CapMetro

RRC0299 Defect Detectors

Goal of the Project

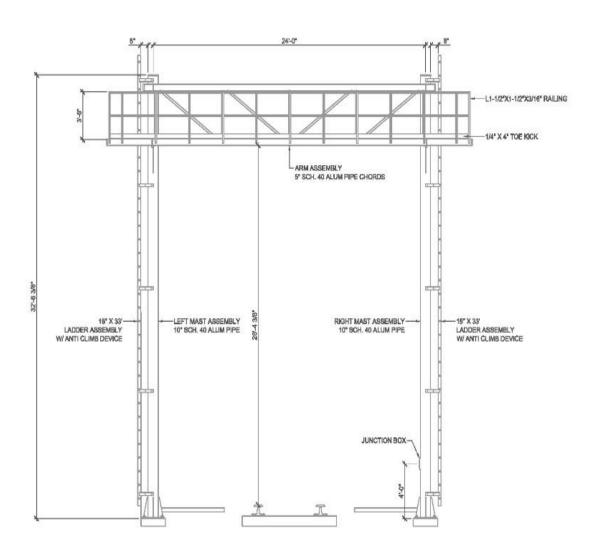
Install 2 new locations enabling CapMetro to have 2 Identical Standardized defect detector sites.

Systems aim to identify small problems before they escalate into major, costly, and potentially dangerous situations.

Systems protect CapMetro's existing platforms and canopies.

Project is guided in anticipation of strengthening regulations in response to the Hazardous Material train derailment in East Palestine, Ohio.

Shifted Load Detector (High/Wide)



- Safety device designed to protect overhead structures IE: Platform Canopies, bridges, and overpasses.
- Uses laser-based sensors to scan passing trains.
- If loads exceed the safe dimensions or appear shifted, an alert is triggered.
- Notifying dispatchers & control centers (real time).

Dragging Equipment Detector (DED)

- Device used to identify objects hanging or dragging from passing trains.
- When dragging objects hit the detector an alarm is generated notifying train crew and dispatch (real time).
- Utilizes wheel sensors to match impacts to specific axles, helping pinpoint the location on the train.



Hot Bearing Detectors (HBD)



- Crucial safety device to identify overheating bearings on passing trains.
- Use infrared sensors to measure the temperatures of passing train wheel bearings.
- Train crews receive an automated message if a problem is detected (real time).

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Thank you!