

# US Route 3/NH 28 Hooksett 29611 Roadway Improvements Project



Working Group Meeting #9

April 17, 2024

2:30 PM – 4:00 PM



# Meeting Agenda

1. Meeting Purpose and Goals
2. Alice Ave – Signalized Intersection Design Alternative
3. Alice Ave – Roundabout Design Alternative
  - a. Design Characteristics
  - b. Traffic Operations
  - c. Roundabout vs. Signalized Intersection Comparison
4. Feedback from working group
5. NHDOT Recommendation



# Alice Avenue Intersection Existing Condition





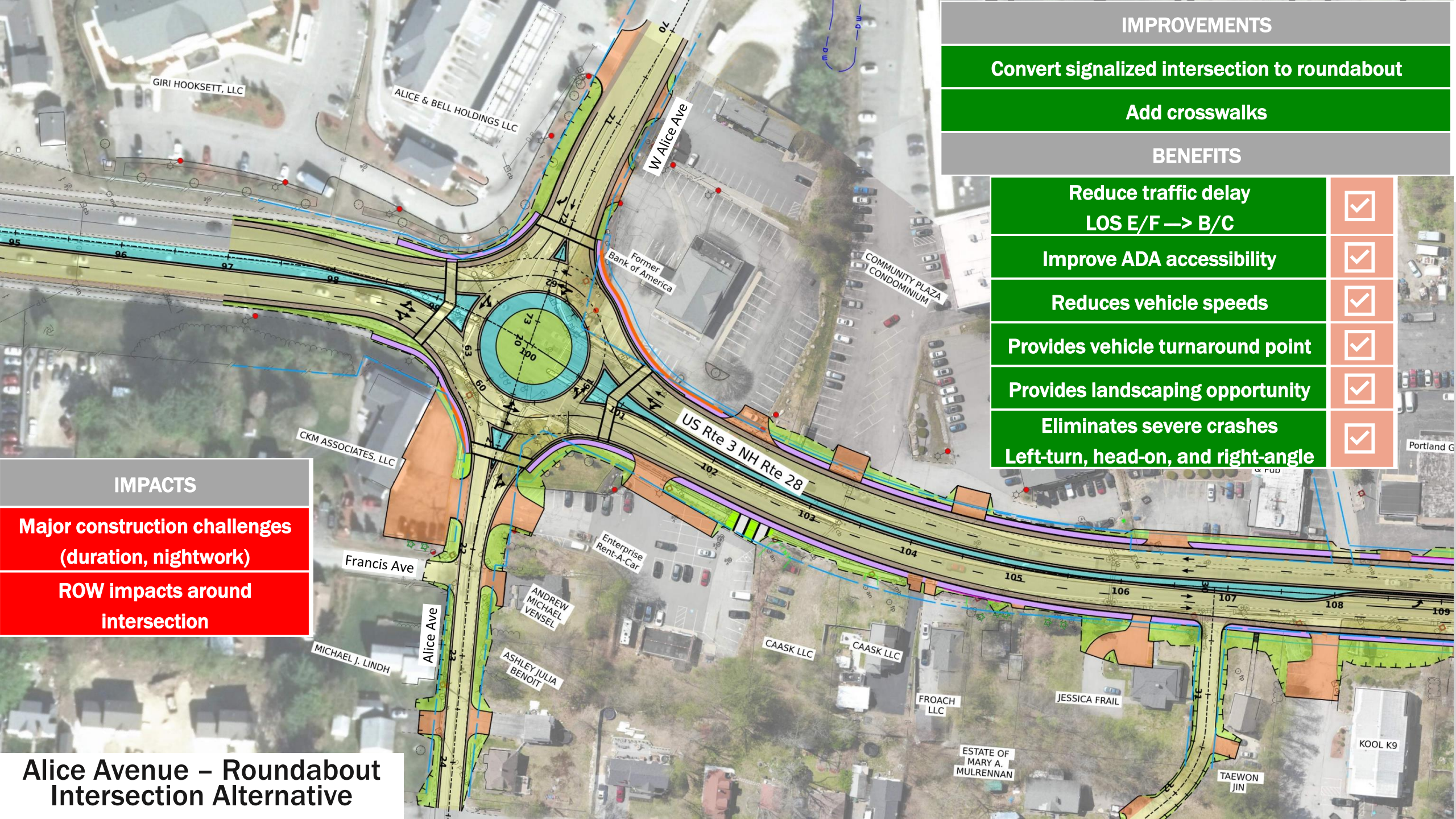


**LEGEND:**  
 Black arrow = Existing traffic lane  
 Green arrow = Additional traffic lane

IMPROVEMENTS	
Additional lanes on Rte. 3 & Alice Ave	
Modernize traffic signal	
Add crosswalks	
BENEFITS	
Reduce traffic delay LOS E/F → C	<input checked="" type="checkbox"/>
Improve ADA accessibility	<input checked="" type="checkbox"/>

