Color   |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| 1                                 | 0.00%   | 10.00%  |  |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| 2                                 | 10.00%  | 20.00%  |  |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| 3                                 | 20.00%  | 30.00%  |  |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |
| Slope Arrow                       |   |   |   |  |  |  |        |               |               |               |   |   |            |   |   |   |        |   |   |   |        |   |   |   |       |       |  |



| ANZ_Slope Arrow Ranges (%)       |                       | <table border="1"> <thead> <tr> <th colspan="4">Surface Analysis: Slope Arrows</th> </tr> <tr> <th>Number</th> <th>Minimum Slope</th> <th>Maximum Slope</th> <th>Color</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0.0%</td> <td>10.0%</td> <td></td> </tr> <tr> <td>2</td> <td>10.0%</td> <td>20.0%</td> <td></td> </tr> <tr> <td>3</td> <td>20.0%</td> <td>30.0%</td> <td></td> </tr> <tr> <td>4</td> <td>30.0%</td> <td>760.0%</td> <td></td> </tr> </tbody> </table> | Surface Analysis: Slope Arrows  |  |  |        | Number            | Minimum Slope         | Maximum Slope         | Color       | 1      | 0.0%   | 10.0%  |  | 2 | 10.0%  | 20.0%  |  | 3 | 20.0%  | 30.0%  |  | 4 | 30.0%  | 760.0%  |  |  |
|----------------------------------|-----------------------|--|---|--|--|--------|-------------------|-----------------------|-----------------------|-------------|--------|--------|--------|---|---|--------|--------|---|---|--------|--------|---|---|--------|---------|---|--|
| Surface Analysis: Slope Arrows   |                       |  |   |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| Number                           | Minimum Slope         | Maximum Slope  | Color   |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| 1                                | 0.0%                  | 10.0%  |  |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| 2                                | 10.0%                 | 20.0%  |  |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| 3                                | 20.0%                 | 30.0%  |  |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| 4                                | 30.0%                 | 760.0%   |  |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| Standard                         |                       | <table border="1"> <thead> <tr> <th colspan="4">Slope Arrows Table</th> </tr> <tr> <th>Number</th> <th>Minimum Slope</th> <th>Maximum Slope</th> <th>Color</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0.00%</td> <td>10.00%</td> <td></td> </tr> <tr> <td>2</td> <td>10.00%</td> <td>20.00%</td> <td></td> </tr> <tr> <td>3</td> <td>20.00%</td> <td>30.00%</td> <td></td> </tr> <tr> <td>4</td> <td>30.00%</td> <td>760.00%</td> <td></td> </tr> </tbody> </table>     | Slope Arrows Table  |  |  |        | Number            | Minimum Slope         | Maximum Slope         | Color       | 1      | 0.00%  | 10.00% |  | 2 | 10.00% | 20.00% |  | 3 | 20.00% | 30.00% |  | 4 | 30.00% | 760.00% |  |  |
| Slope Arrows Table               |                       |  |   |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| Number                           | Minimum Slope         | Maximum Slope  | Color   |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| 1                                | 0.00%                 | 10.00%   |  |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| 2                                | 10.00%                | 20.00%   |  |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| 3                                | 20.00%                | 30.00%   |  |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| 4                                | 30.00%                | 760.00%  |  |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| Contour                          |                       |  |   |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| ANZ_Contour Ranges               |                       | <table border="1"> <thead> <tr> <th colspan="4">Surface Analysis: Contour Ranges</th> </tr> <tr> <th>Number</th> <th>Minimum Elevation (m)</th> <th>Maximum Elevation (m)</th> <th>Volume (m³)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>50.514</td> <td>94.679</td> <td>40214.88.0</td> </tr> </tbody> </table>   | Surface Analysis: Contour Ranges  |  |  |        | Number            | Minimum Elevation (m) | Maximum Elevation (m) | Volume (m³) | 1      | 50.514 | 94.679 | 40214.88.0  |   |        |        |   |   |        |        |   |   |        |         |   |  |
| Surface Analysis: Contour Ranges |                       |  |   |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| Number                           | Minimum Elevation (m) | Maximum Elevation (m)  | Volume (m³)   |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| 1                                | 50.514                | 94.679   | 40214.88.0  |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| Standard                         |                       | <table border="1"> <thead> <tr> <th colspan="3">Contours Table</th> </tr> <tr> <th>Number</th> <th>Minimum Elevation</th> <th>Maximum Elevation</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>50.514</td> <td>94.679</td> </tr> </tbody> </table>  | Contours Table  |  |  | Number | Minimum Elevation | Maximum Elevation     | 1                     | 50.514      | 94.679 |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| Contours Table                   |                       |  |   |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| Number                           | Minimum Elevation     | Maximum Elevation  |   |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| 1                                | 50.514                | 94.679   |   |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |
| Watershed                        |                       |  |   |  |  |        |                   |                       |                       |             |        |        |        |   |   |        |        |   |   |        |        |   |   |        |         |   |  |

| ANZ_Watershed                          |                  | <table border="1"> <thead> <tr> <th colspan="5">Surface Analysis: Watershed Catchments</th> </tr> <tr> <th>ID</th> <th>Type</th> <th>Drains Into</th> <th>Segment Display</th> <th>Area (m<sup>2</sup>)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Boundary point</td> <td></td> <td></td> <td>1423.358</td> </tr> <tr> <td>2</td> <td>Boundary point</td> <td></td> <td></td> <td>773.590</td> </tr> <tr> <td>3</td> <td>Boundary point</td> <td></td> <td></td> <td>0.982</td> </tr> <tr> <td>4</td> <td>Boundary point</td> <td></td> <td></td> <td>8448.178</td> </tr> <tr> <td>5</td> <td>Boundary segment</td> <td></td> <td></td> <td>64.169</td> </tr> <tr> <td>6</td> <td>Boundary segment</td> <td></td> <td></td> <td>19.237</td> </tr> <tr> <td>7</td> <td>Boundary segment</td> <td></td> <td></td> <td>2743.318</td> </tr> </tbody> </table> | Surface Analysis: Watershed Catchments  |   |   |         |  | ID | Type | Drains Into | Segment Display | Area (m <sup>2</sup> ) | 1               | Boundary point         |              |  | 1423.358 | 2              | Boundary point  |               |    | 773.590   | 3       | Boundary point |   |  | 0.982         | 4   | Boundary point  |        |  | 8448.178 | 5 | Boundary segment |  |  | 64.169 | 6 | Boundary segment |  |  | 19.237 | 7 | Boundary segment |  |  | 2743.318 |  |
|--|------------------|--|---|---|---|---------|--|----|------|-------------|-----------------|------------------------|-----------------|------------------------|--------------|---|----------|----------------|---|---------------|---|---|---------|----------------|---|---|---------------|---|---|--------|---|----------|---|------------------|--|---|--------|---|------------------|--|---|--------|---|------------------|--|---|----------|--|
| Surface Analysis: Watershed Catchments |                  |  |   |   |   |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| ID                                     | Type             | Drains Into  | Segment Display   | Area (m <sup>2</sup> )  |   |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| 1                                      | Boundary point   |  |  | 1423.358  |   |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| 2                                      | Boundary point   |  |  | 773.590   |   |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| 3                                      | Boundary point   |  |  | 0.982   |   |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| 4                                      | Boundary point   |  |  | 8448.178  |   |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| 5                                      | Boundary segment |  |  | 64.169  |   |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| 6                                      | Boundary segment |  |  | 19.237  |   |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| 7                                      | Boundary segment |  |  | 2743.318  |   |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| ANZ_Watershed (with description)       |                  | <table border="1"> <thead> <tr> <th colspan="6">Surface Analysis: Watershed Catchments</th> </tr> <tr> <th>ID</th> <th>Type</th> <th>Drains Into</th> <th>Description</th> <th>Segment Display</th> <th>Area (m<sup>2</sup>)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Boundary point</td> <td></td> <td>Description 1</td> <td></td> <td>1423.358</td> </tr> <tr> <td>2</td> <td>Boundary point</td> <td></td> <td>Description 2</td> <td></td> <td>773.590</td> </tr> </tbody> </table>  | Surface Analysis: Watershed Catchments  |   |   |         |  |    | ID   | Type        | Drains Into     | Description            | Segment Display | Area (m <sup>2</sup> ) | 1            | Boundary point  |          | Description 1  |  | 1423.358      | 2   | Boundary point  |         | Description 2  |  | 773.590   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| Surface Analysis: Watershed Catchments |                  |  |   |   |   |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| ID                                     | Type             | Drains Into  | Description   | Segment Display   | Area (m <sup>2</sup> )  |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| 1                                      | Boundary point   |  | Description 1   |    | 1423.358  |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| 2                                      | Boundary point   |  | Description 2   |    | 773.590   |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| Standard                               |                  | <table border="1"> <thead> <tr> <th colspan="7">Watersheds Table</th> </tr> <tr> <th>ID</th> <th>Type</th> <th>Drains Into</th> <th>Description</th> <th>Segment Display</th> <th>Area Display</th> <th>Area</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Boundary point</td> <td></td> <td>Description 1</td> <td></td> <td></td> <td>1423.36</td> </tr> <tr> <td>2</td> <td>Boundary point</td> <td></td> <td>Description 2</td> <td></td> <td></td> <td>773.69</td> </tr> </tbody> </table>  | Watersheds Table  |   |   |         |  |    |      | ID          | Type            | Drains Into            | Description     | Segment Display        | Area Display | Area  | 1        | Boundary point |   | Description 1 |  |  | 1423.36 | 2              | Boundary point  |   | Description 2 |  |  | 773.69 |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| Watersheds Table                       |                  |  |   |   |   |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| ID                                     | Type             | Drains Into  | Description   | Segment Display   | Area Display  | Area    |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| 1                                      | Boundary point   |  | Description 1   |  |  | 1423.36 |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| 2                                      | Boundary point   |  | Description 2   |  |  | 773.69  |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |
| User Defined Contour                   |                  |  |   |   |   |         |  |    |      |             |                 |                        |                 |                        |              |   |          |                |   |               |   |   |         |                |   |   |               |   |   |        |   |          |   |                  |  |   |        |   |                  |  |   |        |   |                  |  |   |          |  |

| ANZ_User-defined Contours   |             | <table border="1"> <thead> <tr> <th colspan="3">User-Defined Contours</th> </tr> <tr> <th>Number</th> <th>Description</th> <th>Elevation</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Contour 1</td> <td>61.555</td> </tr> <tr> <td>2</td> <td>Contour 2</td> <td>72.596</td> </tr> <tr> <td>3</td> <td>Contour 3</td> <td>83.638</td> </tr> </tbody> </table>       | User-Defined Contours       |  |  | Number | Description | Elevation | 1 | Contour 1 | 61.555 | 2 | Contour 2 | 72.596 | 3 | Contour 3 | 83.638 |  |
|-----------------------------|-------------|---|-----------------------------|--|--|--------|-------------|-----------|---|-----------|--------|---|-----------|--------|---|-----------|--------|--|
| User-Defined Contours       |             |   |                             |  |  |        |             |           |   |           |        |   |           |        |   |           |        |  |
| Number                      | Description | Elevation   |                             |  |  |        |             |           |   |           |        |   |           |        |   |           |        |  |
| 1                           | Contour 1   | 61.555  |                             |  |  |        |             |           |   |           |        |   |           |        |   |           |        |  |
| 2                           | Contour 2   | 72.596  |                             |  |  |        |             |           |   |           |        |   |           |        |   |           |        |  |
| 3                           | Contour 3   | 83.638  |                             |  |  |        |             |           |   |           |        |   |           |        |   |           |        |  |
| Standard                    |             | <table border="1"> <thead> <tr> <th colspan="3">User-Defined Contours Table</th> </tr> <tr> <th>Number</th> <th>Description</th> <th>Elevation</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Contour 1</td> <td>61.555</td> </tr> <tr> <td>2</td> <td>Contour 2</td> <td>72.596</td> </tr> <tr> <td>3</td> <td>Contour 3</td> <td>83.638</td> </tr> </tbody> </table> | User-Defined Contours Table |  |  | Number | Description | Elevation | 1 | Contour 1 | 61.555 | 2 | Contour 2 | 72.596 | 3 | Contour 3 | 83.638 |  |
| User-Defined Contours Table |             |   |                             |  |  |        |             |           |   |           |        |   |           |        |   |           |        |  |
| Number                      | Description | Elevation   |                             |  |  |        |             |           |   |           |        |   |           |        |   |           |        |  |
| 1                           | Contour 1   | 61.555  |                             |  |  |        |             |           |   |           |        |   |           |        |   |           |        |  |
| 2                           | Contour 2   | 72.596  |                             |  |  |        |             |           |   |           |        |   |           |        |   |           |        |  |
| 3                           | Contour 3   | 83.638  |                             |  |  |        |             |           |   |           |        |   |           |        |   |           |        |  |

**6.4 Parcels**

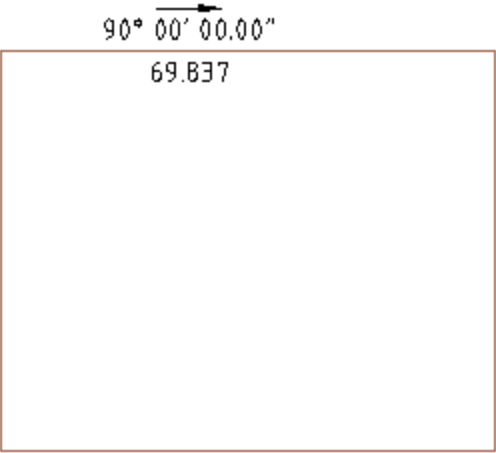
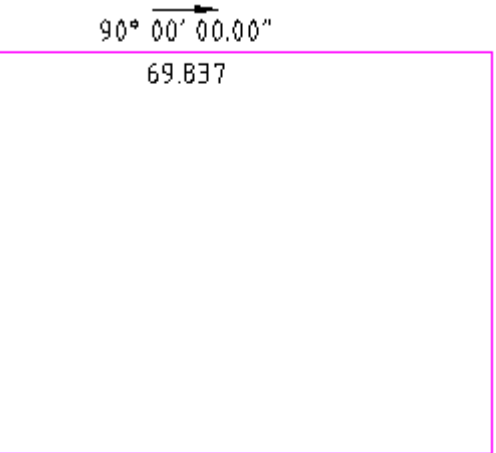
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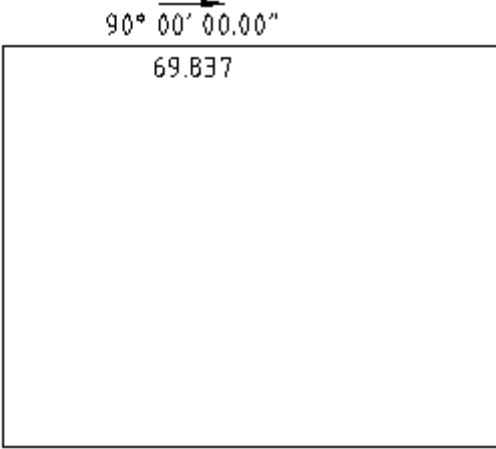
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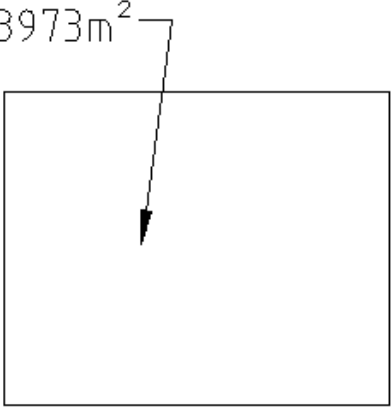
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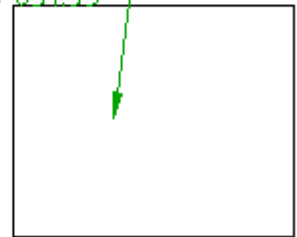

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| L     |  |  <p>90° 00' 00.00"<br/>69.837</p> |  |



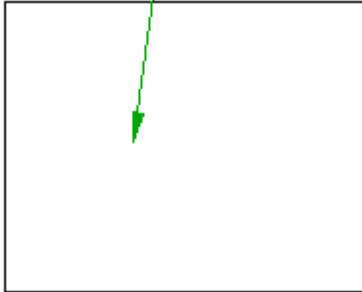
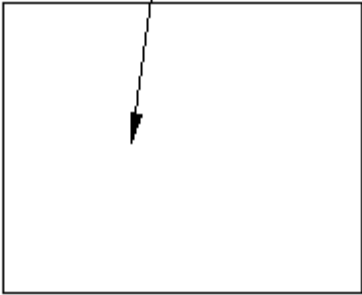
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| Single-Family |  |  |  |

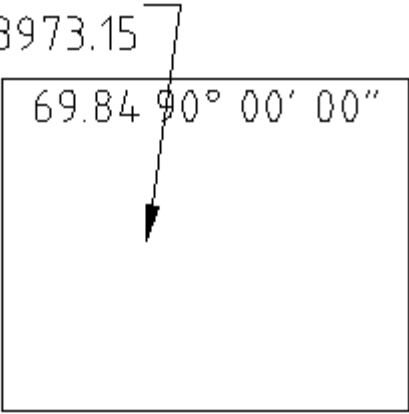
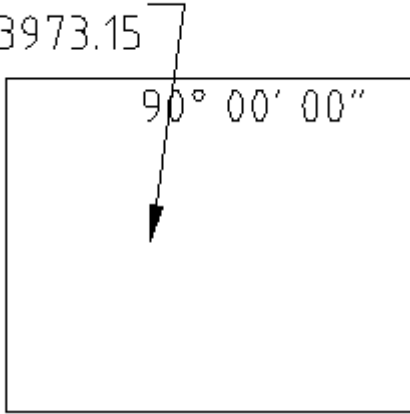
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| Parcel Label Styles | Description | Screen grab / DWF / DWG   | Default |
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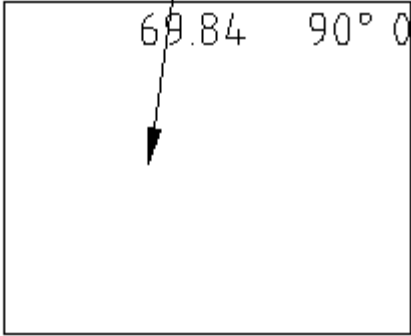
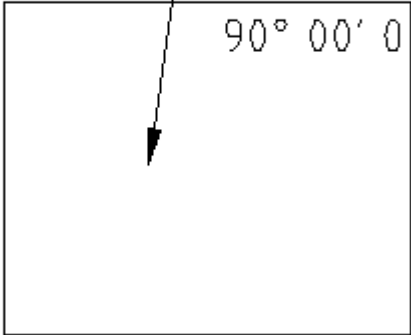
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| ANZ_Lot Number & Area    |  | <p># 0<br/>3973m<sup>2</sup></p>                        |  |
| Name Area & Perimeter    |  | <p>SITE 1<br/>Area: 0.98 AC<br/>Perimeter: 831.55'</p>  |  |
| Name Square Foot & Acres |  | <p>SITE 1<br/>42766.59 SQ FT<br/>0.98 ACRES</p>       |  |

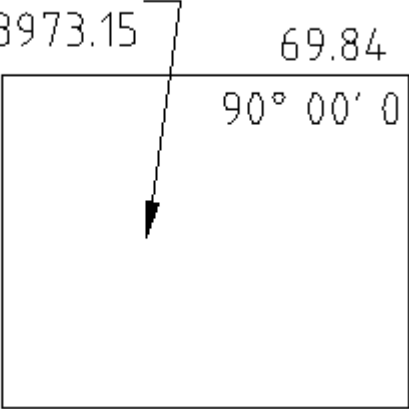
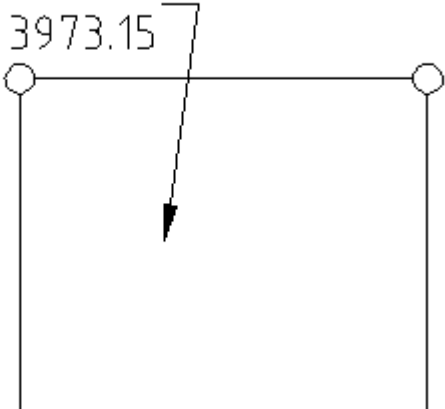


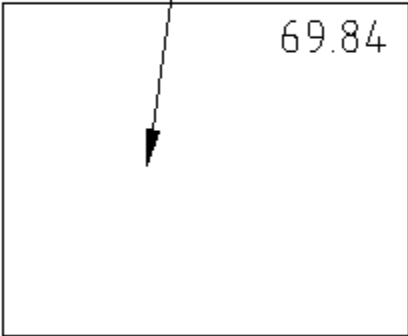
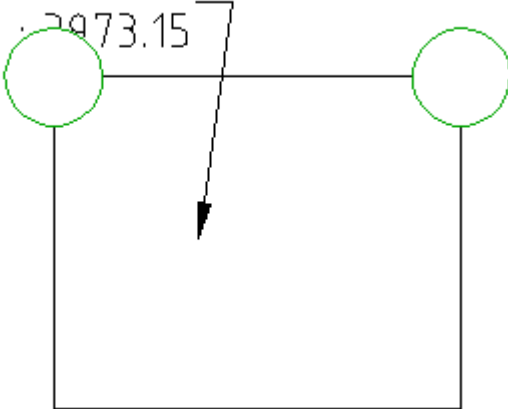
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| Line          |  |  |  |

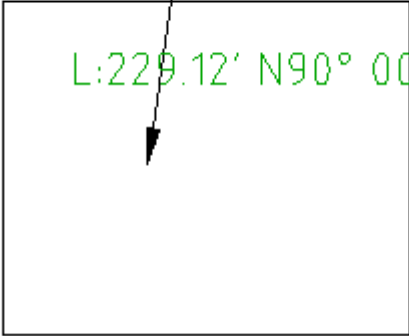
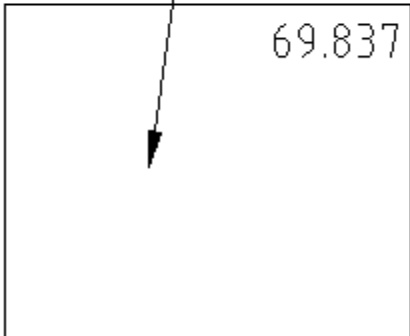
|                  |  |  |  |
|------------------|--|--|--|
| ANZ_B - D        |  | <p>Site 1<br/>Area : 3973.15</p>  <p>69.84 90° 00' 00"</p>  |  |
| ANZ_Bearing Dist |  | <p>Site 1<br/>Area : 3973.15</p>  <p>90° 00' 00" 69.84</p> |  |

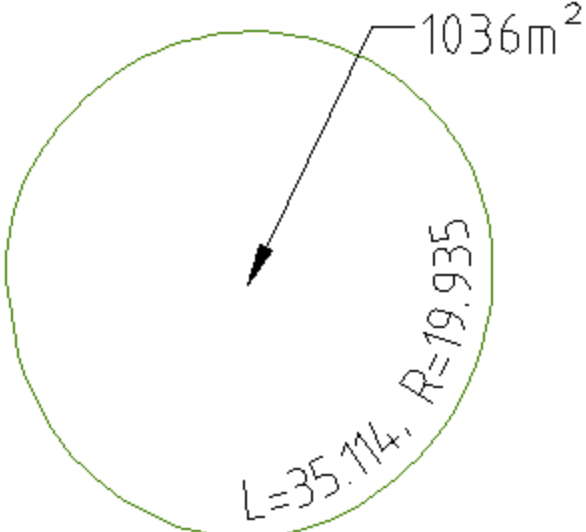
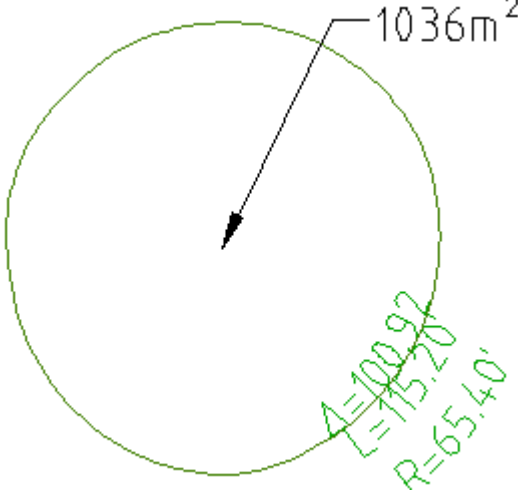
|                           |  |  |  |
|---------------------------|--|--|--|
| ANZ_Bearing over Dist     |  | <p>Site 1<br/>Area : 3973.15</p> <p>90° 00' 00"<br/>69.84</p>  |  |
| ANZ_Bearing over Distance |  | <p>Site 1<br/>Area : 3973.15</p> <p>90° 00' 00"<br/>69.837</p> |  |

|                           |  |  |  |
|---------------------------|--|--|--|
| ANZ_Dist Bearing          |  | <p>Site 1<br/>Area : 3973.15</p>  <p>69.84 90° 00' 00"</p>      |  |
| ANZ_Distance over Bearing |  | <p>Site 1<br/>Area : 3973.15</p>  <p>69.84<br/>90° 00' 00"</p> |  |

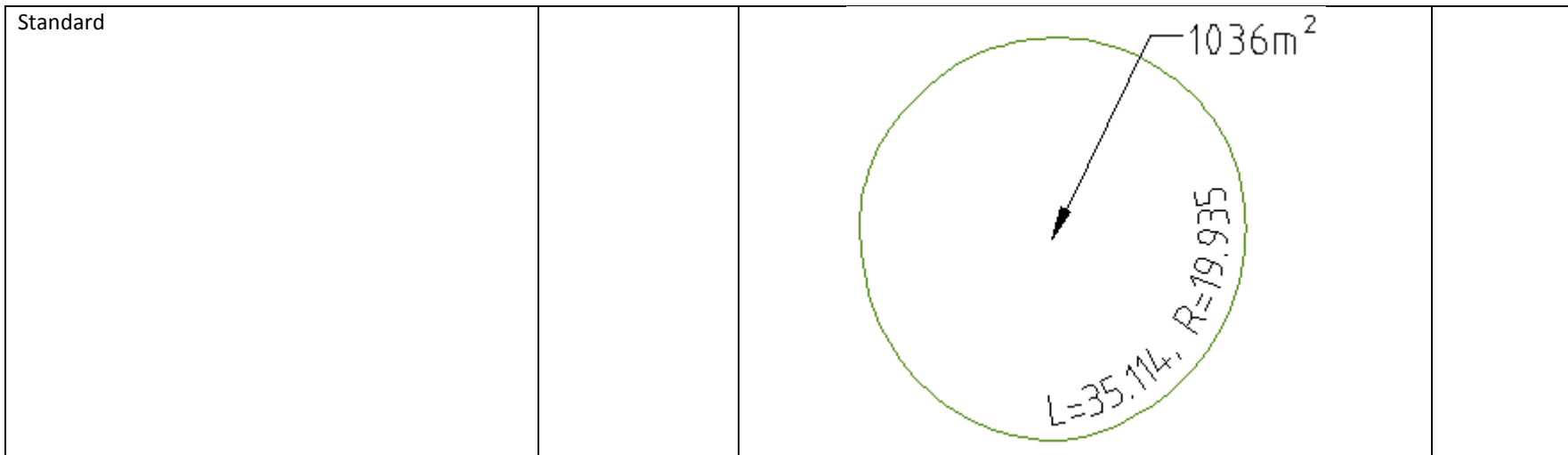
|                 |  |   |  |
|-----------------|--|---|--|
| ANZ_Line        |  | <p>Site 1<br/>Area : 3973.15</p>  <p>69.84<br/>90° 00' 00"</p> |  |
| ANZ_node marker |  | <p>Site 1<br/>Area : 3973.15</p>                              |  |

|                                     |  |  |  |
|-------------------------------------|--|--|--|
| ANZ_Span multiple Bearing over Dist |  | <p>Site 1<br/>Area : 3973.15    90° 00' 00"</p>  <p>69.84</p> |  |
| Iron Pipe Node Label                |  | <p>Site 1<br/>Area : 3973.15</p>                             |  |

|                              |  |  |  |
|------------------------------|--|--|--|
| Overall Distance and Bearing |  | <p>Site 1<br/>Area : 3973.15</p>  <p>L:229.12' N90° 00' 00.00"E</p>   |  |
| Standard                     |  | <p>Site 1<br/>Area : 3973.15</p>  <p>N90° 00' 00.00"E<br/>69.837</p> |  |
| Curve                        |  |  |  |

|                              |  |  |  |
|------------------------------|--|--|--|
| ANZ_Curve                    |  |  <p>A diagram of a circle drawn with a green line. A black arrow points from the center to the top-right edge, labeled "1036m<sup>2</sup>". Inside the circle, the text "L=35.714, R=19.935" is written in black.</p>                   |  |
| Delta over Length and Radius |  |  <p>A diagram of a circle drawn with a green line. A black arrow points from the center to the top-right edge, labeled "1036m<sup>2</sup>". Inside the circle, the text "L=100.92", "R=65.40", and "A=175.20" is written in green.</p> |  |





| Parcel Table Styles | Description | Screen grab / DWF / DWG   | Default    |  |  |        |        |           |    |        |                |  |
|---------------------|-------------|---|------------|--|--|--------|--------|-----------|----|--------|----------------|--|
| Line                |             |   |            |  |  |        |        |           |    |        |                |  |
| ANZ_Line            |             | <table border="1"> <tr> <td colspan="3" data-bbox="674 813 1524 984" style="text-align: center;">Line Table</td> </tr> <tr> <td data-bbox="674 984 890 1117">Line #</td> <td data-bbox="890 984 1125 1117">Length</td> <td data-bbox="1125 984 1524 1117">Direction</td> </tr> <tr> <td data-bbox="674 1117 890 1235">L1</td> <td data-bbox="890 1117 1125 1235">69.837</td> <td data-bbox="1125 1117 1524 1235">90° 00' 00.00"</td> </tr> </table> | Line Table |  |  | Line # | Length | Direction | L1 | 69.837 | 90° 00' 00.00" |  |
| Line Table          |             |   |            |  |  |        |        |           |    |        |                |  |
| Line #              | Length      | Direction   |            |  |  |        |        |           |    |        |                |  |
| L1                  | 69.837      | 90° 00' 00.00"  |            |  |  |        |        |           |    |        |                |  |

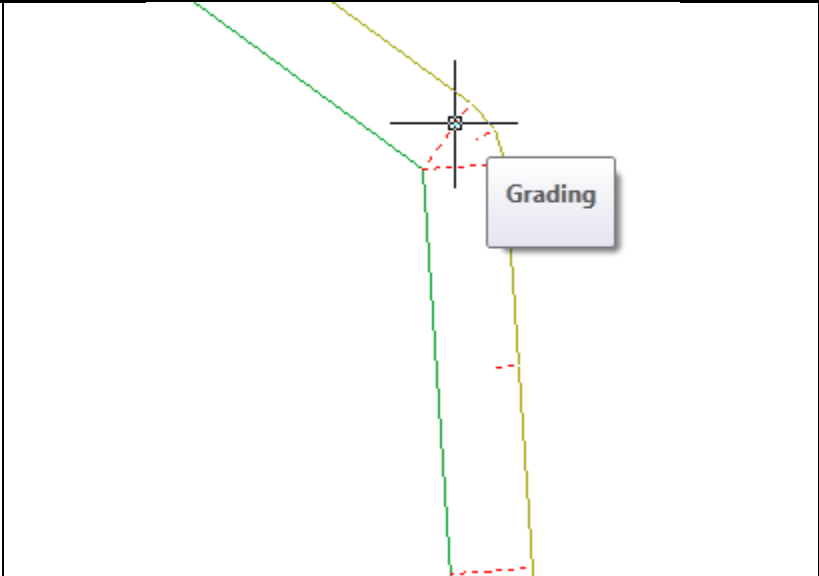
| Length & Direction       |        | <table border="1" style="margin: auto;"> <thead> <tr> <th colspan="3" style="text-align: center;"><b>Parcel Line Table</b></th> </tr> <tr> <th style="text-align: center;">Line #</th> <th style="text-align: center;">Length</th> <th style="text-align: center;">Direction</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">L1</td> <td style="text-align: center;">229.12</td> <td style="text-align: center;">N90° 00' 00.00"E</td> </tr> </tbody> </table>   | <b>Parcel Line Table</b> |                 |              | Line # | Length  | Direction | L1      | 229.12 | N90° 00' 00.00"E |        |                 |              |    |        |       |        |               |        |  |
|--------------------------|--------|---|--------------------------|-----------------|--------------|--------|---------|-----------|---------|--------|------------------|--------|-----------------|--------------|----|--------|-------|--------|---------------|--------|--|
| <b>Parcel Line Table</b> |        |   |                          |                 |              |        |         |           |         |        |                  |        |                 |              |    |        |       |        |               |        |  |
| Line #                   | Length | Direction   |                          |                 |              |        |         |           |         |        |                  |        |                 |              |    |        |       |        |               |        |  |
| L1                       | 229.12 | N90° 00' 00.00"E  |                          |                 |              |        |         |           |         |        |                  |        |                 |              |    |        |       |        |               |        |  |
| Standard                 |        | <table border="1" style="margin: auto;"> <thead> <tr> <th colspan="3" style="text-align: center;"><b>Line Table</b></th> </tr> <tr> <th style="text-align: center;">Line #</th> <th style="text-align: center;">Length</th> <th style="text-align: center;">Direction</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">L1</td> <td style="text-align: center;">69.837</td> <td style="text-align: center;">N90° 00' 00.00"E</td> </tr> </tbody> </table>  | <b>Line Table</b>        |                 |              | Line # | Length  | Direction | L1      | 69.837 | N90° 00' 00.00"E |        |                 |              |    |        |       |        |               |        |  |
| <b>Line Table</b>        |        |   |                          |                 |              |        |         |           |         |        |                  |        |                 |              |    |        |       |        |               |        |  |
| Line #                   | Length | Direction   |                          |                 |              |        |         |           |         |        |                  |        |                 |              |    |        |       |        |               |        |  |
| L1                       | 69.837 | N90° 00' 00.00"E  |                          |                 |              |        |         |           |         |        |                  |        |                 |              |    |        |       |        |               |        |  |
| Curve<br>ANZ_Curve       |        | <table border="1" style="margin: auto;"> <thead> <tr> <th colspan="4" style="text-align: center;"><b>Curve Table</b></th> </tr> <tr> <th style="text-align: center;">Curve #</th> <th style="text-align: center;">Length</th> <th style="text-align: center;">Radius</th> <th style="text-align: center;">Delta</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">C1</td> <td style="text-align: center;">35.114</td> <td style="text-align: center;">19.935</td> <td style="text-align: center;">100.9217</td> </tr> </tbody> </table>  | <b>Curve Table</b>       |                 |              |        | Curve # | Length    | Radius  | Delta  | C1               | 35.114 | 19.935          | 100.9217     |    |        |       |        |               |        |  |
| <b>Curve Table</b>       |        |   |                          |                 |              |        |         |           |         |        |                  |        |                 |              |    |        |       |        |               |        |  |
| Curve #                  | Length | Radius  | Delta                    |                 |              |        |         |           |         |        |                  |        |                 |              |    |        |       |        |               |        |  |
| C1                       | 35.114 | 19.935  | 100.9217                 |                 |              |        |         |           |         |        |                  |        |                 |              |    |        |       |        |               |        |  |
| Length Radius & Delta    |        | <table border="1" style="margin: auto;"> <thead> <tr> <th colspan="6" style="text-align: center;"><b>Curve Table</b></th> </tr> <tr> <th style="text-align: center;">Curve #</th> <th style="text-align: center;">Length</th> <th style="text-align: center;">Radius</th> <th style="text-align: center;">Delta</th> <th style="text-align: center;">Chord Direction</th> <th style="text-align: center;">Chord Length</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">C1</td> <td style="text-align: center;">115.20</td> <td style="text-align: center;">65.40</td> <td style="text-align: center;">100.92</td> <td style="text-align: center;">S30° 35' 39"W</td> <td style="text-align: center;">100.88</td> </tr> </tbody> </table> | <b>Curve Table</b>       |                 |              |        |         |           | Curve # | Length | Radius           | Delta  | Chord Direction | Chord Length | C1 | 115.20 | 65.40 | 100.92 | S30° 35' 39"W | 100.88 |  |
| <b>Curve Table</b>       |        |   |                          |                 |              |        |         |           |         |        |                  |        |                 |              |    |        |       |        |               |        |  |
| Curve #                  | Length | Radius  | Delta                    | Chord Direction | Chord Length |        |         |           |         |        |                  |        |                 |              |    |        |       |        |               |        |  |
| C1                       | 115.20 | 65.40   | 100.92                   | S30° 35' 39"W   | 100.88       |        |         |           |         |        |                  |        |                 |              |    |        |       |        |               |        |  |

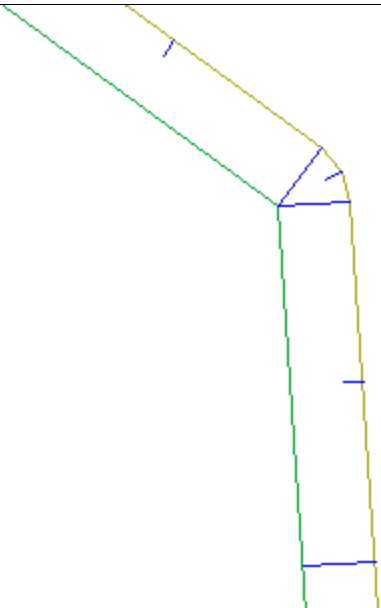
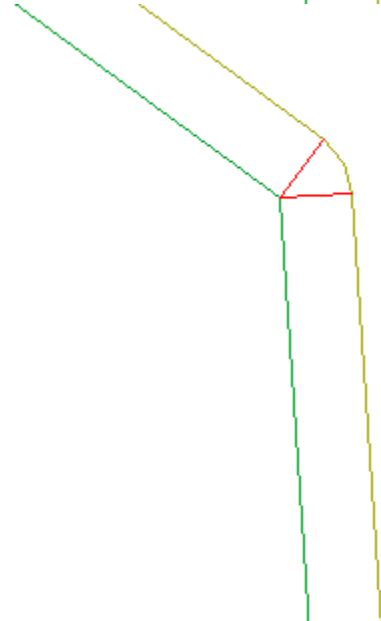
|                                    |  |  |                                    |               |                        |               |  |  |
|------------------------------------|--|--|------------------------------------|---------------|------------------------|---------------|--|--|
| Standard                           |  |  | <b>Curve Table</b>                 |               |                        |               |  |  |
|                                    |  |  | <b>Curve #</b>                     | <b>Length</b> | <b>Radius</b>          | <b>Delta</b>  |  |  |
|                                    |  |  | C1                                 | 35.114        | 19.935                 | 100.9217      |  |  |
| Segment                            |  |  | <b>Parcel Table</b>                |               |                        |               |  |  |
| ANZ_Segment                        |  |  | <b>Line #/Curve #</b>              | <b>Length</b> | <b>Direction/Delta</b> | <b>Radius</b> |  |  |
|                                    |  |  | L1                                 | 69.837        | 90° 00' 00.00"         |               |  |  |
|                                    |  |  | C1                                 | 35.114        | 100.9217               | 19.935        |  |  |
| Length & Bearing or Delta & Radius |  |  | <b>Parcel Line and Curve Table</b> |               |                        |               |  |  |
|                                    |  |  | <b>Line #/Curve #</b>              | <b>Length</b> | <b>Bearing/Delta</b>   | <b>Radius</b> |  |  |
|                                    |  |  | L1                                 | 229.12        | N90° 00' 00.00"E       |               |  |  |
|                                    |  |  | C1                                 | 115.20        | 100.92                 | 65.40         |  |  |

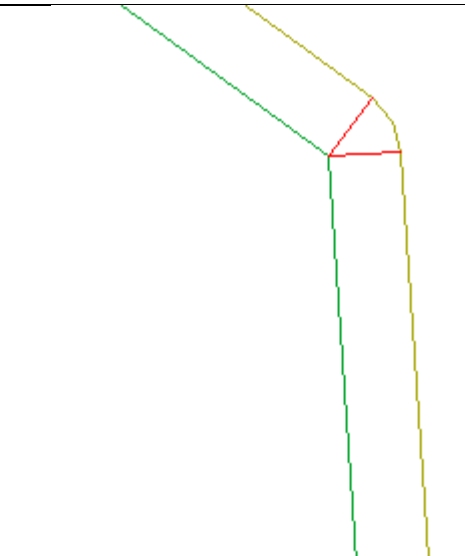
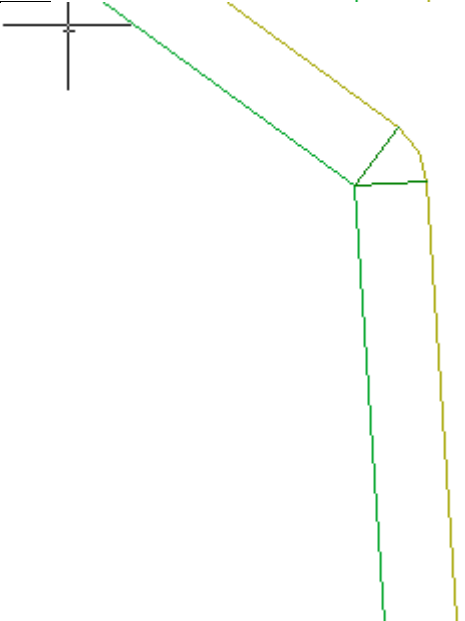
| Standard                          |          | <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr style="background-color: #006400; color: yellow;"> <th colspan="4">Parcel Table</th> </tr> <tr style="background-color: #800000; color: yellow;"> <th>Line #/Curve #</th> <th>Length</th> <th>Direction/Delta</th> <th>Radius</th> </tr> </thead> <tbody> <tr style="background-color: #000080; color: white;"> <td>L1</td> <td>69.837</td> <td>N90° 00' 00.00"E</td> <td></td> </tr> <tr style="background-color: #000080; color: white;"> <td>C1</td> <td>35.114</td> <td>100.9217</td> <td>19.935</td> </tr> </tbody> </table>                   | Parcel Table                         |  |  |  | Line #/Curve # | Length   | Direction/Delta | Radius    | L1              | 69.837           | N90° 00' 00.00"E |          | C1      | 35.114                               | 100.9217   | 19.935 |
|-----------------------------------|----------|---|--------------------------------------|--|--|--|----------------|----------|-----------------|-----------|-----------------|------------------|------------------|----------|---------|--------------------------------------|--|--------|
| Parcel Table                      |          |   |                                      |  |  |  |                |          |                 |           |                 |                  |                  |          |         |                                      |  |        |
| Line #/Curve #                    | Length   | Direction/Delta   | Radius                               |  |  |  |                |          |                 |           |                 |                  |                  |          |         |                                      |  |        |
| L1                                | 69.837   | N90° 00' 00.00"E  |                                      |  |  |  |                |          |                 |           |                 |                  |                  |          |         |                                      |  |        |
| C1                                | 35.114   | 100.9217  | 19.935                               |  |  |  |                |          |                 |           |                 |                  |                  |          |         |                                      |  |        |
| Area                              |          |   |                                      |  |  |  |                |          |                 |           |                 |                  |                  |          |         |                                      |  |        |
| ANZ_Area                          |          | <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr style="color: green;"> <th colspan="5">Parcel Table</th> </tr> <tr style="color: green;"> <th>Parcel #</th> <th>Area</th> <th>Perimeter</th> <th>Segment Lengths</th> <th>Segment Bearings</th> </tr> </thead> <tbody> <tr style="color: green;"> <td>2</td> <td>1036.117</td> <td>114.202</td> <td>15.577<br/>36.330<br/>35.114<br/>27.181</td> <td>15° 36' 57.99"<br/>98° 15' 20.65"<br/>210° 35' 38.55"<br/>311° 41' 39.37"</td> </tr> </tbody> </table>   | Parcel Table                         |  |  |  |                | Parcel # | Area            | Perimeter | Segment Lengths | Segment Bearings | 2                | 1036.117 | 114.202 | 15.577<br>36.330<br>35.114<br>27.181 | 15° 36' 57.99"<br>98° 15' 20.65"<br>210° 35' 38.55"<br>311° 41' 39.37"       |        |
| Parcel Table                      |          |   |                                      |  |  |  |                |          |                 |           |                 |                  |                  |          |         |                                      |  |        |
| Parcel #                          | Area     | Perimeter   | Segment Lengths                      | Segment Bearings   |  |  |                |          |                 |           |                 |                  |                  |          |         |                                      |  |        |
| 2                                 | 1036.117 | 114.202   | 15.577<br>36.330<br>35.114<br>27.181 | 15° 36' 57.99"<br>98° 15' 20.65"<br>210° 35' 38.55"<br>311° 41' 39.37"       |  |  |                |          |                 |           |                 |                  |                  |          |         |                                      |  |        |
| Area Perimeter Length and Bearing |          | <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr style="color: blue;"> <th colspan="5">Parcel Area Table</th> </tr> <tr style="color: blue;"> <th>Parcel #</th> <th>Area</th> <th>Perimeter</th> <th>Segment Lengths</th> <th>Segment Bearings</th> </tr> </thead> <tbody> <tr style="color: blue;"> <td>2</td> <td>11152.67</td> <td>374.68</td> <td>61.10<br/>119.19<br/>115.20<br/>89.18</td> <td>N15° 36' 57.99"E<br/>S81° 44' 39.35"E<br/>S30° 35' 38.55"W<br/>N48° 18' 20.63"W</td> </tr> </tbody> </table>  | Parcel Area Table                    |  |  |  |                | Parcel # | Area            | Perimeter | Segment Lengths | Segment Bearings | 2                | 11152.67 | 374.68  | 61.10<br>119.19<br>115.20<br>89.18   | N15° 36' 57.99"E<br>S81° 44' 39.35"E<br>S30° 35' 38.55"W<br>N48° 18' 20.63"W |        |
| Parcel Area Table                 |          |   |                                      |  |  |  |                |          |                 |           |                 |                  |                  |          |         |                                      |  |        |
| Parcel #                          | Area     | Perimeter   | Segment Lengths                      | Segment Bearings   |  |  |                |          |                 |           |                 |                  |                  |          |         |                                      |  |        |
| 2                                 | 11152.67 | 374.68  | 61.10<br>119.19<br>115.20<br>89.18   | N15° 36' 57.99"E<br>S81° 44' 39.35"E<br>S30° 35' 38.55"W<br>N48° 18' 20.63"W |  |  |                |          |                 |           |                 |                  |                  |          |         |                                      |  |        |
| Standard                          |          | <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr style="background-color: #006400; color: yellow;"> <th colspan="5">Parcel Table</th> </tr> <tr style="background-color: #800000; color: yellow;"> <th>Parcel #</th> <th>Area</th> <th>Perimeter</th> <th>Segment Lengths</th> <th>Segment Bearings</th> </tr> </thead> <tbody> <tr style="background-color: #000080; color: white;"> <td>2</td> <td>1036.12</td> <td>114.202</td> <td>15.577<br/>36.330<br/>35.114<br/>27.181</td> <td>N15° 36' 57.99"E<br/>S81° 44' 39.35"E<br/>S30° 35' 38.55"W<br/>N48° 18' 20.63"W</td> </tr> </tbody> </table> | Parcel Table                         |  |  |  |                | Parcel # | Area            | Perimeter | Segment Lengths | Segment Bearings | 2                | 1036.12  | 114.202 | 15.577<br>36.330<br>35.114<br>27.181 | N15° 36' 57.99"E<br>S81° 44' 39.35"E<br>S30° 35' 38.55"W<br>N48° 18' 20.63"W |        |
| Parcel Table                      |          |   |                                      |  |  |  |                |          |                 |           |                 |                  |                  |          |         |                                      |  |        |
| Parcel #                          | Area     | Perimeter   | Segment Lengths                      | Segment Bearings   |  |  |                |          |                 |           |                 |                  |                  |          |         |                                      |  |        |
| 2                                 | 1036.12  | 114.202   | 15.577<br>36.330<br>35.114<br>27.181 | N15° 36' 57.99"E<br>S81° 44' 39.35"E<br>S30° 35' 38.55"W<br>N48° 18' 20.63"W |  |  |                |          |                 |           |                 |                  |                  |          |         |                                      |  |        |

