# SPECIFICATIONS FOR PRE-STRESSED REINFORCED CONCRETE PLANK BEAM AS SHOWN ON STRUCTURE DRAWINGS S-37288

#### **General Notes**

- Structure Drawing S-37288 being provided for information only.
- Site preparation will be performed by PennDOT forces. This RFQ-IFB is for the fabrication, storage, and delivery of the pre-stressed plank beam only.
  - All notes listed on the structure drawings shall apply.
  - Steel Products Procurement Act "A" shall apply where applicable

## **General Requirements**

- Prequalification: Manufacturers of pre-stressed plank beams shall be listed in Publication 35, Bulletin 15, section 714, 1085, or 1107.02 current at the time of the posting of this RFQ-IFB.
  - Standard Reference: Specifications, Publication 408, Section 105.04
- Shop Drawings: Specification, Publication 408, Section 105.02(d) except delete the last sentence in that paragraph. Shop drawings to be submitted by April 30<sup>th</sup> 2018 for approval prior to fabricating the pre-stressed fascia plank beam to:

## Pennsylvania Department of Transportation

Attn: Keith E. Johnson

**District 3-0 Bridge Project Manager** 

715 Jordan Avenue

Montoursville, PA 17754

#### **Design Specifications**

• Design division of AASHTO, Standard Specifications for Highway Bridges, Seventh Edition, dated 2014, and as supplemented by the design manual, part 4, April 2015 Edition. • Design is in accordance with the LRFD (Load and Resistance Design) method. Live load distribution to the girders/beams is based upon design manual, part 4 distribution factor method.

# **Design Live Loads**

• PHL-93 or P-82 (204K permit load).

#### **Dead Loads**

• Vertical bituminous overlay density = 150 PCF (includes 30 PSF for future wearing surface) .

# **Fabrication Specifications**

- Provide materials and workmanship in accordance to Specifications, Publication 408, dated 2016. Applicable portions of sections 714, 1085, and 1107 shall apply to these bid documents.
  - Provide 2" concrete cover on reinforcement bars, except as noted.
- Use cement concrete with a minimum 28-day design compressive strength of 8000 ksi in the pre-stressed concrete plank beam.
- Provide Grade 60 reinforcing steel bars that meet the requirements of ASTM A615, A16, or A706 low alloy.
  - Do not weld Grade 60 reinforcing steel bars unless specified.
- Use only epoxy coated steel reinforcement bars in the pre-stressed concrete plank beam.
- Provide a smooth finish on all surfaces of the precast concrete plank beams, unless indicated otherwise.
  - Provide a ½" rounded edge on the top edges of all beam ends.
  - Chamfer exposed edges 1" x 1", except as noted
  - All dimensions shown are horizontal, except as noted.

- Provide minimum lap and embedment length of 30 bar diameters or in accordance with 1992 AASHTO as modified by DM-4 whichever is greater.
- Install PVC or other non-metallic sleeves for tendon pockets, drains, and dowel holes.

# **Special Conditions**

- Awarded vendor will guarantee delivery within 5 working days of the anticipated date for delivery. The anticipated date for delivery will be May 25, 2018. FOB delivered, if a supplier cannot or does not commence delivery at the delivery time, the Commonwealth can terminate the award and issue the award to the next most economically feasible supplier available who responded to the applicable RFQ or seek liquidated damages. If award is made to another supplier, immediate availability is a factor in the selection process, and the delinquent supplier is responsible for any excess cost to the Commonwealth.
- Liquidated Damages If any item is not delivered or performed within the contract specified time limits, the delay will interfere with the proper implementation of the Commonwealth's programs and utilizing the item, to the loss and damage of the Commonwealth. From the nature of the case it would be impractical and extremely difficult to fix the actual damage sustained in the event of any such action. The Commonwealth and the Contractor, therefore, presume that in the event of any such delay the amount of damage which will be sustained from a delay will be \$500.00 per day per item, and they agree that in the event of any such delay, the Contractor shall pay such amount as liquidated damages and not as a penalty. The Commonwealth, as its option, for amounts due the Commonwealth as liquidated damages, may deduct such from any money payable to the Contractor or may bill the Contractor as a separate item. The Commonwealth shall notify the Contractor in writing of any claims for liquidated damages pursuant to this paragraph before the date the Commonwealth deducts such sums from money payable to the Contractor. Delivery of any item, which is rejected by the Commonwealth, shall not toll the running of the days for the purposes of determining the amount of liquidated damages.
- Delivery shall be coordinated with the Bradford County Maintenance District by contacting either Jody Cain, Assistant County Maintenance Manager for Bradford County at (570) 265-2181 or County Maintenance Manager for Bradford County, Jared McMicken at (570) 265-2181. The Pre-stressed concrete plank beam is to be delivered to the

Bradford County Maintenance Office
340 York Avenue

Towanda, PA 18848