**Alice Avenue - Signalized Intersection Alternative**





**IMPROVEMENTS**

**Convert signalized intersection to roundabout**

**Add crosswalks**

**BENEFITS**

**Reduce traffic delay  
LOS E/F → B/C**



**Improve ADA accessibility**



**Reduces vehicle speeds**



**Provides vehicle turnaround point**



**Provides landscaping opportunity**



**Eliminates severe crashes  
Left-turn, head-on, and right-angle**



**IMPACTS**

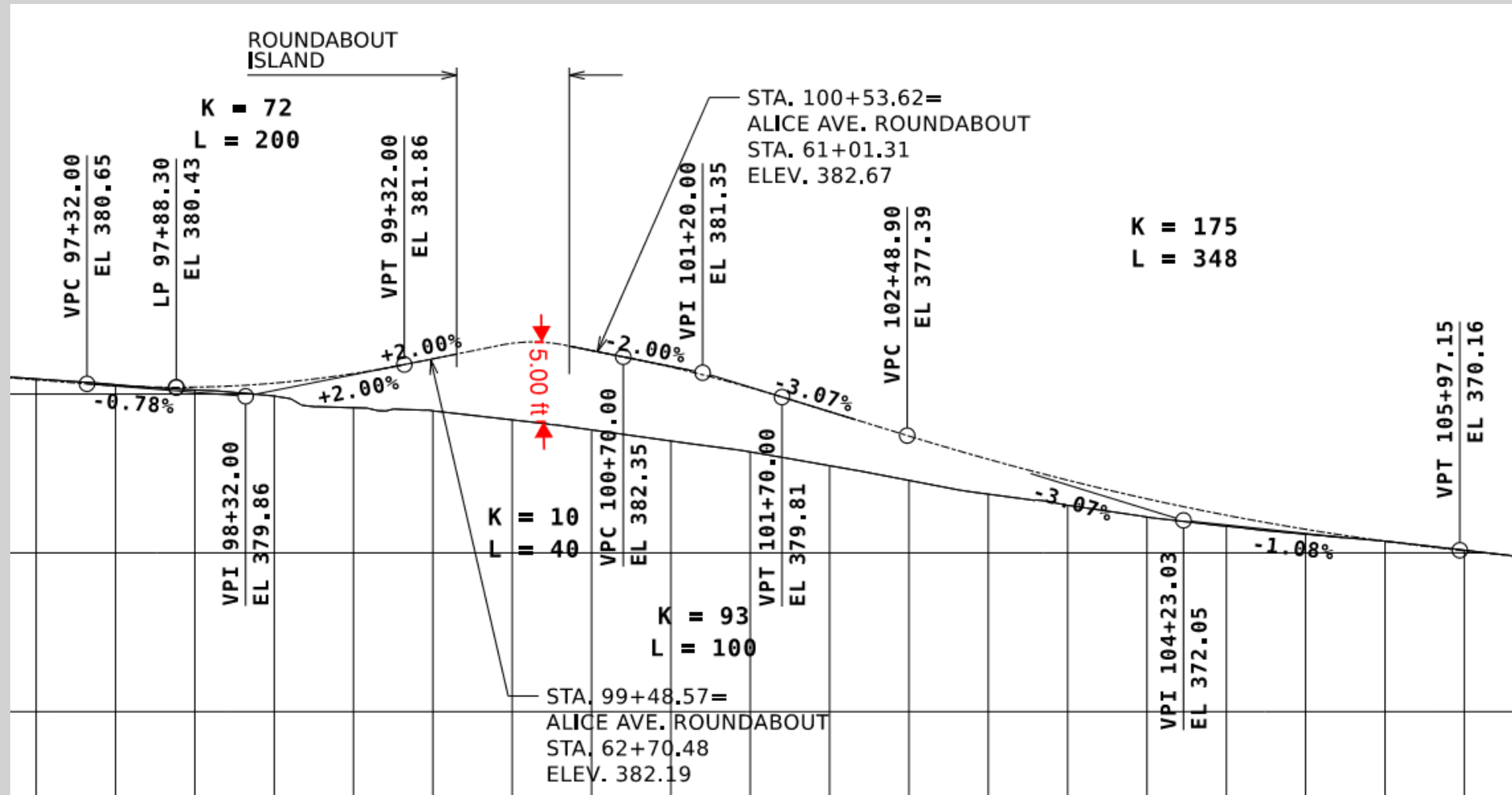
**Major construction challenges  
(duration, nightwork)**

