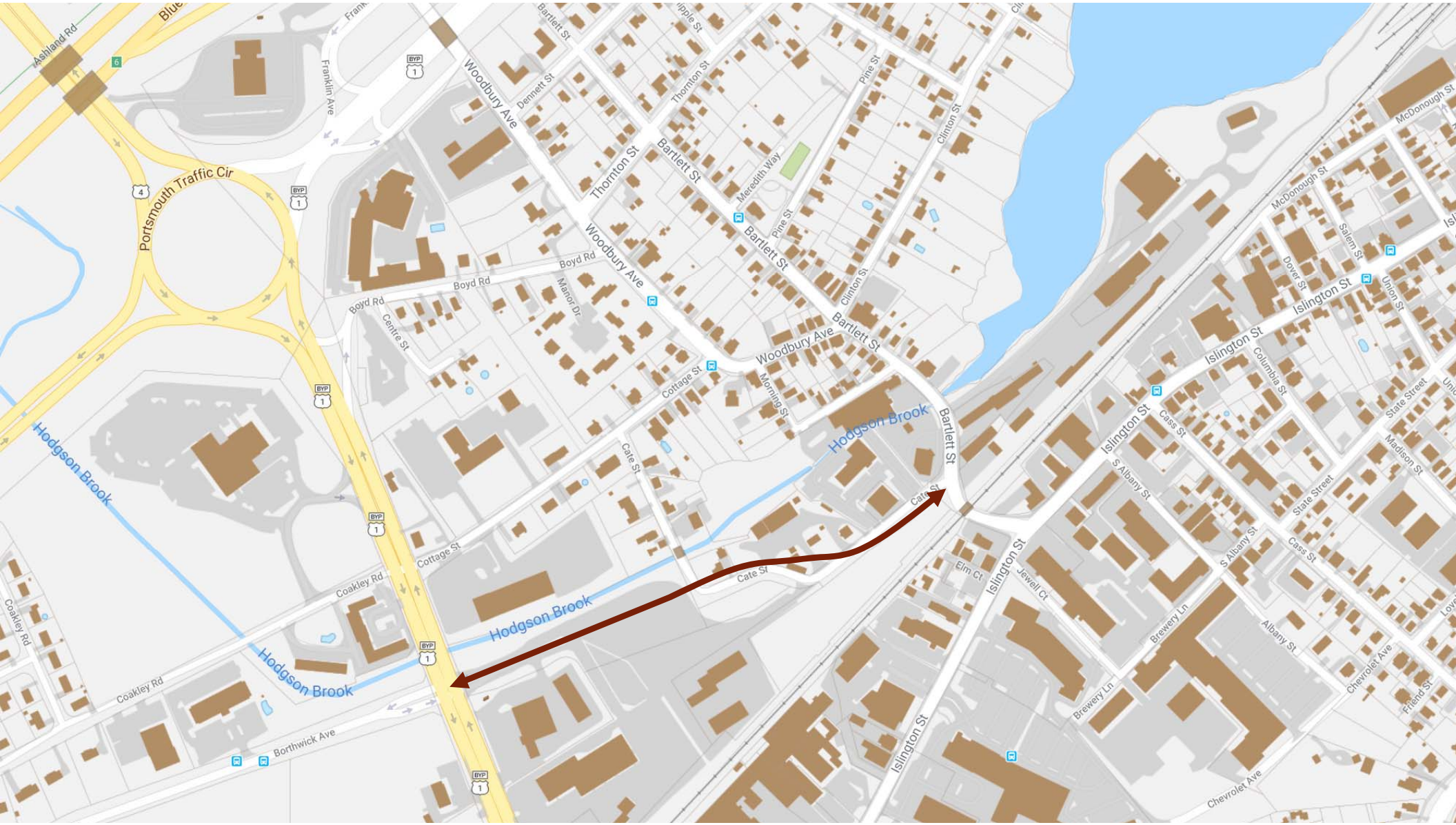
CATE STREET CONNECTOR & BARTLETT STREET NEIGHBORHOOD TRAFFIC CALMING

Neighborhood Listening Session

3/11/2019


Ashland Rd
Portsmouth Traffic Cir
Franklin Ave
Woodbury Ave
Bartlett St
Thornton St
Dennett St
Meredith Way
Pine St
Clinton St
Boyd Rd
Manor Dr
Centre St
Cottage St
Morning St
Cate St
Hodgson Brook
Coakley Rd
Borthwick Ave
Islington St
McDonough St
Salem St
Dover St
Union St
Columbia St
State Street
Madison St
Cass St
S Albany St
Jewell Ct
Elm Ct
Brewery Ln
Albany St
Chevrolet Ave
Friend St
BYP
1
4
6

