

LOAD FACTOR:- 1.6	15m	18m	20m
WORKING BASE MOMENT: kNm	27.50	32.25	41.56
WORKING SHEAR MOMENT: kNm	3.31	2.75	3.25
ULTIMATE BASE MOMENT: kNm	44	51.6	66.5
ULTIMATE BASE SHEAR: kNm	5.3	4.4	5.2

**GENERAL NOTES**

- G1. READ THIS DRAWING IN CONJUNCTION WITH THE ARCHITECTURAL & LAYOUT PLANS & SPECIFICATIONS. REPORT ANY DISCREPANCY IMMEDIATELY.
- G2. THE CONTRACTOR IS TO CHECK & BE RESPONSIBLE FOR THE CORRECTNESS OF ALL DIMENSIONS & ANY DISCREPANCY TO BE REPORTED IMMEDIATELY.
- G3. THE CONSEQUENCES OF EXCAVATION IN THE VICINITY OF NEIGHBOURING STRUCTURES ARE THE BUILDER'S RESPONSIBILITY. APPROVAL OF ALL PROPOSALS MUST BE GRANTED IN WRITING BY THE STRUCTURAL ENGINEER PRIOR TO COMMENCEMENT OF WORK. ALL EXCAVATIONS ARE TO BE SHORED.
- G4. ALL PROPRIETARY ITEMS ARE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- G5. ALL WORKMANSHIP AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE CURRENT S.A.A. CODES AND BUILDING CODE OF AUSTRALIA.

**CONCRETE NOTES**

- C1. ALL CONCRETE MUST BE IN ACCORDANCE WITH THE CURRENT AS CODE 3600 CONCRETE QUALITY.

ELEMENT	MAX. AGG SIZE	SLUMP	CHARACTERISTIC STRENGTH F <sub>c</sub> (AS 3600)
FOOTINGS	20 mm	80 mm	32 MPa AT 28 DAYS

- C3. CLEAR CONCRETE COVER IN mm TO REINFORCEMENT UNLESS NOTED OTHERWISE

ELEMENTS	FORMED & SHELTERED	FORMED & EXPOSED	NO FORMWORK
FOOTINGS		50 mm	65 mm

- C4. NO ADMIXTURES ARE TO BE ADDED TO CONCRETE WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.
- C5. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN & SHALL BE SUFFICIENT TO DEVELOP THE FULL STRENGTH OF THE REINFORCEMENT. FABRIC REINFORCEMENT MINIMUM SIDE & END LAPS SHALL BE 400.
- C6. ALL REINFORCEMENT TO BE ACCURATELY PLACED IN POSITION SHOWN & WELDED & ADEQUATELY SUPPORTED TO GIVE SPECIFIED COVER.
- C7. CONCRETE SIZES SHOWN DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C8. ALL TIE RODS WHERE NOT SHOWN ON THE DRAWING SHALL BE R6.
- C9. CONDUITS MUST NOT BE PLACED IN CONCRETE COVER & NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE ALLOWED UNLESS APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.

**SOIL NOTES:**

IF BASE AT FOOTING EXCAVATIONS BECOMES WET BEFORE POURING CONCRETE THEN THE WATER AND ANY SOFTENED MATERIAL SHALL BE REMOVED BEFORE POURING THE FOOTINGS.

SOIL RUPTURE INTENSITY (Q<sub>kPa/m</sub>). THE WORST EXPECTED CONDITIONS SHOULD BE USED WHEN ESTIMATING THE STRENGTH OF PILE FOOTINGS FOR SOILS WHICH ARE DEFINED AS FOLLOWS:

**GOOD BEARING SOIL (Q = 600 kPa/m)**

WELL-COMPACTED ROCK SOIL, HARD CLAY & WELL-BONDED SAND & GRAVEL WITH GOOD SURFACE WATER DRAINAGE & FOOTING NORMALLY ABOVE WATER TABLE.

