



555 Oak Street East
North Bay, Ontario
P1B 8L3

555, rue Oak Est
North Bay (Ontario)
P1B 8L3

Tel: 1-800-363-7512
www.ontarionorthland.ca

December 12, 2025

Addendum No. 01

File Reference Number: RFP 2025 112

Title: Englehart Station Backup Generator Project

RE: Clarifications/Questions

QUESTIONS/CLARIFICATIONS:

Item 1: Would ONTC please provide a panel schedule for Distribution Panel DP-200?

Answer: ONTC advises that this panel will be blank, with a 400-amp breaker, 42 cct, as described below. Follow specification section 26 24 17 for all panelboards. This will be used for potential non-generator loads, including EV chargers, etc.

Item 2: Would ONTC please advise if the emergency generator concrete pad is under this project? If so, please provide a copy of the structural drawings.

Answer: Yes, ONTC advises that the emergency generator concrete pad is under this project. Please see attached structural drawings.

This Addendum hereby forms part of the RFP.

Regards,

Nicole Laplante
Procurement Contracts Specialist
nicole.laplante@ontarionorthland.ca

STRUCTURAL WORK SPECIFICATION

1. GENERAL

- 1.1. COMPLY WITH THE REQUIREMENTS OF THE ONTARIO BUILDING CODE AND THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
- 1.1.1. A BUILDING PERMIT IS REQUIRED FOR ALL STRUCTURAL WORKS UNLESS OTHERWISE NOTED BY THE CHIEF BUILDING OFFICIAL OR AUTHORITY HAVING JURISDICTION.
- 1.2. PROVIDE ALL MATERIAL AND LABOUR REQUIRED FOR THE COMPLETION OF THE WORK. BREAKDOWN OF WORK BY TRADE IS FOR GUIDANCE ONLY AND IS NOT NECESSARILY COMPLETE.
- 1.3. REVIEW STRUCTURAL DRAWINGS IN CONJUNCTION WITH THE CONTRACT DOCUMENTS PREPARED BY ALL CONSULTANTS PRIOR TO CONSTRUCTION. REPORT DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.
- 1.4. DO NOT SCALE THESE DRAWINGS.
- 1.5. THE STRUCTURAL DRAWINGS SHOW BEARING ELEMENTS BELOW WITH DASHED LINES. CONTINUOUS LINES DENOTE STRUCTURAL ELEMENTS ABOVE.
- 1.6. COORDINATE ALL OPENINGS, SLEEVES AND EMBEDDED ITEMS IN STRUCTURE WITH THE CONTRACT DOCUMENTS PREPARED BY ALL CONSULTANTS. REPORT ANY CONFLICTS BEFORE PROCEEDING WITH THE WORK.
- 1.7. DO NOT CUT OR DRILL ANY OPENINGS IN STRUCTURAL MEMBERS WITHOUT WRITTEN PERMISSION FROM THE STRUCTURAL CONSULTANT UNLESS SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS.
- 1.8. TYPICAL DETAILS SHOW STRUCTURAL INTENT RATHER THAN ACTUAL CONDITIONS FOR THIS PROJECT.
- 1.9. DRAWING UNITS (UNLESS OTHERWISE NOTED):
- | | | | |
|--------------------|------|----------------------|------|
| LENGTH ----- | mm | MASS ----- | kg |
| PRESSURE ----- | kPa | FORCE ----- | kN |
| LINEAR FORCE ----- | kN/m | MOMENT / TORSION --- | kN.m |