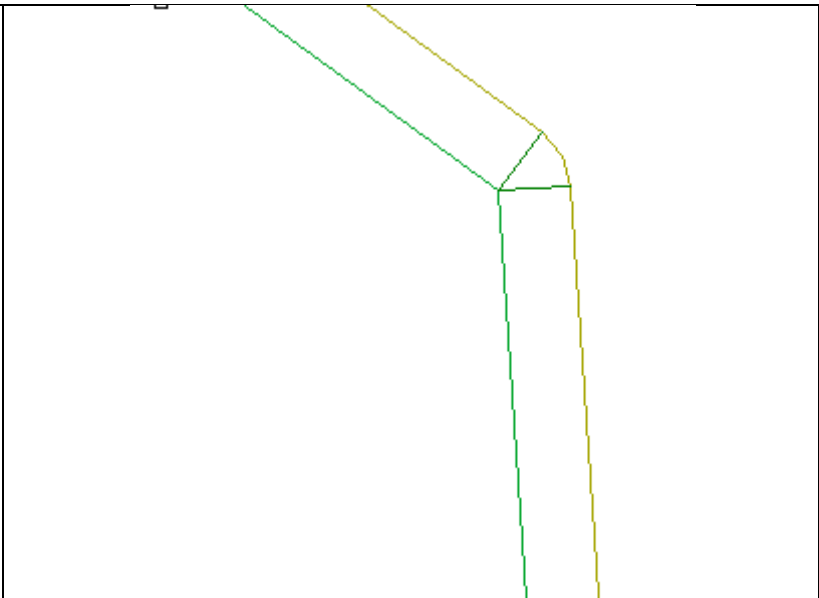
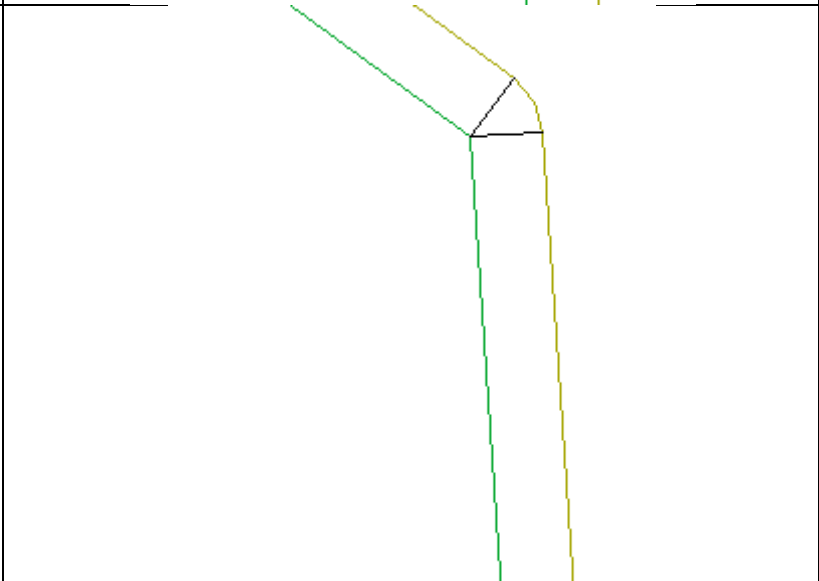
### 6.5 Grading

Design Template: \_AutoCAD Civil3D 2014 ANZ Design\_ANZ.dwt

| Grading Styles | Description | Screen grab / DWF / DWG  | Default |
|----------------|-------------|--|---------|
| ANZ_Cut        |             |  |         |

|            |  |  |  |
|------------|--|--|--|
| ANZ_Fill   |  |   |  |
| ANZ_Offset |  |  |  |

|                    |  |  |  |
|--------------------|--|--|--|
| Cut Slope Display  |  |   |  |
| Fill Slope Display |  |  |  |

|                             |  |   |  |
|-----------------------------|--|---|--|
| Residential Grading Display |  |   |  |
| Standard                    |  |  |  |



| Grading Criteria Sets | Description | Screen grab / DWF / DWG | Default |
|-----------------------|-------------|-------------------------|---------|
| ANZ                   |             |                         |         |
| Basic Set             |             |                         |         |
| Standard Set          |             |                         |         |

**6.6 Alignments**

DESIGN Template ANZ

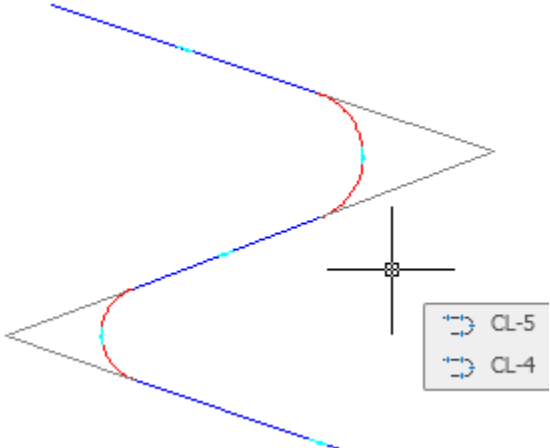
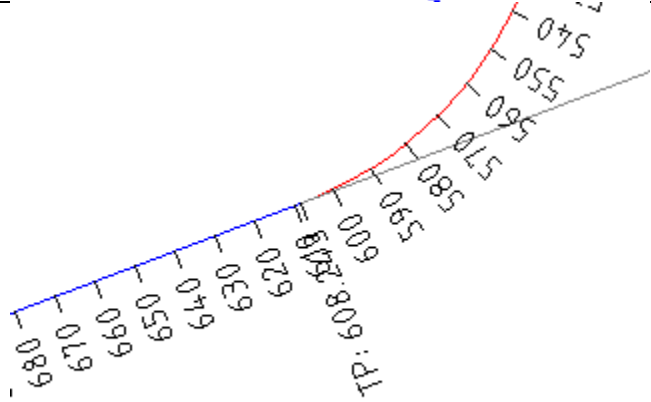
| Alignment Style               | Description | Screen grab / DWF / DWG | Default |
|-------------------------------|-------------|-------------------------|---------|
| • ANZ_Design                  |             |                         |         |
| • ANZ_Design_LWT              |             |                         |         |
| • ANZ_Offsets                 |             |                         |         |
| • ANZ_Pipe CL                 |             |                         |         |
| • ANZ_Plotting Kerb Returns   |             |                         |         |
| • ANZ_Plotting Main Strings   |             |                         |         |
| • ANZ_Plotting Offset Strings |             |                         |         |
| • Basic                       |             |                         |         |
| • Existing                    |             |                         |         |
| • Intersection Basic          |             |                         |         |
| • Layout                      |             |                         |         |
| • Offsets                     |             |                         |         |
| • Proposed                    |             |                         |         |
| • Standards                   |             |                         |         |

| Alignment Design Checks          | Description | Screen grab / DWF / DWG | Default |
|----------------------------------|-------------|-------------------------|---------|
| Design Check Sets                |             |                         |         |
| • ANZ_Max Tangent Length         |             |                         |         |
| • ANZ_Spiral Curve Spiral        |             |                         |         |
| • Basic                          |             |                         |         |
| • Standard                       |             |                         |         |
| Line                             |             |                         |         |
| • Max Tangent Length             |             |                         |         |
| • Subdivision Street             |             |                         |         |
| Curve                            |             |                         |         |
| • Min Arc Length between Spirals |             |                         |         |

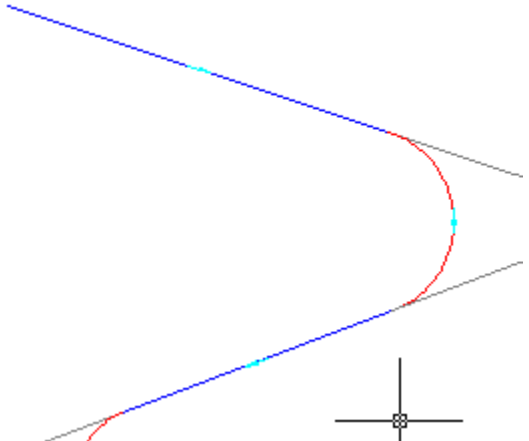
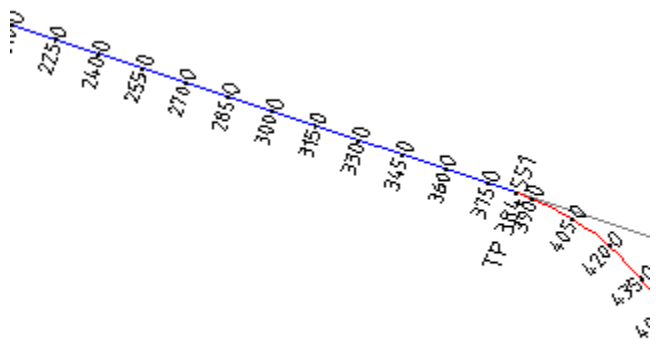
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|--|--|--|--|
| <ul style="list-style-type: none"> <li>Subdivision Curves</li> </ul>             |  |  |  |
| Spiral   |  |  |  |
| <ul style="list-style-type: none"> <li>A Parameter Spiral out</li> </ul>         |  |  |  |
| <ul style="list-style-type: none"> <li>A Parameter Spiral in</li> </ul>          |  |  |  |
| <ul style="list-style-type: none"> <li><math>R/3 &lt; A &lt; R</math></li> </ul> |  |  |  |
| Tangent Intersection   |  |  |  |

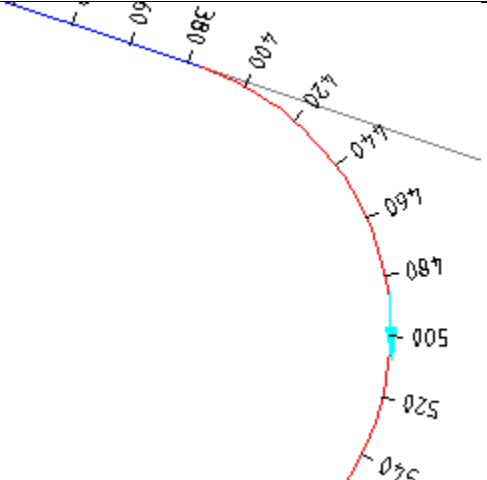
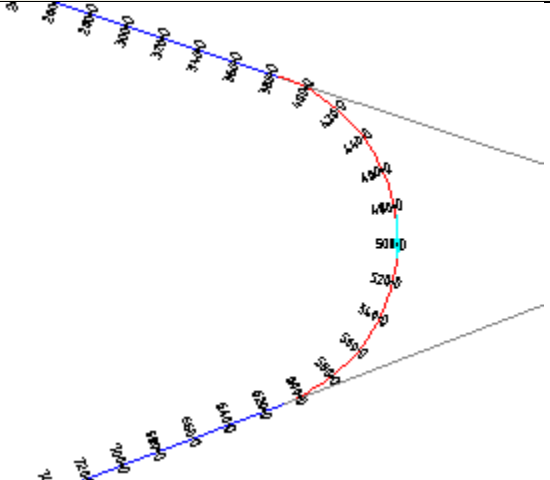
| Alignment Label Type/Name   | Description | Screen grab / DWF / DWG | Default |
|---|-------------|-------------------------|---------|
| Alignment Label Sets  |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_Geometry Points (All)</li> </ul> |             |                         |         |

|  |      |  |       |      |    |       |   |      |    |       |  |
|--|------|--|-------|------|----|-------|---|------|----|-------|--|
| <ul style="list-style-type: none"> <li>• ANZ_Highway</li> </ul>      |      |  |       |      |    |       |   |      |    |       |  |
| <ul style="list-style-type: none"> <li>• ANZ_Kerb Returns</li> </ul> |      | <table border="1" data-bbox="1549 971 1801 1052"> <tr> <td>↪</td> <td>CL-5</td> <td>SO</td> <td>516.3</td> </tr> <tr> <td>↪</td> <td>CL-4</td> <td>SO</td> <td>343.3</td> </tr> </table> | ↪     | CL-5 | SO | 516.3 | ↪ | CL-4 | SO | 343.3 |  |
| ↪  | CL-5 | SO   | 516.3 |      |    |       |   |      |    |       |  |
| ↪  | CL-4 | SO   | 343.3 |      |    |       |   |      |    |       |  |

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|--|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_No Labels</li></ul>              |  |   |  |
| <ul style="list-style-type: none"><li>• ANZ_Simple (10m ch + TP's)</li></ul> |  |  |  |

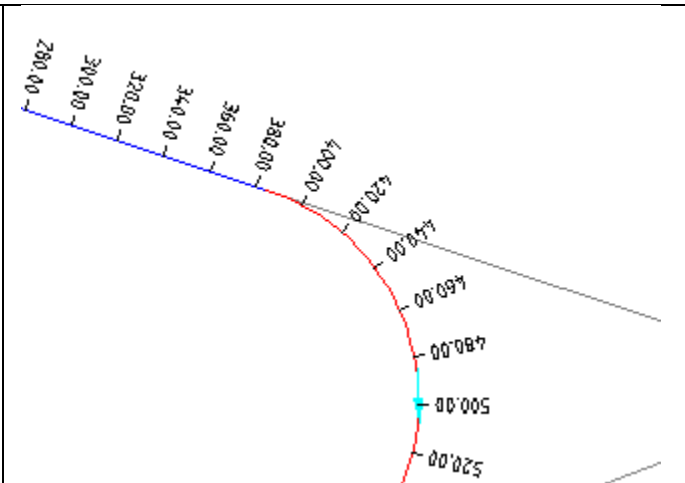
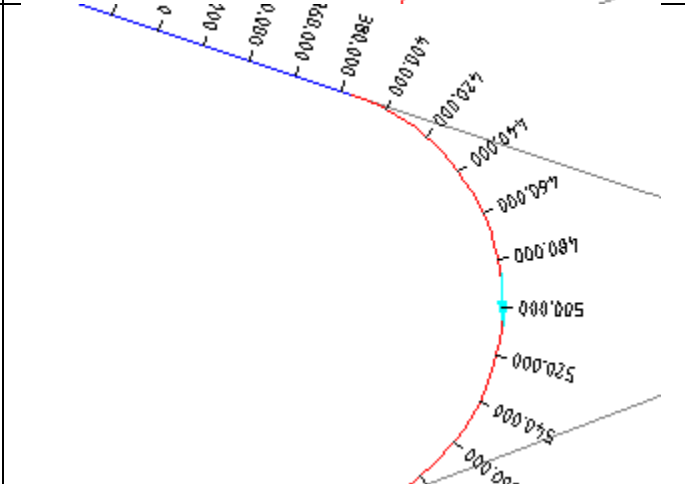
|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"> <li>• ANZ_Simple (15m ch + TP's)</li> </ul> |  | <p>Diagram showing a parabolic curve with elevations: 525, 540, 555, 570, 585, 600, 608.279, 615, 630, 645, 660, 675. TP: 608.279.</p> |  |
| <ul style="list-style-type: none"> <li>• ANZ_Simple (20m ch + TP's)</li> </ul> |  | <p>Diagram showing a parabolic curve with elevations: 540, 560, 580, 600, 608.809, 614, 620, 640, 660, 680. TP: 608.809.</p>           |  |

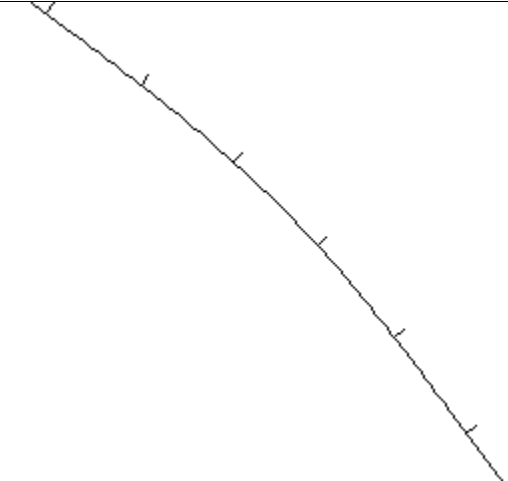
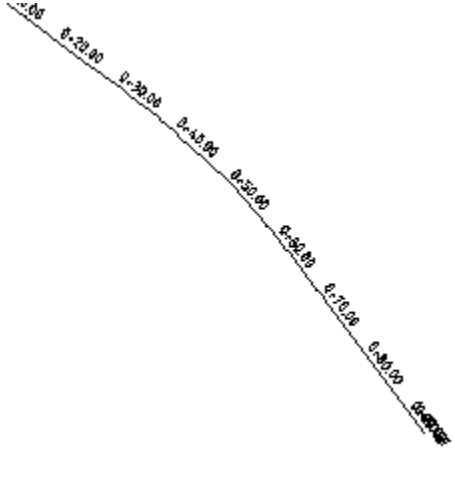
|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_Superelevation</li></ul> |  |   |  |
| <ul style="list-style-type: none"><li>• Landmark</li></ul>           |  |  |  |

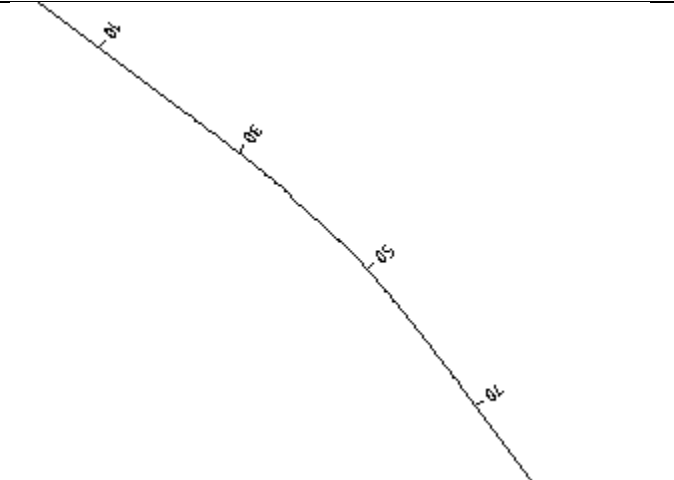
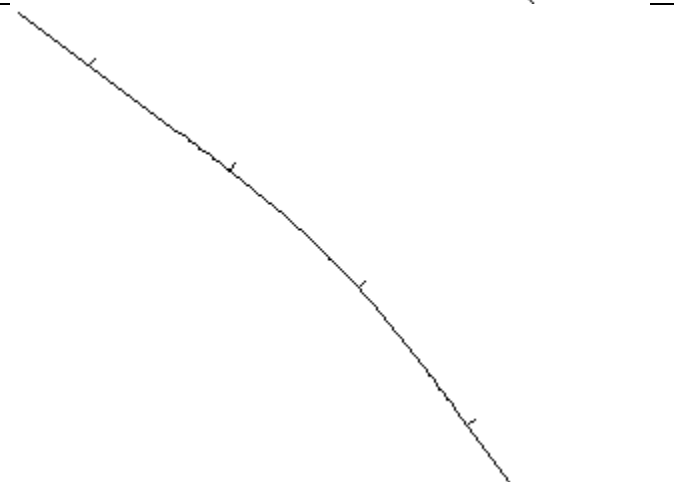
|  |                                |  |  |
|--|--------------------------------|--|--|
| <ul style="list-style-type: none"><li>• Standard</li></ul>                   |                                |   |  |
| <p>Major Station</p>   | <p>Label at Major Stations</p> |  |  |
| <ul style="list-style-type: none"><li>• ANZ_Landmark plan readable</li></ul> |                                |  |  |

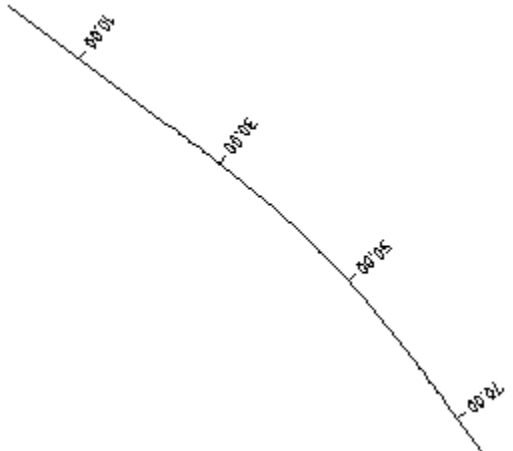
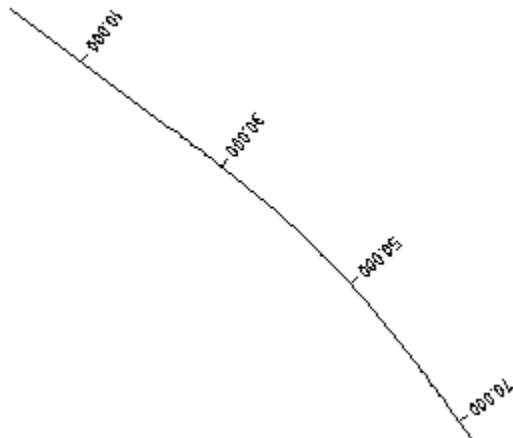
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|--|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_Perp with tick (Left) (Precision 1m)</li></ul>   |  |  |  |
| <ul style="list-style-type: none"><li>• ANZ_Perp with tick (Left) (Precision 0.1m)</li></ul> |  |  |  |

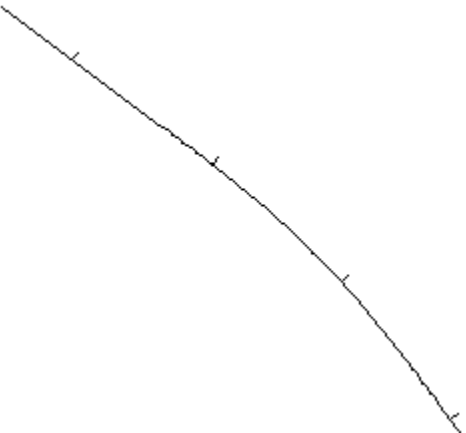
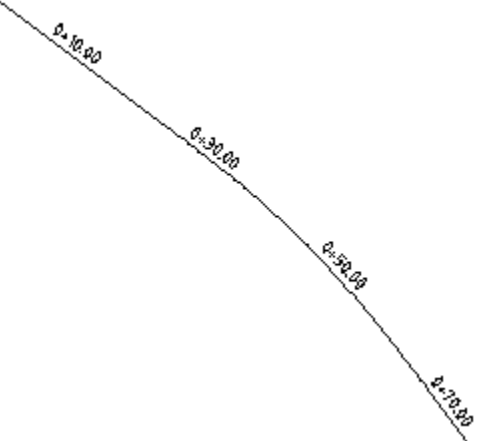


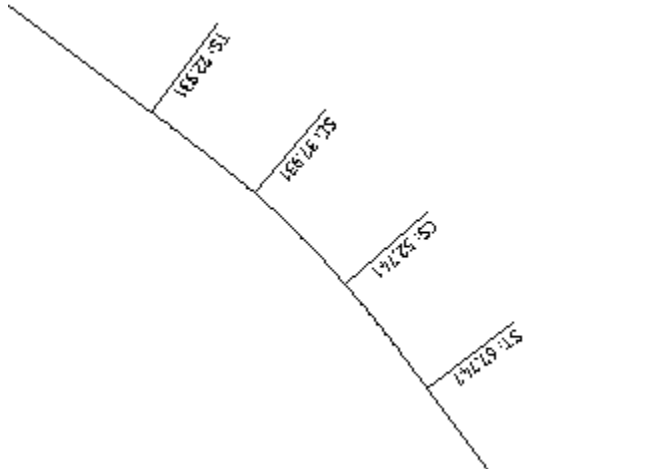
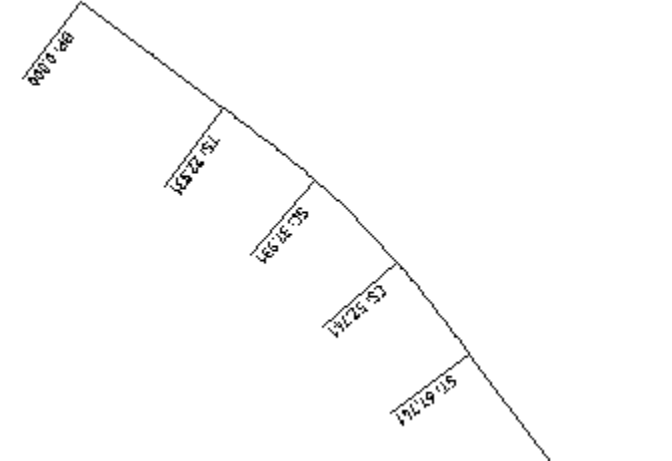
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|--|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_Perp with tick (Left) (Precision 0.01m)</li></ul>  |  |   |  |
| <ul style="list-style-type: none"><li>• ANZ_Perp with tick (Left) (Precision 0.001m)</li></ul> |  |  |  |

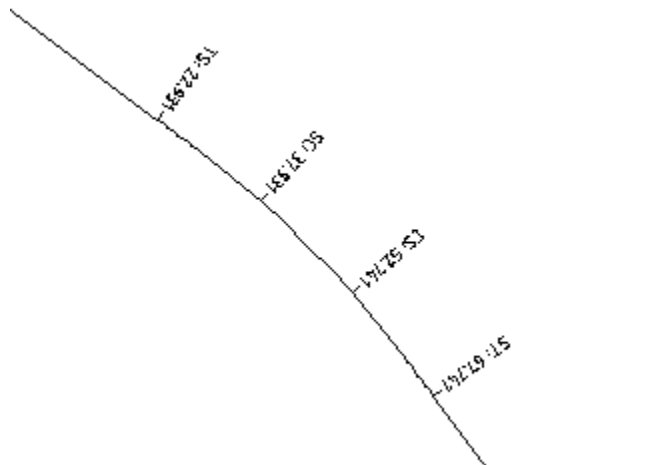
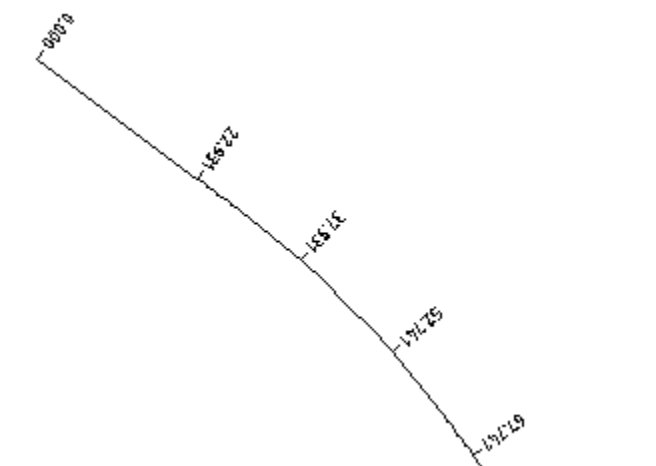
|   |                                |  |  |
|---|--------------------------------|--|--|
| <ul style="list-style-type: none"> <li>• ANZ_Tick only</li> </ul> |                                |   |  |
| <ul style="list-style-type: none"> <li>• Standard</li> </ul>      |                                |  |  |
| <ul style="list-style-type: none"> <li>• Expressions</li> </ul>   |                                |  |  |
| <p>Minor Station</p>  | <p>Label at Minor Stations</p> |  |  |

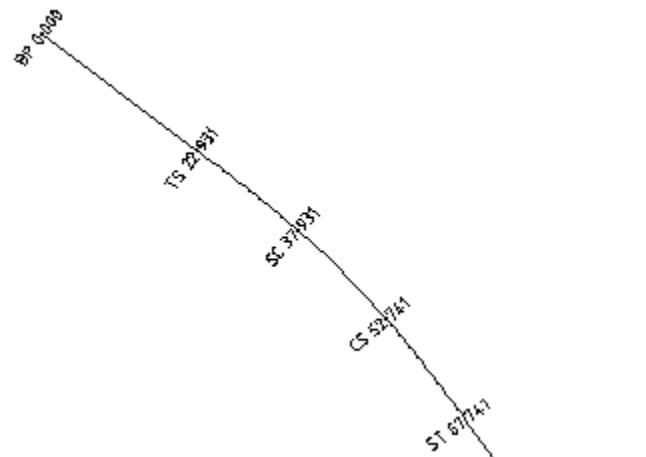
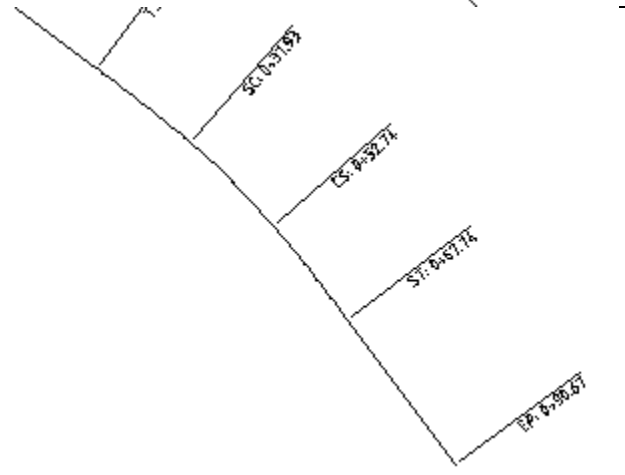
|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_Perp with tick (Left) (Precision 1m)</li></ul>   |  |  A diagram showing a curved line sloping downwards from left to right. The line has four tick marks pointing to the left, with labels '40', '30', '20', and '10' positioned to the right of each tick mark. The line starts at the top left and ends at the bottom right. |  |
| <ul style="list-style-type: none"><li>• ANZ_Perp with tick (Left) (Precision 0.1m)</li></ul> |  |  A diagram showing a curved line sloping downwards from left to right, similar to the one above. It has several tick marks pointing to the left, but they are not labeled with numbers.  |  |

|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_Perp with tick (Left) (Precision 0.01m)</li></ul>  |  |   |  |
| <ul style="list-style-type: none"><li>• ANZ_Perp with tick (Left) (Precision 0.001m)</li></ul> |  |  |  |

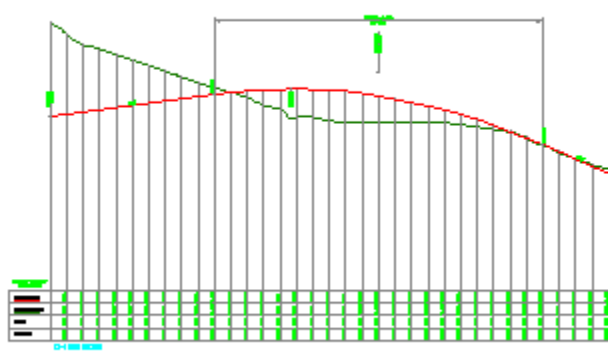
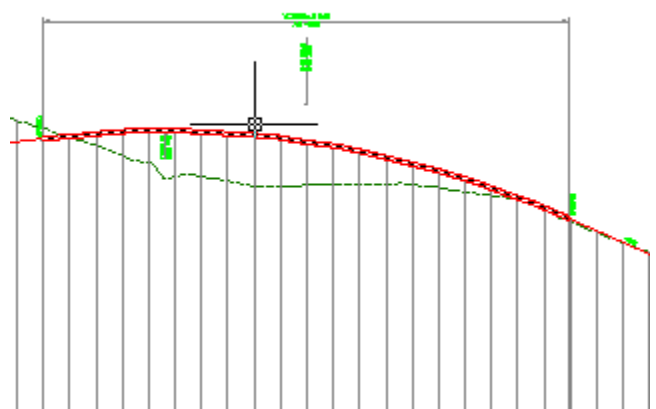
|   |                                 |  |  |
|---|---------------------------------|--|--|
| <ul style="list-style-type: none"> <li>• ANZ_Tick only</li> </ul> |                                 |   |  |
| <ul style="list-style-type: none"> <li>• Standard</li> </ul>      |                                 |  |  |
| <ul style="list-style-type: none"> <li>• Expressions</li> </ul>   |                                 |  |  |
| <p>Geometry Point</p>   | <p>Label at Geometry Points</p> |  |  |

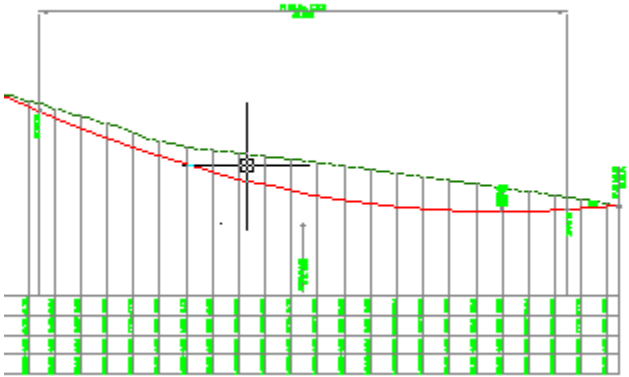
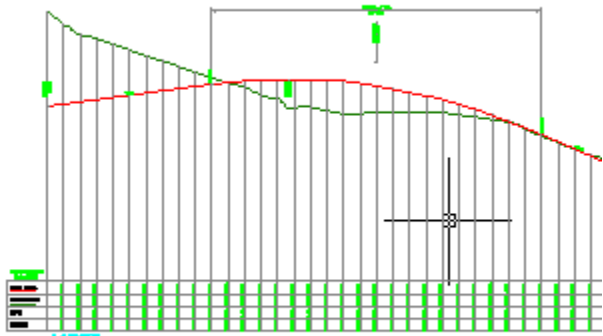
|   |  |   |  |
|---|--|---|--|
| <ul style="list-style-type: none"><li>• ANZ_GP Data (Offset to Left)</li></ul>  |  |  <p>A diagram showing a curved line with four points labeled IS-22-931, ST-91-931, CS-32761, and ST-61761. The points are arranged from top-left to bottom-right along the curve.</p>            |  |
| <ul style="list-style-type: none"><li>• ANZ_GP Data (Offset to Right)</li></ul> |  |  <p>A diagram showing a curved line with five points labeled BA-1-931, TS-72-931, SC-31-931, CS-15761, and ST-61761. The points are arranged from top-left to bottom-right along the curve.</p> |  |

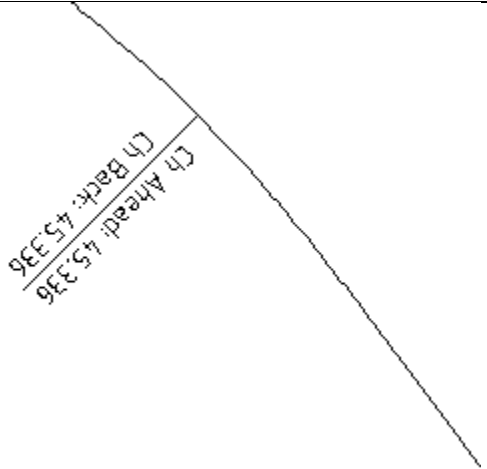
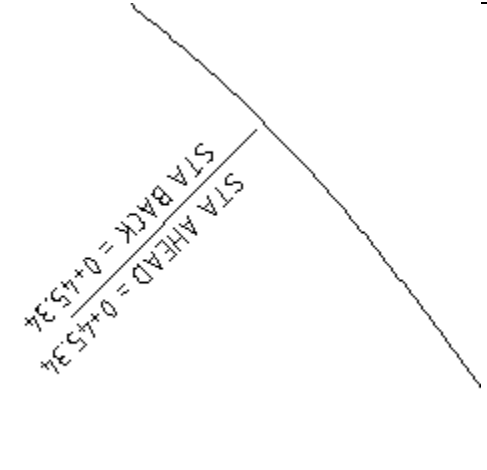
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|--|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_GP Perp with tick (Left)</li></ul> |  |  <p>The graph shows a downward trend with four data points labeled: 18:22.94, 31:31.94, 43:42.94, and 51:51.74.</p>           |  |
| <ul style="list-style-type: none"><li>• ANZ_Kerb Returns</li></ul>             |  |  <p>The graph shows a downward trend with five data points labeled: 0:00.00, 22:22.94, 31:31.94, 43:42.94, and 51:51.74.</p> |  |

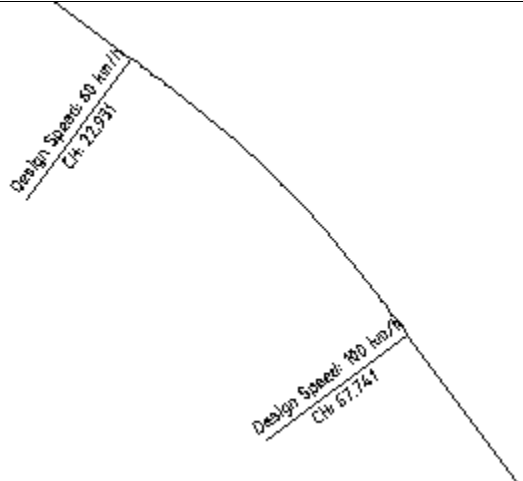
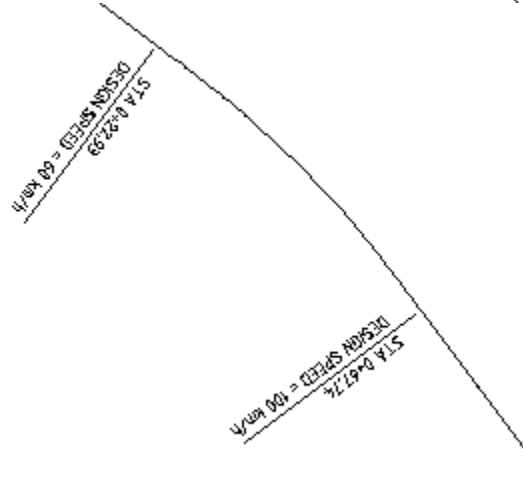
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|--|---|--|--|
| <ul style="list-style-type: none"> <li>ANZ_Landmark GP Data</li> </ul> |   |   |  |
| <ul style="list-style-type: none"> <li>Standard</li> </ul>             |   |  |  |
| <ul style="list-style-type: none"> <li>Expressions</li> </ul>          |   |  |  |
| <p>Profile Geometry Point</p>  | <p>Labels at the profile geometry points on the alignment</p> |  |  |



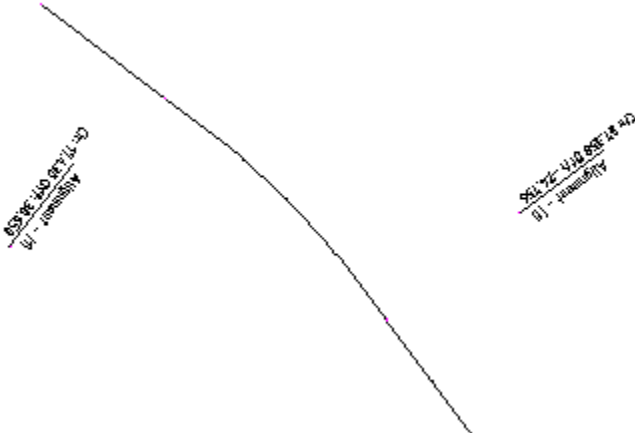
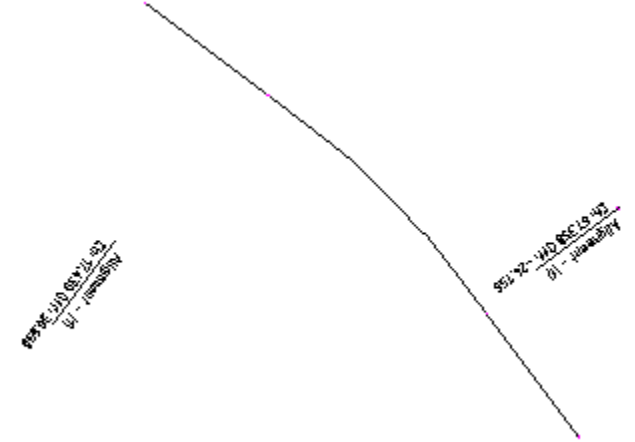
|   |  |  |  |
|---|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_Instantaneous Grade</li></ul> |  |   |  |
| <ul style="list-style-type: none"><li>• ANZ_VC High Points</li></ul>      |  |  |  |

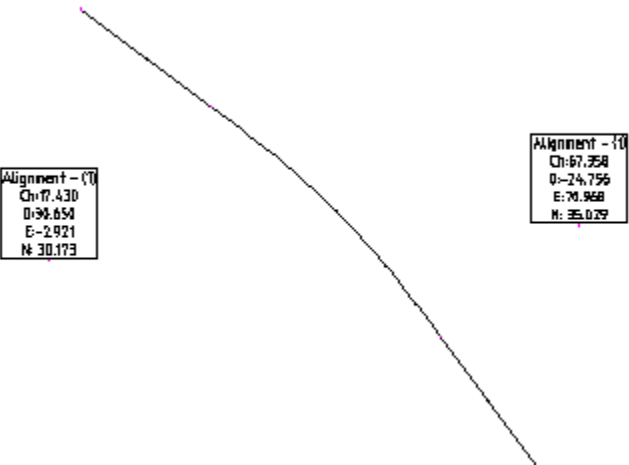
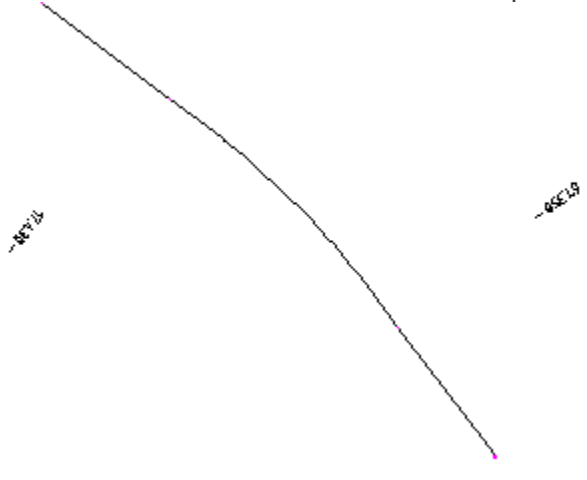
|   |                                |  |  |
|---|--------------------------------|--|--|
| <ul style="list-style-type: none"> <li>• ANZ_VC Low Points</li> </ul> |                                |   |  |
| <ul style="list-style-type: none"> <li>• Standard</li> </ul>          |                                |  |  |
| <ul style="list-style-type: none"> <li>• Expressions</li> </ul>       |                                |  |  |
| <p>Station Equation</p>   | <p>Station equation Labels</p> |  |  |

|   |                            |  |  |
|---|----------------------------|--|--|
| <ul style="list-style-type: none"> <li>• ANZ_Chainage Change</li> </ul> |                            |   |  |
| <ul style="list-style-type: none"> <li>• Standard</li> </ul>            |                            |  |  |
| <ul style="list-style-type: none"> <li>• Expressions</li> </ul>         |                            |  |  |
| <p>Design Speed</p>   | <p>Design Speed labels</p> |  |  |

|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"> <li>• ANZ_Speed Chainage</li> </ul> |  |   |  |
| <ul style="list-style-type: none"> <li>• Standard</li> </ul>           |  |  |  |
| <ul style="list-style-type: none"> <li>• Expressions</li> </ul>        |  |  |  |
| <p>Superelevation Critical Points</p>                                  | <p>Labels at the critical Superelevation points on the alignment</p> |  |  |

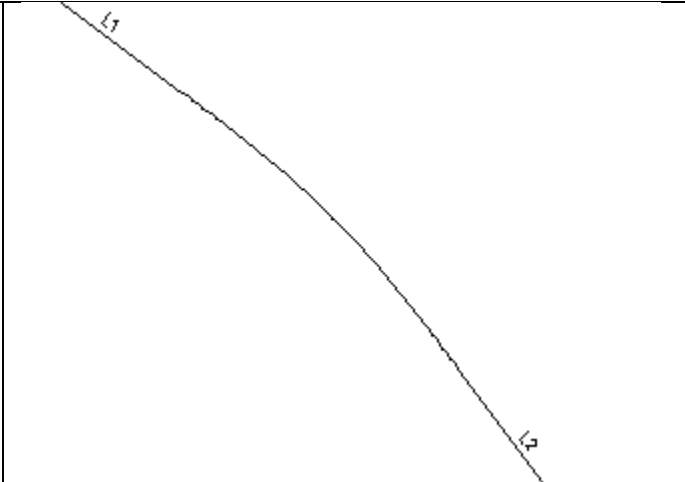
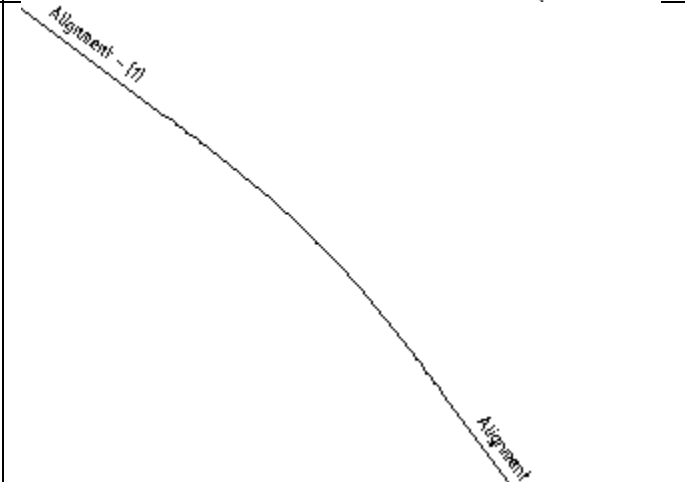
|   |                              |  |  |
|---|------------------------------|--|--|
| <ul style="list-style-type: none"> <li>• ANZ_Super</li> </ul>   |                              |  |  |
| <ul style="list-style-type: none"> <li>• Standard</li> </ul>    |                              |  |  |
| <ul style="list-style-type: none"> <li>• Expressions</li> </ul> |                              |  |  |
| <p>Station Offset</p>   | <p>Station Offset Labels</p> |  |  |

|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_Ch &amp; Offset Line (Left)</li></ul>  |  |   |  |
| <ul style="list-style-type: none"><li>• ANZ_Ch &amp; Offset Line (Right)</li></ul> |  |  |  |

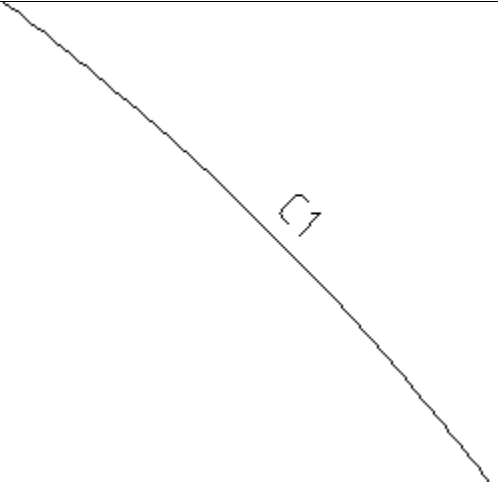

|   |  |  |  |
|---|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_Ch &amp; Offset Table</li></ul>                 |  |   |  |
| <ul style="list-style-type: none"><li>• ANZ_Random Station Label (Perp with tick)</li></ul> |  |  |  |

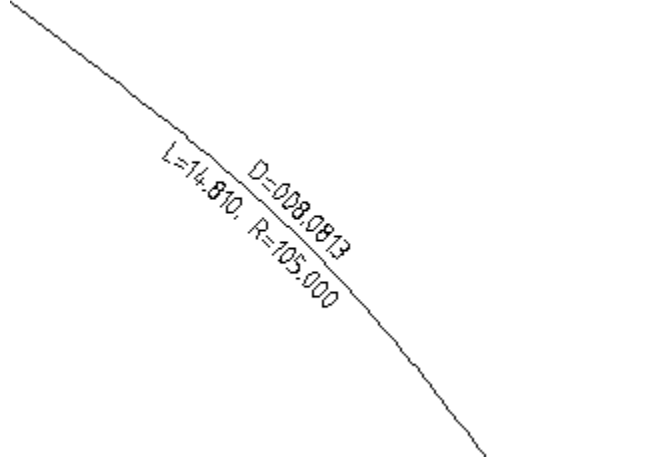
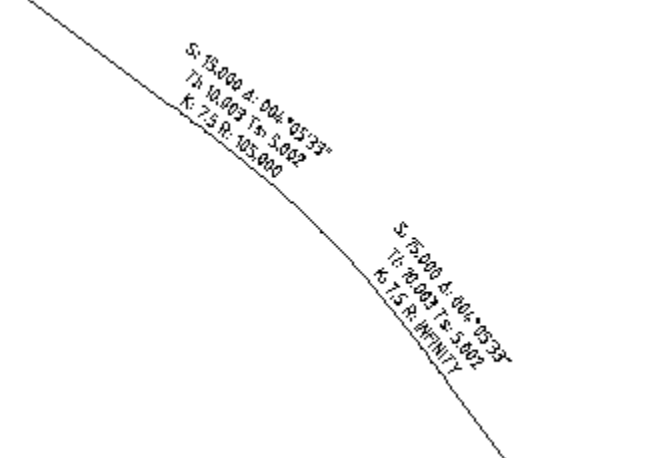
|  |                |  |  |
|--|----------------|--|--|
| <ul style="list-style-type: none"> <li>Standard</li> </ul>             |                |  |  |
| <ul style="list-style-type: none"> <li>Expressions</li> </ul>          |                |  |  |
| Line   | Tangent labels |  |  |
| <ul style="list-style-type: none"> <li>ANZ_Line Design Data</li> </ul> |                |  |  |

