

# Hooksett U.S. 3/NH 28 - Project 29611

Date: February 12, 2024

**Time:** 9:00 AM – 11:00 AM

**Location:** Hooksett Town Council Chambers at the Hooksett Town Offices

35 Main Street Hooksett, NH 03106

Re: Working Group Meeting #8

### **Attendees:**

#### **NHDOT**

Dave Smith, Project Manager Jon Hebert, Senior Design Engineer\* Sarah Healey, Design Engineer

#### **WSP**

Liviu Sfintescu, Project Manager Delia Makhetha, Public Involvement Matthew Grote, Civil Engineer

### **Working Group Members**

Andre Garron, Hooksett Town Administrator
Bruce Thomas, Hooksett Town Engineer
Nate Miller, Southern New Hampshire Regional Planning Commission (SNHRPC)
William Rearick, Hooksett Schools Superintendent
Jesse Frail, Resident
Michelle Canning, Pro Technologies
State Rep. JR Hoell, State Representative

Tom Osborne, Osbornes Farm and Garden Centers, LLC

Jake Robie, Hooksett Police Department

Tony Crawford, Circle T Car Wash\*
Joseph Stalker, Hooksett Fire Department\*
David Boutin, Hooksett Town Council\*
Lawrence Yassanye, Southern New Hampshire University\*

<sup>\*</sup>Invited but not in Attendance



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### **Meeting Discussion:**

### MEETING WELCOME

- Dave Smith (NHDOT) welcomed Working Group (WG) attendees.
- Dave Smith (NHDOT) outlined the goals of the meeting:
  - o NHDOT/WSP Team to provide updates on the topics discussed at PWG Meeting #7 on Dec 11, 2023 and Town Council Meeting on Feb 12, 2024.
  - o Gather feedback from the Working Group on the design revisions.
  - o Discuss next steps.

### NHDOT REVIEWED TOPICS DISCUSSED AT PREVIOUS WORKING GROUP MEETING

### a. Alice Avenue Roundabout concept (NHDOT/WSP)

- i. A revised roundabout concept has been developed at the Rte 3/Alice Ave intersection. This roundabout has been located to balance the ROW impacts to abutting parcels and will be further adjusted as the vertical design is progressed. The current design maintains a 24' distance between the back edge of sidewalk and the former Bank of American [BofA] building for vehicle circulation, and a 14' distance between back edge of sidewalk and the Crown Trophy building.
- ii. The steep vertical grade of Alice Ave. is a challenge that will be reviewed and may result in Alice Ave. and Rte. 3 vertical profile adjustments.
- iii. Traffic operations for the Alice Ave. roundabout have not been analyzed yet but are expected to function well considering previous traffic analysis at the Mammoth Rd. roundabout.
- iv. JR Hoell noted potential concerns for vehicles entering the roundabout from Alice Ave. To successfully take a left turn, vehicles would need to cross two lanes of traffic. The typical hybrid roundabout design includes one circulatory lane from west to east and will be looked into further. Potential solutions include adding a second lane in this area of the roundabout, changing the shape from circular to oblong.
- v. NHDOT is currently reaching out to BofA owner to determine future development plans for the property which may allow for additional adjustments to the roundabout location.
- vi. M. Canning voiced opposition to the roundabout design on behalf of Bill Sullivan, owner of Crown Trophy, citing ROW impacts and approach speeds. NHDOT is in email correspondence with Mr. Sullivan to ensure he is involved as the project and design progress.
- vii. The proposed roundabout design requires a retaining wall at back edge of sidewalk on the Crown Trophy property to mitigate ROW impacts. Aesthetics



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and geotechnical requirements among other things, would be considered in the retaining wall design. For ownership and maintenance purposes, it is best to locate the retaining wall completely within NHDOT ROW. A temporary easement would be required to construct retaining wall.

### viii. Roundabout Pros:

- 1. Landscape opportunities.
- 2. Less maintenance vs. signalized intersection.
- 3. Turn around opportunity for trucks and emergency vehicles given proposed median access restrictions along corridor.
- 4. May reduce impact to abutters along Rte. 3 corridor as number of lanes at the intersection would be reduced: NB Rte 3 signalized intersection design would feature 4 lanes while the roundabout design would feature only 2 lanes and SB Rte 3 signalized intersection design would feature 3 lanes while the roundabout design would feature only 2 lanes. The median heading north may further be narrowed in areas to eliminate the need for a retaining wall at Sta. 104+50 Rt. and mitigate abutter ROW impact.
- 5. Doesn't require widening of Alice Ave thereby reducing the impacts along Alice Ave from Rte 3 to Coaker Ave (to be confirmed after the vertical design is developed).
- 6. Decreases vehicle speeds at the intersection.

