



Z-15-01-006

City of Greensboro Planning Department Zoning Staff Report and Plan Amendment Evaluation

Zoning Commission Hearing Date: January 12, 2015

GENERAL INFORMATION

APPLICANT	Halpern Development Company, LLC on behalf of Vera T. Rabin, John Bishop Byerly, William E. Smith, Nancy V. Smith-Hunnicut, Jennifer O. Krisher, and Ada S. German
HEARING TYPE	Rezoning
REQUEST	R-3 (Residential Single-Family) to CD-C-M (Conditional District-Commercial-Medium)
CONDITIONS	<p>(1) Uses shall be limited to those permitted in the CM District, except that the following uses shall not be permitted: billboards, eating and drinking establishments with drive-through facilities, single or multi-family residential dwellings, animal shelters, community scale cultural and community uses, day care centers, educational facilities, governmental buildings, group care facilities, clubs and lodges, indoor shooting ranges, hotels and motels, bed and breakfasts, bars, night clubs, brewpubs, funeral homes and crematoriums, veterinary services and pet grooming, kennels, ABC stores, convenience stores with gas pumps, garden centers, pawn shops, sexually oriented businesses, self-storage, vehicle sales and service, drug stores, and car washes.</p> <p>(2) The total square footage of all buildings shall not exceed 55,000 square feet, with no single building to exceed 48,000 square feet.</p> <p>(3) Upon redevelopment, the properties shall have no more than one point of access on Hobbs Road and no more than one point of access on W. Friendly Avenue.</p> <p>(4) The development shall be limited to one monument sign on Hobbs Road and one monument sign on W. Friendly Ave. Each sign shall be limited to a maximum of 12 feet in height.</p> <p>(5) Wall signs and monument signs shall not be internally illuminated.</p> <p>(6) The site shall contain a minimum 115 foot undeveloped area along the northern portion of the tract. The existing and natural vegetation 3 inches or greater DBH (diameter at breast height) within this undeveloped area shall be undisturbed except where necessary to accommodate construction of a 13 foot tall brick wall.</p> <p>(7) The site shall contain a minimum 40 foot undisturbed buffer along the western portion of the tract except where necessary to accommodate a fence no less than 6 feet in height along the boundary.</p> <p>(8) Exterior lights shall not exceed 22 feet in height.</p>

- (9) Buildings shall not exceed 35 feet in height.
- (10) Buildings exteriors, at a minimum, shall consist of 50% brick or stone veneer.
- (11) The loading area of the eastern-most building or buildings shall be screened from view of the of Hobbs Road right-of-way and from the W. Friendly Ave. right-of-way as viewed from the tract frontage.

LOCATION **3510-3516 West Friendly Avenue, 805 & 807 Hobbs Road**

PARCEL ID NUMBER(S) **7855110811, 7855111699, 7855113644, 7855114622, 7855113816, & 785513915**

PUBLIC NOTIFICATION The notification area for this public hearing was 600 feet (Chapter 30-4-1.4 of the Land Development Ordinance requires notification of the owner of that parcel of land and the owners of all parcels of land adjoining and contiguous to that parcel of land as shown on the County tax listing). **118** notices were mailed to those property owners in the mailing area.

TRACT SIZE ~6.4 Acres

TOPOGRAPHY Undulating

VEGETATION Residential

SITE DATA

Existing Use Single family dwellings

Adjacent Zoning **Adjacent Land Uses**

N CD-R-5 (Conditional District-Residential Single-Family) Single family dwellings

E CD-C-M (Conditional District-Commercial-Medium) Commercial retail center and services

W R-3 (Residential single-Family) & CD-O (Conditional District-Office) Single family dwellings
A place of worship

S R-3 (Residential Single-Family) Single family dwellings

Zoning History

Case #	Date	Request Summary
Z-14-01-005	02/10/2014	The Zoning Commission voted 8-1 to approve this request; however, it was withdrawn before City Council could render a decision.

ZONING DISTRICT STANDARDS

District Summary *

Zoning District Designation:	Existing (R-3)	Requested (CD-C-M)
Max. Density:	The overall gross density in R-3 will typically be 3.0 units per acre or less.	N/A
Typical Uses	Primarily intended to accommodate low-density single-family detached residential development.	Primarily intended to accommodate a wide range of retail, service, and office uses.

**These regulations may not reflect all requirements for all situations; see the City of Greensboro Development Ordinance for all applicable regulations for site requirements for this zoning district.*

SPECIAL INFORMATION

Overlay District Ordinance/Historic Preservation

Subject site is located within the boundaries of the West Friendly Avenue Visual Corridor Overlay Zone and the Holden Road Visual Corridor Overlay Zone, both of which prohibit establishment of new outdoor advertising signs.

Environmental/Soils - Site drains to South Buffalo Creek

Water Supply Watershed Site drains to North Buffalo Creek, non-watersupply watershed

Floodplains N/A

Streams N/A

Other: If >1acre is to be disturbed and BUA is increased, site must meet Phase 2 requirements. Quantity & Quality must be addressed, treat new BUA and any existing BUA that drains to the State approved Water Quality BMP. Site is located within the 5 mile statue radius of the PTI Airport. No BMP's are allowed that hold a normal pool elevation unless engineer proves no other device will function properly.

