

GENERAL NOTES:

- 1. NOTES TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. VERIFY ALL DIMENSIONS, ELEVATIONS AND SCOPE OF WORK PRIOR TO CONSTRUCTION.

DESIGN LOADS:

Table with 2 columns: IMPORTANCE CATEGORY, LIVE LOADS, ROOF LOADS, WIND DESIGN PRESSURE, WIND EXPOSURE FACTOR, FOUNDATION SOIL LOADS, AT REST LATERAL PRESSURE COEFFICIENT, LATERAL PRESSURE ON WALL. Includes values like POST-DISASTER, 10.0 kPa, 5.0 kPa, etc.

UNIT MASONRY:

- 1. MASONRY UNITS SHALL BE MANUFACTURED IN ACCORDANCE WITH CAN/CSA A165 (LATEST).
2. ALL CONCRETE MASONRY TO BE AS NOTED AND DETAILED.
3. MORTAR SHALL BE TYPE 'S' AND MANUFACTURED TO CAN/CSA A179-(LATEST).

CONCRETE:

- 1. CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CSA A23.1 (LATEST).
2. ADMIXTURES SHALL NOT BE USED UNLESS SPECIFIED HEREIN OR APPROVED BY THE DESIGN ENGINEER.

- 9. LOCATE AND FABRICATE ALL CONSTRUCTION JOINTS, CONTROL JOINTS AND EXPANSION JOINTS AS DETAILED ON THE DRAWINGS.
10. WATERSTOP TO BE 100mm PVC TYPE 2 BY DURAJOINT (NO MOVEMENT), OR APPROVED EQUAL.
11. ALL EXPOSED CORNERS TO HAVE 25mm CHAMFER FILLET UNLESS NOTED.

CONCRETE MIX DESIGNS:

CONCRETE MIX DESIGN SHALL BE PROPORTIONED TO MEET THE FOLLOWING PERFORMANCE REQUIREMENTS:

FOUNDATION SLAB, WALLS & STRUCTURAL SLAB:

Table with 2 columns: EXPOSURE CLASS, MIN. 56 DAY COMP. STRENGTH, CEMENT TYPE, MAX. W/C RATIO, MAX. AGGREGATE SIZE, ENTRAINED AIR CONTENT.

EXTERIOR SLABS (NON-STRUCTURAL):

Table with 2 columns: EXPOSURE CLASS, MIN. 28 DAY COMP. STRENGTH, MAX. W/C RATIO, MAX. AGGREGATE SIZE, ENTRAINED AIR CONTENT.

LEAN MIX CONCRETE:

Table with 2 columns: EXPOSURE CLASS, MIN. 28 DAYS COMPRESSIVE STRENGTH, MAX. AGGREGATE SIZE, AIR CONTENT.

STRUCTURAL AND MISCELLANEOUS STEEL:

- 1. STRUCTURAL AND MISCELLANEOUS STEEL FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH CAN/CSA S16 (LATEST).
2. STRUCTURAL STEEL SHALL MEET THE REQUIREMENTS OF CAN/CSA G40.20/G40.21 (LATEST).
3. WELDING SHALL BE IN ACCORDANCE WITH CSA W59 (LATEST).

6. STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE FINISHED AS INDICATED BELOW, UNLESS OTHERWISE NOTED, OR APPROVED EQUAL:

INTERIOR STEEL (INDUSTRIAL)

- SURFACE PREP. TO SP6 (COMMERCIAL BLAST)
- ONE PRIME COAT INTERZINC 52 ZINC-RICH EPOXY (2.5 MIL DFT.)
- ONE FINISH COAT INTERGARD 345 HIGH BUILD EPOXY (6.0 MIL DFT.)

GALVANIZED STEEL

- SURFACE PREP. TO SP8 (PICKLING)
- HOT DIPPED GALVANIZED TO CAN/CSA G164

7. FIELD TOUCH-UP WITH GALVANIZING SOLDER TO MATCH GALVANIZED STEEL. ACCEPTABLE PRODUCT: GAL-VIZ OR APPROVED EQUAL.

8. PAINTED SURFACES OF EXISTING STEEL SHALL BE GROUND SMOOTH TO BARE METAL PRIOR TO FIELD WELDING.

STEEL STUD FRAMING (NON-LOADBEARING):

GENERAL

- 1. INSTALL ALL FRAMING PLUMB, LEVEL, AND SQUARE.

