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July 5, 2018

TO: PLANHOLDERS

SUBJECT: PARCEL 77 AUTO TERMINAL – TRACKWORK INSTALLTION
PROJECT NO. 101247.01
CONTRACT NO. 070771

ADDENDUM NUMBER 01

This addendum is issued to amend the following:

SPECIFICATIONS

DIVISION 01 – GENERAL REQUIREMENTS

1. **SECTION 01 14 00 – Work Restrictions**

- a. **DELETE AND REPLACE** the issued Section 01 14 00 - Work Restrictions with the attached Section 01 14 00 – Work Restrictions (Attachment A).

2. **SECTION 01 57 13 – TESC and SWPPP – Short Form**

- a. **DELETE** the issued Section 01 57 13 – TESC and SWPPP – Short Form

3. **SECTION 01 64 00 – Owner Furnished Products**

- a. **DELETE AND REPLACE** the issued Section 01 64 00 – Owner Furnished Products with the attached Section 01 64 000 – Owner Furnished Products (Attachment B).

DIVISION 34 – TRANSPORTATION

1. **SECTION 34 11 23 – Special Trackwork**

- a. **DELETE AND REPLACE** the issued Section 34 11 23 – Special Trackwork with the attached Section 34 11 23 – Special Trackwork (Attachment C).

Attachments:

Attachment A – Section 01 14 00 – Work Restrictions

Attachment B – Section 01 64 00 – Owner Furnished Products

Attachment C – Section 34 11 23 – Special Trackwork

Receipt for this addendum shall be indicated in the space provided in Section 00 41 00, Bid Form.

END OF SECTION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. This Section specifies work sequence and constraints.
- B. The purpose of the milestones, sequence and limitations of construction are to ensure that the Contractor understands the requirements and limitations on its work by the specific characteristics of the Contract, schedules and conducts work in a manner consistent with achieving these purposes, and complies with the construction schedule, the specific sequence, constraints, milestones and limitations of work specified.
- C. Sequence of construction: Plan the sequence of construction to accommodate all the requirements of the specifications. The Contract Price shall include all specified requirements as described in this Section.

1.02 CONTRACTOR ACCESS AND USE OF PREMISES

- A. Activity Regulations
 - 1. Ensure Contractor personnel deployed to the project become familiar with and follow all regulations or restrictions established by the Engineer.
- B. Work Site Regulations
 - 1. Keep within the limits of work and assigned avenues of ingress and egress. Do not enter any areas outside the designated work location unless previously approved by the Engineer. The Contractor must comply with the following conditions:
 - a. Be responsible for control and security of Contractor-owned equipment and materials at the work site. Report to Port Security (phone (253) 383-9472) any missing/lost/stolen property.
 - b. Ensure all materials, tools and equipment will be removed from the site or secured within the designated laydown area at the end of each shift.

1.03 CONSTRAINTS - GENERAL

- A. Constraints for Work at Site
 - 1. It is anticipated that the Site Contractor will complete grading and installation of subdrains and utilities for the majority of the main rail yard area by August 15, 2018.
 - 2. Contractor shall coordinate with Site Contractor for completion of the grading and utilities, as needed to complete trackwork.
 - 3. Coordinate Work with paving of the crossings with the Port and Site Contractor.
 - 4. Protect the utilities installed in subgrade and near railyard from damage.

1.04 RAIL COORDINATION

- A. Contractor shall coordinate all work in the vicinity of the existing track with the Engineer and Tacoma Rail.
- B. Contractor shall adhere to all Port, Tacoma Rail and Federal safety codes, regulations and specifications during the duration of the project.
- C. Contractor shall identify all Work within 25 feet of an active track.
- D. Contractor shall have full responsibility for all track safety requirements.

E. All work in proximity of active tracks shall be performed in accordance with 49 CFR Part 214.

PART 2 - PRODUCTS

PART 3 - EXECUTION

END OF SECTION

PART 1 - GENERAL

1.01 SCOPE

- A. The purpose of this section is to provide the framework for transferring Port provided equipment and materials to the Contractor in a safe, timely and effective manner.

1.02 SUBMITTALS

- A. Submit an inspection report or log to the Engineer of the inspection performed on the equipment and materials before acceptance by the Contractor within 2 days of delivery. Flag any equipment or materials identified as being in unsatisfactory condition. Document unsatisfactory condition of equipment photographically, using digital media.

1.03 COORDINATION

- A. Rail materials will be delivered as follows:
1. Railroad ties and rail – August 1 – 15, 2018
 2. Turnouts - September 17, 2018
- B. Contractor shall submit and obtain approval of all pre-work submittals in time to receive materials. Contractor shall be responsible for receiving and unloading all Owner furnished materials. Contractor shall mobilize and be available to receive materials at any time during the dates provided.
- C. Materials are supplied by North American Rail Products, Inc.

