

**WEGMANS SUPERMARKET**

**DRAFT TRAFFIC IMPACT STUDY**

**EXECUTIVE SUMMARY**



Prepared for:

The Town of Chapel Hill  
Public Works Department - Engineering

*Prepared by:*

***HNTB North Carolina, PC***

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*NCBELS License #: C-1554*

June 2017

**HNTB**

**WEGMANS SUPERMARKET  
COMMERCIAL REDEVELOPMENT  
TRAFFIC IMPACT STUDY  
DRAFT**

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## EXECUTIVE SUMMARY - DRAFT

### Project Overview

The redevelopment of the existing Performance Motors site, located along the US 15-501 (Durham-Chapel Hill Road) Service Road and Old Durham Road, into a new Wegmans Supermarket is being proposed in Chapel Hill. The project proposes to construct a new supermarket on the existing Performance Motors parcel with an approximate 130,000 - 140,000 square foot size. **Figure ES-1** shows the general location of the site. The project is anticipated to be fully complete by late 2018. This report analyzes the transportation impacts for the build-out scenario for the year 2019 (one year after anticipated completion), the no-build scenario for 2019, as well as 2016 existing base year traffic conditions.

The proposed site concept plan shows several substantial transportation network changes from existing conditions, including improvements to Old Durham Road at its intersection with US 15-501, a restriction of access to/from Scarlett Drive, and a new roundabout to serve on-site parking lots along Old Durham Road. No vehicular access from the site will be provided along the existing Service Road. **Figure ES-2** displays the preliminary concept plan of the Wegmans Supermarket development, transportation network changes, and nearby land uses and roadways. The project is expected to provide on-site surface parking and additional site parking to the south of Old Durham Road adjacent to the site.

### Existing Conditions

#### **Study Area**

The existing Performance Motors site currently contains multiple showroom buildings and auto service facilities and on-site parking lots. The site borders residential neighborhoods to the south and commercial development to the west, east, and north across the US 15-501 corridor. It is located immediately adjacent to the existing SECU Data Center / former Blue Cross-Blue Shield building to the east and a Hardees Restaurant to the west.



All vehicular access is proposed to enter and exit the site via several full access site driveways along Old Durham Road, with external primary access via the US 15-501 intersections at Sage Road/Old Durham Road and Eastowne Drive/Lakeview Drive. No site access is provided via the existing adjacent US 15-501 Service Road or the Eastowne Drive/Service Road intersection with US 15-501. All parking will be provided on-site or at an additional surface lot to the south of the proposed site across Old Durham Road, with a grand total of approximately 750 parking spaces for customers and employees. The proposed site plan, shown in **Figure ES-2**, shows the location of the local access streets, internal driveway network and adjacent transportation facilities.

The study area contains all major signalized intersections along US 15-501 (Fordham Boulevard) from Erwin Road/Europa Drive to the I-40 interchange. It also includes several intersections along Old Durham Road/Old Chapel Hill Road in the vicinity of neighborhoods and commercial areas surrounding Wegmans Supermarket to the north and east. Site traffic is primarily expected use either the major existing access points along US 15-501 at Old Durham Road and Lakeview Drive. Consideration was made for a small percentage of site traffic utilizing local streets from the neighborhoods surrounding Wegmans Supermarket.



US 15-501 (Fordham Boulevard – Durham/Chapel Hill Boulevard) is a major principal arterial providing connectivity between Chapel Hill, the UNC Main Campus, the I-40 corridor and Durham. The remaining study area network roadways are either minor arterial facilities providing connectivity throughout Chapel Hill, suburban collector streets or local neighborhood/commercial access streets.

### **Site Traffic Generation**

With the addition of new peak hour trips during the weekday AM, noon, and PM peak hours, there are potential site traffic impacts to the study area intersections. Appropriate reductions for “pass-by” type trips, transit trips, and pedestrian/bicycle trips were assumed to occur, given the nature of the proposed Wegmans Supermarket land use, and are summarized in **Table ES-1**. **Table ES-1** shows site trip generation details, with rates taken from the *ITE Trip Generation Manual, Volume 9* and adjusted for the appropriate trip reductions and for the existing Performance Motors trip generation data taken directly from field traffic counts of all Performance Motors driveways.

### **Background Traffic**

Background traffic growth for the future 2019 analysis years is expected to come ambient regional traffic growth and specific development-related traffic growth. Based on information on average daily traffic collected by the Town of Chapel Hill and the NCDOT, a yearly ambient traffic growth rate of 1.4 percent per year was used for the short-term 2019 design year capacity analyses. This rate is based on previous and anticipated growth trends for this area from Town and NCDOT average annual daily traffic (AADT) information from the period 1990-2015. In some cases, AADT’s on study area roadways have actually declined over the last 10 years. However, to conservatively account for any background development projects and potential traffic increases in the future, a positive growth rate was selected.

With numerous on-going and planned development sites located in or near the large project study area for the Wegmans Supermarket, and varying time frames for completion of specific projects, background traffic for the 2019 analysis year was estimated as being included in the 1.4 percent per year ambient growth rate.

### **Impact Analysis**

#### **Peak Hour Intersection Level of Service**

Existing 2016 base year traffic operations at most study area intersections are acceptable during all three peak hours analyzed, though several intersections along the US 15-501 are near or at capacity. The projected ambient and background development traffic growth will marginally increase impacts for the 2019 analysis time period. With the addition of Wegmans “net” site traffic on the network, several study area intersections are projected to be over capacity in the 2019 AM and PM peak hours. Inclusion of Applicant-proposed mitigation measures and additional recommended mitigation improvements to individual intersections should provide adequate traffic operations for the project study area.

A summary of the traffic operations for each intersection, related to vehicular delays (overall intersection average if signalized, critical movement if stop-controlled) and the corresponding Level-of-Service (LOS) is shown in **Table ES-2**.