#### ix. Roundabout Cons:

- 1. ROW Impacts to the abutter in the four quadrants of the intersection.
- 2. The construction of the roundabout may require raising Route 3 at the intersection to minimize the steep vertical grade along Alice Ave.
- 3. Current 1-lane circulatory lane in typical Hybrid Roundabout design may be challenging for vehicles traveling westbound from Alice Ave.
- 4. Initial construction cost is greater than signalized intersection.
- 5. Roundabout vehicular operations are less familiar to the public than a standard signalized intersection.
- x. N. Miller motioned to investigate the Alice Ave. roundabout design further, considering the vertical design.
  - 1. A. Garron seconded motion with no dissenters.

### b. Median island revisions south of the Mammoth Rd. roundabout

- i. The central median along the corridor has been updated with openings to accommodate left turns at various locations at the request of local business owners.
- ii. The notable exception is the area in front of Chantilly's and Community Plaza, where a raised island is proposed to improve safety by restricting left turns; this area feature dense driveways and the available crash data shows a larger number of accidents. Maintaining median openings will also reduce the total



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number of U-turns required at the intersections. There is a concern that tractor trailers won't be able to exit Chantilly's to travel northbound due to the raised median. The roundabout offers the ability for the tractor trailers to make a U-turn, but for the signalized intersection there isn't an ideal solution. JR Hoell suggested trucks could use the I-93 clover ramps to turn around – take I-93 SB on-ramp to exit 9N (Rte. 3 NB) offramp.

- iii. Shooters Outpost's existing access at Rte. 3 will be maintained; however, the drive needs to be shifted to the south to accommodate a left turn lane at Zachary Ave. The left turn lane considers vehicle deceleration length plus two vehicles queuing to turn left. JR Hoell noted that Shooters Outpost does not want to move their driveway.
- iv. Many trucks enter/exit the Shooter Outpost drive. The design team will review truck turning movements for the median openings to ensure a left turn heading northward is feasible and will adjust median cuts as needed. This analysis will be applied to each median opening where large trucks are expected to exit in the final design phase of the project.

## c. Mid-block crossing at Silver Ave

- i. Many pedestrians along the corridor originate from the residential areas west of the project and walk to A-1 Market at Silver Ave, J. Frail (resident) confirms this is what she observes. The project currently proposes a mid-block crossing at Silver Ave to meet this pedestrian demand.
- ii. A mid-block crossing at Embassy Ave. or Zachary Dr will also be considered. Zachary Dr seems to be located approximately mid-distance between the Silver Ave and the Mammoth Rd roundabout crossings. It was also noted that if Carrington Farms constructs a pedestrian connection to Rte 3, the mid-block crossing at Zachary Dr would provide access to both sides of Rte 3.
- iii. N. Miller noted that due to volume and speed, this corridor would be a good contender for HAWK beacon (High intensity activated crosswalk beacon), which function as a vehicular stop light when activated by a pedestrian. RRFBs (Rapid Rectangular Flashing Beacons) function more as a warning/yield sign and may not be as suited to this type of corridor.
- iv. D. Smith added that crosswalks and pedestrian warning devices will be studied further in final design.

#### d. Shoulder widths on Rte. 3

- i. Current design proposes 5' shoulders. This accommodates cyclists and has additional emergency vehicle benefits, allowing vehicles to pull over and granting emergency vehicles more width to pass.
- ii. The lane (11') and shoulder (5') create a 16' outer lane width, which is consistent with sections of Rte. 3 north and south of the project.



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- iii. Concerning ROW impact, median width may be narrowed in areas as the design progresses.
- iv. JR Hoell voices opposition to 5' shoulder, citing impacts to abutters' ROW.

## e. Left turn median merge lanes

i. NHDOT does not recommend adding median merge lanes for left turns entering Rte. 3 for two reasons – 1) opening the median may be an indication to vehicles traveling northbound that there is a left turn lane coming up and therefore encourage merge into this lane to then needing to remerge into the Rte. 3 northbound lanes. 2) The merge lanes will likely be too short to accelerate and find a gap to enter the main lanes in time. A vehicle attempting to merge will have to use right mirror and merge into 40mph + traffic, creating a potentially dangerous situation.

