

| Drawing No.  | Ver. | Approved   | Drawing Title   |
|--|------|------------|---|
| <b>(1000-1049) LAYOUT OF INTERSECTIONS, PED OPS &amp; OTHER SITE TYPES</b> |      |            |   |
| TC-1000  |      | 13/10/2000 | Typical Layouts   |
| TC-1001  |      | 13/10/2000 | Traffic Signals - Associated Pavement Marking                             |
| TC-1003  |      | 13/10/2000 | Typical Layouts for Pedestrian Operated Signals                           |
| TC-1004  |      | 13/10/2000 | Linemarking at Pedestrian Operated Signals                                |
| TC-1005  | A    | 12/09/2003 | Typical Layouts for PUFFIN Operated Signals                               |
| <b>(1050-1099) STREET LIGHTING SERIES</b>                                  |      |            |   |
| TC-1060  | D    | 19/09/2006 | Street Lighting Bracket - Single & Double - Type 1                        |
| TC-1061  | D    | 19/09/2006 | Street Lighting Bracket - Single & Double - Type 2                        |
| TC-1062  | C    | 13/05/2014 | Street Lighting Distribution Box - Foundation Detail                      |
| TC-1064  | A    | 18/06/2001 | Impact Absorbing Pole Assembly - Ground Set Mounted                       |
| TC-1065  | D    | 15/06/2017 | Slip Base Pole Assembly - Ground Set Mounted                              |
| TC-1066  | B    | 2/04/2008  | Transition Base Assembly for Slip Base Pole - P.S. Mounted                |
| TC-1067  | A    | 18/06/1997 | Stiffening Plate for Street Lighting Bracket                              |
| TC-1068  |      | 23/02/2000 | Rigid Street Lighting Pole (RSLP) Base Section                            |
| TC-1069  |      | 19/09/2006 | Street Lighting Clamping Plate - Bracket to Pole Spigot                   |
| TC-1070  |      | 19/09/2006 | Street Lighting Cable Support for Outreach                                |
| TC-1071  | A    | 19/06/2014 | Street Lighting - Impact Absorbing Pole - Electrical Installation Details |
| TC-1072  | A    | 19/06/2014 | Street Lighting - Slip Base Pole - Electrical Installation Details        |
| TC-1073  | A    | 15/06/2017 | Street Lighting - Slip Base Pole - Electrical Disconnect Details          |
| TC-1074  | A    | 15/06/2017 | Distribution Cabinet Type 2 - Foundation Detail                           |
| TC-1075  |      | 13/05/2014 | Rag Bolt Assembly For Cabinet   |
| TC-1076  |      | 15/06/2017 | Pole location identifier system   |
| TC-1077  |      | 15/06/2017 | Typical Pole numbering arrangement  |
| TC-1078  |      | 15/06/2017 | Pole label installation location  |
| <b>(1100-1199) TRAFFIC SIGNALS - POSTS &amp; ATTACHMENTS</b>               |      |            |   |
| TC-1100  | A    | 12/09/2003 | Traffic Signal Post - Types 2A, 2B & 3                                    |
| TC-1101  |      | 7/01/2002  | Lantern Mounting Brackets   |
| TC-1103  |      | 7/01/2002  | Mini Mastarm (Type 2D)  |
| TC-1104  |      | 13/10/2000 | Flashing Pedestrian Crossing Details                                      |

