

## **City of Morgan Hill “Quiet Zone”**

### **Scope of Work**

#### **1. Description**

The Federal Railroad Administration (FRA) has developed the Train Horn Rule. This rule identifies the requirements for the creation of a “quiet zone” at highway-rail at-grade crossings, including the use of Supplemental Safety Measures (SSM) and Alternative Safety Measures (ASM), to be incorporated at the at-grade crossing.

The City of Morgan Hill (City) is interested in establishing a quiet zone at three existing at-grade railroad crossings:

- Dunne Avenue (CPUC No. 001E-67.75, USDOT No. 755162N)
- Main Avenue (CPUC No. 001E-67.25, USDOT No. 755159F)
- Tilton Avenue (CPUC NO. 001E-65.20, USDOT No. 755155D)

These at-grade crossings are operated and maintained by the Union Pacific Railroad (UPRR). The other railroads that use this corridor are Caltrain and Amtrak. In May 2015, the City Council discussed applying for grants for the funding of the quiet zones.

Working with the California Public Utilities Commission (CPUC), UPRR, FRA, and the City, Michael Baker International (Michael Baker) will develop a feasibility study for the development of a “quiet zone” at each of these three crossings. This scope of work defines the level of effort necessary to study the feasibility of establishing a quiet zone at each referenced crossing. The work product from this effort will serve as the necessary background information for the City to decide whether to proceed with the establishment of a “quiet zone”. Upon the final determination of what will be necessary to develop the “quiet zone”, a separate scope of work will be prepared for the final engineering and permitting.

#### **2. Task 1: Project Management, Meetings**

Included in this task are the project management activities of budget management, scheduling, administrative assistance, and overall management of the project. Michael Baker will manage the project to ensure it stays on schedule and within budget. An important part of that management will be following the schedule and informing the City of any issues.

##### **a. Meetings**

Michael Baker will organize, attend, and document the following meetings associated with the effort.

##### **i. Project Kickoff Meeting**

A project kickoff meeting will be held, with staff from the City and Michael Baker in attendance. This meeting will discuss the project workflow and establish the project reporting procedures, invoicing procedures, project schedule, and meeting frequency.

Deliverables: Meeting agenda, meeting minutes

ii. Project Development Team Meetings

Project Development Team (PDT) meetings will be held once a month for the duration of the project. These meetings will include the Michael Baker team and City staff. Michael Baker will prepare the necessary exhibits for discussion at the meeting, in addition to agendas and minutes. A total of three meetings is assumed.

Deliverables: Meeting agendas, meeting minutes

iii. Meetings with City Staff

Regular meetings will be held with City staff to discuss progress on the project and the project schedule, and budget. Issues that are pending or require specific action will be discussed, and an action plan will be established.

iv. City Council Meeting

An initial meeting will be scheduled with the City Council. This meeting will inform the Council on the nature of the project and define the necessary steps for the completion of the study. Michael Baker will work with City staff to develop the materials necessary for this meeting, including a PowerPoint presentation, and will assist the City with preparation of the City Council report.

3. Task 2: Pre-Study/Existing Conditions

a. Task 2.1: Data Collection and Field Review

Michael Baker will gather the relevant information regarding the at-grade crossings. This information includes the following:

- As-built information regarding the crossing (to be provided by the City)
- Scaled aerial photography of the crossing (to be provided by the City)
- Traffic data (to be provided by the City)
- FRA crossing data
- Crossing data from the Union Pacific Railroad
- Other applicable studies and information

b. Task 2.2: Quiet Zone Risk Index

Using the FRA Quiet Zone Calculator, Michael Baker will calculate the Quiet Zone Risk Index (QZRI) of the existing crossings. QZRI's will be developed for existing conditions and for up to two proposed scenarios. Combinations of options will be analyzed that minimize the impact on adjacent landowners and businesses.

c. Task 2.3: Prediagnostic Meeting

Michael Baker will organize a prediagnostic meeting with the City. The purpose of this meeting will be to discuss the likely improvements that the UPRR, the FRA, and the CPUC will require.

#### 4. Task 3: Analysis/Feasibility Study

##### a. Task 3.1: Conceptual Plans

Based on the information obtained during Task 1, Michael Baker will develop conceptual exhibits showing the proposed safety measures. The exhibits will be prepared using MicroStation and will show the appropriate level of detail to ascertain the Supplemental Safety Measures (SSM) and Alternative Safety Measures (ASM) that will be necessary at each of the three crossings. These drawings will be shown over available aerial photography.

Deliverable: At-grade crossing exhibits showing potential configurations of safety and traffic devices to be implemented

##### b. Task 3.2: Conceptual Cost Estimates

Using the data shown in the conceptual exhibits, Michael Baker will prepare conceptual cost estimates that will include construction, maintenance, permitting, and related at-grade crossing costs.

Deliverable: Conceptual cost estimates, to be included with the draft Quiet Zone Assessment

##### c. Task 3.3: Draft Quiet Zone Assessment

A draft Quiet Zone Assessment will be prepared as a technical memorandum. This assessment will outline existing conditions, proposed at-grade crossing enhancements, project requirements, and the quiet zone permitting process and will list the anticipated stakeholders.

Deliverable: Draft Quiet Zone Assessment

##### d. Task 3.3: Field Diagnostic Meeting

A field diagnostic meeting will be held that will include the City, the CPUC, and the UPRR. The purpose of this meeting will be to present and confirm the draft conceptual designs discussed in the draft Quiet Zone Assessment. Recommendations from this meeting will be addressed in the final Quiet Zone Assessment.

#### 5. Task 4: Final Assessment Documents

##### a. Final Conceptual Plans

We will revise the conceptual plans based on recommendations received from stakeholders and input from the diagnostic meeting.

Deliverable: Final conceptual plans

##### b. Final Quiet Zone Assessment

The Quiet Zone Assessment will be updated to reflect agency comments on the draft as well as information received during the field diagnostic meeting. Included will be revised cost estimates and other revisions as necessary.

Deliverable: Final Quiet Zone Assessment

6. Task 5: Public Meetings (optional)

This is an optional task for outreach to the public regarding the development of the Quiet Zone Feasibility Study.

a. Meeting Preparation

Michael Baker will prepare and mail meeting notices to addresses within a specified radius of the crossings. The exact radius will be determined after discussion with City staff.

Deliverable: Meeting notice postcards

b. Meeting Presentation Materials

- i. Michael Baker will prepare boards for discussion with the public at the public meetings. These boards will show the crossings, potential configurations, and safety methods for at-grade crossings.

Deliverable: Presentation boards

- ii. Michael Baker will prepare a PowerPoint presentation for use at the public meetings. The PowerPoint will discuss safety at at-grade crossings and the “quiet zone” process.

Deliverable: PowerPoint

iii. Meeting Handouts

Michael Baker will design the layout for the brochures for distribution at public meetings.

iv. Assumptions:

- 1. The radius and number of postcards will be determined as the outreach plan is finalized.
- 2. The City and Michael Baker will discuss the most efficient way of printing the brochures using a City or Michael Baker vendor.

The cost for Tasks 1-4 is \$53,038.50

The cost of Task 5 (Optional) is \$5,280