

28 Austin Street Newtonville

Traffic Engineering Peer Review

Presentation to the Land Use Committee

By

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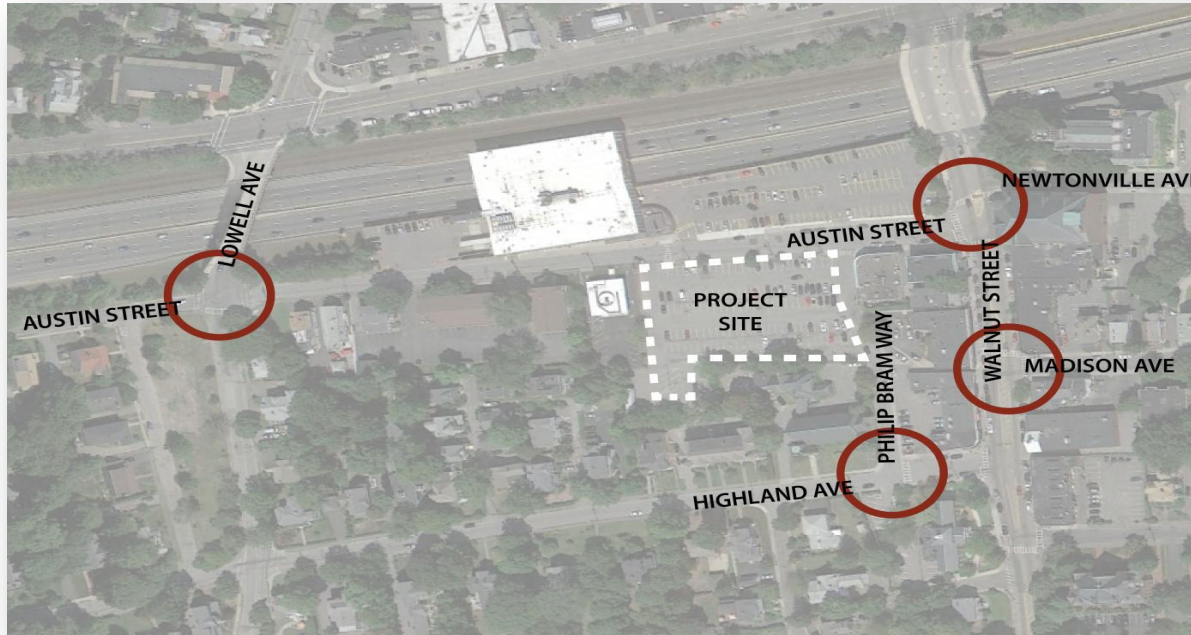
October 6, 2015

Summary of Findings

- Materials prepared in a professional manner and following the applicable standards of care
- Study area sufficient to assess project impacts
- Data collection completed in accordance with standard practices
- Project impacts limited to minor increases in motorist delay and vehicle queuing
- Additional information and analyses requested for the following areas:
 - Safety (motor vehicle crash data and sight lines)
 - Future Planning Horizon (7-years)
 - Traffic Demand and Parking Management
 - Access and On-Site Circulation

Existing Conditions

- Study area:



- Austin Street at Walnut Street and Newtonville Avenue
- Austin Street at Lowell Avenue
- Walnut Street at Madison Avenue
- Highland Avenue at Philip Bram Way

Existing Conditions (Cont.)

- **Data Collection**
 - April and May 2015
 - Traffic Count Periods: 7-9 AM, 4-6 PM, Saturday 11 AM -2PM
- **Pedestrian and Bicycle Accommodations**
 - Interconnected sidewalk network
 - Limited ADA accommodations
 - Lowell Ave. and Walnut St. designated City bike routes
- **Public Transportation Services**
 - Newtonville Commuter Rail Station (5 min. walk)
 - (4) MBTA bus routes with stops at Walnut St./Austin St. and Washington St./Walnut St.
- **Crash Data (To be Provided)**
- **Parking**
 - July 2014 *Parking and Traffic Engineering Study* for Newtonville prepared by Greenman-Pedersen, Inc. (GPI) for the City

Future Conditions

- Applicant to provide 7-year future traffic volume projection
- Project-Generated Traffic
 - ITE Data for base trip generation
 - Adjusted to account for alternative modes of transportation

Table 3: Existing Mode Split in Newtonville, Tract 3734, and City of Newton

Source: 2013 American Community Survey, 5-Year Estimates

Mode of Travel to Work	Newtonville	City of Newton	State of Massachusetts
Drove Alone	66.2%	64.1%	72.1%
Carpooled	5.8%	8.6%	7.9%
Public Transportation	13.0%	11.5%	9.3%
Walked	3.4%	5.5%	4.7%
Bicycle	0%	1.3%	0.7%
Taxi, Motorcycle or Other	0.6%	0.7%	0.8%
Worked at Home	11.1%	8.3%	4.3%

Future Conditions (Cont.)