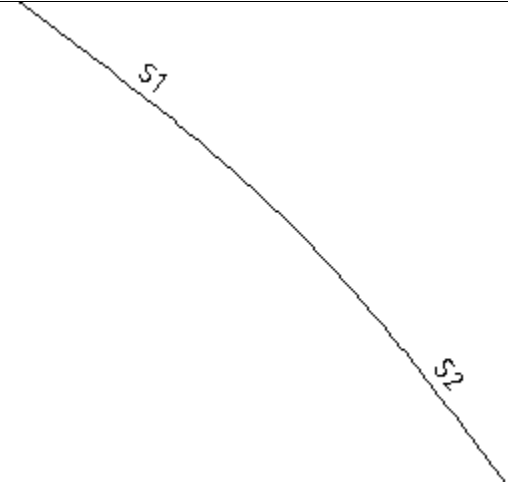
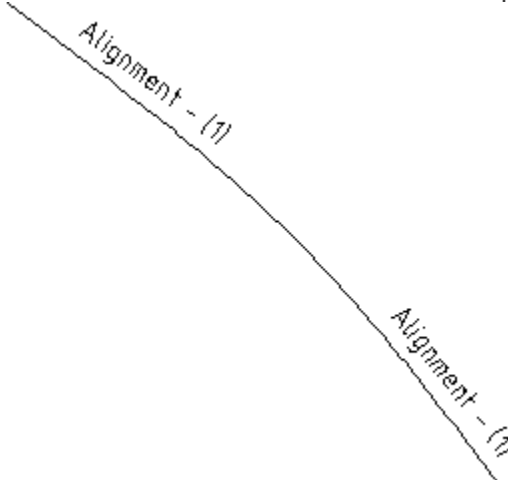


|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_Line Design Data.Tag.1</li></ul> |  |  A diagram showing a curved line that starts at the top left and curves downwards to the right. The line is labeled 'L1' at the top left end and 'L2' at the bottom right end.                      |  |
| <ul style="list-style-type: none"><li>• ANZ_Line Name Only</li></ul>         |  |  A diagram showing a curved line that starts at the top left and curves downwards to the right. The line is labeled 'Alignment - (1)' at the top left end and 'Alignment' at the bottom right end. |  |

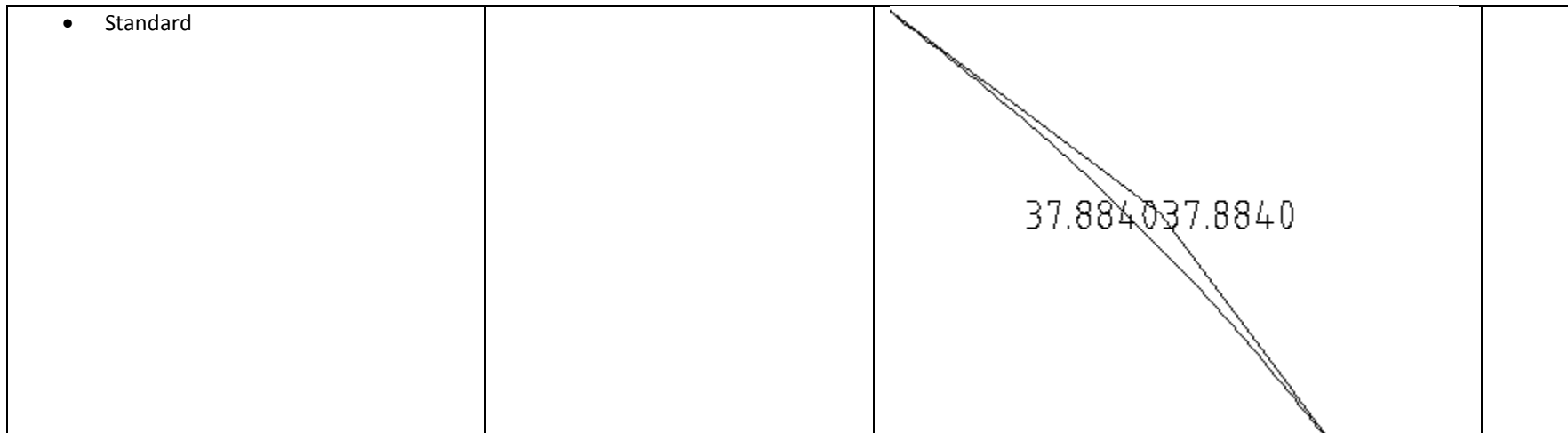
|   |  |            |  |
|---|--|------------|--|
| <ul style="list-style-type: none"> <li>Standard</li> </ul>              |  |            |  |
| Curve   |  | Arc Labels |  |
| <ul style="list-style-type: none"> <li>ANZ_Curve Design Data</li> </ul> |  |            |  |

|   |  |  |  |
|---|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_Curve Design Data.Tag.1</li></ul> |  |  A diagram showing a curve labeled 'C1' sloping downwards from left to right. The curve is a smooth, concave-up line.               |  |
| <ul style="list-style-type: none"><li>• ANZ_Curve Name Only</li></ul>         |  |  A diagram showing a curve labeled 'Alignment - (1)' sloping downwards from left to right. The curve is a smooth, concave-up line. |  |

|  |               |  |  |
|--|---------------|--|--|
| <ul style="list-style-type: none"><li>Standard</li></ul>               |               |  <p>L=14.810, D=008.0813, R=105.000</p>   |  |
| Spiral   | Spiral Labels |  |  |
| <ul style="list-style-type: none"><li>ANZ_Spiral Design Data</li></ul> |               |  <p>S: 15.000 A: 004 *05.23"<br/>T: 10.000 T: 5.000<br/>K: 7.5 R: 105.000</p> <p>S: 75.000 A: 004 *05.23"<br/>T: 20.000 T: 5.000<br/>K: 7.5 R: INFINITY</p> |  |

|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_Spiral Design Data.Tag.1</li></ul> |  |   |  |
| <ul style="list-style-type: none"><li>• ANZ_Spiral Name Only</li></ul>         |  |  |  |

|  |           |  |  |
|--|-----------|--|--|
| <ul style="list-style-type: none"> <li>Standard</li> </ul>       |           |  |  |
| Tangent Intersection   | PI Labels |  |  |
| <ul style="list-style-type: none"> <li>ANZ_IP Details</li> </ul> |           |  |  |



| Alignment Table Type/Name                                  | Description    | Screen grab / DWF / DWG  | Default                |                     |                     |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
|--|----------------|--|------------------------|---------------------|---------------------|--|--|--|--------|----------------|--------|-----------|-------------|-----------|----|------|--------|-----------------|---------------------|---------------------|----|------|--------|-----------------|---------------------|---------------------|----|------|--------|-----------------|---------------------|---------------------|----|------|---------|-----------------|---------------------|--------------------|----|------|---------|-----------------|---------------------|---------------------|----|------|--------|-----------------|---------------------|---------------------|----|------|---------|-----------------|--------------------|---------------------|----|------|--------|-----------------|---------------------|---------------------|----|------|--------|-----------------|---------------------|---------------------|----|------|--------|-----------------|---------------------|---------------------|----|------|---------|-----------------|---------------------|--------------------|--|
| Line   |                |  |                        |                     |                     |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| <ul style="list-style-type: none"> <li>ANZ_Line</li> </ul> |                | <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="color: green;"> <th colspan="6">Line Table: Alignments</th> </tr> <tr style="color: green;"> <th>Line #</th> <th>Alignment Name</th> <th>Length</th> <th>Direction</th> <th>Start Point</th> <th>End Point</th> </tr> </thead> <tbody> <tr><td>S1</td><td>CL-4</td><td>91.111</td><td>183° 43' 14.65"</td><td>[1379.141,1111.261]</td><td>[1241.924,1154.712]</td></tr> <tr><td>S2</td><td>CL-4</td><td>91.111</td><td>174° 15' 53.61"</td><td>[1435.394,1163.966]</td><td>[1358.178,1118.416]</td></tr> <tr><td>S3</td><td>CL-4</td><td>91.111</td><td>174° 15' 53.61"</td><td>[1324.998,1439.392]</td><td>[1419.911,1411.591]</td></tr> <tr><td>C1</td><td>CL-4</td><td>237.654</td><td>183° 43' 14.65"</td><td>[1241.924,1154.712]</td><td>[1228.116,841.691]</td></tr> <tr><td>C2</td><td>CL-4</td><td>289.145</td><td>174° 15' 53.61"</td><td>[1449.911,1411.591]</td><td>[1435.394,1163.966]</td></tr> <tr><td>L1</td><td>CL-4</td><td>43.151</td><td>245° 14' 16.12"</td><td>[1358.178,1118.416]</td><td>[1319.141,1111.261]</td></tr> <tr><td>L2</td><td>CL-4</td><td>349.855</td><td>183° 17' 31.19"</td><td>[1964.282,518.838]</td><td>[1324.998,1439.392]</td></tr> <tr><td>S4</td><td>CL-4</td><td>91.111</td><td>183° 43' 14.65"</td><td>[1379.141,1111.261]</td><td>[1241.924,1154.712]</td></tr> <tr><td>S5</td><td>CL-4</td><td>91.111</td><td>174° 15' 53.61"</td><td>[1435.394,1163.966]</td><td>[1358.178,1118.416]</td></tr> <tr><td>S6</td><td>CL-4</td><td>91.111</td><td>174° 15' 53.61"</td><td>[1324.998,1439.392]</td><td>[1419.911,1411.591]</td></tr> <tr><td>C3</td><td>CL-4</td><td>237.654</td><td>183° 43' 14.65"</td><td>[1241.924,1154.712]</td><td>[1228.116,841.691]</td></tr> </tbody> </table> | Line Table: Alignments |                     |                     |  |  |  | Line # | Alignment Name | Length | Direction | Start Point | End Point | S1 | CL-4 | 91.111 | 183° 43' 14.65" | [1379.141,1111.261] | [1241.924,1154.712] | S2 | CL-4 | 91.111 | 174° 15' 53.61" | [1435.394,1163.966] | [1358.178,1118.416] | S3 | CL-4 | 91.111 | 174° 15' 53.61" | [1324.998,1439.392] | [1419.911,1411.591] | C1 | CL-4 | 237.654 | 183° 43' 14.65" | [1241.924,1154.712] | [1228.116,841.691] | C2 | CL-4 | 289.145 | 174° 15' 53.61" | [1449.911,1411.591] | [1435.394,1163.966] | L1 | CL-4 | 43.151 | 245° 14' 16.12" | [1358.178,1118.416] | [1319.141,1111.261] | L2 | CL-4 | 349.855 | 183° 17' 31.19" | [1964.282,518.838] | [1324.998,1439.392] | S4 | CL-4 | 91.111 | 183° 43' 14.65" | [1379.141,1111.261] | [1241.924,1154.712] | S5 | CL-4 | 91.111 | 174° 15' 53.61" | [1435.394,1163.966] | [1358.178,1118.416] | S6 | CL-4 | 91.111 | 174° 15' 53.61" | [1324.998,1439.392] | [1419.911,1411.591] | C3 | CL-4 | 237.654 | 183° 43' 14.65" | [1241.924,1154.712] | [1228.116,841.691] |  |
| Line Table: Alignments                                     |                |  |                        |                     |                     |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| Line #   | Alignment Name | Length   | Direction              | Start Point         | End Point           |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| S1   | CL-4           | 91.111   | 183° 43' 14.65"        | [1379.141,1111.261] | [1241.924,1154.712] |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| S2   | CL-4           | 91.111   | 174° 15' 53.61"        | [1435.394,1163.966] | [1358.178,1118.416] |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| S3   | CL-4           | 91.111   | 174° 15' 53.61"        | [1324.998,1439.392] | [1419.911,1411.591] |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| C1   | CL-4           | 237.654  | 183° 43' 14.65"        | [1241.924,1154.712] | [1228.116,841.691]  |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| C2   | CL-4           | 289.145  | 174° 15' 53.61"        | [1449.911,1411.591] | [1435.394,1163.966] |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| L1   | CL-4           | 43.151   | 245° 14' 16.12"        | [1358.178,1118.416] | [1319.141,1111.261] |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| L2   | CL-4           | 349.855  | 183° 17' 31.19"        | [1964.282,518.838]  | [1324.998,1439.392] |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| S4   | CL-4           | 91.111   | 183° 43' 14.65"        | [1379.141,1111.261] | [1241.924,1154.712] |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| S5   | CL-4           | 91.111   | 174° 15' 53.61"        | [1435.394,1163.966] | [1358.178,1118.416] |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| S6   | CL-4           | 91.111   | 174° 15' 53.61"        | [1324.998,1439.392] | [1419.911,1411.591] |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| C3   | CL-4           | 237.654  | 183° 43' 14.65"        | [1241.924,1154.712] | [1228.116,841.691]  |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| <ul style="list-style-type: none"> <li>Standard</li> </ul> |                |  |                        |                     |                     |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |
| Curve  |                |  |                        |                     |                     |  |  |  |        |                |        |           |             |           |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |    |      |         |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                    |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |        |                 |                     |                     |    |      |         |                 |                     |                    |  |

| <ul style="list-style-type: none"> <li>ANZ_Line</li> </ul> |   | <table border="1"> <thead> <tr> <th colspan="7">Curve Table: Alignments</th> </tr> <tr> <th>Curve #</th> <th>Alignment Name</th> <th>Radius</th> <th>Length</th> <th>Chord Direction</th> <th>Start Point</th> <th>End Point</th> </tr> </thead> <tbody> <tr><td>S7</td><td>CL-4</td><td>???</td><td>90.000</td><td>???</td><td>(1228.006,840.680)</td><td>(1291.671,785.504)</td></tr> <tr><td>S1</td><td>CL-4</td><td>???</td><td>90.000</td><td>???</td><td>(1319.340,1190.261)</td><td>(1241.924,1054.702)</td></tr> <tr><td>S2</td><td>CL-4</td><td>???</td><td>90.000</td><td>???</td><td>(1435.394,1163.366)</td><td>(1358.178,1118.408)</td></tr> <tr><td>S3</td><td>CL-4</td><td>???</td><td>90.000</td><td>???</td><td>(1524.998,1438.392)</td><td>(1448.900,1411.591)</td></tr> <tr><td>C1</td><td>CL-4</td><td>153.000</td><td>237.854</td><td>103° 43' 14.63"</td><td>(1241.924,1054.702)</td><td>(1228.006,840.680)</td></tr> <tr><td>C2</td><td>CL-4</td><td>153.000</td><td>289.145</td><td>174° 05' 53.60"</td><td>(1403.900,1410.590)</td><td>(1435.394,1163.366)</td></tr> <tr><td>L5</td><td>CL-4</td><td>???</td><td>154.402</td><td>???</td><td>(1298.671,785.504)</td><td>(1429.147,712.794)</td></tr> <tr><td>L1</td><td>CL-4</td><td>???</td><td>43.050</td><td>???</td><td>(1358.178,1118.408)</td><td>(1318.140,1100.260)</td></tr> <tr><td>L2</td><td>CL-4</td><td>???</td><td>349.855</td><td>???</td><td>(1064.282,1518.838)</td><td>(1324.998,1438.392)</td></tr> <tr><td>S8</td><td>CL-4</td><td>???</td><td>90.000</td><td>???</td><td>(1228.006,840.680)</td><td>(1291.671,785.504)</td></tr> <tr><td>S4</td><td>CL-4</td><td>???</td><td>90.000</td><td>???</td><td>(1319.340,1190.261)</td><td>(1241.924,1054.702)</td></tr> <tr><td>S5</td><td>CL-4</td><td>???</td><td>90.000</td><td>???</td><td>(1435.394,1163.366)</td><td>(1358.178,1118.408)</td></tr> </tbody> </table>   | Curve Table: Alignments   |                 |  |                     |                     |  |  | Curve # | Alignment Name | Radius         | Length  | Chord Direction | Start Point | End Point         | S7          | CL-4      | ??? | 90.000 | ???    | (1228.006,840.680)        | (1291.671,785.504) | S1                                       | CL-4               | ???                | 90.000 | ???  | (1319.340,1190.261) | (1241.924,1054.702)       | S2     | CL-4                                     | ???                 | 90.000              | ??? | (1435.394,1163.366) | (1358.178,1118.408) | S3                        | CL-4   | ???                                      | 90.000              | ???                 | (1524.998,1438.392) | (1448.900,1411.591) | C1     | CL-4                      | 153.000 | 237.854                                  | 103° 43' 14.63"     | (1241.924,1054.702) | (1228.006,840.680) | C2   | CL-4 | 153.000             | 289.145 | 174° 05' 53.60"                          | (1403.900,1410.590) | (1435.394,1163.366) | L5 | CL-4 | ??? | 154.402             | ???     | (1298.671,785.504)                       | (1429.147,712.794)  | L1                  | CL-4 | ???  | 43.050 | ???                 | (1358.178,1118.408) | (1318.140,1100.260)    | L2                 | CL-4               | ??? | 349.855 | ??? | (1064.282,1518.838) | (1324.998,1438.392) | S8                     | CL-4                | ???                 | 90.000 | ???  | (1228.006,840.680) | (1291.671,785.504)  | S4      | CL-4                   | ???                 | 90.000              | ??? | (1319.340,1190.261) | (1241.924,1054.702) | S5                        | CL-4   | ???                                      | 90.000             | ???                | (1435.394,1163.366) | (1358.178,1118.408) |  |
|--|---|---|---------------------------|-----------------|--|---------------------|---------------------|--|--|---------|----------------|----------------|---------|-----------------|-------------|-------------------|-------------|-----------|-----|--------|--------|---------------------------|--------------------|--|--------------------|--------------------|--------|------|---------------------|---------------------------|--------|--|---------------------|---------------------|-----|---------------------|---------------------|---------------------------|--------|--|---------------------|---------------------|---------------------|---------------------|--------|---------------------------|---------|--|---------------------|---------------------|--------------------|------|------|---------------------|---------|--|---------------------|---------------------|----|------|-----|---------------------|---------|--|---------------------|---------------------|------|------|--------|---------------------|---------------------|------------------------|--------------------|--------------------|-----|---------|-----|---------------------|---------------------|------------------------|---------------------|---------------------|--------|------|--------------------|---------------------|---------|------------------------|---------------------|---------------------|-----|---------------------|---------------------|---------------------------|--------|--|--------------------|--------------------|---------------------|---------------------|--|
| Curve Table: Alignments                                    |   |   |                           |                 |  |                     |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| Curve #  | Alignment Name                                  | Radius  | Length                    | Chord Direction | Start Point                              | End Point           |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| S7   | CL-4  | ???   | 90.000                    | ???             | (1228.006,840.680)                       | (1291.671,785.504)  |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| S1   | CL-4  | ???   | 90.000                    | ???             | (1319.340,1190.261)                      | (1241.924,1054.702) |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| S2   | CL-4  | ???   | 90.000                    | ???             | (1435.394,1163.366)                      | (1358.178,1118.408) |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| S3   | CL-4  | ???   | 90.000                    | ???             | (1524.998,1438.392)                      | (1448.900,1411.591) |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| C1   | CL-4  | 153.000   | 237.854                   | 103° 43' 14.63" | (1241.924,1054.702)                      | (1228.006,840.680)  |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| C2   | CL-4  | 153.000   | 289.145                   | 174° 05' 53.60" | (1403.900,1410.590)                      | (1435.394,1163.366) |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| L5   | CL-4  | ???   | 154.402                   | ???             | (1298.671,785.504)                       | (1429.147,712.794)  |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| L1   | CL-4  | ???   | 43.050                    | ???             | (1358.178,1118.408)                      | (1318.140,1100.260) |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| L2   | CL-4  | ???   | 349.855                   | ???             | (1064.282,1518.838)                      | (1324.998,1438.392) |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| S8   | CL-4  | ???   | 90.000                    | ???             | (1228.006,840.680)                       | (1291.671,785.504)  |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| S4   | CL-4  | ???   | 90.000                    | ???             | (1319.340,1190.261)                      | (1241.924,1054.702) |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| S5   | CL-4  | ???   | 90.000                    | ???             | (1435.394,1163.366)                      | (1358.178,1118.408) |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| <ul style="list-style-type: none"> <li>Standard</li> </ul> |   |   |                           |                 |  |                     |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| Spiral   |   |   |                           |                 |  |                     |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| <ul style="list-style-type: none"> <li>ANZ_Line</li> </ul> |   | <table border="1"> <thead> <tr> <th colspan="8">Spiral Table: Alignments</th> </tr> <tr> <th>Spiral #</th> <th>Alignment Name</th> <th>A Value</th> <th>Radl</th> <th>Length</th> <th>Tangent Direction</th> <th>Start Point</th> <th>End Point</th> </tr> </thead> <tbody> <tr><td>S7</td><td>CL-4</td><td>10.246</td><td>In: 123.0<br/>Out: 119.077</td><td>90.000</td><td>Start: 130° 15' 18"<br/>End: 133° 32' 03"</td><td>(1228.006,840.680)</td><td>(1291.671,785.504)</td></tr> <tr><td>S1</td><td>CL-4</td><td>10.246</td><td>In: 119.077<br/>Out: 123.0</td><td>90.000</td><td>Start: 228° 45' 18"<br/>End: 228° 12' 10"</td><td>(1318.140,1190.260)</td><td>(1241.924,1054.702)</td></tr> <tr><td>S2</td><td>CL-4</td><td>10.246</td><td>In: 123.0<br/>Out: 119.077</td><td>90.000</td><td>Start: 228° 12' 10"<br/>End: 228° 45' 18"</td><td>(1435.394,1163.366)</td><td>(1358.178,1118.408)</td></tr> <tr><td>S3</td><td>CL-4</td><td>10.246</td><td>In: 119.077<br/>Out: 123.0</td><td>90.000</td><td>Start: 103° 47' 34"<br/>End: 118° 31' 57"</td><td>(1524.998,1438.392)</td><td>(1448.900,1411.591)</td></tr> <tr><td>C1</td><td>CL-4</td><td>???</td><td>In: 111<br/>Out: 111</td><td>237.854</td><td>Start: 228° 12' 10"<br/>End: 228° 45' 18"</td><td>(1241.924,1054.702)</td><td>(1228.006,840.680)</td></tr> <tr><td>C2</td><td>CL-4</td><td>???</td><td>In: 111<br/>Out: 111</td><td>289.145</td><td>Start: 174° 58' 57"<br/>End: 228° 12' 10"</td><td>(1403.900,1410.590)</td><td>(1435.394,1163.366)</td></tr> <tr><td>L5</td><td>CL-4</td><td>???</td><td>In: 111<br/>Out: 111</td><td>154.402</td><td>Start: 111<br/>End: 111</td><td>(1298.671,785.504)</td><td>(1429.147,712.794)</td></tr> <tr><td>L1</td><td>CL-4</td><td>???</td><td>In: 111<br/>Out: 111</td><td>43.050</td><td>Start: 111<br/>End: 111</td><td>(1358.178,1118.408)</td><td>(1318.140,1100.260)</td></tr> <tr><td>L2</td><td>CL-4</td><td>???</td><td>In: 111<br/>Out: 111</td><td>349.855</td><td>Start: 111<br/>End: 111</td><td>(1064.282,1518.838)</td><td>(1324.998,1438.392)</td></tr> <tr><td>S8</td><td>CL-4</td><td>10.246</td><td>In: 123.0<br/>Out: 119.077</td><td>90.000</td><td>Start: 130° 15' 18"<br/>End: 133° 32' 03"</td><td>(1228.006,840.680)</td><td>(1291.671,785.504)</td></tr> </tbody> </table> | Spiral Table: Alignments  |                 |  |                     |                     |  |  |         | Spiral #       | Alignment Name | A Value | Radl            | Length      | Tangent Direction | Start Point | End Point | S7  | CL-4   | 10.246 | In: 123.0<br>Out: 119.077 | 90.000             | Start: 130° 15' 18"<br>End: 133° 32' 03" | (1228.006,840.680) | (1291.671,785.504) | S1     | CL-4 | 10.246              | In: 119.077<br>Out: 123.0 | 90.000 | Start: 228° 45' 18"<br>End: 228° 12' 10" | (1318.140,1190.260) | (1241.924,1054.702) | S2  | CL-4                | 10.246              | In: 123.0<br>Out: 119.077 | 90.000 | Start: 228° 12' 10"<br>End: 228° 45' 18" | (1435.394,1163.366) | (1358.178,1118.408) | S3                  | CL-4                | 10.246 | In: 119.077<br>Out: 123.0 | 90.000  | Start: 103° 47' 34"<br>End: 118° 31' 57" | (1524.998,1438.392) | (1448.900,1411.591) | C1                 | CL-4 | ???  | In: 111<br>Out: 111 | 237.854 | Start: 228° 12' 10"<br>End: 228° 45' 18" | (1241.924,1054.702) | (1228.006,840.680)  | C2 | CL-4 | ??? | In: 111<br>Out: 111 | 289.145 | Start: 174° 58' 57"<br>End: 228° 12' 10" | (1403.900,1410.590) | (1435.394,1163.366) | L5   | CL-4 | ???    | In: 111<br>Out: 111 | 154.402             | Start: 111<br>End: 111 | (1298.671,785.504) | (1429.147,712.794) | L1  | CL-4    | ??? | In: 111<br>Out: 111 | 43.050              | Start: 111<br>End: 111 | (1358.178,1118.408) | (1318.140,1100.260) | L2     | CL-4 | ???                | In: 111<br>Out: 111 | 349.855 | Start: 111<br>End: 111 | (1064.282,1518.838) | (1324.998,1438.392) | S8  | CL-4                | 10.246              | In: 123.0<br>Out: 119.077 | 90.000 | Start: 130° 15' 18"<br>End: 133° 32' 03" | (1228.006,840.680) | (1291.671,785.504) |                     |                     |  |
| Spiral Table: Alignments                                   |   |   |                           |                 |  |                     |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| Spiral #   | Alignment Name                                  | A Value   | Radl                      | Length          | Tangent Direction                        | Start Point         | End Point           |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| S7   | CL-4  | 10.246  | In: 123.0<br>Out: 119.077 | 90.000          | Start: 130° 15' 18"<br>End: 133° 32' 03" | (1228.006,840.680)  | (1291.671,785.504)  |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| S1   | CL-4  | 10.246  | In: 119.077<br>Out: 123.0 | 90.000          | Start: 228° 45' 18"<br>End: 228° 12' 10" | (1318.140,1190.260) | (1241.924,1054.702) |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| S2   | CL-4  | 10.246  | In: 123.0<br>Out: 119.077 | 90.000          | Start: 228° 12' 10"<br>End: 228° 45' 18" | (1435.394,1163.366) | (1358.178,1118.408) |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| S3   | CL-4  | 10.246  | In: 119.077<br>Out: 123.0 | 90.000          | Start: 103° 47' 34"<br>End: 118° 31' 57" | (1524.998,1438.392) | (1448.900,1411.591) |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| C1   | CL-4  | ???   | In: 111<br>Out: 111       | 237.854         | Start: 228° 12' 10"<br>End: 228° 45' 18" | (1241.924,1054.702) | (1228.006,840.680)  |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| C2   | CL-4  | ???   | In: 111<br>Out: 111       | 289.145         | Start: 174° 58' 57"<br>End: 228° 12' 10" | (1403.900,1410.590) | (1435.394,1163.366) |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| L5   | CL-4  | ???   | In: 111<br>Out: 111       | 154.402         | Start: 111<br>End: 111                   | (1298.671,785.504)  | (1429.147,712.794)  |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| L1   | CL-4  | ???   | In: 111<br>Out: 111       | 43.050          | Start: 111<br>End: 111                   | (1358.178,1118.408) | (1318.140,1100.260) |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| L2   | CL-4  | ???   | In: 111<br>Out: 111       | 349.855         | Start: 111<br>End: 111                   | (1064.282,1518.838) | (1324.998,1438.392) |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| S8   | CL-4  | 10.246  | In: 123.0<br>Out: 119.077 | 90.000          | Start: 130° 15' 18"<br>End: 133° 32' 03" | (1228.006,840.680)  | (1291.671,785.504)  |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| <ul style="list-style-type: none"> <li>Standard</li> </ul> |   |   |                           |                 |  |                     |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |
| Segment  | Line, curve or spiral element in a single table |   |                           |                 |  |                     |                     |  |  |         |                |                |         |                 |             |                   |             |           |     |        |        |                           |                    |  |                    |                    |        |      |                     |                           |        |  |                     |                     |     |                     |                     |                           |        |  |                     |                     |                     |                     |        |                           |         |  |                     |                     |                    |      |      |                     |         |  |                     |                     |    |      |     |                     |         |  |                     |                     |      |      |        |                     |                     |                        |                    |                    |     |         |     |                     |                     |                        |                     |                     |        |      |                    |                     |         |                        |                     |                     |     |                     |                     |                           |        |  |                    |                    |                     |                     |  |



|  |  |                |                               |                                  |                                  |         |                   |                 |
|--|--|----------------|-------------------------------|----------------------------------|----------------------------------|---------|-------------------|-----------------|
| <ul style="list-style-type: none"> <li>ANZ_Line</li> </ul> | Set Out Table for CL-4                                     |                |                               |                                  |                                  |         |                   |                 |
|  | TAG  |                | CHAINAGE                      | EASTING                          | NORTHING                         | LENGTH  | RADIUS            | BEARING         |
|  | L4   | BP<br>EP       | 0.000<br>349.855              | 984.282<br>1324.998              | 1518.838<br>1439.392             | 349.855 |                   | 143° 07' 31"    |
|  | L2   | BP<br>EP       | 0.000<br>349.855              | 984.282<br>1324.998              | 1518.838<br>1439.392             | 349.855 |                   | 143° 07' 31"    |
|  | S6   | BP<br>EP       | 349.855<br>439.855            | 1324.998<br>1409.900             | 1439.392<br>1470.591             | 90.000  | INFINITY<br>753.0 | 163.1483        |
|  | S3   | BP<br>EP       | 349.855<br>439.855            | 1324.998<br>1409.900             | 1439.392<br>1470.591             | 90.000  | INFINITY<br>753.0 | 163.1483        |
|  | C4   | TP<br>IP<br>TP | 439.855<br>651.381<br>728.901 | 1409.900<br>1806.978<br>1435.394 | 1470.591<br>1327.007<br>1163.966 | 289.045 | 753.0             | 174° 05' 53.60" |
|  | C2   | TP<br>IP<br>TP | 439.855<br>651.381<br>728.901 | 1409.900<br>1806.978<br>1435.394 | 1470.591<br>1327.007<br>1163.966 | 289.045 | 753.0             | 174° 05' 53.60" |
|  |  | BP<br>EP       | 0.000<br>349.855              | 984.282<br>1324.998              | 1518.838<br>1439.392             | 349.855 |                   | 143° 07' 31"    |
|  | <ul style="list-style-type: none"> <li>Standard</li> </ul> |                |                               |                                  |                                  |         |                   |                 |
|  |  |                |                               |                                  |                                  |         |                   |                 |
|  |  |                |                               |                                  |                                  |         |                   |                 |
|  |  |                |                               |                                  |                                  |         |                   |                 |
|  |  |                |                               |                                  |                                  |         |                   |                 |

6.7 Profiles

Design Template: \_AutoCAD Civil3D 2014 ANZ Design\_ANZ.dwt

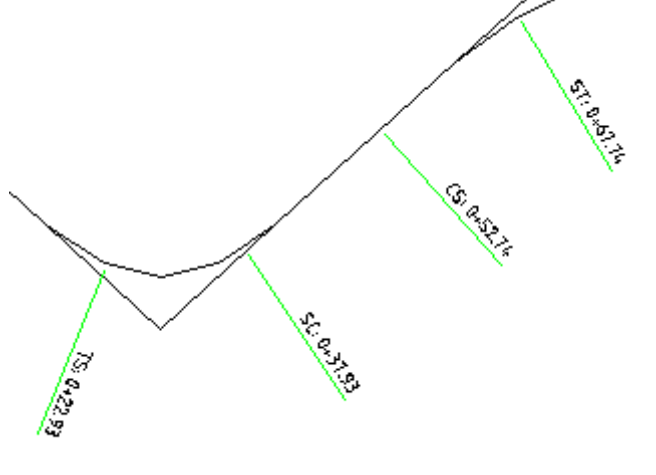
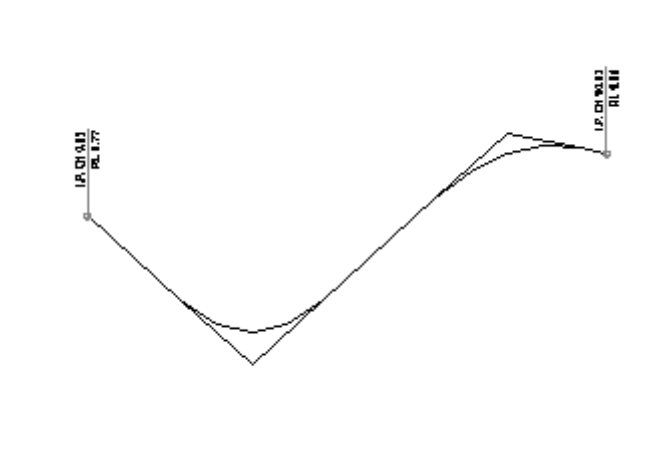
| Profile Style   | Description | Screen grab / DWF / DWG | Default |
|---|-------------|-------------------------|---------|
| <ul style="list-style-type: none"> <li>ANZ_Design Plotting (by layer)</li> </ul>    |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_Design_Conceptual</li> </ul>             |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_Design_Conceptual_LWT</li> </ul>         |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_Design_Superimposed</li> </ul>           |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_Reference Planes 1%</li> </ul>           |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_Reference Planes 2%</li> </ul>           |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_Reference Planes 3%</li> </ul>           |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_Reference Planes 4%</li> </ul>           |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_Reference Planes 5%</li> </ul>           |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_Reference Planes Extend Grade</li> </ul> |             |                         |         |

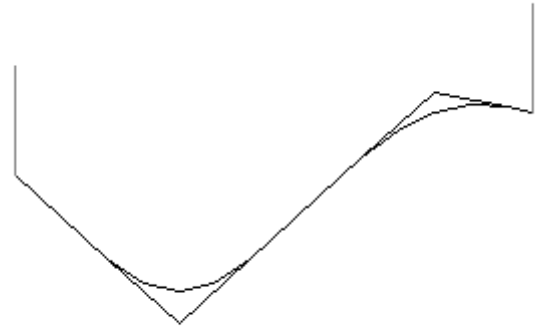
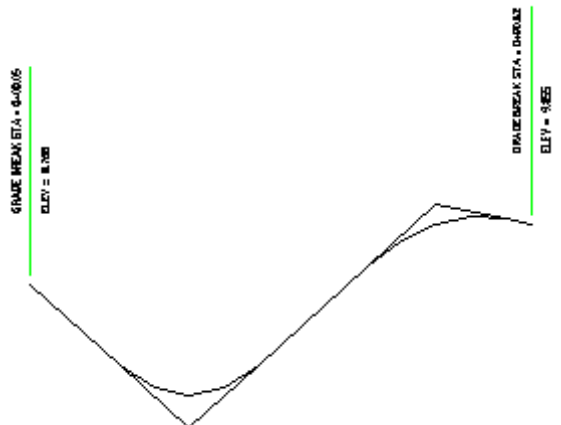
|                                     |  |  |  |
|-------------------------------------|--|--|--|
| • ANZ_Reference Planes Extend Grade |  |  |  |
| • ANZ_Surface Existing              |  |  |  |
| • ANZ_Surface Rock                  |  |  |  |
| • ANZ_Surface_01 (Additional)       |  |  |  |
| • ANZ_Surface_02 (Additional)       |  |  |  |

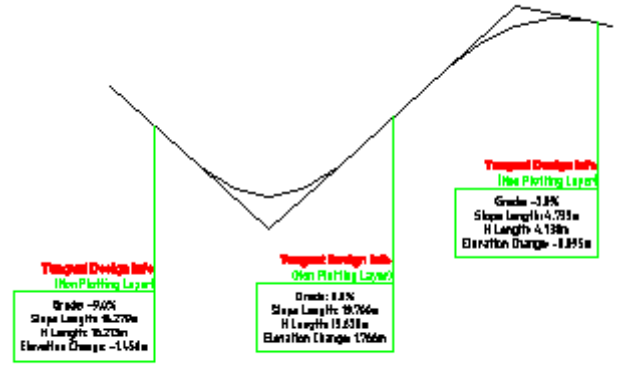

| Profile Design Checks  | Description | Screen grab / DWF / DWG | Default |
|--|-------------|-------------------------|---------|
| <b>Design Check Sets</b>   |             |                         |         |
| • ANZ_Austroads - Length of Crest VC – Appearance Criterion when S < L |             |                         |         |
| • ANZ_Austroads - Maximum Grade Mountaineous Terrain                   |             |                         |         |
| • ANZ_Austroads - Maximum Grade Flat Terrain                           |             |                         |         |
| • ANZ_Austroads - Maximum Grade Rolling Terrain                        |             |                         |         |
| <b>Line</b>  |             |                         |         |
| • ANZ_Austroads Max Grade - flat terrain                               |             |                         |         |
| • ANZ_Austroads Max Grade - Rolling Terrain                            |             |                         |         |
| • ANZ_Austroads Max Grade Mountaineous Terrain                         |             |                         |         |
| <b>Curve</b>   |             |                         |         |
| • ANZ_Austroads Crest VC Length - [Copy]                               |             |                         |         |

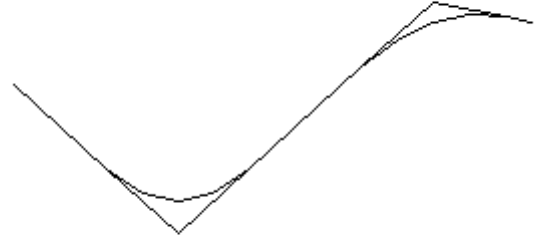
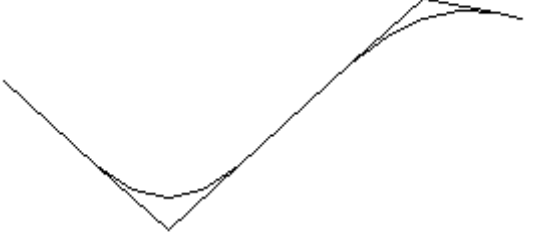
| Profile Label Type/Name                         | Description | Screen grab / DWF / DWG | Default |
|---|-------------|-------------------------|---------|
| <b>Profile Label Sets</b>                       |             |                         |         |
| • ANZ_Default                                   |             |                         |         |
| • ANZ_Empty                                     |             |                         |         |
| • ANZ_Lines on Bottom                           |             |                         |         |
| • ANZ_Lines on Bottom (with Design Info)        |             |                         |         |
| • ANZ_Ordinate Lines Only                       |             |                         |         |
| • ANZ_Ordinate Lines Only (Grade Breaks - 100m) |             |                         |         |
| • ANZ_Ref Planes Name                           |             |                         |         |
| <b>Major Station</b>                            |             |                         |         |

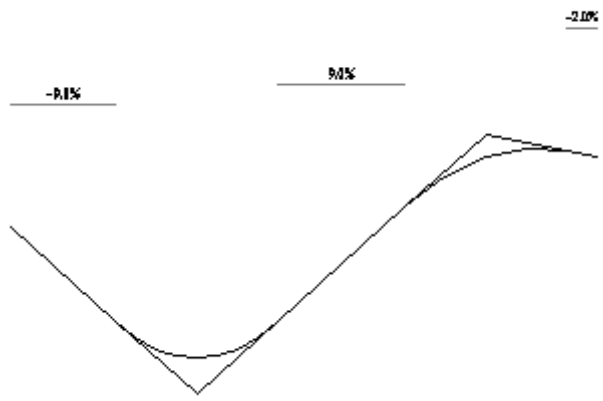
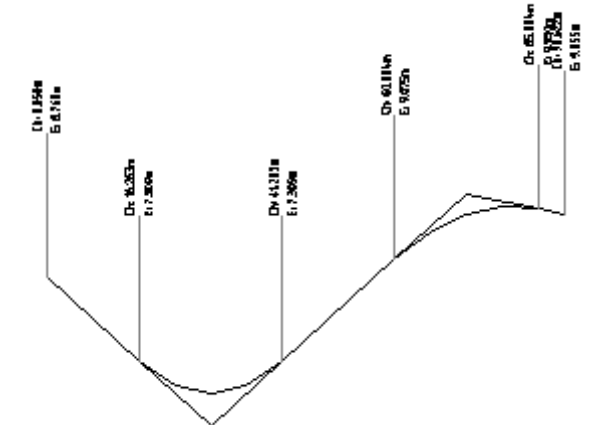
|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"> <li>Standard</li> </ul> |  |  |  |
| <p>Minor Station</p>                                       |  |  |  |
| <ul style="list-style-type: none"> <li>Standard</li> </ul> |  |  |  |
| <p>Horizontal Geometry Point</p>                           |  |  |  |

|   |  |  |  |
|---|--|--|--|
| <ul style="list-style-type: none"> <li>Standard</li> </ul>                                    |  |   |  |
| Grade Breaks  |  |  |  |
| <ul style="list-style-type: none"> <li>ANZ_Grade Break Labels (Vertical with line)</li> </ul> |  |  |  |

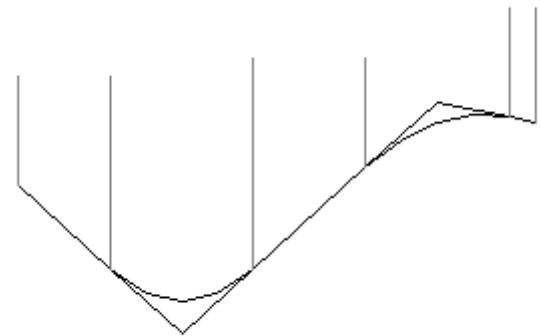
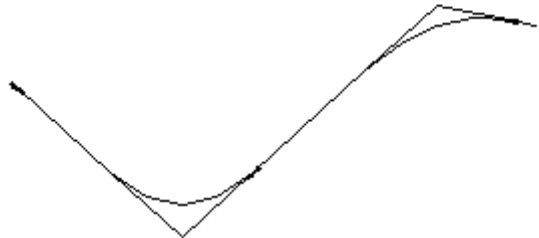
|   |                       |  |  |
|---|-----------------------|--|--|
| <ul style="list-style-type: none"> <li>• ANZ_Ordinate Lines (Grade Breaks)</li> </ul> |                       |   |  |
| <ul style="list-style-type: none"> <li>• Standard</li> </ul>                          |                       |  |  |
| <p>Line</p>   | <p>Tangent Labels</p> |  |  |


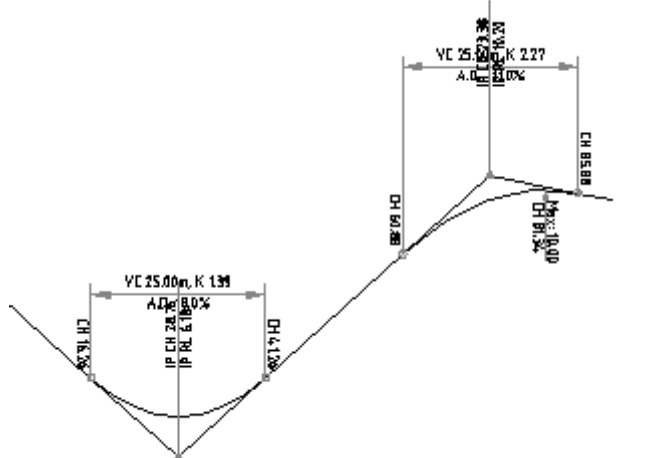
| <ul style="list-style-type: none"> <li>ANZ_Design info Tangents (Non plotting Layer)</li> </ul> |       |  <p>The diagram shows a cross-section of a road profile with three tangent design info callouts. Each callout is a green box with red text for the title and green text for the details. The callouts are connected to the profile by vertical green lines.</p> <table border="1"> <thead> <tr> <th>Callout</th> <th>Grade</th> <th>Slope Length</th> <th>H Length</th> <th>Elevation Change</th> </tr> </thead> <tbody> <tr> <td>Tangent Design Info (Non Plotting Layer)</td> <td>-9.0%</td> <td>16.270m</td> <td>16.270m</td> <td>-1.454m</td> </tr> <tr> <td>Tangent Design Info (Non Plotting Layer)</td> <td>8.8%</td> <td>19.766m</td> <td>19.766m</td> <td>1.766m</td> </tr> <tr> <td>Tangent Design Info (Non Plotting Layer)</td> <td>-1.8%</td> <td>4.138m</td> <td>4.138m</td> <td>-0.895m</td> </tr> </tbody> </table> | Callout  | Grade            | Slope Length | H Length | Elevation Change | Tangent Design Info (Non Plotting Layer) | -9.0% | 16.270m | 16.270m | -1.454m | Tangent Design Info (Non Plotting Layer) | 8.8% | 19.766m | 19.766m | 1.766m | Tangent Design Info (Non Plotting Layer) | -1.8% | 4.138m | 4.138m | -0.895m |  |
|---|-------|--|----------|------------------|--------------|----------|------------------|--|-------|---------|---------|---------|--|------|---------|---------|--------|--|-------|--------|--------|---------|--|
| Callout   | Grade | Slope Length   | H Length | Elevation Change |              |          |                  |  |       |         |         |         |  |      |         |         |        |  |       |        |        |         |  |
| Tangent Design Info (Non Plotting Layer)  | -9.0% | 16.270m  | 16.270m  | -1.454m          |              |          |                  |  |       |         |         |         |  |      |         |         |        |  |       |        |        |         |  |
| Tangent Design Info (Non Plotting Layer)  | 8.8%  | 19.766m  | 19.766m  | 1.766m           |              |          |                  |  |       |         |         |         |  |      |         |         |        |  |       |        |        |         |  |
| Tangent Design Info (Non Plotting Layer)  | -1.8% | 4.138m   | 4.138m   | -0.895m          |              |          |                  |  |       |         |         |         |  |      |         |         |        |  |       |        |        |         |  |
| <ul style="list-style-type: none"> <li>ANZ_Design Tangent Grade</li> </ul>                      |       |  <p>The diagram shows a cross-section of a road profile with three tangent grades labeled: -9.0%, 8.8%, and -2.0%.</p>   |          |                  |              |          |                  |  |       |         |         |         |  |      |         |         |        |  |       |        |        |         |  |

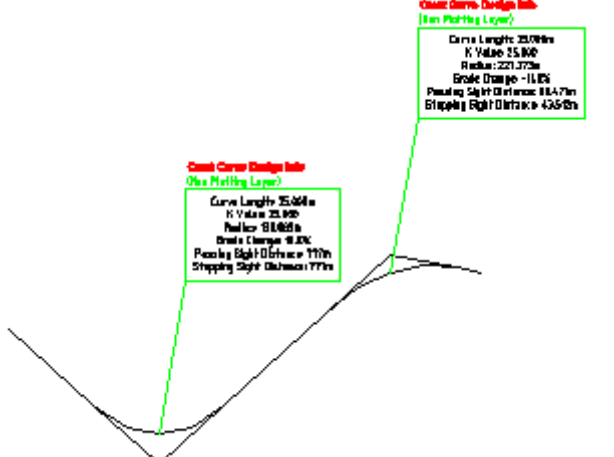
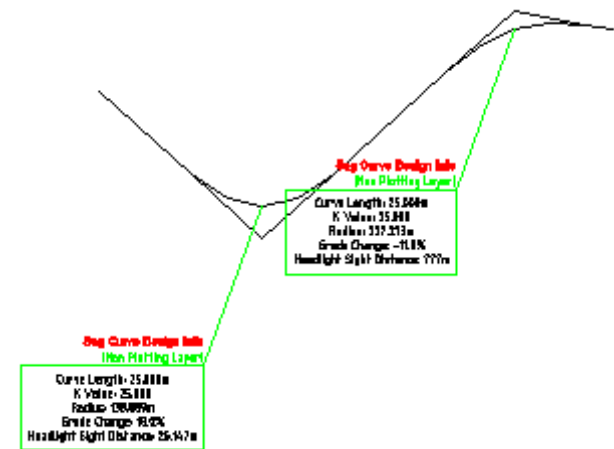
|   |  |  |  |
|---|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_Labels Bottom Arrow End</li></ul>   |  |   |  |
| <ul style="list-style-type: none"><li>• ANZ_Labels Bottom Arrow Start</li></ul> |  |  |  |

