



May 20, 2013

TO: All Plan Holders

FROM: Luis Mendez, Deputy Director SCCRTC

Bill Baker, Resident Engineer, Santa Cruz Branch Line Bridge Supports, Repairs and Member Replacements Project

**SUBJECT: Notice – Questions & Answers**

1. **Q:** Bid item number 37, Handrail Repair, does not have a bid item description. Which type of Handrail is in need of repair; cable or wood and on which bridge shall the repairs be made?

**A:** See inspection reports in the reference documents for details on Bid Item 30 - handrail repair. Bidder to determine type and quantity of repair based on inspection reports, site visit of April 10<sup>th</sup> and bidder's own site investigations.

2. **Q:** On page one of the general notes for the La Selva Bridge under General Notes it states, "All material and workmanship shall conform to the American Railway Engineering and Maintenance of Way Association's Manual for Railway Engineering (AREMA Manual)..." In AREMA Manual Chapter 15 Section 3 Subsection A & B pertains to structural steel fabricators qualifications which states that fabricators must pose a SBR (Simple Steel Bridge Structures) or a CBR (Major Steel Bridge Structures) or another suitable program as determined by the engineer. As well as, "Structural steel fabricators of Fracture Critical Members shall be certified under the AISC Quality Certification Program, with a Fracture Critical Endorsement (F) or another suitable program as determined by the engineer." Is it the owner's intentions that the structural steel fabricator have either a SBR or a CBR certification and a Fracture Critical Endorsement (F) for this project? Also what constitutes a "suitable program" that will be accepted by the engineer in lieu of the aforementioned qualifications?

**A:** To Clarify AREMA Chapter 15, Section 3.1.1, Subpart a) AISC Quality Certification CBR shall be required for fabrication of all bridge steel. To Clarify AREMA Chapter 15, Section 3.1.1, Subpart b) AISC Quality Certification Program with a Fracture Critical Endorsement shall be required for the fabrication of any members listed as Fracture Critical Members (FCM) within the Contract Plans. No other qualification will be deemed suitable.

3. **Q:** While reviewing the drawings for the La Selva Bridge, the Span Top Plan drawing for Span 5 seems to be missing. Was this was left out intentionally or is it located someplace else in the drawings?

**A:** Rev. 1 of Drawing 54 of 67 is in the La Selva Package, Addendum No 4.

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4. **Q:** It appears that the following represents the grading of the wood materials for the project:
- Specie (Douglas Fir, Hem-Fir, SYP)
  - Grade - Select Structural, #1, or #2
  - Surfacing - Rough (Full Sawn, or Standard Sawn), S4S, or S1S, S1E, S1S1E, Etc.
  - Treatment type - Creosote, 50/50 Creosote/Petroleum oil, Penta-H, ACZA or ACQ
  - Retention of Treatment - 12#, 10#, 8# if Creosote or 50/50, Penta-H .60, .50, .40, ACZA .4#, .6#, 1.0#, 1.5#, 2.5#
- a) What is the appropriate AWPAC UC (use code) this would spell out retentions & type of treatment? What preservative or preservatives are to be used? (The UC's gives more than 1 option)
- b) Which Certifications are required - Independent, Agency Certs (WCLIB WWPA PLIB)?
- c) Is there any moisture content spec?
- d) What is the grade and surfacing of the material?
- e) What certificates are needed? - Mill certificates, Agency certificates, or 3rd party certificates.
- f) What are the BMP's required? If so are treating plant certificate OK or do we need 3rd party?
- A:** a) AREMA only refers to AWPAC C28 for the preservative requirements for glulam timber (Ch. 7 Sec 1.5.1.6). Other preservatives vary by the location of the bridge element (i.e. above ground dry, marine use, ground contact, etc.) Those preservative designations vary greatly and can be found in AWPAC's Use Category System: User Specification for Treated Wood.
- b) The appropriate grading Agencies/Bureaus are referenced in the Tables found in AREMA Chapter 7, Section 2. They are:
- NELMA – Northeastern Lumber Manufacturers Association, Inc.
  - NLGA - National Lumber Grades Authority
  - SPIB – Southern Pine Inspection Bureau
  - WCLIB – West Coast Lumber Inspection Bureau
  - WWPA – Western Wood Products Association
- c) Moisture content is listed in AREMA Table 7-2-13 per specie.
- d) Grade is listed in AREMA Table 7-2-13. Grade recommendations for railway lumber can be found in ASTM D 2555 and ASTM D245 (AREMA Ch. 7 Sec 1.4.1b). AREMA does not specify rough or surfacing of lumber, except for a note for dapping ties (Ch. 7 Sec. 1.13.7).
- e) The above agency/bureau certification of the mills is sufficient. List of certified mills can be found on the agencies' websites. AREMA has some information regarding the agency/bureau, but is not practical to list here. Each State has its own and lists the mills which are certified depending on the species of wood.

f) The above agency/bureau certification of the treatment plants is sufficient. AREMA provides some guidance toward the type of treatment to be used. Depending on the location of the treatment facility, there will be an agency/bureau with a list of certified treatment facilities.

5. **Q:** What vertical height shall we assume the new retaining wall will be; the 4 to 5 feet it is currently or greater since at some locations it is supported from below?

**A:** The height of the wall would be approximately 4' to 5' in height. The wall is to be approximately 15' from centerline of the existing track alignment with top of wall even with top of tie.

6. **Q:** Also what will the anticipated surcharge loading be; will it be cooper E-80 loading or less?

**A:** The surcharge loading would be Copper E-80 loading.

7. **Q:** Bid Items #29, #30 and #32 don't seem to have a description of what work is entailed in Appendix G, as the other bid items not shown in the drawings have.

- a) Can you please provide a drawings of the typical walkway to be repaired under bid item #29 and for the typical handrail to be repaired under bid item #30?

The only description we have found is a brief reference in the questions and answers, shown below:

“Notes:

1. For walkway repairs, only damaged portions (i.e. holes, broken ledgers, etc.) need to be repaired. There is no total replacement. This is identified as a lineal foot item in the bid schedule.”

- b) Can you please provide a description of what bid item #32 covers? Is the quantity “each” the same as per day in this usage?

**A:** a) See the inspection reports in the reference documents for details on the handrail and walkway repairs. The Bidder is to determine type and quantity of repair based on inspection reports, site visit of April 10<sup>th</sup> and bidder's own site investigations.

b) Refer to Item 40. DELAYS, in the General Conditions, Pgs. 15-16 for information on Bid Item #32. The quantity “each” is the same as per day in this usage.