



TOWN OF PENETANGUISHENE

REF # 2018 – 07

INSTALLATION OF A 400 KILOWATT GENERATOR AT THE PAYETTE PUMPSTATION

ADDENDUM NO. 1

This addendum has been issued by the Town of Penetanguishene Public Works Department to revise and clarify selected sections within the original Tender document.

The following sections within the Request for Proposal will be clarified or revised:

1. Covering Page – Delivery of Submissions, Section 2.2 Delivery and Opening of Submissions & Section 2.18 Schedule for Respondent Selection

Please be aware that the Town has extended the Delivery of Submissions, Closing Date and Proposal Closing date from **April 6, 2018** at 11:00am to **April 13, 2018** at 11:00am.

2. Appendix 1 Schedule of Fees

DESCRIPTION OF TASKS:	Quantity		Fee (HST excluded)
Installation of a 400kw generator, including the supply and installation of all wiring, conduit, fuel lines	1	X	
Installation of the automatic power transfer switch with connections to the existing electrical systems	1	X	
Supply and installation of all the components required for a back-up temporary power cord connection to a portable power source (Umbilical Cord) This item is to include the installation of a manual transfer switch with an external connection.	1	X	

Supply of a temporary portable power source (350-400kw) to be utilized while the new generator is being installed. This unit will be required when periods of extended power outage are anticipated. This unit must remain on site for the entire duration that the primary generator is unavailable.	1	X	
In consultation with the Towns programmer, Eramosa Engineering, completing works within the PLC Cabinet to accommodate the installation of the Deep Sea controller and completing the necessary SCADA connections. The works to install the Deep Sea Controller can include the addition of an external cabinet or box.	1	X	
On-site testing of all components associated with the installation of the generator and associated equipment. (please allow for 8 hours)	1	X	
Provisional Item			
Installation of the Concrete Pad as designed and engineered by Tacoma Engineering (included within the addendum). Any required geotechnical testing is to be organized by the Town.	1	x	
TOTAL COST (NO HST)			

GENERAL NOTES:

- UNLESS NOTED OTHERWISE ON THE DRAWINGS, THE FOLLOWING NOTES SHALL GOVERN.
- ALL WORK ON THIS PROJECT SHALL CONFORM TO THE 2012 ONTARIO BUILDING CODE (OBC 2012), ANY LOCAL REGULATIONS AND BYLAWS, AND THE CURRENT OCCUPATIONAL HEALTH AND SAFETY ACT (OHS) AND CURRENT REGULATIONS FOR CONSTRUCTION PROJECTS. ALL CODES AND STANDARDS SHALL BE THOSE REFERENCED IN OBC 2012.
- ALL STANDARDS ARE TO BE THE YEAR, EDITIONS, DOCUMENT NUMBERS, ETC AS PER OBC 2012 DIVISION B, T.1.3.1.2. WHERE DISCREPANCIES EXIST BETWEEN OUR DRAWINGS AND T.1.3.1.2, THE TABLE SHALL GOVERN UNLESS NOTED OTHERWISE.
- THIS SET OF DRAWINGS SUPERCEDES AND REPLACES ALL PREVIOUS DRAWINGS.
- READ THESE DRAWINGS IN CONJUNCTION WITH ALL RELATED CONTRACT DOCUMENTS AND ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS.
- THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND MEASUREMENTS AT THE SITE AND VERIFY ALL DIMENSIONS GIVEN ON THE STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL DRAWINGS. REPORT TO THE ENGINEER ANY DISCREPANCIES OR UNSATISFACTORY CONDITIONS WHICH MAY ADVERSELY AFFECT THE PROPER COMPLETION OF THE PROJECT BEFORE PROCEEDING WITH THE WORK.
- IF ANY STRUCTURAL DISCREPANCIES ON THE DRAWINGS EXIST, THE MOST STRINGENT SHALL APPLY.
- DRAWINGS ARE NOT TO BE SCALED.
- CONSTRUCTION AND SHOP DRAWING REVIEW MUST BE PROVIDED AS PER CODE.
- SUBMIT SHOP DRAWINGS AS PER TABLE 1. SHOP DRAWINGS SHALL BE CERTIFIED BY A PROFESSIONAL ENGINEER WHERE REQUIRED AND REVIEWED BY THE CONTRACTOR FOR DIMENSIONAL CORRELATION WITH THE DRAWINGS AND FIELD CONDITIONS PRIOR TO SUBMITTING TO TACOMA ENGINEERS. FABRICATION OF ELEMENTS ON SHOP DRAWINGS MAY NOT PROCEED UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED BY TACOMA ENGINEERS.
- CONSTRUCTION LOADINGS SHALL NOT EXCEED THE SPECIFIED DESIGN LOADS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL MAKE ADEQUATE PROVISION FOR CONSTRUCTION LOADS AND TEMPORARY BRACING TO KEEP STRUCTURE PLUMB AND IN TRUE ALIGNMENT AT ALL PHASES OF CONSTRUCTION. ANY BRACING MEMBERS SHOWN ON THE DRAWINGS ARE REQUIRED FOR THE FINISHED STRUCTURE AND MAY NOT BE SUFFICIENT FOR ERECTION PURPOSES.
- OBC 2012 DIVISION C SECTION 1.2.2 REQUIRES GENERAL REVIEW OF THE CONSTRUCTION BY THE DESIGN PROFESSIONAL. TACOMA ENGINEERS SHALL BE GIVEN A MINIMUM OF 48 HOURS NOTICE AT (705) 735-1875 (BARRIE) BY THE CONTRACTOR FOR THE FOLLOWING REQUIRED CONSTRUCTION REVIEWS:
 - REINFORCING- PRIOR TO POURING CONCRETE PAD.
- RETAIN A CERTIFIED INDEPENDENT TESTING OR INSPECTION COMPANY FOR TESTING & INSPECTION FOR THE ITEMS IN TABLE 2. THIS TESTING AND INSPECTION IS TO BE PAID FOR BY THE OWNER.

