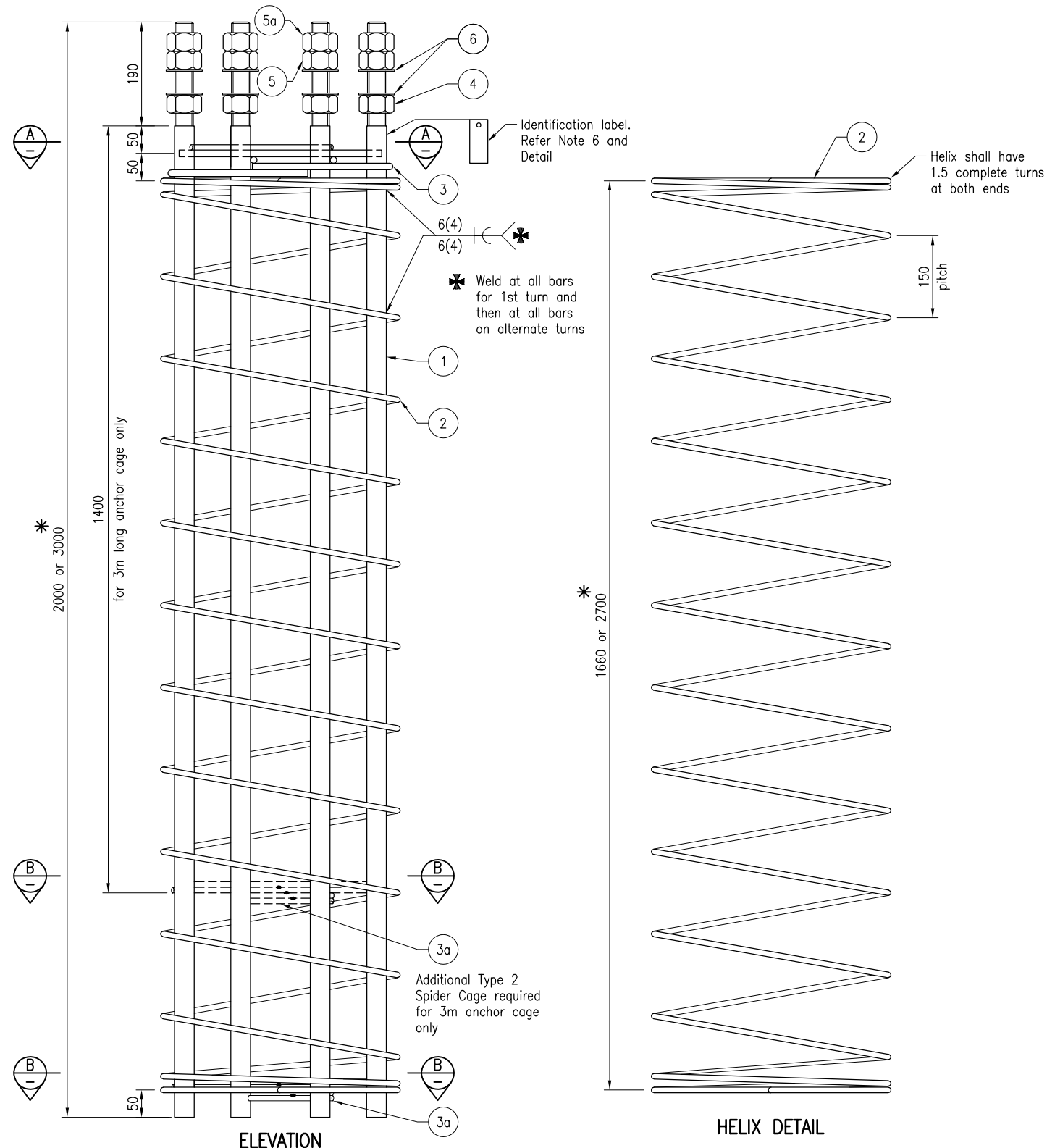


MATERIALS LIST

ITEM	DESCRIPTION	QTY	REMARKS
1	36 dia Grade D500N deformed bar	8	Bar threaded 150 at top to M33
2	10 dia Grade R250N helix at 150 pitch	1	Circular helix
3	Type 1 Spider Cage Grade R250N	1	Refer Section A
3a	Type 2 Spider Cage Grade R250N	1	Refer Section B (2 off for 3m anchor cage)
4	Leveling nuts, hex., high strength galvanised	8	To suit galvanised M33 threaded bar
5	Fixing nuts, hex., high strength galvanised	8	To suit galvanised M33 threaded bar
5a	M33 temporary fixing nuts, hex., high strength galvanised	8	To suit galvanised M33 threaded bar
6	Washers, structural, galvanised	16	To suit galvanised M33 threaded bar



EXAMPLE OF IDENTIFICATION LABEL

ACN Number	12345
Manufacturer's Name/Trade Mark	Big Pole Co.
Mass	15kg
Month/Year of manufacture	9/03

Minimum anchor cage length is 2m.
 In poor soil conditions, the anchor cage may be increased to a maximum of 3m in length. In the event that soil conditions or other factors require even longer anchorages, then a geotechnical survey is required to establish actual foundation material, followed by an analysis by a structural engineer to determine a suitable anchorage design.