2. SUBMITTALS

- 2.1. SUBMIT FOR REVIEW BEFORE THE START OF THE WORK SUBMIT SHOP DRAWINGS IN UNLOCKED, PDF DOCUMENT FORMAT FOR:
- 2.1.1. CONCRETE MIX DESIGNS
- 2.1.2. CONCRETE REINFORCING STEEL
- 2.2. SUBMIT SHOP DRAWINGS IN GENERAL CONFORMANCE WITH THE SEQUENCE OF CONSTRUCTION.
- 2.3. SHOP DRAWINGS ARE TO BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE CONSULTANT. SHOP DRAWINGS THAT DO NOT BEAR THE REVIEW STAMP OF THE CONTRACTOR WILL BE MARKED 'RESUBMIT' AND RETURNED WITHOUT BEING REVIEWED.
- 2.4. REVIEW OF SHOP DRAWINGS IS PERFORMED ON A RATIONAL SAMPLING BASIS FOR GENERAL CONFORMANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS PREPARED BY THE STRUCTURAL CONSULTANT. OUR REVIEW DOES NOT INCLUDE DETAILED CHECKING OF DIMENSIONS OR EXTENSIVE CHECKING OF CALCULATIONS FOR ELEMENTS ENGINEERED BY OTHERS AND DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLETE THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 2.5. REVIEW OF SHOP DRAWINGS DOES NOT IMPLY ANY CHANGE IN ANY OTHER CONSULTANTS' OR PROFESSIONALS' RESPONSIBILITIES RELATED TO DESIGN OF SPECIFIC ITEMS AS OUTLINED BY THE SPECIFICATIONS.
- 2.6. REVIEW OF A SPECIFIC COMPONENT ON NON-STRUCTURAL SHOP DRAWINGS (COMPONENTS ENGINEERED BY OTHERS) DOES NOT INCLUDE REVIEW OF THE ASSEMBLY OF WHICH THE ITEM MAY BE A COMPONENT.
- 2.7. ALLOW A MINIMUM OF 10 WORKING DAYS FOR REVIEW OF EACH SUBMISSION OF SHOP DRAWINGS. ALLOW MORE TIME WHEN LARGE QUANTITIES OF SHOP DRAWINGS ARE SUBMITTED.
- 2.8. MAKE CORRECTIONS REQUIRED BY PREVIOUS REVIEW BEFORE RESUBMITTING DRAWINGS. CLEARLY INDICATE ALL CHANGES AND ADDITIONS TO PREVIOUS SUBMISSION. DO NOT ADD NEW DETAILS TO DRAWINGS THAT HAVE BEEN STAMPED AS REVIEWED OR NOTED.
- 2.9. DO NOT COMMENCE FABRICATION UNTIL RETURNED SHOP DRAWINGS HAVE BEEN EXAMINED.
- 2.10. PROVIDE FINAL RECORD DRAWINGS AFTER ALL CORRECTIONS ARE MADE.
- 2.11. THE CONTRACTOR IS TO DEVELOP AND MAINTAIN A DETAILED QUALITY CONTROL PLAN ASSOCIATED WITH THE STRUCTURAL WORK. PROVIDE A COPY OF THE QUALITY CONTROL PLAN TO THE CONSULTANT WHEN REQUESTED. THE QUALITY CONTROL PLAN SHALL INCLUDE, BUT IS NOT LIMITED TO:
- 2.11.1. PROCEDURES FOR COLD AND HOT WEATHER CONSTRUCTION.
- 2.11.2. COMPLIANCE WITH THE CONTRACT DOCUMENTS.
- 2.11.3. COMPLIANCE OF SUB-TRADE QUALIFICATIONS.
- 2.11.4. PROCEDURES FOR THIRD-PARTY / INDEPENDENT INSPECTION AND TESTING.

3. TEMPORARY WORKS

- 3.1. STRUCTURAL DRAWINGS SHOW THE INTENT OF THE COMPLETED STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE SCOPE, DESIGN AND ERECTION OF ALL TEMPORARY WORKS THAT ARE NECESSARY TO COMPLETE THE WORK. TEMPORARY WORKS MAY BE REQUIRED THAT ARE NOT SHOWN ON STRUCTURAL DRAWINGS.
- 3.2. CONSTRUCTION LOADS ON THE STRUCTURE SHALL NOT EXCEED DESIGN LOADS INDICATED ON DRAWINGS.
- 3.3. DESIGN AND GENERAL REVIEW OF ALL TEMPORARY WORKS TO BE CARRIED OUT BY A PROFESSIONAL ENGINEER LICENSED AND INSURED TO PRACTICE IN ONTARIO) RETAINED BY THE CONTRACTOR.
- 3.4. MAKE GOOD ALL EXISTING WORK DISTURBED BY TEMPORARY CONSTRUCTION OPERATIONS.