1.04 LOCATION

- A. Ties and turnouts will be delivered by truck to the site at 3400 Taylor Way. Rail will be staged on the East Blair pier spur or Alexander Avenue siding next to the site. All traffic control required to safely transport rail to the site shall be provided by the Contractor in accordance with Section 01 55 00, paragraph 3.05 Traffic Control.

PART 2 - PRODUCTS

2.01 ITEMS

- A. Assume all items are in satisfactory condition unless otherwise indicated. Report in writing to the Engineer equipment found to be in unsatisfactory condition.

No.	Description	Quantity
1	Timber crossties: 8'-6" Standard Crossties – pre-plated with plates and screw spikes	4,880 EA
2	Timber crossties: 8'-6" Standard Crossties – blank	50 EA
3	Timber crossties: 10'-0" Crosstie – pre-plated with plates and screw spikes	1,760 EA
4	Timber crossties: 10'-0" Crosstie – blank	20 EA
5	Extra Tie Plates	140 EA
6	Elastic Rail Clips	26,840 EA
7	Extra Screw Spikes (25 lbs. bag)	32 EA
8	Gage Rods	72 EA
9	Turnouts – Right Hand Turnout (complete assembly, including but not limited to joint bars, other track materials and switch ties)	4 EA

10	Turnouts – Left Hand Turnout (complete assembly, including but not limited to joint bars, other track materials and switch ties)	6 EA
11	Rail – New Rail Blank 80' Sticks	292 EA

PART 3 - EXECUTION

3.01 REMOVAL OF EQUIPMENT FROM STORAGE LOCATION

- A. Protect, transport and install where indicated within the Contract Documents.

3.02 FIELD QUALITY CONTROL

- A. Equipment Inspection
1. Examine each piece or component for visual defects.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. This Section specifies the material requirements and performance criteria for complete special trackwork assembly and installation including turnouts.
- B. Except as modified herein, special trackwork shall be handled, assembled, and inspected, in accordance with the current edition of the American Railway Engineering and Maintenance-of-Way Association (AREMA) Portfolio of Trackwork Plans, and the AREMA Manual of Railway Engineering.
- C. The Port will provide the materials identified in Section 01 64 00 as Port Furnished Material. Quantity of Port Furnished Material items shall be as indicated in Section 01 64 00.
- D. Contractor shall provide all materials required for completion of the Work, except those materials specifically identified as Port furnished in Section 01 64 00 - Owner Furnished Products.

1.2 REFERENCE STANDARDS

- A. Comply with all applicable local, State and Federal codes provisions of most recent edition, including all addenda, of following codes, specifications, standards, and recommended practices, except as otherwise indicated:
 - 1. AREMA MANUAL - American Railway Engineering and Maintenance-of-Way Association, Manual for Railway Engineering
 - 2. AREMA PORTFOLIO - American Railway Engineering and Maintenance-of-Way Association, Portfolio of Trackwork Plans
 - 3. FRA-DOT - Federal Railroad Administration, Department of Transportation

1.3 QUALITY ASSURANCE

- A. Testing and inspection shall conform to the AREMA Manual, AREMA Portfolio and these specifications.

1.4 CONTRACTOR FURNISHED MATERIAL:

- A. Contractor shall provide all materials required for completion of the Work, except those materials specifically identified as Port furnished in Section 01 64 00 - Owner Furnished Products.

1.5 PORT FURNISHED MATERIAL:

- A. Port furnished materials shall comply with product specifications of this Section.
- B. The Contractor shall receive products at the site and give written receipt for materials at the time of delivery, noting visible defects and omissions. If such declaration is not given, the Contractor shall assume responsibility for such defects and omissions.
- C. The Contractor shall store materials until ready for installation and protect from loss and damage.

