

53 Regional Drive  
Concord, NH 03313



Tel: (603) 225-2978  
Fax: (603) 225-0095

## **McFARLAND JOHNSON**

Established 1946

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# **MEETING NOTES**

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**PROJECT:** NASHUA, NH – EAST HOLLIS STREET AND BRIDGE STREET INTERSECTION IMPROVEMENTS (NHDOT PROJECT NO. 16314)  
(MJ Project No: 18315.00) **DATE OF MEETING:** June 27, 2018

**LOCATION:** Room 208, City Hall, Nashua, NH **TIME:** 11:00 AM – 12:30 PM

**SUBJECT:** Steering Committee Alternatives Workshop Meeting #2

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### **ATTENDED BY:**

CITY of NASHUA:	J. Vayo	Downtown Specialist
	P. Kohalmi	Deputy City Engineer
	S. Marchant	Director Community Development
	J. Chizmas	Transportation Planner
	W. Husband	Senior Traffic Engineer
	T. Cummings	Director of Economic Development

MJ: B. Colburn  
B. Patinskas  
J. Santacruce

CRJA: J. Law

RESIDENTS: P. Schaefer

SMC MANAGEMENT S. Riley

RIVERSIDE PROPERTIES S. Bonnette  
OF NASHUA

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### **PROJECT DISCUSSION:**

B. Colburn began the meeting by giving an overview of what was talked about at the first Steering Committee Alternatives Meeting and what has taken place since then. The main purpose of this project is to improve mobility of all users, improve access, facilitate land use, not adversely impact traffic, and provide an aesthetically pleasing gateway.

B. Colburn went over the existing conditions and how they were analyzed by McFarland Johnson. The existing intersection of Bridge Street and East Hollis Street has no delays for vehicles moving from Hudson to Bridge Street and from East Hollis Street to Hudson. There is no proposed alternative that will be able to keep these as free movements. The only existing delays going through the intersection are at the two-  
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phase signal in the center. The traffic growth factor used for estimating future traffic volumes was 1% per year. This resulted in an overall increase in traffic of 22% for the design year, which is twenty years from now. These future volumes also account for the future redevelopment of the Crown Street area.

The proposed alternatives only consist of signalized options. Roundabouts were looked at, but it was determined that they would cause large backups due to the high volumes of traffic coming Hudson in the morning and Nashua at night. Metering the roundabout was also investigated, but that caused significant delays. The alternatives include five-foot shoulders for bicycles and eleven-foot lanes for vehicles. Another alternative for bicycles may be to do ten-foot shared use paths. All the proposed alternatives show an access road to Crown Street as dashed. This is because that road will not be built as part of this project. Survey has been started and the ROW lines are expected prior to submitting the final report.

#### **ALTERNATIVE 1 (see attached for Alternatives 1-4)**

This alternative consists of four signalized intersections. These signals would be two or three phases and would be as coordinated as possible. This alternative would provide full access to both Riverside Landing and Crown Street.

#### **ALTERNATIVE 2**

This alternative is similar to Alternative 1. The only difference is that traffic coming from Bridge Street into Hudson will use the west side of the square as opposed to the east side. A benefit of this over Alternative 1 is that the signal at the access road to Crown Street would not be needed until that access road is built.

J. Vayo asked why two lanes were needed for both Bridge Street and East Hollis Street coming into the intersection. These lanes are needed to make the signals more efficient. If only one lane is used, traffic starts backing up very quickly during peak hours.

J. Vayo asked if it was possible to move the connection between Riverside Landing and the Crown Street access road to the east to allow for more open space in the center. An option like this idea was looked at prior to the last Steering Committee Alternatives Meeting and was determined to have safety concerns and resulted in traffic back-ups into Hudson. MJ, however, will take another look at this option to see if it can work.

P. Schaefer asked how residents and delivery vehicles would navigate in and out of the side streets. B. Colburn explained that the main intersection will need to be determined first and then the side streets can be considered. Looking at the different alternatives, there shouldn't be any problems accommodating the side streets.

#### **ALTERNATIVE 3**

This alternative comes directly from the previous study done by STV. This option will utilize two signals. One signal will be three phases and the other will be four phases. There will be no road adjacent to E Street and the queue will be short in the center.

#### **ALTERNATIVE 4**

Alternative four simplifies the signal phasing from Alternative 3 by only sending traffic coming from Hudson to East Hollis Street through one signal. This does, however, come at the cost of taking away greenspace west of the intersection and the signal at D Street may need to be retained.

**LANDSCAPING (see attached for Options 1-2)**

There are currently two options for landscaping. The first option places trees, a park, flags, and a public garden adjacent to E Street. This option would be used for Alternatives 3 and 4. The second landscaping option would be like the first except that it would move the park to the center of the intersection. This option would be used with Alternatives 1 and 2. Both landscaping options could also include a dog park to the east near the sewer pump station. Most in attendance agreed that having a park for kids would be safest next to E Street. The City will need to decide how much maintenance they are willing to perform in this area once the project is built. P. Schaefer requested that this project create access to the river where there is currently just a dirt path. Once survey is completed, MJ can determine whether a path will be possible.