|         |   |            |   |
|---------|---|------------|---|
| TC-1105 |   | 23/02/2000 | Components for Standard Traffic Signal and Street Lighting                                      |
| TC-1106 | A | 21/08/2001 | Traffic Signal MA's, JUP's & JUMA's Overhead Lantern Mounting Assembly                          |
| TC-1107 |   | 23/02/2000 | Traffic Signal MA's, JUP's & JUMA's Baseplate Detail  |
| TC-1108 | A | 24/08/1998 | Weather Cap for Traffic Signals and Street Lighting   |
| TC-1109 |   | 23/02/2000 | Outreach Arm Clamping Details for MA's, JUP's & JUMA  |
| TC-1110 |   | 23/02/2000 | Traffic Signals MA's, JUP's & JUMA's Column Conduit Entry Details                               |
| TC-1111 |   | 23/02/2000 | JUMA, JUP, RSLP Street Lighting Extensions spigot cap   |
| TC-1112 |   | 13/10/2000 | 5.5m x 2.5m Mast Arm - Typical Installation Details   |
| TC-1113 |   | 23/02/2000 | MA, JUMA and JUP Lantern Support Detail   |
| TC-1114 | A | 31/05/2010 | Terminal Assembly - Pedestal  |
| TC-1115 |   | 13/10/2000 | Lantern & Mounting Bracket Orientation  |
| TC-1116 | B | 17/02/2008 | Traffic Signal Mounting Arrangement   |
| TC-1117 |   | 7/01/2002  | Lantern Orientation and Mounting Heights For 300mm Lanterns on Standard Posts                   |
| TC-1118 | A | 21/08/2001 | For Traffic Signal & Street Lighting, Door Opening and Cable Termination Block Mounting Details |
| TC-1119 |   | 13/10/2000 | Lantern Mounting Details  |
| TC-1120 |   | 23/02/2000 | Joint Use Pole (JUP) Base Section   |
| TC-1121 | A | 31/01/2001 | Joint Use Mast Arm (JUMA) Base Section  |
| TC-1122 | A | 31/01/2001 | Mast Arm (MA) Base Section  |
| TC-1123 |   | 23/02/2000 | JUMA, JUP, RSLP Street Lighting Extensions section  |
| TC-1124 |   | 23/02/2000 | Mast Arm (MA) and Joint Use Mast Arm (JUMA) Outreach Sections                                   |
| TC-1125 |   | 13/10/2000 | Post Installation Details for signs   |
| TC-1126 |   | 13/10/2000 | Pedestal Location Under or Through Verandahs  |
| TC-1127 | A | 14/03/2007 | Traffic Signal - Visor Types and Dimensions   |
| TC-1128 | A | 31/05/2010 | Terminal Assembly - MA, JUP & JUMA  |
| TC-1129 |   | 31/05/2010 | Terminal Assembly - Pedestal 19 Way   |

#### **(1200-1299) TRAFFIC SIGNALS - CIVIL & ELECTRICAL**

|         |   |            |   |
|---------|---|------------|---|
| TC-1200 | C | 22/05/2014 | Foundation for Pedestals                                      |
| TC-1201 | B | 22/05/2014 | Bored Pile Foundation for Traffic Signal Posts                |
| TC-1202 | A | 13/05/2014 | Spread Footing for JUP's, MA's and JUMA's                     |
| TC-1203 | C | 13/05/2014 | Traffic Signal Controller Foundation Details                  |
| TC-1204 | A | 13/10/2000 | 51 Core for Intersections (Cable Connections)                 |
| TC-1205 | C | 16/06/2005 | 19 & 29 Core Cable Connection for Pedestrian Operated Signals |
| TC-1206 | A | 13/05/2014 | Assembly & Installation of Consumer Mains & Meter Box         |
| TC-1207 | B | 13/05/2014 | General Layout - Traffic Signal Ducting                       |
| TC-1208 |   | 13/10/2000 | Underground Conduit Warning Sign                              |

|         |   |            |   |
|---------|---|------------|---|
| TC-1210 |   | 21/12/1995 | Cable Pit Former - 600 mm Dia   |
| TC-1211 |   | 12/09/2003 | Heavy Duty Cable Pit and Cover  |
| TC-1212 |   | 5/09/2001  | Traffic Signal Controller Site Identification Encoder                     |
| TC-1214 |   | 2/04/2008  | Suitable Arrangement - Dual 51 Core Terminations for Complex Intersection |
| TC-1215 |   | 2/04/2008  | Suitable Arrangement - Dual 51 Core Terminations for Diamond Intersection |
| TC-1220 | C | 13/05/2014 | Cable Pit Access Cover & Frame 600 mm Dia                                 |
| TC-1230 | B | 13/05/2014 | Cable Pit - Installation Details  |
| TC-1601 |   | 14/08/1996 | Rag Bolt Assembly - M24 CG and HS 600mm x 350mm PCD                       |
| TC-1603 | A | 22/08/1996 | Rag Bolt Assembly for Cabinet M12 - 600 x 460 x 255mm                     |