PART 2 - PRODUCTS

2.1 PORT FURNISHED TURNOUTS

- A. Materials for special trackwork will be provided by the Port as indicated in Section 01 64 00 - Owner Furnished Products. Contractor shall provide all materials required for completion of the Work, except those materials specifically identified as Port furnished.
- B. Port Furnished special trackwork shall be delivered by material suppliers to the Rail Laydown Area identified on the Drawings. Contractor shall be responsible for unloading materials from trucks.
- C. Port furnished special trackwork shall comply with the following:
 - 1. Turnouts shall be No. 9 turnouts with rail bound manganese frogs fabricated in accordance with the BNSF/Union Pacific Common Standards except as modified in the Contract Drawings and in the specifications herein. See Article 2.01 for discussion on order of priority.
 - 2. Rail, switch points, and frog castings shall be new, fabricated in the United States or Canada. Rail shall be 115RE as shown on the Drawings and conform to Section 34 05 17 "Railroad Work". There is not a Buy America contract requirement.
 - 3. Turnouts shall have 16'-6" switch points with graduated risers. Turnouts shall be furnished with appurtenant hardware for hand throw switches as indicated in the Contract Drawings and in these specifications and as directed by the Engineer. Switch points shall be Samson undercut type and be manufactured per AREMA Specifications for Special Trackwork and with AREMA Plan No. 221-12 Detail 5100 and modified as required to meet the geometry and accommodate appurtenances shown on Contract Drawings, including drilling for horizontal switch rods with transit style clips. Samson points shall be head hardened and double reinforced with transit style clips. Turnouts shall include curved, straight, closure rails utilizing 115 RE rail with screw spikes and elastic fasteners. Switches shall have manganese tips per AREMA Plan No. 220-08.
 - 4. Guardrails shall be new, 13'-0" long, conform to AREMA Plan No. 504-03, shall be set according to AREMA Plan No. 502 and fastened with screw spike plates and elastic fasteners.
 - 5. The special trackwork components shall be designed to be hand thrown capable of providing 300 pounds of force at mid-stroke and 500 pounds of force at the end of the throw.
 - 6. Frogs shall be one piece, rail-bound manganese, and heavy walled. Contractor shall use resilient fastening system for all frog base plates and gage plates.
 - 7. Frogs shall conform to AREMA Portfolio of Trackwork Plans, Plan No. 623-03, 16' rail bound manganese steel frog for 115 RE rail with screw spike plates and elastic fasteners. Frogs shall be drilled for three (3) bolts to match the specified rail.
 - 8. The arm ends of the frogs shall be beveled as per AREMA Portfolio Plan No. 1005-03 "Beveling of Rail Ends for Special Trackwork". Rail bending shall be done with great care to avoid stress build up and injury to the rails. Rail shall be bent cold whenever possible. If heating the rail should be necessary, the surface temperature of the rail shall not exceed 800° F and the surface of the remainder of the rail section shall not exceed 1100° F. Heating shall be done in a manner so as to have a minimal adverse effect on the metal.

~~9. All switch ties shall be provided by the Contractor and shall conform to Section 34 11 32 "Timber Ties".~~

10. Switch point guards shall be furnished for all switches. Switch point guards shall be boltless adjustable switch point guard Model U69 as manufactured by A&K Railroad Materials, Model FM as manufactured by Western-Cullen-Hayes, Model 33C1 as manufactured by Voestalpine Nortrak or approved equal. Switch point guards shall be furnished with appropriate switch plates and mounting hardware. Switch point guards may be sourced from Europe.
11. Switch stands shall be Racor Model 22-E trailable, adjustable switch stands with low banner, "Backsaver" handle, adjustable connecting rod and bolts with lock washers and cotter pins. The bolt hole in the switch stands, connecting rods and switch rods (42-inches) shall all be the same matching diameter with matching size bolts. Mismatch of bolts and bolt holes will be cause for rejection.
12. Turnouts shall be of bolted design. All switch bolts shall be designed for use with cotter pins and shall be installed with lock washers for cotter pins.
13. Switch rods and clips shall be insulated. Switch rods shall be horizontal and conform to AREMA Plan No. 222-03. Switch rods shall conform to AREMA Specification Section M6. The Contractor shall furnish switch rods with all associated slide and runoff plates.
14. Switch rods shall conform to the AAR Signal Manual, Part 14.5.3, Signal Specifications, "Recommended Developmental Criteria for Insulating Material".
 - a. Fiber angles, plates and end posts shall be fabricated of fiberglass mat reinforced polyester, 3/16-inch thick, GPO- I sheet stock, NEMA Class B.
 - b. Fiber bushings shall be fabricated of NEMA Grade 10 epoxy glass fabric.
 - c. All cut edges of fiberglass shall be sealed with Sherwin Williams Polane, 2-part coatings or an accepted equal.
 - d. Prior to assembly, all contact metal surfaces shall be painted with General Electric Insulating Enamel, Red Glyptol No. 1202 or equal.
15. Gage Plates
 - a. Plates shall conform to the AREMA "Specifications for Special Trackwork", Section M7, rolled "Mild Steel".
 - b. Insulation shall conform to the AAR Signal Manual, Part 116, Signal Specifications, "Assembly and Test of Insulated Track Fittings".
 - c. Insulated gage plates shall be provided for all turnouts.

2.2 RAIL

- A. Rail for turnouts shall be new, 115 RE head hardened rail conforming to AREMA Chapter 4.

2.3 TIES

- A. Wood ties shall conform to Section 34 11 32, Timber Ties.

2.4 JOINT BARS AND COMPROMISE JOINTS:

- A. Joint bars and compromise joints shall conform to Section 34 05 17, Railroad Work.

2.5 TIE PLATES:

A. Tie plates shall conform Section 34 05 17, Railroad Work.

2.6 TRACK BOLTS, NUTS, AND SPRING WASHERS:

A. Track bolts, nuts and washers shall conform to Section 34 05 17, Railroad Work.

2.7 ELASTIC RAIL CLIPS:

A. Elastic rail shall conform to Section 34 05 17, Railroad Work.

2.8 SCREW SPIKES:

A. Screw spikes shall conform to Section 34 05 17, Railroad Work.

PART 3 - EXECUTION

3.01 NOT USED

END OF SECTION