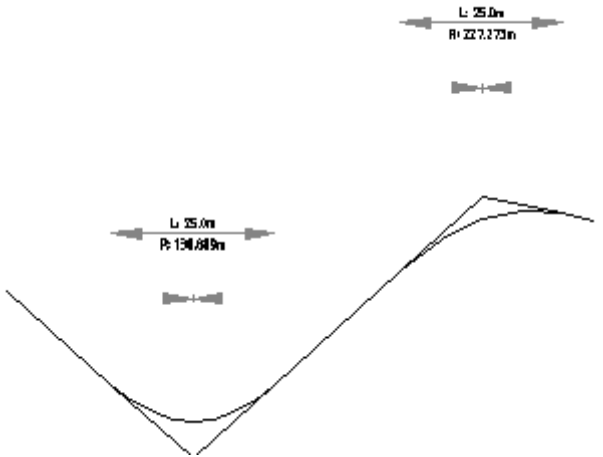
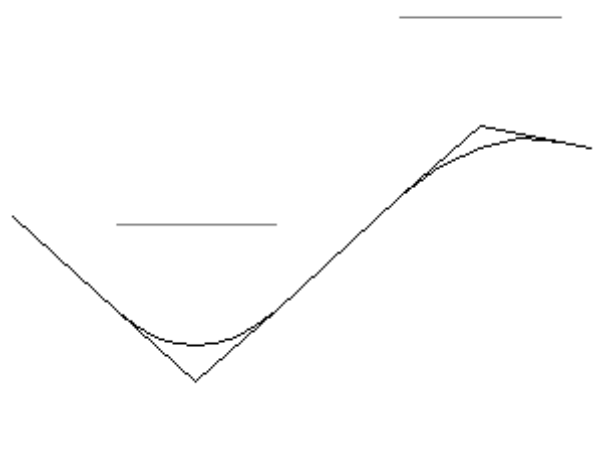
|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"> <li>• ANZ_Labels Bottom Lines</li> </ul>                |  |  <p>Profile view showing bottom lines with slope labels: -0.1%, 0.0%, and -2.0%.</p>  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Labels Profile Tangent (Ch + Elev)</li> </ul> |  |  <p>Profile view showing profile tangent with stationing and elevation data points:</p> <ul style="list-style-type: none"> <li>Ch: 1354m, E: 6.761m</li> <li>Ch: 4325m, E: 7.506m</li> <li>Ch: 4320m, E: 7.506m</li> <li>Ch: 4314m, E: 7.506m</li> <li>Ch: 4314m, E: 7.675m</li> <li>Ch: 4314m, E: 7.725m</li> <li>Ch: 4315m, E: 7.815m</li> </ul> |  |

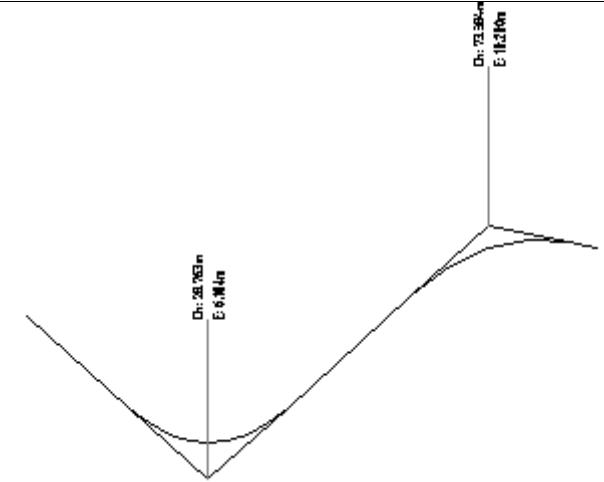
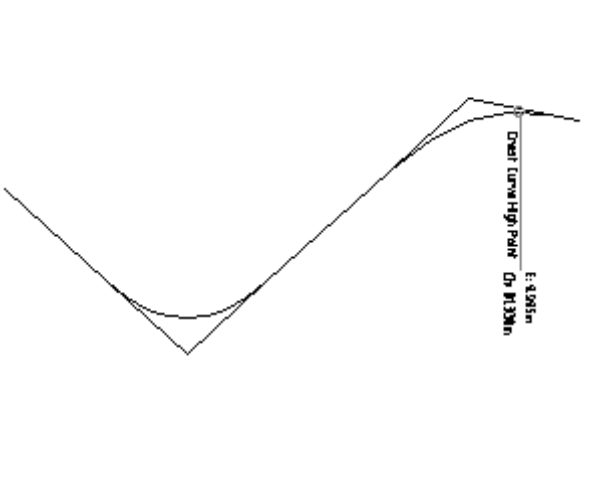


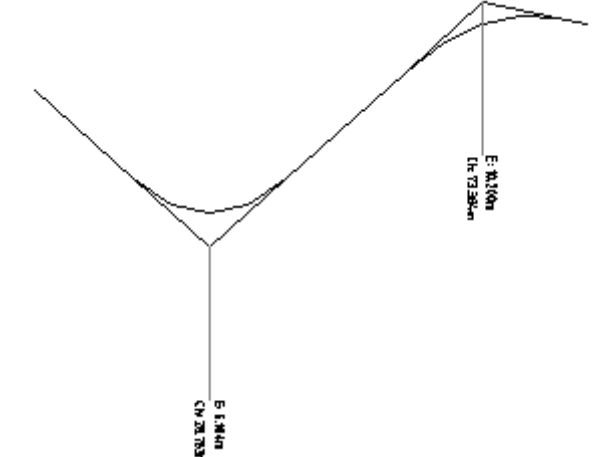
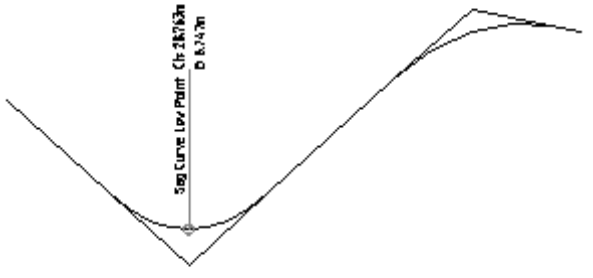
|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_Ordinate Lines</li></ul>         |  |   |  |
| <ul style="list-style-type: none"><li>• ANZ_Profile Name (NO PLOT)</li></ul> |  |  |  |

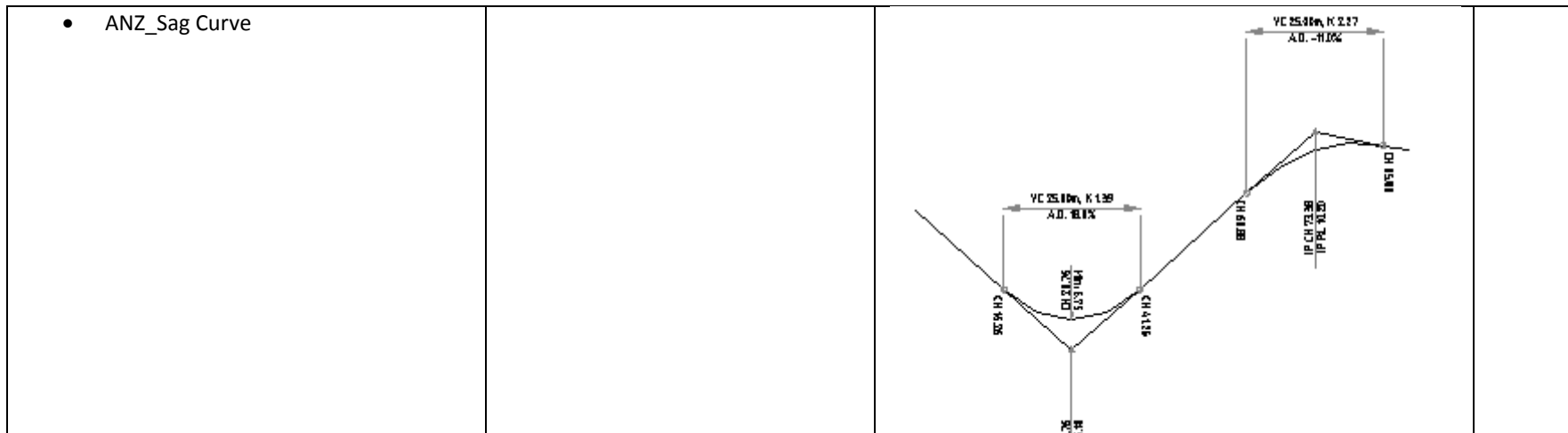
|   |  |  |  |
|---|--|--|--|
| <ul style="list-style-type: none"> <li>Standard</li> </ul>        |  |   |  |
| <p>Curve</p>  |  |  |  |
| <ul style="list-style-type: none"> <li>ANZ_Crest Curve</li> </ul> |  |  |  |

|   |  |  |  |
|---|--|--|--|
| <ul style="list-style-type: none"> <li>ANZ_Design Info Crest Curves (Non Plotting Layer)</li> </ul> |  |  <p><b>Crest Curve Design Info</b><br/>(Non Plotting Layer)</p> <p>Curve Length: 25.000m<br/>K Value: 25.000<br/>Radius: 221.372m<br/>Grade Change: -11.0%</p> <p><b>Crest Curve Design Info</b><br/>(Non Plotting Layer)</p> <p>Curve Length: 25.000m<br/>K Value: 25.000<br/>Radius: 221.372m<br/>Grade Change: -11.0%</p> <p>Passing Sight Distance: 114.7m<br/>Stopping Sight Distance: 43.58m</p>  |  |
| <ul style="list-style-type: none"> <li>ANZ_Design Info Sag Curves (Non Plotting Layer)</li> </ul>   |  |  <p><b>Sag Curve Design Info</b><br/>(Non Plotting Layer)</p> <p>Curve Length: 25.000m<br/>K Value: 25.000<br/>Radius: 221.372m<br/>Grade Change: -11.0%</p> <p>Headlight Sight Distance: 117m</p> <p><b>Sag Curve Design Info</b><br/>(Non Plotting Layer)</p> <p>Curve Length: 25.000m<br/>K Value: 25.000<br/>Radius: 221.372m<br/>Grade Change: -11.0%</p> <p>Headlight Sight Distance: 117m</p> <p><b>Sag Curve Design Info</b><br/>(Non Plotting Layer)</p> <p>Curve Length: 25.000m<br/>K Value: 25.000<br/>Radius: 221.372m<br/>Grade Change: -11.0%</p> <p>Headlight Sight Distance: 117m</p> |  |

|   |  |  |  |
|---|--|--|--|
| <ul style="list-style-type: none"><li>• ANZ_Labels Bottom Curves</li></ul>                  |  |  <p>The diagram shows two curves. The upper curve is labeled with <math>L = 25.0m</math> and <math>R = 227.73m</math>. The lower curve is labeled with <math>L = 25.0m</math> and <math>R = 136.689m</math>. Each curve has a horizontal line segment below it representing the curve centerline.</p> |  |
| <ul style="list-style-type: none"><li>• ANZ_Labels Bottom Lnes (to curve centres)</li></ul> |  |  <p>The diagram shows two curves. The upper curve has a horizontal line segment below it representing the curve centerline. The lower curve also has a horizontal line segment below it representing the curve centerline.</p>   |  |

|  |  |   |  |
|--|--|---|--|
| <ul style="list-style-type: none"><li>• ANZ_Labels Profile Curves (Crest)</li></ul>                |  |  <p>A profile curve diagram showing a crest. The curve starts on the left, dips into a valley, rises to a crest, and then dips again. A vertical line points to the peak of the crest with the label "D=73.96m" and "E=14.30m".</p>                  |  |
| <ul style="list-style-type: none"><li>• ANZ_Labels Profile Curves (Crest)<br/>High Point</li></ul> |  |  <p>A profile curve diagram showing a high point. The curve starts on the left, dips into a valley, rises to a high point, and then dips again. A vertical line points to the peak of the high point with the label "D=81.205m" and "E=13.30m".</p> |  |

|   |  |  |  |
|---|--|--|--|
| <ul style="list-style-type: none"> <li>• ANZ_Labels Profile Curves (Sag)</li> </ul>           |  |  <p>Profile curve diagram showing a sag curve. The vertical curve length is 120.00m. The low point elevation is 12.120m.</p>  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Labels Profile Curves (Sag) Low Point</li> </ul> |  |  <p>Profile curve diagram showing a sag curve. The low point elevation is 12.120m. The vertical curve length is 120.00m.</p> |  |



| Profile View Type/Name            | Description | Screen grab / DWF / DWG | Default |
|-----------------------------------|-------------|-------------------------|---------|
| • ANZ_1x Exaggeration             |             |                         |         |
| • ANZ_5x Exaggeration             |             |                         |         |
| • ANZ_10x Exaggeration            |             |                         |         |
| • ANZ_Pipe 1x Exaggeration        |             |                         |         |
| • ANZ_Pipe 5x Exaggeration        |             |                         |         |
| • ANZ_Pipe 10x Exaggeration       |             |                         |         |
| • ANZ_Quick Profile (5x)          |             |                         |         |
| • ANZ_Split_1x Exaggeration       |             |                         |         |
| • ANZ_Split_5x Exaggeration       |             |                         |         |
| • ANZ_Split_10x Exaggeration      |             |                         |         |
| • ANZ_Split_Pipe 1x Exaggeration  |             |                         |         |
| • ANZ_Split_Pipe 5x Exaggeration  |             |                         |         |
| • ANZ_Split_Pipe 10x Exaggeration |             |                         |         |

| Profile View Label Type/Name | Description | Screen grab / DWF / DWG | Default |
|------------------------------|-------------|-------------------------|---------|
| Station Elevation            |             |                         |         |

|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"> <li>• ANZ_Chainage Elev</li> </ul>      |  |  |  |
| <p>Depth</p> <ul style="list-style-type: none"> <li>• ANZ_Depth</li> </ul> |  |  |  |
| <p>Projection</p>  |  |  |  |



|   |  |  |  |
|---|--|--|--|
| <ul style="list-style-type: none"> <li>• ANZ_Projection (Profiles)</li> </ul>                     |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Projection (Profiles) Road Crossing Point</li> </ul> |  |  |  |

| Profile Band Type/Name  | Description | Screen grab / DWF / DWG | Default |
|---|-------------|-------------------------|---------|
| Profile Band Set  |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_Basic</li> </ul>                 |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_Pipes</li> </ul>                 |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_Road</li> </ul>                  |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_Road All Bands</li> </ul>        |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_Road_Geometry Details</li> </ul> |             |                         |         |

|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"> <li>• ANZ_Road_Geometry Details &amp; Superelevation</li> </ul> |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Volumes</li> </ul>                                    |  |  |  |
| Profile Data   |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Chainage</li> </ul>                                   |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Depth (P1-P2)</li> </ul>                              |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Design (P1)</li> </ul>                                |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_NS (P2)</li> </ul>                                    |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_PROFILE TITLE</li> </ul>                              |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Surface (P2) - Additional 1</li> </ul>                |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Surface (P2) - Additional 2</li> </ul>                |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Surface (P2) - Rock</li> </ul>                        |  |  |  |
| Vertical Geometry  |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Vertical</li> </ul>                                   |  |  |  |
| Horizontal Geometry  |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Horizontal</li> </ul>                                 |  |  |  |
| Superelevation Data  |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Super</li> </ul>                                      |  |  |  |
| Sectional Data   |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Vols CUT (Cumulative)</li> </ul>                      |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Vols FILL (Cumulative)</li> </ul>                     |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Vols NET (Cumulative)</li> </ul>                      |  |  |  |
| Pipe Network   |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_INVERT LEVELS</li> </ul>                              |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_(P2) Existing Surface</li> </ul>                      |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Capacity</li> </ul>                                   |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Chainage (PIPE)</li> </ul>                            |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Cover</li> </ul>                                      |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Design Elev at MH CL</li> </ul>                       |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_ELEV (pipe method)</li> </ul>                         |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Grade % (schematic)</li> </ul>                        |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_HGL &amp; FLOW</li> </ul>                             |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Junction Loss</li> </ul>                              |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Pipe Details</li> </ul>                               |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Pit Name (Top of Band)</li> </ul>                     |  |  |  |

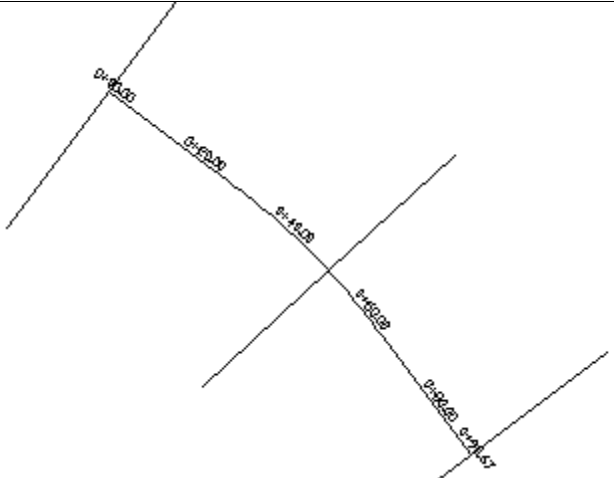
| •  |             |                         |         |
|--|-------------|-------------------------|---------|
| Superelevation View  | Description | Screen grab / DWF / DWG | Default |
| <ul style="list-style-type: none"> <li>ANZ_Superelevation Graph Vertical Ex 5</li> </ul> |             |                         |         |

**6.8 Sections**

Design Template: \_AutoCAD Civil3D 2014 ANZ Design\_ANZ.dwt

| Sample Line Styles  | Description | Screen grab / DWF / DWG | Default |
|---|-------------|-------------------------|---------|
| <ul style="list-style-type: none"> <li>ANZ_Sample Lines</li> </ul>              |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_Sample Lines (NO DISPLAY)</li> </ul> |             |                         |         |

| Sample Line Label Styles                                       | Description | Screen grab / DWF / DWG | Default |
|--|-------------|-------------------------|---------|
| <ul style="list-style-type: none"> <li>ANZ_Chainage</li> </ul> |             |                         |         |


|   |  |   |  |
|---|--|---|--|
| <ul style="list-style-type: none"> <li>• ANZ_No Labels</li> </ul> |  |  |  |
|---|--|---|--|

| Section Styles  | Description | Screen grab / DWF / DWG | Default |
|---|-------------|-------------------------|---------|
| <ul style="list-style-type: none"> <li>• ANZ_Surface Design</li> </ul>          |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_Surface Existing</li> </ul>        |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_Surface Rock</li> </ul>            |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_Surface_01 (Additional)</li> </ul> |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_Surface_02 (Additional)</li> </ul> |             |                         |         |

| Section Label Styles  | Description | Screen grab / DWF / DWG | Default |
|---|-------------|-------------------------|---------|
| Label Sets  |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_EG Sections Labels</li> </ul>                        |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_FG Sections Labels</li> </ul>                        |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_Major &amp; Minor Offsets</li> </ul>                 |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_No Labels</li> </ul>                                 |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_Ordinate Lines (No Weeding 0.0)</li> </ul>           |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_Ordinate Lines (Weeding .5m)</li> </ul>              |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_Ordinate Lines (Weeding .7m)</li> </ul>              |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ_Ordinate Lines (Weeding 1.0m)</li> </ul>             |             |                         |         |
| <ul style="list-style-type: none"> <li>• ANZ Ordinates (EXISTING SURFACE - end points)</li> </ul> |             |                         |         |
| Major Offset  |             |                         |         |

|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"> <li>• ANZ_Major Offset</li> </ul> |  |  |  |
| <ul style="list-style-type: none"> <li>• ANZ_Ordinates</li> </ul>    |  |  |  |
| <p>Minor Offset</p>  |  |  |  |

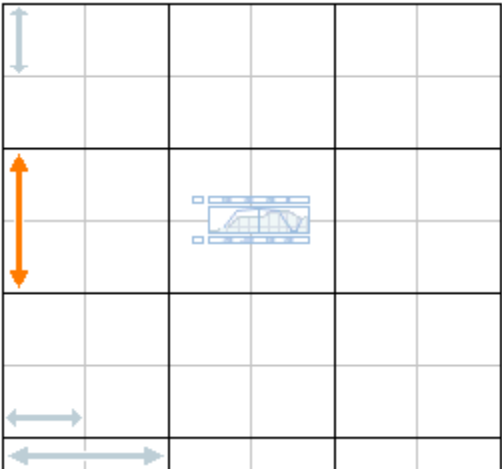
|  |  |  |  |
|--|--|--|--|
| <ul style="list-style-type: none"> <li>ANZ_Minor Offset</li> </ul> |  | <p style="text-align: center;"> <math display="block">\begin{array}{r} \text{OFF: } -25.000 \\ \text{LVL: } 0.000 \\ \hline \text{OFF: } -15.000 \\ \text{LVL: } 0.043 \\ \text{OFF: } -10.000 \\ \text{LVL: } 0.086 \\ \text{OFF: } -5.000 \\ \text{LVL: } 0.131 \\ \hline \text{OFF: } 5.000 \\ \text{LVL: } 0.316 \\ \text{OFF: } 10.000 \\ \text{LVL: } 0.194 \\ \text{OFF: } 15.000 \\ \text{LVL: } 0.280 \\ \hline \text{OFF: } 25.000 \\ \text{LVL: } 0.650 \end{array}</math> </p> |  |
| Grade Break  |  |  |  |
| <ul style="list-style-type: none"> <li>ANZ_EG Sections</li> </ul>  |  | <p style="text-align: center;"> <math display="block">\begin{array}{r} \text{LVL: } 0.041 \\ \text{OFFSET: } -30.000 \\ \hline \text{LVL: } 7.981 \\ \text{OFFSET: } -23.142 \\ \hline \text{LVL: } 0.075 \\ \text{OFFSET: } -23.355 \\ \hline \text{LVL: } 0.228 \\ \text{OFFSET: } 0.000 \\ \hline \text{LVL: } 0.217 \\ \text{OFFSET: } 13.296 \\ \hline \text{LVL: } 0.724 \\ \text{OFFSET: } 23.624 \\ \text{LVL: } 0.349 \\ \text{OFFSET: } 30.000 \end{array}</math> </p>           |  |

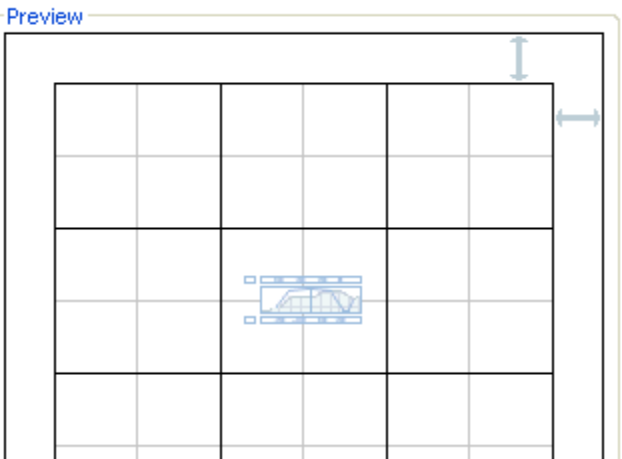
|   |  |   |  |
|---|--|---|--|
| <ul style="list-style-type: none"> <li>ANZ_FG Sections</li> </ul>           |  | <pre> LVL = 8041 P CODE = 117 OFFSET = -31410 LVL = 3981 P CODE = 117 OFFSET = -23162 LVL = 8075 P CODE = 117 OFFSET = -2355 LVL = 8328 P CODE = 117 OFFSET = 0.000 LVL = 8217 P CODE = 117 OFFSET = 13296 LVL = 8328 P CODE = 117 OFFSET = 23162 LVL = 8381 P CODE = 117 OFFSET = 36110                     </pre> |  |
| <ul style="list-style-type: none"> <li>ANZ_Ordinate Line to Band</li> </ul> |  |    |  |
| <p>Segment</p>  |  |   |  |

|   |  |  |  |
|---|--|--|--|
| <ul style="list-style-type: none"> <li>ANZ_FG Section Segments</li> </ul> |  | <pre> GRADE BREAK OFFSET = -30.000 ELEV = 80.000 GRADE BREAK OFFSET = -23.142 ELEV = 79.81 GRADE BREAK OFFSET = -12.355 ELEV = 80.75 GRADE BREAK OFFSET = 0.000 ELEV = 81.228 GRADE BREAK OFFSET = 13.296 ELEV = 81.217 GRADE BREAK OFFSET = 23.624 ELEV = 81.224 GRADE BREAK OFFSET = 30.000 ELEV = 81.309                     </pre> |  |
|---|--|--|--|

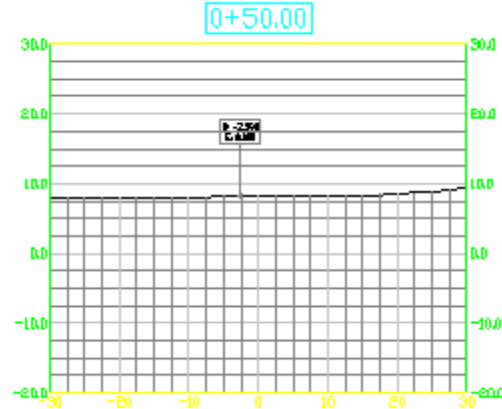
| Section View Styles   | Description | Screen grab / DWF / DWG | Default |
|---|-------------|-------------------------|---------|
| <ul style="list-style-type: none"> <li>ANZ_(Rd) X Section plot 1X - (No Vertical Ex)</li> </ul> |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_(Rd) X Section plot 2X Vert Ex</li> </ul>            |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_(Rd) X Section plot 5X Vert Ex</li> </ul>            |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_Rural Road</li> </ul>                                |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_X Section plot 1X Vert Ex (Maj &amp; Min)</li> </ul> |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_X Section plot 1X Vert Ex (Maj Only)</li> </ul>      |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_X Section plot 2X Vert Ex (Maj &amp; Min)</li> </ul> |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_X Section plot 2X Vert Ex (Maj Only)</li> </ul>      |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_X Section plot 5X Vert Ex (Maj &amp; Min)</li> </ul> |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_X Section plot 5X Vert Ex (Maj Only)</li> </ul>      |             |                         |         |
| <ul style="list-style-type: none"> <li></li> </ul>  |             |                         |         |
| <ul style="list-style-type: none"> <li></li> </ul>  |             |                         |         |

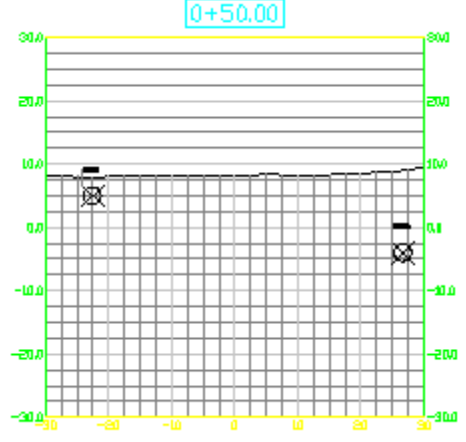


| Group Plot Styles  | Description | Screen grab / DWF / DWG   | Default |
|--|-------------|---|---------|
| <ul style="list-style-type: none"> <li>ANZ_Sections Sheet</li> </ul> |             |  |         |

| Sheet Styles   | Description | Screen grab / DWF / DWG  | Default |
|--|-------------|--|---------|
| <ul style="list-style-type: none"> <li>Standard</li> </ul> |             |  |         |

| Label Styles     | Description | Screen grab / DWF / DWG | Default |
|------------------|-------------|-------------------------|---------|
| Offset Elevation |             |                         |         |

|   |  |   |  |
|---|--|---|--|
| <ul style="list-style-type: none"> <li>• ANZ_Offset Elevation (Vertical Leader (up))</li> </ul> |  |  <p>A cross-section plot with a grid. The horizontal axis (stationing) ranges from -30 to 30 with major ticks every 10 units. The vertical axis (elevation) ranges from -20.0 to 30.0 with major ticks every 10.0 units. A yellow horizontal line is drawn at an elevation of 30.0. A vertical line is drawn at stationing 0+50.00. A vertical leader points from the top of this vertical line to a point labeled 'P-250' with a value of '6.661'. The ground profile is shown as a solid black line, which is relatively flat around an elevation of 10.0.</p> |  |
| <p>Grade</p>  |  |   |  |
| <p>ANZ_Grade</p>  |  |  <p>A cross-section plot with a grid. The horizontal axis (stationing) ranges from -30 to 30 with major ticks every 10 units. The vertical axis (elevation) ranges from -20.0 to 30.0 with major ticks every 10.0 units. A yellow horizontal line is drawn at an elevation of 30.0. A vertical line is drawn at stationing 0+50.00. A vertical leader points from the top of this vertical line to a point labeled '6.661'. The ground profile is shown as a solid black line, which is relatively flat around an elevation of 10.0.</p>                        |  |
| <p>Projection</p>   |  |   |  |

|  |  |   |  |
|--|--|---|--|
| <ul style="list-style-type: none"> <li>ANZ_Projection</li> </ul> |  |  |  |
|--|--|---|--|

| Section Band Styles   | Description | Screen grab / DWF / DWG | Default |
|---|-------------|-------------------------|---------|
| Band Sets   |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_(Road) (0.0 Weeding) (Design &amp; NS &amp; Difference) by Surfaces</li> </ul> |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_(Road) (0.5 Weeding) (Design &amp; NS &amp; Difference) by Surfaces</li> </ul> |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_(Road) (0.7 Weeding) (Design &amp; NS &amp; Difference) by Surfaces</li> </ul> |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_(Road) (1.0 Weeding) (Design &amp; NS &amp; Difference) by Surfaces</li> </ul> |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_General (5 Surfaces) (Maj &amp; Min)</li> </ul>                                |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_General (5 Surfaces) (Maj Only)</li> </ul>                                     |             |                         |         |
| <ul style="list-style-type: none"> <li></li> </ul>  |             |                         |         |
| <ul style="list-style-type: none"> <li></li> </ul>  |             |                         |         |
| <ul style="list-style-type: none"> <li></li> </ul>  |             |                         |         |
| Section Data  |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_(Rd) - (S1-S2) Level Difference (Grade Breaks)</li> </ul>                      |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_(Rd) - (S1) Design Surface (Grade Breaks)</li> </ul>                           |             |                         |         |
| <ul style="list-style-type: none"> <li>ANZ_(Rd) - (S2) Existing Surface</li> </ul>  |             |                         |         |

|   |  |  |  |
|---|--|--|--|
| (Grade Breaks)                          |  |  |  |
| • ANZ_(Rd) - Offsets (Grade Breaks)     |  |  |  |
| • ANZ_(S1) Additional 01 (Maj & Min)    |  |  |  |
| • ANZ_(S1) Additional 01 (Maj Only)     |  |  |  |
| • ANZ_(S1) Additional 02 (Maj & Min)    |  |  |  |
| • ANZ_(S1) Additional 02 (Maj Only)     |  |  |  |
| • ANZ_(S1) Design Surface (Maj & Min)   |  |  |  |
| • ANZ_(S1) Design Surface (Maj Only)    |  |  |  |
| • ANZ_(S1) Existing Surface (Maj & Min) |  |  |  |
| • ANZ_(S1) Existing Surface (Maj Only)  |  |  |  |
| • ANZ_(S1) Rock (Maj & Min)             |  |  |  |
| • ANZ_(S1) Rock (Maj Only)              |  |  |  |
| • TITLE - CH                            |  |  |  |
| • TITLE - CHAINAGE                      |  |  |  |


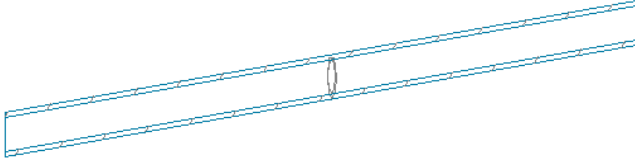
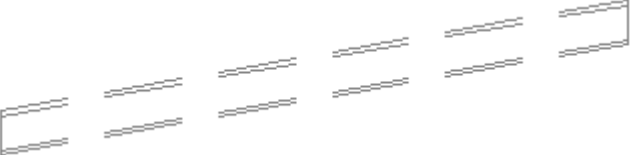

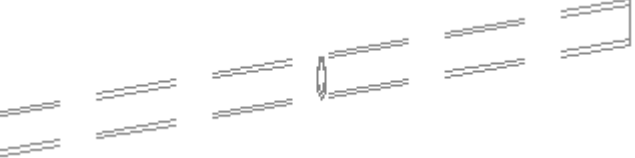
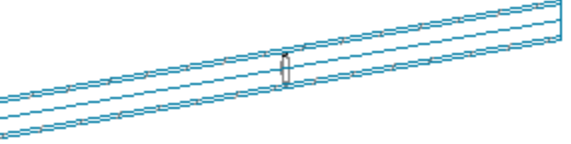
| Section Table Styles            | Description | Screen grab / DWF / DWG | Default |
|---------------------------------|-------------|-------------------------|---------|
| Total Volume                    |             |                         |         |
| • ANZ_Vol                       |             |                         |         |
| • ANZ_Vol (No Lines)            |             |                         |         |
| Material                        |             |                         |         |
| • ANZ_Vol (Material)            |             |                         |         |
| • ANZ_Vol (Material) - No Lines |             |                         |         |


**6.9 Pipe Networks**

Design Template: \_AutoCAD Civil3D 2014 ANZ Design\_ANZ.dwt

| Parts Lists | Description | Screen grab / DWF / DWG | Default |
|-------------|-------------|-------------------------|---------|
|             |             |                         |         |
|             |             |                         |         |

| Interference Styles | Description | Screen grab / DWF / DWG | Default |
|---------------------|-------------|-------------------------|---------|
|                     |             |                         |         |
|                     |             |                         |         |


| Pipe Styles   | Description | Screen grab / DWF / DWG   | Default |
|---|-------------|---|---------|
| _ANZ Sanitary Sewer Pipe                                |             |    |         |
| _ANZ Standard Pipe                                      |             |    |         |
| ANZ_Crossing Service - Profile- (X Section) only        |             |    |         |
| ANZ_Crossing Service - Profile- (X Section)&(Full Pipe) |             |    |         |
| ANZ_Crossing Service - Profile - (Full Pipe) only       |             |   |         |
| ANZ_Storm   |             |  |         |

|          |  |   |  |
|----------|--|---|--|
| Standard |  |  |  |
|----------|--|---|--|

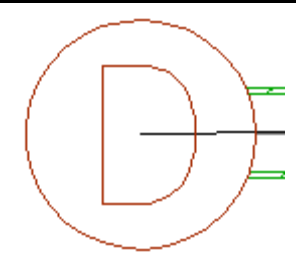
| Pipe Rule Set             | Description | Screen grab / DWF / DWG   | Default |
|---------------------------|-------------|---|---------|
| _ANZ Sanitary Sewer Pipes |             | <ul style="list-style-type: none"> <li>[-] Cover And Slope                             <ul style="list-style-type: none"> <li>Maximum Cover 3.000m</li> <li>Maximum Slope 10.00%</li> <li>Minimum Cover 0.500m</li> <li>Minimum Slope 1.00%</li> </ul> </li> <li>[-] Length Check                             <ul style="list-style-type: none"> <li>Maximum Length 30.000m</li> <li>Minimum Length 1.000m</li> </ul> </li> <li>[-] Pipe to Pipe Match                             <ul style="list-style-type: none"> <li>Match Location Invert</li> <li>Drop Value 0.000m</li> </ul> </li> </ul> |         |
| _ANZ Storm Drainage Pipes |             | <ul style="list-style-type: none"> <li>[-] Length Check                             <ul style="list-style-type: none"> <li>Maximum Length 50.000m</li> <li>Minimum Length 1.000m</li> </ul> </li> <li>[-] Cover and Slope                             <ul style="list-style-type: none"> <li>Maximum Cover 3.000m</li> <li>Maximum Slope 10.00%</li> <li>Minimum Cover 0.750m</li> <li>Minimum Slope 1.00%</li> </ul> </li> <li>[-] Pipe to Pipe Match                             <ul style="list-style-type: none"> <li>Match Location Invert</li> <li>Drop Value 0.000m</li> </ul> </li> </ul> |         |
| Basic                     |             |   |         |

|          |                 |          |
|----------|-----------------|----------|
| Standard | Cover and Slope |          |
|          | Maximum Cover   | 10.000m  |
|          | Maximum Slope   | 8.00%    |
|          | Minimum Cover   | 3.000m   |
|          | Minimum Slope   | 1.00%    |
|          | Length Check    |          |
|          | Maximum Length  | 200.000m |
|          | Minimum Length  | 1.000m   |

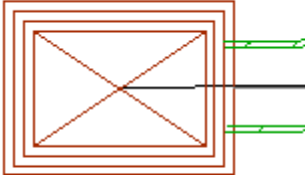
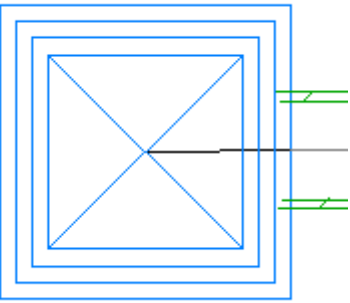
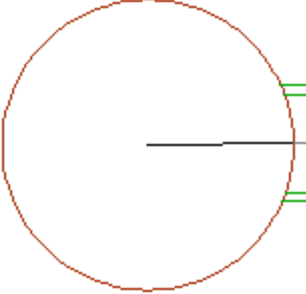
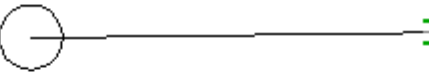
| Pipe Label Styles | Description | Screen grab / DWF / DWG | Default |
|-------------------|-------------|-------------------------|---------|
| Plan Profile      |             |                         |         |
| _ANZ Pipe Data    |             |                         |         |
| _ANZ Pipe Name    |             |                         |         |

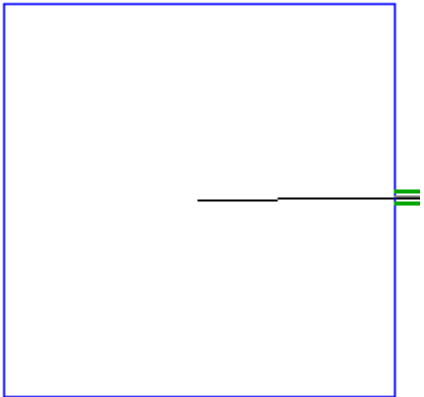
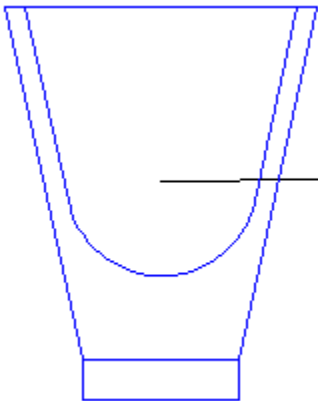
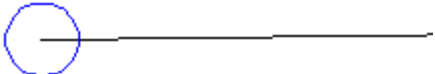
|                  |  |   |  |
|------------------|--|---|--|
| Standard         |  |  |  |
| Crossing Section |  |   |  |


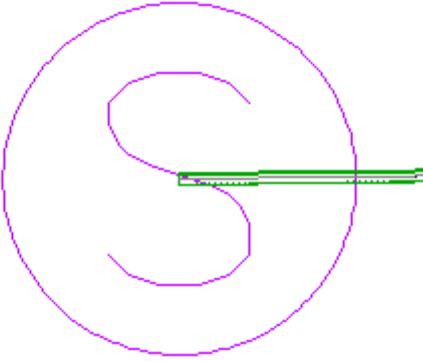
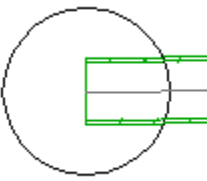
| Pipe Table Styles       | Description         | Screen grab / DWF / DWG  | Default                 |       |          |         |           |         |         |           |           |           |        |        |  |      |           |             |           |       |          |         |         |         |         |           |           |           |         |                     |       |       |     |        |         |         |        |       |      |       |      |  |
|-------------------------|---------------------|--|-------------------------|-------|----------|---------|-----------|---------|---------|-----------|-----------|-----------|--------|--------|--|------|-----------|-------------|-----------|-------|----------|---------|---------|---------|---------|-----------|-----------|-----------|---------|---------------------|-------|-------|-----|--------|---------|---------|--------|-------|------|-------|------|--|
| _ANZ Pipe Schedule      |                     | <table border="1"> <thead> <tr> <th colspan="13">PIPE SCHEDULE FOR: R-16</th> </tr> <tr> <th>NAME</th> <th>PIPE TYPE</th> <th>PIPE Ø [mm]</th> <th>3D LENGTH</th> <th>SLOPE</th> <th>MANNINGS</th> <th>U/S PIT</th> <th>D/S PIT</th> <th>U/S INV</th> <th>D/S INV</th> <th>MAX COVER</th> <th>MIN COVER</th> <th>PIPE DROP</th> </tr> </thead> <tbody> <tr> <td>R-16P28</td> <td>Reinforced Concrete</td> <td>Ø 222</td> <td>59.08</td> <td>1:8</td> <td>0.0000</td> <td>R-16N41</td> <td>R-16N42</td> <td>76.245</td> <td>63.25</td> <td>0.48</td> <td>-0.15</td> <td>7.00</td> </tr> </tbody> </table> | PIPE SCHEDULE FOR: R-16 |       |          |         |           |         |         |           |           |           |        |        |  | NAME | PIPE TYPE | PIPE Ø [mm] | 3D LENGTH | SLOPE | MANNINGS | U/S PIT | D/S PIT | U/S INV | D/S INV | MAX COVER | MIN COVER | PIPE DROP | R-16P28 | Reinforced Concrete | Ø 222 | 59.08 | 1:8 | 0.0000 | R-16N41 | R-16N42 | 76.245 | 63.25 | 0.48 | -0.15 | 7.00 |  |
| PIPE SCHEDULE FOR: R-16 |                     |  |                         |       |          |         |           |         |         |           |           |           |        |        |  |      |           |             |           |       |          |         |         |         |         |           |           |           |         |                     |       |       |     |        |         |         |        |       |      |       |      |  |
| NAME                    | PIPE TYPE           | PIPE Ø [mm]  | 3D LENGTH               | SLOPE | MANNINGS | U/S PIT | D/S PIT   | U/S INV | D/S INV | MAX COVER | MIN COVER | PIPE DROP |        |        |  |      |           |             |           |       |          |         |         |         |         |           |           |           |         |                     |       |       |     |        |         |         |        |       |      |       |      |  |
| R-16P28                 | Reinforced Concrete | Ø 222  | 59.08                   | 1:8   | 0.0000   | R-16N41 | R-16N42   | 76.245  | 63.25   | 0.48      | -0.15     | 7.00      |        |        |  |      |           |             |           |       |          |         |         |         |         |           |           |           |         |                     |       |       |     |        |         |         |        |       |      |       |      |  |
| Standard                |                     | <table border="1"> <thead> <tr> <th colspan="4">Pipe Table</th> </tr> <tr> <th>Pipe Name</th> <th>Size</th> <th>Length</th> <th>Slope</th> </tr> </thead> <tbody> <tr> <td>R-16P28</td> <td>222.000</td> <td>59.164</td> <td>11.83%</td> </tr> </tbody> </table>   | Pipe Table              |       |          |         | Pipe Name | Size    | Length  | Slope     | R-16P28   | 222.000   | 59.164 | 11.83% |  |      |           |             |           |       |          |         |         |         |         |           |           |           |         |                     |       |       |     |        |         |         |        |       |      |       |      |  |
| Pipe Table              |                     |  |                         |       |          |         |           |         |         |           |           |           |        |        |  |      |           |             |           |       |          |         |         |         |         |           |           |           |         |                     |       |       |     |        |         |         |        |       |      |       |      |  |
| Pipe Name               | Size                | Length   | Slope                   |       |          |         |           |         |         |           |           |           |        |        |  |      |           |             |           |       |          |         |         |         |         |           |           |           |         |                     |       |       |     |        |         |         |        |       |      |       |      |  |
| R-16P28                 | 222.000             | 59.164   | 11.83%                  |       |          |         |           |         |         |           |           |           |        |        |  |      |           |             |           |       |          |         |         |         |         |           |           |           |         |                     |       |       |     |        |         |         |        |       |      |       |      |  |

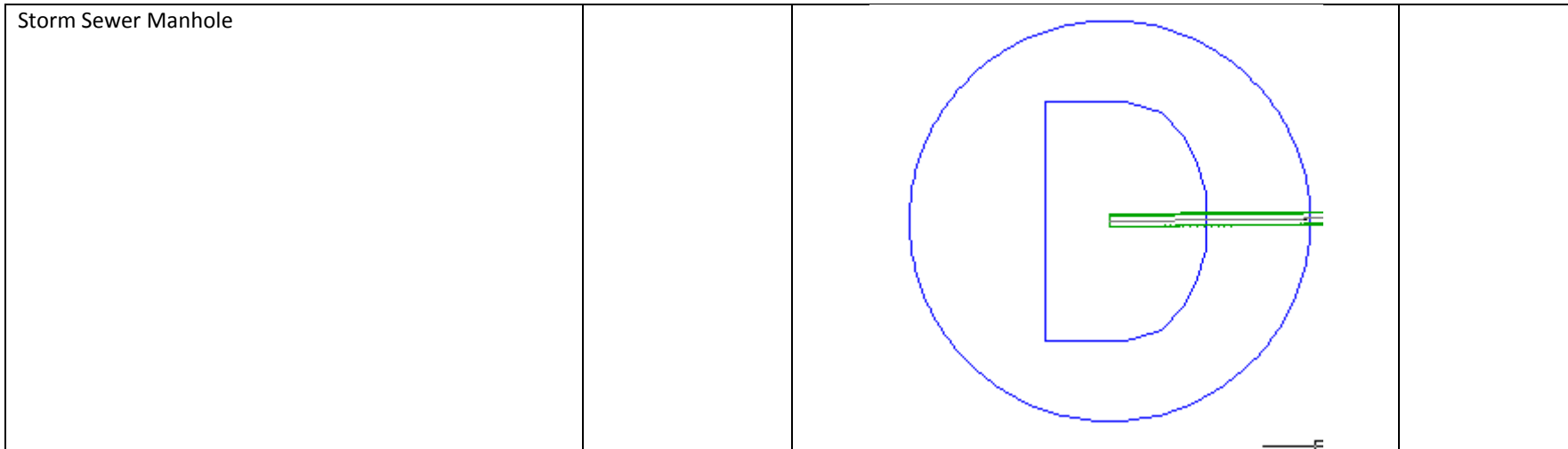
| Structure Styles | Description | Screen grab / DWF / DWG   | Default |
|------------------|-------------|---|---------|
| _ANZ Pit         |             |  |         |



|                          |  |   |  |
|--------------------------|--|---|--|
| <p>_ANZ SEP</p>          |  |    |  |
| <p>_ANZ SEP [Square]</p> |  |    |  |
| <p>_ANZ Wingwall</p>     |  |   |  |
| <p>Basic</p>             |  |  |  |


|                    |  |  |  |
|--------------------|--|--|--|
| Catch Basin        |  |  A diagram of a rectangular catch basin. It consists of a blue-outlined rectangle. In the center, there is a horizontal line representing an outlet pipe. To the right of this line, there are three short, parallel green lines extending to the right edge of the rectangle, indicating a connection or outlet. |  |
| Flared End Section |  |  A diagram of a flared end section. It is a blue-outlined shape that is wider at the top and tapers to a narrower rectangular base at the bottom. The bottom edge is curved upwards. A horizontal line is drawn across the middle of the section, representing a pipe or channel.                                |  |
| Headwall           |  |  A diagram of a headwall. It consists of a blue-outlined circle on the left side. A horizontal line extends from the center of the circle to the right, representing a pipe or channel.   |  |