#### (1300-1399) TRAFFIC SIGNALS - DETECTION

|         |   |            |  |
|---------|---|------------|--|
| TC-1300 | A | 29/03/2005 | Loop Pattern and Installation Details (Symmetripole)             |
| TC-1301 | A | 29/03/2005 | Vehicle and Tram Detector Loops Along Shared and Exclusive Lines |
| TC-1302 | A | 29/03/2005 | Wheerchair Detector Loops  |
| TC-1310 | A | 14/08/1996 | Detector Pit and Lid   |
| TC-1320 | A | 22/08/1996 | Detector Pit - Installation Details                              |
| TC-1332 |   | 13/10/2000 | Advanced Tram Detection (Feeder Cable Details)                   |
| TC-1360 |   | 13/10/2000 | Red Light Camera Installation                                    |
| TC-1361 | A | 29/03/2005 | Red Light Camera Detection Loops                                 |
| TC-1380 |   | 7/01/2002  | Concrete Slab for Tram Detectors                                 |

#### (2000-2009) TRAFFIC INFORMATION SYSTEM - GENERAL SERIES

|         |   |           |  |
|---------|---|-----------|--|
| TC-2001 | B | 4/03/2013 | Trunk Conduit System - For Freeways - Typical Layout |
| TC-2002 | B | 4/03/2013 | Cabinet - Installation Details Freeway Data Stations |
| TC-2003 |   | 7/01/2002 | Universal Roadside Cabinet                           |

#### (2010-2019) TRAFFIC INFORMATION SYSTEM - CAMERA SERIES

|         |   |            |  |
|---------|---|------------|--|
| TC-2011 | B | 9/02/2004  | Freeway Camera Site - Typical Layout                         |
| TC-2012 | A | 11/05/1999 | Camera Column - 10m Mid-hinge                                |
| TC-2013 |   | 14/08/1996 | Camera Column - Bored Pile Foundation - Installation Details |
| TC-2014 |   | proposed   | Camera mounting bracket for 10m mid-hinge pole               |
| TC-2015 |   | proposed   | Camera mounting bracket for JUP                              |

#### (2020-2029) TRAFFIC INFORMATION SYSTEM - HELP PHONE SERIES

|         |   |            |                                  |
|---------|---|------------|----------------------------------|
| TC-2021 | A | 20/10/1997 | Help Phone Site - Typical Layout |
| TC-2022 | C | 26/02/1998 | Help Phone - Support Post        |

|         |   |            |   |
|---------|---|------------|---|
| TC-2023 |   | 21/12/1995 | Help Phone - Installation Details                           |
| TC-2024 |   | 7/01/2002  | Help Phone - Taper Details for 3m extended shoulder         |
| TC-2025 |   | 7/01/2002  | Help Phone - Indented Bay for Rural Sites                   |
| TC-2026 | A | 28/08/2001 | Help Phone - Termination Pillar                             |
| TC-2027 |   | 21/12/1995 | Help Phone - Termination Pillar Installation Details        |
| TC-2028 |   | 7/01/2002  | Help Phone - Double Support for Median Barrier Installation |

#### **(2030-2039) TRAFFIC INFORMATION SYSTEM - DETECTION SERIES**

|         |   |            |  |
|---------|---|------------|--|
| TC-2031 | B | 9/09/2005  | Freeway Data Station Site - Typical Layout       |
| TC-2032 | B | 29/03/2005 | Loop Installation Details - Freeway Data Station |
| TC-2033 | C | 29/09/2005 | Loop Pattern - Freeway Data Station              |

#### **(2040-2049) WEATHER WARNING SYSTEMS**

|         |  |            |  |
|---------|--|------------|--|
| TC-2040 |  | 20/09/2000 | Active Ice Warning Sign For Undivded Road Use  |
| TC-2041 |  | 20/09/2000 | Double Ice Warning Sign Freeway Bridge Mounted |