* Standard cage lengths are either 2m or 3m. To achieve cage lengths between 2 and 3m the following options may be used
 (a) Trim a 3m long anchor cage at bottom to the required length, or
 (b) Extend a 2m long anchor cage using extension as detailed in Standard Drawing 1680.

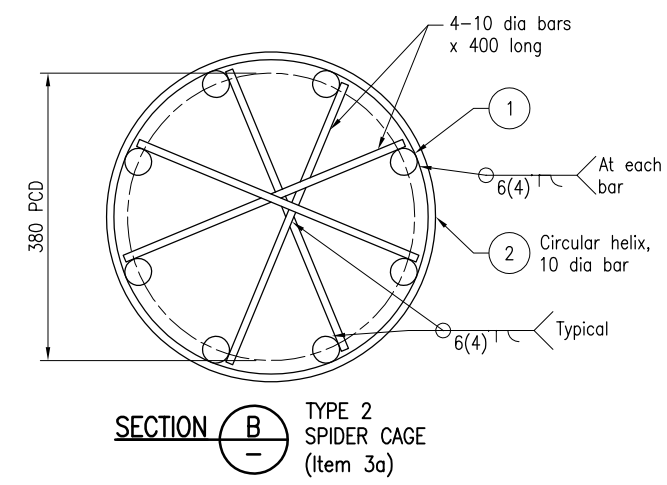
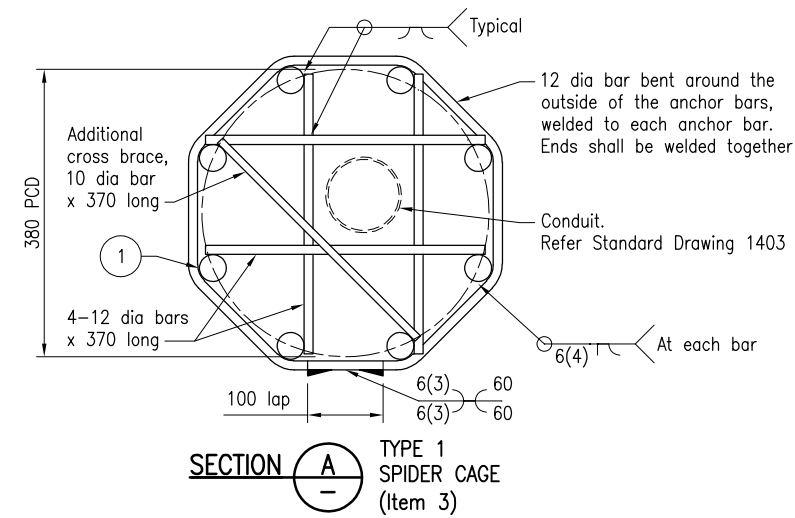
The purpose of this drawing is to provide typical standard details. The fitness for purpose of this drawing for a specific project shall be determined and certified by an RPEQ engineer. Additional project specific details may be required to be included in the scheme drawings.

NOTES:

- SCOPE: This Standard Drawing provides details of the anchor cage in accordance with MRTS92 and MRTS97. This footing design is suitable for Traffic Signal Mast Arms S1-S4 Series and U1 and U2 Series.
- TOLERANCE: General ± 5mm PCD ± 1mm.
- REINFORCING STEEL shall be in accordance with Standard Drawing 1044, and with MRTS71 and AS/NZS 4671. Deformed bars Grade D500N. Round bars Grade R250N. All carbon reinforcing steel shall be ACRS certified. Bars shall be threaded in accordance with AS 1275 before galvanising. Prior to galvanising all weld splatter and welding slag shall be removed. Completed Anchor Cage shall be hot dip galvanised to AS/NZS 4680.
- Nuts Class 8 and structural washers for Class 8.8 bolts shall be supplied in accordance with MRTS78. Assembly testing of threaded bar and nut shall be in accordance with MRTS78 with test loads as for Class 4.6 bolts. All nuts and washers shall be hot dip galvanised to AS 1214.
- WELDING symbols conform to AS 1101.3. All welding to AS/NZS 1554.3. Welding consumables to be controlled hydrogen type: G493 to AS/NZS ISO 14341-B or T493 to AS/NZS ISO 17632-B unless shown otherwise.
- Anchor cages shall have a stainless steel or aluminum identification label, indelibly marked with manufacturer's identification, the mass of the anchor cage, and the month/year of manufacture. This label shall be securely attached to the upper portion of 1-36 dia bar of the assembled cage, immediately below the threaded portion, as shown in this drawing.
- DIMENSIONS are in millimetres unless shown otherwise.

ASSOCIATED DOCUMENTS:
 Design Criteria for Bridges and other Structures

REFERENCED DOCUMENTS:
 Departmental Standard Drawings:
 1680 Traffic Signals/Road Lighting - Extension to Light Pole and Mast Arm Anchor Cages
 1699 Traffic Signals/Road Lighting/ITS - Parts List
 Departmental Specifications:
 MRTS71 Reinforcing Steel
 MRTS78 Fabrication of Structural Steelwork
 MRTS92 Traffic Signal and Road Lighting Footings
 MRTS97 Mounting Structures for Roadside Equipment



Department of Transport and Main Roads			
TRAFFIC SIGNALS			
MAST ARM ANCHOR CAGE FABRICATION DETAILS		A3	Standard Drawing No 1404
		Not to Scale	Date 3/2020