4. EXISTING STRUCTURES

- 4.1. VERIFY EXISTING DIMENSIONS AND CONDITIONS ON SITE PRIOR TO CONSTRUCTION.
- 4.2. TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING STRUCTURES DURING CONSTRUCTION.
- 4.3. EXISTING CONDITIONS ARE ASSUMED. REPORT ANY VARIATIONS TO THE STRUCTURAL CONSULTANT BEFORE PROCEEDING WITH THE WORK.

5. INSPECTION AND TESTING

- 5.1. COOPERATE WITH CONSULTANTS DOING GENERAL REVIEW AND ALL INSPECTION AND TESTING AGENCIES. PROVIDE SAFE ACCESS TO WORK AREAS AS REQUIRED AND ASSIST IN THEIR WORK. PROVIDE REASONABLE NOTICE (NOT LESS THAN 48 HOURS) PRIOR TO CONCEALING ANY WORK THAT REQUIRES INSPECTION, REVIEW OR TESTING. SCHEDULE THIS WORK TO OCCUR DURING NORMAL BUSINESS HOURS. ENSURE THAT THE WORK TO BE REVIEWED IS SUBSTANTIALLY COMPLETE IN TIME FOR THE REVIEW.
- 5.2. THE STRUCTURAL CONSULTANT WILL PROVIDE GENERAL REVIEW OF THE WORK DESIGNED BY THE CONSULTANT ON A RATIONAL SAMPLING BASIS IN ACCORDANCE WITH THE GUIDELINE: "PROFESSIONAL ENGINEERS PROVIDING GENERAL REVIEW OF CONSTRUCTION AS REQUIRED BY THE ONTARIO BUILDING CODE" AS PREPARED BY PROFESSIONAL ENGINEERS ONTARIO. THESE REVIEWS DO NOT ALLEVIATE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLETE THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS WITH AN APPROPRIATE QUALITY CONTROL PROGRAM.
- 5.3. ENSURE THAT GENERAL REVIEW IS PROVIDED FOR ALL STRUCTURAL WORK DESIGNED BY A PROFESSIONAL ENGINEER RETAINED BY THE CONTRACTOR. GENERAL REVIEW TO BE BY THE ENGINEER RESPONSIBLE FOR THE DESIGN OR BY ANOTHER PROFESSIONAL ENGINEER LICENSED AND INSURED IN ONTARIO. SUBMIT GENERAL REVIEW REPORTS FOR REVIEW.
- 5.4. RETAIN AN INDEPENDENT INSPECTION AND TESTING COMPANY TO UNDERTAKE CONCRETE TESTING, MASONRY TESTING AND TO INSPECT STRUCTURAL STEEL WORK (AS APPLICABLE) ON SITE.
- 5.4.1. MAKE ONE STANDARD TEST FOR EACH 100 CUBIC METRES OF CONCRETE (OR PART THEREOF), BUT NOT LESS THAN ONE TEST EACH DAY FOR EACH CLASS. PROVIDE A GROUP OF THREE CONCRETE CYLINDERS FOR EACH STANDARD CONCRETE TEST. BREAK ONE TEST AT 7 DAYS. TEST METHODS AND RESULTS SHALL CONFORM TO CSA A23.2.
- 5.5. RETAIN A GEOTECHNICAL CONSULTANT TO REVIEW ALL FOUNDATION BEARING SURFACES AND TO PERFORM FULL TIME INSPECTION DURING THE PLACEMENT OF ENGINEERED FILLS AND DEEP FOUNDATION ELEMENTS (AS APPLICABLE).