**ROW impacts around  
intersection**

**Alice Avenue – Roundabout  
Intersection Alternative**

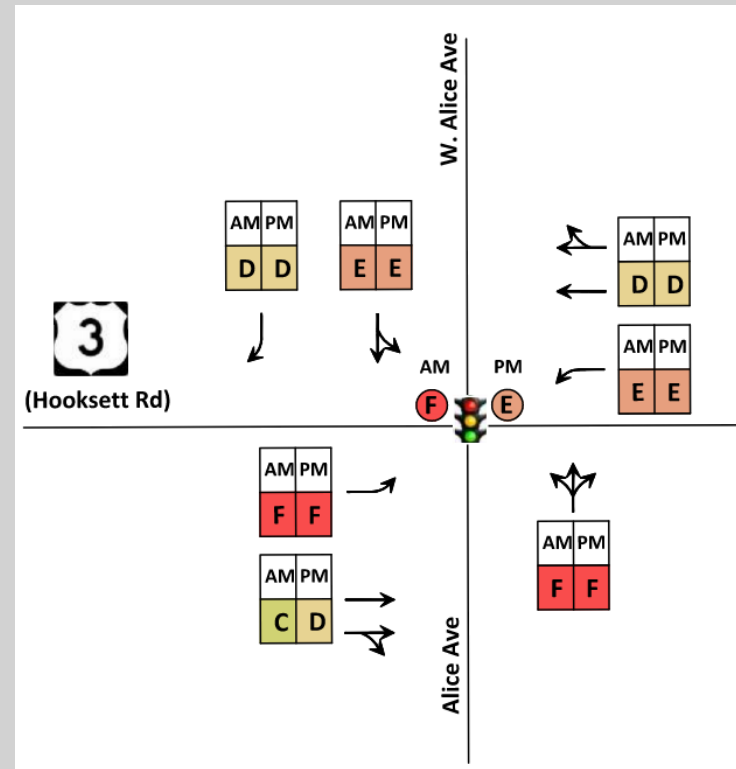


# Alice Avenue Roundabout Proposed Profile of Rte 3



# Alice Avenue Intersection

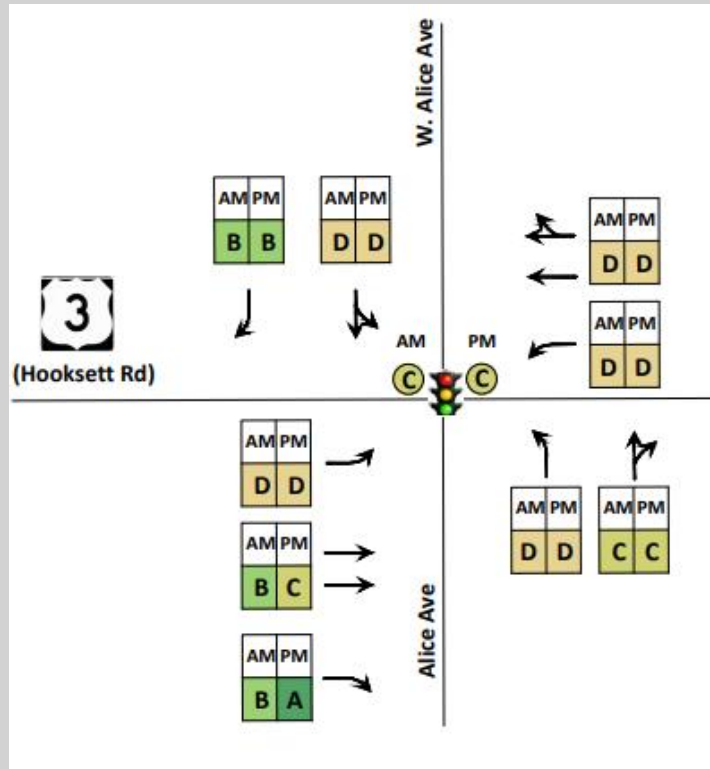
## Level of Service (LOS) – Existing Conditions



