

**GENERAL NOTES:**

1. ALL WORK SHALL CONFORM TO THE 2010 NATIONAL BUILDING CODE AND THE MOST CURRENT VERSION OF THE APPLICABLE DESIGN STANDARDS.
2. ALL WORK TO BE PERFORMED IN ACCORDANCE WITH APPLICABLE LEGISLATION AND REGULATIONS INCLUDING, BUT NOT LIMITED TO, OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS.
3. VERIFY ALL DIMENSIONS AND ELEVATIONS AND REPORT ANY DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING WITH CONSTRUCTION.
4. COORDINATE WITH ALL OTHER DISCIPLINES THE LOCATIONS OF ALL PENETRATIONS PASSING THROUGH WALLS AND/OR SLABS.

**DESIGN DATA:**

CLIMATIC DATA: ARGENTIA, NEWFOUNDLAND AND LABRADOR.  
 LOADING CRITERIA: NORMAL IMPORTANCE CATEGORY  
 SNOW:  $S_s = 2.4 \text{ kPa}$ ;  $S_r = 0.7 \text{ kPa}$   
 $I_s = 1.0 \text{ (ULS)}$ ;  $0.9 \text{ (SLS)}$   
 WIND:  $Q_{90} = 0.75 \text{ kPa}$ ;  $Q_{10} = 0.58 \text{ kPa}$   
 $I_w = 1.0 \text{ (ULS)}$ ;  $0.75 \text{ (SLS)}$   
 SEISMIC: SITE CLASS 'D'  
 $S_a(0.2) = 1.7$   
 $S_a(0.5) = 0.12$   
 $S_a(1.0) = 0.074$   
 $S_a(2.0) = 0.024$   
 $P_GA = 0.06$   
 $I_e = 1.0$

**FOUNDATION NOTES:**

1. ALL FOUNDATIONS SHALL BEAR ON WELL GRADED GRANULAR MATERIAL OR UNDISTURBED NATIVE ROCK HAVING A MINIMUM ALLOWABLE BEARING CAPACITY OF 100 kPa.
2. ALL EXCAVATIONS SHALL BE COMPLETELY DEWATERED DURING CONSTRUCTION. KEEP EXCAVATION DEWATERED TO, AT LEAST, 300 mm BELOW LOWEST ELEVATION OF EXCAVATION.
3. CONTINUOUSLY PROTECT THE BOTTOM OF THE EXCAVATION AND ALL FOUNDATIONS ON THE GROUND FROM DAMAGE DUE TO FROST AND GROUNDWATER PRESSURE.
4. ALL SUBGRADE TO BE INSPECTED BY A GEOTECHNICAL CONSULTANT PRIOR TO PLACING CONCRETE.
5. BACKFILL AGAINST THE FOUNDATION WALL IN SUCH A MANNER THAT THE LEVEL OF BACKFILLING ON ONE SIDE OF THE WALL IS NEVER MORE THAN 450mm DIFFERENT FROM THE LEVEL ON THE OTHER SIDE OF THE WALL
6. COORDINATE WITH MECHANICAL AND ELECTRICAL FOR PENETRATIONS THROUGH ANY FOUNDATION WALLS.