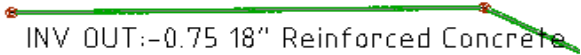

|                        |  |  |  |
|------------------------|--|--|--|
| Null                   |  |   |  |
| Sanitary Sewer Manhole |  |   |  |
| Standard               |  |  |  |






| Structure Rule Styles          | Description | Screen grab / DWF / DWG  | Default   |       |                 |                                |  |  |                         |        |        |            |        |  |                    |        |  |                    |  |  |            |        |        |  |
|--------------------------------|-------------|--|-----------|-------|-----------------|--------------------------------|--|--|-------------------------|--------|--------|------------|--------|--|--------------------|--------|--|--------------------|--|--|------------|--------|--------|--|
| _ANZ Manholes                  |             | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #eee;"> <th style="text-align: left;">Parameter</th> <th style="text-align: left;">Value</th> <th style="text-align: left;">Structure Value</th> </tr> </thead> <tbody> <tr style="background-color: #fff;"> <td>[-] Pipe Drop Across Structure</td> <td></td> <td></td> </tr> <tr style="background-color: #eee;"> <td>    Drop Reference Location</td> <td>Invert</td> <td></td> </tr> <tr style="background-color: #fff;"> <td>    Drop Value</td> <td>0.000m</td> <td></td> </tr> <tr style="background-color: #eee;"> <td>    Maximum Drop Value</td> <td>2.000m</td> <td></td> </tr> <tr style="background-color: #fff;"> <td>[-] Set Sump Depth</td> <td></td> <td></td> </tr> <tr style="background-color: #eee;"> <td>    Sump Depth</td> <td>0.000m</td> <td>0.000m</td> </tr> </tbody> </table> | Parameter | Value | Structure Value | [-] Pipe Drop Across Structure |  |  | Drop Reference Location | Invert |        | Drop Value | 0.000m |  | Maximum Drop Value | 2.000m |  | [-] Set Sump Depth |  |  | Sump Depth | 0.000m | 0.000m |  |
| Parameter                      | Value       | Structure Value  |           |       |                 |                                |  |  |                         |        |        |            |        |  |                    |        |  |                    |  |  |            |        |        |  |
| [-] Pipe Drop Across Structure |             |  |           |       |                 |                                |  |  |                         |        |        |            |        |  |                    |        |  |                    |  |  |            |        |        |  |
| Drop Reference Location        | Invert      |  |           |       |                 |                                |  |  |                         |        |        |            |        |  |                    |        |  |                    |  |  |            |        |        |  |
| Drop Value                     | 0.000m      |  |           |       |                 |                                |  |  |                         |        |        |            |        |  |                    |        |  |                    |  |  |            |        |        |  |
| Maximum Drop Value             | 2.000m      |  |           |       |                 |                                |  |  |                         |        |        |            |        |  |                    |        |  |                    |  |  |            |        |        |  |
| [-] Set Sump Depth             |             |  |           |       |                 |                                |  |  |                         |        |        |            |        |  |                    |        |  |                    |  |  |            |        |        |  |
| Sump Depth                     | 0.000m      | 0.000m   |           |       |                 |                                |  |  |                         |        |        |            |        |  |                    |        |  |                    |  |  |            |        |        |  |
| _ANZ Pits                      |             |  |           |       |                 |                                |  |  |                         |        |        |            |        |  |                    |        |  |                    |  |  |            |        |        |  |
| _ANZ Wingwalls                 |             | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #eee;"> <th style="text-align: left;">Parameter</th> <th style="text-align: left;">Value</th> <th style="text-align: left;">Structure Value</th> </tr> </thead> <tbody> <tr style="background-color: #fff;"> <td>[-] Set Sump Depth</td> <td></td> <td></td> </tr> <tr style="background-color: #eee;"> <td>    Sump Depth</td> <td>0.000m</td> <td>0.000m</td> </tr> </tbody> </table>  | Parameter | Value | Structure Value | [-] Set Sump Depth             |  |  | Sump Depth              | 0.000m | 0.000m |            |        |  |                    |        |  |                    |  |  |            |        |        |  |
| Parameter                      | Value       | Structure Value  |           |       |                 |                                |  |  |                         |        |        |            |        |  |                    |        |  |                    |  |  |            |        |        |  |
| [-] Set Sump Depth             |             |  |           |       |                 |                                |  |  |                         |        |        |            |        |  |                    |        |  |                    |  |  |            |        |        |  |
| Sump Depth                     | 0.000m      | 0.000m   |           |       |                 |                                |  |  |                         |        |        |            |        |  |                    |        |  |                    |  |  |            |        |        |  |

| Basic                          |        | <table border="1"> <thead> <tr> <th>Parameter</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>[-] Pipe Drop Across Structure</td> <td></td> </tr> <tr> <td>    Drop Reference Location</td> <td>Invert</td> </tr> <tr> <td>    Drop Value</td> <td>0.100m</td> </tr> <tr> <td>    Maximum Drop Value</td> <td>3.000m</td> </tr> <tr> <td>[-] Maximum pipe size check</td> <td></td> </tr> <tr> <td>    Maximum pipe diameter or wi...</td> <td>4.000m</td> </tr> </tbody> </table> | Parameter | Value | [-] Pipe Drop Across Structure |  | Drop Reference Location        | Invert | Drop Value                     | 0.100m | Maximum Drop Value      | 3.000m | [-] Maximum pipe size check |        | Maximum pipe diameter or wi... | 4.000m |  |  |
|--------------------------------|--------|--|-----------|-------|--------------------------------|--|--------------------------------|--------|--------------------------------|--------|-------------------------|--------|-----------------------------|--------|--------------------------------|--------|--|--|
| Parameter                      | Value  |  |           |       |                                |  |                                |        |                                |        |                         |        |                             |        |                                |        |  |  |
| [-] Pipe Drop Across Structure |        |  |           |       |                                |  |                                |        |                                |        |                         |        |                             |        |                                |        |  |  |
| Drop Reference Location        | Invert |  |           |       |                                |  |                                |        |                                |        |                         |        |                             |        |                                |        |  |  |
| Drop Value                     | 0.100m |  |           |       |                                |  |                                |        |                                |        |                         |        |                             |        |                                |        |  |  |
| Maximum Drop Value             | 3.000m |  |           |       |                                |  |                                |        |                                |        |                         |        |                             |        |                                |        |  |  |
| [-] Maximum pipe size check    |        |  |           |       |                                |  |                                |        |                                |        |                         |        |                             |        |                                |        |  |  |
| Maximum pipe diameter or wi... | 4.000m |  |           |       |                                |  |                                |        |                                |        |                         |        |                             |        |                                |        |  |  |
| Standard                       |        | <table border="1"> <thead> <tr> <th>Parameter</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>[-] Maximum pipe size check</td> <td></td> </tr> <tr> <td>    Maximum pipe diameter or wi...</td> <td>4.000m</td> </tr> <tr> <td>[-] Pipe Drop Across Structure</td> <td></td> </tr> <tr> <td>    Drop Reference Location</td> <td>Invert</td> </tr> <tr> <td>    Drop Value</td> <td>0.100m</td> </tr> <tr> <td>    Maximum Drop Value</td> <td>3.000m</td> </tr> </tbody> </table> | Parameter | Value | [-] Maximum pipe size check    |  | Maximum pipe diameter or wi... | 4.000m | [-] Pipe Drop Across Structure |        | Drop Reference Location | Invert | Drop Value                  | 0.100m | Maximum Drop Value             | 3.000m |  |  |
| Parameter                      | Value  |  |           |       |                                |  |                                |        |                                |        |                         |        |                             |        |                                |        |  |  |
| [-] Maximum pipe size check    |        |  |           |       |                                |  |                                |        |                                |        |                         |        |                             |        |                                |        |  |  |
| Maximum pipe diameter or wi... | 4.000m |  |           |       |                                |  |                                |        |                                |        |                         |        |                             |        |                                |        |  |  |
| [-] Pipe Drop Across Structure |        |  |           |       |                                |  |                                |        |                                |        |                         |        |                             |        |                                |        |  |  |
| Drop Reference Location        | Invert |  |           |       |                                |  |                                |        |                                |        |                         |        |                             |        |                                |        |  |  |
| Drop Value                     | 0.100m |  |           |       |                                |  |                                |        |                                |        |                         |        |                             |        |                                |        |  |  |
| Maximum Drop Value             | 3.000m |  |           |       |                                |  |                                |        |                                |        |                         |        |                             |        |                                |        |  |  |

| Structure Label Styles | Description | Screen grab / DWF / DWG  | Default |
|------------------------|-------------|--|---------|
| _ANZ Pit Data          |             | <p>R-19N48<br/>                     1,200 dia ANZ Concrete Manhole<br/>                     CH: ??? OFFSET: ??? ???<br/>                     RIM: 0.57 DEPTH: 0.80<br/>                     Inv Out: -0.23 / R-19N49</p>  |         |

|   |  |  |  |
|---|--|--|--|
| <p>_ANZ Pit Name</p>                        |  |   |  |
| <p>Data with Connected Pipes (Sanitary)</p> |  | <p>R-19N48<br/>             STA:??? OFF:??????<br/>             RIM:1.86<br/>             SUMP:-0.75<br/>             INV OUT:-0.75 18" Reinforced Concrete</p>   |  |
| <p>Data with Connected Pipes (Storm)</p>    |  | <p>R-19N48<br/>             STA:??? OFF:??????<br/>             RIM:1.86<br/>             SUMP:-0.75<br/>             INV OUT:-0.75 18" Reinforced Concrete</p>  |  |
| <p>empty</p>                                |  |   |  |

|                      |  |  |  |
|----------------------|--|--|--|
| Name Only (Sanitary) |  | R-19N48<br>                 |  |
| Name Only (Storm)    |  | R-19N48<br>                 |  |
| Standard             |  | 1,200 dia Concrete Manhole  |  |

| Structure Table Styles | Description  | Screen grab / DWF / DWG  | Default           |                   |                |                    |                   |  |                    |                |           |               |         |                     |                           |                  |  |  |  |  |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                            |                  |            |        |  |  |       |       |  |
|------------------------|--|--|-------------------|-------------------|----------------|--------------------|-------------------|--|--------------------|----------------|-----------|---------------|---------|---------------------|---------------------------|------------------|--|--|--|--|-------|-------|---------|---------------------|---------------------------|------------------|------------|--------|------------|--------|-------|-------|---------|---------------------|---------------------------|------------------|------------|--------|------------|--------|-------|-------|---------|---------------------|----------------------------|------------------|------------|--------|--|--|-------|-------|--|
| _ANZ Pit Schedule      |  | <p style="text-align: center;">PIT SCHEDULE FOR: R-19</p> <table border="1"> <thead> <tr> <th>PIT NAME</th> <th>PIT TYPE</th> <th>SETOUT COORDS</th> <th>INTERNAL DIM [mm]</th> <th>INLET <math>\phi</math> [mm]</th> <th>INLET INV [m]</th> <th>OUTLET <math>\phi</math> [mm]</th> <th>OUTLET INV [m]</th> <th>PIT FINAL</th> <th>PIT DEPTH [m]</th> </tr> </thead> <tbody> <tr> <td>R-19N48</td> <td>Reinforced Concrete</td> <td>E: 901.323<br/>N: 1288.928</td> <td>W: ???<br/>L: ???</td> <td></td> <td></td> <td></td> <td></td> <td>0.000</td> <td>0.795</td> </tr> <tr> <td>R-19N49</td> <td>Reinforced Concrete</td> <td>E: 951.566<br/>N: 1203.430</td> <td>W: 777<br/>L: ???</td> <td><math>\phi</math> 457</td> <td>-0.228</td> <td><math>\phi</math> 457</td> <td>-0.978</td> <td>0.566</td> <td>0.795</td> </tr> <tr> <td>R-19N50</td> <td>Reinforced Concrete</td> <td>E: 961.528<br/>N: 1187.664</td> <td>W: 777<br/>L: ???</td> <td><math>\phi</math> 457</td> <td>-0.978</td> <td><math>\phi</math> 457</td> <td>-1.728</td> <td>0.000</td> <td>0.978</td> </tr> <tr> <td>R-19N51</td> <td>Reinforced Concrete</td> <td>E: 1032.778<br/>N: 1205.795</td> <td>W: ???<br/>L: ???</td> <td><math>\phi</math> 457</td> <td>-1.728</td> <td></td> <td></td> <td>0.000</td> <td>1.728</td> </tr> </tbody> </table> | PIT NAME          | PIT TYPE          | SETOUT COORDS  | INTERNAL DIM [mm]  | INLET $\phi$ [mm] | INLET INV [m]  | OUTLET $\phi$ [mm] | OUTLET INV [m] | PIT FINAL | PIT DEPTH [m] | R-19N48 | Reinforced Concrete | E: 901.323<br>N: 1288.928 | W: ???<br>L: ??? |  |  |  |  | 0.000 | 0.795 | R-19N49 | Reinforced Concrete | E: 951.566<br>N: 1203.430 | W: 777<br>L: ??? | $\phi$ 457 | -0.228 | $\phi$ 457 | -0.978 | 0.566 | 0.795 | R-19N50 | Reinforced Concrete | E: 961.528<br>N: 1187.664 | W: 777<br>L: ??? | $\phi$ 457 | -0.978 | $\phi$ 457 | -1.728 | 0.000 | 0.978 | R-19N51 | Reinforced Concrete | E: 1032.778<br>N: 1205.795 | W: ???<br>L: ??? | $\phi$ 457 | -1.728 |  |  | 0.000 | 1.728 |  |
| PIT NAME               | PIT TYPE   | SETOUT COORDS  | INTERNAL DIM [mm] | INLET $\phi$ [mm] | INLET INV [m]  | OUTLET $\phi$ [mm] | OUTLET INV [m]    | PIT FINAL  | PIT DEPTH [m]      |                |           |               |         |                     |                           |                  |  |  |  |  |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                            |                  |            |        |  |  |       |       |  |
| R-19N48                | Reinforced Concrete  | E: 901.323<br>N: 1288.928  | W: ???<br>L: ???  |                   |                |                    |                   | 0.000  | 0.795              |                |           |               |         |                     |                           |                  |  |  |  |  |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                            |                  |            |        |  |  |       |       |  |
| R-19N49                | Reinforced Concrete  | E: 951.566<br>N: 1203.430  | W: 777<br>L: ???  | $\phi$ 457        | -0.228         | $\phi$ 457         | -0.978            | 0.566  | 0.795              |                |           |               |         |                     |                           |                  |  |  |  |  |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                            |                  |            |        |  |  |       |       |  |
| R-19N50                | Reinforced Concrete  | E: 961.528<br>N: 1187.664  | W: 777<br>L: ???  | $\phi$ 457        | -0.978         | $\phi$ 457         | -1.728            | 0.000  | 0.978              |                |           |               |         |                     |                           |                  |  |  |  |  |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                            |                  |            |        |  |  |       |       |  |
| R-19N51                | Reinforced Concrete  | E: 1032.778<br>N: 1205.795   | W: ???<br>L: ???  | $\phi$ 457        | -1.728         |                    |                   | 0.000  | 1.728              |                |           |               |         |                     |                           |                  |  |  |  |  |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                            |                  |            |        |  |  |       |       |  |
| Basic                  |  | <table border="1"> <thead> <tr> <th colspan="2">Structure Table</th> </tr> <tr> <th>Structure Name</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>R-19N49</td> <td>RIM = 1.859 SUMP = -0.750<br/>INV IN = -0.750<br/>INV OUT = -3.210</td> </tr> </tbody> </table>  | Structure Table   |                   | Structure Name | Details            | R-19N49           | RIM = 1.859 SUMP = -0.750<br>INV IN = -0.750<br>INV OUT = -3.210 |                    |                |           |               |         |                     |                           |                  |  |  |  |  |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                            |                  |            |        |  |  |       |       |  |
| Structure Table        |  |  |                   |                   |                |                    |                   |  |                    |                |           |               |         |                     |                           |                  |  |  |  |  |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                            |                  |            |        |  |  |       |       |  |
| Structure Name         | Details  |  |                   |                   |                |                    |                   |  |                    |                |           |               |         |                     |                           |                  |  |  |  |  |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                            |                  |            |        |  |  |       |       |  |
| R-19N49                | RIM = 1.859 SUMP = -0.750<br>INV IN = -0.750<br>INV OUT = -3.210 |  |                   |                   |                |                    |                   |  |                    |                |           |               |         |                     |                           |                  |  |  |  |  |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                           |                  |            |        |            |        |       |       |         |                     |                            |                  |            |        |  |  |       |       |  |

|                      |                        |   |   |                                  |
|----------------------|------------------------|---|---|----------------------------------|
| Standard             | <b>Structure Table</b> |   |   |                                  |
|                      | <b>Structure Name</b>  |   | <b>Structure Details</b>  |                                  |
|                      | R-19N49                |   | RIM = 0.566<br>SUMP = -0.228<br>R-19P29 INV IN = -0.228<br>R-19P30 INV OUT = -0.978 |                                  |
| Structure with Pipes | <b>STRUCTURE TABLE</b> |   |   |                                  |
|                      | <b>STRUCTURE NAME:</b> | <b>DETAILS:</b>   | <b>PIPES IN:</b>  | <b>PIPES OUT:</b>                |
|                      | R-19N49                | 47"<br>RIM = 1.86<br>SUMP = -0.7<br>INV IN = -0.228<br>INV OUT = -0.978 | R-19P29, 18" REINFORCED CONCRETE INV IN = -0.76                                     | R-19P30, 18" REINFORCED CONCRETE |

**6.10 Corridors**

Design Template: \_AutoCAD Civil3D 2014 ANZ Design\_ANZ.dwt

| Corridor Styles | Description | Screen grab / DWF / DWG | Default |
|-----------------|-------------|-------------------------|---------|
| ANZ_Corridor    |             |                         |         |
| Basic           |             |                         |         |
| Standard        |             |                         |         |

| Assembly Styles      | Description | Screen grab / DWF / DWG | Default |
|----------------------|-------------|-------------------------|---------|
| ANZ_Assembly default |             |                         |         |
| Basic                |             |                         |         |
| Standard             |             |                         |         |

| Quantity Takeoff Criteria      | Description | Screen grab / DWF / DWG | Default |
|--------------------------------|-------------|-------------------------|---------|
| _ANZ Cut Fill                  |             |                         |         |
| _ANZ Earthworks                |             |                         |         |
| _ANZ Paving Materials          |             |                         |         |
| ANZ_Earthworks                 |             |                         |         |
| ANZ_Footpaths                  |             |                         |         |
| ANZ_Road Construction          |             |                         |         |
| ANZ_Road Construction Complete |             |                         |         |
| ANZ_Road Narrow Widening       |             |                         |         |



|                  |  |  |  |
|------------------|--|--|--|
| ANZ_Road Overlay |  |  |  |
| ANZ_Road Planing |  |  |  |
| ANZ_Two Surfaces |  |  |  |
| Cut and Fill     |  |  |  |
| Earthworks       |  |  |  |
| Material List    |  |  |  |
| Standard         |  |  |  |

| QTO Table Styles | Description | Screen grab / DWF / DWG | Default |
|------------------|-------------|-------------------------|---------|
| Total Volume     |             |                         |         |
|                  |             |                         |         |
| Material         |             |                         |         |
|                  |             |                         |         |

**6.11 Plan and Profile Sheets**

Design Template: \_AutoCAD Civil3D 2014 ANZ Design\_ANZ.dwt

| View Frame Styles | Description | Screen grab / DWF / DWG | Default |
|-------------------|-------------|-------------------------|---------|
|                   |             |                         |         |
|                   |             |                         |         |

| View Frame Label Styles | Description | Screen grab / DWF / DWG | Default |
|-------------------------|-------------|-------------------------|---------|
|                         |             |                         |         |
|                         |             |                         |         |

| Match Line Styles | Description | Screen grab / DWF / DWG | Default |
|-------------------|-------------|-------------------------|---------|
|                   |             |                         |         |
|                   |             |                         |         |

| Match Line Label Styles | Description | Screen grab / DWF / DWG | Default |
|-------------------------|-------------|-------------------------|---------|
| Match Line Left         |             |                         |         |
|                         |             |                         |         |
| Match Line Right        |             |                         |         |
|                         |             |                         |         |

**6.12 General - Multipurpose Styles – Shape Styles**

| Display Component    | Visible | Layer            | Color | Linetype | LTScale | Lineweight | Plot Style |
|----------------------|---------|------------------|-------|----------|---------|------------|------------|
| All View Directions: |         |                  |       |          |         |            |            |
| Shape Border Line    | On      | C-ROAD-SHAP      | Blue  | ByLayer  | 1.0000  | ByLayer    | NA         |
| Shape Area Fill      | On      | C-ROAD-SHAP-PATT | Blue  | ByLayer  | 1.0000  | ByLayer    | NA         |

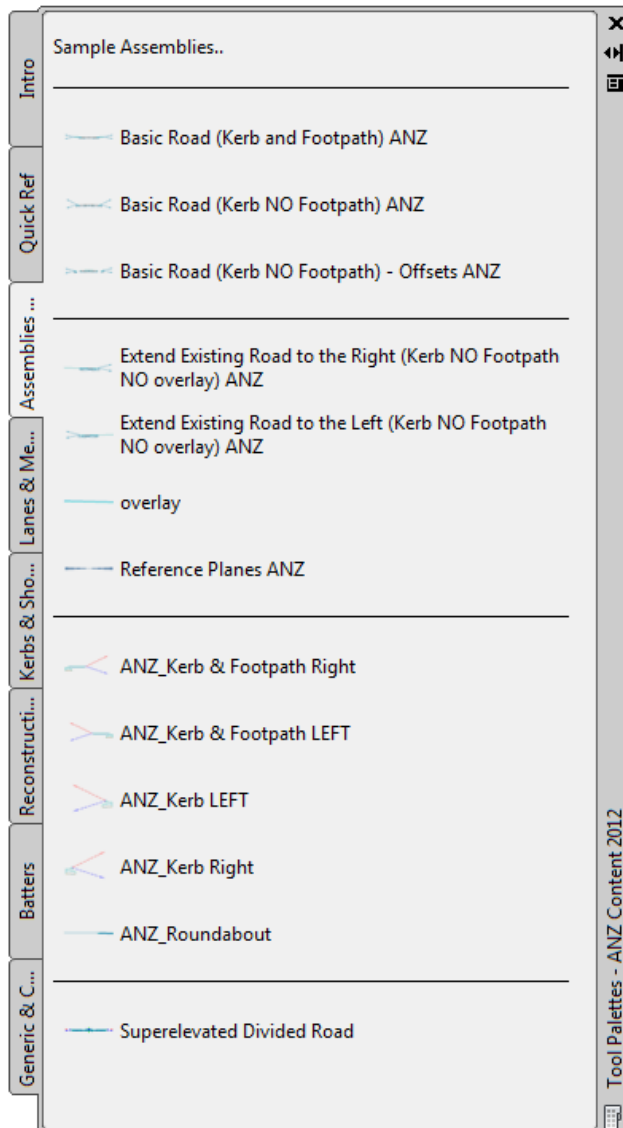
| Hatch Display Component Type | Pattern | Angle | Scale  |
|------------------------------|---------|-------|--------|
| All View Directions:         |         |       |        |
| Shape Area Fill              | ANSI31  | 0     | 1.7500 |

## 7 Tool palette(s)

### 7.1 Subassemblies and assemblies

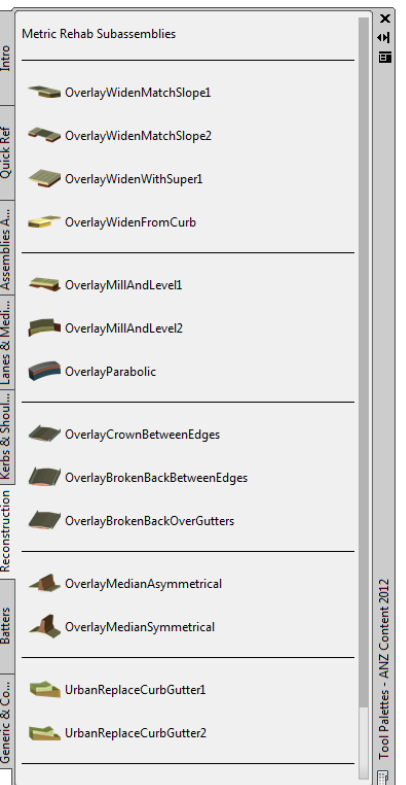
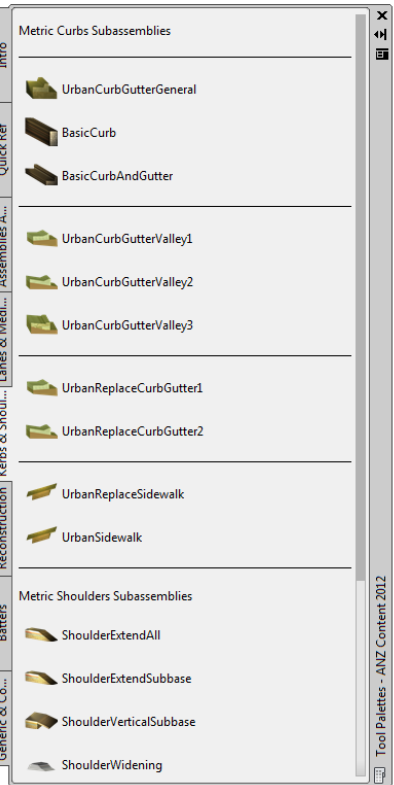
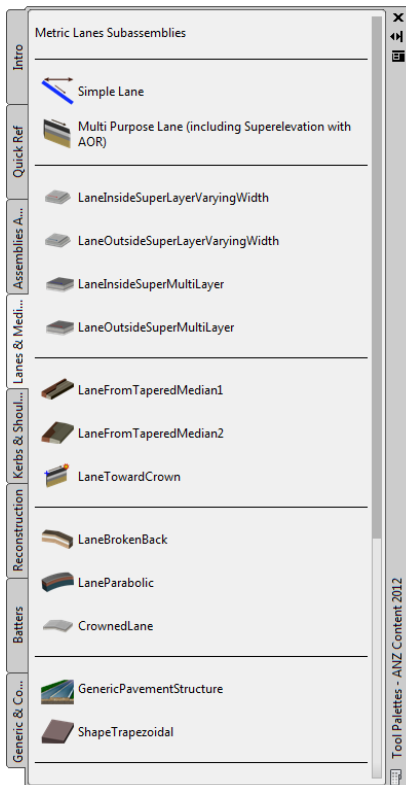
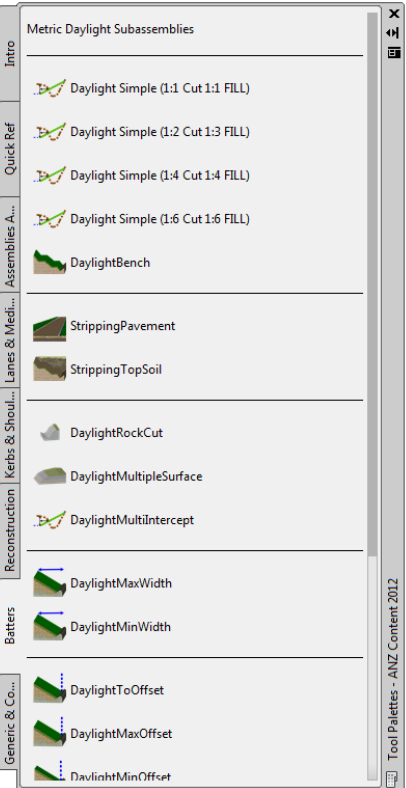
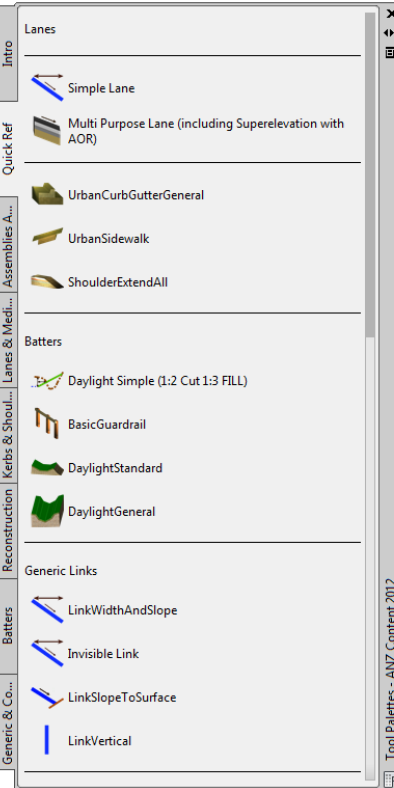
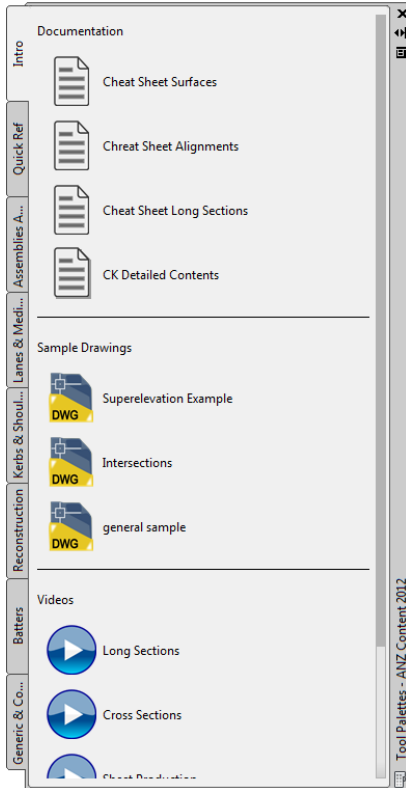
The ANZ Tool Palette has specific assemblies for typical designs in Australia and New Zealand

These are listed in the screen capture below.



The existing subassemblies have been rearranged into a more logical order with some minor edits.

The most regularly used subassemblies are in the "Quick Ref" palette to enable designers to access the information without searching through individual palettes.



## 8 Pipe and Structure Catalogs

### ANZ Concrete Pipe RCRRJ CLASS 2

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name        |
|---------------------|---------------------|-----------------------|
| 30.00               | 222.00              | 225 NB RCRRJ CLASS 2  |
| 32.00               | 305.00              | 300 NB RCRRJ CLASS 2  |
| 32.00               | 381.00              | 375 NB RCRRJ CLASS 2  |
| 38.00               | 457.00              | 450 NB RCRRJ CLASS 2  |
| 41.00               | 533.00              | 525 NB RCRRJ CLASS 2  |
| 51.00               | 610.00              | 600 NB RCRRJ CLASS 2  |
| 48.00               | 686.00              | 675 NB RCRRJ CLASS 2  |
| 51.00               | 762.00              | 750 NB RCRRJ CLASS 2  |
| 54.00               | 838.00              | 825 NB RCRRJ CLASS 2  |
| 64.00               | 914.00              | 900 NB RCRRJ CLASS 2  |
| 70.00               | 991.00              | 975 NB RCRRJ CLASS 2  |
| 76.00               | 1067.00             | 1050 NB RCRRJ CLASS 2 |
| 76.00               | 1219.00             | 1200 NB RCRRJ CLASS 2 |
| 76.00               | 1372.00             | 1350 NB RCRRJ CLASS 2 |
| 76.00               | 1524.00             | 1500 NB RCRRJ CLASS 2 |
| 82.00               | 1589.00             | 1600 NB RCRRJ CLASS 2 |
| 83.00               | 1676.00             | 1650 NB RCRRJ CLASS 2 |
| 101.00              | 1804.00             | 1800 NB RCRRJ CLASS 2 |
| 102.00              | 2032.00             | 1950 NB RCRRJ CLASS 2 |
| 125.00              | 2100.00             | 2100 NB RCRRJ CLASS 2 |
| 125.00              | 2250.00             | 2250 NB RCRRJ CLASS 2 |
| 175.00              | 2400.00             | 2400 NB RCRRJ CLASS 2 |
| 175.00              | 2550.00             | 2550 NB RCRRJ CLASS 2 |
| 175.00              | 2700.00             | 2700 NB RCRRJ CLASS 2 |

## ANZ Concrete Pipe RCRRJ CLASS 3

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name        |
|---------------------|---------------------|-----------------------|
| 30.00               | 222.00              | 225 NB RCRRJ CLASS 3  |
| 32.00               | 305.00              | 300 NB RCRRJ CLASS 3  |
| 32.00               | 381.00              | 375 NB RCRRJ CLASS 3  |
| 38.00               | 457.00              | 450 NB RCRRJ CLASS 3  |
| 41.00               | 533.00              | 525 NB RCRRJ CLASS 3  |
| 49.00               | 600.00              | 600 NB RCRRJ CLASS 3  |
| 51.00               | 680.00              | 675 NB RCRRJ CLASS 3  |
| 54.00               | 756.00              | 750 NB RCRRJ CLASS 3  |
| 57.00               | 832.00              | 825 NB RCRRJ CLASS 3  |
| 64.00               | 914.00              | 900 NB RCRRJ CLASS 3  |
| 70.00               | 991.00              | 975 NB RCRRJ CLASS 3  |
| 76.00               | 1067.00             | 1050 NB RCRRJ CLASS 3 |
| 76.00               | 1219.00             | 1200 NB RCRRJ CLASS 3 |
| 82.00               | 1360.00             | 1350 NB RCRRJ CLASS 3 |
| 86.00               | 1504.00             | 1500 NB RCRRJ CLASS 3 |
| 88.00               | 1577.00             | 1600 NB RCRRJ CLASS 3 |
| 93.00               | 1656.00             | 1650 NB RCRRJ CLASS 3 |
| 101.00              | 1804.00             | 1800 NB RCRRJ CLASS 3 |
| 110.00              | 2016.00             | 1950 NB RCRRJ CLASS 3 |
| 125.00              | 2100.00             | 2100 NB RCRRJ CLASS 3 |
| 125.00              | 2250.00             | 2250 NB RCRRJ CLASS 3 |
| 175.00              | 2400.00             | 2400 NB RCRRJ CLASS 3 |
| 175.00              | 2550.00             | 2550 NB RCRRJ CLASS 3 |
| 175.00              | 2700.00             | 2700 NB RCRRJ CLASS 3 |

## ANZ Concrete Pipe RCRRJ CLASS 4

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name       |
|---------------------|---------------------|----------------------|
| 30.00               | 222.00              | 225 NB RCRRJ CLASS 4 |
| 32.00               | 305.00              | 300 NB RCRRJ CLASS 4 |
| 32.00               | 375.00              | 375 NB RCRRJ CLASS 4 |

|        |         |                       |
|--------|---------|-----------------------|
| 41.00  | 451.00  | 450 NB RCRRJ CLASS 4  |
| 48.00  | 520.00  | 525 NB RCRRJ CLASS 4  |
| 56.00  | 586.00  | 600 NB RCRRJ CLASS 4  |
| 60.00  | 662.00  | 675 NB RCRRJ CLASS 4  |
| 67.00  | 730.00  | 750 NB RCRRJ CLASS 4  |
| 70.00  | 806.00  | 825 NB RCRRJ CLASS 4  |
| 73.00  | 896.00  | 900 NB RCRRJ CLASS 4  |
| 79.00  | 973.00  | 975 NB RCRRJ CLASS 4  |
| 86.00  | 1047.00 | 1050 NB RCRRJ CLASS 4 |
| 92.00  | 1187.00 | 1200 NB RCRRJ CLASS 4 |
| 96.00  | 1332.00 | 1332 NB RCRRJ CLASS 4 |
| 104.00 | 1468.00 | 1500 NB RCRRJ CLASS 4 |
| 108.00 | 1537.00 | 1600 NB RCRRJ CLASS 4 |
| 111.00 | 1620.00 | 1650 NB RCRRJ CLASS 4 |
| 120.00 | 1767.00 | 1800 NB RCRRJ CLASS 4 |
| 140.00 | 1956.00 | 1950 NB RCRRJ CLASS 4 |
| 125.00 | 2100.00 | 2100 NB RCRRJ CLASS 4 |
| 125.00 | 2250.00 | 2250 NB RCRRJ CLASS 4 |
| 175.00 | 2400.00 | 2400 NB RCRRJ CLASS 4 |
| 175.00 | 2550.00 | 2550 NB RCRRJ CLASS 4 |
| 175.00 | 2700.00 | 2700 NB RCRRJ CLASS 4 |

## ANZ Concrete Pipe RCFJ CLASS 2

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name       |
|---------------------|---------------------|----------------------|
| 44.00               | 610.00              | 600 NB RCFJ CLASS 2  |
| 49.00               | 685.00              | 675 NB RCFJ CLASS 2  |
| 51.00               | 762.00              | 750 NB RCFJ CLASS 2  |
| 57.00               | 914.00              | 900 NB RCFJ CLASS 2  |
| 64.00               | 1067.00             | 1050 NB RCFJ CLASS 2 |
| 70.00               | 1219.00             | 1200 NB RCFJ CLASS 2 |
| 76.00               | 1372.00             | 1350 NB RCFJ CLASS 2 |
| 76.00               | 1524.00             | 1500 NB RCFJ CLASS 2 |
| 83.00               | 1676.00             | 1650 NB RCFJ CLASS 2 |
| 89.00               | 1828.00             | 1800 NB RCFJ CLASS 2 |
| 102.00              | 2032.00             | 1950 NB RCFJ CLASS 2 |
| 102.00              | 2032.00             | 2050 NB RCFJ CLASS 2 |

|        |         |                      |
|--------|---------|----------------------|
| 127.00 | 2312.00 | 2300 NB RCFJ CLASS 2 |
|--------|---------|----------------------|

### ANZ Concrete Pipe RCFJ CLASS 3

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name       |
|---------------------|---------------------|----------------------|
| 49.00               | 600.00              | 600 NB RCFJ CLASS 3  |
| 49.00               | 685.00              | 675 NB RCFJ CLASS 3  |
| 54.00               | 756.00              | 750 NB RCFJ CLASS 3  |
| 64.00               | 900.00              | 900 NB RCFJ CLASS 3  |
| 70.00               | 1054.00             | 1050 NB RCFJ CLASS 3 |
| 76.00               | 1207.00             | 1200 NB RCFJ CLASS 3 |
| 83.00               | 1358.00             | 1300 NB RCFJ CLASS 3 |
| 86.00               | 1504.00             | 1500 NB RCFJ CLASS 3 |
| 93.00               | 1656.00             | 1650 NB RCFJ CLASS 3 |
| 99.00               | 1808.00             | 1800 NB RCFJ CLASS 3 |
| 110.00              | 2016.00             | 1950 NB RCFJ CLASS 3 |
| 102.00              | 2032.00             | 2050 NB RCFJ CLASS 3 |
| 140.00              | 2286.00             | 2300 NB RCFJ CLASS 3 |

### ANZ Concrete Pipe RCFJ CLASS 4

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name       |
|---------------------|---------------------|----------------------|
| 56.00               | 586.00              | 600 NB RCFJ CLASS 4  |
| 49.00               | 685.00              | 675 NB RCFJ CLASS 4  |
| 67.00               | 730.00              | 750 NB RCFJ CLASS 4  |
| 73.00               | 883.00              | 900 NB RCFJ CLASS 4  |
| 84.00               | 1026.00             | 1050 NB RCFJ CLASS 4 |
| 90.00               | 1179.00             | 1200 NB RCFJ CLASS 4 |
| 96.00               | 1332.00             | 1350 NB RCFJ CLASS 4 |
| 104.00              | 1468.00             | 1500 NB RCFJ CLASS 4 |
| 111.00              | 1620.00             | 1650 NB RCFJ CLASS 4 |
| 117.00              | 1772.00             | 1800 NB RCFJ CLASS 4 |
| 140.00              | 1956.00             | 1950 NB RCFJ CLASS 4 |



|        |         |                      |
|--------|---------|----------------------|
| 102.00 | 2032.00 | 2050 NB RCFJ CLASS 4 |
| 140.00 | 2286.00 | 2300 NB RCFJ CLASS 4 |

## ANZ Concrete Pipe

### RCP CLASS 2

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name     |
|---------------------|---------------------|--------------------|
| 35.00               | 225.00              | 225 NB RCP CLASS 2 |
| 35.00               | 300.00              | 300 NB RCP CLASS 2 |
| 35.00               | 375.00              | 375 NB RCP CLASS 2 |
| 40.00               | 450.00              | 450 NB RCP CLASS 2 |
| 45.00               | 525.00              | 525 NB RCP CLASS 2 |
| 50.00               | 600.00              | 600 NB RCP CLASS 2 |

## ANZ Concrete Pipe

### RCP CLASS 3

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name     |
|---------------------|---------------------|--------------------|
| 35.00               | 225.00              | 225 NB RCP CLASS 3 |
| 35.00               | 300.00              | 300 NB RCP CLASS 3 |
| 35.00               | 375.00              | 375 NB RCP CLASS 3 |
| 40.00               | 450.00              | 450 NB RCP CLASS 3 |
| 45.00               | 525.00              | 525 NB RCP CLASS 3 |
| 50.00               | 600.00              | 600 NB RCP CLASS 3 |

## ANZ Concrete Pipe

### RCP CLASS 4

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name     |
|---------------------|---------------------|--------------------|
| 35.00               | 225.00              | 225 NB RCP CLASS 4 |
| 35.00               | 300.00              | 300 NB RCP CLASS 4 |
| 35.00               | 375.00              | 375 NB RCP CLASS 4 |
| 40.00               | 450.00              | 450 NB RCP CLASS 4 |
| 45.00               | 525.00              | 525 NB RCP CLASS 4 |
| 50.00               | 600.00              | 600 NB RCP CLASS 4 |

**ANZ Concrete Pipe****RCSRJ CLASS 2**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name        |
|---------------------|---------------------|-----------------------|
| 115.00              | 770.00              | 750 NB RCSRJ CLASS 2  |
| 135.00              | 1030.00             | 1050 NB RCSRJ CLASS 2 |
| 140.00              | 1960.00             | 1950 NB RCSRJ CLASS 2 |
| 140.00              | 2100.00             | 2100 NB RCSRJ CLASS 2 |
| 225.00              | 2250.00             | 2300 NB RCSRJ CLASS 2 |
| 150.00              | 2550.00             | 2550 NB RCSRJ CLASS 2 |
| 200.00              | 3050.00             | 3050 NB RCSRJ CLASS 2 |

**ANZ Concrete Pipe****RCSRJ CLASS 3**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name        |
|---------------------|---------------------|-----------------------|
| 140.00              | 1981.00             | 1950 NB RCSRJ CLASS 3 |
| 140.00              | 2082.00             | 2100 NB RCSRJ CLASS 3 |
| 225.00              | 2250.00             | 2300 NB RCSRJ CLASS 3 |
| 150.00              | 2550.00             | 2550 NB RCSRJ CLASS 3 |
| 200.00              | 3050.00             | 3050 NB RCSRJ CLASS 3 |

**ANZ Concrete Pipe****RCSRJ CLASS 4**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name        |
|---------------------|---------------------|-----------------------|
| 140.00              | 1981.00             | 1950 NB RCSRJ CLASS 4 |
| 206.00              | 2088.00             | 2100 NB RCSRJ CLASS 4 |
| 225.00              | 2250.00             | 2300 NB RCSRJ CLASS 4 |
| 190.00              | 2470.00             | 2550 NB RCSRJ CLASS 4 |
| 260.00              | 3000.00             | 3050 NB RCSRJ CLASS 4 |

**ANZ Concrete Pipe****RCBJ CLASS 4**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name       |
|---------------------|---------------------|----------------------|
| 80.00               | 375.00              | 375 NB RCBJ CLASS 4  |
| 80.00               | 450.00              | 450 NB RCBJ CLASS 4  |
| 80.00               | 622.00              | 600 NB RCBJ CLASS 4  |
| 90.00               | 900.00              | 900 NB RCBJ CLASS 4  |
| 115.00              | 1080.00             | 1200 NB RCBJ CLASS 4 |
| 120.00              | 1284.00             | 1300 NB RCBJ CLASS 4 |

**ANZ uPVC Pipe****PN 6**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name   |
|---------------------|---------------------|------------------|
| 1.40                | 45.20               | 40NB UPVC PN 6   |
| 1.60                | 56.80               | 50 NB UPVC PN 6  |
| 2.00                | 71.00               | 65 NB UPVC PN 6  |
| 2.20                | 80.00               | 75 NB UPVC PN 6  |
| 2.40                | 83.70               | 80 NB UPVC PN 6  |
| 2.70                | 95.00               | 90 NB UPVC PN 6  |
| 3.00                | 107.80              | 100 NB UPVC PN 6 |
| 3.70                | 132.20              | 125 NB UPVC PN 6 |
| 4.20                | 151.30              | 150 NB UPVC PN 6 |
| 5.40                | 213.80              | 200 NB UPVC PN 6 |
| 6.00                | 237.70              | 225NB UPVC PN 6  |
| 6.70                | 266.20              | 250 NB UPVC PN 6 |
| 7.50                | 299.50              | 300 NB UPVC PN 6 |
| 9.50                | 380.30              | 375 NB UPVC PN 6 |

**ANZ uPVC Pipe****PN 9**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name  |
|---------------------|---------------------|-----------------|
| 1.40                | 30.50               | 25 NB UPVC PN 9 |
| 1.70                | 38.50               | 32 NB UPVC PN 9 |

|       |        |                  |
|-------|--------|------------------|
| 1.90  | 44.10  | 40NB UPVC PN 9   |
| 2.40  | 55.20  | 50 NB UPVC PN 9  |
| 3.00  | 68.90  | 65 NB UPVC PN 9  |
| 3.30  | 78.00  | 75 NB UPVC PN 9  |
| 3.50  | 81.30  | 80 NB UPVC PN 9  |
| 4.00  | 92.00  | 90 NB UPVC PN 9  |
| 4.50  | 104.60 | 100 NB UPVC PN 9 |
| 5.50  | 128.40 | 125 NB UPVC PN 9 |
| 6.30  | 146.90 | 150 NB UPVC PN 9 |
| 6.90  | 208.50 | 200 NB UPVC PN 9 |
| 8.80  | 231.70 | 225NB UPVC PN 9  |
| 9.90  | 259.40 | 250 NB UPVC PN 9 |
| 11.10 | 292.00 | 300 NB UPVC PN 9 |
| 14.10 | 370.70 | 375 NB UPVC PN 9 |

## ANZ uPVC Pipe

### PN 12

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name    |
|---------------------|---------------------|-------------------|
| 1.40                | 23.70               | 20 NB UPVC PN 12  |
| 1.70                | 29.80               | 25 NB UPVC PN 12  |
| 2.20                | 37.50               | 32 NB UPVC PN 12  |
| 2.50                | 42.80               | 40NB UPVC PN 12   |
| 3.10                | 53.70               | 50 NB UPVC PN 12  |
| 3.90                | 67.00               | 65 NB UPVC PN 12  |
| 4.30                | 76.00               | 75 NB UPVC PN 12  |
| 4.60                | 79.00               | 80 NB UPVC PN 12  |
| 5.30                | 91.00               | 90 NB UPVC PN 12  |
| 5.90                | 101.70              | 100 NB UPVC PN 12 |
| 7.20                | 124.90              | 125 NB UPVC PN 12 |
| 8.30                | 142.70              | 150 NB UPVC PN 12 |
| 10.50               | 203.10              | 200 NB UPVC PN 12 |
| 11.60               | 225.80              | 225NB UPVC PN 12  |
| 13.00               | 252.90              | 250 NB UPVC PN 12 |
| 14.70               | 284.50              | 300 NB UPVC PN 12 |
| 18.60               | 361.20              | 375 NB UPVC PN 12 |

**ANZ uPVC Pipe****PN 15**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name    |
|---------------------|---------------------|-------------------|
| 1.40                | 18.30               | 15 NB UPVC PN 15  |
| 1.70                | 23.00               | 20 NB UPVC PN 15  |
| 2.10                | 29.00               | 25 NB UPVC PN 15  |
| 2.70                | 36.40               | 32 NB UPVC PN 15  |
| 3.10                | 41.60               | 40NB UPVC PN 15   |
| 3.80                | 52.20               | 50 NB UPVC PN 15  |
| 4.80                | 65.10               | 65 NB UPVC PN 15  |
| 5.40                | 72.00               | 75 NB UPVC PN 15  |
| 5.70                | 76.70               | 80 NB UPVC PN 15  |
| 6.40                | 87.00               | 90 NB UPVC PN 15  |
| 7.30                | 98.80               | 100 NB UPVC PN 15 |
| 8.90                | 121.30              | 125 NB UPVC PN 15 |
| 10.20               | 138.70              | 150 NB UPVC PN 15 |
| 12.90               | 198.00              | 200 NB UPVC PN 15 |
| 14.40               | 220.00              | 225NB UPVC PN 15  |
| 16.10               | 246.40              | 250 NB UPVC PN 15 |
| 18.10               | 277.30              | 300 NB UPVC PN 15 |
| 23.00               | 352.00              | 375 NB UPVC PN 15 |

**ANZ uPVC Pipe****PN 18**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name    |
|---------------------|---------------------|-------------------|
| 1.60                | 17.80               | 15 NB UPVC PN 15  |
| 2.00                | 22.40               | 20 NB UPVC PN 15  |
| 2.50                | 28.10               | 25 NB UPVC PN 15  |
| 3.20                | 35.40               | 32 NB UPVC PN 15  |
| 3.60                | 40.50               | 40NB UPVC PN 15   |
| 3.60                | 50.50               | 50 NB UPVC PN 15  |
| 5.70                | 63.20               | 65 NB UPVC PN 15  |
| 6.40                | 71.01               | 75 NB UPVC PN 15  |
| 6.70                | 74.60               | 80 NB UPVC PN 15  |
| 8.20                | 84.00               | 90 NB UPVC PN 15  |
| 8.60                | 96.00               | 100 NB UPVC PN 15 |

|       |        |                   |
|-------|--------|-------------------|
| 10.60 | 117.70 | 125 NB UPVC PN 15 |
| 12.10 | 134.70 | 150 NB UPVC PN 15 |
| 15.30 | 192.90 | 200 NB UPVC PN 15 |
| 17.00 | 214.40 | 225NB UPVC PN 15  |
| 19.10 | 240.10 | 250 NB UPVC PN 15 |
| 21.50 | 270.20 | 300 NB UPVC PN 15 |
| 27.30 | 343.00 | 375 NB UPVC PN 15 |

## ANZ mPVC Pipe

### PN 6

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name   |
|---------------------|---------------------|------------------|
| 2.30                | 109.50              | 100 NB MPVC PN 6 |
| 2.70                | 119.60              | 125 NB MPVC PN 6 |
| 3.00                | 154.00              | 150 NB MPVC PN 6 |
| 3.80                | 192.40              | 175 NB MPVC PN 6 |
| 4.20                | 216.60              | 200 NB MPVC PN 6 |
| 4.70                | 240.60              | 225 NB MPVC PN 6 |
| 5.30                | 269.40              | 250 NB MPVC PN 6 |
| 5.90                | 303.20              | 300 NB MPVC PN 6 |
| 7.50                | 385.00              | 375 NB MPVC PN 6 |