TABLE 1: SHOP DRAWING SUBMITTALS

ITEM	REQUIRED SUBMITTAL?	ENGINEER'S STAMP REQ'D?	NOTES
CONCRETE MIX DESIGN	YES	NO	
REINFORCING STEEL	YES	NO	

TABLE 2: REQUIRED TESTING & INSPECTION

RESULTS SHALL BE SUBMITTED DIRECTLY TO TACOMA ENGINEERS FROM THE TESTING COMPANY, FOR REVIEW

ITEM	REQ'D	NOTES
SOIL BEARING CAPACITY	YES	BY SOILS ENGINEER
SOIL COMPACTION	YES	BY SOILS ENGINEER
CONCRETE COMPRESSIVE TESTS	YES	MIN. 3 TEST, SEE CONCRETE NOTES
CONCRETE AIR ENTRAINMENT	YES	
CONCRETE SLUMP	NO	

CONCRETE

- ALL REINFORCED CONCRETE ELEMENTS ARE DESIGNED USING THE LIMIT STATES DESIGN METHOD IN ACCORDANCE WITH CAN/CSA-A23.3.
- CONCRETE WORK SHALL CONFORM TO CAN/CSA-A23.1,2,3 FOR MATERIALS AND WORKMANSHIP.
- CLASSES OF CONCRETE SHALL BE PLACED IN THE LOCATIONS NOTED:

CLASS OF CONCRETE	LOCATION
C-1	EXTERIOR STRUCTURALLY REINFORCED SLABS
- CLASSES OF CONCRETE SHALL HAVE THE FOLLOWING MIX REQUIREMENTS:

CLASS OF CONCRETE	STRENGTH	W/C RATIO	AIR ENTRAINMENT	CHLORIDE ION
C-1	35 MPa	0.40	5% TO 8%	<1500 COULOMBS AT 56 d
- ADJUST AIR ENTRAINMENT PERCENTAGE FOR AGGREGATE SIZE BASED ON A23.1-04 TABLE 4.
- CONCRETE DESIGN IS BASED ON THE ABOVE MIX REQUIREMENTS. PHYSICAL PROPERTIES (SLUMP, AGGREGATE SIZE, ETC.) TO SUIT INSTALLATION (BY OTHERS) AND SHALL NOT AFFECT REQUIREMENTS SPECIFIED.
- ALL CONCRETE TO BE TESTED SHALL BE TESTED BY A C.S.A. CERTIFIED CONCRETE TESTING LABORATORY. CONTRACTOR TO PROVIDE COPIES OF TESTING REPORTS TO TACOMA ENGINEERS. NOT LESS THAN ONE STRENGTH TEST SHALL BE MADE FOR EACH 100 m³ OF CONCRETE WITH AT LEAST THREE TESTS FOR EACH CLASS OF CONCRETE USED, PER DAY.
- USE HIGH FREQUENCY VIBRATION TO PLACE ALL CONCRETE.
- ALL CONCRETE SHALL BE KEPT MOIST DURING THE FIRST THREE DAYS OF CURING.
- TAKE ADEQUATE MEASURES TO PROTECT THE CONCRETE FROM EXPOSURE TO FREEZING TEMPERATURES AT LEAST SEVEN DAYS AFTER CONCRETE PLACEMENT. COLD WEATHER PROTECTION IS REQUIRED FOR ALL CONCRETE PLACED WHERE IT IS FORECASTED THAT THE TEMPERATURE WILL DROP BELOW 5°C WITHIN 24 HOURS OF PLACEMENT. PROTECTION PROVIDED, INCLUDING INSULATED TARPS, POLY COVERED STRAW, SUPPLEMENTAL HEAT AND/OR CHEMICAL ADMIXTURES, IS TO BE SUFFICIENT TO MAINTAIN A MINIMUM CURING TEMPERATURE OF 10°C FOR 3 DAYS.
- DO NOT ADD WATER TO CONCRETE ON SITE.
- CALCIUM CHLORIDE OR ANY ADMIXTURE FORMULATION CONTAINING CHLORIDE SHALL NOT BE USED IN CONCRETE CONTAINING REINFORCEMENT, OR IN CONCRETE CLASSIFICATIONS S-1, S-2, OR C-1, C-2, OR FOR PARKING STRUCTURES, FLOORS RECEIVING DRY-SHAKE METALLIC HARDENERS, OR CONCRETE CONTAINING EMBEDDED ALUMINUM. USE ONLY IN DOSAGES LESS THAN 2% BY WEIGHT OF CEMENT.
- REBAR CHAIRS (BAR SUPPORTS) ARE TO BE OF PRECAST CONCRETE, PLASTIC OR STEEL. WOOD, CLAY BRICK AND CONCRETE BLOCK IS NOT ACCEPTABLE.

REINFORCING STEEL:

- ALL REBAR SHALL BE DEFORMED BARS CONFORMING TO G30.18 WITH A MINIMUM YIELD STRENGTH OF 400 MPa.
- REINFORCING STEEL SHALL BE FABRICATED BY A SUPPLIER EXPERIENCED IN BAR BENDING. ALL BEND DIAMETERS SHALL CONFORM TO CAN/CSA-A23.1.
- ALL REBAR SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH REINFORCING STEEL MANUAL OF STANDARD PRACTICE, BY R.S.I.O., 4TH EDITION (2004).
- MAINTAIN THE FOLLOWING CLEAR CONCRETE COVER TO REINFORCEMENT (U.N.O.):
 - 40 mm (1.5") FOR CONCRETE PLACED IN FORMWORK FOR 15M OR SMALLER BARS.
 - 75 mm (3") FOR CONCRETE PLACED AGAINST THE EARTH (BOTTOM OF FOOTINGS).
 CHAIRS SHALL BE USED TO MAINTAIN THE SPECIFIED CONCRETE COVER.
- MINIMUM REBAR TENSION LAP LENGTH (25 MPa, NORMAL DENSITY, NON COATED BARS) SHALL BE:
 - 600 mm (24") FOR 15M BARS
- LAP ALL HORIZONTAL BARS AT CORNERS WITH BENT DOWELS MEETING THE MINIMUM LAP REQUIREMENTS IN BOTH DIRECTIONS.