**CONCRETE NOTES:**

1. PERFORM CONCRETE WORK IN ACCORDANCE WITH CSA A23.1 AND TESTING TO CSA 23.2.
2. MINIMUM CONCRETE COMPRESSIVE STRENGTH TO BE 30 MPa AT 28 DAYS.
3. AIR ENTRAIN ALL CONCRETE EXPOSED TO WEATHER 5% TO 8% AIR BY VOLUME.
4. CONCRETE FORMWORK AND FALSEWORK MATERIALS SHALL CONFORM TO CSA A23.1 AND CSA S269.1
5. REINFORCING STEEL SHALL CONFORM TO CAN/CSA G30.18 GRADE 400. PERFORM REINFORCING WORK IN ACCORDANCE WITH CSA A23.1.
6. THE CLEAR DISTANCE BETWEEN REINFORCING STEEL AND SURFACE OF CONCRETE SHALL BE AS FOLLOWS:  
 CONCRETE CAST AGAINST EARTH 75mm  
 CONCRETE SLABS 25mm  
 ELEVATOR SHAFT ABOVE SLAB ON GRADE = 20mm  
 ELSEWHERE 50mm
7. ALL REINFORCING BARS SHALL BE SUPPORTED IN THE FORMS AND SPACED WITH STANDARD ACCESSORIES.
8. REINFORCING IS TO BE GENERALLY DETAILED IN ACCORDANCE WITH R.S.I.C. MANUAL OF STANDARD PRACTICE (LATEST EDITION).
9. NO CUTTING OR DRILLING IN HARDENED CONCRETE IS PERMITTED WITHOUT WRITTEN AUTHORIZATION FROM THE DEPARTMENTAL REPRESENTATIVE.
10. GROUT UNDERSIDE OF BASE PLATES OF STEEL COLUMNS WITH NON-SHRINK GROUT TO MANUFACTURERS INSTRUCTIONS. GROUTING SHALL BE COMPLETED PRIOR TO LIVE LOADING OF THE STRUCTURE.
11. FOR THICKNESS OF SLABS ON GRADE, SEE SLAB ON GRADE PLANS.
12. ALL REINFORCING STEEL IN PLACE TO BE INSPECTED BY DEPARTMENTAL REPRESENTATIVE BEFORE PLACING CONCRETE.
13. ISOLATION JOINT MATERIAL SHALL BE MIN 12mm THICK ASPHALT IMPREGNATED FIBREBOARD, TO ASTM D1751.
14. PROVIDE A MINIMUM 1500 EARTH COVER U/N TO THE UNDERSIDE OF EXTERIOR CONCRETE WALLS AND FOOTINGS FOR FROST PROTECTION. PROTECT SOIL FROM FREEZING TO AND BELOW FOOTINGS.
15. DO NOT EXCEED A RISE OF 7 IN A RUN OF 10 IN THE LINE OF SLOPE BETWEEN ADJACENT FOOTING EXCAVATIONS OR ALONG STEPPED FOOTINGS. FOR STEPPED FOOTINGS, USE STEPS NOT EXCEEDING 600 IN HEIGHT.
16. CONSTRUCT CONCRETE WALLS WITHOUT HORIZONTAL CONSTRUCTION JOINTS EXCEPT AS INDICATED ON THE DRAWINGS.
17. ALL EXPOSED EDGES TO BE CHAMFERED 25mm.
18. PLACE ALL CONCRETE IN THE DRY.
19. PROVIDE 2-15M EACH FACE AROUND ALL OPENINGS IN CONCRETE PROJECTING 600mm PAST THE END OF THE OPENING U.N.O.
20. USE CLASS 'B' LAPS FOR REINFORCING BARS IN ACCORDANCE WITH CSA A23.3 U.N.O.

**STRUCTURAL STEEL NOTES:**

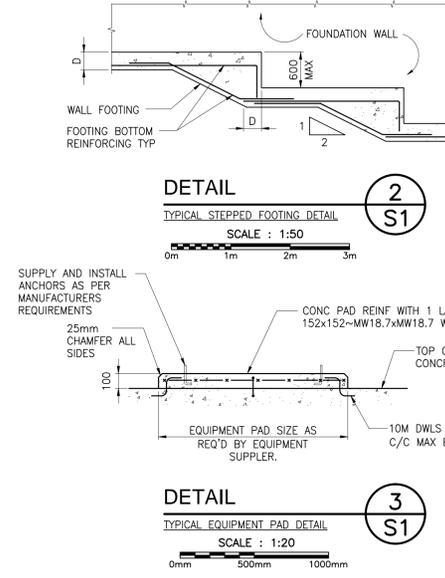
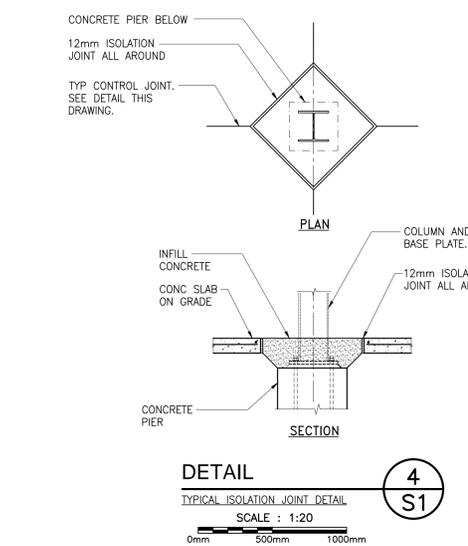
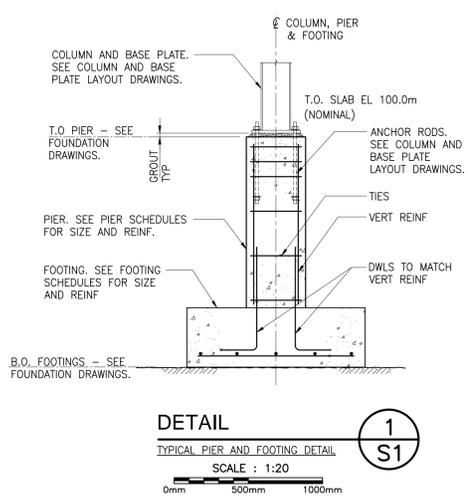
1. STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA G40.20/G40.21 GRADE 350W FOR W SECTIONS AND CHANNELS. GRADE 300W FOR ANGLES AND PLATES. HSS TO ASTM A500 GRADE C (345 MPa) IS ACCEPTABLE FOR THIS WORK. ALL STEEL SHALL BE SHOP PRIMED AND PAINTED WITH FIELD TOUCH-UP AS REQUIRED. NEW MATERIAL ONLY SHALL BE USED.
2. STRUCTURAL BOLTS TO ASTM F3125, GRADE A325. ANCHOR RODS TO F1554, GRADE 36.
3. FABRICATION & ERECTION TO CONFORM TO CAN/CSA-S16 (LATEST EDITION).
4. THE FABRICATOR IS RESPONSIBLE FOR THE DESIGN OF ALL STEEL CONNECTIONS UNLESS NOTED OTHERWISE. SUBMIT PROPOSED CONNECTIONS ON SHOP DRAWINGS
5. PROVIDE TEMPORARY BRACING AS REQUIRED DURING CONSTRUCTION UNTIL ALL STRUCTURAL MEMBERS ARE IN PLACE, CONNECTED AND TIGHTENED.
6. CARRY OUT ALL WELDING IN ACCORDANCE WITH CSA STANDARD W59. THE FABRICATOR SHALL BE FULLY APPROVED BY THE CANADIAN WELDING BUREAU IN CONFORMANCE WITH THE CSA STANDARD W47.1. ELECTRODES TO BE E49XX U.N.O.
7. CAMBER BEAMS PARALLEL TO JOISTS TO ENSURE CONTINUOUS STEEL DECK BEARING AS REQUIRED.

