

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 ARMap. 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

Subconsultant	Amount	DBE (Y/N)	SBE (Y/N)
Inspection Services (ISI)	\$372,042	Y	Y
Advanced Rail Mgmt	\$2,074, 368	N	N

Total Work Plan Value: \$2,581,565