CONCRETE SLABS ON GRADE:

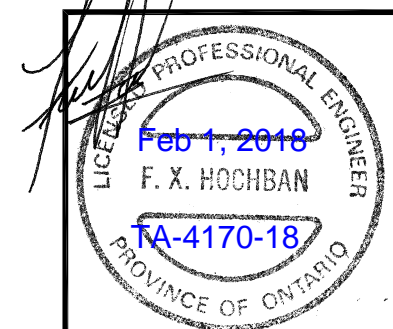
- PLACE SLAB ON 250mm (10") GRANULAR FILL COMPACTED TO 98% SPDD FOUNDED ON NATIVE SOILS OR APPROVED ENGINEERED FILL, UNLESS NOTED OTHERWISE (REFER TO SOIL ENGINEERS REPORT FOR RECOMMENDATIONS).
- CONCRETE FLOORS SHALL BE COVERED WITH PLASTIC AND KEPT MOIST FOR THE FIRST THREE (3) DAYS OF CURING.
- FLOATING SLABS ARE TO BE REINFORCED AS NOTED ON THE PLAN AND HAVE NO SAWCUTS.
- SLABS ON GRADE TO BEAR ON MATERIALS SUITABLE FOR 25 kPa (500 psf) BEARING PRESSURES.
- SPECIFIED SOIL BEARING CAPACITY FOR SLABS ON GRADE MUST BE VERIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACING THE SLABS. ANY NON-COMFORMANCE WITH THE SPECIFIED MINIMUM CAPACITIES MUST BE IMMEDIATELY REPORTED TO THE STRUCTURAL ENGINEER.

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No.	Date	Revision / Issued for:
1.	FEB. 01 2018	ISSUED FOR PERMIT AND CONSTRUCTION
2.		
3.		