Utilities

Potable Water Available

Waste Water Available

Airport Noise Cone

n/a

Landscaping Requirements

Landscaping requirements will be established at the time a development plan is submitted for this site. Credit can be given for existing trees upon inspection by the Urban Forester.
(see zoning conditions)

W. Friendly Ave. & Hobbs Rd.- Street Yard – minimum width 10'; 2 canopy trees per 100', 17 shrubs per 100'

Required Landscaping

Parking lot planting yards must include at least one canopy tree for every 12 parking spaces.

When a parking lot or other vehicular use area abuts a vacant site or a site with the same land use classification as the subject site, a planting yard with a minimum width of 5 feet must be provided between the parking lot/vehicular use area and the abutting (interior) property line. This required planting area must be landscaped with at least 2 understory trees and 18 evergreen shrubs per 100 linear feet.

Trees used to satisfy the planting requirements for parking lot areas may not be counted toward the planting requirements for other required plantings on the site.

**Tree Preservation Requirements
Acreage**

Requirements

6.4 ac. 5% of lot size

Transportation

- Street Classification: Friendly Avenue – Major Thoroughfare.
Hobbs Road – Collector Street.
- Site Access: All access(s) must be designed and constructed to the City of Greensboro standards.
- Traffic Counts: Friendly Avenue ADT = 33,256 (GDOT, 2013)
Hobbs Road ADT = 6,268 (GDOT, 2013)
- Trip Generation: Scenario 1:
24 Hour = 6,383, AM Peak Hour = 202, PM Peak Hour = 599.
Scenario 2:
24 Hour = 5,312, AM Peak Hour = 148, PM Peak Hour = 480.
Scenario 3:
24 Hour = 5,736, AM Peak Hour = 194, PM Peak Hour = 598..
- Sidewalks: Sidewalks are a requirement of the Development Ordinance. 5' sidewalk with a 5' grass strip is required along both sides of thoroughfares. 5' sidewalk with a 3' grass strip is required along one side (at a minimum, collectors may require sidewalk on both sides) of all other street types. Sidewalk does exist along the Friendly Avenue frontage of this property.
- Transit in Vicinity: Yes, GTA Route 7 (Friendly Avenue) is adjacent to subject site, along Friendly Avenue.
- Traffic Impact Study: (TIS) Yes, required per TIS Ordinance. Please see the end of this staff report for the Executive Summary of the TIS.
- Street Connectivity: N/A.

Other: N/A.

IMPACT ANALYSIS

Land Use Compatibility

The proposed **CD-C-M (Conditional District-Commercial-Medium)** zoning as conditioned would allow land uses that are compatible with the general character of the area.

Connections 2025 Comprehensive Plan Policies

The Generalized Future Land Use Map designates this location as **Low Residential (3-5 d.u./acre)** and **Moderate Residential (5-12 d.u./acre)**. The requested **CD-C-M (Conditional District – Commercial Medium)** zoning district is generally inconsistent with these GFLUM designations, however the applicant has concurrently submitted a request to amend the GFLUM designations on the subject site to **Mixed Use Commercial** which, if approved, would resolve this inconsistency.

Connections 2025 Written Policies

Land Use Goal 4.1 – Growth Strategy: Promote sound investment in Greensboro's urban areas, including Center City, commercial and industrial areas, and neighborhoods.

Policy 4C - Promote new patterns and intensities of use to increase economic competitiveness and enhance quality of life in urban areas.

Community Character Goal 5.2 – Man-Made Environment: Preserve and enhance the character and visual quality of Greensboro's built environment, including historic resources, private developments, and public landscapes.

Policy 5F – Implement and improve design standards governing the appearance of development from public roadways.

Housing and Neighborhoods Goal 6 – Meet the needs of present and future Greensboro citizens for a choice of decent, affordable housing in stable, livable neighborhoods that offer security, quality of life, and the necessary array of services and facilities.

Policy 6B – Implement an expanded program to maintain the City's housing stock, eliminate substandard housing, and meet needs for affordable housing.

Economic Development Goal 7: Promote a healthy, diversified economy with a strong tax base and opportunities for employment, entrepreneurship and for-profit and non-profit economic development for all segments of the community, including under-served areas such as East Greensboro.

Policy 7C - Ensure that city land use policies and regulations allow for an adequate supply of land to accommodate economic development.

Transportation, Goal 8: Develop and maintain a safe, efficient, and environmentally sound transportation system that provides convenient choices for accessing destinations throughout Greensboro and the Triad, including a range of well-integrated transit, pedestrian, and bicycle linkages.

Policy 8A - Maintain a roadway network that safely and efficiently accommodates vehicular traffic while supporting other community objectives defined in the Comprehensive Plan.

