A1 SIZE - 594mm x 841mm

6. TEST CYLINDERS SHALL BE PROPERLY CURED
7. THE TESTING AGENCY SHALL FORWARD A COPY OF ALL TEST RESULTS DIRECTLY TO THE CA AT THE TIME THE TEST RESULTS ARE FORWARDED TO THE CONTRACTOR

SUPPLEMENTAL CEMENTITIOUS MATERIALS

1. SUBSTITUTION OF FLYASH FOR PORTLAND CEMENT TO BE 25% MAX BY WEIGHT
2. FLYASH SHALL BE TYPE 'F' UNLESS AUTHORISED IN WRITING BY THE CA
3. FLYASH SHALL HAVE A PROVEN HISTORY OF SATISFACTORY USE FOR PERIOD OF NOT LESS THAN 10 YEARS
4. FLYASH SHALL NOT HAVE A HIGH ALKALI, SULPHATE OR REACTIVE MATERIAL CONTENT
5. PROVIDE TEST RESULTS SHOWING FLYASH FOR GUb CEMENT IMPROVES SULPHATE RESISTANCE

REINFORCING

1. REINF SHALL BE NEW BILLET GRADE STEEL MEETING THE REQUIREMENT OF CSA STD G30.18, GRADE 400
2. REINFORCING STEEL SHALL BE FREE OF ALL LOOSE RUST, DIRT AND ALL DELETERIOUS MATERIAL THAT WILL AFFECT CONC BOND
3. CONCRETE COVER

MIN CONC COVER TO REINF SHALL BE 50mm U/N

U/N MIN CONC COVER TO REINF SHALL BE:	N	F-1,2
S-1,2 C-1,2,3		
-SURFACES POURED AGAINST SOIL (mm)	-	75
75		
-FORMED SURFACES EXPOSED TO SOIL (mm)	-	40
65		
-BEAMS, GIRDERS, COLUMNS, PILES (mm)	35	40
40		
-SLABS, WALLS, JOISTS (mm)	20	40
65		
-RATIO OF COVER TO BAR DIA	1.0	1.5
2.0		
-RATIO OF COVER TO MAX AGG SIZE	1.0	1.5
2.0		

BAR DETAILING AND PLACING

1. DIMENSION TOLERANCE FOR REINF PLACEMENT AND FORMWORK ARE NOT ADDITIVE
2. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH RSIC "RSIC MANUAL OF STANDARD PRACTICE"
3. VARIATION FROM POSITION (U/N):
   - -CONC COVER: +12, -6
   - -SPLICE LENGTH AND POSITION: +/- 25
   - -STARTER BARS: +/- ONE BAR DIA
   - -SLABS AND WALLS: 0.25 OF DESIGNATED SPACING
   - -BEAMS AND COLUMNS: +/- 6
   - -DIMENSIONS OF BENT BARS: +/- 6
4. SUPPORT BOT REINF ON SUFFICIENT SLAB BOLSTERS OR EQUIVALENT TO MAINTAIN CONC COVER AS SPECIFIED
5. SUPPORT SLAB/BEAM TOP REINF ON HIGH CHAIRS AND/OR 15M SUPPORT BARS WHERE REQUIRED. ALL BARS AND CHAIRS MUST BE SECURELY TIED TOGETHER
6. PROVIDE SUFFICIENT CHAIRS AND SUPPORT BARS TO MAINTAIN CONC PROTECTION AS SPECIFIED
7. CONCRETE REINFORCING STEEL SHOP DRAWINGS SHALL SHOW:
   - -ALL REINFORCING AND PLACING ORDER,
   - -ALL CONCRETE COVER, AND
   - -ALL DIMENSIONS, AND ALL ELEVATIONS,

ACCESSORIES

1. SECURE IN PLACE ALL SLEEVES, INSERTS, ANCHORS, AND EMBEDDED ITEMS REQUIRED FOR ADJOINING WORK OR FOR SUPPORT OF ADJOINING WORK BEFORE CONCRETE PLACEMENT
2. PROVIDE 25mm CHAMFER STRIP AT ALL EXPOSED CONCRETE EDGES
3. WATERSTOPS SHALL BE VOLCLAY WATERSTOP-RX 101 U/N, BENTONITE BASED WATERSTOP CONFORMING TO ANSI/NSF 61 OR APPD EQ
4. WATERSTOPS SHALL BE SECURED TO THE STRUCTURE BY VOLCLAY WB ADHESIVE OR APPD EQ
5. SURFACE PREPARATION AND INSTALLATION SHALL BE STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS
6. PROVIDE 200mm FROST CUSHION BY BEAVER PLASTICS OR APPD EQ UNDER ALL CONCRETE BEAMS, DUCT VAULT, DUCT BANKS AND AS SHOWN AS VOID FORM ON THE DRAWINGS.