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TOWN OF PENETANGUISHENE

10 Robert Street West
Penetanguishene, Ontario

PAYETTE PUMPHOUSE

GENERATOR PAD

64 Payette Drive, Penetanguishene

STRUCTURAL NOTES

Scale: NTS	Drawn By: M. REKKER
Project No. TA 4170-18	Date: JANUARY 2018

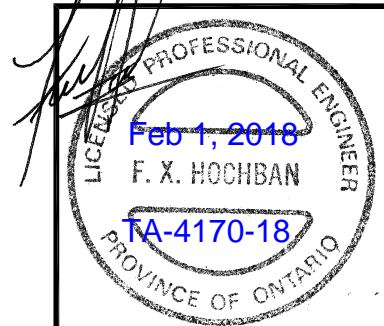
S1.1

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**TOWN OF
PENETANGUISHENE**

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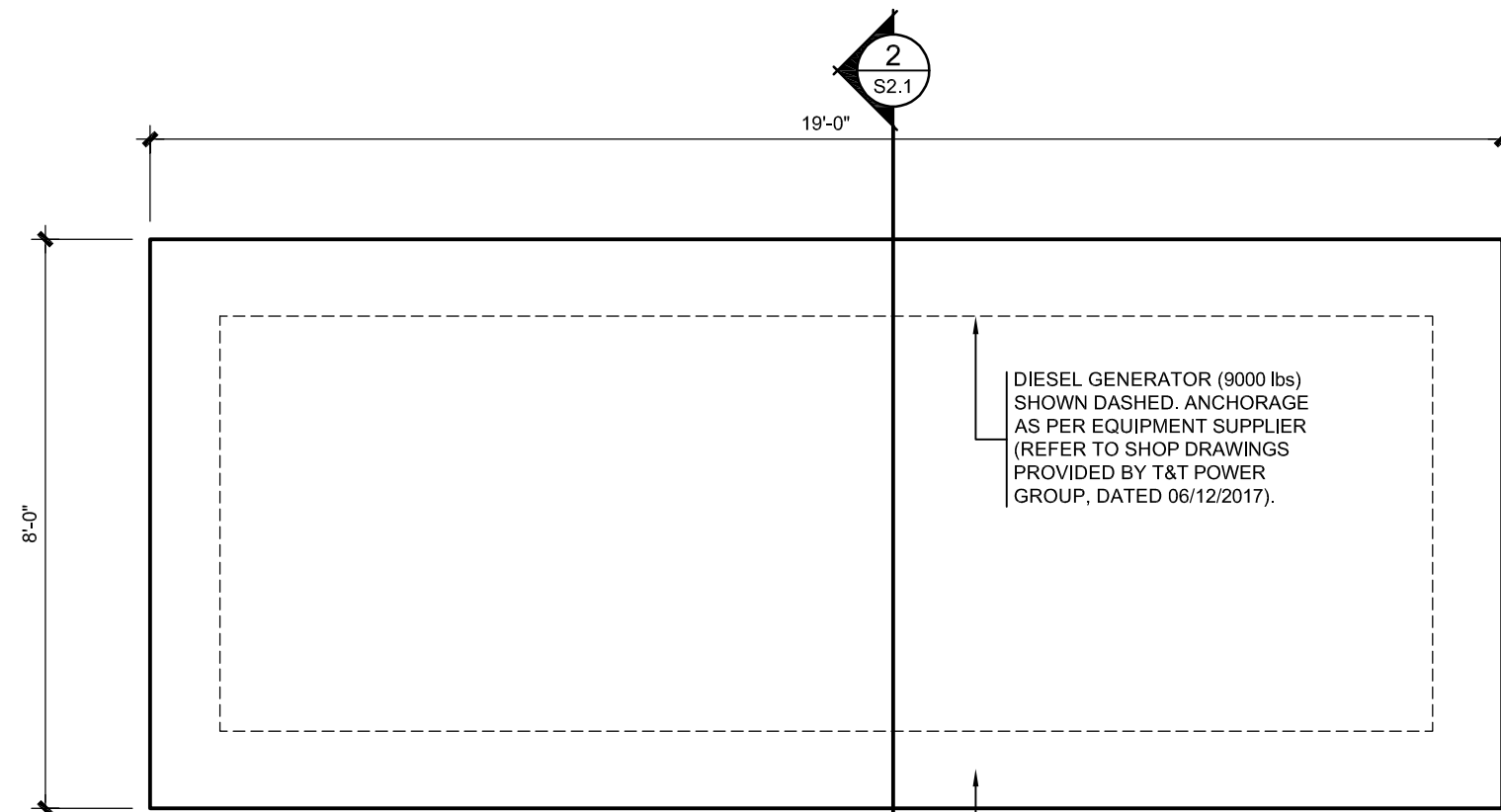
PAYETTE PUMPHOUSE
GENERATOR PAD