Connections 2025 Map Policies

Low Residential (3-5 d.u./acre): This category includes the City's predominantly single-family neighborhoods as well as other compatible housing types that can be accommodated within this density range. Although there are some existing residential areas in the City developed on lots greater than 1/3 acre, future residential developments and "conventional" subdivisions should generally maintain a gross density of no less than three dwellings per acre, except where environmental constraints (e.g., the Watershed Critical Area) prevent such densities from being achieved. Compact developments that include clustered, small lots with substantial retained open

space are encouraged.

Moderate Residential (5-12 d.u./acre): This category accommodates housing types ranging from small-lot, single-family detached and attached single-family dwellings such as townhomes to moderate density, low-rise apartment dwellings.

Mixed Use Commercial: This designation is intended to promote a mix of uses, of which various commercial uses remain predominant, but where residential, service, and other uses are complementary. Where applied to older highway corridors characterized by “strip” commercial uses, the intent is to encourage infill and redevelopment for a more diverse and attractive mix of uses over time. Examples include residential units over commercial uses or a wider array of economically viable uses to replace obsolete uses. Such areas also may represent opportunities for the introduction of substantial higher density and/or mixed-income housing, with negligible impacts on, or resistance from, nearby single-family neighborhoods. Ensuring that buildings are of the appropriate scale and intensity is critical, as is ensuring that sites are designed in a coordinated, as opposed to a lot-by-lot, manner. New “strip” commercial development is discouraged.

Comprehensive Plan Amendment History

Case #	Date	Request Summary
n/a	n/a	n/a

Applicant Stated Reasons for Request

“Amendment is minor

“The requested zoning district is CM, but it is so heavily conditioned with use restrictions that it will have an overall intensity equal to or less than a CL zoning district. CM was requested solely for the purpose of allowing a drive-through window at a (non-restaurant) retail use. Except for that, it is no different than a CL district. Under the City’s policies, if the requested district had been CL and there were 16,000 fewer square feet, no GFLUM amendment would have been required.

“The proposed zoning conditions are designed to create a pedestrian-scale and pedestrian-friendly retail district that is heavily buffered and compatible with all surrounding uses.”

Explain in detail the conditions that you think may warrant a Plan Amendment – Per Applicant and Application

“Changes in land use are ‘a virtual certainty’

“*Connections 2025* describes the Generalized Future Land Use Map as a tool that ‘broadly depicts the desired future land use pattern of land use.’ The highest and most appropriate use of various tracts -- especially in transitional corridors -- evolves as land use and traffic patterns change. *Connections 2025* anticipates these changes as ‘a virtual certainty.’

“*Connections 2025* and GFLUM Predate Shoppes at Friendly

“Importantly, *Connections 2025* and the GFLUM were adopted prior to the rezoning of the 33 acre tract on the northeast corner of Hobbs and Friendly from RS-12 and GO-H to CD-GB to allow a shopping center development now known as the Shoppes at Friendly. Together with the original Friendly Shopping Center, this development creates one of the largest retail areas in the city immediately adjacent to the subject property to the east.

“While the proposed rezoning is not fully consistent with the GFLUM at its adoption ten years ago, the proposed amendment is consistent with and furthers the goals contained within *Connections 2025*, including enhancement of areas through parks and open spaces; providing for a diverse economy and healthy investment; development of highest standards that protects a community’s character; and

promoting pedestrian-access development.

"A residential 'island'

"Friendly Avenue and Hobbs Road have evolved from a major thoroughfare and a connector serving mostly residential traffic to roads serving a heavy mixture of commercial and residential traffic.

"Starting at the eastern-most corner of Centenary Methodist Church (.3 miles east of Wendover), traveling west to Holden and Friendly (exactly one mile west of Wendover), these six tracts are the only residential properties remaining in that 1.3 mile stretch on the north side of W. Friendly Ave. They are an island. To the west are a large institutional use (First Lutheran Church) and a large office building at the corner of Friendly and N. Holden.

"The six tracts that constitute the subject property have the lowest average residential density in the area (one unit per 1.12 acres), yet they adjoin one of the largest retail centers in the City of Greensboro on the east. To the south and across Friendly are a higher density residential development (R-3 zoning) and two large institutional uses. And to the north are two much higher density residential developments.

"Only three of these six tracts are owner-occupied.

"Low density, single family residential is no longer viable at this corner. A transitional zoning is needed to connect this high density retail space with nearby institutional, office and residential designations. The more intense surrounding densities and intensities make these six tracts appropriately located to be a transitional zone between shopping centers to the east and the church, institutional and office uses to the west and south.

"Market pressure

"The current application is the third attempt in 3 years to rezone these properties to a retail use. The previous two applications never made it to the City Council. The 'market' believes that the highest and best use for this corner is retail."

COMPREHENSIVE POLICY PLAN ANALYSIS

Need for Proposed Change

The requested zoning would allow uses that are incompatible with the subject site's current GFLUM categories, **Low Residential (3-5 d.u./acre)** and **Moderate Residential (5-12 d.u./acre)**. The requested GFLUM amendment to **Mixed Use Commercial** would eliminate that potential inconsistency.