#### **Access Analysis**

Vehicular site access is to be accommodated by four proposed full movement access driveways, three connecting to Old Durham Road and one connecting to Cooper Street for the auxiliary surface parking lot. Access for delivery trucks is also proposed along the rear of the supermarket building that would connect with Old Durham Road. The proposed site plan shows no external access connections to the existing US 15-501 Service Road. All proposed connections are shown on the site plan in **Figure ES-2**.



**Table ES-1**  
**Weekday Vehicle Trip Generation Summary**  
**Wegmans Supermarket Redevelopment Development**

Trip Designation	% Reduction	Daily			AM Peak Hour			Noon Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Raw ITE Vehicular Calculation – LUC 850 (Supermarket) – 140,000 Square Feet		5,383	5,383	10,766	295	181	476	302	252	554	509	490	999
Transit	5%	-269	-269	-538	-15	-9	-24	-15	-13	-28	-25	-25	-50
Ped/Bike	5%	-269	-269	-538	-15	-9	-24	-15	-13	-28	-25	-25	-50
Total Vehicle Trips		4,845	4,845	9,690	265	163	428	272	226	498	459	440	899
Pass-By	18% AM&NN / 36%PM	1,454	1,454	2,908	48	29	77	49	41	90	165	158	323
Balanced Pass-by Trips		-1,454	-1,454	-2,908	-39	-39	-78	-45	-45	-90	-162	-162	-324
<b>New Trips</b>		<b>3,391</b>	<b>3,391</b>	<b>6,782</b>	<b>217</b>	<b>134</b>	<b>351</b>	<b>223</b>	<b>185</b>	<b>408</b>	<b>294</b>	<b>282</b>	<b>576</b>
Existing Vehicle Trips		-1,784	-1,784	-3,568	-181	-83	-264	-168	-171	-339	-114	-208	-322
<b>Net New Trips</b>		<b>1,607</b>	<b>1,607</b>	<b>3,214</b>	<b>36</b>	<b>51</b>	<b>87</b>	<b>55</b>	<b>14</b>	<b>69</b>	<b>180</b>	<b>74</b>	<b>254</b>

Notes: No ITE Data for Noon Peak Hour - Assume 75% of Average Between AM and PM Peak Raw Generation Data and 50% of PM Peak Pass-by Data  
 Data for Existing Trips for Performance Auto Taken from Peak Hour Driveway Count Summations - Data for Existing Daily Trips Taken from ITE



Table ES-2. Wegmans Supermarket Redevelopment Peak Hour LOS and Vehicular Delay Summary

ID	Intersection Name	2016 Base Year						2019 Without Site						2019 With Site						2019 With Site and Mitigation					
		LOS			Average Delay (sec/veh)			LOS			Average Delay (sec/veh)			LOS			Average Delay (sec/veh)			LOS			Average Delay (sec/veh)		
		AM	NN	PM	AM	NN	PM	AM	NN	PM	AM	NN	PM	AM	NN	PM	AM	NN	PM	AM	NN	PM	AM	NN	PM
1	US 15-501 Northbound & Northbound U-Turn	B	B	A	12.0	10.8	9.2	B	B	B	12.7	11.3	10.3	B	B	B	12.4	10.5	11.5	B	B	B	12.1	10.6	10.7
2	US 15-501 Northbound & Europa Drive	B	B	B	15.2	16.4	15.9	B	B	B	15.3	16.5	16.0	B	B	B	13.6	15.8	15.6	B	B	B	13.8	15.9	15.9
3	US 15-501 Southbound & Southbound U-Turn	B	B	B	13.0	17.6	18.7	B	B	B	13.0	16.9	17.9	B	B	B	13.5	15.5	17.1	B	B	B	14.2	14.9	16.6