## f. Restricted Left Turns from Cinemagic Way (Mammoth Rd Roundabout Option)

- i. Left turns exiting Cinemagic Dr are restricted for the Mammoth Rd. roundabout design concept; vehicles will be forced to turn right and make a Uturn at the roundabout to head north.
- ii. For the Mammoth Rd. signalized intersection, left turns are not restricted because the intersection doesn't accommodate U-turns.

## g. Interim signal enhancements along project segment

i. With construction anticipated in 4-years, NHDOT will work with the community to provide interim signal improvements to address intersection congestion, such as signal retiming.

#### h. Alice Ave/Mammoth Rd intersection operation assessment

i. In a previous meeting, concern was expressed that the addition of medians on Rte 3 would limit left turns and potentially require large tractor trailers to use the Alice Ave/Mammoth rd intersection to reverse direction. This intersection is in a residential area and is not designed to accommodate large vehicles. The opinion of the design team is that large trucks are unlikely to use Alice Ave which features a steep vertical grade. Rather, these vehicles would either use the I-93 cloverleaf interchange (as explained in bullet b ii above) to reverse direction or modify their delivery routes to account for the median from Alive Ave to Silver Ave.

#### 2. PWG feedback

a. The preferred design moving forward is a 5-lane roadway section with a roundabout at the Mammoth Rd. intersection and a signalized intersection at Whitehall Rd. These designs are up for discussion pending input from the public/Town leading up to the



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Public Hearing. Afterwards, it is intended that the project layout be locked down moving into final design.

- B. Rearick left the meeting early and noted a concern about additional traffic impacting existing bus routes. JR Hoell asked if there were existing bus routes along the corridor.
   D. Smith responded, "yes" though the design team hasn't focused on bus activity much yet. Design team will review existing bus routes and identify potential impacts due to design improvements.
- c. Shuttles Auto Sales (Sta. 141+50 Lt.)
  - i. The current design proposes a retaining wall at the back edge of sidewalk to mitigate impacts to the Shuttles Auto Sales building. The building impedes sight distance for vehicles exiting Embassy Ave (looking left). The restricted sight distance, which the property owner acknowledged during discussions, poses a safety hazard.
  - ii. NHDOT has been in coordination with and informed the owners of Shuttles Auto Sales that the front portion of the building, at least needs to be acquired and demolished. Due to the age and condition of the building, the entire building is being shown as an acquisition and to be demolished as part of the improvements.
- d. Paquette Pools & Spas (Sta. 143+00 Lt.)
  - i. M. Canning (business representative) noted that Paquette Pool is opposed to their driveway location being altered.
  - ii. D. Smith responded that NHDOT proposes to rebuild Paquette's drive and reconstruct impacted parking spaces so the existing number of spaces will be maintained. The proposed driveway will be constructed while the existing driveway access is maintained to mitigate impacts to the business.
  - iii. There is an existing conflict between the northbound lane queue at the existing signal and the existing driveway location, restricting exiting vehicles from entering the roadway during peak travel times. Both design options propose a median to protect the left turn lane, the existing driveway needs to be relocated for both design options.
- e. Stone House (Sta. 167+00 Rt.)
  - i. B. Thomas noted that the regrading of the Stone House property created an offsite drainage issue for the Colorful Apple Learning Center (Sta. 165+00 Rt.).
  - ii. The project team will review this area during the final design phase of the project to determine whether this issue can be resolved however offsite drainage challenges such as this will likely need to be addressed by the property owner themselves. It was noted that the proposed project will



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construct curb and a closed drainage system which will collect roadway drainage runoff.

- 3. Schedule/Next Steps
  - a. Formal meetings
    - i. Public Informational meeting March 2024
    - ii. Public Officials meeting April 2024
    - iii. Project Working Group meeting May 2024 (if needed)
    - iv. Public Hearing August 2024
  - b. Ongoing Efforts
    - i. Property/Business Owner discussions

Dave Smith (NHDOT) thanked the WG for their time and closed the meeting at 11:00 am.

## **ACTION ITEMS**

- Develop the vertical design of the Alice Ave roundabout to confirm its impacts. WSP/NHDOT
- Reach out to the owners of BofA and Crown Trophy to discuss the Alice Ave roundabout. NHDOT/WSP
- Assess traffic operations of the Alice Ave roundabout. WSP/NHDOT
- Evaluate another midblock crossing between Silver Ave and Mammoth Rd. NHDOT
- Review school bus route along the corridor. NHDOT