Effect of the proposed Change on the Need for City Services and Facilities (e.g. roadway level of service).

See recommendations of attached Traffic Impact Analysis.

Implications, if any, the Amendment may have for Other Parts of the Plan

n/a

Unforeseen Circumstances or the Emergence of New Information (e.g. significant economic opportunity in Tier 2 or 3)

n/a

PLANNING BOARD COMMENTS

At their December 17, 2014 meeting, the Planning Board was asked to consider and comment on the requested change to the GFLUM as discussed above. The Planning Board commented that this is the second time it has reviewed this proposal. Looking at the map, the Board expressed concerns regarding the change, in the interest of the highest and best use of the property and that it be conducive to neighboring properties. The Board reiterated its previous observation that the area is in transition, and added that this transition must occur in harmony with, and be sensitive to, the neighborhood. The Board stated that this proposal addresses an opportunity for good infill, and responds to the context of the other adjoining non-residential properties.

CONFORMITY WITH OTHER PLANS**City Plans*****Consolidated Plan 2010-2014: Plan for a Resilient Community*****Principle 1 – Provide More Transportation Options:**

Goal A: Promote transportation and development patterns and types that contribute to decreased household transportation costs.

Principle 3 – Enhance Economic Competitiveness:

Goal E: Focus on energy efficiency as an economic generator for small business development.

Principle 4 – Support Existing Communities:

Goal F: Promote neighborhood and economic development by fulfilling target area commitments and creating a process for identifying new opportunities for neighborhood revitalization and planning.

Principle 6 – Value Communities and Neighborhoods:

Goal A: Promote coordinated transportation and land use decisions for broader livability throughout Greensboro.

Principle 7 – Recognize the Environment as a Critical Element of Community Sustainability:

Goal A: Promote more efficient land development patterns.

Sustainability Action Plan**Element 1) Transportation and Land Use:**

Policy 1) Encourage increased density, a mix of land uses and more integrated links between transportation and land use through changes to Greensboro's Comprehensive Plan, Development Ordinance and other related plans.

Element 2) Green Jobs and Buildings:

Policy 3) Develop a coordinated City program to provide technical support, energy audits and education and outreach to increase energy efficiency and conservation in commercial and residential buildings.

Policy 4) Use a combination of code changes, incentives, partnerships and education to promote green building in Greensboro.

Policy 6) Promote more efficient use of water through education, partnerships and pilot projects.

Element 3) Waste Reduction and Recycling:

Policy 7) Employ a combination of expanded recycling infrastructure, regulations and incentives to increase Greensboro's solid waste diversion and recycling rates.

Element 6) Education and Outreach:

Policy 11) Provide technical support, awards and recognition to individuals and organizations furthering Greensboro's energy and sustainability efforts.

Other Plans

n/a

STAFF ANALYSIS AND RECOMMENDATION

Community Outreach

Applicant is strongly encouraged to discuss the proposed rezoning, GFLUM amendment, and development with owners of surrounding properties and with representatives of the adjacent Wedgewood neighborhood and nearby Starmount Forest and Hamilton Forest neighborhoods.

Based on the proximity of the subject site to signed Bicycle Route #6 (along Hobbs Road), as well as very high concentrations of residential development, commercial activity, and centers of employment, long term vitality of this proposed commercial development would be greatly enhanced by provision of secure, accessible bicycle parking facilities for both employees and visitors.

Staff Analysis

The subject properties are currently developed as single family dwellings. Properties located to the east, across Hobbs Road, are primarily zoned CD-C-M (commercial retail center and services). Property located north of the proposal, along Hobbs Landing Court, are zoned CD-R-5 (single family dwelling development). Adjacent property to the west is zoned CD-O and R-3 (a place of religious assembly) with property further west zoned O (office building). Properties to the south of the proposal, across W. Friendly Avenue, are zoned R-3 (single-family dwellings).

The Generalized Future Land Use Map currently designates the site as both Low Residential and Moderate Residential, with the Moderate Residential designation covering the most of the site. The Low Residential designation predominantly consists of single-family neighborhoods as well as other compatible housing types that can be accommodated within a density range of 3 to 5 dwelling units per gross acre. The Moderate Residential designation typically accommodates housing types ranging from small-lot, single-family detached and attached single family dwellings such as townhomes to moderate density, low-rise apartment dwellings within a range of 5 to 12 dwelling units per gross acre. The applicant has submitted a GFLUM amendment with this rezoning request to reclassify the area as Mixed Use Commercial consistent with the proposed commercial use. The Mixed Use Commercial designation is intended to promote a mix of uses, of which various commercial uses remain predominant, but where residential, service, and other uses are complimentary.