4	US 15-501 Southbound & Erwin Road	C	C	D	23.9	21.9	36.2	C	C	D	24.6	22.5	39.1	C	B	D	22.3	18.6	36.5	C	B	B	24.6	16.3	19.3
5	<b>US 15-501 &amp; Sage Road / Scarlett Drive</b>	D	D	D	45.6	46.9	51.4	D	D	D	48.6	49.2	53.4	<b>E</b>	D	D	<b>58.1</b>	52.6	51.2	D	D	D	46.7	40.5	46.2
6	US 15-501 & Eastowne Drive / Service Road Access	A	B	C	9.6	17.1	21.3	B	C	C	11.5	22.3	28.5	A	B	B	10.0	12.3	13.0	B	B	B	12.1	11.6	10.6
7	<b>US 15-501 &amp; Eastowne Drive / Lakeview Drive</b>	C	C	D	27.4	20.8	54.8	C	C	<b>E</b>	29.8	21.1	<b>60.9</b>	C	C	<b>F</b>	24.7	26.4	<b>113.2</b>	B	B	D	16.9	17.9	39.2
8	US 15-501 & I-40 Eastbound Ramps	D	C	D	44.3	32.7	35.7	D	C	D	46.9	33.2	37.4	D	C	C	35.4	24.5	27.6	D	C	C	36.6	25.1	30.4
9	US 15-501 & I-40 Westbound Ramps	D	C	D	44.6	29.2	39.5	D	C	D	47.5	29.9	41.4	D	C	D	51.8	29.0	38.3	D	C	D	44.2	32.3	36.8
10	<b>Old Durham Road &amp; Scarlett Drive<sup>@</sup></b>	A	A	A	9.0	9.6	8.6	A	A	A	9.2	9.9	8.8	A	B	A	9.5	10.1	9.9	N/A	N/A	N/A	N/A	N/A	N/A
11	Old Durham Road & Performance Driveway 6 <sup>@</sup>	B	B	B	10.6	10.4	10.4	B	B	B	10.7	10.5	10.4												
12	Old Durham Road & Cooper St / Performance Dr 7 <sup>@</sup>	B	B	C	13.9	13.9	22.6	B	B	C	14.3	14.2	24.6	B	B	C	13.0	11.6	22.9	N/A	N/A	N/A	N/A	N/A	N/A
13	Old Durham Road & Standish Drive <sup>@</sup>	B	B	B	11.0	10.7	13.6	B	B	B	11.1	10.8	14.0	B	B	D	14.1	12.7	25.2	N/A	N/A	N/A	N/A	N/A	N/A
14	<b>Old Chapel Hill Road &amp; Lakeview Drive<sup>@</sup></b>	C	B	C	17.1	11.8	17.0	C	B	C	18.4	13.1	22.1	E	C	<b>F</b>	43.2	21.8	<b>148.8</b>	B	B	B	19.2	12.8	16.1
15	Service Road/Cemetery Driveway & Scarlett Drive <sup>@</sup>	B	B	B	10.8	14.6	11.9	B	C	B	10.9	15.1	12.1	B	A	B	11.8	9.4	13.2	N/A	N/A	N/A	N/A	N/A	N/A
16	Service Road & Performance Driveway 1 <sup>@</sup>	A	A	A	8.5	8.6	8.4	A	A	A	8.4	8.6	8.4												
17	Service Road & Performance Driveway 2 <sup>@</sup>	A	A	A	8.6	8.8	8.5	A	A	A	8.6	8.8	8.5												
18	Service Road & Performance Driveway 3 <sup>@</sup>	A	A	A	8.9	8.9	8.7	A	A	A	8.9	8.9	8.7												
19	Service Road & Performance Driveway 4 <sup>@</sup>	A	A	A	8.7	8.8	8.7	A	A	A	8.7	8.8	8.7												
20	Service Road & Performance Driveway 5 <sup>@</sup>	A	A	A	8.8	8.8	8.7	A	A	A	8.8	8.8	8.7												
21	Service Road / SECU Visitors Cir & Eastowne Drive <sup>@</sup>	A	A	A	8.7	8.8	8.8	A	A	A	8.7	8.9	8.9	A	A	A	9.2	8.9	8.8	N/A	N/A	N/A	N/A	N/A	N/A
22	Cooper Street & Performance Driveway 8 (Site Driveway 4) <sup>@</sup>	A	A	B	8.8	9.5	10.9	A	A	B	8.8	9.5	11.0	A	A	B	9.9	9.6	11.1	N/A	N/A	N/A	N/A	N/A	N/A
24	<b>Old Durham Road &amp; Site Driveway 1<sup>@</sup></b>													C	C	<b>F</b>	17.1	18.2	<b>51.6</b>	N/A	N/A	N/A	N/A	N/A	N/A
25	<b>Old Durham Road &amp; Site Driveways 2 &amp; 3<sup>@</sup></b>													C	C	<b>F</b>	17.7	16.7	<b>59.3</b>	A	A	B	7.0	7.3	11.7

