

**Ulster County Transportation Council**  
*UPWP 44.23.02-04: Boices Lane Rail Safety Study*

**SCHEDULE A**  
**SCOPE OF SERVICES**

**1. Overview of Services to be Provided**

The FIRM shall develop Traffic Operations and Safety Plan for the Boices Lane Railroad Crossing (the “Plan”) as further outlined below in this Schedule A (the “Project”). The FIRM has assigned Mark Sargent as the FIRM’S Project Manager (PM) for this Project.

**2. Project Management**

The COUNTY’S Project Coordinator (PC) will be the Ulster County Planning Board Director or his designee. The PC shall approve Project deliverables and their distribution to the Technical Advisory Committee (TAC), approve scheduling of Project events, grant initial approval of all invoices, handle any media inquiries and perform general Project administration work. The PC shall also be responsible for final acceptance of Project deliverables, which acceptance shall be made in writing to the FIRM after consultation with the TAC.

**3. Technical Advisory Committee (TAC)**

A Technical Advisory Committee shall be formed and shall consist of the following: Ulster County Planning Department’s Senior Transportation Planner, representatives of the New York State Department of Transportation, the Ulster County Department of Public Works, CSX Railroad, the Town of Ulster, and such additional members as may be determined necessary by the PC. Throughout the Project, the TAC shall be provided draft copies of all materials for comments, and shall be included in all Project meetings.

**The SERVICES shall be in accordance with the TASK descriptions below**

**SUMMARY OF TASKS**

The Project includes the following tasks:

- Task 1: Project Management, Communication, Scope and Schedule Administration, and Public Outreach
- Task 2: Inventory and Mapping:
- Task 3: Existing and Future Traffic Conditions
- Task 4: Analysis and Assessment
- Task 5: Draft and Final Plan

**TASK DETAILS**

The purpose of the Plan is to assess the traffic operations and safety at the existing railroad crossing on Boices Lane, including the adjacent intersections with Morton Boulevard and John Clark Drive, and to evaluate alternatives to reduce congestion and address safety issues identified as part of the Plan. The effort shall build on previous transportation improvement recommendations in the area. The Plan shall also specifically evaluate alternatives to allow certain non-conflicting turning movements to occur during the rail pre-emption signal phase.

**TASK 1: Project Management, Communication, Scope and Schedule, Public Outreach:**

The purpose of this task is to familiarize the FIRM and the TAC with the elements of the Project, establish necessary Project assessment and communication protocols, ensure agreement with scope and schedule, and to discuss public outreach. The task also includes the public outreach components associated with the other tasks.

1. The FIRM will meet with the Ulster County Planning Department (the “Department”) staff and members of the TAC to confirm the scope and deliverables, to review Project requirements, roles and responsibilities, to identify data sources, to identify initial concerns and confirm public outreach and any additional stakeholders.
2. The FIRM will use the 2008 NYS Metropolitan Planning Organization’s Safety Assessment Guidelines and prompt lists throughout the project.

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3. General public outreach: The FIRM shall conduct one (1) public outreach meeting at which the FIRM will present data draft findings of the Plan for review and comment. The FIRM will be responsible for all presentation materials and display boards associated with this meeting.
4. Communications and Meetings:
  - a. The FIRM shall meet as necessary and no more than four (4) times with the TAC to discuss progress on the Plan and respond to questions and concerns. These meetings include the kick-off meeting and one (1) meeting each with the TAC during tasks 3, 4, and 5. The Task 4 meeting with the TAC will include a field visit to review conditions and confirm areas of concern. Summaries will be prepared for all meetings within one (1) week of the meeting and distributed to the PC and the TAC.
  - b. The FIRM will initiate a biweekly conference call with the PC and the TAC to discuss the progress on the Plan and respond to questions and concerns.
  - c. The FIRM shall provide content to the Department for posting to a website or social media of meeting announcements, presentations, work products, and other materials produced for the Plan.

*Task 1 Deliverables: The FIRM shall produce a final scope and schedule for the Project; Kick-off Meeting minutes; TAC formation, data availability summary, presentations for public meetings, summary of any elected official and stakeholder contacts and Project update memos and progress reports as requested.*

### **TASK 2: Inventory and Mapping:**

This task will inventory the existing conditions in the Project area, gather key transportation system data for analysis, and provide mapping for the Plan area and the associated regional road network in the immediate vicinity.

1. Existing Conditions Survey: The FIRM will complete an existing conditions survey that shall include the following areas: the railroad crossing, the adjacent intersections of Morton Boulevard and John Clark Drive, right-of-way for the area, pavement markings, traffic signals and signs, and other above ground features. The FIRM shall also collect any existing plans or “as built” drawings of the transportation infrastructure as part of the existing conditions survey. Base mapping will be prepared at 1”= 40’ scale. Mapping will also be provided at an appropriate scale that shows the context of the railroad crossing with the regional road network including the Tech City area. Concept plans or other proposed improvements to the Boices Lane and Enterprise Drive associated with Tech City or the Boices Lane intersection with NYS Rt. 9W shall be incorporated into this mapping.
2. Verify Existing Conditions: The FIRM will verify existing roadway and traffic control conditions at the railroad crossing and at the two (2) adjacent area intersections; Morton Boulevard and John Clarke Drive. Such verification will include lane widths, storage lengths, signal timing, pre-emption, and speed limits. Crash data will be obtained for the most recent five (5) years of available data.