Portsmouth Traffic Cir
Woodbury Ave
Bartlett St
Thornton St
Meredith Way
Pine St
Clinton St
Boyd Rd
Manor Dr
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Elm Ct
Jewell Ct
Brewery Ln
Albany St
Chevrolet Ave
Aldrich Rd
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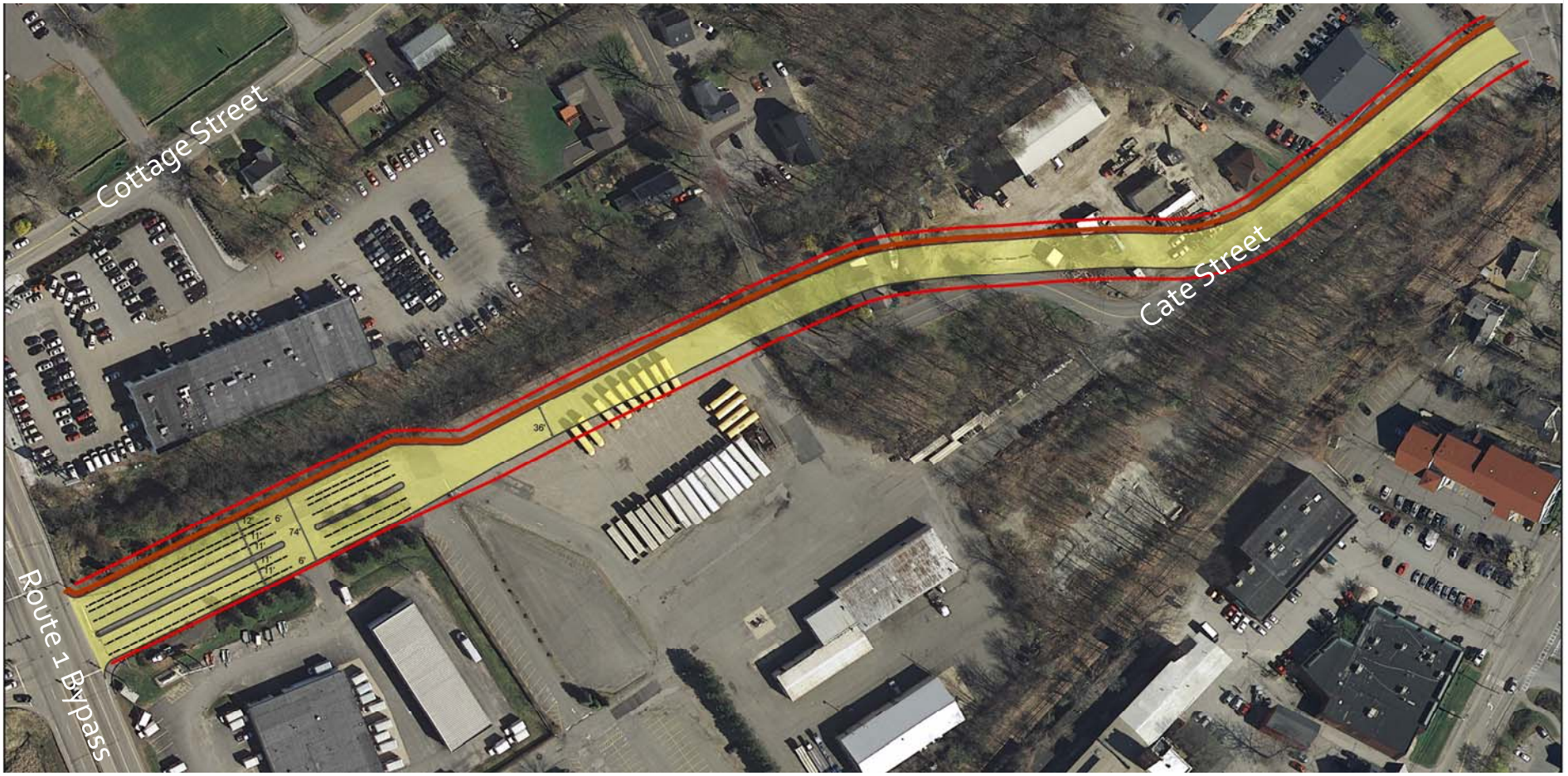
CONCEPTUAL LAYOUT