BLUE – New and/or Modified Intersections      **BOLD/ITALICS** – Movement or Overall Intersection is over capacity as defined by Town of Chapel Hill TIS Standards  
 @ - Unsignalized Intersection, LOS/Delay Values Correspond to Worst-Case Critical Movement      N/A – Not Applicable, i.e. no improvements made

GREY CELLS – Intersection Does Not Exist for Analyzed Scenario



Design details related to driveway throat lengths and driveway spacing between driveways and nearby intersections indicate that no significant operational or safety issues are expected to occur due to the proposed site access plan. The applicant is proposing to provide a future cross-access easement to the adjoining property to the west (Hardees) from within the proposed parking lot. If the Hardees property were to redevelop in the future, access to this property should be via the cross-access easement and the existing Hardees access point on Old Durham Road should be eliminated.

Access for pedestrians and bicyclists is inadequate in the project study area. Sidewalk is present on most study area facilities, but connectivity is impaired due to lack of continuous sidewalk in some areas and adequate crossings of the US 15-501 corridor. Crosswalk and pedestrian signals exist across the US 15-501 superstreet intersection with Erwin Road/Europa Drive and at Eastowne Drive (south) and unsignalized crosswalk is present at the Cooper Street/Old Durham Road intersection. No bicycle lanes exist in the project study area. Paved shoulders exist along US 15-501 in the project study area, but their width and proximity to high volume/high speed and often congested traffic conditions make the facility unsuitable for bicycling.

### **Signal Warrant Analysis**

Based on projected 2019 traffic volumes and current/proposed access plans, the only unsignalized intersection in the project study area that may warrant the new installation of a traffic signal, based on the peak hour warrant methodology found in the *2009 Manual on Uniform Traffic Control Devices (MUTCD)*, is at Old Chapel Hill Road and Lakeview Drive.

The Peak Hour signal warrant analysis is used as a verification that projected traffic volumes meet peak hour warrants as a precursor to a more extensive analysis of conditions via additional data collection for 4-Hour and 8-Hour warrant analyses. This intersection does not meet signal warrants for the 2019 Build Scenario – with Wegmans site traffic, but should be monitored for signalization if traffic patterns due to the Wegmans site differ from assumptions made for this analysis.

### **Crash Analysis**

Data from the NCDOT Traffic Safety Unit was provided for the five-year period 6/1/2011 to 5/31/2016 for segments of US 15-501 (Durham-Chapel Hill Boulevard) and Old Durham Road in the vicinity of the proposed site and for existing major study area intersections adjacent to the Wegmans site. 613 crashes were reported along US 15-501 between E. Franklin Street and I-40 and 46 crashes were reported along Old Durham Road between US 15-501 and Lakeview Drive. Primary crash types included rear end crashes, sideswipes, and left-turn crashes.

Overall, the number and severity of crashes along the US 15-501 corridor in the project study area is higher than state-wide averages for similar facilities. The intersection of Old Durham Road and Scarlett Drive has a high rate of crashes relative to other study area intersections.

