PATRICK ENGINEERING INC.

MEETING MINUTES

Meeting Date: August 17, 2009

Date Issued: August 19, 2009

Location: Patrick Engineering Office

Project: Washington Street, Hainesville Road to Lake Street, Section #08-00121-08-WR

Topic: Canadian National Railroad (CN) Coordination Meeting

Attendees	Representing	Phone
John Henriksen	CN	708-332-3557
Jarrod Cebulski	Patrick Engineering Inc (Patrick)	630-795-7468
Steve Heath	Patrick	630-795-7306
John Heim	Patrick	630-795-7296

The following notes reflect our understanding of the discussions and decisions made at this meeting. If you have any questions, additions or comments, please contact us at the above address. We will consider the minutes to be accurate unless written notice is received within 10 working days of the date issued.

The meeting began at 3:30 p.m. The purpose of the meeting was an initial coordination meeting with the CN for the Phase I Study for Washington Street from Hainesville Road to Lake Street.

1. The meeting began with introductions. Patrick then provided some background information on the recently commenced Phase I Study. The lead agency is the Lake County Division of Transportation (LCDOT). LCDOT has retained Patrick to perform a Phase I engineering and environmental study for the improvement of Washington Street from Hainesville Road on the west to Lake Street on the east. The project is within the Villages of Grayslake, Hainesville, and Round Lake Park.

2. The existing roadway is mostly one lane in each direction with a rural cross-section and open ditch drainage. The general scope of the study will be for a corridor improvement. The study will evaluate the possibility of additional travel lanes along the corridor and a potential grade separation (over- or under-pass) of Washington Street with the CN/Metra rail line. The two signalized intersections at the project termini (Lake Street and Hainesville Road) will also be analyzed for additional through and/or turning lanes. Drainage improvements will also be evaluated. The Phase I portion of the project is anticipated to have a 2-year schedule. LCDOT is processing this study through the Illinois Department of Transportation (IDOT) and the Federal Highway Administration (FHWA) to render the project eligible for federal funding.

3. Patrick has completed the ground survey of the study area and has prepared preliminary plan and profile drawings for Washington Street, which LCDOT has reviewed. The plan sheets were presented and discussed. Also, preliminary profiles for a roadway overpass alternate and a roadway underpass alternate at the railroad were presented. It was noted that the roadway overpass alternative utilizes 5% grades along Washington Street and affects the

nearby intersections, while the roadway underpass alternate utilizes 4% grades and is 15' below the groundwater elevation. A decision on the preferred alternative (roadway over or under or keep at grade) will not be determined until further engineering, environmental analysis, and public involvement has occurred.

4. The CN noted that Patrick was in possession of their latest CN Design Guidelines and standards, which should be utilized in the engineering analysis. Patrick should check with the CN Manager Bridges and Structures Sandro Scola to determine the design load that should be used (E80, E90, or E100) for any bridge that will carry the railroad. It was noted that a railroad shoofly will be required for construction of a railroad bridge and the nearest adjacent constraints were identified as the Fox lake Yard 2 miles away and a diamond 2.5 miles away. There is also a track switch for the end of double track that should be considered.

5. Patrick asked whether the rail line was proposed to be double tracked. CN responded that they had no plans for this type of improvement; however, Metra should be consulted. The timetable speed on this section of the Waukesha Sub is 60 mph for both passenger and freight. This operating speed must be maintained during construction. This section of the rail line is in a Quiet Zone. There are approximately 22 Metra trains and 20 freight trains per day on this line and these numbers are anticipated to increase in the future, although not significantly. It was noted that this line extends all the way to Canada.

6. The CN stated that the existing crossing warning devices are current and in good condition. In any proposed design, multiple tracks should be designed on 15' centers, with 35' from the track centerline to the abutment of any overpass, to allow for a 10' service road along the tracks. Regarding utilities, there may be some signal lines, however, there is likely no fiber optic. Patrick can follow-up with the CN home office regarding this issue.

7. Patrick asked about raising or lowering the tracks several feet in this area to provide for the overpass or underpass. The CN stated that this is a possibility; however, they thought only a 0.1% grade would be allowed for the tracks. Further verification with the design criteria for the EJ&E integration projects revealed that a maximum 1% grade would be allowed. Regardless, any track profile adjustments should consider impacts to the next railroad/highway crossing along the rail line, such as at Lake Street.

8. The CN noted that the next submittal that they would need to see for this project would be the TS&L for any proposed bridge structure. A railroad bridge TS&L would be reviewed in detail by the CN, however, a roadway bridge structure would only be reviewed in terms of the clearances provided.

9. The meeting adjourned at approximately 4:30 p.m.

Submitted by:
PATRICK ENGINEERING INC.

Jarrod J. Cebulski, P.E.
Orig: Chuck Gleason, LCDOT
cc: Attendees
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