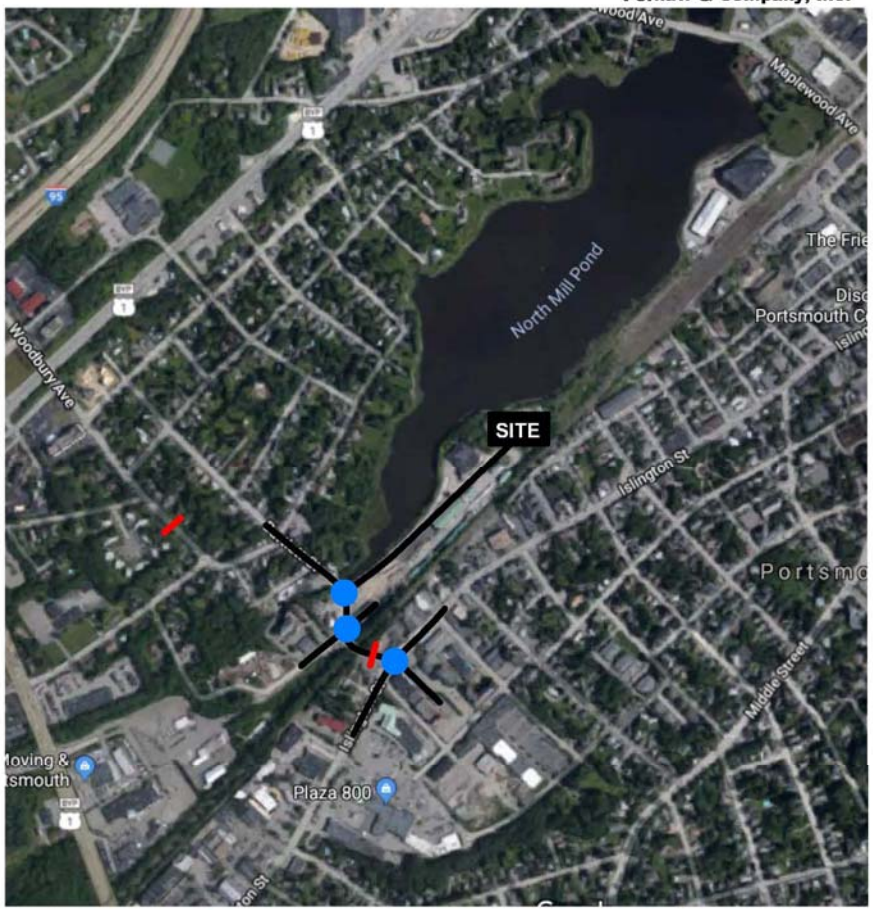
EXISTING CONDITIONS

- Bartlett Street
  - minor arterial and truck route between Islington St and Woodbury Ave / Route 1 Bypass
  - travels through dense residential neighborhoods
  - peak traffic levels in weekday PM (commuter period)
  - significant queuing of vehicles at Islington St signal during peak travel time
  - railroad bridge creates constrained condition before Islington St intersection
- Cate Street
  - local road, indirect connection to Route 1 Bypass via Cottage St
  - sub-standard bridge over Hodgson Brook will need replacement in near future
  - periodically blocked by queuing from Islington St signal
- Islington St
  - minor arterial and primary connector between downtown and Rte 33/Greenland Rd
- Truck traffic accounts for 2-3% of traffic flow

105 BARTLETT STREET TRAFFIC ANALYSIS

- Potential impact of 120 dwelling units (conceptual only, no formal development proposal has been submitted)
- Intersections studied: Bartlett St / existing driveway, Bartlett St / Cate St, Bartlett St / Islington St
- Findings
  - Increase of 41 vph AM peak, 53 vph PM peak
  - Primarily outbound in AM, primarily inbound in PM (opposite of existing)
  - Biggest impact on Bartlett St east of site (net 2% increase in AM)
  - Queuing at Islington St traffic signal will continue to extend beyond driveway at peak times
  - Recommend addition of left turn lane on southbound approach of Bartlett St (not supported by staff at this time)

Pernaw & Company, Inc.



= AUTOMATIC TRAFFIC RECORDER LOCATION (NHDOT)

= TURNING MOVEMENT COUNT LOCATIONS

NORTH

1821A

Figure 1

Site Location

Traffic Impact and Site Access Study, Proposed Residential Development, Portsmouth, New Hampshire

105 BARTLETT STREET TRAFFIC ANALYSIS

- Impact of Cate Street Extension and Proposed Mixed Use Development on Frank Jones Center property
  - the extension of Cate Street will reduce vehicle-trips on certain sections of Bartlett Street due to local trip diversions
  - the extension of Cate Street will alter the travel patterns of those currently using the existing driveway
  - recommend no-right turn for large trucks from site driveway
  - net change on Bartlett Street during the weekday PM peak hour is approximately -200 vph north of the shared driveway and -50 vph south of the shared driveway

428 ROUTE 1 BYPASS (FRANK JONES CENTER) TRAFFIC ANALYSIS

- Potential impact of 325 apts, 17 townhomes, 22K retail/restaurant, 22K office (conceptual only, final project proposal has not been submitted)
- Intersections studied
  - US1 Bypass/Cottage St/Coakley Rd
  - US 1 Bypass/Borthwick Ave
  - US 1 Bypass/site driveway
  - Islington St / Bartlett St / CVS driveway
  - Bartlett St / Cate St
  - Bartlett St / existing driveway
  - Cate Street extension proposed site driveways

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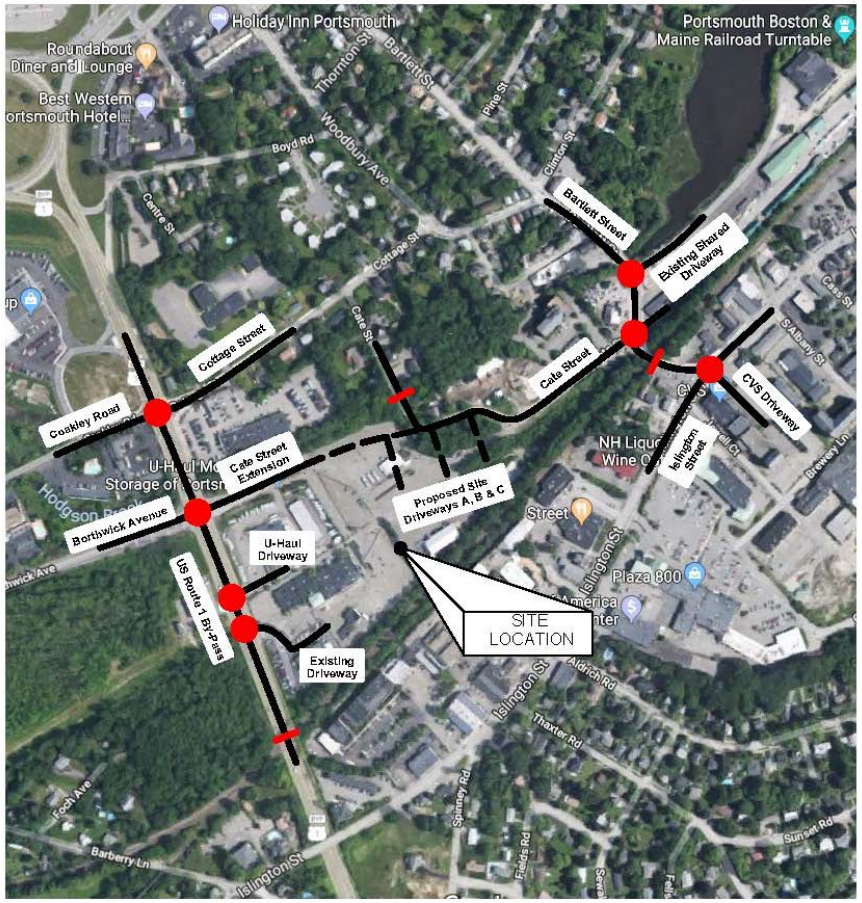

