

**GENERAL NOTES**

1. THESE NOTES SHALL BE READ IN CONJUNCTION WITH DRAWINGS BSD-4311 SHEETS 3 TO 5, RELEVANT SPECIFICATIONS AND SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED.
2. ANY DISCREPANCIES IN THE DRAWINGS SHALL BE REFERRED TO THE SUPERINTENDENT FOR DECISION BEFORE PROCEEDING WITH THE WORK.
3. ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE APPROPRIATE AND CURRENT AUSTRALIAN STANDARDS, RELEVANT DTMR SPECIFICATIONS AND OTHER PROJECT SPECIFIC SPECIFICATIONS.
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE (U.N.O). DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
5. SETTING OUT DIMENSIONS SHOWN ON PROJECT SPECIFIC DRAWINGS SHALL BE VERIFIED ON SITE BEFORE CONSTRUCTION COMMENCES.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING STABILITY OF THE STRUCTURE UNTIL CONSTRUCTION COMPLETION AND SHALL ENSURE THAT NO PART OF THE STRUCTURE IS OVERSTRESSED DURING CONSTRUCTION. ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE MADE GOOD AT THE CONTRACTOR'S OWN COST.
7. ALL TEMPORARY WORKS AND TEMPORARY STRUCTURES ARE TO BE DESIGNED AND CERTIFIED BY THE CONTRACTOR'S STRUCTURAL ENGINEER (RPEQ). ALL TEMPORARY WORKS ARE TO BE REMOVED AT THE END OF THE PROJECT WITH GROUND MADE GOOD, ALL AT THE CONTRACTOR'S COST.
8. CONTRACTOR SHALL LOCATE ANY BURIED SERVICES AT THE SITE AND NOTIFY THE DESIGNER IF THERE ARE ANY CLASHES WITH THE FOUNDATION, AT LEAST 2 WEEKS PRIOR TO COMMENCEMENT OF CONSTRUCTION.

**INSPECTION AND CONSTRUCTION CERTIFICATION NOTES**

1. THE CONTRACTOR SHALL ARRANGE & PAY ALL COSTS FOR A STRUCTURAL ENGINEER (RPEQ) AND A GEOTECHNICAL ENGINEER (RPEQ) TO INSPECT AND CERTIFY ALL CONSTRUCTION WORK AS SPECIFIED IN THE CONTRACT.
2. THE CONSTRUCTION CERTIFICATION SHALL STATE THAT ALL CONSTRUCTION WORKS HAD BEEN CARRIED OUT AS PER THE MOST CURRENT ISSUE OF THE CONTRACT DOCUMENTS AND SITE INSTRUCTIONS/VARIATION ORDERS ISSUED DURING CONSTRUCTION BY CITY PROJECTS OFFICE.

**DESIGN CRITERIA**

1. DESIGN STANDARDS : AS5100 (2004), AS1170, AS3600 (2009), AS4100 (1998) INCLUDING SUPPLEMENTS AND AMENDMENTS.
2. DESIGN LOADS : IN ACCORDANCE WITH AS5100, AS1170 AND 'DESIGN CRITERIA FOR BRIDGES AND OTHER STRUCTURES: 2012' PUBLISHED BY DEPARTMENT OF TRANSPORT AND MAIN ROADS (DTMR) QLD.
3. DESIGN DATA : VMS PANEL WEIGHT: 300kg MAX. TRAFFIC CAMERA WEIGHT 20kg MAX.  
 : WIND LOADS  
 - REGION: B  
 - TERRAIN CATEGORY: 2  
 - STRUCTURE HEIGHT: 8.0m  
 - ARI: 2000 YRS (ULS) & 20 YRS (SLS)  
 -  $V_{des.0uls}=58$  m/s &  $V_{des.0sls}=35$  m/s  
 : EARTHQUAKE LOADS  
 - EARTHQUAKE ZONE HAZARD FACTOR Z = 0.05  
 - DESIGN CATEGORY: EDC II  
 : FATIGUE LOADS  
 - THE STRUCTURE HAS BEEN DESIGNED FOR FATIGUE IN ACCORDANCE WITH SECTION 11 OF 'AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS' 5th EDITION 2009.  
 : 100 YEAR DESIGN LIFE

**CONCRETE NOTES**

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH DTMR SPECIFICATION MRTS70.
2. MANUFACTURE AND PLACEMENT OF CONCRETE SHALL BE IN ACCORDANCE WITH MRTS70.
3. CHAMFERS AND FILLETS - UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL EXPOSED CONCRETE EDGES HAVING A CONTAINED ANGLE OF LESS THAN 120° SHALL BE PROVIDED WITH 20mm CHAMFERS OR FILLETS AS APPROPRIATE.

**CONCRETE NOTES CONTINUED**

4. ALL CONCRETE SHALL BE PREMIXED BY AN APPROVED SUPPLIER
5. ALL CEMENT SHALL BE TYPE GP OR GB TO AS3972 UNLESS OTHERWISE SPECIFIED.
6. ADMIXTURES SHALL NOT BE USED UNLESS APPROVED IN WRITING BY THE SUPERINTENDENT.
7. TARGET SLUMP TO BE AS PER MRTS70.
8. CONCRETE STRENGTH AND CLEAR COVER TO REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE U.N.O. EXPOSURE CLASSIFICATION B2.