INTERIOR WALL FRAMING

2. INTERIOR WALL STEEL STUDS, TRACK, FURRING BARS, ETC. TO BE 0.455mm (25 GA.) SECTIONS ROLL FORMED FROM ZINC COATED SHEET STEEL TO ASTM C645. SEE DRAWINGS FOR SECTION SIZES AND SPACING.

3. PROVIDE LONG-LEGGED DOUBLE TOP TRACKS AT TOP OF ALL FULL HEIGHT WALL FRAMING TO ALLOW 6mm DEFLECTION. FOR FIRE-RATED PARTITIONS INSTALL TOP OF STUDS AN ADDITIONAL 6mm SHORT WITHIN LOWER TRACK OF THE DOUBLE TRACK ASSEMBLY (TO ALLOW FOR 13mm TOTAL EXPANSION).

ALUMINUM:

1. ALUMINUM SHALL BE IN ACCORDANCE WITH CAN/CSA S157 AND THE ALUMINUM ASSOCIATION "SPECIFICATION FOR ALUMINUM STRUCTURES". ALUMINUM FOR PLATES AND EXTRUDED SHAPES SHALL BE TYPE 6061-T651.

2. ALUMINUM WELDING SHALL BE AN ACCORDANCE WITH CSA W59.2-(LATEST) BY WELDERS CERTIFIED AND QUALIFIED IN ACCORDANCE WITH CSA W47.2-(LATEST). ALL WELDS TO BE 6mm UNLESS OTHERWISE NOTED.

3. INSTALL NYLITE ELECTROCHEMICAL ISOLATION GASKETS TO ELECTRICALLY ISOLATE DISSIMILAR METALS (SUPPLIER: SPAENAU).

4. ALL ALUMINUM IN CONTACT WITH CONCRETE OR CAST INTO CONCRETE TO HAVE BITUMINOUS ISOLATION COATING.

5. FASTENERS TO BE TYPE 316 STAINLESS STEEL. SIZE AS SHOWN ON THESE DRAWINGS.

WOOD ROOF TRUSSES:

1. WOOD TRUSSES SHALL BE DESIGNED BY OTHERS FOR LOADS SHOWN ON DRAWINGS. THE SIZE, WEIGHT AND LOCATION OF ALL MECHANICAL EQUIPMENT SHALL BE CO-ORDINATED WITH THE MECHANICAL CONTRACTOR.

2. SHOP DRAWINGS INDICATING SIZES, LENGTHS, SLOPES, SPACING, CAMBER, LOADING CRITERIA, CONNECTIONS, ETC. SHALL BE SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

3. MANUFACTURE ALL TRUSSES WITH CAMBER TO OFFSET DEAD LOAD DEFLECTION.

4. DEFLECTION DUE TO LIVE LOADS SHALL NOT EXCEED SPAN/360.

5. REDUCE TRUSS SPACING TO 400mm MAXIMUM AS REQUIRED AT BUILT-UP SNOW LOAD AREAS TO PREVENT OVERSTRESSING OF ROOF SHEATHING.

6. ALL FLUSH FRAMED TRUSSES SHALL BE SUPPORTED WITH METAL HANGERS. ALL HANGERS AND TRUSS TO TRUSS CONNECTIONS TO BE DESIGNED BY TRUSS MANUFACTURER.

LEGEND:

Legend table with 2 columns: Material Name, Pattern. Includes CONC., LEAN MIX CONCRETE, STEEL, CONC. BLOCK, ALUMINUM HATCH, BATT INSULATION, RIGID INSULATION, UNDISTURBED SOIL, CLAY, GRANULAR BACKFILL.

REINFORCING STEEL:

1. REINFORCING STEEL TO BE NEW DEFORMED BILLET STEEL BARS CONFORMING TO CSA G30.18-(LATEST). GRADE TO BE 400 MPa.

2. REINFORCING STEEL SHALL BE CLEAN, FREE OF RUST, DIRT, LOOSE SCALE, OIL, GREASE OR ANY OTHER MATERIAL WHICH WOULD REDUCE BOND WITH THE CONCRETE.