ADMIXTURES

1. WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH THE FOLLOWING STANDARDS/SPECIFICATIONS:

   ADMIXTURES TO ASTM SPEC C260 AND ASTM SPEC C494
2. ALL ADMIXTURES SHALL BE USED STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS
3. AEA TO ASTM SPEC C260 SHALL BE DAREX BY WR GRACE OR APPD EQ
4. WRDA TO ASTM SPEC C494 SHALL BE WRD20 BY WR GRACE OR APPD EQ
5. HRWR TO ASTM SPEC C494 SHALL BE SIKAMENT BY SIKA OR APPD EQ
6. OTHER ADMIXTURES SHALL NOT BE USED WITHOUT WRITTEN APPROVAL OF THE CA
7. CHEMICAL RETARDERS AND CALCIUM CHLORIDE SHALL NOT BE USED

CONCRETE CURING AND SEALING

EXPOSED CONC SHALL BE SEALED WITH MEADOWS SEALTIGHT CS-309 OR EQ. 21 DAYS AFTER FINISHING COAT WITH 1 COAT OF HYDROZO ENVIROSEAL 20 OR EQ, WATER BASED SILANE SEALER. 7 DAYS AFTER APPLYING THE FIRST COAT APPLY A SECOND COAT

FALSEWORK AND FORMWORK

1. ALL WORK TO CONFORM TO CSA STN S269.3
2. PILE CAP FORMS SHALL NOT BE REMOVED BEFORE CONC HAS ATTAINED SUFFICIENT STRENGTH TO PREVENT DAMAGE, WITH THE FOLLOWING BEING THE MIN:
   STRUCTURAL CONC - 8 MPA
3. FORMWORK SHALL NOT BE LOOSENED UNTIL 24 HOURS HAS ELAPSED AND UNTIL CONC HAS ATTAINED SUFFICIENT STRENGTH TO PREVENT DAMAGE
4. UPON REMOVAL OF FORMWORK, PROVIDE A CURING MEMBRANE AS REQ'D
5. STRENGTH OF CONC FOR STRIPPING TO BE DETERMINED BY FIELD CURED SAMPLES
6. FORM RELEASE AGENT SHALL BE MULTI-REACTIVE, NON-STAINING, VOC COMPLIANT AND SHALL BE DUOGARD AS MANUFACTURED BY WR MEADOWS OR APPD EQ
7. FORMWORK DESIGN DEFLECTION HAS BEEN LIMITED TO L / 180 WHERE L IS THE SPAN OF THE SUPPORTING FORMWORK ELEMENT. WET SERVICE CONDITIONS HAVE BEEN ASSUMED FOR FORMPLY DESIGN. SHORT TERM LOADING CONDITIONS HAVE BEEN ASSUMED FOR ALL FORMWORK ELEMENTS
8. FORMWORK DESIGN PRESSURES ARE IN ACCORDANCE WITH THE CURRENT EDITION OF ACI 347
9. DIMENSION TOLERANCE
   - DIMENSION TOLERANCE FOR FORMWORK TO BE:
     - -FOUNDATION CROSS-SECTIONS SHALL BE: +12, -6
     - -MEMBER LENGTH: +/-12
     - -LOCATION IN PLAN: +/-12
     - -OUT OF PLUMB: FOR HEIGHT OF WALL: 6
   - DIMENSION TOLERANCE FOR REINF PLACEMENT AND FORMWORK ARE NOT ADDITIVE
   - ALL WORK MUST BE ADJUSTED BY THE CONTRACTOR TO ACCOMMODATE TOLERANCES

STRUCTURAL STEEL (AND METAL FABRICATIONS)