= AUTOMATIC TRAFFIC RECORDER LOCATION (NHDOT)

= INTERSECTION TURNING MOVEMENT COUNT LOCATION

NORTH

1831A

Figure 1 **Site Location**

428 ROUTE 1 BYPASS (FRANK JONES CENTER) TRAFFIC ANALYSIS

- Findings
  - Increase of 379 vehicles per hour (vph) PM peak, 471 vph Saturday mid-day – this is all vehicles entering and exiting the site
  - Addition of Cate Street Extension will result in -200 vph (approximately 18% decrease) on Bartlett St (north of project) and -80 vph (approx. 16% decrease) on Cottage St (east of Bypass) during PM peak
  - Capacity deficiencies at Bartlett St / Cate St intersection as a result of site traffic and diverted traffic to new roadway
  - 3 Alternatives considered for Bartlett St / Cate St intersection
  - Intersection improvements at US 1 Bypass and potential closure of the median island at Cottage St/Coakley Rd will likely be required


Ashland Rd
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Blue
Franklin
Franklin Ave
Portsmouth Traffic Cir
95
4
6
BYP 1
Bartlett St
Whipple St
Woodbury Ave
Dennett St
Thornton St
Pine St
Clinton St
Meredith Way
Boyd Rd
Manor Dr
Centre St
Cottage St
Morning St
Cate St
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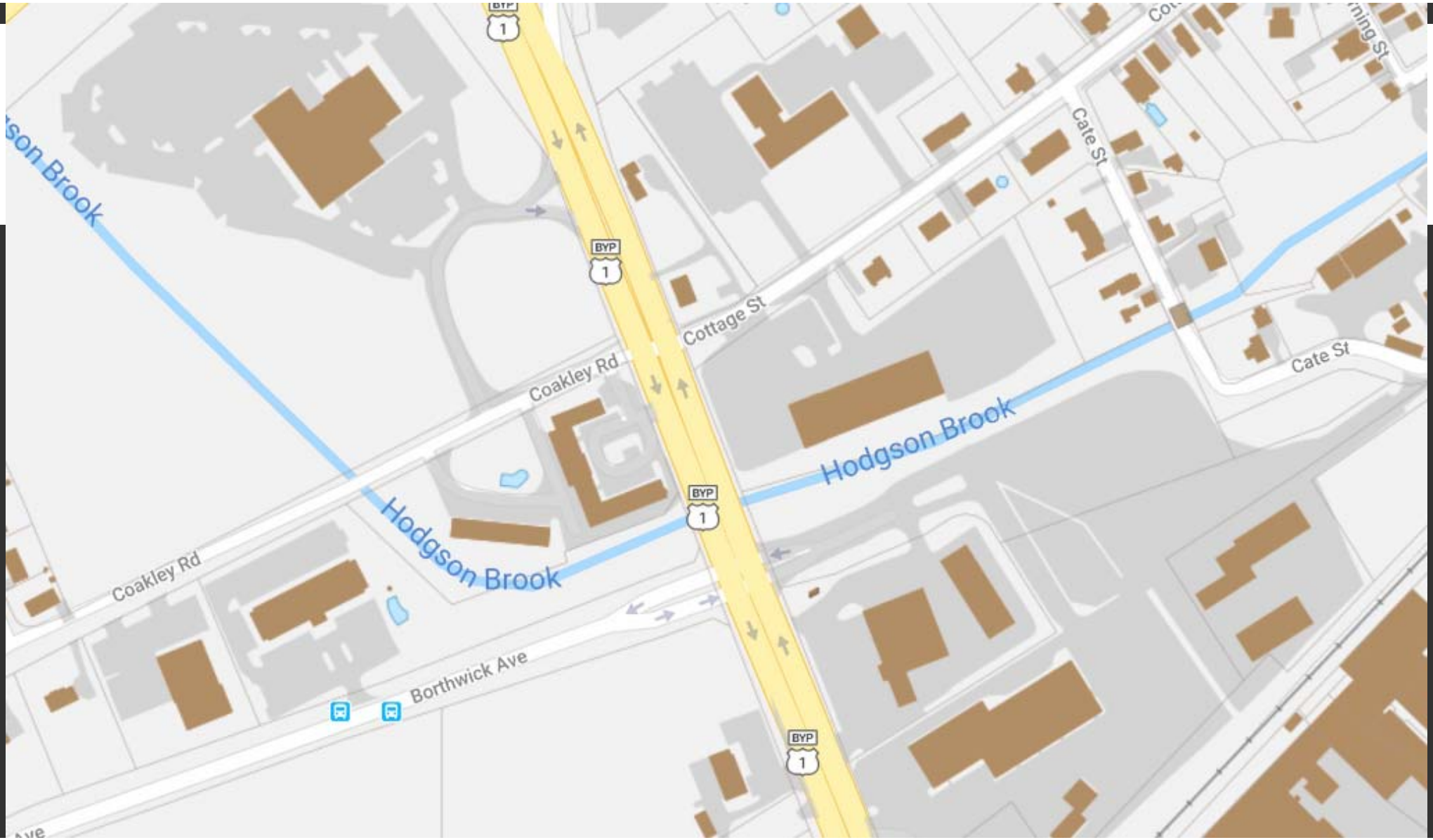
Coakley Rd
Larry Ln
Borthwick Ave
Islington St
Elm Ct
Jewell Ct
Brewery Ln
Aldrich Rd
Thaxter Rd