3. WELDED STEEL WIRE FABRIC SHALL CONFORM TO A185 OR A497 (LATEST). 400 MPa MINIMUM GRADE IN FLAT SHEETS ONLY UNLESS APPROVED OTHERWISE.

4. SUBMIT SHOP DRAWINGS WHICH CLEARLY INDICATE BAR SIZES, SPACINGS, LOCATIONS & QUANTITIES OF REINFORCING STEEL, BENDING & CUTTING SCHEDULES, SUPPORTING & SPACING DEVICES, ETC. FOR REVIEW PRIOR TO FABRICATION.

5. LAP BEAM AND STRUCTURAL SLAB TOP REINFORCING AT CENTER SPAN, AND BOTTOM STEEL AT SUPPORTS.

6. BEND ALL HORIZONTAL REINFORCING 305mm AROUND CORNERS OR PROVIDE ADDITIONAL 610mm X 610mm ANGLE BARS.

7. PROVIDE AT EACH FACE, 2-15M EXTRA BARS ALONG ALL SIDES, AND 2-15M DIAGONAL BARS AT ALL RE-ENTRANT CORNERS OF OPENINGS UNLESS NOTED. PROJECT ALL BARS 610mm PAST CORNERS.

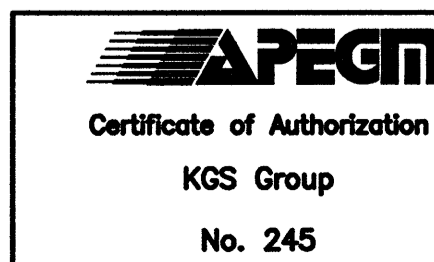
8. TIE, SUPPORT AND SPACE ALL REINFORCING STEEL WITH PROPER APPROVED DEVICES DESIGNED FOR USE IN REINFORCED CONCRETE, TO PREVENT DISPLACEMENT OF REINFORCING AND ENSURE SPECIFIED CONCRETE COVER.

9. PROVIDE MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS:

Table with 2 columns: Location, Cover. Includes FOUNDATION WALLS (EXTERIOR FACE) 60mm, FOUNDATION WALLS (INTERIOR FACE) 40mm, FOUNDATION WALLS (BOTTOM) 60mm, FOUNDATION FLOOR (TOP & BOTTOM) 60mm, SLAB-ON-GRADE (EXTERIOR TOP) 50mm, STRUCTURAL SLAB (TOP) 40mm, STRUCTURAL SLAB (BOTTOM) 50mm.

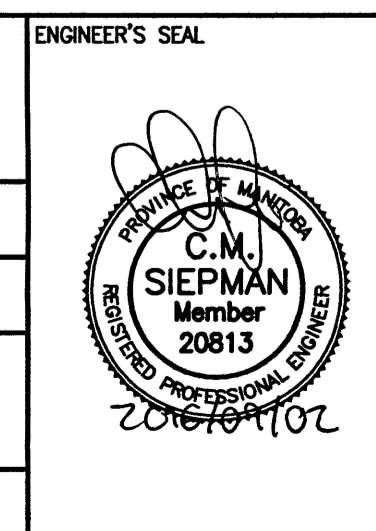
METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES



Revision table with columns: NO., REVISIONS, DATE, DESIGN, CHECK. Includes entry 00 ISSUED FOR CONSTRUCTION 2016/09/02 VPD CMS.

Project information table with fields: DESIGNED BY (K. R. DYCK), CHECKED BY (CMS), DRAWN BY (F. B. VALENCIA), APPROVED BY, SCALE (AS NOTED), ISSUED FOR CONSTRUCTION BY, DATE (2016/03/17), DATE, CONSULTANT NO. (15-0107-019_S01).



City of Winnipeg logo and project title: WEST END SEWAGE TREATMENT PLANT EFFLUENT MONITORING STATION LEGEND & GENERAL NOTES STRUCTURAL. Includes drawing number 1-0103-SAA-Z001 and sheet 00 of A1.