6. CONCRETE

- 6.1. CONFORM TO CSA A23.1: "CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION".
- 6.2. CONCRETE IS SPECIFIED AS PER THE "PERFORMANCE SPECIFICATION" ALTERNATIVE AS OUTLINED IN CAN/CSA-A23.1, TABLE 5. THE CONTRACTOR AND THE CONCRETE SUPPLIER TO MEET ALL CERTIFICATION, DOCUMENTATION, AND QUALITY CONTROL REQUIREMENTS.
- 6.3. THE CONCRETE SUPPLIER TO BE CERTIFIED BY THE READY-MIXED CONCRETE ASSOCIATION OF ONTARIO.
- 6.4. THE CONTRACTOR AND THE CONCRETE SUPPLIER ARE TO ENSURE THAT THE PLASTIC AND HARDENED MIX PROPERTIES MEET SITE REQUIREMENTS FOR PLACING, FINISHING AND THE OWNERS' PERFORMANCE REQUIREMENTS.
- 6.5. CEMENT TO BE PORTLAND CEMENT TYPE GU UNLESS NOTED OTHERWISE OR REQUIRED BY EXPOSURE CLASS.
- 6.6. CONCRETE TO BE NORMAL DENSITY UNLESS NOTED OTHERWISE.
- 6.7. NOMINAL SIZE OF COURSE AGGREGATE TO BE 20 mm (3/4") UNLESS NOTED OTHERWISE.
- 6.8. CURING UNLESS OTHERWISE RECOMMENDED BY THE CONCRETE SUPPLIER TO SUIT SCM CONTENT:
- 6.8.1. BASIC: 3 DAYS AT 10°C MIN OR 40% SPECIFIED STRENGTH
- 6.8.2. ADDITIONAL: 7 DAYS AT 10°C MIN AND 70% SPECIFIED STRENGTH
- 6.9. CONCRETE PROPERTIES (EXPOSURE CLASS, f_c , ENTRAINED AIR, MAX W/C RATIO, CURING TYPE):
- 6.9.1. NEW CONCRETE SLAB: C-1, 35 MPa, 5-8%, 0.40, ADDITIONAL
- 6.10. PLACE CONCRETE AS CLOSE AS POSSIBLE TO FINAL LOCATION TO AVOID SEGREGATION. VIBRATE ALL CONCRETE.
- 6.11. PROTECT CONCRETE FROM FREEZING. DO NOT PLACE CONCRETE AGAINST FROZEN GROUND. USE COLD WEATHER CONCRETING METHODS IN ACCORDANCE WITH CAN/CSA-A23.1.
- 6.12. PROTECT CONCRETE FROM EXCESSIVE HEAT AND DRYING. USE HOT WEATHER CONCRETING METHODS IN ACCORDANCE WITH CAN/CSA-A23.1.
- 6.13. SLABS:
- 6.13.1. DO NOT HARD TROWEL (I.E. DENSIFY) AIR-ENTRAINED CONCRETE. EXCESSIVE FINISHING CAN DAMAGE

THE SURFACE OF THE SLAB FOR WHICH THE CONTRACTOR WILL BE RESPONSIBLE.

- 6.13.2. MAXIMUM OUTSIDE DIAMETER OF ANY CONDUIT OR PIPE EMBEDDED IN SUSPENDED CONCRETE SLABS IS NOT TO EXCEED ONE QUARTER THE SLAB THICKNESS. MINIMUM SPACING TO BE 3 DIAMETERS ON CENTRE. DO NOT INSTALL BELOW COLUMNS.

6.14. FORMWORK, FALSEWORK AND RE-SHORING:

- 6.14.1. FORM THE SIDES OF ALL STRUCTURAL CONCRETE MEMBERS.

6.15. ARCHITECTURALLY EXPOSED CONCRETE (AEC):

- 6.15.1. UNLESS OTHERWISE NOTED ON THE ARCHITECTURAL DRAWINGS OR SPECIFICATIONS, FINISHES ARE TO BE AS FOLLOWS:

6.15.1.1. EXTERIOR SLABS: BROOM

7. REINFORCING STEEL

- 7.1. REINFORCEMENT TO CONFORM TO:

- 7.1.1. DEFORMED BARS: CAN/CSA G30-18, GRADE 400R.
- 7.1.2. EPOXY-COATING: ASTM D3963
- 7.1.3. ZINC-COATING (GALVANIZED): ASTM A767/A767M
- 7.2. BARS MARKED CONTINUOUS TO BE TERMINATED IN STANDARD HOOKS AT ENDS AND SPLICED USING CLASS B LAPS.