### **Mitigation Measures/Recommendations**

#### **Planned Improvements**

The North Carolina Department of Transportation is studying the US 15-501 corridor through the project study area for comprehensive improvements to manage access and potentially result in a superstreet design. This STIP project (U-5304B) is in the planning stages and was not considered to be complete by 2019. The proposed Applicant Committed Improvements and Necessary Improvements outlined below, were developed to minimize future changes that may be necessary due to future designs of access changes and potentially limitations that may be recommended in the U-5304 project.



The Town of Chapel Hill is planning improvements to the Sage Road and Old Durham Road corridors to enhance pedestrian and bicycle facilities. The current NCDOT project, STIP EB-4707, is providing bicycle and pedestrian improvements along Old Durham Road from the Scarlett Drive/Sage Road/Old Durham Road and US 15-501 Fordham Boulevard intersection into Durham County (as schematically shown on **Figure ES-3**). The improvements will add sidewalks along the entire length as well as bicycle lanes on both sides. Right-of-way acquisitions have been made along this frontage. Construction is anticipated to begin Summer 2018. The improvements to the facilities should not cause significant changes to the existing or proposed geometrics of study area intersections, but will improve safety and accessibility for all transportation modes in the vicinity of the proposed Wegmans Supermarket site.

### **Background Committed Improvements**

There are no specific significant geometric or operational improvements to study area roadway intersections or facilities related to background private development projects that are expected to be completed between 2017 and 2019. A new Advance Auto Parts store, located off Scarlett Drive has provided minor signage, pavement marking, and median improvements in the vicinity of the Scarlett Drive and Old Durham Road intersection.

### **Applicant Committed Improvements**

Based on the current site concept plans, scenario testing and vetting process undertaken by the Town, NCDOT and Applicant for this project, and supporting development information provided, there are several significant external transportation-related improvements proposed adjacent to the Wegmans Supermarket site. They are listed below and were considered as being completed for the Condition 4 – 2019 With Mitigation Scenario analyses:

1. Extension of concrete median along Scarlett Drive to extend up Old Durham Road to a distance of approximately 325 feet upstream of the existing stop bar at the US 15-501 intersection. This would restrict through movements on northbound Scarlett Drive and left-turn movements westbound on Old Durham Road. Widening of Old Durham Road approach at the US 15-501 intersection to include dual left-turn lanes (the inner lane featuring 125 feet of vehicle storage) and a shared through/right-turn lane. Upgrade signal phasing for these changes.
2. Construct full access site driveway with future cross-access potential connection to Hardees and 100 feet of left-turn and right-turn exit storage.
3. Construct single lane roundabout at Site Driveways #2 and #3 with mountable inner circle to provide site access and U-turning capability for traffic from Scarlett Drive impacted by proposed median and access limitation.
4. An unsignalized pedestrian crosswalk with central median refuge is proposed on Old Durham Road connecting the additional parking area with the main store site just west of the roundabout.
5. Provide full access driveway onto Cooper Street.
6. Eliminate all existing roadway connections to US 15-501 Service Road.

Additional details regarding geometric improvements and spatial location of this list of improvements can be found in **Figure ES-2** and schematically in **Figure ES-3**. Regarding the applicant's proposal to provide a future cross-access easement to the adjoining property to the west from within the proposed parking lot – if the adjoining property were to redevelop in the future, access to these two properties could be combined and the existing property access point to Old Durham Road should be closed.



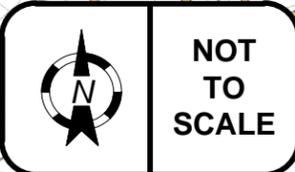
**Necessary Improvements**

Based on traffic capacity analyses for the 2019 design year, and analyses of existing and proposed study area turning bay storage lengths and site access, the following improvements in **Table ES-3** are recommended as being necessary for adequate transportation network operations (see **Figure ES-4**).

