BART Agreement Number: 6M8177  
Approval Date: 05/26/21

Work Plan No. B03-01-Continued Wheel/Rail Optimization Services

SCOPE OF SERVICES

The services to be performed by the Consultant shall consist of the following:

Task 1:
1. QC/QA field inspection requiring one FTE to go out nightly to monitor the progress and quality of each shift’s rail grinding effort.
2. Daily reporting of these efforts through a live utility website called ARMapp. This tool allows Track Engineering a visual of where re-profiling efforts are taking place and the quality of those efforts.

Task 2:
Scheduling of re-profiling efforts based on the grind quality index and is contingent on BART resource availability.

Task 3:
Data collection. ARM will continue collecting data at 50+ locations throughout the District. The data collected will be used to trend the effectiveness of the newly designed rail profiles. The three defined data types to be collected are:
   a. Eddy Current, for Rolling Contact Fatigue crack length measurements. This data will highlight point loading, a damage mechanism for rail. RCF length measurements shall be detectable from 1 to 20 millimeters.
      i. Eddy Current Measuring equipment shall consist of a Walking Stick type, from one of the following three suppliers:
         1. TSC ACFM
         2. NEWT International Lizard
         3. Rohmann Drasine
      ii. Measuring equipment shall be calibrated and maintained as specified in supplier maintenance manuals.
   b. CAT Trolley, for Corrugation measurements. This data will highlight where rail corrugations are located and what specific wavelength they are forming at.
   c. Miniprof, for rail head profile shape Q/A. This data will highlight the wheel rail interaction and guide the grinding schedule.

Prime: Prescience

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<th>Subconsultant</th>
<th>Amount</th>
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<th>SBE (Y/N)</th>
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<td>Inspection Services (ISI)</td>
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<td>Advanced Rail Mgmt</td>
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Total Work Plan Value: $2,581,565