**ACTION ITEMS:**

- MJ to look at Signal Option 3 from the first Steering Committee Alternatives Meeting to see if it can be an alternative. MJ will colorize this alternative and bring it to the next Steering Committee Meeting.
- MJ to investigate whether the merge to East Hollis Street in Alternative 4 can be shifted east.
- CRJA to include a dog park at the east end of the project area.
- Steering Committee to revisit the Purpose and Needs Statement.
- MJ to upload previous steering committee presentation to the project website.
- MJ to add "DRAFT" to documents uploaded to the project website.

Submitted by:

Brian E. Patinkas, PE  
McFarland Johnson, Inc.

cc: Attendees

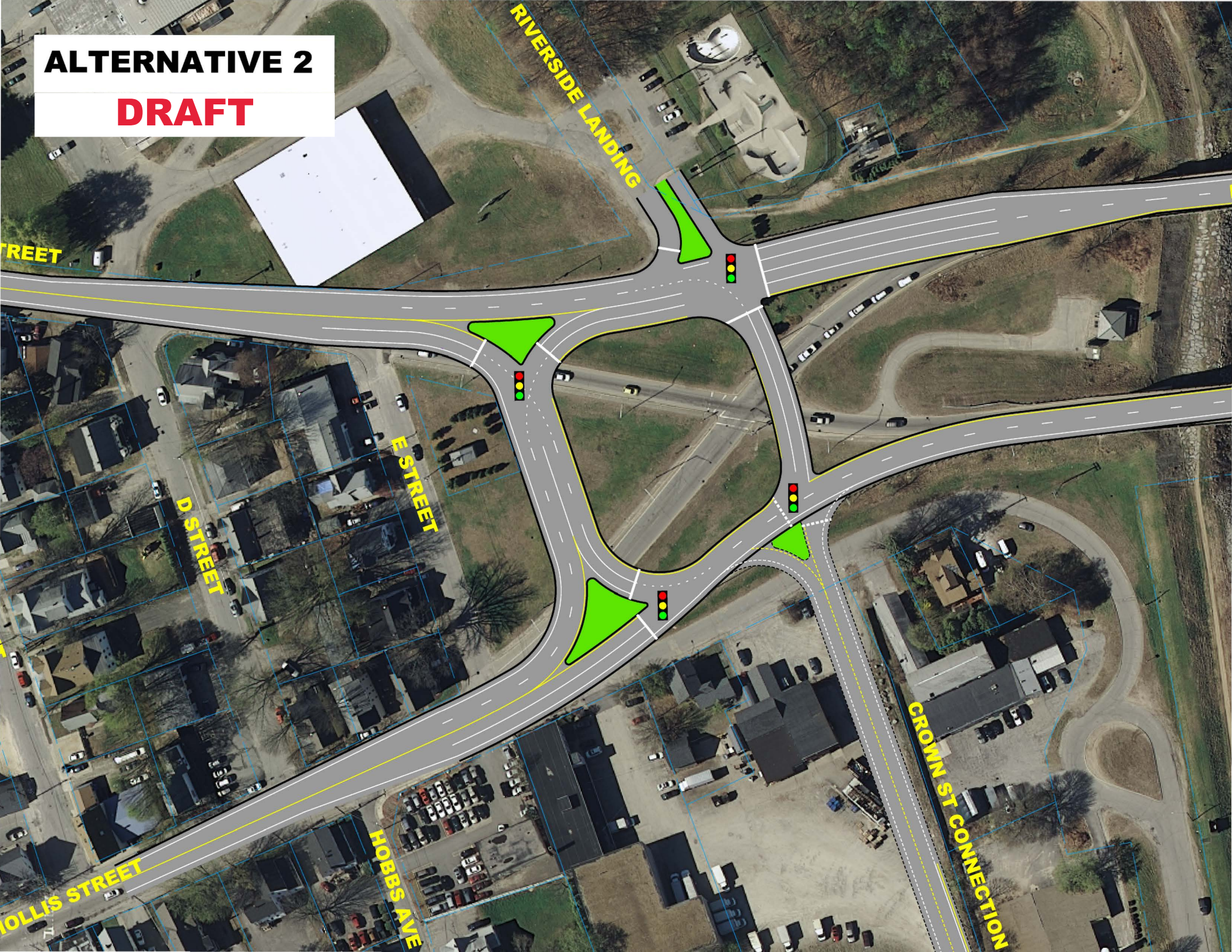


**ALTERNATIVE 1**  
**DRAFT**





**ALTERNATIVE 2**  
**DRAFT**





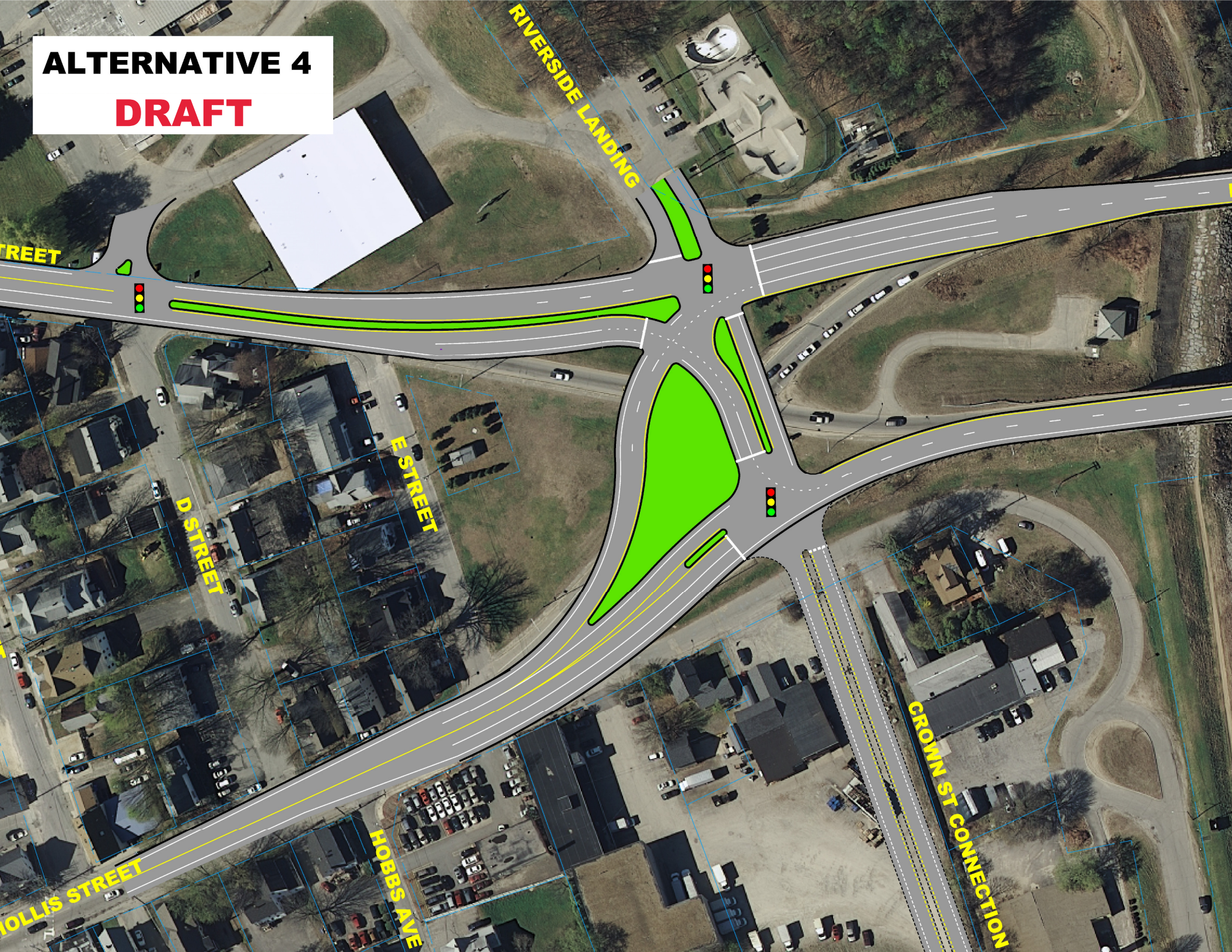
**ALTERNATIVE 3**  
**DRAFT**





# ALTERNATIVE 4

**DRAFT**





# East Hollis / Bridge Street Intersection Improvement Project

LANDSCAPE CONCEPTUAL DESIGN OPTION 1



- |                                |                   |                                      |                            |   |   |
|--------------------------------|-------------------|--------------------------------------|----------------------------|---|---|
