## **ADDENDUM NO. 3** (4/19/2018)

This addendum #3 to the "Ipswich River Substation – Site Construction" bid documents released on 3/29/18 contains responses to several questions that have come up during the bid process:

- Bid Opening date has been moved to Wednesday, May 2<sup>nd</sup> at 11AM. The deadline for any additional questions to be submitted will be the end of the business day on Thursday April 26<sup>th</sup>.
- Please CC Mike Barrett in any email inquiries or further questions about this project. (mcbarrett@plmnet.com)
- The proposed project schedule is included with this Addendum. The Contractor shall meet the following milestones regarding equipment delivery and energization:
  - o 115-23 kV Transformer Foundations ready for transformer placement: 9/9/18
  - o 23 kV Switchgear Foundations ready for switchgear placement: 9/15/18
  - o Substation ready for final testing/commissioning: 10/29/18
- Proposed grades for the entire site are shown on the drawings. Excess material
  excavated from the site can be used where appropriate to attain these grades,
  however any material in excess of this or any unsuitable material shall be
  removed from the site.
- The Waters River Substation control house roof shall be a membrane system with foam underlayment. Smaller foam strips shall be installed to shim the areas between the ribs flush, followed by a continuous layer of poly-iso underlayment in compliance with the membrane vendors requirements. The control house has outside dimensions of approximately 24' x 40', with a low pitch peaked roof. A similar roof was installed recently at another PMLP substation. The subcontractor that installed this roof was Aspen Roofing Services, 58R Pulaski Street, Peabody.
- The Waters River Substation control house HVAC units will require additional support blocking added to the walls to support the units. These units were recently installed on a control house at another PMLP substation. The vendor who installed these units was Joset Corporation, 27A Hayward Street, Ipswich, MA (978) 356-0122.
- A photograph of the nameplate for the existing power transformer at Ipswich River Substation that will be relocated to the spare foundation at Waters River is included with this addendum. This provides weight and oil volume. This transformer shall be dis-assembled to the extent required and the oil removed, transported to the spare transformer foundation at Waters River Substation, and fully reassembled ready for service. A full vacuum filling process shall be followed to refill the transformer with oil after reassembly. This contractor is responsible for all permits (oversize load, overweight load, etc.) required for transportation of this unit.
- A PCB test report is included with this addendum. The breaker and bushings are less than 50 PPM PCB content.

- Exact details of the new 23 kV steel line poles are not available yet. The vendor is performing final design on these and has not released the details yet.
- The Ipswich River cable trench shall be 20" wide x 16" deep. An AutoCAD file of the trench layout is included with this addendum to assist in layout.
- An existing 5 kV Substation foundation is to be removed in the area at Waters
  River Substation where the spare transformer foundation is to be installed. A
  drawing of a similar foundation is included with this addendum for reference. A
  drawing of the exact foundation at this location is not available. Please use the
  reference drawing as the basis of your bid, with any significant changes to be
  addressed by change order.
- A revised version of the switchgear foundation details (Dwg 919911IR-C215-B) along with revised versions of the foundation plan (919911IR-C200-B) and conduit plan (919911IR-E400-D) are included with this addendum. These drawings reflect changes due to the final switchgear base design. Please note that all conduits entering the switchgear must be held below the top of concrete until after the switchgear is installed, due to the vendor placement/slide into place method of installation.
- At Waters River Substation, Contractor shall furnish and install a firewall between existing Transformers 1 and 2. The firewall shall be a "DuraBarrier" removable firewall manufactured by DuraSystems, Inc., (<a href="www.durasystems.com">www.durasystems.com</a>). The wall shall be 19' wide and 18' high, install on a foundation attached to the existing Transformer 1 foundation/oil containment pit. Drawing 919911WR-C210-A is included with this addendum depicting the foundation required for this firewall. Please note that this foundation design (in particular anchor bolt size and placement) is preliminary. DuraSystems will not release detailed design data until receipt of a purchase order for the wall. Contractor shall obtain and submit for approval design calculations and drawings for the proposed wall from DuraSystems. Once these submittals are reviewed and approved, we will finalize the foundation arrangement and issue for construction.
- At Johnson Street Substation, additional 23 kV pole replacements will be performed. A revised drawing (919911JS-G100-2B) is included with this addendum.
- The outline of the TransGard fence is shown on drawing 919911IR-E100-A.
- For item 57 on drawing 919911WR-ML1-A the quantity should be 12 not 120.
- At Waters River, the required grounding simply consists of connecting ground leads between the breaker and the ground grid, and running up the structure to ground the LA's and VT and installing two ground end studs on the diagonal brace.
- The existing circuit breaker at Ipswich River to be removed contains 265 gallons of oil.
- The existing wood poles along the bike path to be removed are 65' tall.
- Contractor will need to develop a road closure plan.
- There are approximately 80 poles between Johnson Street Station and Warren Street Extension.
- The screening wall should be this type <a href="http://www.artisanprecast.com/fencestone-gallery/">http://www.artisanprecast.com/fencestone-gallery/</a> or an approved equal.
- The closest addresses for the substations are as follows:

- Ipswich River Substation 21 Russell Street
   Johnson Street Switching Station 32 Johnson Street
- Warren Street Switching Station 201 Warren Street Ext.
- Waters River Substation 58 Rear Pulaski Street