28 AUSTIN STREET TRIP GENERATION SUMMARY

Time Period/Direction	Pedestrian/Bicycle Trips (Person Trips)	Transit Trips (Person Trips)	Automobile Trips (Vehicle Trips) ^a
Average Weekday:			
Entering	12	44	223
<u>Exiting</u>	<u>12</u>	<u>44</u>	<u>223</u>
Total	24	88	446
Weekday Morning Peak Hour:			
Entering	0	2	8
<u>Exiting</u>	<u>1</u>	<u>4</u>	<u>21</u>
Total	1	6	29
Weekday Evening Peak Hour:			
Entering	1	5	24
<u>Exiting</u>	<u>1</u>	<u>3</u>	<u>18</u>
Total	2	8	42
Saturday:			
Entering	11	44	221
<u>Exiting</u>	<u>11</u>	<u>44</u>	<u>221</u>
Total	22	88	442
Saturday Midday Peak Hour:			
Entering	1	4	9
<u>Exiting</u>	<u>1</u>	<u>4</u>	<u>19</u>
Total	2	8	38

^aAuto person trips ÷ 1.1 persons per auto

Future Conditions (Cont.)

- **Auto Trip Distribution** based on exiting traffic patterns

TRIP-DISTRIBUTION SUMMRY

Roadway	Direction	Percent
Walnut Street	North	50
Walnut Street	South	10
Lowell Avenue	North	15
Lowell Avenue	South	5
Newtonville Avenue	East	10
Highland Avenue	East/West	10
TOTAL		100

Analysis of Impacts

- **The Project did not result in a significant change in operating conditions over Existing conditions without the Project**
- **Noted Minor Impacts:**
 - **Lowell Avenue/Austin Street** – Predicted increase in motorist delay of approximately 1.3 sec.
 - **Walnut Street/Austin Street** – Predicted increase in vehicle queuing of approximately 1-2 vehicles.
- **Project Site Driveways** - All movements are predicted to operate with minimal delay with negligible vehicle queuing predicted.
- **Sight Line Analysis** (To be Provided)

Parking

- **Existing Conditions:**
 - 164 Public Parking Spaces
- **Proposed Conditions:**
 - 127 Public Parking Spaces
 - 90 New Private Parking Spaces
 - 85 spaces for residents (1.25 spaces per unit)
 - 5 spaces for employees (1.0 spaces/1,000 sf)
- **Residential Parking Ratio Meets Newton Zoning Code with Special Permit and is consistent with ITE Parking Demand Data for similar projects**
- **Newton Zoning Code Requires 18 spaces for Commercial Component; Balance of parking needs to be met by District Parking**
- **July 2014 Parking and Traffic Engineering Study documented available public parking in the District**
- **Working Group has identified improvements and management strategies that could yield additional District parking**

Circulation Improvements

- **Austin Street as One-Way** – Convert all or a portion of Austin Street to a one-way roadway to allow for additional green space, sidewalk width and on-street parking.
 - **Recommendation** – *Maintain two-way traffic on Austin Street with sidewalk and streetscape improvements.*
- **Philip Bram Way as One-Way** – Convert Philip Bram Way from a two-way right-of-way to one-way
 - **Recommendation** - *Maintain as a two-way roadway with the traffic calming measures (proposed as a part of the Project including pedestrian plaza, landscaping, pavement treatment, etc.)*

Circulation Improvements (Cont.)

- **Austin Street/Walnut Street/Newtonville Avenue** – Improvements under discussion: removing parking to provide two (2) approach lanes on Walnut Street eastbound; reconfigure intersection to eliminate left-turn movements; and/or eliminate Walnut Street southbound left-turn movement.
 - **Recommendation** – *Retain existing conditions*
- **Walnut Street** – Wider sidewalks, bicycle accommodations, curb extensions and addition of angled parking.
 - **Recommendation** - *Implement streetscape improvements along Walnut Street; elimination of northbound left-turn lane on the Walnut Street approach to Austin Street would necessitate the installation of a traffic control signal at the intersection.*

Site Plan

- Information Requested:
 - Truck Turning Analysis
 - Tenant Move and Loading/Delivery Narrative
 - Bicycle Racks to be Added
 - Review Proximity of Parking to Austin Street
 - Re-evaluate Parking Layout (Dead End Aisles)
 - Minimize or Eliminate Compact Parking Spaces
 - Clarify Use of Highland Avenue Passageway
 - Extend Bollard Installation along Philip Bram Way
 - Develop Sign and Pavement Marking Plan
 - Transportation Demand Management Program

Questions?