Approving this request will address the Comprehensive Plan's goal to promote a healthy, diversified economy. It will also promote the Reinvestment/Infill Goal to promote sound investment in Greensboro's urban areas. As conditioned, the applicant limits the proposed uses, building height, signage, and lighting. The applicant's conditions also include significant vegetative and physical buffers (wall/fence) to adjacent residential and religious assembly uses and will be required to address any transportation improvements outlined in the approved Traffic Impact Study. The proposed retail and service uses will be located between an existing large scale commercial center (Shoppes at Friendly) and two existing nonresidential uses (place of religious assembly and office use) on the same block face along a heavily traveled thoroughfare (West Friendly Avenue). As such the properties associated with this request have a different relationship to surrounding development than the larger residential areas located to the north, south and further west of the proposed request.

Staff finds this rezoning request consistent with the applicable provisions of the Comprehensive Plan, the Zoning Ordinance and the development pattern of the surrounding area.

Staff Recommendation

Staff recommends **approval** of the requested **CD-C-M** (Conditional District-Commercial-Medium) zoning district.

Additional Information**Friendly Hobbs Commercial Site, Greensboro, NC
Transportation Impact Analysis
Prepared for Halpern Enterprises, Inc.
December 22, 2014****Executive Summary**

The proposed Friendly Hobbs Commercial Site is located on the northwest quadrant of the intersection of West Friendly Avenue and Hobbs Road in Greensboro, North Carolina. The site is approximately 6.77 acres, and the developer is proposing to rezone the site from its current residential land use to retail use. Two site accesses are proposed: one on West Friendly Avenue and one on Hobbs Road. Three scenarios with different land use intensity are being considered. Figures 1A, 1B, and 1C present the site plans for the three scenarios:

- Scenario 1: 45,000 sq. ft. grocery store and 15,000 sq. ft. of retail
- Scenario 2: 29,150 sq. ft. grocery store and 15,000 sq. ft. of retail
- Scenario 3: 39,200 sq. ft. grocery store, bank with drive-thru (3 lanes), and 8,660 sq. ft. of retail

DAVENPORT was retained to determine the potential traffic impacts of this development and to identify transportation improvements that may be required to accommodate the impacts of both background traffic and new development traffic. The following intersections were included in the study:

- West Friendly Avenue @ Holden Road (existing signalized)
- West Friendly Avenue @ Wedgedale Avenue
- West Friendly Avenue @ Proposed Site Access 1
- West Friendly Avenue @ Hobbs Road (existing signalized)
- West Friendly Avenue @ Shopping Center Access (existing signalized)
- Hobbs Road @ Proposed Site Access 2

The above-mentioned intersections were analyzed for the following conditions:

- 2014 Base Conditions
- 2016 Future No Build Conditions
- 2016 Future Build Conditions (3 Scenarios)
- 2016 Future Build Conditions with Mitigation (3 Scenarios)

The expected build-out year for this site is 2015. A future analysis year of 2016 was used per direction by Greensboro Department of Transportation (build-out plus one year). The AM (7-9 am) and PM (4-6 pm) peaks were analyzed.

The elements covered in this Transportation Impact Analysis (TIA) are based on Greensboro Department of Transportation (GDOT) guidelines. Information regarding the property was provided by the developer, Halpern Enterprises, Inc.

Scenario 1: 45,000 Sq. Ft. Grocery Store and 15,000 Sq. Ft. Retail

This scenario was analyzed based on development of a 45,000 square foot grocery store and 15,000 square feet of retail space.

Scenario 1 Level of Service Results

The results of the study are discussed by intersection below:

West Friendly Avenue at North Holden Street

This signalized intersection currently operates at LOS C during the AM peak and at LOS D during the PM peak. In 2016 future no build conditions, the level of service is expected to remain at LOS C during the AM peak and LOS D during the PM peak. With the addition of proposed site traffic, the level of service is expected to remain at LOS C and LOS D in AM and PM peaks, respectively. No improvements are recommended.

West Friendly Avenue at Wedgedale Avenue

This unsignalized intersection currently operates at LOS B during 2014 AM and PM peaks. In 2016 future no build conditions, LOS B is expected in both the AM and PM peaks. With the addition of proposed site traffic, the level of service is projected to remain unchanged. The simulation shows 75 feet of stacking on the center turn lane will be adequate for left turning vehicles onto Wedgedale Avenue. No improvements are recommended.

West Friendly Avenue at Site Access 1

In 2016 future build conditions, this proposed unsignalized site access is expected to operate at LOS B during the AM peak and LOS E during the PM peak. The need for auxiliary turn lanes was reviewed based on page 80 of the NCDOT "Policy on Street and Driveway Access to North Carolina Highways" and on page 22 of the GDOT Driveway Manual. Based on projected volumes, this intersection will warrant 175 feet of right turn storage. A two way left turn lane is currently in place on West Friendly Avenue, which will be adequate to handle left-turning traffic into the site. In order to enhance mobility at this intersection, we recommend the following improvement:

- Provide westbound right turn lane on West Friendly Avenue with 175 feet of storage and appropriate taper

With this improvement in place, the intersection is expected to operate at LOS B in the AM peak and LOS D in the PM peak.