## ANZ mPVC Pipe

### PN 9

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name   |
|---------------------|---------------------|------------------|
| 3.20                | 107.70              | 100 NB MPVC PN 9 |
| 4.00                | 117.00              | 125 NB MPVC PN 9 |
| 4.40                | 151.20              | 150 NB MPVC PN 9 |
| 5.60                | 188.80              | 175 NB MPVC PN 9 |
| 6.30                | 212.40              | 200 NB MPVC PN 9 |
| 6.90                | 236.20              | 225 NB MPVC PN 9 |
| 7.80                | 264.40              | 250 NB MPVC PN 9 |
| 8.70                | 297.60              | 300 NB MPVC PN 9 |
| 11.10               | 377.80              | 375 NB MPVC PN 9 |

**ANZ mPVC Pipe****PN 12**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name    |
|---------------------|---------------------|-------------------|
| 4.20                | 105.70              | 100 NB MPVC PN 12 |
| 5.30                | 114.40              | 125 NB MPVC PN 12 |
| 5.90                | 148.20              | 150 NB MPVC PN 12 |
| 7.30                | 185.40              | 175 NB MPVC PN 12 |
| 8.20                | 208.60              | 200 NB MPVC PN 12 |
| 9.20                | 231.60              | 225 NB MPVC PN 12 |
| 10.30               | 259.40              | 250 NB MPVC PN 12 |
| 11.50               | 292.00              | 300 NB MPVC PN 12 |
| 14.30               | 370.60              | 375 NB MPVC PN 12 |
| 16.00               | 445.00              | 450 NB MPVC PN 12 |

**ANZ mPVC Pipe****PN 15**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name    |
|---------------------|---------------------|-------------------|
| 5.20                | 103.70              | 100 NB MPVC PN 15 |
| 6.40                | 112.20              | 125 NB MPVC PN 15 |
| 7.20                | 145.60              | 150 NB MPVC PN 15 |
| 9.10                | 181.80              | 175 NB MPVC PN 15 |
| 10.20               | 204.60              | 200 NB MPVC PN 15 |
| 11.30               | 227.40              | 225 NB MPVC PN 15 |
| 12.50               | 254.80              | 250 NB MPVC PN 15 |
| 14.30               | 286.40              | 300 NB MPVC PN 15 |
| 18.20               | 363.60              | 375 NB MPVC PN 15 |

**ANZ mPVC Pipe****PN 20**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name    |
|---------------------|---------------------|-------------------|
| 7.30                | 107.10              | 100 NB MPVC PN 20 |
| 10.60               | 155.90              | 150 NB MPVC PN 20 |
| 13.90               | 204.10              | 200 NB MPVC PN 20 |

**ANZ oPVC Pipe**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name |
|---------------------|---------------------|----------------|
| 7.80                | 100.00              | 100 NB OPVC PN |

**ANZ PE80 Pipe****PN 10**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name     |
|---------------------|---------------------|--------------------|
| 1.90                | 20.00               | 20 OD PE80 PN10    |
| 1.90                | 25.00               | 25 OD PE80 PN10    |
| 2.20                | 32.00               | 32 OD PE80 PN10    |
| 2.80                | 40.00               | 40 OD PE80 PN10    |
| 3.40                | 50.00               | 50 OD PE80 PN10    |
| 4.30                | 63.00               | 63 OD PE80 PN10    |
| 5.10                | 75.00               | 75 OD PE80 PN10    |
| 6.10                | 90.00               | 90 OD PE80 PN10    |
| 7.40                | 110.00              | 110 OD PE80 PN10   |
| 8.30                | 125.00              | 125 OD PE80 PN10   |
| 9.30                | 140.00              | 140 OD PE80 PN10   |
| 10.60               | 160.00              | 160 OD PE80 PN10   |
| 11.90               | 180.00              | 180 OD PE80 PN10   |
| 13.20               | 200.00              | 200 OD PE80 PN10   |
| 14.90               | 225.00              | 225 OD PE80 PN10   |
| 16.40               | 250.00              | 250 OD PE80 PN10   |
| 18.40               | 280.00              | 280 OD PE80 PN10   |
| 20.70               | 315.00              | 315 OD PE80 PN10   |
| 23.40               | 355.00              | 355 OD PE80 PN10   |
| 26.20               | 400.00              | 400 OD PE80 PN10   |
| 29.50               | 450.00              | 450 OD PE80 PN10   |
| 32.70               | 500.00              | 500 OD PE80 PN10   |
| 36.70               | 560.00              | 560 OD PE80 PN10   |
| 41.20               | 630.00              | 630 OD PE80 PN10   |
| 46.50               | 710.00              | 710 OD PE80 PN10   |
| 52.30               | 800.00              | 800 OD PE80 PN10   |
| 65.40               | 1000.00             | 1,000 OD PE80 PN10 |



**ANZ PE80 Pipe****PN 12.5**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name       |
|---------------------|---------------------|----------------------|
| 1.90                | 20.00               | 20 OD PE80 PN12.5    |
| 1.90                | 25.00               | 25 OD PE80 PN12.5    |
| 2.20                | 32.00               | 32 OD PE80 PN12.5    |
| 2.80                | 40.00               | 40 OD PE80 PN12.5    |
| 3.40                | 50.00               | 50 OD PE80 PN12.5    |
| 4.30                | 63.00               | 63 OD PE80 PN12.5    |
| 5.10                | 75.00               | 75 OD PE80 PN12.5    |
| 6.10                | 90.00               | 90 OD PE80 PN12.5    |
| 7.40                | 110.00              | 110 OD PE80 PN12.5   |
| 8.30                | 125.00              | 125 OD PE80 PN12.5   |
| 9.30                | 140.00              | 140 OD PE80 PN12.5   |
| 10.60               | 160.00              | 160 OD PE80 PN12.5   |
| 11.90               | 180.00              | 180 OD PE80 PN12.5   |
| 13.20               | 200.00              | 200 OD PE80 PN12.5   |
| 14.90               | 225.00              | 225 OD PE80 PN12.5   |
| 16.40               | 250.00              | 250 OD PE80 PN12.5   |
| 18.40               | 280.00              | 280 OD PE80 PN12.5   |
| 20.70               | 315.00              | 315 OD PE80 PN12.5   |
| 23.40               | 355.00              | 355 OD PE80 PN12.5   |
| 26.20               | 400.00              | 400 OD PE80 PN12.5   |
| 29.50               | 450.00              | 450 OD PE80 PN12.5   |
| 32.70               | 500.00              | 500 OD PE80 PN12.5   |
| 36.70               | 560.00              | 560 OD PE80 PN12.5   |
| 41.20               | 630.00              | 630 OD PE80 PN12.5   |
| 46.50               | 710.00              | 710 OD PE80 PN12.5   |
| 52.30               | 800.00              | 800 OD PE80 PN12.5   |
| 65.40               | 1000.00             | 1,000 OD PE80 PN12.5 |

**ANZ PE80 Pipe****PN 16**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name  |
|---------------------|---------------------|-----------------|
| 1.90                | 20.00               | 20 OD PE80 PN16 |
| 1.90                | 25.00               | 25 OD PE80 PN16 |

|       |         |                    |
|-------|---------|--------------------|
| 2.20  | 32.00   | 32 OD PE80 PN16    |
| 2.80  | 40.00   | 40 OD PE80 PN16    |
| 3.40  | 50.00   | 50 OD PE80 PN16    |
| 4.30  | 63.00   | 63 OD PE80 PN16    |
| 5.10  | 75.00   | 75 OD PE80 PN16    |
| 6.10  | 90.00   | 90 OD PE80 PN16    |
| 7.40  | 110.00  | 110 OD PE80 PN16   |
| 8.30  | 125.00  | 125 OD PE80 PN16   |
| 9.30  | 140.00  | 140 OD PE80 PN16   |
| 10.60 | 160.00  | 160 OD PE80 PN16   |
| 11.90 | 180.00  | 180 OD PE80 PN16   |
| 13.20 | 200.00  | 200 OD PE80 PN16   |
| 14.90 | 225.00  | 225 OD PE80 PN16   |
| 16.40 | 250.00  | 250 OD PE80 PN16   |
| 18.40 | 280.00  | 280 OD PE80 PN16   |
| 20.70 | 315.00  | 315 OD PE80 PN16   |
| 23.40 | 355.00  | 355 OD PE80 PN16   |
| 26.20 | 400.00  | 400 OD PE80 PN16   |
| 29.50 | 450.00  | 450 OD PE80 PN16   |
| 32.70 | 500.00  | 500 OD PE80 PN16   |
| 36.70 | 560.00  | 560 OD PE80 PN16   |
| 41.20 | 630.00  | 630 OD PE80 PN16   |
| 46.50 | 710.00  | 710 OD PE80 PN16   |
| 52.30 | 800.00  | 800 OD PE80 PN16   |
| 65.40 | 1000.00 | 1,000 OD PE80 PN16 |

## ANZ PE80B Pipe

### PN 4

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name  |
|---------------------|---------------------|-----------------|
| 1.90                | 20.00               | 20 OD PE80B PN4 |
| 1.90                | 25.00               | 25 OD PE80B PN4 |
| 2.20                | 32.00               | 32 OD PE80B PN4 |
| 2.80                | 40.00               | 40 OD PE80B PN4 |
| 3.40                | 50.00               | 50 OD PE80B PN4 |
| 4.30                | 63.00               | 63 OD PE80B PN4 |
| 5.10                | 75.00               | 75 OD PE80B PN4 |
| 6.10                | 90.00               | 90 OD PE80B PN4 |

|       |         |                    |
|-------|---------|--------------------|
| 7.40  | 110.00  | 110 OD PE80B PN4   |
| 8.30  | 125.00  | 125 OD PE80B PN4   |
| 9.30  | 140.00  | 140 OD PE80B PN4   |
| 10.60 | 160.00  | 160 OD PE80B PN4   |
| 11.90 | 180.00  | 180 OD PE80B PN4   |
| 13.20 | 200.00  | 200 OD PE80B PN4   |
| 14.90 | 225.00  | 225 OD PE80B PN4   |
| 16.40 | 250.00  | 250 OD PE80B PN4   |
| 18.40 | 280.00  | 280 OD PE80B PN4   |
| 20.70 | 315.00  | 315 OD PE80B PN4   |
| 23.40 | 355.00  | 355 OD PE80B PN4   |
| 26.20 | 400.00  | 400 OD PE80B PN4   |
| 29.50 | 450.00  | 450 OD PE80B PN4   |
| 32.70 | 500.00  | 500 OD PE80B PN4   |
| 36.70 | 560.00  | 560 OD PE80B PN4   |
| 41.20 | 630.00  | 630 OD PE80B PN54  |
| 46.50 | 710.00  | 710 OD PE80B PN4   |
| 52.30 | 800.00  | 800 OD PE80B PN4   |
| 65.40 | 1000.00 | 1,000 OD PE80B PN4 |

## ANZ PE80B Pipe

### PN 5

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name   |
|---------------------|---------------------|------------------|
| 1.90                | 20.00               | 20 OD PE80B PN5  |
| 1.90                | 25.00               | 25 OD PE80B PN5  |
| 2.20                | 32.00               | 32 OD PE80B PN5  |
| 2.80                | 40.00               | 40 OD PE80B PN5  |
| 3.40                | 50.00               | 50 OD PE80B PN5  |
| 4.30                | 63.00               | 63 OD PE80B PN5  |
| 5.10                | 75.00               | 75 OD PE80B PN5  |
| 6.10                | 90.00               | 90 OD PE80B PN5  |
| 7.40                | 110.00              | 110 OD PE80B PN5 |
| 8.30                | 125.00              | 125 OD PE80B PN5 |
| 9.30                | 140.00              | 140 OD PE80B PN5 |
| 10.60               | 160.00              | 160 OD PE80B PN5 |
| 11.90               | 180.00              | 180 OD PE80B PN5 |

|       |         |                    |
|-------|---------|--------------------|
| 13.20 | 200.00  | 200 OD PE80B PN5   |
| 14.90 | 225.00  | 225 OD PE80B PN5   |
| 16.40 | 250.00  | 250 OD PE80B PN5   |
| 18.40 | 280.00  | 280 OD PE80B PN5   |
| 20.70 | 315.00  | 315 OD PE80B PN5   |
| 23.40 | 355.00  | 355 OD PE80B PN5   |
| 26.20 | 400.00  | 400 OD PE80B PN5   |
| 29.50 | 450.00  | 450 OD PE80B PN5   |
| 32.70 | 500.00  | 500 OD PE80B PN5   |
| 36.70 | 560.00  | 560 OD PE80B PN5   |
| 41.20 | 630.00  | 630 OD PE80B PN5   |
| 46.50 | 710.00  | 710 OD PE80B PN5   |
| 52.30 | 800.00  | 800 OD PE80B PN5   |
| 65.40 | 1000.00 | 1,000 OD PE80B PN5 |

## ANZ PE80B Pipe

### PN 6.3

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name     |
|---------------------|---------------------|--------------------|
| 1.90                | 20.00               | 20 OD PE80B PN6.3  |
| 1.90                | 25.00               | 25 OD PE80B PN6.3  |
| 2.20                | 32.00               | 32 OD PE80B PN6.3  |
| 2.80                | 40.00               | 40 OD PE80B PN6.3  |
| 3.40                | 50.00               | 50 OD PE80B PN6.3  |
| 4.30                | 63.00               | 63 OD PE80B PN6.3  |
| 5.10                | 75.00               | 75 OD PE80B PN6.3  |
| 6.10                | 90.00               | 90 OD PE80B PN6.3  |
| 7.40                | 110.00              | 110 OD PE80B PN6.3 |
| 8.30                | 125.00              | 125 OD PE80B PN6.3 |
| 9.30                | 140.00              | 140 OD PE80B PN6.3 |
| 10.60               | 160.00              | 160 OD PE80B PN6.3 |
| 11.90               | 180.00              | 180 OD PE80B PN6.3 |
| 13.20               | 200.00              | 200 OD PE80B PN6.3 |
| 14.90               | 225.00              | 225 OD PE80B PN6.3 |
| 16.40               | 250.00              | 250 OD PE80B PN6.3 |
| 18.40               | 280.00              | 280 OD PE80B PN6.3 |

|       |         |                      |
|-------|---------|----------------------|
| 20.70 | 315.00  | 315 OD PE80B PN6.3   |
| 23.40 | 355.00  | 355 OD PE80B PN6.3   |
| 26.20 | 400.00  | 400 OD PE80B PN6.3   |
| 29.50 | 450.00  | 450 OD PE80B PN6.3   |
| 32.70 | 500.00  | 500 OD PE80B PN6.3   |
| 36.70 | 560.00  | 560 OD PE80B PN6.3   |
| 41.20 | 630.00  | 630 OD PE80B PN6.3   |
| 46.50 | 710.00  | 710 OD PE80B PN6.3   |
| 52.30 | 800.00  | 800 OD PE80B PN6.3   |
| 65.40 | 1000.00 | 1,000 OD PE80B PN6.3 |

## ANZ PE80B Pipe

### PN 8

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name   |
|---------------------|---------------------|------------------|
| 1.90                | 20.00               | 20 OD PE80B PN8  |
| 1.90                | 25.00               | 25 OD PE80B PN8  |
| 2.20                | 32.00               | 32 OD PE80B PN8  |
| 2.80                | 40.00               | 40 OD PE80B PN8  |
| 3.40                | 50.00               | 50 OD PE80B PN8  |
| 4.30                | 63.00               | 63 OD PE80B PN8  |
| 5.10                | 75.00               | 75 OD PE80B PN8  |
| 6.10                | 90.00               | 90 OD PE80B PN8  |
| 7.40                | 110.00              | 110 OD PE80B PN8 |
| 8.30                | 125.00              | 125 OD PE80B PN8 |
| 9.30                | 140.00              | 140 OD PE80B PN8 |
| 10.60               | 160.00              | 160 OD PE80B PN8 |
| 11.90               | 180.00              | 180 OD PE80B PN8 |
| 13.20               | 200.00              | 200 OD PE80B PN8 |
| 14.90               | 225.00              | 225 OD PE80B PN8 |
| 16.40               | 250.00              | 250 OD PE80B PN8 |
| 18.40               | 280.00              | 280 OD PE80B PN8 |
| 20.70               | 315.00              | 315 OD PE80B PN8 |
| 23.40               | 355.00              | 355 OD PE80B PN8 |
| 26.20               | 400.00              | 400 OD PE80B PN8 |
| 29.50               | 450.00              | 450 OD PE80B PN8 |
| 32.70               | 500.00              | 500 OD PE80B PN8 |

|       |         |                    |
|-------|---------|--------------------|
| 36.70 | 560.00  | 560 OD PE80B PN8   |
| 41.20 | 630.00  | 630 OD PE80B PN8   |
| 46.50 | 710.00  | 710 OD PE80B PN8   |
| 52.30 | 800.00  | 800 OD PE80B PN8   |
| 65.40 | 1000.00 | 1,000 OD PE80B PN8 |

## ANZ PE100 Pipe

### PN 4

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name     |
|---------------------|---------------------|--------------------|
| 1.90                | 20.00               | 20 OD PE100 PN4    |
| 1.90                | 25.00               | 25 OD PE100 PN4    |
| 2.20                | 32.00               | 32 OD PE100 PN4    |
| 2.80                | 40.00               | 40 OD PE100 PN4    |
| 3.40                | 50.00               | 50 OD PE100 PN4    |
| 4.30                | 63.00               | 63 OD PE100 PN4    |
| 5.10                | 75.00               | 75 OD PE100 PN4    |
| 6.10                | 90.00               | 90 OD PE100 PN4    |
| 7.40                | 110.00              | 110 OD PE100 PN4   |
| 8.30                | 125.00              | 125 OD PE100 PN4   |
| 9.30                | 140.00              | 140 OD PE100 PN4   |
| 10.60               | 160.00              | 160 OD PE100 PN4   |
| 11.90               | 180.00              | 180 OD PE100 PN4   |
| 13.20               | 200.00              | 200 OD PE100 PN4   |
| 14.90               | 225.00              | 225 OD PE100 PN4   |
| 16.40               | 250.00              | 250 OD PE100 PN4   |
| 18.40               | 280.00              | 280 OD PE100 PN4   |
| 20.70               | 315.00              | 315 OD PE100 PN4   |
| 23.40               | 355.00              | 355 OD PE100 PN4   |
| 26.20               | 400.00              | 400 OD PE100 PN4   |
| 29.50               | 450.00              | 450 OD PE100 PN4   |
| 32.70               | 500.00              | 500 OD PE100 PN4   |
| 36.70               | 560.00              | 560 OD PE100 PN4   |
| 41.20               | 630.00              | 630 OD PE100 PN4   |
| 46.50               | 710.00              | 710 OD PE100 PN4   |
| 52.30               | 800.00              | 800 OD PE100 PN4   |
| 65.40               | 1000.00             | 1,000 OD PE100 PN4 |

**ANZ PE100 Pipe****PN 6.3**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name       |
|---------------------|---------------------|----------------------|
| 1.90                | 20.00               | 20 OD PE100 PN6.3    |
| 1.90                | 25.00               | 25 OD PE100 PN6.3    |
| 2.20                | 32.00               | 32 OD PE100 PN6.3    |
| 2.80                | 40.00               | 40 OD PE100 PN6.3    |
| 3.40                | 50.00               | 50 OD PE100 PN6.3    |
| 4.30                | 63.00               | 63 OD PE100 PN6.3    |
| 5.10                | 75.00               | 75 OD PE100 PN6.3    |
| 6.10                | 90.00               | 90 OD PE100 PN6.3    |
| 7.40                | 110.00              | 110 OD PE100 PN6.3   |
| 8.30                | 125.00              | 125 OD PE100 PN6.3   |
| 9.30                | 140.00              | 140 OD PE100 PN6.3   |
| 10.60               | 160.00              | 160 OD PE100 PN6.3   |
| 11.90               | 180.00              | 180 OD PE100 PN6.3   |
| 13.20               | 200.00              | 200 OD PE100 PN6.3   |
| 14.90               | 225.00              | 225 OD PE100 PN6.3   |
| 16.40               | 250.00              | 250 OD PE100 PN6.3   |
| 18.40               | 280.00              | 280 OD PE100 PN6.3   |
| 20.70               | 315.00              | 315 OD PE100 PN6.3   |
| 23.40               | 355.00              | 355 OD PE100 PN6.3   |
| 26.20               | 400.00              | 400 OD PE100 PN6.3   |
| 29.50               | 450.00              | 450 OD PE100 PN6.3   |
| 32.70               | 500.00              | 500 OD PE100 PN6.3   |
| 36.70               | 560.00              | 560 OD PE100 PN6.3   |
| 41.20               | 630.00              | 630 OD PE100 PN6.3   |
| 46.50               | 710.00              | 710 OD PE100 PN6.3   |
| 52.30               | 800.00              | 800 OD PE100 PN6.3   |
| 65.40               | 1000.00             | 1,000 OD PE100 PN6.3 |

**ANZ PE100 Pipe****PN 8**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name     |
|---------------------|---------------------|--------------------|
| 1.90                | 20.00               | 20 OD PE100 PN8    |
| 1.90                | 25.00               | 25 OD PE100 PN8    |
| 2.20                | 32.00               | 32 OD PE100 PN8    |
| 2.80                | 40.00               | 40 OD PE100 PN8    |
| 3.40                | 50.00               | 50 OD PE100 PN8    |
| 4.30                | 63.00               | 63 OD PE100 PN8    |
| 5.10                | 75.00               | 75 OD PE100 PN8    |
| 6.10                | 90.00               | 90 OD PE100 PN8    |
| 7.40                | 110.00              | 110 OD PE100 PN8   |
| 8.30                | 125.00              | 125 OD PE100 PN8   |
| 9.30                | 140.00              | 140 OD PE100 PN8   |
| 10.60               | 160.00              | 160 OD PE100 PN8   |
| 11.90               | 180.00              | 180 OD PE100 PN8   |
| 13.20               | 200.00              | 200 OD PE100 PN8   |
| 14.90               | 225.00              | 225 OD PE100 PN8   |
| 16.40               | 250.00              | 250 OD PE100 PN8   |
| 18.40               | 280.00              | 280 OD PE100 PN8   |
| 20.70               | 315.00              | 315 OD PE100 PN8   |
| 23.40               | 355.00              | 355 OD PE100 PN8   |
| 26.20               | 400.00              | 400 OD PE100 PN8   |
| 29.50               | 450.00              | 450 OD PE100 PN8   |
| 32.70               | 500.00              | 500 OD PE100 PN8   |
| 36.70               | 560.00              | 560 OD PE100 PN8   |
| 41.20               | 630.00              | 630 OD PE100 PN8   |
| 46.50               | 710.00              | 710 OD PE100 PN8   |
| 52.30               | 800.00              | 800 OD PE100 PN8   |
| 65.40               | 1000.00             | 1,000 OD PE100 PN8 |

## ANZ PE100 Pipe

### PN 10

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name   |
|---------------------|---------------------|------------------|
| 1.90                | 20.00               | 20 OD PE100 PN10 |



|       |         |                     |
|-------|---------|---------------------|
| 1.90  | 25.00   | 25 OD PE100 PN10    |
| 2.20  | 32.00   | 32 OD PE100 PN10    |
| 2.80  | 40.00   | 40 OD PE100 PN10    |
| 3.40  | 50.00   | 50 OD PE100 PN10    |
| 4.30  | 63.00   | 63 OD PE100 PN10    |
| 5.10  | 75.00   | 75 OD PE100 PN10    |
| 6.10  | 90.00   | 90 OD PE100 PN10    |
| 7.40  | 110.00  | 110 OD PE100 PN10   |
| 8.30  | 125.00  | 125 OD PE100 PN10   |
| 9.30  | 140.00  | 140 OD PE100 PN10   |
| 10.60 | 160.00  | 160 OD PE100 PN10   |
| 11.90 | 180.00  | 180 OD PE100 PN10   |
| 13.20 | 200.00  | 200 OD PE100 PN10   |
| 14.90 | 225.00  | 225 OD PE100 PN10   |
| 16.40 | 250.00  | 250 OD PE100 PN10   |
| 18.40 | 280.00  | 280 OD PE100 PN10   |
| 20.70 | 315.00  | 315 OD PE100 PN10   |
| 23.40 | 355.00  | 355 OD PE100 PN10   |
| 26.20 | 400.00  | 400 OD PE100 PN10   |
| 29.50 | 450.00  | 450 OD PE100 PN10   |
| 32.70 | 500.00  | 500 OD PE100 PN10   |
| 36.70 | 560.00  | 560 OD PE100 PN10   |
| 41.20 | 630.00  | 630 OD PE100 PN10   |
| 46.50 | 710.00  | 710 OD PE100 PN10   |
| 52.30 | 800.00  | 800 OD PE100 PN10   |
| 65.40 | 1000.00 | 1,000 OD PE100 PN10 |

## ANZ PE100 Pipe

### PN 12.5

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name     |
|---------------------|---------------------|--------------------|
| 1.90                | 20.00               | 20 OD PE100 PN12.5 |
| 1.90                | 25.00               | 25 OD PE100 PN12.5 |
| 2.20                | 32.00               | 32 OD PE100 PN12.5 |
| 2.80                | 40.00               | 40 OD PE100 PN12.5 |

|       |         |                       |
|-------|---------|-----------------------|
| 3.40  | 50.00   | 50 OD PE100 PN12.5    |
| 4.30  | 63.00   | 63 OD PE100 PN12.5    |
| 5.10  | 75.00   | 75 OD PE100 PN12.5    |
| 6.10  | 90.00   | 90 OD PE100 PN12.5    |
| 7.40  | 110.00  | 110 OD PE100 PN12.5   |
| 8.30  | 125.00  | 125 OD PE100 PN12.5   |
| 9.30  | 140.00  | 140 OD PE100 PN12.5   |
| 10.60 | 160.00  | 160 OD PE100 PN12.5   |
| 11.90 | 180.00  | 180 OD PE100 PN12.5   |
| 13.20 | 200.00  | 200 OD PE100 PN12.5   |
| 14.90 | 225.00  | 225 OD PE100 PN12.5   |
| 16.40 | 250.00  | 250 OD PE100 PN12.5   |
| 18.40 | 280.00  | 280 OD PE100 PN12.5   |
| 20.70 | 315.00  | 315 OD PE100 PN12.5   |
| 23.40 | 355.00  | 355 OD PE100 PN12.5   |
| 26.20 | 400.00  | 400 OD PE100 PN12.5   |
| 29.50 | 450.00  | 450 OD PE100 PN12.5   |
| 32.70 | 500.00  | 500 OD PE100 PN12.5   |
| 36.70 | 560.00  | 560 OD PE100 PN12.5   |
| 41.20 | 630.00  | 630 OD PE100 PN12.5   |
| 46.50 | 710.00  | 710 OD PE100 PN12.5   |
| 52.30 | 800.00  | 800 OD PE100 PN12.5   |
| 65.40 | 1000.00 | 1,000 OD PE100 PN12.5 |

## ANZ PE100 Pipe

### PN 16

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name   |
|---------------------|---------------------|------------------|
| 1.90                | 20.00               | 20 OD PE100 PN16 |
| 1.90                | 25.00               | 25 OD PE100 PN16 |
| 2.20                | 32.00               | 32 OD PE100 PN16 |
| 2.80                | 40.00               | 40 OD PE100 PN16 |
| 3.40                | 50.00               | 50 OD PE100 PN16 |
| 4.30                | 63.00               | 63 OD PE100 PN16 |
| 5.10                | 75.00               | 75 OD PE100 PN16 |

|       |         |                     |
|-------|---------|---------------------|
| 6.10  | 90.00   | 90 OD PE100 PN16    |
| 7.40  | 110.00  | 110 OD PE100 PN16   |
| 8.30  | 125.00  | 125 OD PE100 PN16   |
| 9.30  | 140.00  | 140 OD PE100 PN16   |
| 10.60 | 160.00  | 160 OD PE100 PN16   |
| 11.90 | 180.00  | 180 OD PE100 PN16   |
| 13.20 | 200.00  | 200 OD PE100 PN16   |
| 14.90 | 225.00  | 225 OD PE100 PN16   |
| 16.40 | 250.00  | 250 OD PE100 PN16   |
| 18.40 | 280.00  | 280 OD PE100 PN16   |
| 20.70 | 315.00  | 315 OD PE100 PN16   |
| 23.40 | 355.00  | 355 OD PE100 PN16   |
| 26.20 | 400.00  | 400 OD PE100 PN16   |
| 29.50 | 450.00  | 450 OD PE100 PN16   |
| 32.70 | 500.00  | 500 OD PE100 PN16   |
| 36.70 | 560.00  | 560 OD PE100 PN16   |
| 41.20 | 630.00  | 630 OD PE100 PN16   |
| 46.50 | 710.00  | 710 OD PE100 PN16   |
| 52.30 | 800.00  | 800 OD PE100 PN16   |
| 65.40 | 1000.00 | 1,000 OD PE100 PN16 |

## ANZ DUCTILE IRON PIPE

### PN 20

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name |
|---------------------|---------------------|----------------|
| 5.00                | 100.00              | 100 NB DI PN20 |
| 5.00                | 125.00              | 125 NB DI PN20 |
| 5.00                | 150.00              | 150 NB DI PN20 |
| 5.00                | 160.00              | 160 NB DI PN20 |
| 5.00                | 200.00              | 200 NB DI PN20 |
| 5.20                | 225.00              | 225 NB DI PN20 |
| 5.60                | 250.00              | 250 NB DI PN20 |
| 6.30                | 280.00              | 280 NB DI PN20 |
| 6.30                | 300.00              | 300 NB DI PN20 |
| 6.30                | 315.00              | 315 NB DI PN20 |
| 6.30                | 350.00              | 350 NB DI PN20 |
| 5.10                | 375.00              | 375 NB DI PN20 |
| 5.60                | 400.00              | 400 NB DI PN20 |

|      |        |                |
|------|--------|----------------|
| 5.60 | 450.00 | 450 NB DI PN20 |
| 6.00 | 500.00 | 500 NB DI PN20 |
| 6.80 | 600.00 | 600 NB DI PN20 |
| 6.80 | 630.00 | 630 NB DI PN20 |
| 7.90 | 750.00 | 750 NB DI PN20 |

## ANZ DUCTILE IRON PIPE

### PN 35

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name |
|---------------------|---------------------|----------------|
| 5.00                | 100.00              | 100 NB DI PN35 |
| 5.00                | 125.00              | 125 NB DI PN35 |
| 5.00                | 150.00              | 150 NB DI PN35 |
| 5.00                | 160.00              | 160 NB DI PN35 |
| 5.00                | 200.00              | 200 NB DI PN35 |
| 5.20                | 225.00              | 225 NB DI PN35 |
| 5.60                | 250.00              | 250 NB DI PN35 |
| 6.30                | 280.00              | 280 NB DI PN35 |
| 6.30                | 300.00              | 300 NB DI PN35 |
| 6.30                | 315.00              | 315 NB DI PN35 |
| 6.30                | 350.00              | 350 NB DI PN35 |
| 5.10                | 375.00              | 375 NB DI PN35 |
| 5.60                | 400.00              | 400 NB DI PN35 |
| 5.60                | 450.00              | 450 NB DI PN35 |
| 6.00                | 500.00              | 500 NB DI PN35 |
| 6.80                | 600.00              | 600 NB DI PN35 |
| 6.80                | 630.00              | 630 NB DI PN35 |
| 7.90                | 750.00              | 750 NB DI PN35 |

## ANZ DUCTILE IRON PIPE

### FLANGE CLASS

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name         |
|---------------------|---------------------|------------------------|
| 5.00                | 100.00              | 100 NB DI FLANGE CLASS |
| 5.00                | 125.00              | 125 NB DI FLANGE CLASS |
| 5.00                | 150.00              | 150 NB DI FLANGE CLASS |
| 5.00                | 160.00              | 160 NB DI FLANGE CLASS |

|      |        |                        |
|------|--------|------------------------|
| 5.00 | 200.00 | 200 NB DI FLANGE CLASS |
| 5.20 | 225.00 | 225 NB DI FLANGE CLASS |
| 5.60 | 250.00 | 250 NB DI FLANGE CLASS |
| 6.30 | 280.00 | 280 NB DI FLANGE CLASS |
| 6.30 | 300.00 | 300 NB DI FLANGE CLASS |
| 6.30 | 315.00 | 315 NB DI FLANGE CLASS |
| 6.30 | 350.00 | 350 NB DI FLANGE CLASS |
| 5.10 | 375.00 | 375 NB DI FLANGE CLASS |
| 5.60 | 400.00 | 400 NB DI FLANGE CLASS |
| 5.60 | 450.00 | 450 NB DI FLANGE CLASS |
| 6.00 | 500.00 | 500 NB DI FLANGE CLASS |
| 6.80 | 600.00 | 600 NB DI FLANGE CLASS |
| 6.80 | 630.00 | 630 NB DI FLANGE CLASS |
| 7.90 | 750.00 | 750 NB DI FLANGE CLASS |

### ANZ SPIRAL WELDED STEEL PIPE (SWP)

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name     |
|---------------------|---------------------|--------------------|
| 10.20               | 100.00              | 121.9 OD x 3.2 SWP |
| 10.20               | 100.00              | 121.9 OD x 4.8 SWP |
| 11.80               | 150.00              | 177.3 OD x 3.2 SWP |
| 11.80               | 150.00              | 177.3 OD x 4.8 SWP |
| 14.80               | 200.00              | 232.2 OD x 3.2 SWP |
| 14.80               | 200.00              | 232.2 OD x 4.8 SWP |
| 14.80               | 225.00              | 259.1 OD x 3.2 SWP |
| 14.80               | 225.00              | 259.1 OD x 4.8 SWP |
| 14.80               | 250.00              | 286.0 OD x 3.2 SWP |
| 14.80               | 250.00              | 286.0 OD x 4.8 SWP |
| 14.80               | 300.00              | 345.4 OD x 3.2 SWP |
| 14.80               | 300.00              | 345.4 OD x 4.8 SWP |
| 14.80               | 300.00              | 345.4 OD x 6.4 SWP |
| 17.80               | 375.00              | 426.2 OD x 4.8 SWP |
| 17.80               | 375.00              | 426.2 OD x 6.4 SWP |
| 19.40               | 400.00              | 457.2 OD x 4.8 SWP |
| 19.40               | 400.00              | 457.2 OD x 6.4 SWP |
| 19.40               | 450.00              | 508.0 OD x 4.8 SWP |
| 19.40               | 450.00              | 508.0 OD x 6.4 SWP |
| 19.40               | 500.00              | 558.8 OD x 4.8 SWP |
| 19.40               | 500.00              | 558.8 OD x 6.4 SWP |
| 19.40               | 550.00              | 587.2 OD x 4.8 SWP |

|       |         |                      |
|-------|---------|----------------------|
| 19.40 | 550.00  | 587.2 OD x 6.4 SWP   |
| 19.40 | 600.00  | 650.2 OD x 4.8 SWP   |
| 19.40 | 600.00  | 650.2 OD x 6.4 SWP   |
| 19.40 | 650.00  | 667.0 OD x 4.8 SWP   |
| 19.40 | 650.00  | 667.0 OD x 6.4 SWP   |
| 25.50 | 700.00  | 746.8 OD x 6.4 SWP   |
| 25.50 | 700.00  | 746.8 OD x 9.5 SWP   |
| 25.50 | 750.00  | 812.8 OD x 6.4 SWP   |
| 25.50 | 750.00  | 812.8 OD x 9.5 SWP   |
| 25.50 | 800.00  | 863.6 OD x 6.4 SWP   |
| 25.50 | 800.00  | 863.6 OD x 9.5 SWP   |
| 25.50 | 850.00  | 914.4 OD x 6.4 SWP   |
| 25.50 | 850.00  | 914.4 OD x 9.5 SWP   |
| 25.50 | 900.00  | 965.2 OD x 6.4 SWP   |
| 25.50 | 900.00  | 965.2 OD x 9.5 SWP   |
| 28.00 | 950.00  | 1016.0 OD x 9.5 SWP  |
| 28.00 | 950.00  | 1016.0 OD x 12.0 SWP |
| 28.00 | 1000.00 | 1066.8 OD x 9.5 SWP  |
| 28.00 | 1000.00 | 1066.8 OD x 12.0 SWP |
| 28.00 | 1050.00 | 1117.6 OD x 9.5 SWP  |
| 28.00 | 1050.00 | 1117.6 OD x 12.0 SWP |
| 28.00 | 1150.00 | 1219.2 OD x 9.5 SWP  |
| 28.00 | 1150.00 | 1219.2 OD x 12.0 SWP |
| 28.00 | 1300.00 | 1371.6 OD x 9.5 SWP  |
| 28.00 | 1300.00 | 1371.6 OD x 12.0 SWP |
| 28.00 | 1500.00 | 1524.0 OD x 9.5 SWP  |
| 28.00 | 1500.00 | 1524.0 OD x 12.0 SWP |
| 28.00 | 1600.00 | 1676.4 OD x 9.5 SWP  |
| 28.00 | 1600.00 | 1676.4 OD x 12.0 SWP |
| 28.00 | 1800.00 | 1828.8 OD x 9.5 SWP  |
| 28.00 | 1800.00 | 1828.8 OD x 12.0 SWP |
| 28.00 | 1900.00 | 1981.2 OD x 9.5 SWP  |
| 28.00 | 1900.00 | 1981.2 OD x 12.0 SWP |

### ANZ SPIRAL WELDED STEEL PIPE (CLMS)

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name      |
|---------------------|---------------------|---------------------|
| 10.20               | 100.00              | 121.9 OD x 3.2 CLMS |
| 10.20               | 100.00              | 121.9 OD x 4.8 CLMS |

|       |         |                       |
|-------|---------|-----------------------|
| 11.80 | 150.00  | 177.3 OD x 3.2 CLMS   |
| 11.80 | 150.00  | 177.3 OD x 4.8 CLMS   |
| 14.80 | 200.00  | 232.2 OD x 3.2 CLMS   |
| 14.80 | 200.00  | 232.2 OD x 4.8 CLMS   |
| 14.80 | 225.00  | 259.1 OD x 3.2 CLMS   |
| 14.80 | 225.00  | 259.1 OD x 4.8 CLMS   |
| 14.80 | 250.00  | 286.0 OD x 3.2 CLMS   |
| 14.80 | 250.00  | 286.0 OD x 4.8 CLMS   |
| 14.80 | 300.00  | 345.4 OD x 3.2 CLMS   |
| 14.80 | 300.00  | 345.4 OD x 4.8 CLMS   |
| 14.80 | 300.00  | 345.4 OD x 6.4 CLMS   |
| 17.80 | 375.00  | 426.2 OD x 4.8 CLMS   |
| 17.80 | 375.00  | 426.2 OD x 6.4 CLMS   |
| 19.40 | 400.00  | 457.2 OD x 4.8CLMS    |
| 19.40 | 400.00  | 457.2 OD x 6.4 CLMS   |
| 19.40 | 450.00  | 508.0 OD x 4.8 CLMS   |
| 19.40 | 450.00  | 508.0 OD x 6.4 CLMS   |
| 19.40 | 500.00  | 558.8 OD x 4.8 CLMS   |
| 19.40 | 500.00  | 558.8 OD x 6.4 CLMS   |
| 19.40 | 550.00  | 587.2 OD x 4.8 CLMS   |
| 19.40 | 550.00  | 587.2 OD x 6.4 CLMS   |
| 19.40 | 600.00  | 650.2 OD x 4.8 CLMS   |
| 19.40 | 600.00  | 650.2 OD x 6.4 CLMS   |
| 19.40 | 650.00  | 667.0 OD x 4.8 CLMS   |
| 19.40 | 650.00  | 667.0 OD x 6.4 CLMS   |
| 25.50 | 700.00  | 746.8 OD x 6.4 CLMS   |
| 25.50 | 700.00  | 746.8 OD x 9.5 CLMS   |
| 25.50 | 750.00  | 812.8 OD x 6.4 CLMS   |
| 25.50 | 750.00  | 812.8 OD x 9.5 CLMS   |
| 25.50 | 800.00  | 863.6 OD x 6.4 CLMS   |
| 25.50 | 800.00  | 863.6 OD x 9.5 CLMS   |
| 25.50 | 850.00  | 914.4 OD x 6.4 CLMS   |
| 25.50 | 850.00  | 914.4 OD x 9.5 CLMS   |
| 25.50 | 900.00  | 965.2 OD x 6.4 CLMS   |
| 25.50 | 900.00  | 965.2 OD x 9.5 CLMS   |
| 28.00 | 950.00  | 1016.0 OD x 9.5 CLMS  |
| 28.00 | 950.00  | 1016.0 OD x 12.0 CLMS |
| 28.00 | 1000.00 | 1066.8 OD x 9.5 CLMS  |

|       |         |                       |
|-------|---------|-----------------------|
| 28.00 | 1000.00 | 1066.8 OD x 12.0 CLMS |
| 28.00 | 1050.00 | 1117.6 OD x 9.5 CLMS  |
| 28.00 | 1050.00 | 1117.6 OD x 12.0 CLMS |
| 28.00 | 1150.00 | 1219.2 OD x 9.5 CLMS  |
| 28.00 | 1150.00 | 1219.2 OD x 12.0 CLMS |
| 28.00 | 1300.00 | 1371.6 OD x 9.5 CLMS  |
| 28.00 | 1300.00 | 1371.6 OD x 12.0 CLMS |
| 28.00 | 1500.00 | 1524.0 OD x 9.5 CLMS  |
| 28.00 | 1500.00 | 1524.0 OD x 12.0 CLMS |
| 28.00 | 1600.00 | 1676.4 OD x 9.5 CLMS  |
| 28.00 | 1600.00 | 1676.4 OD x 12.0 CLMS |
| 28.00 | 1800.00 | 1828.8 OD x 9.5 CLMS  |
| 28.00 | 1800.00 | 1828.8 OD x 12.0 CLMS |
| 28.00 | 1900.00 | 1981.2 OD x 9.5 CLMS  |
| 28.00 | 1900.00 | 1981.2 OD x 12.0 CLMS |

### ANZ CORRUGATED PIPE (ALUFLO)

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name  |
|---------------------|---------------------|-----------------|
| 1.30                | 300.00              | 300 NB ALUFLO   |
| 1.30                | 375.00              | 375 NB ALUFLO   |
| 1.30                | 450.00              | 450 NB ALUFLO   |
| 1.30                | 525.00              | 525 NB ALUFLO   |
| 1.30                | 600.00              | 600 NB ALUFLO   |
| 1.30                | 675.00              | 675 NB ALUFLO   |
| 1.30                | 750.00              | 750 NB ALUFLO   |
| 1.30                | 825.00              | 825 NB ALUFLO   |
| 1.30                | 900.00              | 900 NB ALUFLO   |
| 1.30                | 1050.00             | 1,050 NB ALUFLO |
| 1.60                | 1200.00             | 1,200 NB ALUFLO |
| 1.93                | 1350.00             | 1,350 NB ALUFLO |
| 2.17                | 1500.00             | 1,500 NB ALUFLO |
| 3.45                | 1650.00             | 1,650 NB ALUFLO |
| 4.20                | 1800.00             | 1,800 NB ALUFLO |
| 4.20                | 1950.00             | 1,950 NB ALUFLO |
| 4.20                | 2100.00             | 2,100 NB ALUFLO |
| 4.20                | 2250.00             | 2,250 NB ALUFLO |
| 4.20                | 2400.00             | 2,400 NB ALUFLO |



|      |         |                 |
|------|---------|-----------------|
| 4.20 | 2550.00 | 2,550 NB ALUFLO |
| 4.20 | 2700.00 | 2,700 NB ALUFLO |
| 4.20 | 2850.00 | 2,850 NB ALUFLO |
| 4.20 | 3000.00 | 3000 NB ALUFLO  |
| 4.20 | 3150.00 | 3,150 NB ALUFLO |
| 4.20 | 3300.00 | 3,300 NB ALUFLO |
| 4.20 | 3450.00 | 3,450 NB ALUFLO |
| 4.20 | 3600.00 | 3,600 NB ALUFLO |

### ANZ CORRUGATED PIPE (HELCOR)

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name  |
|---------------------|---------------------|-----------------|
| 1.30                | 300.00              | 300 NB HELCOR   |
| 1.30                | 375.00              | 375 NB HELCOR   |
| 1.30                | 450.00              | 450 NB HELCOR   |
| 1.30                | 525.00              | 525 NB HELCOR   |
| 1.30                | 600.00              | 600 NB HELCOR   |
| 1.30                | 675.00              | 675 NB HELCOR   |
| 1.30                | 750.00              | 750 NB HELCOR   |
| 1.30                | 825.00              | 825 NB HELCOR   |
| 1.30                | 900.00              | 900 NB HELCOR   |
| 1.30                | 1050.00             | 1,050 NB HELCOR |
| 1.60                | 1200.00             | 1,200 NB HELCOR |
| 1.93                | 1350.00             | 1,350 NB HELCOR |
| 2.17                | 1500.00             | 1,500 NB HELCOR |
| 3.45                | 1650.00             | 1,650 NB HELCOR |
| 4.20                | 1800.00             | 1,800 NB HELCOR |
| 4.20                | 1950.00             | 1,950 NB HELCOR |
| 4.20                | 2100.00             | 2,100 NB HELCOR |
| 4.20                | 2250.00             | 2,250 NB HELCOR |
| 4.20                | 2400.00             | 2,400 NB HELCOR |
| 4.20                | 2550.00             | 2,550 NB HELCOR |
| 4.20                | 2700.00             | 2,700 NB HELCOR |
| 4.20                | 2850.00             | 2,850 NB HELCOR |
| 4.20                | 3000.00             | 3000 NB HELCOR  |
| 4.20                | 3150.00             | 3,150 NB HELCOR |
| 4.20                | 3300.00             | 3,300 NB HELCOR |
| 4.20                | 3450.00             | 3,450 NB HELCOR |
| 4.20                | 3600.00             | 3,600 NB HELCOR |

**ANZ CORRUGATED PIPE (SEWERBOSS SN8)**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name       |
|---------------------|---------------------|----------------------|
| 1.30                | 225.00              | 225 NB SEWERBOSS SN8 |
| 1.30                | 300.00              | 300 NB SEWERBOSS SN8 |
| 1.30                | 375.00              | 375 NB SEWERBOSS SN8 |
| 1.50                | 400.00              | 400 NB SEWERBOSS SN8 |

**ANZ CORRUGATED PIPE (SEWERBOSS SN16)**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name        |
|---------------------|---------------------|-----------------------|
| 1.30                | 225.00              | 225 NB SEWERBOSS SN16 |
| 1.30                | 300.00              | 300 NB SEWERBOSS SN16 |
| 1.30                | 375.00              | 375 NB SEWERBOSS SN16 |
| 1.50                | 400.00              | 400 NB SEWERBOSS SN16 |

**ANZ CORRUGATED PIPE (SEWERBOSS SN20)**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name        |
|---------------------|---------------------|-----------------------|
| 1.30                | 225.00              | 225 NB SEWERBOSS SN16 |
| 1.30                | 300.00              | 300 NB SEWERBOSS SN16 |
| 1.30                | 375.00              | 375 NB SEWERBOSS SN16 |
| 1.50                | 400.00              | 400 NB SEWERBOSS SN16 |

**ANZ CORRUGATED PIPE (STORMBOSS SN6)**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name       |
|---------------------|---------------------|----------------------|
| 1.30                | 225.00              | 225 NB STORMBOSS SN6 |
| 1.30                | 300.00              | 300 NB STORMBOSS SN6 |
| 1.30                | 375.00              | 375 NB STORMBOSS SN6 |
| 1.50                | 400.00              | 400 NB STORMBOSS SN6 |

**ANZ CORRUGATED PIPE (STORMBOSS SN8)**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name       |
|---------------------|---------------------|----------------------|
| 1.30                | 225.00              | 225 NB STORMBOSS SN8 |
| 1.30                | 300.00              | 300 NB STORMBOSS SN8 |
| 1.30                | 375.00              | 375 NB STORMBOSS SN8 |
| 1.50                | 400.00              | 400 NB STORMBOSS SN8 |

### ANZ CORRUGATED PIPE (STORMBOSS SN16)

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name        |
|---------------------|---------------------|-----------------------|
| 1.30                | 225.00              | 225 NB STORMBOSS SN16 |
| 1.30                | 300.00              | 300 NB STORMBOSS SN16 |
| 1.30                | 375.00              | 375 NB STORMBOSS SN16 |
| 1.50                | 400.00              | 400 NB STORMBOSS SN16 |

### ANZ CONCRETE BOX CULVERT

| Wall Thickness (mm) | Part Size Name                        |
|---------------------|---------------------------------------|
| 150.00              | 1,500 x 1,500 mm Concrete Box Culvert |
| 150.00              | 1,500 x 2,000 mm Concrete Box Culvert |
| 150.00              | 2,000 x 1,500 mm Concrete Box Culvert |
| 150.00              | 2,000 x 2,000 mm Concrete Box Culvert |
| 150.00              | 2,000 x 2,500 mm Concrete Box Culvert |
| 200.00              | 2,500 x 1,500 mm Concrete Box Culvert |
| 200.00              | 2,500 x 2,000 mm Concrete Box Culvert |
| 200.00              | 2,500 x 2,500 mm Concrete Box Culvert |
| 200.00              | 2,500 x 3,000 mm Concrete Box Culvert |
| 200.00              | 3,000 x 1,500 mm Concrete Box Culvert |
| 200.00              | 3,000 x 2,000 mm Concrete Box Culvert |
| 200.00              | 3,000 x 2,500 mm Concrete Box Culvert |
| 200.00              | 3,000 x 3,000 mm Concrete Box Culvert |
| 200.00              | 3,000 x 3,500 mm Concrete Box Culvert |
| 200.00              | 3,500 x 1,500 mm Concrete Box Culvert |
| 200.00              | 3,500 x 2,000 mm Concrete Box Culvert |
| 200.00              | 3,500 x 2,500 mm Concrete Box Culvert |
| 200.00              | 3,500 x 3,000 mm Concrete Box Culvert |
| 200.00              | 3,500 x 3,500 mm Concrete Box Culvert |

|        |                                       |
|--------|---------------------------------------|
| 225.00 | 3,500 x 4,000 mm Concrete Box Culvert |
| 225.00 | 4,000 x 1,500 mm Concrete Box Culvert |
| 225.00 | 4,000 x 2,000 mm Concrete Box Culvert |
| 225.00 | 4,000 x 2,500 mm Concrete Box Culvert |
| 225.00 | 4,000 x 3,000 mm Concrete Box Culvert |
| 225.00 | 4,000 x 3,500 mm Concrete Box Culvert |
| 225.00 | 4,000 x 4,000 mm Concrete Box Culvert |

### ANZ EARTHENWARE PIPE

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name     |
|---------------------|---------------------|--------------------|
| 20.00               | 100.00              | 100 NB EARTHENWARE |
| 20.00               | 150.00              | 150 NB EARTHENWARE |
| 20.00               | 200.00              | 200 NB EARTHENWARE |
| 30.00               | 225.00              | 225 NB EARTHENWARE |
| 30.00               | 250.00              | 250 NB EARTHENWARE |
| 30.00               | 300.00              | 300 NB EARTHENWARE |
| 30.00               | 375.00              | 375 NB EARTHENWARE |
| 30.00               | 400.00              | 400 NB EARTHENWARE |
| 40.00               | 450.00              | 450 NB EARTHENWARE |
| 40.00               | 500.00              | 500 NB EARTHENWARE |
| 40.00               | 600.00              | 600 NB EARTHENWARE |

### ANZ EARTHENWARE PIPE (VITCLAY)

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name |
|---------------------|---------------------|----------------|
| 20.00               | 100.00              | 100 NB VITCLAY |
| 20.00               | 150.00              | 150 NB VITCLAY |
| 20.00               | 200.00              | 200 NB VITCLAY |
| 30.00               | 225.00              | 225 NB VITCLAY |
| 30.00               | 250.00              | 250 NB VITCLAY |
| 30.00               | 300.00              | 300 NB VITCLAY |
| 30.00               | 375.00              | 375 NB VITCLAY |
| 30.00               | 400.00              | 400 NB VITCLAY |
| 40.00               | 450.00              | 450 NB VITCLAY |
| 40.00               | 500.00              | 500 NB VITCLAY |
| 40.00               | 600.00              | 600 NB VITCLAY |

**ANZ EARTHENWARE PIPE (CERAMIC)**

| Wall Thickness (mm) | Inner Diameter (mm) | Part Size Name |
|---------------------|---------------------|----------------|
| 20.00               | 100.00              | 100 NB CERAMIC |
| 20.00               | 150.00              | 150 NB CERAMIC |
| 20.00               | 200.00              | 200 NB CERAMIC |
| 30.00               | 225.00              | 225 NB CERAMIC |
| 30.00               | 250.00              | 250 NB CERAMIC |
| 30.00               | 300.00              | 300 NB CERAMIC |
| 30.00               | 375.00              | 375 NB CERAMIC |
| 30.00               | 400.00              | 400 NB CERAMIC |
| 40.00               | 450.00              | 450 NB CERAMIC |
| 40.00               | 500.00              | 500 NB CERAMIC |
| 40.00               | 600.00              | 600 NB CERAMIC |

Describe additions and changes to pipe and structure catalogs here, with screen grabs.