**MEDIUM BEARING SOIL (Q = 300 kPa/m)**

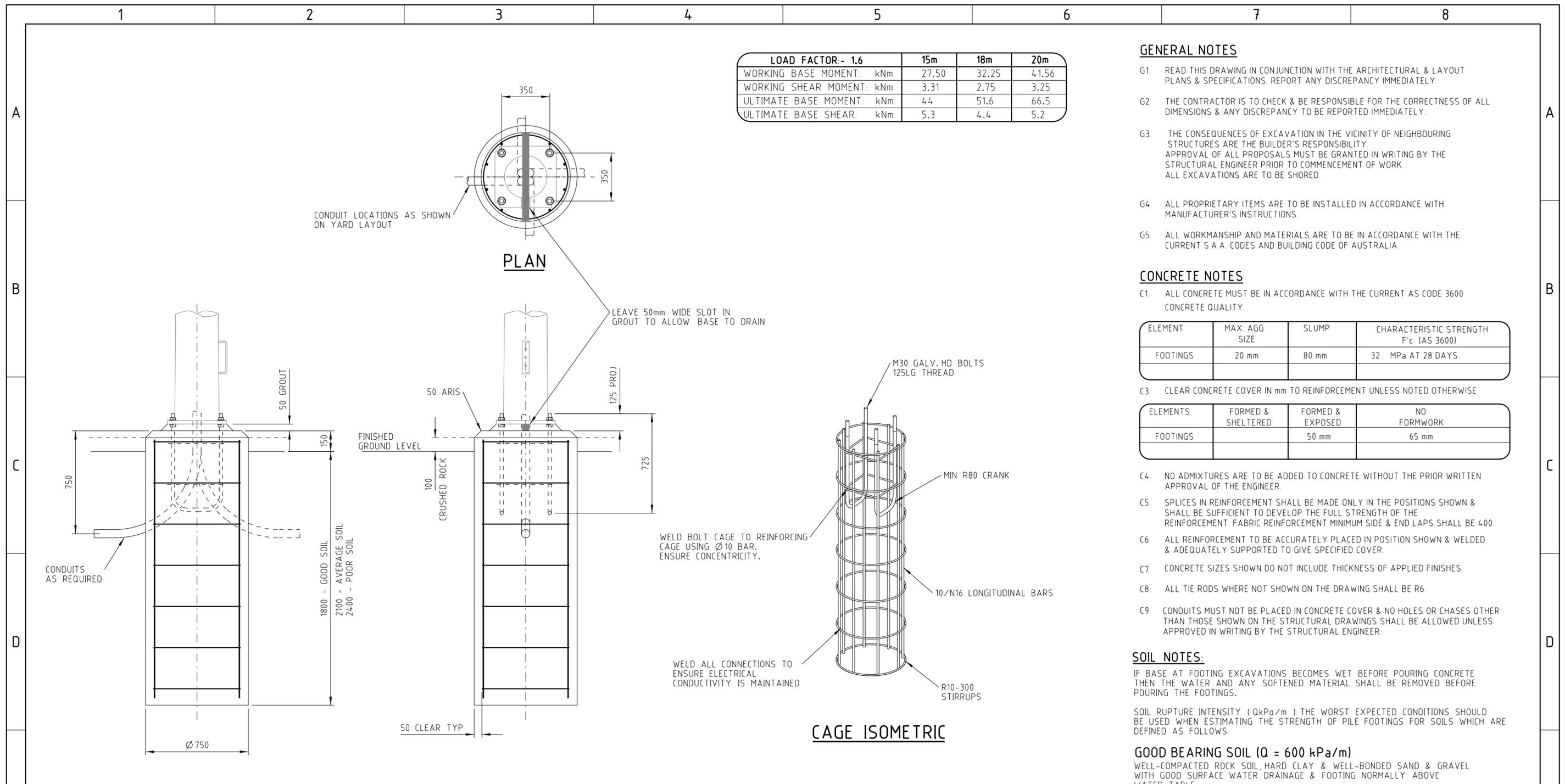
COMPACT MEDIUM CLAY, WELL-BONDED SANDY LOAM, BONDED SAND & GRAVEL WITH REASONABLE SURFACE WATER DRAINAGE.

**POOR BEARING SOIL (Q = 150 kPa/m)**

SOFT CLAY, POORLY COMPACTED SAND & SOILS THAT TEND TO ABSORB LARGE AMOUNTS OF WATER PROVIDED THESE DO NOT DEVELOP INTO SLUSH.

**NOTE:**

THESE VALUES FOR "Q" ARE A GUIDE ONLY FOR ANY FOUNDATION, ENGINEER SHALL ASSESS THE VALUE OF "Q".



**CAGE ISOMETRIC**

**CONSTRUCTION ISSUE**

CAD DRAWING DO NOT MANUALLY AMEND A.M.E.N.D.M.E.N.T.S DWN: BARRY BONNING CHKD: RAY DEAL APP'D: RAY DEAL DATE: 23/11/2017 PAD FOOTING REF. ADDED TO ASSOC DWGS LIST 8 DWN: RAY DEAL CHKD: DAVID STANBURY APP'D: DAVID STANBURY DATE: 23/07/2018 9 50 WIDE SLOT IN GROUT ADDED DWN: RAY DEAL CHKD: THOMAS PHILLIPS APP'D: THOMAS PHILLIPS DATE: 04/04/2019 10 REFERENCE DRAWINGS UPDATED	1	2	3	4	5	6	7	8	
	ALTERNATE PAD CONCRETE FOOTING. 215497 LIGHTNING SPIRE & FLOODLIGHTING 4 LIGHT DESIGN GENERAL ARR'G'T 169818 LIGHTNING SPIRE & FLOODLIGHTING 2 LIGHT DESIGN GENERAL ARR'G'T 162013 7m AND 12m POLE FOOTING DETAILS 162812							SCALE 1:10 DESIGNED PAUL MCEWAN DRAWN PAUL MCEWAN CHECKED PETER STOREY APPROVED I. PEDERSEN DATE 04/06/03 PROJECT NUMBER STD PROJ/TRAK NUMBER	
	ASSOCIATED DRAWINGS					145 NEWCASTLE RD WALLSEND, NSW 2287		STANDARD CONSTRUCTION 15m, 18m & 20m LIGHTNING SPIRE FOOTING DETAILS	
							SIZE A2 DRAWING No 162293 SHEET 01 AMD 10		