West Friendly Avenue at Hobbs Road

This signalized intersection currently operates at LOS B and LOS A in the AM and PM peaks, respectively. In 2016 future no build conditions, the level of service is expected to remain unchanged. With the addition of site traffic, the intersection is expected to operate at a LOS B during both the AM and PM peaks. This intersection has a combined lane for southbound left turn and through movements on Hobbs Road. This creates a potential safety issue, as southbound through traffic is forced to stop when a left-turning vehicle ahead is waiting for a gap for a left turn. To ensure safety and mobility, we recommend restriping southbound Hobbs Road to provide a combined through-right lane and a separate left turn lane with 180 feet of storage, and modifying the traffic signal.

West Friendly Avenue at Shopping Center Access

In 2014 base conditions, this signalized intersection is expected to operate at LOS A and LOS B in AM and PM peaks, respectively. In 2016 future no build conditions, the level of service is expected to remain

unchanged. With the addition of site traffic, the intersection is expected to remain at LOS A and LOS B during AM and PM peaks respectively. No improvements are recommended.

Hobbs Road at Site Access 2

This proposed unsignalized site access is expected to operate at LOS A and LOS B during 2016 future build AM and PM peaks, respectively. To enhance safety and mobility, we recommend restriping the section of Hobbs Road between West Friendly Avenue and Site Access 2 to provide a two way left turn lane.

The recommended improvements are illustrated in Figure 9 of the report.

Scenario 2: 29,150 Sq. Ft. Grocery Store and 15,000 Sq. Ft. Retail

This scenario was analyzed based on development of a 29,150 square foot grocery store and 15,000 square feet of retail space.

Scenario 2 Level of Service Results

The results of the study are discussed by intersection below:

West Friendly Avenue at North Holden Street

This signalized intersection currently operates at LOS C during the AM peak and at LOS D during the PM peak. In 2016 future no build conditions, the level of service is expected to remain at LOS C during the AM peak and LOS D during the PM peak. With the addition of proposed site traffic, the level of service is expected to remain at LOS C and LOS D in AM and PM peaks, respectively. No improvements are recommended.

West Friendly Avenue at Wedgedale Avenue

This unsignalized intersection currently operates at LOS B during 2014 AM and PM peaks. In 2016 future no build conditions, LOS B is expected in both the AM and PM peaks. With the addition of proposed site traffic, the level of service is projected to remain unchanged. The simulation shows 75 feet of stacking on the center turn lane will be adequate for left turning vehicles onto Wedgedale Avenue. No improvements are recommended.

West Friendly Avenue at Site Access 1

In 2016 future build conditions, this proposed unsignalized site access is expected to operate at LOS B during the AM peak and LOS D during the PM peak. The need for auxiliary turn lanes was reviewed based on page 80 of the NCDOT "Policy on Street and Driveway Access to North Carolina Highways" and on page 22 of the GDOT Driveway Manual. Based on projected volumes, this intersection will warrant 150 feet of right turn storage. A two way left turn lane is currently in place on West Friendly Avenue, which will be adequate to handle left-turning traffic into the site. In order to enhance mobility at this intersection, we recommend the following improvement:

- Provide westbound right turn lane on West Friendly Avenue with 150 feet of storage and appropriate taper

With this improvement in place, the intersection is expected to operate at LOS B in the AM peak and LOS D in the PM peak with reduced delay.

West Friendly Avenue at Hobbs Road

This signalized intersection currently operates at LOS B and LOS A in the AM and PM peaks, respectively. In 2016 future no build conditions, the level of service is expected to remain unchanged. With the addition of site traffic, the intersection is expected to operate at a LOS B during the AM peak and a LOS A in the PM peak. This intersection has a combined lane for southbound left turn and through movements on Hobbs Road. This creates a potential safety issue, as southbound through traffic is forced to stop when a left-turning vehicle ahead is waiting for a gap for a left turn. To ensure safety and mobility, we recommend restriping southbound Hobbs Road to provide a combined through-right lane and a separate left turn lane with 180 feet of storage, and modifying the traffic signal.

With this improvement in place, the intersection is expected to operate at LOS A in the AM peak and LOS B in the PM peak.

West Friendly Avenue at Shopping Center Access

In 2014 base conditions, this signalized intersection is expected to operate at LOS A and LOS B in AM and PM peaks, respectively. In 2016 future no build conditions, the level of service is expected to remain unchanged. With the addition of site traffic, the intersection is expected to remain at LOS A and LOS B during AM and PM peaks respectively. No improvements are recommended.

Hobbs Road at Site Access 2

This proposed unsignalized site access is expected to operate at LOS A and LOS B during 2016 future build AM and PM peaks. To enhance safety and mobility, we recommend restriping the section of Hobbs Road between West Friendly Avenue and Site Access 2 to provide a two way left turn lane.

The recommended improvements for Scenario 2 are shown in Figure 12 of the report.

Scenario 3: 39,000 Sq. Ft. Grocery Store, Drive in Bank, and 15,000 Sq. Ft. Retail

This scenario was analyzed based on development of a 13,225 square foot pharmacy, a 4,800 square foot bank, and 15,000 square feet of retail space.