**Table ES-3. Recommended Improvements**

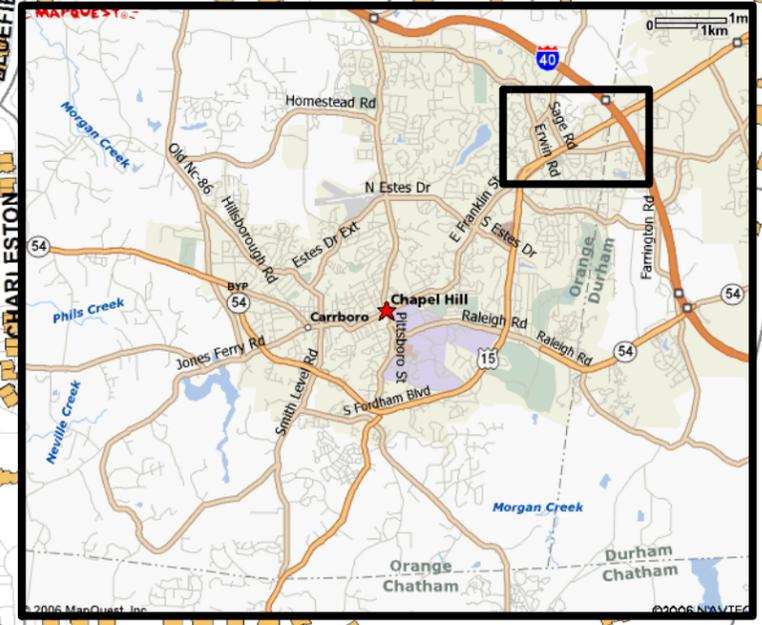
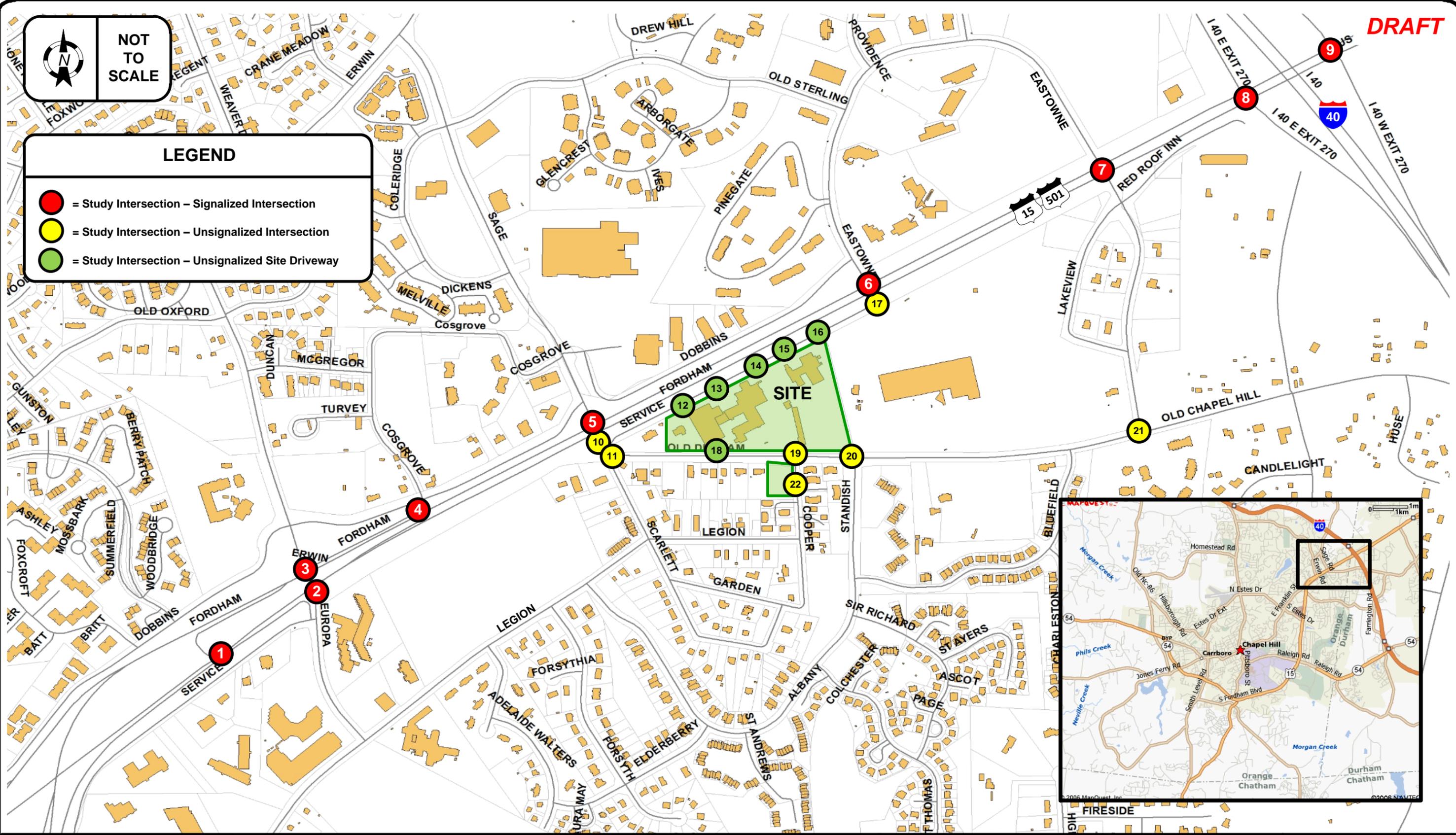
ID	Intersection Name	Additional Recommended Improvements
5	US 15-501 & Sage Road / Old Durham Road	<ul style="list-style-type: none"> <li>Widen northbound Old Durham Road approach to include an auxiliary right-turn lane with 75 feet of storage (minimum). Upgrade signal phasing to include a northbound right-turn overlap.</li> </ul>
6	US 15-501 & Eastowne Drive / Service Road	<ul style="list-style-type: none"> <li>Install way-finding signage to delineate the Service Road as having NO access to Wegmans</li> <li>Construct additional sidewalk to connect existing crosswalk to Wegmans property along south side of Service Road.</li> </ul>
7	US 15-501 & Eastowne Drive / Lakeview Drive	<ul style="list-style-type: none"> <li>Convert southbound approach to include dual left-turn lanes (with 300 feet of delineated storage) and a new through/right-turn lane (with 300 feet of storage).</li> <li>Widen northbound Lakeview Drive approach for an auxiliary right-turn lane with 350 feet of storage and provide right-turn overlap signal phasing.</li> <li>Lengthen existing eastbound US 15-501 through/right-turn add lane from 100 feet to 300 feet minimum.</li> <li>Install way-finding signage to delineate Lakeview Drive as primary Wegmans access point.</li> </ul>
13	Old Durham Road & Cooper Street	<ul style="list-style-type: none"> <li>Construct transit stop improvements for stops serving current CHT Routes CL, D and DX, as necessary.</li> </ul>
14	Old Chapel Hill Road & Lakeview Drive	<ul style="list-style-type: none"> <li>Monitor intersection for signalization.</li> <li>Provide crosswalk and pedestrian crossing signals (if signalized) at all approaches.</li> </ul>
25	Old Durham Road & Site Driveways #2/#3	<ul style="list-style-type: none"> <li>Remove bicycle lane striping within roundabout (per FHWA, Office of Safety, <i>FHWA-SA-10-0066.3 Bicycle Design Treatments</i>) unless specified by Town and/or NCDOT Design standards</li> </ul>
N/A	Cooper Street / Legion Road Extension	<ul style="list-style-type: none"> <li>Monitor traffic flow along these corridors and provide additional traffic calming measures, if needed.</li> </ul>
N/A	US 15-501 Corridor	<ul style="list-style-type: none"> <li>Retime all traffic signals.</li> </ul>

A final recommendation for improvements to access and to future traffic operations for the Wegmans Supermarket would be to consider coordination with the adjoining parcel to the east of the site, should it eventually be redeveloped, to develop internal roadway connectivity that would serve both sites and allow Wegmans site traffic to utilize the US 15-501 intersection with Eastowne Drive / Service Road. This would necessitate new driveway connection(s) with the Wegmans surface parking lot and the Service Road, but could ultimately improve the number of access options and traffic circulation for both parcels.