**STEEL DECK NOTES:**

1. FOR OPENINGS SMALLER THAN 300mm, DECK SUPPLIER TO PROVIDE DECK SUPPORTS. AT LARGER OPENINGS, PROVIDE L76x76x6.4 SPANNING TO STRUCTURAL SUPPORTS U.N.O.
2. STEEL DECK SHALL BE INSTALLED IN ACCORDANCE WITH CSSBI 12M AND CSA S136.
3. PROTECT STEEL DECK FROM DAMAGE DURING SHIPPING, STORAGE AND ERECTION IN ACCORDANCE WITH CSSBI STANDARDS.
4. STEEL DECK WORK SHALL INCLUDE THE SUPPLY AND INSTALLATION OF ALL SHEET STEEL ANGLES, COVER PLATES, CLOSURES, STIFFENERS AND ANY OTHER ACCESSORIES REQUIRED.
5. FASTEN DECK TO STRUCTURAL STEEL WITH HILTI X-HSN24 36/4 PATTERN, OR APPROVED ALTERNATIVE. FASTEN SIDE LAPS WITH #10 SCREWS AT 600mm C/C.

**OPEN WEB STEEL JOIST NOTES:**

1. ALL OWSJ SHOES 100mm DEEP U.N.O.
2. CAMBER OWSJ IN ACCORDANCE WITH CLAUSE 16 OF CAN/CSA S16. CAMBER ALL OWSJ FOR 1/2 THE DEAD LOAD. MINIMUM CAMBER 0.002 SPAN.
3. MAXIMUM LIVE LOAD DEFLECTION - ROOFS = L/300, FLOORS = L/360.
4. BRIDGING DESIGN BY SUPPLIER TO SUIT JOIST DESIGN REQUIREMENTS.
5. DEPTH AND SPACING OF OWSJ AS SHOWN ON DRAWINGS.
6. DESIGN JOISTS FOR SUPERIMPOSED DEAD AND LIVE LOADS AND NET FACTORED UPLIFT AS SHOWN ON THE DRAWING, PLUS A CONCURRENT LIVE LOAD OF 1.0 KN LOCATED AT ALL BOTTOM CHORD PANEL POINTS TO ALLOW FOR SUSPENDED MECHANICAL LOADS.
7. 'T.J.' DENOTES THE JOIST. EXTEND BOTTOM CHORD MEMBER TO BUILDING COLUMN.



PROVINCE OF NEWFOUNDLAND AND LABRADOR  
 PERMIT HOLDER  
 This Permit Allows  
 RYAN W. JACOBS JUN 28, 2017  
 Amec Foster Wheeler Americas Limited  
 To practice Professional Engineering  
 in Newfoundland and Labrador.  
 Permit No. as issued by PEG 00018  
 which is valid for the year 2017



C	ISSUED FOR TENDER	JUN 28 2017
B	ISSUED FOR 99% REVIEW	MAY 25 2017
A	ISSUED FOR CLIENT REVIEW	APR 24 2017
revisions		date

project project

**MCTS CENTRE AND C&P BUILDING**  
**PLACENTIA**

drawing dessin  
**NOTES AND TYPICAL DETAILS**

designed *RJ* congru  
 date JUN.28.2017  
 drawn *ej* dessin  
 date JUN.28.2017  
 approved *JB* approuvé  
 date JUN.28.2017  
 Tender *Gary Macgillivray June 30/17* Soumission  
 PWSGC Project Manager / Administrateur de projets TPSGC  
 project number no. du projet  
**R.081781.004**  
 drawing no. no. du dessin  
**S1**

LEGEND:  
 SECTION REFERENCE  
 REFERENCE BUBBLE:  
 A - PLAN, SECTION, ELEVATION, OR DETAIL NUMBER  
 B - NUMBER OF THE DRAWING WHERE THE ABOVE IS DRAWN