1. STRUCTURAL STEEL TO BE DESIGNED, FABRICATED, AND ERECTED IN ACCORDANCE WITH CSA STN S16
2. CONSTRUCTION IS CLASSIFIED AS SEMI-RIGID AND LIMIT STATES ELASTIC DESIGN HAS BEEN USED
3. ALL SECTIONS SHALL CONFORM TO CSA STN G40.21 GRADE 350W. HSS TO BE CLASS C U/N. ALL PLATE AND BAR MATERIAL SHALL CONFORM TO CSA STN G40.21 GRADE 300W MIN
4. STRUCTURAL STEEL SECTIONS SHALL BE CONTINUOUS BETWEEN CONNECTIONS. SPLICING IS NOT PERMITTED UNLESS APPROVED BY THE CA
5. WELDING SHALL CONFORM TO THE REQUIREMENTS OF CSA STN W59 AND SHALL BE UNDERTAKEN BY A FABRICATOR FULLY APPROVED BY THE CWB MEETING THE REQUIREMENTS OF CSA STN W47.1, DIVISION 1 OR 2
6. WELDING INSPECTION SHALL BE UNDERTAKEN BY A WELDING INSPECTOR FULLY CERTIFIED BY THE CWB TO CSA STN W178.2 or AWS QC1 FOR THE TYPE OF WORK
7. REMOVE ALL SHARP EDGES AND CORNERS FROM ALL EXPOSED STRUCTURAL STEEL OR STEEL THAT IS FREQUENTLY HANDLED
8. ALL BOLTED CONNS SHALL USE A MIN OF TWO HIGH STRENGTH BOLTS. THREADS MAY BE INCLUDED IN THE SHEAR PLANE
9. ALL BEAM CONNS SHALL DEVELOP EQ SHEAR RESISTANCE OF ONE-HALF THE MAX UDL CAPACITY OF THE MEMBER, WITH THE COMPRESSION FLANGE LATERALLY UNSUPPORTED, FOR THE SPAN OF THE MEMBER U/N
10. LOCATION OF ALL BEAM AND COLUMN SPLICES SHALL BE APPROVED BY THE CA AND SHALL BE SHOWN ON SHOP DRAWINGS. SPLICE WELDS SHALL BE TESTED BY ULTRASONIC OR RADIOGRAPHIC METHODS AS APPLICABLE
11. STRUCTURAL STEEL SHOP DRAWINGS SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN THE PROVINCE WHERE THE PROJECT IS LOCATED WHO WILL BE RESPONSIBLE FOR THE DESIGN AND FABRICATION OF ALL STRUCTURAL STEEL CONNECTIONS

HIGH STRENGTH BOLTS

1. U/N ALL BOLTS FOR STRUCTURAL STEEL SHALL BE 19mmø HIGH STRENGTH BOLTS MEETING ASTM SPEC A325, TYPE 1. ALL NUTS SHALL BE HEAVY HEX CONFORMING TO ASTM SPEC A563, GRADE DH, OR ASTM SPEC A194, GRADE 2H, AND WASHERS SHALL CONFORM TO ASTM SPEC F436-1
2. THE STEEL SUPPLIER SHALL CERTIFY THAT BOLTS, NUTS AND WASHERS COMPLY WITH THE APPROPRIATE REQUIREMENTS OF THE APPLICABLE SPEC AND SHALL PROVIDE MANUFACTURER'S MILL TEST REPORTS ON REQUEST
3. FASTENERS USED FOR SLIP CRITICAL INSTALLATIONS SHALL BE STORED IN A MANNER THAT AFFORDS PROTECTION FROM MOISTURE, EXCESSIVE HEAT, AND/OR CONTAMINATION BY DELETERIOUS MATERIALS. ONLY THE NUMBER OF SLIP CRITICAL FASTENERS REQUIRED SHALL BE REMOVED FROM STORAGE AT THE START OF A SHIFT
4. SLIP CRITICAL CONNECTIONS SHALL BE USED U/N
5. HARDENED STEEL WASHERS SHALL BE USED FOR ALL SLIP CRITICAL INSTALLATIONS
6. SLIP CRITICAL TYPE CONNS ARE TO BE DESIGNED FOR THE ABSOLUTE VALUE OF THE DIFFERENCE BTN MAX AND MIN LOAD, OR MAX LOAD WHATEVER IS GREATER.
7. ALL BOLTS, NUTS AND WASHERS SHALL BE HDG U/N
8. BOLT INSPECTION PROCEDURES SHALL BE IN ACCORDANCE WITH SECTION 9 OF THE 'SPEC FOR STRUCTURAL JOINTS USING ASTM SPEC A325 OR ASTM SPEC A490 BOLTS AND SHALL OCCUR AT THE TIME OF INSTALLATION. TESTING AND CALIBRATION SHALL USE ONE OF THE FOLLOWING PROCEDURES:
   - -TURN-OF-NUT TIGHTENING METHOD; FOR 'TURN-OF-NUT' TENSIONING, PRE-INSTALLATION VERIFICATION SHALL BE UNDERTAKEN
   - -DIRECT TENSION INDICATORS (ASTM SPEC F959)
   - -TENSION CONTROL BOLTS (ASTM SPEC F1852)
9. CALIBRATED WRENCH METHOD IS NOT RECOMMENDED