Hodgson Brook
Coakley Rd
Cottage St
Cate St
Hodgson Brook
Coakley Rd
Borthwick Ave
Cate St
BYP
1


ury Ave
Bartlett St
Hodgson Brook
Bartlett St
Islin
Cate St
Elm Ct
Islington St
Jewell Ct

PRELIMINARY ANALYSIS

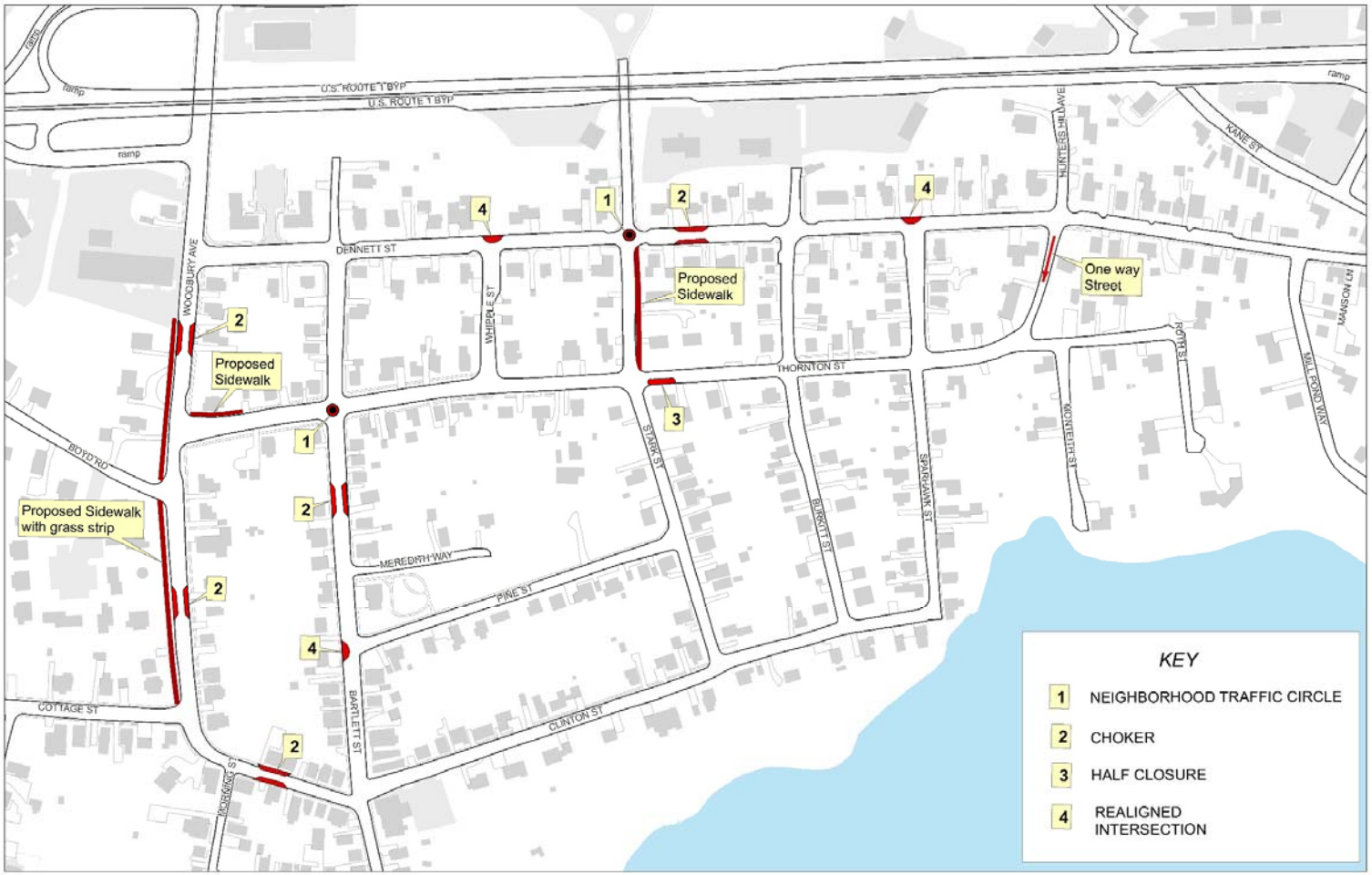
- Pros
  - Removal of cut-through traffic through Bartlett St residential neighborhood
  - Queuing on Cate Street will eliminate the blockage of the Cate Street/Bartlett intersection, which is key for left turns from Bartlett onto Cate (such as ambulances on the way to the hospital)
  - Removal of traffic signal and closing of median on Bypass at Cottage will make for better traffic flow and safer conditions on the Bypass
  - More direct access for to Borthwick Ave and Hospital
  - Bicycle and pedestrian connections
  - Divert traffic queuing from Islington St onto Cate St rather than Bartlett St