- 7.3. ALL REBAR HOOKS TO BE STANDARD LENGTH 90° OR 180° HOOKS. REBAR LENGTHS LISTED ON DRAWINGS DO NOT INCLUDE THE HOOK LENGTH. DO NOT SHORTEN HOOKS TO ACCOMMODATE MEMBER DIMENSIONS, BUT RATHER ROTATE THE HOOK TO ENSURE PROPER CONCRETE COVERAGE.

- 7.4. PROVIDE ADDITIONAL SUPPORT BARS AS REQUIRED TO ADEQUATELY SUPPORT AND SECURE ALL REINFORCEMENT AND PREVENT MOVEMENT WHEN PLACING CONCRETE.

- 7.5. PROVIDE SUFFICIENT CHAIRS TO REINFORCING TO MAINTAIN SPECIFIED CONCRETE COVER.

7.5.1. CHAIRS PLACED ON INSULATION OR VOID FORM TO HAVE SAND PLATE BASES OR SIMILAR.

- 7.6. ALL REINFORCING TO BE CLEAN, FREE OF LOOSE SCALE, OIL, DIRT, RUST, AND ANY OTHER FOREIGN COATING THAT AFFECT BONDING CAPACITY.

- 7.7. PROVIDE EPOXY-COATED OR GALVANIZED REINFORCEMENT IN ALL CONCRETE WITH EXPOSURE CLASS C-XL, C-1, OR C-3.

- 7.8. WHERE EPOXY-COATED OR GALVANIZED REINFORCEMENT IS NOTED ON THE STRUCTURAL DRAWINGS, PROVIDE COATED TIE-WIRES AND PLASTIC CHAIRS. TOUCH-UP ALL DAMAGED EPOXY-COATING AND GALVANIZING PRIOR TO PLACING CONCRETE.