#### **(2100-2109) PUBLIC INFORMATION LABELS**

|         |   |            |                             |
|---------|---|------------|-----------------------------|
| TC-2100 | B | 6/05/2011  | Standard Cabinet Label      |
| TC-2101 | A | 7/05/2003  | Small Cabinet Label         |
| TC-2102 |   | 1/08/2002  | Help Phone Label (External) |
| TC-2103 |   | 1/08/2002  | Help Phone Label (Internal) |
| TC-2104 | A | 13/05/2014 | Pedestrian Label            |
| TC-2105 | B | 13/05/2014 | Pedestal Controller Label   |
| TC-2106 |   | 15/06/2017 | Road Lighting Pole Label    |

#### **(2200-2219) MANAGED MOTORWAYS - PITS AND CONDUITS**

|         |  |  |   |
|---------|--|--|---|
| TC-2200 |  |  | 600mm Round Electrical Cable Pit          |
| TC-2201 |  |  | 750mm Round Electrical Cable Pit          |
| TC-2202 |  |  | 750mm Round Communication Junction Pit    |
| TC-2203 |  |  | P8 Communication Pit                      |
| TC-2204 |  |  | Electrical & Communication Trenches       |
| TC-2205 |  |  | 600mm Isolated Electrical Pit             |
| TC-2206 |  |  | Tail Conduit Junction Arrangements        |
| TC-2207 |  |  | General Arrangement at Gantries           |
| TC-2208 |  |  | General Arrangement at Interchanges       |
| TC-2209 |  |  | General Arrangement at Communications Hut |

|         |   |
|---------|---|
| TC-2216 | Cable Pit Former 750mm Dia to Suit 600mm Dia Lid                        |
| TC-2217 | Cable Pit Access Cover, Frame and Precast Concrete Surround - 750mm Dia |

**(2220-2229) MANAGED MOTORWAYS - POSTS & ATTACHMENTS**

|         |  |
|---------|--|
| TC-2220 | VLSL Pole and Base Plate                 |
| TC-2221 | Gantry Mounted CCTV Camera, AP & RP Pole |
| TC-2222 | CCTV Camera Pole Extension               |
| TC-2223 | RTIS/RC3 Pole                            |
| TC-2224 | RTIS/RC3 Pole Bracketing Arrangements    |

**(2230-2239) MANAGED MOTORWAYS - CABINET AND POST FOUNDATIONS**

|         |   |            |   |
|---------|---|------------|---|
| TC-2230 |   |            | Typical Single ITS Field Cabinet Foundation                 |
| TC-2231 | A | 15/06/2017 | Typical Distribution Cabinet Type 1                         |
| TC-2232 | A | 15/06/2017 | Typical Distribution Cabinet Type 2                         |
| TC-2233 |   |            | VLSL Pole Foundation Concrete                               |
| TC-2234 |   |            | VLSL Pole Foundation Reinforcement                          |
| TC-2235 |   |            | RTIS/RC3 Pole Spread Foundation Type 1                      |
| TC-2236 |   |            | RTIS/RC3 Pole Spread Foundation Type 2                      |
| TC-2237 |   |            | Site Layout For ITS Field Cabinets Located on Batters       |
| TC-2238 |   |            | Pedestrian Safety Fence Arrangements for ITS Field Cabinets |

**(2240-2249) MANAGED MOTORWAYS - ELECTRICAL AND COMMUNICATIONS NETWORK WIRING ARRANGEMENTS**

|         |                                 |
|---------|---------------------------------|
| TC-2242 | Typical Gantry Wiring Schematic |
| TC-2243 | VLSL Pole Wiring Arrangements   |

**(2250-2259) MANAGED MOTORWAYS - FRS LANTERN SUPPORT STRUCTURES**

|         |  |
|---------|--|
| TC-2250 | Cantilever Gantry For Two Lanes Metered (Sheet 1 of 2)       |
| TC-2251 | Cantilever Gantry For Two Lanes Metered (Sheet 2 of 2)       |
| TC-2252 | Portal Gantry For Three or More Lanes Metered (Sheet 1 of 3) |
| TC-2253 | Portal Gantry For Three or More Lanes Metered (Sheet 2 of 3) |
| TC-2254 | Portal Gantry For Three or More Lanes Metered (Sheet 3 of 3) |
| TC-2255 | Access Openings & Covers                                     |
| TC-2256 | Beam Lantern Support Assembly                                |
| TC-2257 | Beam Sign Support Assembly                                   |
| TC-2258 | Column Mounted Signal Lantern Head Support Assembly          |