PRELIMINARY ANALYSIS

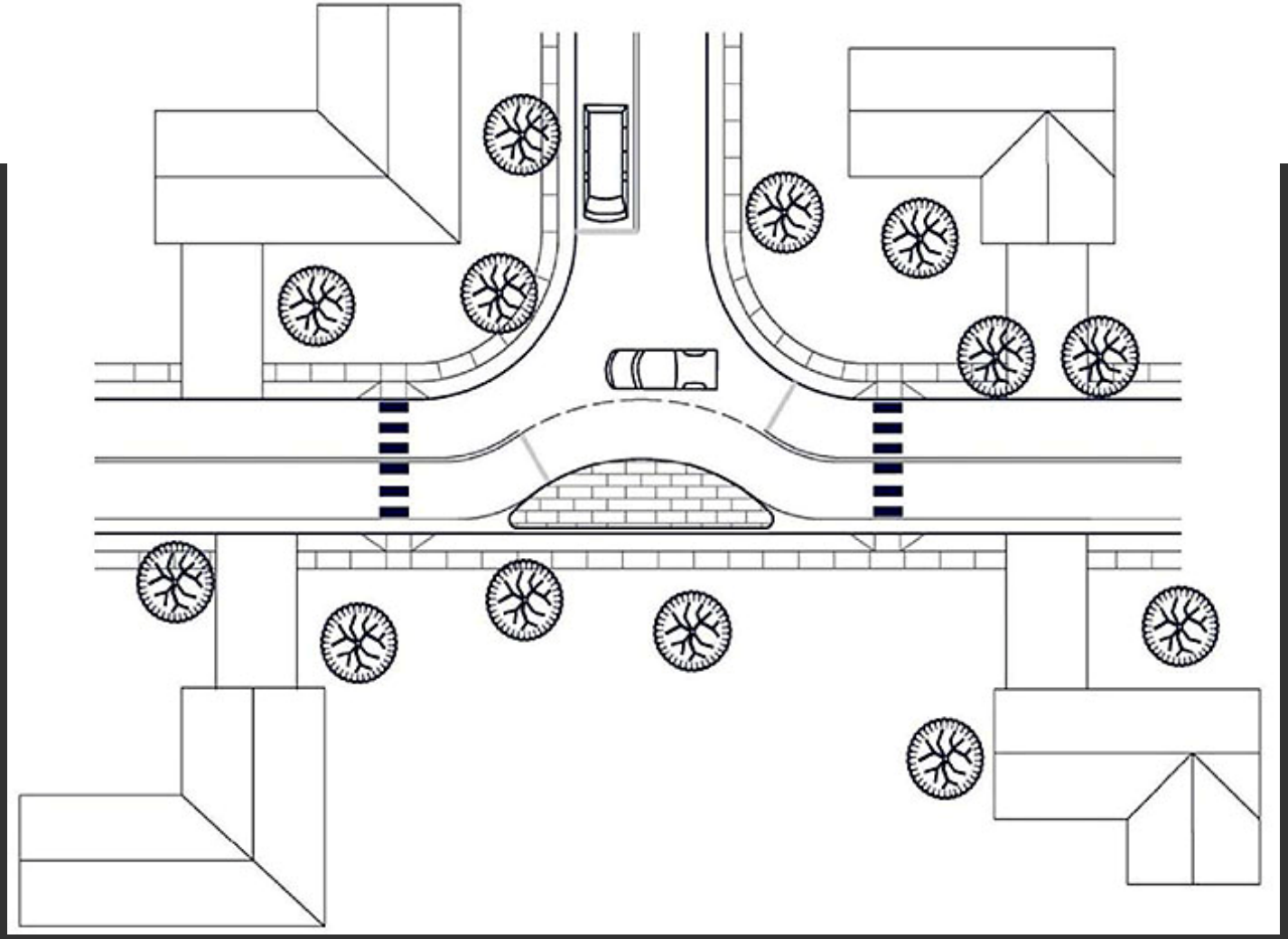
- Cons
  - Intersection improvements required at Route 1 Bypass
  - Connector road required for median closure at Coakley/Cottage
  - Elimination of existing Cate St – Cottage St connection will impact existing properties
  - Queuing at Islington St / Bartlett St intersection will likely increase
  - Potential for overall traffic to increase