Scenario 3 Level of Service Results

The results of the study are discussed by intersection below:

West Friendly Avenue at North Holden Street

This signalized intersection currently operates at LOS C during the AM peak and at LOS D during the PM peak. In 2016 future no build conditions, the level of service is expected to remain at LOS C during the AM peak and LOS D during the PM peak. With the addition of proposed site traffic, the level of service is expected to remain at LOS C and LOS D in AM and PM peaks, respectively. No improvements are recommended.

West Friendly Avenue at Wedgedale Avenue

This unsignalized intersection currently operates at LOS B during 2014 AM and PM peaks. In 2016 future no build conditions, LOS B is expected in both the AM and PM peaks. With the addition of proposed site traffic, the level of service is projected to remain unchanged. The simulation shows 75 feet of stacking on the center turn lane will be adequate for left turning vehicles onto Wedgedale Avenue. No improvements are recommended.

West Friendly Avenue at Site Access 1

In 2016 future build conditions, this proposed unsignalized site access is expected to operate at LOS B during the AM peak and LOS E during the PM peak. The need for auxiliary turn lanes was reviewed based on page 80 of the NCDOT "Policy on Street and Driveway Access to North Carolina Highways" and on page 22 of the GDOT Driveway Manual. Based on projected volumes, this intersection will warrant 175 feet of right turn storage. A two way left turn lane is currently in place on West Friendly Avenue, which will be adequate to handle left-turning traffic into the site. In order to enhance mobility at this intersection, we recommend the following improvement:

- Provide westbound right turn lane on West Friendly Avenue with 175 feet of storage and appropriate taper

With this improvement in place, the intersection is expected to operate at LOS B in the AM peak and LOS D in the PM peak with reduced delay.

West Friendly Avenue at Hobbs Road

This signalized intersection currently operates at LOS B and LOS A in the AM and PM peaks, respectively. In 2016 future no build conditions, the level of service is expected to remain unchanged. With the addition of site traffic, the intersection is expected to operate at LOS B during the AM peak and LOS A during the PM peak. This intersection has a combined lane for southbound left turn and through movements on Hobbs Road. This creates a potential safety issue, as southbound through traffic is forced to stop when a left-turning vehicle ahead is waiting for a gap for a left turn. To ensure safety and mobility, we recommend restriping southbound Hobbs Road to provide a combined through-right lane and a separate left turn lane with 180 feet of storage, and modifying the traffic signal.

With this improvement in place, the intersection is expected to operate at LOS A in the AM peak and LOS B in the PM peak.

West Friendly Avenue at Shopping Center Access

In 2014 base conditions, this signalized intersection is expected to operate at LOS A and LOS B in AM and PM peaks, respectively. In 2016 future no build conditions, the level of service is expected to remain unchanged. With the addition of site traffic, the intersection is expected to remain at LOS A and LOS B during AM and PM peaks respectively. No improvements are recommended.

Hobbs Road at Site Access 2

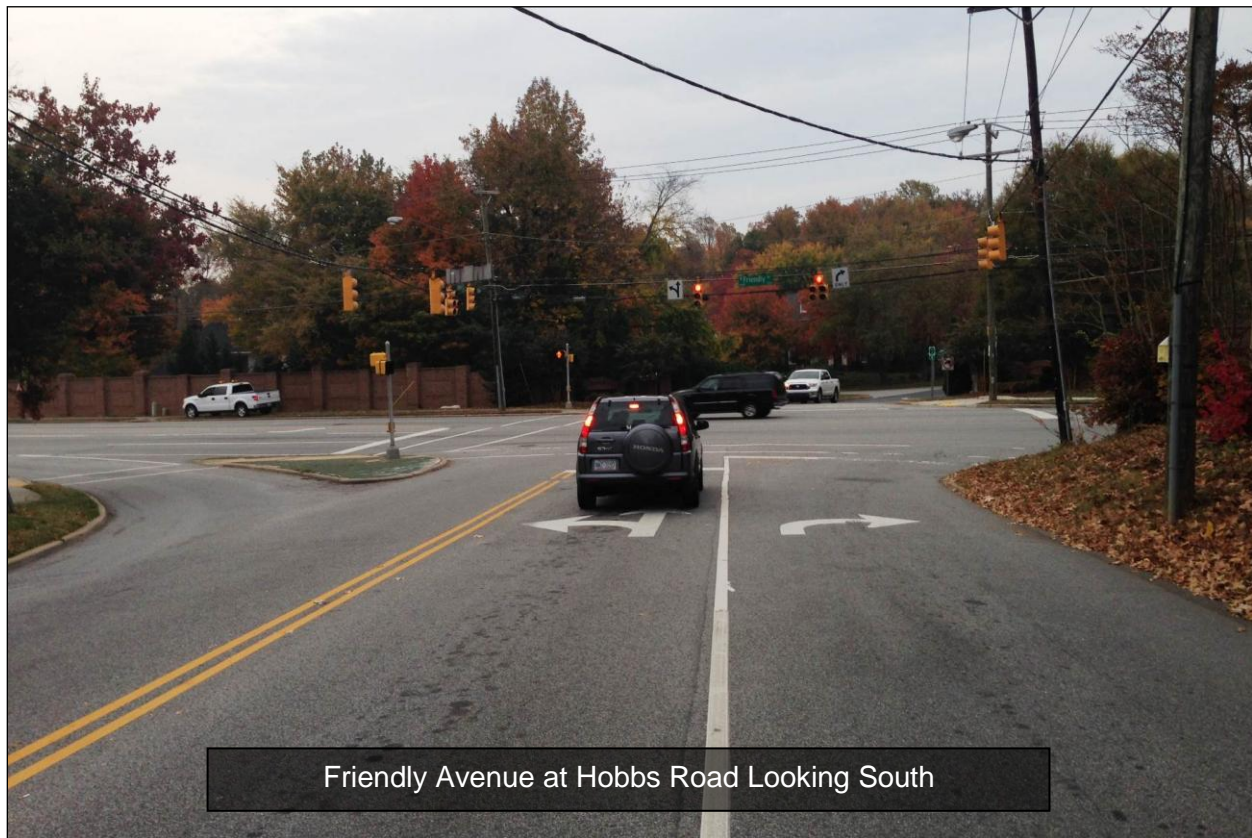
This proposed unsignalized site access is expected to operate at LOS A and LOS B during 2016 future build AM and PM peaks. To enhance safety and mobility, we recommend restriping the section of Hobbs Road between West Friendly Avenue and Site Access 2 to provide a two way left turn lane.