| 1 NEW STREET TREES             | 3 BUFFER PLANTING | 5 CHILDREN'S PLAYGROUND WITH FENCING | 7 OPEN GREEN SPACE         | 9 EXISTING BUILDINGS TO REMAIN                            | 11 SCULPTED LAWN LAND FORM FOR GATHERING / PLAY |
| 2 GATEWAY STRUCTURE WITH PLAZA | 4 FLAG POLE       | 6 COMMUNITY GARDEN                   | 8 NEW PEDESTRAIN SIDEWALKS | 10 LANDSCAPED BERM WITH PLANTING TO HELP SCREEN TO A CITY |   |



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# East Hollis / Bridge Street Intersection Improvement Project

LANDSCAPE CONCEPTUAL DESIGN OPTION 2



- |                     |                   |                                      |                            |  |  |
|---------------------|-------------------|--------------------------------------|----------------------------|--|--|
| ① NEW STREET TREES  | ③ BUFFER PLANTING | ⑤ CHILDREN'S PLAYGROUND WITH FENCING | ⑦ OPEN GREEN SPACE         | ⑨ EXISTING BUILDINGS TO REMAIN                           | ⑪ SCULPTED LAWN LAND FORM FOR GATHERING / PLAY |
| ② GATEWAY STRUCTURE | ④ FLAG POLE       | ⑥ COMMUNITY GARDEN                   | ⑧ NEW PEDESTRIAN SIDEWALKS | ⑩ LANDSCAPED BERM WITH PLANTING TO HELP SCREEN TO A CITY | ⑫ DOG PARK                                     |



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