64 Payette Drive, Penetanguishene

PLAN AND SECTION

Scale: AS NOTED	Drawn By: M. REKKER
Project No. TA 4170-18	Date: JANUARY 2018

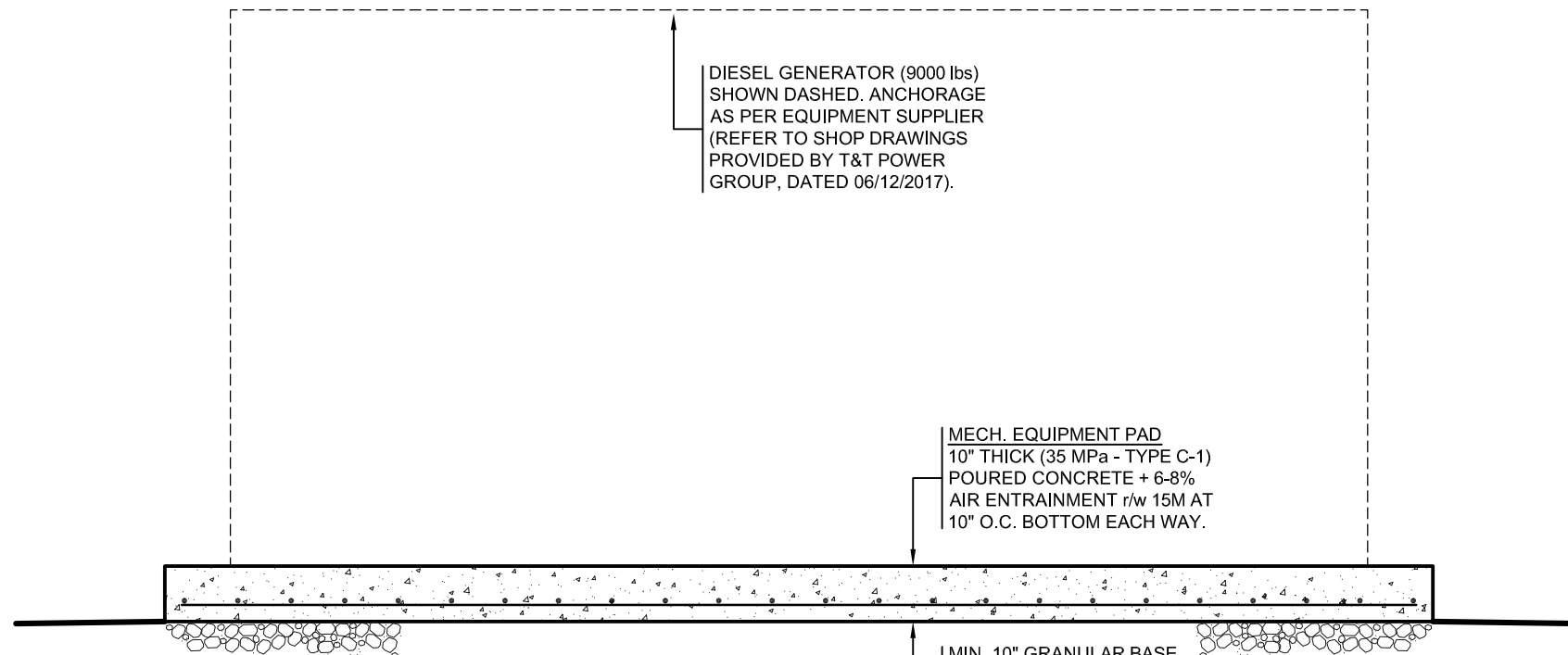
S2.1



1 PLAN - MECHANICAL EQUIPMENT PAD
SCALE: 3/8" = 1'-0"

DIESEL GENERATOR (9000 lbs)
SHOWN DASHED. ANCHORAGE
AS PER EQUIPMENT SUPPLIER
(REFER TO SHOP DRAWINGS
PROVIDED BY T&T POWER
GROUP, DATED 06/12/2017).

MECH. EQUIPMENT PAD
10" THICK (35 MPa - TYPE C-1)
POURED CONCRETE + 6-8%
AIR ENTRAINMENT r/w 15M AT
10" O.C. BOTTOM EACH WAY.



2 SECTION - MECHANICAL EQUIPMENT PAD
SCALE: 3/8" = 1'-0"

MIN. 10" GRANULAR BASE
MIN. 25 kPa (500 psf) SOIL
BEARING CAPACITY

DIESEL GENERATOR (9000 lbs)
SHOWN DASHED. ANCHORAGE
AS PER EQUIPMENT SUPPLIER
(REFER TO SHOP DRAWINGS
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GROUP, DATED 06/12/2017).

MECH. EQUIPMENT PAD
10" THICK (35 MPa - TYPE C-1)
POURED CONCRETE + 6-8%
AIR ENTRAINMENT r/w 15M AT
10" O.C. BOTTOM EACH WAY.

Company: _____

Reviewed By: _____

Date: _____

Please acknowledge receipt of this addendum by fax transmission (705-549-4263) or email (jhamelin@penetanguishene.ca) to the attention of the undersigned. Also, please indicate acceptance of the addendum within section 5.1 of the Submission Forms.

Jeff Hamelin, C. Tech.
Manager of Capital Projects
Town of Penetanguishene