ANCHOR RODS (GENERAL)

1. ANCHOR RODS SHALL BE WELDABLE U/N
2. ANCHOR RODS, NUTS AND WASHERS SHALL BE HDG U/N
3. ANCHOR RODS SHALL HAVE A MIN EMBEDMENT LENGTH AND CONFIGURATION TO RESIST ALL SHEAR AND UPLIFT FORCES
4. ANCHOR RODS LESS THAN 25mmø SHALL BE FABRICATED FROM ROUND BAR x 600mm LONG U/N. THE BOTTOM OF THE BAR SHALL HAVE A 25mm LONG THREADED PORTION TO ACCEPT A HEAVY HEX HEAD NUT WELDED AT THE BOTTOM WITH 6mm FILLET WELD 20mm LONG. THE TOP OF THE BAR SHALL HAVE A 100mm LONG THREADED PORTION TO ACCEPT A HEAVY HEX HEAD NUT, AND WASHER. EMBEDMENT LENGTH SHALL BE 475mm MIN. LENGTH OF PROJECTION SHALL BE 100mm
5. ANCHOR RODS GREATER THAN OR EQUAL TO 25mmø SHALL BE FABRICATED FROM ROUND BAR x 750mm LONG U/N. THE BOTTOM OF THE BAR SHALL HAVE A 40mm LONG THREADED PORTION TO ACCEPT A HEAVY HEX HEAD NUT WELDED AT THE BOTTOM WITH 6mm FILLET WELD 25mm LONG. THE TOP OF THE BAR SHALL HAVE A 100mm LONG THREADED PORTION TO ACCEPT A HEAVY HEX HEAD NUT, AND WASHER. EMBEDMENT LENGTH SHALL BE 600mm MIN. LENGTH OF PROJECTION SHALL BE 100mm
6. ANCHOR ROD DESIGN SHALL BE BASED ON HEADED BOLT DESIGN. 'J' OR 'L' ANCHOR RODS SHALL NOT BE USED
7. LENGTH OF PROJECTION SHALL BE 25mm MIN ABOVE THE BASE PLATE, OR AS REQD
8. ANCHOR RODS SHALL BE SET USING A TEMPLATE. DO NOT HAND SET ANCHOR RODS
9. ANCHOR RODS SHALL BE SUPPLIED AS A COMPLETE ASSEMBLY CONSISTING OF THREADED ROD, NUT, WASHER, AND ANCHOR ROD NUT AND SHALL BE SUPPLIED TO SITE PRE-ASSEMBLED
10. ANCHOR RODS SHALL NOT BE TENSIONED UNTIL EMBEDMENT CONCRETE HAS ACHIEVED 80% MIN OF SPECIFIED STRENGTH

ANCHOR RODS (CARBON STEEL)

1. ANCHOR RODS LESS THAN 25mmø SHALL BE CAN/CSA STN G40.21, GRADE 275W MIN U/N. NUTS AND WASHERS TO MATCH
2. ANCHOR RODS DENOTED AS 25mmø OR GREATER SHALL BE ASTM SPEC F1554, GRADE 55-S1. NUTS AND WASHERS TO MATCH
3. ANCHOR ROD WASHERS SHALL CONFORM TO ASTM SPEC F436 U/N
4. ANCHOR ROD NUTS SHALL CONFORM TO ASTM SPEC A563A (HEAVY HEX) U/N
5. HDG ANCHOR ROD ASSEMBLIES NUTS AND WASHERS SHALL USE THE SAME PROCESS

