
**DETAIL C**  
 SCALE 1:5

**GENERAL**

1. ALL FIELD DIMENSIONS ARE BE CHECKED AND VERIFIED BY THE CONTRACTOR PRIOR TO STARTING CONSTRUCTION.
2. CONTRACTOR TO CONFIRM THE LOCATION OF ALL SUBGRADE SERVICES PRIOR TO STARTING ANY EXCAVATION.
3. EXCAVATE ALL TOPSOIL, LOOSE OR SWELLING SOILS UNDER TO THE NEW CONSTRUCTION TO THE CONTRACT ADMINISTRATOR'S SATISFACTION.
4. EXCAVATE SOIL BELOW ALL NEW SLAB-ON-GRADE FLOORS AND REPLACE WITH A MINIMUM 200MM OF COMPACTED GRANULAR FILL. GRANULAR FILL TO BE COMPACTED TO 98% MODIFIED PROCTOR DENSITY.
5. ALL CONSTRUCTION JOINT LOCATIONS ARE TO BE APPROVED BY THE CONTRACT ADMINISTRATOR.
6. THE STRUCTURE SHALL BE BRACED TO SAFELY WITHSTAND ALL FORCES WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION. THE BRACING SHALL REMAIN IN PLACE UNTIL THE PERMANANT STRUCTURAL MEMBERS ARE IN PLACE AND FULLY OPERATIONAL.

**CONCRETE CAISSONS**

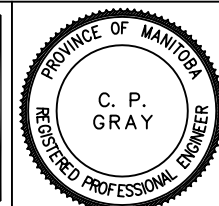
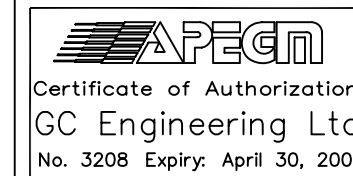
1. CONCRETE CAISSONS ARE DESIGNED FOR AN END BEARING VALUE OF 360 KPa.
2. PROVIDE 32MPa CONCRETE AT 28 DAYS WITH TYPE 50 SULPHATE RESISTING CEMENT FOR ALL CAISSONS.
3. MECHANICALLY VIBRATE TOP 3M OF PILE.
4. CAISSONS TO BE WITHIN 15MM PER METER OF VERTICAL PLUMBNESS.
5. NO MORE THAN 1 CAISSONS TO REMAIN OPEN AT ANY ONE TIME AFTER CAISSON DRILLING IS COMPLETE.
6. PLACE REINFORCING & CONCRETE WITHIN 15 MINUTES AFTER DRILLING CAISSON.
7. INSPECTIONS BY THE GEOTECHNICAL ENGINEER IS TO BE PROVIDED DURING CONSTRUCTION OF THE CAISSONS. THE COST OF INSPECTIONS IS TO BE PAID BY THE CONTRACTOR.

**REINFORCING**

1. PERFORM CONCRETE REINFORCING WORK IN ACCORDANCE WITH CSA CAN3-A23.3.
2. ALL REINFORCING BARS TO HAVE A MINIMUM SPECIFIED YIELD STRENGTH OF 400 MPa (EXCEPT STIRRUPS AND TIES WHICH SHALL HAVE A MINIMUM SPECIFIED YIELD STRENGTH OF 300MPa) IN ACCORDANCE WITH CSA G30.12.
3. COVER TO REINFORCING UNLESS NOTED OTHERWISE SHALL BE: BEAMS 30MM; SLABS 30MM CLEAR TOP AND BOTTOM; CAISSONS 60MM.
4. LOCATE REINFORCING SPLICES NOT INDICATED ON DRAWINGS AT POINTS OF MINIMUM STRESS. LOCATIONS OF SPLICES TO BE APPROVED BY CONTRACT ADMINISTRATOR.
5. BEFORE PLACING ENSURE REINFORCING IS CLEAN, FREE OF LOOSE SCALE, DIRT, OR OTHER FOREIGN COATING WHICH WOULD REDUCE THE BOND TO CONCRETE.
6. SHOP DRAWINGS SHALL BE SUBMITTED WHICH CLEARLY INDICATE BAR SIZES, SPACINGS, LOCATIONS AND QUANTITIES OF REINFORCING STEEL AND WIRE FABRIC, BENDING AND CUTTING SCHEDULES, AND SUPPORTING AND SPACING DEVICES FOR REVIEW PRIOR TO FABRICATION OF THE REINFORCING STEEL. DETAIL IN ACCORDANCE WITH THE ACI DETAILING MANUAL.

**S5**  
 Details & Notes

**East Gate Entrance**  
**Assiniboine Park Zoo**  
**Winnipeg, MB**



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