**9 Highway design check files**

## 10 Quantity Take Off

### 10.1 Overview

QTO in the ANZ CK has samples of RTA NSW and Queensland Main Roads standards.

### 10.2 Codes

The following codes are from the RTA and QLD Main Roads manuals.

| <i>Code</i> | <i>Description</i>  |
|-------------|---|
| 1101        | Contractor's site facilities  |
| 1102        | Contractor's camp   |
| 1201        | Provision for traffic   |
| 1202        | Traffic Management Plan   |
| 1203        | Roadwork signing records  |
| 1211        | Construction and removal of side track                                      |
| 1221        | Supply of Temporary Barriers  |
| 1223        | Installation of Temporary Barriers  |
| 1225        | Supply of temporary barrier end treatments                                  |
| 1226        | Installation of temporary barrier end treatments                            |
| 1330        | Environmental Inspections   |
| 1331        | Develop Environmental Management Plan (Construction)                        |
| 1332        | Implement Environmental Management Plan (Construction)                      |
| 1333        | Environmental Licences, Permits and Approvals                               |
| 1342        | Environmental Rock Structures.  |
| 1343        | Sand Bag Structures   |
| 1344        | Silt / Sediment Fence   |
| 1345        | Erosion Control Matting   |
| 1346        | Erosion Control Blankets  |
| 2101        | Removal or demolition of culverts, complete                                 |
| 2102        | Removal or demolition of culvert end structures                             |
| 2103        | Removal or demolition of culverts, excluding end structures                 |
| 2104        | Removal or demolition of concrete kerb including kerb crossings             |
| 2105        | Removal or demolition of concrete channel                                   |
| 2106        | Removal or demolition of concrete kerb and channel including kerb crossings |
| 2107        | Removal or demolition of concrete slabs                                     |
| 2108        | Removal or demolition of gullies  |
| 2109        | Removal or demolition of access chambers                                    |

|      |   |
|------|---|
| 2201 | Supply of concrete pipe culvert components, Class [class], [diameter] mm diameter         |
| 2202 | Supply of fibre reinforced concrete pipe culverts, Class [class], [diameter] mm diameter  |
| 2203 | Supply of concrete box culvert components, [size]   |
| 2204 | Supply of concrete spanning slabs, [size]   |
| 2205 | Supply of helical lock-seam corrugated steel pipe culvert components, [size]              |
| 2206 | Supply of helical lock-seam corrugated aluminium pipe culvert components, [size]          |
| 2207 | Supply of nestable corrugated steel pipe culvert components, [size]                       |
| 2208 | Supply of multiple plate corrugated steel pipe culvert components, [size]                 |
| 2209 | Supply of multiple plate corrugated steel pipe-arch culvert components, [size]            |
| 2211 | Supply of multiple plate corrugated steel arch culvert components, [size]                 |
| 2212 | Supply of concrete pipe drainage trough components, [size]                                |
| 2213 | Supply of concrete box trough components, [size]  |
| 2214 | Supply of nestable corrugated steel pipe drainage trough components, [size]               |
| 2221 | Installation of concrete pipe culvert components, [diameter] mm diameter                  |
| 2222 | Installation of fibre reinforced concrete pipe culvert components, [diameter] mm diameter |
| 2223 | Installation of concrete box culvert components, [size]                                   |
| 2224 | Installation of concrete spanning slabs,[size]  |
| 2225 | Installation of helical lock-seam corrugated steel pipe culvert components, [size]        |
| 2226 | Installation of helical lock-seam corrugated aluminium pipe culvert components, [size]    |
| 2227 | Installation of nestable corrugated steel pipe culvert components, [size]                 |
| 2228 | Installation of multiple plate corrugated steel pipe culvert components, [size]           |
| 2229 | Installation of multiple plate corrugated steel pipe-arch culvert components, [size]      |
| 2231 | Installation of multiple plate corrugated steel arch culvert components, [size]           |



|      |   |
|------|---|
| 2232 | Installation of concrete pipe drainage trough components, [size]  |
| 2233 | Installation of concrete box trough components, [size]  |
| 2234 | Installation of nestable corrugated steel pipe drainage trough components, [size]                               |
| 2236 | Installation of pipe culvert components using jacking methods, [diameter] mm diameter                           |
| 2241 | Supply and installation of concrete pipe culvert components, Class [class], [diameter] mm diameter              |
| 2242 | Supply and installation of fibre reinforced concrete pipe culverts, Class [class], [diameter] mm diameter       |
| 2243 | Supply and installation of concrete box culvert components, [size]  |
| 2244 | Supply and installation of concrete spanning slabs,[size]   |
| 2245 | Supply and installation of helical lock-seam corrugated steel pipe culvert components, [size]                   |
| 2246 | Supply and installation of helical lock-seam corrugated aluminium pipe culvert components, [size]               |
| 2247 | Supply and installation of nestable corrugated steel pipe culvert components, [size]                            |
| 2248 | Supply and installation of multiple plate corrugated steel pipe culvert components, [size]                      |
| 2249 | Supply and installation of multiple plate corrugated steel pipe-arch culvert components, [size]                 |
| 2251 | Supply and installation of multiple plate corrugated steel arch culvert components, [size]                      |
| 2252 | Supply and installation of concrete pipe drainage trough components, [size]                                     |
| 2253 | Supply and installation of concrete box trough components, [size]   |
| 2254 | Supply and installation of nestable corrugated steel pipe drainage trough components, [size]                    |
| 2256 | Supply and installation of pipe culvert components using jacking methods, Class [class], [diameter] mm diameter |
| 2301 | Concrete end plugs for culverts   |

|      |  |
|------|--|
| 2302 | Concrete bases in culverts   |
| 2303 | Concrete footings in culverts  |
| 2304 | Concrete infill floors in culverts   |
| 2305 | Concrete abutments and piers in culverts                                       |
| 2306 | Concrete slab decks and kerbs in culverts                                      |
| 2307 | Concrete unitary box culverts  |
| 2308 | End structures to culverts, reinforced concrete                                |
| 2309 | End structures to culverts, unreinforced concrete                              |
| 2311 | End structures to culverts, rock masonry                                       |
| 2312 | End structures to culverts, concrete masonry                                   |
| 2313 | Aprons to culverts, reinforced concrete  |
| 2314 | Aprons to culverts, unreinforced concrete                                      |
| 2315 | Aprons to culverts, grouted rock pitching                                      |
| 2316 | Aprons to culverts, steel-wire mattresses                                      |
| 2317 | Precast concrete end structures to culverts, [size]                            |
| 2401 | Concrete kerb, [type]  |
| 2402 | Concrete kerb crossings, [type]  |
| 2403 | Concrete channel, [type]   |
| 2404 | Concrete kerb and channel, [type]  |
| 2405 | Concrete kerb and channel crossings, [type]                                    |
| 2406 | Precast concrete kerb blocks, [type]   |
| 2407 | Precast concrete channel blocks, [type]  |
| 2408 | Precast concrete kerb and channel blocks, [type]                               |
| 2409 | Shoulder dykes, concrete   |
| 2411 | Shoulder dykes, asphalt  |
| 2412 | Shoulder dykes, precast concrete blocks  |
| 2413 | Concrete gullies, [size/description]   |
| 2414 | Concrete access chambers, [size/description]                                   |
| 2415 | Precast concrete access chambers, [size/description]                           |
| 2416 | Precast concrete side inlet gullies with precast shaft, [size/description]     |
| 2417 | Precast concrete side inlet gullies with cast-in-place pit, [size/description] |
| 2501 | Subsoil drains, Type B, [size] mm diameter                                     |
| 2502 | Subsoil drains, Type D   |
| 2503 | Subsoil drain outlet connection, [size] mm diameter, [type]                    |
| 2504 | Subsoil drain clean-out, [size] mm diameter, [type]                            |
| 2505 | Sheet filter drains  |
| 2506 | Strip filter drains  |

|      |  |
|------|--|
| 2507 | Sheet or strip filter drain outlet connection, [type]  |
| 2511 | Vertical wick filter drains, plastic core  |
| 2512 | Vertical sand drains   |
| 2513 | Granular working platform for stone columns  |
| 2514 | Supply and installation of reinforcement geosynthetic material for stone columns                               |
| 2515 | Supply and installation of geotextile, Strength Class [strength class], Filtration Class [filtration class]    |
| 2516 | Stone columns  |
| 2601 | Concrete paved inverts in corrugated steel/aluminium culverts, [size]  |
| 2611 | Linings in drains and channels, unreinforced concrete  |
| 2612 | Linings in drains and channels, reinforced concrete  |
| 2613 | Linings in drains and channels, grouted rock pitching  |
| 2614 | Linings in drains and channels, steel-wire mattresses  |
| 2615 | Berm drain, [width] mm wide  |
| 2621 | Concrete margins   |
| 2622 | Concrete batters   |
| 2623 | Concrete rail track crossings  |
| 2624 | Concrete machinery crossings   |
| 2631 | Hand placed concrete paving, [thickness] mm thick  |
| 2632 | Sprayed concrete paving, [thickness] mm thick  |
| 2633 | Block paving, [thickness] mm thick   |
| 2641 | Rock masonry   |
| 2642 | Grouted rock pitching  |
| 2643 | Rock protection  |
| 2644 | Steel-wire gabion protection work  |
| 2645 | Steel-wire mattress protection work  |
| 2646 | Fabric encased concrete batter protection on batter faces  |
| 2647 | Fabric encased concrete batter protection in cut-off walls   |
| 2651 | Bridge abutment protection Type 1 - rock spillthrough, [location] abutment                                     |
| 2652 | Bridge abutment protection Type 2 - reinforced concrete over road embankment spillthrough, [location] abutment |

|      |   |
|------|---|
| 2653 | Bridge abutment protection Type 3 - rockfill at toe of road embankment spillthrough, [location] abutment          |
| 2654 | Bridge abutment protection Type 4 - rockwork over road embankment spillthrough, [location] abutment               |
| 2656 | Bridge abutment protection Type 6 - interlocking blockwork over road embankment spillthrough, [location] abutment |
| 2657 | Shotcreting   |
| 2661 | Silt fence  |
| 2662 | Straw bales   |
| 2701 | Concrete retaining wall, concrete in footing, [wall location / wall number]                                       |
| 2702 | Concrete retaining wall, concrete in wall, [wall location / wall number]  |
| 2703 | Concrete retaining wall, steel reinforcing bar, [wall location / wall number]                                     |
| 2711 | Concrete masonry retaining wall, concrete in footing, [wall location / wall number]                               |
| 2712 | Concrete masonry retaining wall, masonry in wall, [wall location / wall number]                                   |
| 2713 | Concrete masonry retaining wall, steel reinforcing bar, [wall location / wall number]                             |
| 2721 | Crib walls  |
| 2781 | Design of Reinforced Soil Structure, [structure number]   |
| 2782 | Reinforced Soil Structure materials, [structure number]   |
| 2783 | Construction of Reinforced Soil Structure, [structure number]   |
| 2784 | Designer's inspection and certification, [structure number]   |
| 3101 | Clearing and grubbing   |
| 3102 | Bridge site preparation   |
| 3104 | Ground surface treatment under embankment, standard   |
| 3105 | Ground surface treatment, special (square metres)   |
| 3106 | Ground surface treatment, special (cubic metres)  |
| 3201 | Road excavation, all materials  |
| 3202 | Excavation to clear waterways at bridge abutments, all materials  |

|      |   |
|------|---|
| 3203 | Excavation for culverts, pipe and conduit trenches, all materials [description]                             |
| 3204 | Excavation for structures, all materials [description]  |
| 3205 | Excavation for diversion channels, all materials  |
| 3206 | Excavation for diversion drains, all materials  |
| 3207 | Excavation for catch drains, all materials  |
| 3208 | Special excavation, all materials [description]   |
| 3213 | Pre-splitting batters of rock cuttings  |
| 3221 | Blinding concrete, [thickness] mm nominal thickness   |
| 3301 | Road embankment   |
| 3302 | Levees, catch banks and diversion blocks using clay fill material from all sources                          |
| 3303 | Special embankment [description] from all sources   |
| 3304 | Supply and installation of geotextile, strength class [strength class], filtration class [filtration class] |
| 3306 | Road verges using general fill material   |
| 3501 | Backfill with general backfill material to [description]  |
| 3502 | Backfill with select backfill material to [description]   |
| 3503 | Backfill with free draining granular material to [description]  |
| 3504 | Backfill with sand to [description]   |
| 3505 | Backfill with cement stabilised pavement material to [description]  |
| 3506 | Backfill with stabilised sand to [description]  |
| 3507 | Backfill with lean mix concrete to [description]  |
| 3508 | Backfill with rock fill to [description]  |
| 3509 | Backfill with material for steel culverts to [description]  |
| 3511 | Bedding of [description]  |
| 3512 | Haunch zone for [description]   |
| 3513 | Side zone for [description]   |
| 3514 | Overlay zone for [description]  |
| 3601 | Turnouts  |
| 3602 | Entrances to private property   |
| 3603 | Stopping Places   |
| 3701 | Widening of the existing formation  |
| 3702 | Widening of the existing formation  |
| 3704 | Fencing around vegetation   |

|      |   |
|------|---|
| 3705 | Padding of trees and boarding of drip zones   |
| 3708 | Preparation of a PMMP-C   |
| 3710 | Screening of stripped site soil   |
| 3711 | Amelioration of stripped site soil  |
| 3713 | Loading, haulage and placement of site planting media   |
| 3714 | Supply and placement of imported planting media   |
| 3715 | Earth mounding  |
| 3719 | Spreading of amelioration agent prior to ground preparation   |
| 3720 | Roughening of batters - [cut batters   fill batters]  |
| 3721 | Ripping   |
| 3722 | Ploughing   |
| 3723 | Cultivation   |
| 3725 | Excavation of subsoil   |
| 3729 | Item description not found  |
| 3738 | Slashing  |
| 3739 | Brushcutting  |
| 3744 | Timber garden edging  |
| 3745 | Concrete garden edging  |
| 3746 | Unit paver garden edging  |
| 3747 | Rock garden edging  |
| 3752 | Loading, haulage and placement of site organic mulch - [chipped site mulch   tub ground site mulch   other mulch]   |
| 3753 | Supply and placement of imported organic mulch - [chipped mulch   tub ground mulch   Hoop Pine mulch   other mulch] |
| 3754 | Loading, haulage and placement of site rock mulch - [type and size of rock]   |
| 3755 | Supply and placement of imported rock mulch – [type and size of rock]   |
| 3756 | Supply and / or blending and placement of organics blanket  |
| 3757 | Supply and placement of filter sock - [200 mm   300 mm   450 mm]  |
| 3760 | Environmental matting - [type] m2   |
| 3761 | Plant mats - [type]   |
| 3766 | Irrigation system, design   |
| 3767 | Irrigation system, supply and installation  |
| 3768 | Irrigation system, commissioning  |
| 3771 | Harvesting of native seed   |

|      |  |
|------|--|
| 3772 | Hydromulching - single pass [native seed mix   grass seed mix]   |
| 3773 | Hydromulching - double pass [native seed mix   grass seed mix]   |
| 3774 | Straw mulching [native seed mix   grass seed mix]  |
| 3775 | Drill seeding [native seed mix   grass seed mix]   |
| 3776 | Mechanical broadcast [native seed mix   grass seed mix]  |
| 3777 | Manual broadcast [native seed mix   grass seed mix]  |
| 3779 | Sample installation  |
| 3782 | Turf [type]  |
| 3783 | Reinforced Turf [type]   |
| 3787 | Planting [viro-cell   viro-tube   ½ native tube (50 x 50 x 75 mm)   full native tube stock (50 x 50 x 120 mm)   140 mm container   300 mm container   25 litre container   45 litre container   75 litre container   100 litre container   200 litre container ] |
| 3788 | Planting ex-ground stock [container size]  |
| 3789 | Harvesting and planting of site plant material [plant unit   container size]   |
| 3790 | site plant material [plant unit]   |
| 3791 | Potting on   |
| 3795 | LR Construction Establishment Period – Input Controlled  |
| 3797 | LR Monitoring Period – Input Controlled  |
| 3798 | LR Monitoring Period – Performance Based   |
| 4101 | Base, unbound pavement, Type 1, Subtype [subtype], [location]  |
| 4102 | Subbase, unbound pavement, Type 1, Subtype [subtype], [location]   |
| 4103 | Base, unbound pavement, Type 2, Subtype [subtype], [location]  |
| 4104 | Subbase, unbound pavement, Type 2, Subtype [subtype], [location]   |
| 4105 | Base, unbound pavement, Type 3, Subtype [subtype], [location]  |
| 4106 | Subbase, unbound pavement, Type 3, Subtype [subtype], [location]   |
| 4107 | Base, unbound pavement, Type 4, Subtype [subtype], [location]  |

|      |   |
|------|---|
| 4108 | Subbase, unbound pavement, Type 4, Subtype [subtype], [location]  |
| 4210 | Pulverisation prior to insitu stabilisation   |
| 4211 | Insitu stabilisation  |
| 4221 | Supply of stabilising agent [description]   |
| 4231 | Water curing  |
| 4246 | Insitu stabilisation  |
| 4256 | Supply of stabilising agent [description]   |
| 4275 | Pulverisation prior to insitu stabilisation   |
| 4276 | Insitu stabilisation  |
| 4281 | Transport of Class 170 bitumen supplied by the Principal, from [supply location]  |
| 4286 | Supply of secondary stabilising agent [description]   |
| 4296 | Water curing  |
| 4301 | Plant-mixed stabilised pavement   |
| 4321 | Supply of stabilising agent   |
| 4331 | Moist curing  |
| 4332 | Curing coat   |
| 4333 | Cover material  |
| 5011 | Supply of cover aggregate [precoated   unprecoated], [nominal size] mm nominal size   |
| 5012 | Supply of cover aggregate [precoated   unprecoated], [nominal size] mm nominal size   |
| 5013 | Supply of prime cover material, [type of material]  |
| 5021 | Transport of materials, [type of material]  |
| 5031 | Construction of stockpile site  |
| 5101 | Prime, grade [grade], spray rate [spray rate], [including   excluding] supply of binder, [including   excluding] supply of additives, [location]      |
| 5102 | Primerseal, grade [grade], spray rate [spray rate], [including   excluding] supply of binder, [including   excluding] supply of additives, [location] |
| 5103 | Seal, class [class], spray rate [spray rate], [including   excluding] supply of binder, [including   excluding] supply of additives, [location]       |
| 5104 | Reseal, class [class], spray rate [spray rate], [including   excluding] supply of binder, [including   excluding] supply of additives, [location]     |



|      |   |
|------|---|
| 5105 | Enrichment, grade [grade], spray rate [spray rate], [including   excluding] supply of binder, [including   excluding] supply of additives, [location]   |
| 5111 | Spreading prime cover material [material], [spread rate], [location]  |
| 5112 | Spreading cover aggregate [size], [spread rate], [location]   |
| 5121 | Supply of bituminous material [material], [class / grade]   |
| 5131 | Transport of bituminous material supplied by the Principal [material], from [supply location]   |
| 5132 | Transport of aggregate supplied by the Principal [material], from [supply location]   |
| 5141 | Sprayed bituminous surfacing, [including   excluding] supply of binder, [including   excluding] supply of additives, [including   excluding] supply of cover aggregates, [location], refer to Clause 1 of Annexure MRS11.11.1 |
| 5151 | Supply of Geotextile [grade] g/m <sup>2</sup>   |
| 5152 | Transport of material supplied by the Principal [material], from [supply location]  |
| 5153 | Placement of Paving Geotextile [nominal weight] g/m <sup>2</sup>  |
| 5201 | Prime, grade [grade], spray rate [spray rate], [including   excluding] supply of binder, [location]   |
| 5202 | Primerseal, grade [grade], spray rate [spray rate], [including   excluding] supply of binder, [location]  |
| 5203 | Seal, grade [grade], spray rate [spray rate], [including   excluding] supply of binder, [location]  |
| 5204 | Reseal, grade [grade], spray rate [spray rate], [including   excluding] supply of binder, [location]  |
| 5205 | Enrichment, grade [grade], spray rate [spray rate], [including   excluding] supply of binder, [location]  |
| 5211 | Spreading prime cover material [material], [spread rate], [location]  |
| 5212 | Spreading cover aggregate [size], [spread rate], [location]   |
| 5221 | Supply of bituminous emulsion [material], [class / grade]   |
| 5231 | Transport of bituminous emulsion supplied by the Principal [material], from [supply location]   |

|      |   |
|------|---|
| 5232 | Transport of aggregate supplied by the Principal [material], from [supply location]   |
| 5241 | Sprayed bituminous emulsion surfacing, [including   excluding] supply of binder, [including   excluding] supply of cover aggregates, [location], refer to Clause 1 of Annexure MRS11.12.1 |
| 5301 | Preparation of existing surface   |
| 5311 | Bituminous slurry seal, QS3   |
| 5312 | Bituminous slurry seal, QS5   |
| 5313 | Bituminous slurry seal, QS7   |
| 5314 | Bituminous slurry micro-surfacing, QS5  |
| 5315 | Bituminous slurry micro-surfacing, QS7  |
| 5316 | Bituminous slurry micro-surfacing, QS10   |
| 5317 | Bituminous slurry rut-filling   |
| 5401 | Preparation of the existing surface   |
| 5404 | Tack coat [application rate] litres/m2, residual bitumen  |
| 5405 | Dense graded asphalt corrector course, DG [nominal size] mix  |
| 5501 | Dense graded asphalt pavement, DG7 mix  |
| 5502 | Dense graded asphalt pavement, DG10 mix   |
| 5503 | Dense graded asphalt pavement, DG14 mix   |
| 5504 | Dense graded asphalt pavement, DG20 mix   |
| 5505 | Dense graded asphalt pavement, DG28 mix   |
| 5542 | Open graded asphalt surfacing, OG10 mix   |
| 5543 | Open graded asphalt surfacing, OG14 mix   |
| 5561 | Fine gap graded asphalt corrector course, FGG7 mix  |
| 5562 | Fine gap graded asphalt pavement, FGG7 mix  |
| 6101 | Demolition of road furniture, as listed in Clause 2 of Annexure MRS11.14.1  |
| 6103 | Removal and salvage of road furniture, as listed in Clause 3.1 of Annexure MRS11.14.1   |
| 6104 | Removal and re-erection of road furniture, as listed in Clause 4 of Annexure MRS11.14.1   |
| 6111 | Road edge guide posts   |
| 6121 | Supply of regulatory, warning and hazard sign faces, as listed in Clause 6.2 of Annexure MRS11.14.1   |
| 6122 | Supply of regulatory, warning and hazard sign faces, [sign type]  |
| 6123 | Supply of direction and information sign faces, as listed in Clause 6.4 of Annexure MRS11.14.1  |

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| 6124 | Supply of direction and information sign faces, as listed in Clause 6.4 of Annexure MRS11.14.1       |
| 6131 | Installation of regulatory, warning and hazard signs, as listed in Clause 6.2 of Annexure MRS11.14.1 |
| 6132 | Installation of regulatory, warning and hazard signs, [number of posts]                              |
| 6133 | Installation of direction and information signs, as listed in Clause 6.4 of Annexure MRS11.14.1      |
| 6134 | Installation of direction and information signs, [sign number]                                       |
| 6135 | Installation of direction and information signs, [sign size]   |
| 6136 | Supply, erection and removal of project signs  |
| 6141 | Grid [type]  |
| 6142 | Grid with vermin and dog fencing [type]  |
| 6151 | Concrete traffic barrier, [type], [with without] conduit, [with without] dowels                      |
| 6152 | Concrete traffic barrier at wall or pier, [type], [with without] conduit, [with without] dowels      |
| 6153 | Concrete traffic barrier median terminal, [type], [with without] conduit, [with without] dowels      |
| 6154 | Galvanised cover assembly at opening for light pole  |
| 6155 | Galvanised cover assembly at opening for cable pit, number [pit number / type]                       |
| 6156 | Split carriageway concrete traffic barrier, [type], [with without] conduit, [with without] dowels    |
| 6157 | Precast concrete barrier   |
| 6161 | Steel beam guardrail, w beam   |
| 6162 | Steel beam guardrail, thrie beam   |
| 6163 | Steel beam guardrail, terminal type [number]   |
| 6164 | Steel beam guardrail, transition type [number]   |
| 6171 | Tensioned wire rope barrier system   |
| 6175 | Barrier end treatment  |
| 6181 | Fencing, [height] mm high, [type]  |
| 6182 | Gates, [height] mm high, [width] mm wide, [type]   |
| 6186 | Steel traffic barriers   |
| 6211 | Supply of noise barrier, [height] m high   |
| 6212 | Construction of noise barrier, [height] m high   |
| 6213 | Supply and construction of noise barrier, [height] m high  |

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| 6214 | Design, supply and construction of noise barrier, [height] m high   |
| 6215 | Removal and salvage of existing noise barriers, [height] m high   |
| 6301 | Spotting only for longitudinal lines  |
| 6311 | Separation line, [broken   unbroken] [width] mm wide, [line length] mm line length, [gap length] mm gap length, colour [colour], material [material]                                      |
| 6312 | Barrier line, one direction, 80mm wide each line, 80mm lateral gap between lines, 3000 mm line length and 9000 mm gap length on broken side, colour [colour], material [material]         |
| 6313 | Barrier line, both directions, 80 mm wide each line, 80 mm lateral gap between lines, colour [colour], material [material]  |
| 6314 | Lane line, broken, [width] mm wide, [line length] mm line length, [gap length] mm gap length, colour [colour], material [material]  |
| 6315 | Lane line, unbroken, [width] mm wide, colour [colour], material [material]  |
| 6316 | Edge line, [width] mm wide, colour [colour], material [material]  |
| 6317 | Continuity line, [width] mm wide, colour [colour], material [material]  |
| 6318 | Turn line, [width] mm wide, colour [colour], material [material]  |
| 6319 | Outline, [width] mm wide, colour [colour], material [material]  |
| 6321 | Audio tactile line marking - Edge line, 150 mm wide, 50 mm rib length, 250 mm gap length, 8 mm rib height, [with 1.5 m gap every 20 m for cyclists   with no gaps for cyclists].          |
| 6322 | Audio tactile line marking - Double barrier line, consisting of two barrier lines each 80 mm wide, 50 mm rib length, 250 mm gap length, 8 mm rib height (applied to both lines).          |
| 6331 | Transverse lines (stop lines, holding lines, markings at Stop and Give Way signs, pedestrian crosswalk lines, arrows, shapes, symbols and numerals), colour [colour], material [material] |

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| 6332 | Transverse lines (diagonal and chevron markings, parking areas and kerb markings), colour [colour], material [material]  |
| 6341 | Removal of existing longitudinal line, [width] mm wide, by [method of removal]   |
| 6342 | Removal of existing transverse lines or shapes, by [method of removal]   |
| 6351 | Retroreflective raised pavement markers  |
| 6352 | Non-reflective raised pavement markers   |
| 6353 | Temporary raised pavement markers  |
| 6354 | Pavement bars  |
| 6355 | Removal of existing raised pavement markers, by [method of removal]  |
| 6501 | Supply of [diameter] mm, [material], [type] conduit  |
| 6502 | Supply of [diameter] mm, [material], [type] conduit for boring or jacking  |
| 6503 | Installation of [No.] of [diameter] mm, [material], [type] conduit(s), in [surface]  |
| 6504 | Installation of [No.] of [diameter] mm, [material], [type] conduit(s) and [No.] of [diameter] mm, [material], [type] conduit(s), in a shared trench, in [surface]            |
| 6505 | Installation of [diameter] mm, [material], [type] conduit, bored or jacked   |
| 6506 | Supply and installation of [No.] of [diameter] mm, [material], [type] conduit(s), in [surface]   |
| 6507 | Supply and installation of [No.] of [diameter] mm, [material], [type] conduit(s) and [No.] of [diameter] mm, [material], [type] conduit(s), in a shared trench, in [surface] |
| 6508 | Supply and installation of [diameter] mm, [material], [type] conduit, bored or jacked  |
| 6513 | Installation of [No.] of [diameter] mm, [material], [type] conduit(s) in concrete structure / barrier  |
| 6516 | Supply and installation of [No.] of [diameter] mm, [material], [type] conduit(s) in concrete structure / barrier   |
| 6521 | Supply of [diameter] mm, [material], [type] conduit, suitable for mounting on a surface  |
| 6523 | Installation of [No.] of [diameter] mm, [material], [type] conduit(s), surface mounted   |

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| 6526 | Supply and installation of [No.] of [diameter] mm, [material], [type] conduit(s), surface mounted   |
| 6531 | Supply of Draw Rope   |
| 6532 | Installation of draw rope in existing conduits  |
| 6533 | Supply and installation of draw rope in existing conduits   |
| 6534 | Flush and clear conduits (All types)  |
| 6535 | Removal and transport of conduits, (All diameters, All materials, All types)  |
| 6536 | Removal of cable joining pit(s) (All types)   |
| 6551 | Supply of cable jointing pit(s) [type]  |
| 6552 | Installation of cable jointing pit(s) [type]  |
| 6553 | Supply and installation of cable jointing pit(s) [type]   |
| 6554 | Construction of pit surround  |
| 6555 | Supply of maintenance marker posts  |
| 6556 | Installation of maintenance marker posts  |
| 6557 | Supply and installation of maintenance marker posts   |
| 6601 | Traffic signal post footing   |
| 6602 | Traffic signal mast arm footing   |
| 6605 | Traffic signal controller base  |
| 6611 | Supply of traffic signal equipment, [description]   |
| 6612 | Installation of traffic signal equipment, [description]   |
| 6613 | Supply and installation of traffic signal equipment, [description]  |
| 6621 | Supply of traffic signal post, [length] metres long, [with   without] hinged baseplate  |
| 6622 | Supply of traffic signal mast arm with a [length] metre long outreach arm, [without road lighting luminaire spigot   with road lighting luminaire spigot and 1400 mm long luminaire transition piece   with road lighting luminaire spigot and 2900 mm long luminaire transition piece   with road lighting luminaire spigot and 4400 mm long luminaire transition piece] |
| 6623 | Supply of joint use traffic signal and road lighting pole, [length] metres long   |
| 6624 | Supply of push button post, [length] metres long, [with   without] hinged baseplate   |

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| 6631 | Installation of traffic signal post, [length] metres long, [with   without] hinged baseplate   |
| 6632 | Installation of traffic signal mast arm with a [length] metre long outreach arm, [without road lighting luminaire spigot   with road lighting luminaire spigot and 1400 mm long luminaire transition piece   with road lighting luminaire spigot and 2900 mm long luminaire transition piece   with road lighting luminaire spigot and 4400 mm long luminaire transition piece]            |
| 6633 | Installation of joint use traffic signal and road lighting pole, [length] metres long  |
| 6634 | Installation of push button post, [length] metres long, [with   without] hinged baseplate  |
| 6635 | Supply and installation of traffic signal post, [length] metres long, [with   without] hinged baseplate  |
| 6636 | Supply and installation of traffic signal mast arm with a [length] metre long outreach arm, [without road lighting luminaire spigot   with road lighting luminaire spigot and 1400 mm long luminaire transition piece   with road lighting luminaire spigot and 2900 mm long luminaire transition piece   with road lighting luminaire spigot and 4400 mm long luminaire transition piece] |
| 6637 | Supply and installation of joint use traffic signal and road lighting pole, [length] metres long   |
| 6638 | Supply and installation of push button post, [length] metres long, [with   without] hinged baseplate   |
| 6641 | Supply of traffic signal lantern, [LED   QH], [number of aspects] aspect, [diameter] mm aspect diameter  |
| 6642 | Supply of pedestrian lantern, [LED   QH]   |
| 6643 | Supply of target board, [ single   double]   |
| 6644 | Installation of [overhead mounted   ground mounted] traffic signal lantern, [number of aspects] aspect, [diameter] mm aspect diameter  |
| 6645 | Installation of pedestrian lantern   |
| 6646 | Installation of target board, [ single   double]   |

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| 6647 | Supply and installation of [overhead mounted   ground mounted] traffic signal lantern, [LED   QH], [number of aspects] aspect, [diameter] mm aspect diameter, and [single   double] target board |
| 6648 | Supply and installation of pedestrian lantern, [LED   QH]  |
| 6651 | Supply of traffic signal pedestrian push button, [standard   audio-tactile]  |
| 6652 | Installation of traffic signal pedestrian push button, [standard   audio-tactile]  |
| 6653 | Supply and installation of traffic signal pedestrian push button, [standard   audio-tactile]   |
| 6661 | Supply and installation of vehicle detector loops, [description]   |
| 6671 | Supply of traffic signal controller  |
| 6672 | Installation of traffic signal controller, [description of traffic signal site]  |
| 6673 | Supply and installation of traffic signal controller, [description of traffic signal site]   |
| 6674 | Modification to existing traffic signal controller, [description of traffic signal site]   |
| 6675 | Supply and installation of Personality EPROM   |
| 6676 | Commissioning and testing of Personality EPROM   |
| 6681 | Removal of traffic signal equipment for salvage, [description]   |
| 6682 | Removal of traffic signal equipment for disposal, [description]  |
| 6701 | Road lighting pole footing, [diameter] mm diameter   |
| 6702 | Road lighting pole footing in concrete median barrier, [diameter] mm diameter  |
| 6705 | Construction of retaining wall around footing  |
| 6706 | Removal of road lighting pole footing  |
| 6711 | Supply of [fixed base   slip base   impact absorbent] road lighting pole, [height] mm vertical height  |
| 6712 | Supply of [single   double] road lighting outreach arm, [length] mm long   |
| 6713 | Supply of road lighting outreach arm extension, 1.5 metres long  |
| 6714 | Supply of road lighting luminaire headframe, [number of spigots] way headframe   |



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| 6721 | Supply of pedestrian crossing floodlight bracket, [length] mm long  |
| 6722 | Supply of underbridge road lighting bracket, [height] mm high   |
| 6723 | Supply of wall mounted road lighting bracket, [length] mm long  |
| 6731 | Supply of road lighting luminaire, [name of manufacturer], [type of luminaire]  |
| 6732 | Supply of pedestrian crossing floodlight, [with   without] louvre, [name of manufacturer], [type of luminaire]  |
| 6741 | Installation of [fixed base / slip base / impact absorbent] road lighting pole  |
| 6742 | Installation of road lighting outreach arm  |
| 6743 | Installation of road lighting outreach arm extension  |
| 6744 | Installation of road lighting luminaire headframe   |
| 6751 | Installation of pedestrian crossing floodlight mounting bracket   |
| 6752 | Installation of underbridge road lighting bracket   |
| 6753 | Installation of wall mounted road lighting bracket  |
| 6761 | Installation of road lighting luminaire   |
| 6762 | Installation of pedestrian crossing floodlight  |
| 6771 | Supply and installation of [fixed base   slip base   impact absorbent] road lighting pole, [height] mm vertical height, [length] mm long [single   double] outreach arm, [with   without] outreach arm extension [with aerial supply   with loop in loop out cabling] |
| 6772 | Supply and installation of [fixed base   slip base   impact absorbent] high mast road lighting pole, [height] mm vertical height, [number of spigots] way headframe, [with aerial supply   with loop in loop out cabling]   |
| 6773 | Supply and installation of pedestrian crossing floodlight mounting bracket  |
| 6774 | Supply and installation of underbridge road lighting bracket, [height] mm high  |
| 6775 | Supply and installation of wall mounted road lighting bracket, [length] mm long   |
| 6776 | Supply and installation of road lighting luminaire, [name of manufacturer], [type of luminaire]   |

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| 6777 | Supply and installation of pedestrian crossing floodlight, [with   without] louvre, [name of manufacturer], [type of luminaire]                    |
| 6778 | Supply and installation of cabling for luminaire on bridge balustrade with loop in, loop out supply  |
| 6781 | Removal of road lighting equipment for salvage, [description]  |
| 6782 | Removal of road lighting equipment for disposal, [description]   |
| 6783 | Removal of road lighting luminaire   |
| 6784 | Removal of pedestrian crossing floodlight  |
| 6801 | Supply of URD pillar switchboard and ancillary components, [type]  |
| 6802 | Supply of pole mounted switchboard and ancillary components, [type]  |
| 6803 | Installation of URD pillar switchboard and ancillary components, [type]  |
| 6804 | Installation of pole mounted switchboard and ancillary components, [type]  |
| 6811 | Supply of underground road lighting cable, [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material] |
| 6812 | Supply of aerial road lighting cable, [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material]      |
| 6813 | Supply of traffic signal cable, [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material]            |
| 6814 | Supply of loop detector cable, [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material]             |
| 6815 | Supply of cable, [usage], [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material]                  |
| 6816 | Supply of cable joint, [fused   unfused]   |
| 6817 | Supply of aerial cable strain clamp  |
| 6818 | Supply of aerial cable connector, [type]   |
| 6819 | Supply of right angle strain relief bushing (to suit 26 mm diameter hole)  |
| 6821 | Installation, jointing and termination of underground road lighting cable, [cores]   |

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| 6822 | Installation, jointing and termination of traffic signal cable, [cores]   |
| 6823 | Installation, jointing and termination of loop detector cable, [cores]  |
| 6824 | Installation, jointing and termination of cable, [usage], [cores]   |
| 6825 | Installation, jointing and termination of aerial road lighting cable, [cores]   |
| 6826 | Removal of underground cable  |
| 6827 | Removal of aerial cable   |
| 6831 | Supply of mains connection equipment including the supply of mains connection cable, [length], [usage], [conductor size], [number of cores] cores, [core insulation], [sheath insulation], [conductor material] |
| 6832 | Installation of mains connection including mains connection cable   |
| 7001 | Hardwood kerbs, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long   |
| 7002 | Plywood kerbs, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long  |
| 7003 | Hardwood decking, supply on Site, ([thickness] mm thick), [length] metres long  |
| 7004 | Plywood deck sheets, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long  |
| 7005 | Plywood deck sheets including coating, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long  |
| 7006 | Hardwood spiking planks, supply on Site, ([width] mm wide, [thickness] mm thick)  |
| 7007 | Hardwood end spiking plank, supply on Site, ([width] mm wide, [thickness] mm thick)   |
| 7008 | Hardwood girders, round, supply on Site, ([diameter] mm diameter), [length] metres long   |
| 7009 | Hardwood girders, octagonal, supply on Site, ([width] mm wide), [length] metres long  |
| 7010 | Hardwood corbels, round, supply on Site, ([diameter] mm diameter), [length] metres long   |
| 7011 | Hardwood corbels, octagonal, supply on Site, ([width] mm wide), [length] metres long  |
| 7012 | Hardwood headstocks, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long  |

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| 7013 | Hardwood piles, supply on Site, ([diameter] mm diameter), [length] metres long   |
| 7014 | Hardwood wales and braces, supply on Site, ([width] mm wide, [thickness] mm thick)   |
| 7015 | Hardwood sill, round, supply on Site, ([diameter] mm diameter), [length] metres long   |
| 7016 | Hardwood sill, rectangular, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long  |
| 7017 | Hardwood struts and fenders, round, supply on Site, ([diameter] mm diameter), [length] metres long   |
| 7018 | Hardwood struts and fenders, rectangular, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long  |
| 7019 | Hardwood distributor planks, supply on Site, ([width] mm wide, [thickness] mm thick)   |
| 7020 | Hardwood running planks, supply on Site, ([width] mm wide, [thickness] mm thick)   |
| 7021 | Hardwood ballast boards, supply on Site, ([width] mm wide, [thickness] mm thick)   |
| 7022 | Hardwood cover boards, supply on Site, ([width] mm wide, [thickness] mm thick)   |
| 7023 | Hardwood backing slabs, supply on Site, ([width] mm wide, [thickness] mm thick)  |
| 7050 | Steel bridge decking, supply on Site, ([depth] mm deep, [thickness] mm thick), [length] metres long  |
| 7051 | Steel kerb, supply on Site, ([depth] mm deep, [thickness] mm thick), [length] metres long  |
| 7080 | Precast prestressed concrete bridge decking, supply on Site, ([width] mm wide, [thickness] mm thick), [length] metres long, [clockwise skew anticlockwise skew square], [degrees] degrees skew |
| 7101 | Hardwood kerbs, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick), [length] metres long  |
| 7102 | Plywood kerbs, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick), [length] metres long   |

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| 7103 | Hardwood decking, transport to Site, ex Works/Stockpile [location], ([thickness] mm thick), [length] metres long  |
| 7104 | Plywood deck sheets, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick), [length] metres long                    |
| 7105 | Plywood deck sheets, including coating, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick), [length] metres long |
| 7106 | Hardwood spiking planks, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)                                      |
| 7107 | Hardwood end spiking planks, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)                                  |
| 7108 | Hardwood girders, round, transport to Site, ex Works/Stockpile [location], ([diameter] mm diameter), [length] metres long                               |
| 7109 | Hardwood girders, octagonal, transport to Site, ex Works/Stockpile [location], ([width] mm wide), [length] metres long                                  |
| 7110 | Hardwood corbels, round, transport to Site, ex Works/Stockpile [location], ([diameter] mm diameter), [length] metres long                               |
| 7111 | Hardwood corbels, octagonal, transport to Site, ex Works/Stockpile [location], ([width] mm wide), [length] metres long                                  |
| 7112 | Hardwood headstocks, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick), [length] metres long                    |
| 7113 | Hardwood piles, transport to Site, ex Works/Stockpile [location], ([diameter] mm diameter), [length] metres long  |
| 7114 | Hardwood wales and braces, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)                                    |
| 7115 | Hardwood sill, round, transport to Site, ex Works/Stockpile [location], ([diameter] mm diameter), [length] metres long                                  |
| 7116 | Hardwood sill, rectangular, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick), [length] metres long             |

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| 7117 | Hardwood struts and fenders, round, transport to Site, ex Works/Stockpile [location], ([diameter] mm diameter), [length] metres long  |
| 7118 | Hardwood struts and fenders, rectangular, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick), [length] metres long   |
| 7119 | Hardwood distributor planks, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)  |
| 7120 | Hardwood running planks, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)  |
| 7121 | Hardwood ballast boards, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)  |
| 7122 | Hardwood cover boards, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)  |
| 7123 | Hardwood backing slabs, transport to Site, ex Works/Stockpile [location], ([width] mm wide, [thickness] mm thick)   |
| 7150 | Steel bridge decking, transport to Site, ex Works/Stockpile [location], ([depth] mm deep, [thickness] mm thick), [length] metres long   |
| 7151 | Steel kerb, transport to Site, ex Works/Stockpile [location], ([depth] mm deep, [thickness] mm thick), [length] metres long   |
| 7180 | Precast prestressed concrete bridge decking, transport to Site [ex Works or Stockpile], ([width] mm wide, [thickness] mm thick), [length] metres long, [clockwise skew   anticlockwise skew   square], [degrees] degrees skew |
| 7190 | Storage of timber bridge materials and components at Site   |
| 7301 | Concrete Class [compressive strength] MPa/20 in pier footing  |
| 7302 | Concrete Class [compressive strength] MPa/20 in pier pile cap   |
| 7303 | Concrete Class [compressive strength] MPa/20 in pier above pile cap/cast-in-place pile/footing  |

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| 7304 | Concrete Class [compressive strength] MPa/20 in pier headstock  |
| 7305 | Concrete Class [compressive strength] MPa/10 in pier pedestal   |
| 7311 | Concrete Class [compressive strength] MPa/20 in abutment footing  |
| 7312 | Concrete Class [compressive strength] MPa/20 in abutment pile cap   |
| 7313 | Concrete Class [compressive strength] MPa/20 in abutment above cast-in-place pile / footing / pile cap excluding parapet terminal |
| 7314 | Concrete Class [compressive strength] MPa/20 in abutment headstock excluding parapet terminal                                     |
| 7315 | Concrete Class [compressive strength] MPa/10 in abutment pedestal   |
| 7321 | Steel reinforcing bar in piers and abutments including parapet terminals  |
| 7401 | Reinforced concrete pipe liners, supply on Site [diameter]  |
| 7402 | Handling and pitching of reinforced concrete pipe liners  |
| 7404 | Steel pipe liners, supply on Site [diameter]  |
| 7405 | Supply and fixing of stiffening bands   |
| 7406 | Handling and pitching of steel liners   |
| 7411 | Item description not found  |
| 7412 | Item description not found  |
| 7413 | Excavation to form bell enlargements below liners   |
| 7501 | Prestressed concrete piles, supply on Site, [cross section size] mm [cross section shape]   |
| 7502 | Transport to Site and storage of prestressed concrete piles, ex works [location]  |
| 7503 | Handling and pitching of prestressed concrete piles, [cross section size] mm [cross section shape]                                |
| 7505 | Setting up for pre-boring for prestressed concrete piles  |
| 7506 | Pre-boring for prestressed concrete piles   |
| 7507 | Setting up for jetting for prestressed concrete piles   |
| 7508 | Jetting for prestressed concrete piles  |
| 7509 | Setting up for drilling and firing for prestressed concrete piles   |
| 7511 | Drilling and firing for prestressed concrete piles  |