ANCHOR RODS (STAINLESS STEEL)

1. ANCHOR ROD WASHERS SHALL CONFORM TO ASTM SPEC A240 AND NUTS SHALL CONFORM TO ASTM SPEC A194, GRADE 8M U/N
2. ANCHOR RODS LESS THAN 25mmø SHALL CONFORM TO AISI 316L HAVING A MIN FY = 30 KSI (210 MPA) AND A UTS = 70 KSI (480 MPA) OR APPD EQ. NUTS AND WASHERS TO MATCH
3. ANCHOR RODS DENOTED AS 25mmø OR LARGER SHALL CONFORM TO AISI 2205 AND ASTM SPEC A276 HAVING A MIN FY = 61 KSI (420 MPA) AND A UTS = 90 KSI (620 MPA) OR APPD EQ. NUTS AND WASHERS TO MATCH

GROUNDING LUGS AND GROUNDING TABS (STAINLESS STEEL)

1. GROUNDING LUGS AND GROUNDING TABS SHALL CONFORM TO AISI 316L HAVING A MIN FY = 210 MPA AND A UTS = 480 MPA OR APPD EQ. WITH NUTS, BOLTS, AND WASHERS TO MATCH AS REQD
2. GROUNDING TABS SHALL BE 6mm THICK MINIMUM. DRILL 15mmø TO ACCEPT NEMA 2N CONNECTORS
3. GROUNDING LUGS SHALL BE 25mm THICK MINIMUM. DRILL 10.7mmø AND TAP FOR FULL DEPTH THREAD TO ACCEPT NEMA 2N CONNECTORS
4. FASTENER LENGTH TO BE DETERMINED USING BELLEVILLE AND FLAT WASHER AND HEAVY HEX HEAD NUT ASSEMBLY. PROVIDE 3mm± CLEAR END SPACE FOR GROUNDING LUG FASTENERS
5. GROUNDING LUGS AND GROUNDING TABS SHALL BE WELDED TO SUPPORTING STEEL WITH 5mm FILLET SEAL WELD ALL AROUND
6. REMOVE FLUX AND DELETERIOUS MATERIAL FROM WELD AREA AND HDG ASSEMBLY. COOL AND REMOVE HDG FROM STAINLESS STEEL BOLT AREA BY MECHANICAL GRINDING. STAINLESS STEEL MAY BE PASSIVATED BY IMMERSION IN A 20% SOLUTION OF NITRIC ACID FOR 4 HOURS. FASTENERS SHALL BE FLUSHED CLEAN AND DRIED
7. SECURE GROUNDING CONNECTORS TO LUGS AND TABS WITH 12.7ø SILICON-BRONZE FASTENERS C/W BELLEVILLE STAINLESS STEEL WASHER AND FLAT WASHER
8. GROUNDING STRAPS IN CONTACT WITH GROUNDING LUGS AND GROUNDING TABS SHALL BE BRASS U/N
9. FASTENERS, WASHERS, AND NUTS SHALL CONFORM TO AISI 316L U/N
10. TORQUE TO PROVIDE A PRELOAD TO PREVENT LOOSENING WITH THERMAL CYCLING

COATING SYSTEMS (SURFACE PREPARATION)