LEGEND

- = Study Intersection – Signalized Intersection
- = Study Intersection – Unsignalized Intersection
- = Study Intersection – Unsignalized Site Driveway

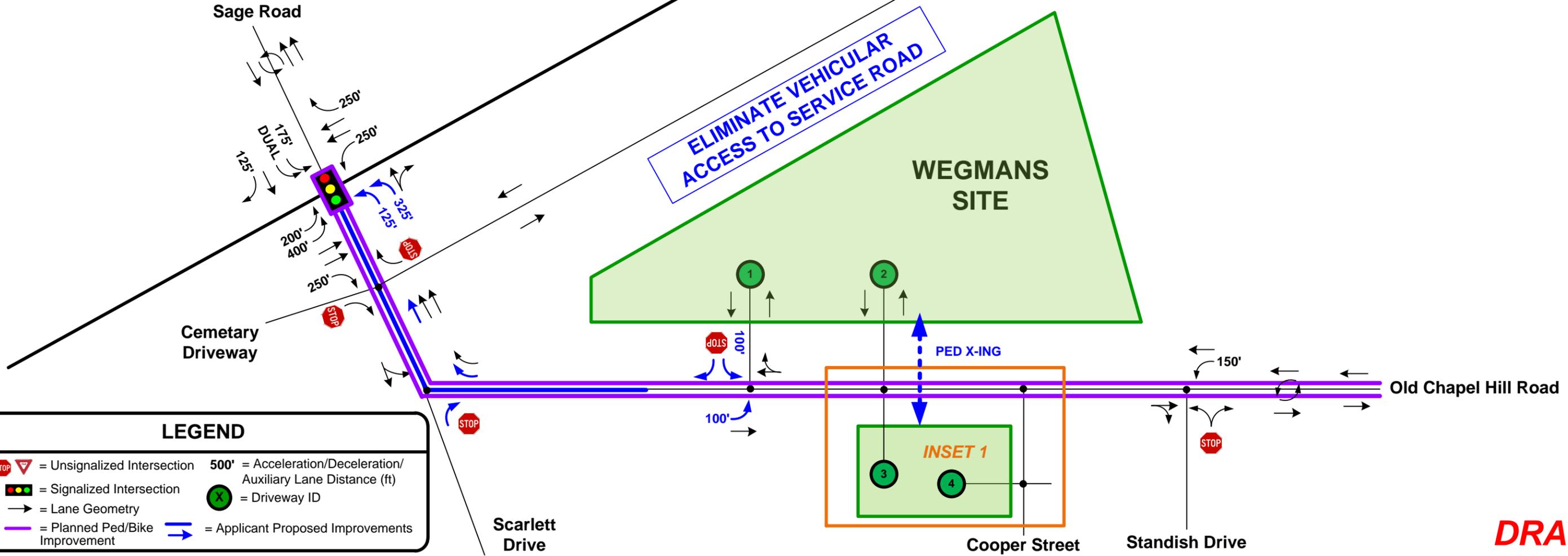
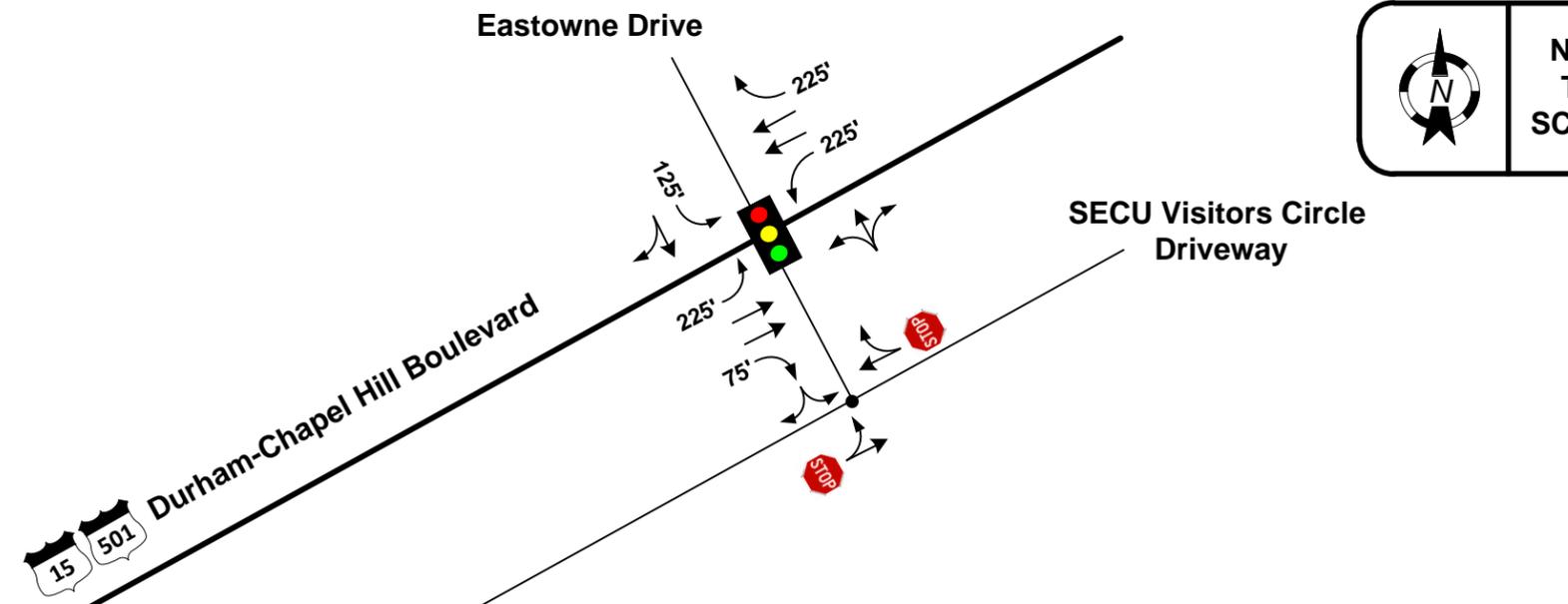
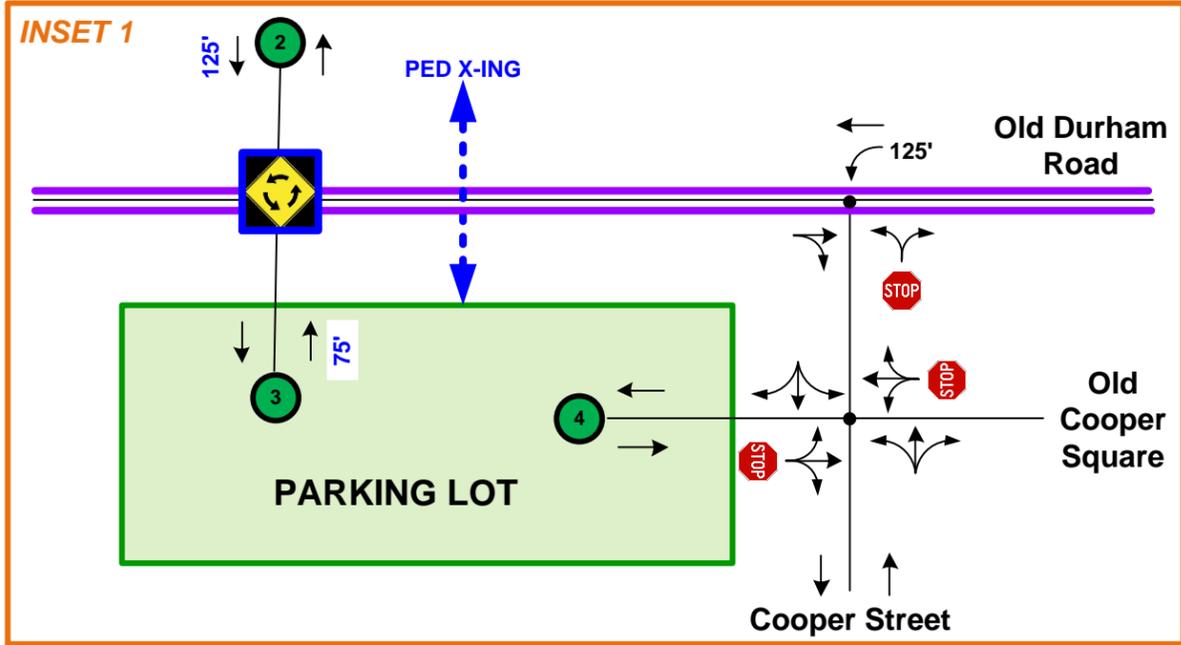