The recommended improvements for Scenario 3 are illustrated in Figure 15 of the report.

Throat Distance Review

The throat distance for each of the site accesses was reviewed based on a traffic simulation internal to the site using SimTraffic 7 software. This analysis is based on the AM and PM peak trips entering and exiting the site. Table A presents the 95th percentile queues for traffic entering each site access, and the recommended storage distance between the adjacent street and the nearest internal driveway or aisle along the access. Note that all accesses should be designed according to GDOT Driveway Manual and NCDOT standards.

Table A - Site Access Throat Queuing				
Site Access	Adjacent Street	SimTraffic Max Queue (ft) Inbound Direction		Minimum Recommended Throat Distance (ft)
		AM Peak	PM Peak	
Site Access 1	West Friendly Avenue	Scenario 1: 0 Scenario 2: 29 Scenario 3: 30	Scenario 1: 31 Scenario 2: 0 Scenario 3: 0	50
Site Access 2	Hobbs Road	Scenario 1: 0 Scenario 2: 0 Scenario 3: 0	Scenario 1: 30 Scenario 2: 0 Scenario 3: 0	50



Summary and Conclusion

DAVENPORT was retained to determine the potential traffic impacts of the proposed Friendly Hobbs Commercial Site and the transportation improvements that may be required to accommodate these impacts.

The proposed Friendly Hobbs Commercial Site is located on the northwest quadrant of the intersection of West Friendly Avenue and Hobbs Road in Greensboro, North Carolina. The developer is proposing to rezone the site from its current residential land use to retail use.

Three scenarios with different land use intensity are being considered:

- Scenario 1: 45,000 sq. ft. grocery store and 15,000 sq. ft. of retail
- Scenario 2: 29,150 sq. ft. grocery store and 15,000 sq. ft. of retail
- Scenario 3: 39,200 sq. ft. grocery store, bank with drive-thru (3 lanes), and 8,660 sq. ft. of retail

Based on trip generation rates and equations published in Trip Generation (Institute of Transportation Engineers, 9th Edition, 2012), this development has a trip generation potential of 6,383 daily trips in Scenario 1, 5,312 trips in Scenario 2, and 5,819 trips in Scenario 3. With the effects of pass-by trip reduction, the trip generation potential is 4,468 net daily trips in Scenario 1, 3,718 net trips in Scenario 2, and 4,073 net trips in Scenario 3.

The expected build-out year for this site is 2015. A future analysis year of 2016 was used per direction by Greensboro Department of Transportation (build-out plus one year). The AM (7-9 am) and PM (4-6 pm) peaks were analyzed.

Based on the results of our analysis, we have recommended a westbound right turn lane at the proposed site access on West Friendly Avenue. 175 feet of storage is recommended for this right turn lane in Scenarios 1 and 3, and 150 feet of storage in Scenario 2, based on turn lane warrant criteria and projected volumes. We have also recommended restriping on Hobbs Road to improve safety at the site access and at the signalized intersection with West Friendly Avenue. Separate left and right turn lanes exiting from Site Accesses 1 and 2 are recommended to reduce delays exiting from the site.

The recommended improvements for Scenarios 1 through 3 are illustrated in Figures 9, 12, and 15 of the report, respectively. Table 11.1 of the report summarizes the level of service results for all scenarios.

In conclusion, this study has determined the potential traffic impacts of this development and identified transportation improvements that will be required to accommodate the impacts of both background traffic and new development traffic. All proposed site accesses should be designed according to GDOT and NCDOT standards.