1. SURFACE PREPARATION AND APPLICATION OF COATINGS TO BE IN ACCORDANCE WITH THE MORE STRINGENT REQUIREMENT OF EITHER THE MANUFACTURER'S PRINTED INSTRUCTIONS. IN THE ABSENCE OF PRINTED INSTRUCTIONS CLEAN NEW STEEL TO SSPC-SP 10, 'NEAR-WHITE BLAST CLEANING'
2. ALL LOOSE MILL SCALE, LOOSE RUST, LOOSE PAINT, DIRT AND DELETERIOUS CONTAMINATION SHALL BE REMOVED BY HAND TOOL CLEANING OR POWER CLEANING. ALL WELD SPATTER AND FLUX SHALL BE REMOVED BY CHIPPING OR GRINDING. SHARP EDGES SHALL BE GROUND SMOOTH. CLEAN TO SSPC-SP 1
3. CONTRACTOR SHALL SHOT BLAST EXISTING STRUCTURE TO REMOVE ALL SURFACE CORROSION PRODUCTS TO PROVIDE A MINIMUM SURFACE CLEANING TO COATING SYSTEM MANUFACTURER REQUIREMENTS
4. FOR ELECTRICAL EQUIPMENT SUPPORTS, CLEAN NEW STEEL TO SSPC-SP 10 AND ASSEMBLE AND BOLT SNUG TIGHT OR SLIP CRITICAL AS REQUIRED, IN FINAL ASSEMBLED CONFIGURATION PRIOR TO COATING. DO NOT DISASSEMBLE
5. SURFACE PROFILE FOR BASE METAL SHALL BE AS RECOMMENDED BY MANUFACTURER BUT SHALL BE GREATER THAN 3.0 MILS (75 MICRONS)

COATING SYSTEMS (GENERAL)

1. DEPTH OF BLAST PROFILE CREATED BY CLEANING METHOD SHALL BE LESS THAN COATING THICKNESS
2. COATING THICKNESS SHALL ACCOMMODATE 'ROGUE' PEAKS CREATED IN BLAST PROFILE
3. STEEL TO BE COATED SHALL BE FREE OF ALL DELETERIOUS MATERIAL
4. FILE OR GRIND EXPOSED WELDS SMOOTH AND FLUSH PRIOR TO COATING
5. THE FOLLOWING COATING SYSTEMS SHALL BE USED (GENERIC):
   SYSTEM 05: HOT DIPPED GALVANISING
   BASE METAL -STEEL
   CLEANING -TO SSPC-SP 1 AND SSPC-SP 10
   HDG -TO ASTM SPEC A123, THICKNESS TO Z275
6. COATING SYSTEM USED:
   PROVIDE THE STIPULATED COATING SYSTEM TO THE FOLLOWING ELEMENTS U/N:
   ALL STRUCTURAL STEEL (EXTERIOR): SYSTEM 05

HOT DIPPED GALVANISING

1. WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH THE FOLLOWING STANDARDS/SPECIFICATIONS:
   -HDG ASTM SPECS A123, A143, A153, A384, 385, A767, A780 AS REQD
   -BLAST CLEANING TO SSPC-SP 10, OR AS REQD
2. HDG EXPOSED TO THE ELEMENTS SHALL BE PASSIVATED USING A NON-CHROMATE PROCESS
3. PROVIDE VENT HOLES AND DRAIN HOLES AS REQUIRED
4. REPAIR DAMAGED HDG TO ASTM SPEC A780. PROVIDE TWO COATS GALVICON ZINC RICH PRIMER OR APPD EQ EXTENDING 12mm MIN BEYOND DAMAGED AREA
5. MINIMISE WARPING AND DISTORTION

SHEET VAPOUR BARRIERS/RETARDERS

1. DAMPPROOF ENVELOPE SHALL BE CREATED WITH 0.25mm PEVB TO CAN/CGSB-51.33 IN LOCATIONS NOT EXPOSED TO POTENTIAL SUNLIGHT AND CAN2/CGSB-51.34 IN LOCATIONS WITH POTENTIAL EXPOSURE TO SUNLIGHT
2. SEALANT AND TAPE TO BE COMPATIBLE WITH VAPOUR RETARDER MATL AND SHALL BE AS RECOmmENDED BY VAPOUR RETARDER MANUFACTURER
3. SEAL ALL LAPPED JOINTS AND EDGES WITH CONT SEALANT BEAD ENSURING NO GAPS AND TAPE FREE EDGE. EDGE TO BE SMOOTH WITH NO RIPPLES. LAP ALL JOINTS 300mm MIN U/N. INSPECT SHEETS FOR CONTINUITY. REPAIR PUNCTURES AND TEARS WITH SEALING TAPE BEFORE WORK IS CONCEALED

RIGID INSULATION

1. ALL RIGID INSULATION BELOW GRADE SHALL BE EXTRUDED POLYSTYRENE CONFORMING TO CAN/CGSB 51.20-M87 TYPE 4 U/N
2. ADHESIVES SHALL CONFORM TO CGSB 71-GP-24M TYPE A