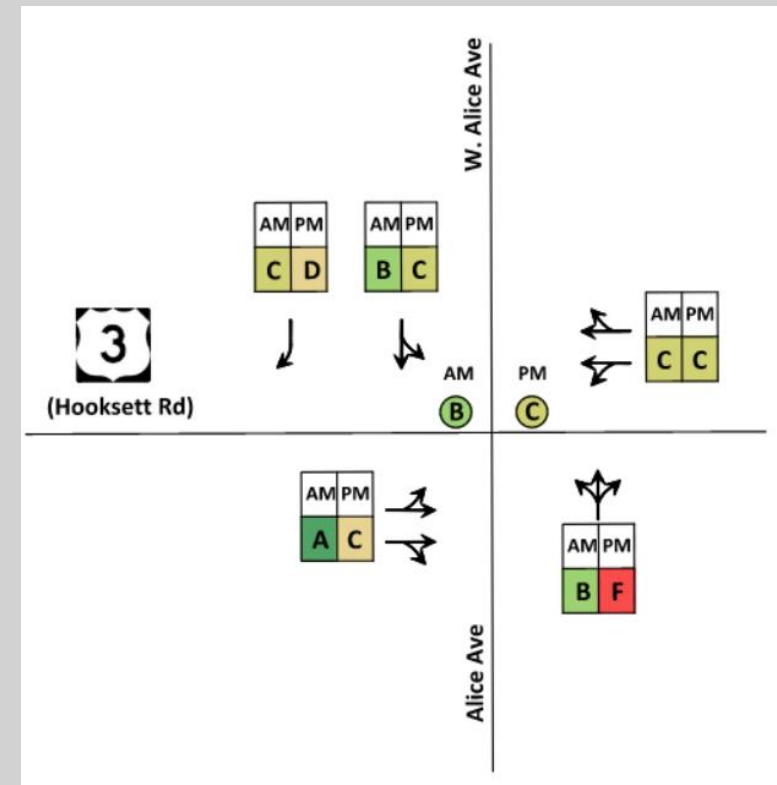
Existing LOS (2020 traffic volumes)

# Alice Avenue Intersection Level of Service (LOS) – Proposed Improvements

LOS shown below are based on 2045 projected traffic volumes



Signalized Intersection



Roundabout



# Alice Ave

## Roundabout vs Signalized Intersection

	Roundabout	Signalized	Remarks
<b>TRAFFIC OPERATIONS</b>	●	●	Similar Level of Service (LOS); Additional U-turn opportunity for roundabout
<b>SAFETY</b>	●	●	Reduced severity of accidents for roundabout
<b>RIGHT-OF-WAY IMPACTS</b>	●	●	
Route 3	●	●	Reduced impacts for roundabout on east side due to narrower median and reduced number of lanes; however, requires retaining wall on former Bank of America property
Alice Ave	●	●	Reduced impacts for roundabout due to reduced number of lanes. Impacts to Crown Trophy are similar for both layouts
West Alice Ave	●	●	Roundabout - more impacts due to reprofiling
Intersection Area	●	●	Roundabout - more impacts onto former Bank of America, Irving and Enterprise
<b>AESTHETICS</b>	●	●	Roundabout provides opportunity for beautification of corridor
<b>MAINTENANCE</b>	●	●	Roundabout is more challenging for winter/landscaping maintenance. Signals require maintenance of poles and cabinets
<b>CONST. IMPACTS</b>	●	●	Longer construction duration and extremely difficult construction for roundabout (due to raising Route 3)
<b>CONST. COST</b>	●	●	Roundabout is more costly to construct

# Next Steps

- Public Information meeting Apr 30, 2024
- Public Officials meeting May/Jun 2024
- WG Meeting #10 Jun 2024
  - Summarize the PI and PO meetings discussions and confirm proposed action
- Public Hearing
  - Winter 2024
  - Present the preferred alternative and the draft environmental document



# Thank you!

Contact information:

David Smith, P.E.

Project Manager, NHDOT

David.S.Smith@dot.nh.gov

603-271-2165