NEIGHBORHOOD TRAFFIC CALMING

OVERALL NEIGHBORHOOD



REALIGNED INTERSECTION



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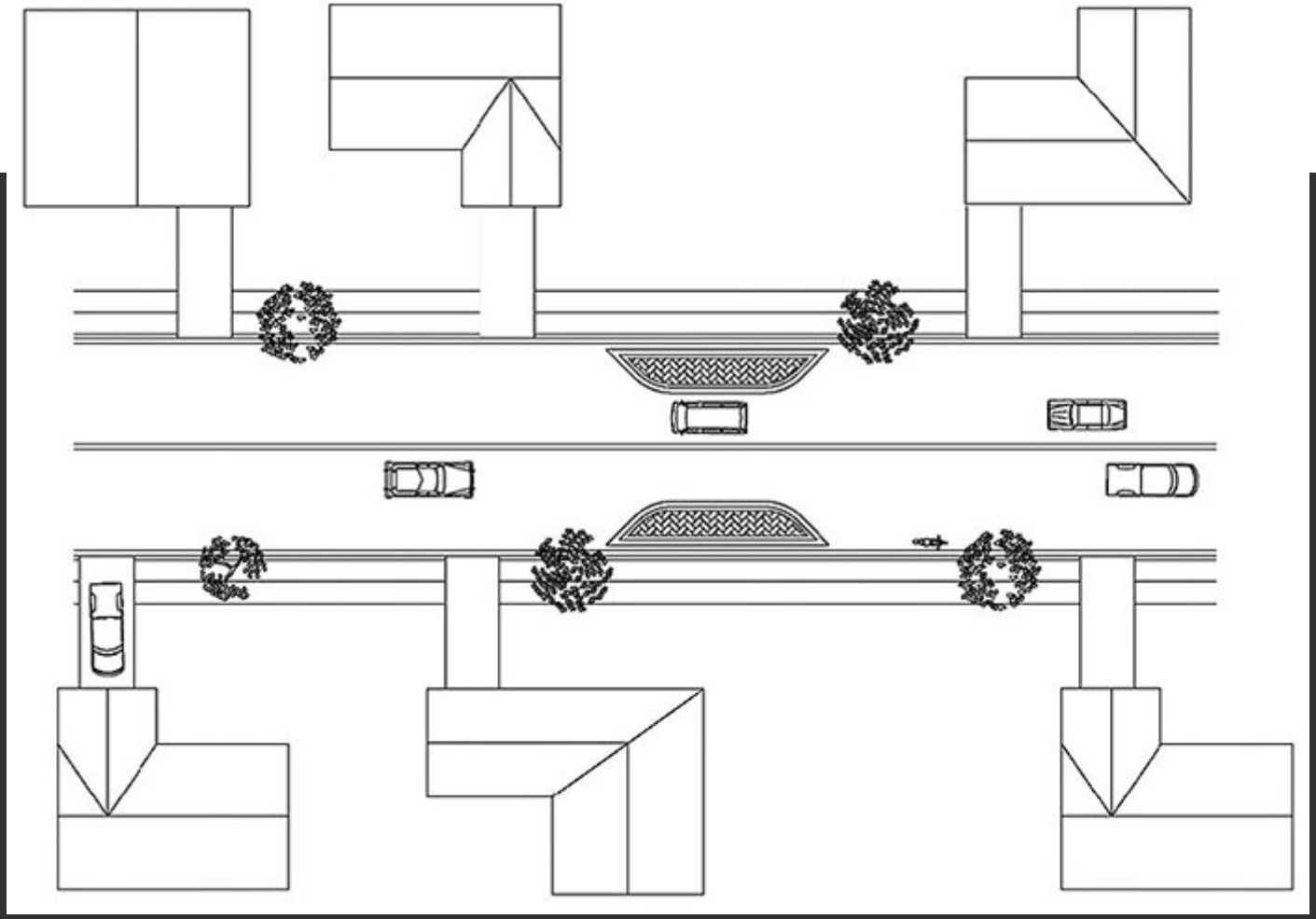