CHAINLINK FENCING

1. DETAILS SHOWN ARE ILLUSTRATIVE. CHAINLINK FENCE SUPPLIER TO PROVIDE DETAILS OF FIXTURES AND ACCESSORIES TO THE CA FOR REVIEW
2. FABRIC TO CONFORM TO CAN/CGSB 138.1. FENCE FABRIC TO CONFORM TO ASTM SPEC A392. WIRE SHALL BE TYPE 1, CLASS A, GRADE 2
3. FENCE FRAMEWORK TO CONFORM TO CAN/CGSB 138.2. PIPE TO BE CONTINUOUS WELD, SCHEDULE 40 CONFORMING TO CAN/CGSB 138.2 AND ASTM SPEC A53 GRADE B
4. GATES TO CONFORM TO CAN/CGSB 138.4
5. PROVIDE GATES AS SHOWN ON THE DRAWINGS. GATES SHALL BE LOCKABLE
6. ALL FENCING MATERIAL TO BE HDG U/N. COATING SHALL CONFORM TO Z275 MIN U/N
7. VINYL CLAD FENCING SHALL NOT BE USED FOR ELECTRICALLY GROUNDED APPLICATIONS
8. FIXTURES AND ACCESSORIES TO BE DROPPED FORGED STEEL AND SHALL BE DESIGNED TO FIT OR FASTEN WITHOUT BENDING OR DISTORTION. FITTINGS SHALL BE FREE FROM DEFECTS AND SHALL BE OF ADEQUATE STRENGTH
9. WIRE MESH FABRIC: 50mm MESH, ø3.66mm (ELECTRICAL CODE) MIN. PROVIDE BARBED/TWISTED TOP SELVAGE AND KNUCKLED BOT SELVAGE
10. U/N. LOCATE FABRIC 40mm MIN AND 50mm MAX FROM GRADE
11. SEE SCHEDULE FOR END, CORNER, GATE, RESTRAINING (PULL), AND LINE (INTERMEDIATE) POSTS
12. TOP RAIL: 32mm OD MIN (ELECTRICAL CODE) U/N
13. BOT TENSION WIRE: ø3.66mm SINGLE STRAND U/N
14. HOR AND VERT BRACING FOR FENCE: 40mm OD MIN U/N

REFERENCE DRAWINGS	DESCRIPTION
1-0102-DDTL-A007-004	AREA CODE INDEMTIFICATION
1-0102-DDTL-A007-002	ABBREVIATIONS AND SYMBOLS
1-0102-DDTL-A007-001	ABBREVIATIONS
1-0102-DDTL-A005-030	COVER SHEET
1-0102-SGAD-Y001	GENERAL NOTES (SHEET 3 OF 3)
1-0102-SGAD-Y001	GENERAL NOTES (SHEET 2 OF 3)
1-0102-SGAD-Y001	GENERAL NOTES (SHEET 1 OF 3)

APEGM Certificate of Authorization
SNC-Lavalin Inc.
No. 4489

NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR CONSTRUCTION - 976-2016	2017/04/05	RC	RC

CH2MHILL. SNC·LAVALIN KGS GROUP

DESIGNED BY: R. COATES	CHECKED BY: R. COATES
DRAWN BY: L. GAO	APPROVED BY: E. RYCZKOWSKI
SCALE: N.T.S.	ISSUED FOR CONSTRUCTION BY: J. SHUMKA
DATE: 2016/01/20	DATE: 2017/04/05
CONSULTANT NO.: 474248	

ENGINEER'S SEAL
PROVINCE OF MANITOBA R. A. COATES Member 31768 REGISTERED PROFESSIONAL ENGINEER

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE
SEWPCC UPGRADING/EXPANSION PROJECT
STRUCTURAL
66 kV SUBSTATION
GENERAL NOTES (SHEET 3 OR 3)

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0102-SGAD-Y001	003	00	A1

LAST SAVE: 2017/03/31 - 2:26pm
PATH: C:\pw_workdir\ch2mhill_wbg\we006717\d0356742\1-0102-SGAD-Y001-003.dwg

PLOT DATE: Mar 31, 2017 - 2:26pm

FILE NAME:1-0102-SGAD-Y001-003.dwg