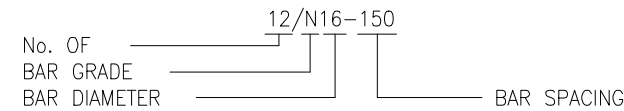
ELEMENT	CONCRETE GRADE	CLEAR COVER TO REINFORCEMENT
BORED PILE	S40/20	85
MASS / BLINDING CONCRETE	N20	N/A

**REINFORCEMENT NOTES**

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH MRTS71.
2. THE CONTRACTOR SHALL SUBMIT MILL AND TEST CERTIFICATES FOR REINFORCING BARS TOGETHER WITH RPEQ CERTIFICATION CONFIRMING THE FOLLOWING, FOR APPROVAL OF THE SUPERINTENDANT PRIOR TO COMMENCEMENT OF CONSTRUCTION;
  - THAT REINFORCING BARS SUPPLIED BY EITHER AN AUSTRALIAN OR OVERSEAS SUPPLIER ARE ACRS CERTIFIED. REFER [www.steelcertification.com](http://www.steelcertification.com) FOR CURRENT CERTIFICATE HOLDERS. ACRS REFERS TO "AUSTRALIAN CERTIFICATION AUTHORITY FOR REINFORCING AND STRUCTURAL STEELS".
  - THAT WHERE REINFORCING BARS ARE SOURCED FROM OVERSEAS FOR THE PROJECT, THE CERTIFYING ENGINEER HAS REVIEWED THE MILL AND TEST CERTIFICATES FROM THE SUPPLIERS OF THE REINFORCING BARS AND CONFIRMS THAT THEY COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS IN RELATION TO MATERIAL COMPOSITION AND STRENGTH.

3. REINFORCEMENT SYMBOLS:  
 R STRUCTURAL PLAIN ROUND BAR GRADE 250R TO AS4671  
 N DEFORMED BAR GRADE D500N TO AS4671  
 SL HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS4671

**REINFORCEMENT NOTATION**



5. REINFORCEMENT IS SHOWN DIAGRAMMATICALLY ON THESE DRAWINGS AND DOES NOT DEPICT THE PRECISE POSITION OF BARS AND NOT NECESSARILY SHOWN IN TRUE PROJECTION OR SCALE.

**MINIMUM DEVELOPMENT AND SPLICING LENGTHS, UNLESS NOTED OTHERWISE**

BAR SIZE	N12	N16	N20	N24	N28	N32	N36	FABRIC
MINIMUM LAP LENGTH	500	650	800	1050	1400	1750	2150	350

7. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN OR AS APPROVED BY THE SUPERINTENDENT.
8. WELDING OR SITE BENDING OF THE REINFORCEMENT IS NOT PERMITTED WITHOUT THE DESIGNER'S APPROVAL.
9. ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS. THE BAR CHAIR MATERIAL SHALL SUIT THE EXPOSURE CLASSIFICATION.
10. COGS, CRANKS AND HOOKS ARE STANDARD UNLESS NOTED OTHERWISE AND SHALL BE IN ACCORDANCE WITH AS 5100-2004.

STRUCTURAL DESIGN CERTIFICATION		
DESIGN <small>Dilan Rowel RPEQ:8455 2013.10.22 13:21:05 +10'00'</small>	DESIGN CHECK <small>Lenita MendisRPEQ 8950 2013.10.22 15:28:09 +10'00'</small>	AUTHORISED FOR ISSUE <small>Bala Balakumar RPEQ 3963 2013.10.22 15:54:18+10'00'</small>

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE	DRAWING AUTHORIZED FOR PUBLICATION Signature on Original Inga Condric Dated 15/04/14 FOR ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT DESIGN APPROVED Eric Bradley Signature on Original Dec 2013 Intelligent Transport Systems Manager	DESIGN	D.R.	DATE	Oct '13	DRAWN	D.M.	DATE	Oct '13	CHECKED	L.M.	DATE	Oct '13	DRAWING FILENAME	VBSD-4311 (C) Vms support structure type BCCVC - Notes - Sheet 1 of 5.dwg	ASSOCIATED PLANS	BSD-4311 SHEETS 2,3, 4 & 5
C	Drawing Title Amended	JAN '16	JUL '16	JUL '16																	
B	NOTES AMENDED	SEPT '14	SEPT '14	SEPT '14																	
A	ORIGINAL ISSUE	Oct '13	Oct '13	Oct '13																	



BRISBANE CITY COUNCIL STANDARD DRAWING	
<b>VMS SUPPORT STRUCTURE TYPE BCCVC-NOTES SHEET 1 OF 5</b>	SCALE NOT TO SCALE DWG No. <b>BSD-4311</b> ORIGINAL SIZE A3 REVISION C