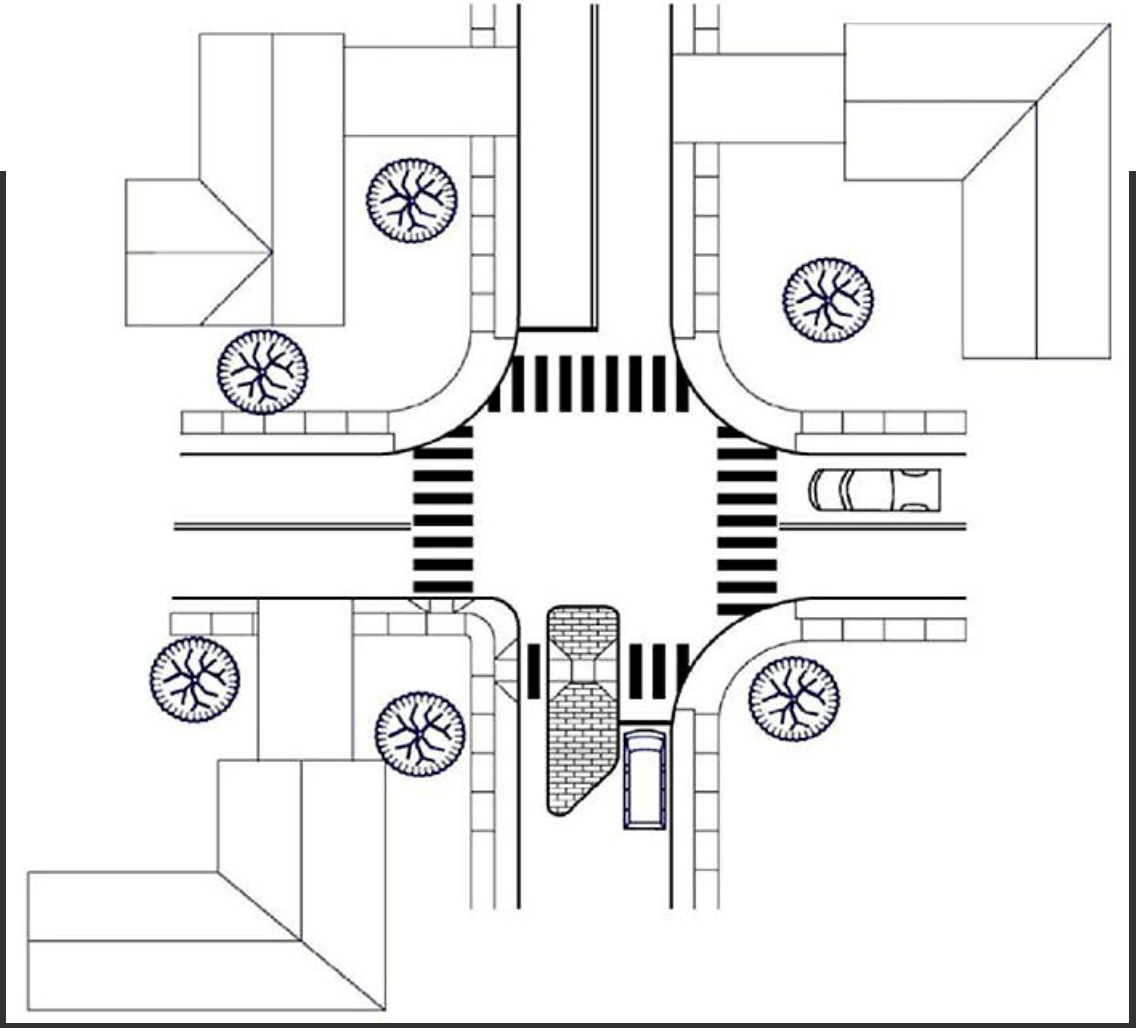
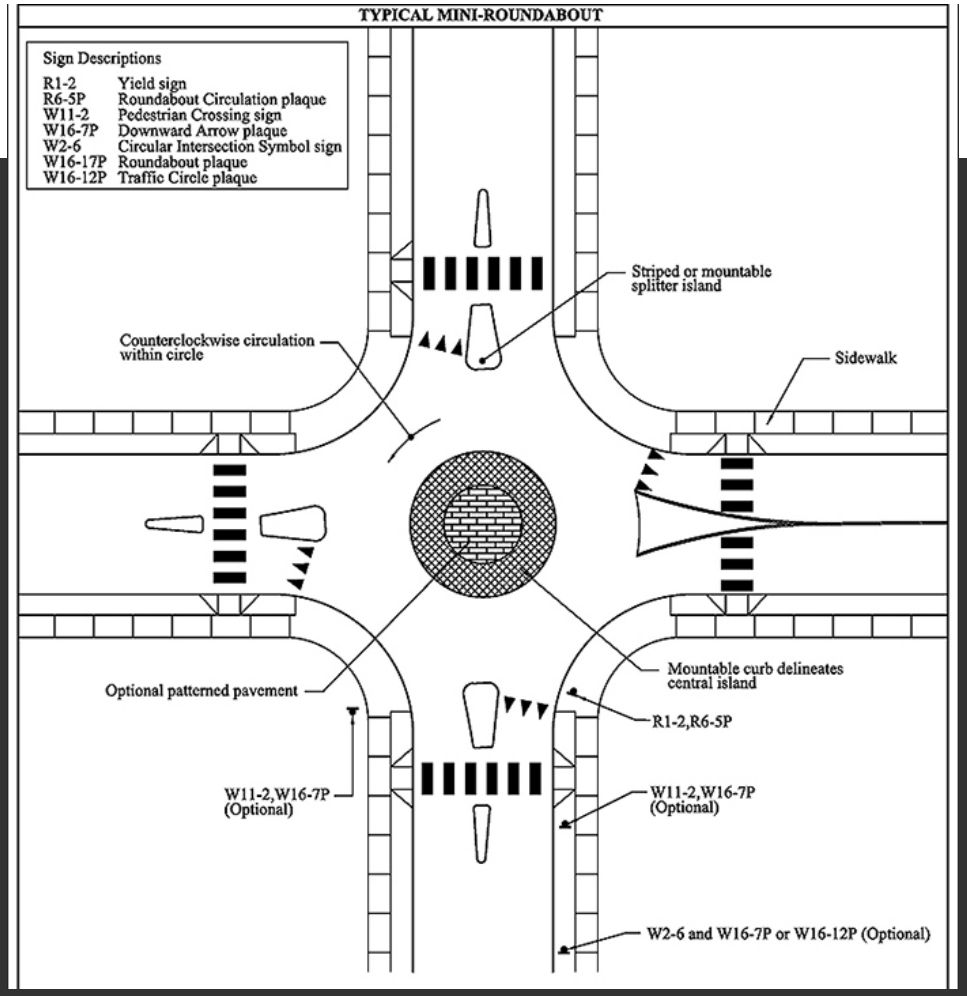


HALF CLOSURE



MINI-ROUNDABOUT



BARTLETT STREET AND THORNTON STREET INTERSECTION