- 7.9. CLEAR CONCRETE COVER TO REINFORCEMENT

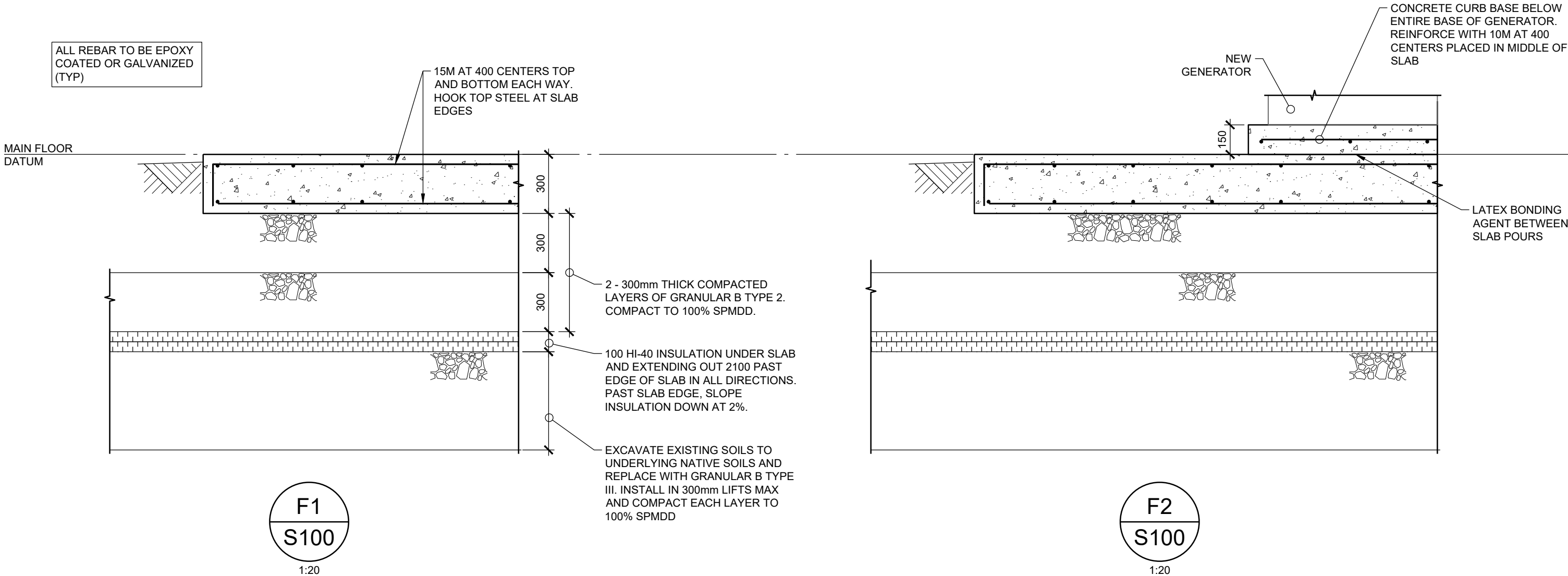
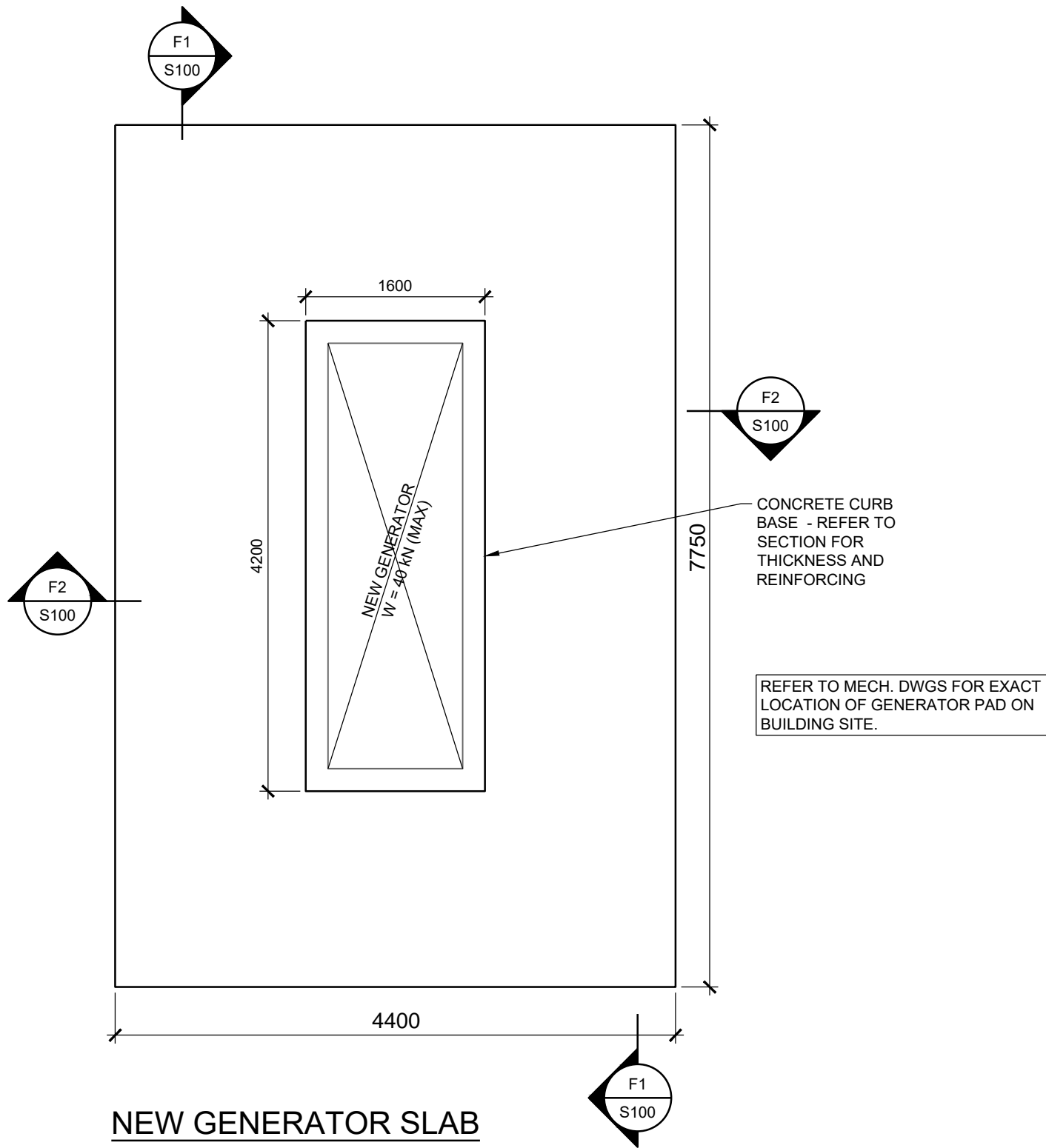
CONCRETE EXPOSURE	CONCRETE EXPOSURE CLASS				
	N, N-CF	F-1, F-2, S-1, S-2	C-XL, C-1, C-3		
CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	N/A	75 (3")	75 (3")		
CAST AGAINST VAPOUR BARRIER OR RIGID INSULATION	50 (2")	50 (2")	60 (2 1/4")		
EXPOSED TO WEATHER OR IN CONTACT WITH EARTH FOR 20M OR LARGER	N/A	50 (2")	60 (2 1/4")		
EXPOSED TO WEATHER OR IN CONTACT WITH EARTH FOR 10M AND 15M	N/A	40 (1 1/2")	60 (2 1/4")		