**Wegmans Supermarket  
Traffic Impact Study  
PROJECT STUDY AREA**

DATE: June 2017

FIGURE ES-1





**LEGEND**

- = Unsignalized Intersection
- = Signalized Intersection
- = Lane Geometry
- = Planned Ped/Bike Improvement
- = Acceleration/Deceleration/Auxiliary Lane Distance (ft)
- = Driveway ID
- = Applicant Proposed Improvements

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**Wegmans Supermarket  
Traffic Impact Study**

**PLANNED AND APPLICANT COMMITTED IMPROVEMENTS**

DATE: June 2017

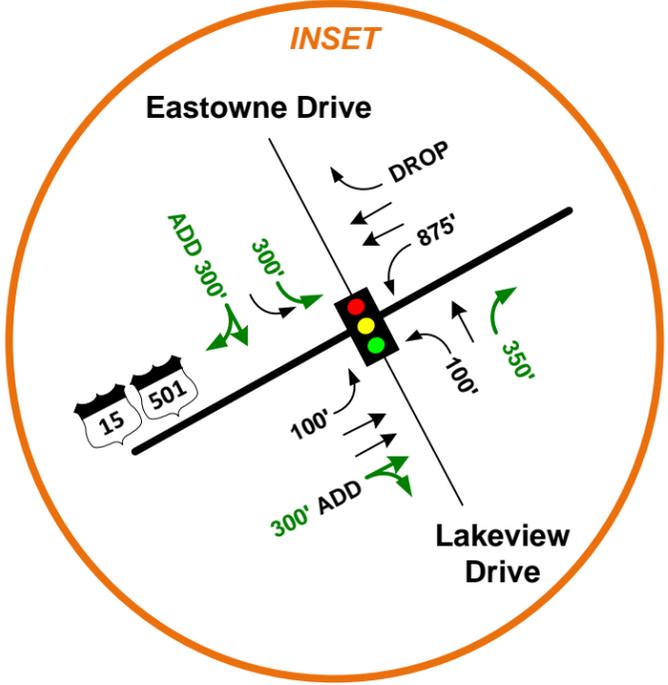
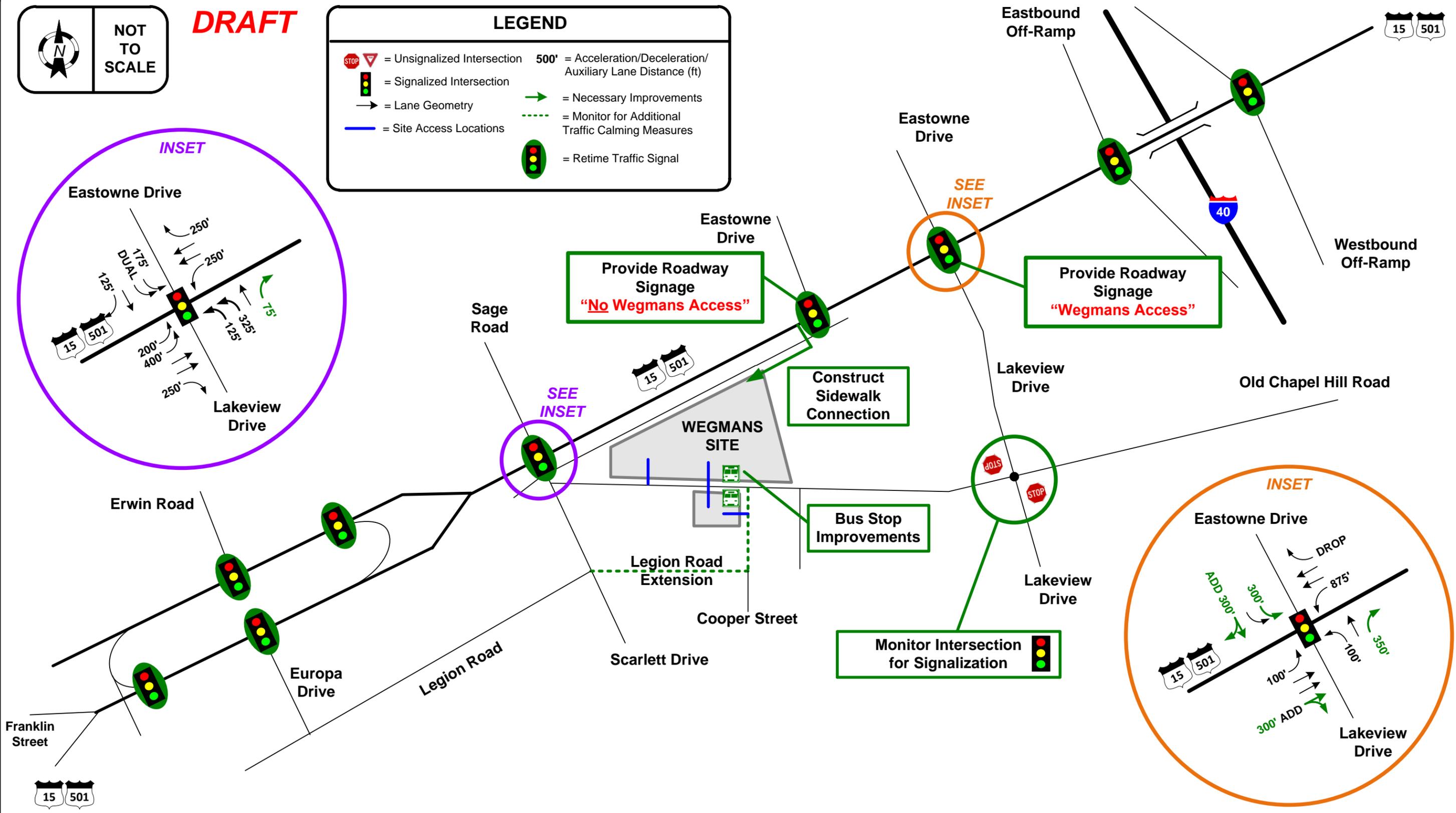
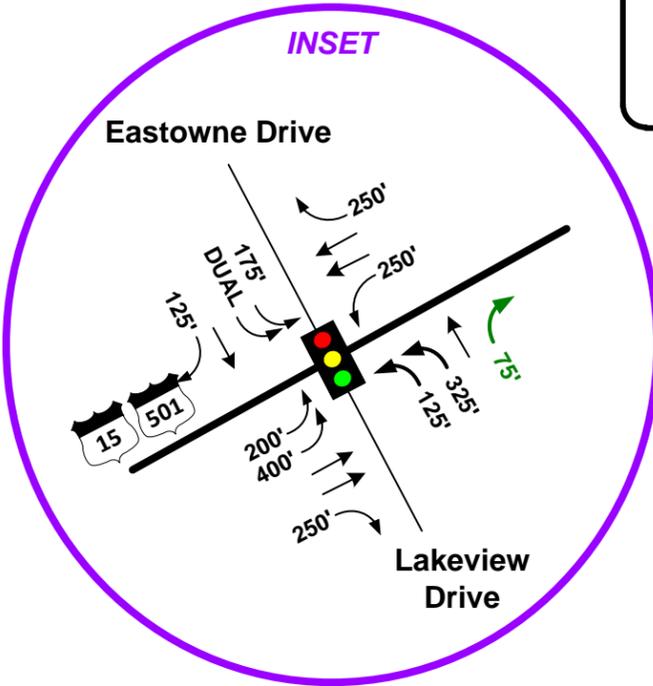
**FIGURE ES-3**



**DRAFT**

**LEGEND**

- = Unsignalized Intersection
- = Signalized Intersection
- = Lane Geometry
- = Site Access Locations
- = Necessary Improvements
- = Monitor for Additional Traffic Calming Measures
- = Retime Traffic Signal
- 500'** = Acceleration/Deceleration/Auxiliary Lane Distance (ft)



**Wegmans Supermarket  
Traffic Impact Study**

**NECESSARY IMPROVEMENTS**

DATE: June 2017

**FIGURE ES-4**