TC-2259

Column Mounted Sign Support Assembly

**(2260-2269) MANAGED MOTORWAYS - NON-ACCESSIBLE LUMS GANTRY**

|         |  |
|---------|--|
| TC-2260 | General Arrangement                                    |
| TC-2261 | Internal Conduiting and LUS Mounting Arrangements      |
| TC-2262 | Gantry LEG Cabinet                                     |
| TC-2263 | Column Base Plate Details                              |
| TC-2264 | Foundation Conduit Details                             |
| TC-2265 | Typical Gantry Earthing Arrangements                   |
| TC-2266 | Electrical and Communications Cable Connection Details |

**(2270-2289) MANAGED MOTORWAYS - ACCESSIBLE VMS AND LUMS GANTRY**

|         |  |
|---------|--|
| TC-2270 | General Arrangement                                    |
| TC-2271 | VMS Mounting Arrangements                              |
| TC-2272 | LUS Mounting Arrangements                              |
| TC-2273 | Conduit Route - 1 of 6                                 |
| TC-2274 | Conduit Route - 2 of 6                                 |
| TC-2275 | Conduit Route - 3 of 6                                 |
| TC-2276 | Conduit Route - 4 of 6                                 |
| TC-2277 | Conduit Route - 5 of 6                                 |
| TC-2278 | Conduit Route - 6 of 6                                 |
| TC-2279 | Gantry LEG Cabinet                                     |
| TC-2280 | Access Ladder and Cage Details                         |
| TC-2281 | Access Walkway and Handrail - 1 of 4                   |
| TC-2282 | Access Walkway and Handrail - 2 of 4                   |
| TC-2283 | Access Walkway and Handrail - 3 of 4                   |
| TC-2284 | Access Walkway and Handrail - 4 of 4                   |
| TC-2285 | Cladding Details                                       |
| TC-2286 | Foundation Conduit Details                             |
| TC-2287 | Typical Gantry Earthing Arrangements                   |
| TC-2288 | Electrical and Communications Cable Connection Details |

**(2290-2299) MANAGED MOTORWAYS - FRS, ERMS AND FDS LAYOUTS**

|         |  |
|---------|--|
| TC-2290 | Typical Entry Freeway Ramp Signals Two Lanes Metered                             |
| TC-2291 | Typical Entry Freeway Ramp Signals Two Lanes Metered Plus Freeflow Priority Lane |
| TC-2292 | Typical Entry Freeway Ramp Signals Two Lanes Metered Plus Metered Priority Lane  |

|         |  |
|---------|--|
| TC-2293 | Merge Layouts Freeway Ramp Signals Three Lanes Metered             |
| TC-2294 | Merge Layouts Freeway Ramp Signals Four Lanes Metered              |
| TC-2295 | Typical Freeway Ramp Signals Layout Freeway to Freeway Interchange |
| TC-2296 | Typical Exit Ramp Management System Layout Arterial Interchange    |
| TC-2297 | Freeway Data Station Using TIRTL                                   |
| TC-2299 | Freeway Data Station Using Wireless Vehicle Detectors              |

**(2300-2309) MANAGED MOTORWAYS - COMMUNICATIONS HUT**

|         |                             |
|---------|-----------------------------|
| TC-2300 | Elevations & Specifications |
| TC-2301 | Floor Plan                  |

**(2310-2319) MANAGED MOTORWAYS - STRUCTURE MOUNTED LUMS ARRANGEMENTS**

|         |   |
|---------|---|
| TC-2310 | Elevation Typical Arrangement                                       |
| TC-2311 | General Arrangement Layout  |
| TC-2312 | Mounting Arrangement Type 1   |
| TC-2313 | Mounting Frame Type 1   |
| TC-2314 | Mounting Arrangement Type 2   |
| TC-2315 | Mounting Frame Type 2   |
| TC-2316 | Mounting Arrangement Type 3   |
| TC-2317 | Mounting Frame Type 3   |
| TC-2318 | Anti-Vandal Cowling   |
| TC-2319 | Junction Box, Electrical and Communications Cable Connection Detail |