8. FOUNDATIONS

- 8.1. STRUCTURAL DESIGN IS BASED ON THE GEOTECHNICAL PARAMETERS OUTLINED ON THE EXISTING STRUCTURAL DRAWINGS PREPARED BY STEWART SMITH ARCHITECT LTD DATED JUNE 1987.
- 8.2. CONSTRUCT ALL FOOTINGS ON STRATA CAPABLE OF SUPPORTING THE FOLLOWING DESIGN BEARING PRESSURES:
- 8.2.1. ULTIMATE LIMIT STATE: 70 kPa
- 8.2.2. SERVICEABILITY LIMIT STATE: 50 kPa
- 8.3. LOCATE ALL EXISTING UNDERGROUND SERVICES PRIOR TO EXCAVATION.
- 8.4. UNLESS OTHERWISE APPROVED BY THE GEOTECHNICAL CONSULTANT, THE LINE OF SLOPE BETWEEN ADJACENT EXCAVATIONS FOR FOOTINGS OR TRENCHES SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10.
- 8.5. KEEP EXCAVATION DRAINED AND FREE OF WATER AT ALL TIMES. REFER TO GEOTECHNICAL REPORT FOR REQUIRED DEWATERING PROCEDURES.
- 8.6. PROTECT FOOTINGS, WALLS, SLABS-ON-GRADE AND ADJACENT SOIL AGAINST FREEZING AND FROST ACTION AT ALL TIMES DURING CONSTRUCTION. DO NOT PLACE CONCRETE AGAINST FROZEN EARTH.

9. DESIGN DATA

- 9.1. STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE ONTARIO BUILDING CODE 2012 SUPPLEMENTED BY THE USER'S GUIDE - NBC 2015 STRUCTURAL COMMENTARIES (PART 4 OF DIVISION B).
- 9.2. CLIMATIC LOCATION: ENGLEHART, ONTARIO
- 9.3. UNLESS OTHERWISE NOTED, DESIGN LOADS SHOWN ARE SPECIFIED (UNFACTORED). FOR POINT LOADS, IF ONLY ONE LOAD IS GIVEN, CONSIDER IT LIVE LOAD.



ISSUED FOR CONSTRUCTION FEB 14, 2025

revision date

the Contractor shall check and verify all dimensions before proceeding with the work

detail no. sheet no. where detailed

Drawings are a property of A2S Consulting Engineers and are protected by copyright. Reproduction of any kind is strictly prohibited.



project ONTARIO NORTHLAND ENGLEHART STATION GENERATOR

ENGLEHART ONTARIO

title STRUCTURAL WORK

drawn by: AJD date: FEB. 2025

checked by: SWC project no: 25022A

scale: dwg no: S100

plotted: February 14, 2025