*Task 2 Deliverables: Base maps at a 1:40 scale will be provided as will maps at an appropriate scale showing the Plan in the context of the surrounding road network. Maps will be provided to the County’s PC for review prior to release to the TAC.*

### **TASK 3 – Existing and Future Traffic Conditions**

This task will examine the existing traffic conditions and estimate future traffic growth based on known or likely development and any recommended traffic growth factor from the TAC.

1. Obtain Traffic Data: The FIRM will obtain available traffic data from proposed or completed projects, NYSDOT, and UCTC. An automatic traffic recorder (ATR) will be installed on Boices Lane for a period of

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several days including a weekend. A continuous count for the duration of seventy-two (72) hours will be obtained for the weekdays to ensure a valid count for NYSDOT purposes. In addition to the ATR counts, visual observation counts of peak hour traffic, including pedestrian counts, will be conducted to verify and establish existing conditions for weekday AM and PM peak periods. In addition, train movements including estimates of the time that the railroad crossing is blocked by trains will be measured during the traffic observation periods. Existing condition traffic simulation models will be developed using SYNCRO. Future traffic volumes will be estimated using input from previous forecasts included in the Tech City Generic Environmental Impact Statement and input from the TAC. The Firm will also outreach to the CSX Railroad for available train data. The FIRM will work with NYSDOT to request set up of an acoustic train counter during the Project to count train movements and estimates of the time that the railroad crossing is blocked.

*Task 3 Deliverables: See the Task 4 deliverables which include the deliverables of Task 3.*

### **TASK 4 – Analysis and Assessment**

This task will analyze and assess the data, projections, and expressed concerns included in tasks 1-3 and provide a concise overview with recommendations for consideration by the PC and the TAC.

1. The FIRM will analyze data from Tasks 1 through 3, including existing conditions and future traffic volume estimates. Crash data will be examined and a calculation of crash rates and identification of crash patterns will be performed. Based on the analysis, recommendations will be made that address identified safety and operational concerns. The recommendations may include traffic signal changes, geometric changes, and pedestrian improvements, among others. Specific recommendations shall include how best to address non-conflicting turning movements during rail pre-emption signal phase.

*Task 4 Deliverables: Existing Conditions and Assessment Presentation: The FIRM will prepare an existing conditions and assessment presentation for work completed for tasks 1-4. The presentation will provide an overview of the Plan, analysis of the data, baseline mapping, identification of problem areas and concerns, preliminary recommendations and concept plans. The presentation will be provided to the TAC for review and comment and after review form the basis for the public meeting required in Task 1.*

### **TASK 5 – Draft and Final Plan**

This task will incorporate the efforts and deliverables of the other tasks into a draft and final Plan.

1. The FIRM will prepare a Draft Plan for review and comment utilizing the information and analysis associated with tasks 1 through 4 and building on the existing conditions and assessment presentation in Task 4. The Draft Plan will be a concise technical report that utilizes graphics where possible. The Draft Plan will include operational and safety conditions, conceptual improvement plans, recommendations and cost estimates. The Draft Plan will be submitted to the TAC for review and comments prior to the public meeting. A public meeting will be conducted on the Draft Plan. The Presentation required in Task 4 shall be amended as necessary, based on the TAC's comments on the Draft Plan, and will form the basis of the public meeting. Comments received at the public meeting and any additional comments by the TAC will be incorporated as deemed necessary by the PC into a Final Plan. The Final Plan will be approved by the PC in consultation with the TAC.

*Task 5 Deliverables: Draft and Final Plan. The FIRM will submit a draft and final plan in accordance with the requirements of Task 5, one (1) digital and ten (10) hard copies of the each plan will be provided to the County's PC*

### **General Note on Deliverables**

All deliverables listed above shall be provided by the FIRM in their original digital format and in a format such as Adobe PDF that can be easily viewed and printed. Graphics and presentations required for the tasks above shall be provided by the FIRM to the PC for initial review prior to their release to the TAC for comments. The FIRM shall

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make one (1) consolidated set of revisions for each, at no additional cost, if requested by the PC. The draft, revisions, and final plan shall be subject to the approval of the PC in consultation with the TAC. All deliverables above and any other material, developed by the FIRM in preparing the Plan, including presentations and photos, will be made available to the COUNTY in original format. The FIRM shall provide five (5) CD's/DVD's containing all deliverables and other project documents, such as presentations, spreadsheets, photos, etc., both native format and where appropriate, in Adobe PDF format, to be indexed as approved by the PC.