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| 7512 | Stripping of prestressed concrete pile head, [cross section size] mm [cross section shape]                                    |
| 7601 | Steel piles, supply on Site   |
| 7602 | Handling and pitching of steel piles  |
| 7604 | Setting up for pre-boring for steel piles   |
| 7605 | Pre-boring for steel piles  |
| 7606 | Setting up for jetting for steel piles  |
| 7607 | Jetting for steel piles   |
| 7608 | Setting up for drilling and firing for steel piles  |
| 7609 | Drilling and firing for steel piles   |
| 7612 | Trimming of steel pile heads including welding of bond bars   |
| 7701 | Bitumen slip layer on PSC piles   |
| 7702 | Bitumen slip layer on steel piles   |
| 8101 | Prestressed concrete deck and kerb unit, supply on Site, [depth] mm deep, [length] metres long                                |
| 8102 | Transverse stressing units, supply on Site  |
| 8103 | Transport of prestressed concrete deck and kerb units to the Site, [depth] mm deep, [length] metres long, ex works [location] |
| 8104 | Transport of transverse stressing units to the Site, ex works [location]  |
| 8111 | Single layer elastomeric bearings, [length] x [breadth] x [depth]   |
| 8112 | Laminated elastomeric bearings, [length] x [breadth] x [depth]  |
| 8121 | Erection of prestressed concrete deck and kerb units, [depth] mm deep, [length] metres long                                   |
| 8122 | Erection of transverse stressing units  |
| 8131 | Holding-down bolts for deck and kerb units, [length] mm   |
| 8132 | Deck unit dowel bars, [length] mm long  |
| 8141 | Transverse prestressing of deck   |
| 8201 | Prestressed concrete I girders, supply on Site, [depth] mm deep, [length] metres long   |
| 8202 | Transport of prestressed concrete I girders to the Site, [depth] mm deep, [length] metres long, ex works [location]           |
| 8203 | Erection of prestressed concrete I girders, [depth] mm deep, [length] metres long   |



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| 8211 | Prestressed concrete T girders, supply on Site, [girder type], [depth] mm deep, [length] metres long                               |
| 8212 | Transport of prestressed concrete T girders to the Site, [girder type], [depth] mm deep, [length] metres long, ex works [location] |
| 8213 | Erection of prestressed concrete T girders, girder [type], [depth] mm deep, [length] metres long                                   |
| 8221 | Laminated elastomeric bearings, [length] x [breadth] x [depth]   |
| 8222 | Pot-type bearings, [rated load capacity], [fixed / sliding]  |
| 8231 | Girder restraints  |
| 8251 | Steel girders, supply on Site, [section] / ([flange width] mm wide, [depth]) mm deep, [length] metres long                         |
| 8252 | Steel cross bracing, supply on Site  |
| 8253 | Transport of steel girders to the Site, [section] / ([flange width] mm wide, [depth]) mm deep, [length] metres long                |
| 8254 | Transport of steel cross bracing to the Site, ex works [location]  |
| 8255 | Erection of steel girders, [section] / ([flange width] mm wide, [depth]) mm deep, [length] metres long                             |
| 8256 | Erection of steel cross bracing  |
| 8257 | Installation of bearings for rolled steel girders  |
| 8261 | Supply and installation of laminated elastomeric bearings, [length] x [breadth] x [depth]  |
| 8262 | Supply and installation of pot-type bearings, [rated load capacity], [fixed / sliding]   |
| 8271 | Supply and installation of girder restraints   |
| 8301 | Concrete Class [compressive strength] MPa/20 in cross girder   |
| 8302 | Concrete Class [compressive strength] MPa/20 in deck   |
| 8303 | Concrete Class [compressive strength] MPa/20 in in situ kerb   |
| 8304 | Concrete Class [compressive strength] MPa/20 in parapet and parapet terminal   |
| 8305 | Concrete Class [compressive strength] MPa/20 in median   |

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| 8306 | Concrete Class [compressive strength] MPa/20 in relieving slab                             |
| 8311 | Reinforcing steel in decks, cross girders, kerbs and parapets, excluding parapet terminals |
| 8312 | Reinforcing steel in medians, in situ kerbs and parapets                                   |
| 8313 | Reinforcing steel in relieving slabs   |
| 8314 | Bar grip coupler fittings for future widening, [diameter] mm diameter                      |
| 8315 | Bar grip coupler, [diameter] mm diameter   |
| 8316 | Bar grip coupler for bar extension, [diameter] mm diameter                                 |
| 8321 | Evaporative retarding curing compound  |
| 8331 | Anchors for bridge rail  |
| 8332 | Anchors for guardrail terminals  |
| 8333 | Anchors for road lighting brackets   |
| 8334 | Sockets for expansion joint  |
| 8341 | Date plate   |
| 8342 | Permanent survey mark  |
| 8343 | PVC scupper and spout, [diameter] mm diameter  |
| 8351 | Bridging strips, compressible fillers and isolation inserts                                |
| 8352 | Joint sealants   |
| 8361 | Expansion joint cover plates, stainless steel  |
| 8362 | Junction box cover plates, stainless steel   |
| 8371 | Stabilised sand in footway   |
| 8372 | Precast concrete footway slab  |
| 8381 | Electrical conduit in footway, [diameter] mm diameter, [use]                               |
| 8382 | Flexible electrical conduit  |
| 8383 | Lamp standard brackets   |
| 8384 | Navigation markers   |
| 8391 | Concrete Class [compressive strength] MPa/20 in slab deck/superstructure                   |
| 8392 | Anchorage Type [type]  |
| 8393 | Ducts, [diameter] mm diameter  |
| 8394 | Strand tendons, [Number], [ Size] mm diameter  |
| 8395 | Post-tensioned stressing bar units, [Size] mm diameter                                     |
| 8396 | Stressing bars/tendons Type [type]   |
| 8397 | Grouting duct, [diameter] mm diameter  |
| 8398 | Capping anchorage recesses and anchorage   |

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| 8401 | Supply and fabrication of bridge traffic rail, steel            |
| 8402 | Supply and fabrication of bridge balustrade, steel              |
| 8403 | Supply and fabrication of bridge safety rail, steel             |
| 8404 | Transport and erection of bridge traffic rail, steel            |
| 8405 | Transport and erection of bridge balustrade, steel              |
| 8406 | Transport and erection of bridge safety rail, steel             |
| 8411 | Supply and fabrication of bridge traffic rail, aluminium        |
| 8412 | Supply and fabrication of bridge balustrade, aluminium          |
| 8413 | Supply and fabrication of bridge safety rail, aluminium         |
| 8414 | Transport and erection of bridge traffic rail, aluminium        |
| 8415 | Transport and erection of bridge balustrade, aluminium          |
| 8416 | Transport and erection of bridge safety rail, aluminium         |
| 8451 | Bolted-in aluminium bridge deck expansion joints                |
| 8452 | Cast-in aluminium bridge deck expansion joints                  |
| 8453 | Fibre reinforced concrete bridge deck expansion joints          |
| 8501 | Anti-graffiti protection coating, non-sacrificial               |
| 8502 | Anti-graffiti protection coating, sacrificial                   |
| 8601 | Bituminous waterproof membrane for bridges                      |
| 8602 | Dense graded asphalt corrector course, DG [nominal size] mm mix |
| 8603 | Dense graded asphalt surfacing layer, DG [nominal size] mm mix  |
| 8604 | Stone mastic asphalt surfacing layer, SM [nominal size] mm mix  |
| 8605 | Open graded asphalt surfacing layer, OG [nominal size] mm mix   |
| 8606 | Tack Coat, 0.2 litres/m <sup>2</sup> residual bitumen           |
| 8651 | Survey for removal of Deck Wearing Surface                      |
| 8652 | Removal of Deck Wearing Surface                                 |
| 8801 | Removal of existing bridge rails and posts                      |
| 8802 | Breaking back existing concrete                                 |
| 8803 | Removal of existing rubble masonry at abutments                 |
| 8804 | Installation of steel reinforcing bars in existing concrete     |
| 8805 | Installation of dowel bars                                      |

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| 8806  | Scabbling concrete faces   |
| 8807  | Temporary barrier guardrail  |
| 9000  | Non-standard item 0  |
| 9001  | Non-standard item 1  |
| 9002  | Non-standard item 2  |
| 9003  | Non-standard item 3  |
| 9004  | Non-standard item 4  |
| 9005  | Non-standard item 5  |
| 1227P | Supply of anti-gawking screens (Provisional Quantity, if ordered)  |
| 1228P | Installation of anti-gawking screens (Provisional Quantity, if ordered)  |
| 1231P | Supply and installation of temporary road lighting including connection to Electricity Supply Authority's network (Provisional Quantity, if ordered) |
| 1341P | Water quality monitoring, if ordered (Provisional Quantity)  |
| 1351P | Cultural Heritage Management, if ordered (Provisional Quantity)  |
| 1355P | Noise monitoring, if ordered (Provisional Quantity)  |
| 1361P | Condition survey and vibration monitoring, if ordered (Provisional Quantity)   |
| 1365P | Air quality monitoring, if ordered (Provisional Quantity)  |
| 1371P | Management of contaminated sites, if ordered (Provisional Quantity)  |
| 1375P | Fauna management, if ordered (Provisional Quantity)  |
| 1381P | Pest Control, if ordered (Provisional Quantity)  |
| 2731P | Soil nailing (Provisional Quantity)  |
| 2741P | Passive rock dowels (Provisional Quantity)   |
| 2751P | Active rock bolts (Provisional Quantity)   |
| 3103P | Stripping of topsoil (Provisional Quantity as directed)  |
| 3107P | Ground surface treatment, in situ treatment of acid sulphate soils with lime (Provisional Quantity if ordered)                                       |
| 3108P | Excavation and disposal of Unsuitable Material with individual excavation <= 10 m3 (Provisional Quantity as directed)                                |

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| 3109P | Excavation and disposal of Unsuitable Material with individual excavation > 10 m <sup>3</sup> (Provisional Quantity as directed)                                    |
| 3111P | Supply and storage of agricultural lime (Provisional Quantity as directed)  |
| 3112P | Quantitative laboratory testing of actual or potential acid sulphate soils (Provisional Quantity if ordered)  |
| 3113P | Treatment of water contaminated by acid sulphate soil (Provisional Quantity if ordered)   |
| 3211P | Excavation of non-rippable material in road excavation, rate additional to rate for Work Item 3201 (Provisional Quantity)   |
| 3212P | Excavation of non-rippable material in confined excavation, rate additional to rates for Work Items 3203 to 3207 inclusive (Provisional Quantity)                   |
| 3215P | Excavation and disposal of Unsuitable Material in and below confined excavations (Provisional Quantity as directed)   |
| 3216P | Excavation and disposal of Unsuitable Material within lines of cuttings, rate additional to rate for Work Item 3201 (Provisional Quantity as directed)              |
| 3305P | Addition of lime to embankment materials to neutralise acid sulphate soils, rate additional to rates for Work Items 3301 to 3303 (Provisional Quantity as directed) |
| 3401P | Testing of existing material below subgrade level in cuttings (Provisional Quantity if ordered)   |
| 3402P | Subgrade treatment Type A in cuttings and in embankments (Provisional Quantity if ordered)  |
| 3403P | Subgrade in cuttings, subgrade treatment Type B, replace with subgrade fill material (Provisional Quantity if ordered)  |
| 3404P | Subgrade in cuttings, subgrade treatment Type C, replace with unbound pavement material (Provisional Quantity if ordered)   |
| 3405P | Subgrade in cuttings, subgrade treatment Type D, in situ stabilise existing (Provisional Quantity if ordered)   |
| 3406P | Subgrade in cuttings, subgrade treatment Type E, replace with plant-mixed stabilised material (Provisional Quantity if ordered)                                     |

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| 3407P | Subgrade in cuttings, subgrade treatment Type F, replace with plant mixed stabilised and unbound drainage layers (Provisional Quantity if ordered) |
| 3408P | Subgrade in cuttings, subgrade treatment Type G, replace with in situ stabilised drainage layer (Provisional Quantity if ordered)                  |
| 3409P | Subgrade in cuttings, subgrade treatment Type H, replace with plant-mixed stabilised drainage layer (Provisional Quantity if ordered)              |
| 3411P | Subgrade in cuttings, subgrade treatment Type I, [description] (Provisional Quantity if ordered)   |
| 3412P | Excavation of non-rippable material in road excavation, rate additional to rate for Work Items 3406, 3407, 3408 and 3409 (Provisional Quantity)    |
| 3413P | Supply of stabilising agent, lime (Provisional Quantity as directed)   |
| 3414P | Supply of stabilising agent, Type GB cement (Provisional Quantity as directed)   |
| 3521P | Addition of lime to backfill material in Acid Sulphate Soil areas (Provisional Quantity as directed)   |
| 3728P | Pest and Disease Control Proposal - Provisional (if ordered)   |
| 3729P | Mechanical herbicide application [knock-down   residual]   |
| 3730P | Manual herbicide application [knock-down   residual]   |
| 3731P | Hand removal of weeds  |
| 3732P | Target herbicide application [additional rate to items 3729   3730]  |
| 3733P | Mechanical or manual pesticide application [pesticide type]  |
| 3799P | Watering of plant material during LR monitoring period - Provisional (if ordered)  |
| 4201P | Excavation and disposal of material not suitable for stabilisation, [type of material] (Provisional Quantity)                                      |
| 4202P | Additional material for shape correction, [type of material], if ordered (Provisional Quantity)  |
| 4203P | New material to replace material not suitable for stabilisation [type of new material], if ordered (Provisional Quantity)                          |

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| 4235P | Excavation and disposal of overlying material [type of material] (Provisional Quantity)                                     |
| 4236P | Excavation and disposal of material not suitable for stabilisation [type of material] (Provisional Quantity)                |
| 4238P | New material to replace material not suitable for stabilisation [type of new material], if ordered (Provisional Quantity)   |
| 4266P | Excavation and disposal of material not suitable for stabilisation [type of material] (Provisional Quantity)                |
| 4267P | Additional material for shape correction [type of new material] (Provisional Quantity)                                      |
| 4268P | New material to replace material not suitable for stabilisation [type of new material], if ordered (Provisional Quantity)   |
| 5402P | Crack filling (Provisional Quantity)  |
| 5403P | Stress absorbing fabric strips (Provisional Quantity)   |
| 6603P | Traffic signal mast arm footing extension for poor soil, 300 mm long , if ordered (Provisional Quantity)                    |
| 6604P | Excavation in excessively hard material, rate additional to rate for Work Items 6601, 6602 and 6603P (Provisional Quantity) |
| 6703P | Road lighting pole footing extension in poor soil, 400 mm long, [diameter] mm diameter, if ordered (Provisional Quantity)   |
| 6704P | Excavation in excessively hard material, rate additional to rate for Work Items 6701, 6702 and 6703P (Provisional Quantity) |
| 7403P | Sinking reinforced concrete pipe liners (Provisional Quantity)  |
| 7407P | Driving steel liners (Provisional Quantity)   |
| 7408P | Extension of steel liners (Provisional Quantity)  |
| 7414P | Drilling of test holes (Provisional Quantity)   |
| 7421P | Concrete Class [compressive strength] MPa/20 in abutment lined pile (Provisional Quantity)                                  |
| 7422P | Concrete Class [compressive strength] MPa/20 in pier lined pile (Provisional Quantity)                                      |
| 7423P | Concrete Class [compressive strength] MPa/20 in abutment bored pole (Provisional Quantity)                                  |

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| 7424P     | Concrete Class [compressive strength] MPa/20 in pier bored pile (Provisional Quantity)                             |
| 7425P     | Steel reinforcing bar in lined and bored piles (Provisional Quantity)  |
| 7504P     | Driving prestressed concrete piles, [cross section size] mm [cross section shape] (Provisional Quantity)           |
| 7513P     | Extension of prestressed concrete piles, [cross section shape] (Provisional Quantity)                              |
| 7514P     | Setting up for re-driving of prestressed concrete piles (Provisional Quantity)                                     |
| 7603P     | Driving steel piles (Provisional Quantity)   |
| 7611P     | Splicing steel piles (Provisional Quantity)  |
| 7613P     | Setting up for re-driving of steel piles (Provisional Quantity)  |
| 7801P     | Establishment of equipment on the Site for dynamic testing of piles (Provisional Quantity)                         |
| 7802P     | Dynamic testing of pile to determine load capacity (Provisional Quantity)  |
| 7803P     | Dynamic testing of pile in difficult conditions to determine final set for subsequent piles (Provisional Quantity) |
| 8711P     | Micaceous iron oxide, full re-coat (Provisional Quantity)  |
| 8712P     | Micaceous iron oxide, top coating (Provisional Quantity)   |
| 8715P     | Full coating systems on steelwork with 30 year design life (Provisional Quantity)                                  |
| 8716P     | Top coat of existing Zinga Liquid Galvanizing with 30 year design life (Provisional Quantity)                      |
| 8717P     | Full coating system on steelwork with 15 year design life (Provisional Quantity)                                   |
| 8718P     | Top coat of existing ZingaMetall Acryltop with 15 year design (Provisional Quantity)                               |
| 8721P     | Full paint coating (Provisional Quantity)  |
| G001P1    | <Item Description>   |
| G004P1    | Principal's Project Accommodation  |
| G010P1    | Control of Traffic   |
| G035P1    | Building Condition Inspections   |
| G035P2(a) | Water Quality  |
| G035P2(b) | Air Pollution  |
| G035P2(c) | Noise  |



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| G035P2(d) | Ground Vibration   |
| G038P1.1  | Basin No.  |
| G038P2    | Inlets, Spillways and Low Flow Outlets for Operational Basins                                  |
| G038P3    | Drop Inlet Sediment Traps and Inlet Control Banks  |
| G038P4    | Cleaning of Permanent Operational Basins (Item with provisional quantity)                      |
| G038P5.1  | Basin No. xxx (Item with provisional quantity)   |
| G038P6    | Removal of Drop Inlet Sediment Traps and Inlet Control Banks (Item with provisional quantity)  |
| G038P7    | Site Water Quality Monitoring  |
| G039P1    | Drop Inlet Sediment Traps and Inlet Control Banks  |
| G039P2    | Removal of Drop Inlet Sediment Traps and Inlet Control Banks (Item with provisional quantity)  |
| G040P1    | Clearing and Grubbing  |
| G040P2    | Production and Stockpiling of Mulch  |
| R011P1    | Diversion Banks  |
| R011P2a   | Reinforced Concrete and Fibre Reinforced Concrete Pipes  |
| R011P2b   | Precast Reinforced Box Culverts  |
| R011P2c   | Other Drainage Structures  |
| R011P3    | Excavation for Open Drains   |
| R011P4    | Unsuitable Material under Drainage Structures and Open Drains (Item with provisional quantity) |
| R011P5.1  | Diameter - Class - Joint   |
| R011P6.1  | No of Cells / Span (mm) x Height (mm) x Length (m)   |
| R011P7.1  | Type   |
| R011P8    | Concrete Lining of Open Drains   |
| R015P1.1  | Type   |
| R022P1(a) | Corrugated Metal Structures  |
| R022P1(b) | Other Access Way Structures  |
| R022P2    | Unsuitable Material (Item with provisional quantity)   |
| R022P3.1  | Diameter   |
| R022P4    | Access Way Structure Components Other Than Corrugated Metal Structures                         |
| R023P1    | Excavation for Plastic Flexible Pipes  |
| R023P2    | Unsuitable Material (Item with provisional quantity)   |
| R023P3.1  | Diameter ? Class - Joint   |
| R033P1    | Excavation   |

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| R033P2.1 | Steep Batter Outlet                                    |
| R033P2.2 | Flat Batter Outlet                                     |
| R033P2.3 | 100 mm Dia Unslotted Corrugated Plastic Drainage Pipe  |
| R033P2.4 | Unslotted Geocomposite Plastic Strip Filter            |
| R033P3.1 | 100 mm Dia Corrugated Perforated Plastic Drainage Pipe |
| R033P3.2 | Slotted Geocomposite Plastic Strip Filter              |
| R033P4   | Type A - Aggregate Filter Material Backfill            |
| R033P5   | Type S - Sand Filter Material Backfill                 |
| R033P6   | Filter Material - No Fines Concrete                    |
| R033P7   | Supply and Installation of Geotextile                  |
| R033P8.1 | Cleanouts and Inspection Structures (Permanent)        |
| R033P8.2 | Cleanouts and Inspection Structures (Temporary)        |
| R037P1.1 | 'V' Shaped Trench                                      |
| R037P2.1 | Steep Batter Outlet                                    |
| R037P2.2 | Flat Batter Outlet                                     |
| R037P3   | Unslotted Fibre Reinforced Concrete Pipe               |
| R037P4   | Slotted Fibre Reinforced Concrete Pipe                 |
| R037P5.1 | Cleanouts and Inspection Structures (Permanent)        |
| R037P5.2 | Cleanouts and Inspection Structures (Temporary)        |
| R037P6   | Supply and Installation of Geotextile                  |
| R038P1   | Excavation   |
| R038P2.1 | Steep Batter Outlet                                    |
| R038P2.2 | Flat Batter Outlet                                     |
| R038P2.3 | Connection to a Trench Drain Outlet                    |
| R038P2.4 | 65mm Dia Unslotted Corrugated Plastic Drainage Pipe    |
| R038P2.5 | 100mm Dia Unslotted Corrugated Plastic Drainage Pipe   |
| R038P2.6 | Unslotted Geocomposite Plastic Strip Filter            |
| R038P3.1 | 65mm Dia Corrugated Perforated Plastic Drainage Pipe   |
| R038P3.2 | 100mm Dia Corrugated Perforated Plastic Drainage Pipe  |
| R038P3.3 | Geocomposite Plastic Strip Filter                      |
| R038P4.1 | Cleanouts (Permanent)                                  |
| R038P4.2 | Cleanouts (Temporary)                                  |
| R038P5   | Aggregate Type A - Aggregate Filter Material Backfill  |
| R038P6   | Filter Material - No Fines Concrete                    |
| R038P7   | Graded Macadam Base                                    |

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| R038P8      | Supply and Installation of Geotextile   |
| R039P1      | Drainage Mats   |
| R044P1      | Removal and Stockpiling of Topsoil  |
| R044P2      | General Earthworks (Cut/Fill)   |
| R044P3      | Imported or Borrowed Material   |
| R044P4      | Unsuitable Material (Item with provisional quantity)                              |
| R044P5.1    | Selected Material from cuttings in the Works area                                 |
| R044P5.2    | Selected Material Imported from beyond the Works area                             |
| R044P5.3    | Verge Material from cuttings in the Works area                                    |
| R044P5.4    | Verge Material Imported from beyond the Works area                                |
| R044P6.1    | Haulage of Spoil  |
| R044P6.2    | Treatment and disposal of Contaminated materials (Item with provisional quantity) |
| R044P7.1    | Treatment Type E1 and Cutting Type C1-Loosen and Recompact                        |
| R044P7.2(a) | Material obtained from excavations within the Works                               |
| R044P7.2(b) | Imported Material   |
| R044P7.3(a) | Geotextile  |
| R044P7.3(b) | Geogrid   |
| R044P7.4(a) | Drainage Blanket Material obtained from excavations within the Works              |
| R044P7.4(b) | Imported Drainage Blanket Material  |
| R049P1      | Supply and Place Verge Material and Removal of Earth Dyke                         |
| R050P1.1    | Quicklime   |
| R050P1.2    | Hydrated Lime   |
| R050P1.3    | Slag/Lime blend   |
| R050P1.4    | Cement  |
| R050P2.1    | Quicklime   |
| R050P2.2    | Hydrated Lime   |
| R050P2.3    | Slag/Lime Blend   |
| R050P2.4    | Cement  |
| R050P3.1    | Quicklime   |
| R050P3.2    | Hydrated Lime   |
| R050P3.3    | Slag/Lime Blend   |
| R050P3.4    | Cement  |
| R055P1      | Rock Filled Gabions   |
| R055P2      | Rock Filled Wire Mattresses   |

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| R055P3   | Terramesh Panels   |
| R055P4   | Select Backfill for Terramesh Panels                           |
| R055P5   | Excavation for Gabions and Mattresses.                         |
| R056P1   | Test Anchors   |
| R056P10a | Non-restressable Anchors                                       |
| R056P10b | Monitorable, Restressable and/or Destressable Anchors          |
| R056P11  | Monitoring of Anchors (Item with provisional quantity)         |
| R056P12  | Provision of Load Cells  |
| R056P2   | Drilling Holes   |
| R056P3   | Drilling Below Contract Level (Item with provisional quantity) |
| R056P4   | Casing of Holes in OTR   |
| R056P5   | Water Proofing (Item with provisional quantity)                |
| R056P6   | Supply, Assembly and Installation of Anchors                   |
| R056P7   | Grouting   |
| R056P8   | Supply and Installation of Anchorages                          |
| R056P9a  | Anchors Subject to Proving Test                                |
| R056P9b  | Anchors Subject to Suitability Test                            |
| R056P9c  | Anchors Subject to Acceptance Test                             |
| R057P1   | Design of Reinforced Soil Walls                                |
| R058P1   | Supply of Components   |
| R058P2   | Preparation of Foundation                                      |
| R058P3   | Base/Concrete Strip Footings                                   |
| R058P4   | RSW Erection   |
| R058P5   | Filters and Drainage   |
| R058P6   | Capping  |
| R058P7   | Reinforced Fill Material                                       |
| R071P1   | Subbase Course   |
| R071P2   | Base Course  |
| R073P1   | Supply Binder, Mix, Spread and Compact Subbase/Base Course     |
| R073P2   | Prime or Prime Seal  |
| R075P1   | In Situ Stabilisation  |
| R075P2   | Supply and Spread New Pavement material                        |
| R075P3   | Prime or Prime Seal  |
| R082P1   | Supply and Place Concrete in Subbase                           |
| R082P2   | Finish and Cure Subbase  |
| R082P3   | Surface Debonding Treatment                                    |
| R082P4   | Subgrade Beams   |

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| R083P1    | Supply and Place Concrete in Base                                    |
| R083P12   | Provision of Base Protective Covers (Item with provisional quantity) |
| R083P2    | Finish, Cure and Texture Base  |
| R083P3    | Supply and Place Wire Reinforcing Fabric                             |
| R083P4    | Supply and Place Steel Bar Reinforcement                             |
| R083P5    | Longitudinal Joints  |
| R083P6    | Expansion Joints and Isolation Joints                                |
| R083P7    | Transverse Contraction Joints  |
| R083P8    | Slab Anchors   |
| R083P9    | Bridge Approach Slabs  |
| R084P1    | Supply and Place Concrete in Base                                    |
| R084P12   | Provision of Base Protective Covers (Item with provisional quantity) |
| R084P2    | Finish, Cure and Texture Base  |
| R084P3    | Supply and Place Wire Reinforcing Fabric                             |
| R084P4    | Supply and Place Steel Bar Reinforcement                             |
| R084P5    | Longitudinal Joints  |
| R084P6    | Expansion Joints and Isolation Joints                                |
| R084P7    | Transverse Contraction Joints  |
| R084P8    | Terminal and Slab Anchors  |
| R084P9    | Bridge Approach Slabs  |
| R101P1.1  | Depth  |
| R101P2.1  | Depth  |
| R101P3    | Texturing Surface (Asphalt and Base Course Material)                 |
| R101P4    | Texturing Surface (Cement Concrete Material)                         |
| R101P5.1  | Affected Area Up to 10 Square Metres                                 |
| R101P5.2  | Affected Area Over 10 and Up to 25 Square Metres                     |
| R101P5.3  | Affected Area Over 25 and Up to 50 Square Metres                     |
| R101P5.4  | Affected Area Over 50 Square Metres                                  |
| R101P6.1  | Affected Area Up to 10 Square Metres                                 |
| R101P6.2  | Affected Area Over 10 and Up to 25 Square Metres                     |
| R101P6.3  | Affected Area Over 25 and Up to 50 Square Metres                     |
| R101P6.4  | Affected Area Over 50 Square Metres                                  |
| R103P1    | High Pressure Waterblasting  |
| R106P1.1  | AMC00  |
| R106P1.10 | Field Cutback Primer/Primerbinder                                    |
| R106P1.2  | AMC0   |
| R106P1.3  | AMC1   |
| R106P1.4  | AMC2   |

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| R106P1.5 | AMC3  |
| R106P1.6 | AMC4  |
| R106P2   | Supply and Spray Binder - Class 170 Bitumen (Including Adhesion Agent where required and Preparation of Surface)          |
| R106P3   | Supply and Spray Binder - Class 320 Bitumen (Including Adhesion Agent where required and Preparation of Surface)          |
| R106P4   | Supply and Spray Binder ? Multigrade 600/170 Bitumen (Including Adhesion Agent where required and Preparation of Surface) |
| R106P5   | Supply, Incorporate and Spray Cutter Oil in Binder  |
| R106P6   | Supply, Incorporate and Spray Flux Oil in Binder  |
| R106P7.1 | 5mm Aggregate (Precoated)   |
| R106P7.2 | 7mm Aggregate (Precoated)   |
| R106P7.3 | 10mm Aggregate (Precoated)  |
| R106P7.4 | 14mm Aggregate (Precoated)  |
| R106P8   | Geotextile  |
| R107P1   | Supply and Spray Polymer Modified Bitumen (including Adhesion Agent where required and Preparation of Surface)            |
| R107P2   | Supply, Incorporate And Spray Cutter Oil in Binder  |
| R107P3   | Supply and Spray Binder - Class 170 Bitumen (Including Adhesion Agent where required and Preparation of Surface)          |
| R107P4.1 | 5mm Aggregate (Precoated)   |
| R107P4.2 | 7mm Aggregate (Precoated)   |
| R107P4.3 | 10mm Aggregate (Precoated)  |
| R107P4.4 | 14mm Aggregate (Precoated)  |
| R107P5   | Supply and Incorporate Geotextile   |
| R109P1   | Surface Preparation   |
| R109P2.1 | 3mm Nominal Size  |
| R109P2.2 | 4mm Nominal Size  |
| R109P2.3 | 5mm Nominal Size  |
| R109P2.4 | 7mm Nominal Size  |
| R109P2.5 | 10mm Nominal Size   |
| R109P3.1 | 3mm Nominal Size  |
| R109P3.2 | 4mm Nominal Size  |
| R109P3.3 | 5mm Nominal Size  |
| R109P3.4 | 7mm Nominal Size  |
| R109P3.5 | 10mm Nominal Size   |
| R110P1.1 | Preparation of Surface  |

|           |  |
|-----------|--|
| R110P2.1  | Red  |
| R110P2.2  | Green  |
| R111P1.1  | (Reserved)   |
| R111P1.2  | (Reserved)   |
| R111P1.3  | Seal or Reseal   |
| R111P1.4  | Curing Membrane  |
| R111P2.1  | 5mm Aggregate (Precoated)  |
| R111P2.2  | 7mm Aggregate (Precoated)  |
| R111P2.3  | 10mm Aggregate (Precoated)   |
| R111P2.4  | 14mm Aggregate (Precoated)   |
| R112P1.1  | AMC00  |
| R112P1.2  | AMC0   |
| R112P1.3  | AMC1   |
| R112P1.4  | AMC2   |
| R112P1.5  | AMC3   |
| R112P2    | Supply and Spray Binder - Class 170 Bitumen (Including Preparation of Surface)                               |
| R112P3    | Supply and Spray Bitumen Emulsion (Including Preparation of Surface)   |
| R112P4    | Supply, Incorporate and Spray Cutter Oil in Binder   |
| R112P5    | Supply and Spray Rejuvenating Agent (Including Preparation of Surface)                                       |
| R112P6    | Supply, Apply and Incorporate Sand   |
| R113P1    | Supply and Spray Emulsion Binder (Including Preparation of Surface and Incorporation of Fibre Reinforcement) |
| R113P2.1  | 5mm Aggregate (Precoated)  |
| R113P2.2  | 7mm Aggregate (Precoated)  |
| R113P2.3  | 10mm Aggregate (Precoated)   |
| R113P2.4  | 14mm Aggregate (Precoated)   |
| R116P1    | Supply and Application of Tack Coat (Including Preparation of Surface)                                       |
| R116P10.1 | 10mm Nominal Size  |
| R116P10.2 | 14mm Nominal Size  |
| R116P12.1 | Wheel Tracking Test  |
| R116P2.1  | 5mm Nominal Size   |
| R116P2.2  | 10mm Nominal Size  |
| R116P2.3  | 14mm Nominal Size  |
| R116P2.4  | 20mm Nominal Size  |
| R116P3.1  | 10mm Nominal Size, xxx mm thick  |
| R116P3.2  | 14mm Nominal Size, xxx mm thick  |
| R116P3.3  | 20mm Nominal Size, xxx mm thick  |

|           |   |
|-----------|---|
| R116P3.4  | 28mm Nominal Size, xxx mm thick   |
| R116P3.5  | 40mm Nominal Size, xxx mm thick   |
| R116P4.1  | 5 mm Nominal Size, xxx mm thick   |
| R116P4.2  | 10 mm Nominal Size, xxx mm thick  |
| R116P4.3  | 14 mm Nominal Size, xxx mm thick  |
| R116P5.1  | 5mm Nominal Size  |
| R116P5.2  | 10mm Nominal Size   |
| R116P5.3  | 14mm Nominal Size   |
| R116P6.1  | 5mm Nominal Size  |
| R116P6.2  | 10mm Nominal Size   |
| R116P6.3  | 14mm Nominal Size   |
| R116P7.1  | 10mm Nominal Size, xxx mm thick   |
| R116P7.2  | 14mm Nominal Size, xxx mm thick   |
| R116P8.1  | 28mm Nominal Size, xxx mm thick   |
| R116P8.2  | 40mm Nominal Size, xxx mm thick   |
| R116P9.1  | 10mm Nominal Size   |
| R116P9.2  | 14mm Nominal Size   |
| R121P1    | Preparation of Surface  |
| R121P2.1  | 10mm Nominal Size   |
| R121P2.2  | 14mm Nominal Size   |
| R123P1    | Preparation of Surface  |
| R123P2.1  | 10mm Nominal Size   |
| R131P1    | Supply and Installation of Guide Posts  |
| R131P2    | Removal of Existing Guide Posts   |
| R132P1    | Removal of Safety Barriers  |
| R132P2    | Removal of Terminals and Transitions  |
| R132P3    | Construction of Post and Rail Safety Barriers   |
| R132P4    | Post Holes at 400mm Diameter (Item with provisional quantity)   |
| R132P5    | Construction of Wire Rope Safety Barrier Systems  |
| R132P6    | Construction of Plastic Safety Barriers   |
| R132P7    | Construction of Concrete Safety Barrier Systems   |
| R132P8    | Construction of Terminals   |
| R132P9    | Construction of Transitions   |
| R141P1.1  | Type  |
| R141P10   | Trowelled, Screeded or Extruded Two part Cold-applied Pavement Marking Material - Transverse Lines and Other Markings |
| R141P11   | Sprayed Two Part Cold-applied Pavement Marking Material - Transverse Lines and Other Markings                         |
| R141P12.1 | Type  |



|           |  |
|-----------|--|
| R141P13.1 | Type   |
| R141P14   | Pavement Marking Tape - Transverse Lines and Other Markings  |
| R141P15   | Removal of Longitudinal Linemarking, Transverse Lines and Other Symbols                                      |
| R141P2    | Water Borne Paint - Transverse Lines and Other Markings  |
| R141P3.1  | Type   |
| R141P4    | Solvent Based Paint - Transverse Lines and Other Markings  |
| R141P5.1  | Type   |
| R141P6    | Screeded or Sprayed Nonprofile Thermoplastic Pavement Marking Material - Transverse Lines and Other Markings |
| R141P7    | Pre-formed Nonprofile Thermoplastic Pavement Marking Material - Transverse Lines and Other Markings          |
| R141P8.1  | Type   |
| R141P9.1  | Type   |
| R142P2    | Installation of Retroreflective Raised Pavement Markers  |
| R142P3    | Removal of Raised Pavement Markers   |
| R143P1.1  | Type   |
| R143P2    | Manufacture and Delivery of Sign Support Structures  |
| R143P3    | Erection of Sign Structures (Standard Round Galvanised Posts)  |
| R143P4    | Erection of Sign Structures (Standard Modular)   |
| R143P6    | Erection of Signs  |
| R143P7    | Modification of Existing Signs and Support Structures  |
| R14610.1  | Type   |
| R146P1.1  | Type   |
| R146P11   | Removal of Longitudinal Linemarking Transverse Lines and Other Markings.                                     |
| R146P2    | Water Borne Paint - Other Markings   |
| R146P3.1  | Type   |
| R146P4    | Nonprofile Thermoplastic Pavement Marking Material - Other Markings.   |
| R146P5.1  | Type   |
| R146P6    | Pre-formed Nonprofile Thermoplastic Pavement Marking Material - Other Markings.                              |

|           |  |
|-----------|--|
| R146P7.1  | Type   |
| R146P8    | Two part Cold-applied Pavement Marking Material - Other Markings   |
| R151P1    | Supply and Lay - mm Diameter UPVC Conduit  |
| R151P2    | Cable Pits   |
| R151P3    | Control Cabinets   |
| R151P4    | Concrete Plinth for Lighting Column  |
| R151P5    | Lighting Columns - Metre High  |
| R151P6    | Lightings and Light Fittings - Watts   |
| R152P1    | Supply and Lay - mm Diameter UPVC Conduit  |
| R152P2    | Cable Pits   |
| R152P3    | Concrete Plinth and Telephone Pillar   |
| R161P1    | Controlled Access Rural Road Fencing - Wire  |
| R161P10   | Excavation and Backfill for Fence Posts in Rock  |
| R161P11   | Remove Existing Fencing  |
| R161P12   | Erection of Controlled Access Rural Road Gates   |
| R161P13   | Erection of Manproof Gates   |
| R161P14   | Flood Gates ? Small Watercourses   |
| R161P15   | Flood Gates ? Gully and Creek  |
| R161P16.1 | Type   |
| R161P2    | Controlled Access Rural Road Fencing - Cattle  |
| R161P3    | Controlled Access Rural Road Fencing ? Rabbit Proof Netting on Ground  |
| R161P4    | Controlled Access Rural Road Fencing ? Rabbit Proof Buried Netting   |
| R161P5    | Controlled Access Rural Road Fencing ? Horse Proof   |
| R161P6    | Controlled Access Urban Road Fencing   |
| R161P7    | Temporary Fencing  |
| R161P8    | Manproof Fencing   |
| R161P9    | Pedestrian Fencing   |
| R173P1.1  | Thickness ? Reinforcement  |
| R173P2    | Tactile Indicators   |
| R178P1    | Spraying Weeds with Herbicide  |
| R178P10   | Supply and Erection of Information Signs   |
| R178P11   | Topsoiling Open Drains Using Site Material Including Surface Preparation and Screening of Topsoil Stockpiles |
| R178P12   | Topsoiling Open Drains Using Imported Material Including Surface Preparation                                 |
| R178P13   | Hydroseeding of Open Drains  |
| R178P14   | Hydromulching of Open Drains   |

|          |  |
|----------|--|
| R178P15  | Sowing Open Drains by Hand                                       |
| R178P16  | Spray Open Drains with Bitumen Emulsion                          |
| R178P17  | Lining Open Drains with Organic Fibre Mat                        |
| R178P18  | Turfing  |
| R178P19  | Watering   |
| R178P2.1 | Areas with a slope of 5 to 1 or flatter.                         |
| R178P2.2 | Areas steeper than 5 to 1 except stepped batters.                |
| R178P2.3 | Stepped Batters  |
| R178P20  | Recultivating and Resowing                                       |
| R178P21  | Mowing   |
| R178P3   | Topsoiling Using Imported Material Including Surface Preparation |
| R178P4   | Dry Sowing   |
| R178P5   | Hand Sowing  |
| R178P6   | Preparation of Surface for Areas Not Requiring Topsoiling        |
| R178P7   | Hydroseeding   |
| R178P8   | Hydromulching  |
| R178P9   | Straw mulching   |

## 11 Superelevation standards

Previous versions of the Superelevation XML files needed entries for each Transition variation so the relevant percentages could be triggered. In 2014, this can be achieved from the front end so the attainment formulas were adjusted in the design files and the superfluous information was removed.

**Calculate Superelevation - Attainment**

Roadway Type  
Lanes  
Shoulder Control  
▶ Attainment

Design criteria file: C:\Documents and Settings\All Users\Application  
Superelevation rate table: AUSTRROADS 2003 e7%  
Transition length table: 1 Lane  
Attainment method: AUSTRROADS - Standard - Enter % in Civil 3D Wizard

Transition formula for superelevation runoff

% on tangent for tangent-curve: 80.00%  
% on spiral for spiral-curve: 80.00%

Curve smoothing

Apply curve smoothing    Curve length: 20.000m

Automatically resolve overlap    This option applies only to the entire alignment.

< Back    Next >    Finish    Cancel    Help

There are 3 separate XML files in the CK:

- \_Austroads\_Absolute Min Radius Tables\_ANZ.xml
- \_Austroads\_Desirable Min Radius Tables\_ANZ.xml
- \_TRANSIT NZ\_Highway Design Manual MINIMUM RADII VALUES\_ANZ.xml

The first 2 use table methods for widening and the NZ version uses formulas.

The general Superelevation Attainment method needs to have the 'p' parameter added – otherwise the values in the dialogue box above will not be used.

```
<TransitionFormula type="NctoLC" formula="{t}*{c}/{e}"/>
<TransitionFormula type="LctoRC" formula="{t}*{c}/{e}"/>
<TransitionFormula type="LctoFS" formula="{t}*{p}"/>
<TransitionFormula type="LctoBC" formula="{t}*{p}"/>
<TransitionFormula type="NStoNC" formula="{t}*({s}-{c})/{e}"/>
```

The widening process by table is shown below. The design speed is set to "all" and the order is set to higher radii first. These tables are from the Austroads standards for Absolute Min Radius Tables and Desirable Min Radius Tables.

```
<WideningTypeByTable TableType="Standard" StandardName="Prime Mover or Semi Trailer"
NumberOfLanes="1">
  <LaneWidth width="3">
    <WideningDesignSpeed speed="All">
      <IncreasedWidth radius="300" dWidth="0.23"/>
      <IncreasedWidth radius="250" dWidth="0.29"/>
      <IncreasedWidth radius="200" dWidth="0.35"/>
      <IncreasedWidth radius="180" dWidth="0.42"/>
      <IncreasedWidth radius="160" dWidth="0.49"/>
      <IncreasedWidth radius="140" dWidth="0.56"/>
      <IncreasedWidth radius="120" dWidth="0.63"/>
      <IncreasedWidth radius="100" dWidth="0.71"/>
      <IncreasedWidth radius="90" dWidth="0.81"/>
      <IncreasedWidth radius="80" dWidth="0.91"/>
      <IncreasedWidth radius="70" dWidth="1.03"/>
      <IncreasedWidth radius="60" dWidth="1.27"/>
    </WideningDesignSpeed>
  </LaneWidth>
</WideningTypeByTable>
```

The Widening process by formula is shown below.

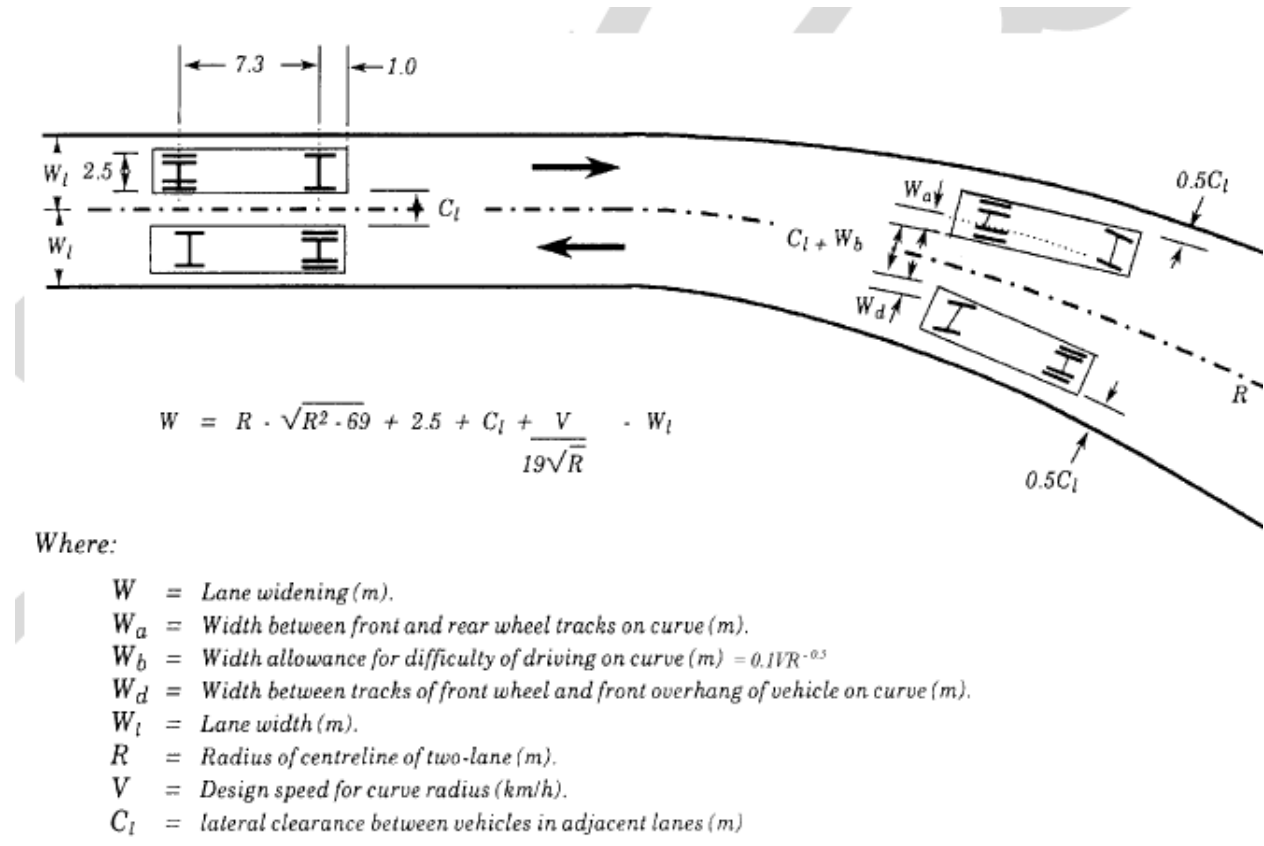


Figure 4.5: Lane Widening on Horizontal Curves

The formula used in the XML file was modified to incorporate the number of lanes using a similar method to the AASHTO standards.

```
<WideningMethod name="Modified NZ Transit Manual - Figure 4.5">
  <WideningTypeByFormula>
    <WideningFormula roundingFactor="0.1" formula="{n}*({r}-sqrt({r}^2-69))+2.5+{c}+{v}/sqrt({r})/19- {tw}" />
    <WideningConstants>
      <WideningConstant name="c" value="0.6" />
    </WideningConstants>
  </WideningTypeByFormula>
</WideningMethod>
```

## 12 Intersection feature – Styles, Names and Assembly sets

| Name                              | DWT Value  | Comments | Screengrab/DWG/DWF |
|-----------------------------------|--|----------|--------------------|
| Offset Alignment Style            | Design   |          |                    |
| Curb Return Alignment Style       | Basic  |          |                    |
| Offset Profile Style              | Design Profile   |          |                    |
| Curb Return Profile Style         | Design Profile   |          |                    |
| Offset Alignment Label Set        | Major and Minor Only   |          |                    |
| Curb Return Alignment Label Set   | Major and Minor Only   |          |                    |
| Offset Profile Label Set          | _No Labels   |          |                    |
| Curb Return Profile Label Set     | _No Labels   |          |                    |
|                                   |  |          |                    |
| Intersection Name Format          | (Intersection) - (Next Counter)  |          |                    |
| Intersection Quadrant Name Format | (Intersection Name) –(Quadrant Location)<br>– QUADRANT                       |          |                    |
| Offset Alignment Name Format      | (Parent Alignment Name) – (Side) – (Offset Distance)                         |          |                    |
| Curb Return Alignment Name Format | (Intersection Name) – (Intersection Quadrant Name)                           |          |                    |
| Offset Profile Name Format        | (Parent Alignment Name) – (Side) – (Offset Profile Nominal Cross Slope)      |          |                    |
| Curb Return Profile Name Format   | (Parent Alignment Name) - (Intersection Name) – (Intersection Quadrant Name) |          |                    |
| Corridor Region Name Format       | (Intersection Name) – (Baseline Name) – (Assembly Name)                      |          |                    |

See section 5.4 of content spec for instructions on developing an assembly set for the intersection feature.

