



Z-13-05-007

**Planning & Community Development
Zoning Staff Report and Plan Amendment Evaluation**

Zoning Commission Hearing Date: May 13, 2013

GENERAL INFORMATION

APPLICANT	Jeff Nimmer for Kotis properties, Inc.
HEARING TYPE	Rezoning
REQUEST	CD-BP (Conditional District-Business Park) to CD-C-H (Conditional District-Commercial Heavy) and CD-BP (Conditional District-Business Park)
CONDITIONS	<ol style="list-style-type: none">1. Uses: All uses allowed in the C-H (Commercial-High) zoning district portion, consisting of approximately 22.73 acres except bus and rail terminals; pawnshops; multi-family dwellings; animal shelters; cemeteries; recycling collection points and junked motor vehicles as accessory uses.2. Uses: All uses allowed in the BP (Business Park) zoning district portion, consisting of 14.19 acres except bus and rail terminals; multi-family dwellings and recycling collection points as accessory uses.
GFLUM	Industrial/Corporate Park to Mixed Use Corporate Park
LOCATION	2909 Horse Pen Creek Road , generally described as the southeastern intersection of Horse Pen Creek Road and Jessup Grove Road
PARCEL ID NUMBER(S)	7837900648 and 7837902928
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). 19 notices were mailed to those property owners in the mailing area.
TRACT SIZE	The request for the CD-CH area is 22.73 acres and the CD-BP area is 14.19 acres for a total of 36.917 acres.
TOPOGRAPHY	Undulating
VEGETATION	Heavily wooded

SITE DATA

Existing Use

Undeveloped

	Adjacent Zoning	Adjacent Land Uses
N	PUD (Planned Unit Development)	Undeveloped
E	R-3 (Residential-Single-family) and PI (Public and Institutional)	Undeveloped
W	R-3 (Residential-Single-family) and PI (Public and Institutional)	Elementary school and Single-family dwelling
S	R-3 (Residential-Single-family) and PI (Public and Institutional)	Athletic field and Single-family dwelling

Zoning History

Case #	Date	Request Summary
3671	06/30/08	<p>This property was annexed into the City in June 2008 and assigned original zoning of CD-CP from County CU-CP with the following conditions:</p> <ol style="list-style-type: none"> 1. All uses permitted in the CP district 2. Natural buffers: property shall have an average 75-foot buffer from property line to buildings and parking lots 3. Limit on total square footage: total heated square footage of buildings shall not exceed 160,000 square feet 4. Architectural style: buildings shall constructed in a residential style with natural looking materials such as stone or brick or when appropriate stucco-type exteriors for buildings constructed in a French provincial style. Buildings shall have a pitched roof appearance and shall not have large expanses of glass with exception of bay windows or rows of windows conforming to a standard residential appearance 5. Screening parking lots: parking lots located within 100 feet of a public road shall be screened by landscaping or a berm or undisturbed areas, to the extent allowed by the right-of-way of Duke Power and any other governmental authority, including the Department of Transportation 6. Building height restriction: buildings shall not exceed three (3) stories 7. Pedestrian trails: A network of pedestrian trails shall be constructed as shown on the zoning sketch plan 8. Transportation improvements: for Site Access #1, the primary access, the developer shall construct a southbound left turn lane, a northbound right turn lane and exclusive westbound right and left turn lanes. For Site Access #2, the developer shall construct a westbound right and left turn lane. All transportation improvements are subject to phasing and NCDOT and GDOT requirements and approvals

ZONING DISTRICT STANDARDS

District Summary *

Zoning District Designation:	Existing (CD-BP)	Existing (CD-BP)	Requested (CD-C-H)
Max. Density:	N/A	N/A	N/A
Typical Uses	Primarily intended to accommodate office, warehouse, research and development, assembly and other uses on larger sites in a planned setting.	Primarily intended to accommodate office, warehouse, research and development, assembly and other uses on larger sites in a planned setting.	Primarily intended to accommodate a wide range of high intensity retail and service developments meeting the shopping and distributive needs of the community and the region, and other uses.

**These regulations may not reflect the actual requirements for all situations; see the City of Greensboro Zoning Code for actual regulations for site requirements for this zoning district.*

SPECIAL INFORMATION

Overlay District Ordinance/Historic Preservation – N/A

The subject site is located within the Greensboro Urban Loop Scenic Corridor Overlay District 1. Consult the Scenic Corridor Overlay Districts Design Manual for detailed information on applicable design standards.

Environmental/Soils

Water Supply Watershed –	Site is located in the Greensboro Watersupply Watershed, Horse Pen Creek sub-basin
Floodplains	>2000ft
Streams	Perennial streams onsite require a 100ft stream buffer measured from top of bank. Intermittent streams require a 50ft stream buffer measured from top of bank. First 50ft of stream buffer must comply with Jordan Lake Buffer rules. See LDO table 12-5 for allowances and restrictions within the Jordan Buffer.
Other:	Site must meet current watershed requirements. Water quality and water quantity must be addressed. Any Built Upon Area (BUA) must be treated by a State approved water quality device (BMP).

Utilities

Potable Water	Water is available and capacity is in line with request
Waste Water	Sewer is available and capacity is in line with request

Airport Noise Cone

The subject property is located in the Airport Noise Cone.

Landscaping Requirements

Horse Pen Creek Rd. - Street Yard – minimum width 10’; 2 canopy trees per 100’, 17 shrubs per 100’

Jessup Grove Rd. - St Street Yard – minimum width 10’; 2 canopy trees per 100’, 17 shrubs per 100’

East Property Line Adjoining Single Family - Type B Yard – average width 25’; 3 canopy trees per 100’, 5 understory trees per 100’, 25 shrubs per 100’

South Property Line - NA

Parking Lot Landscaping

Requiring landscaping within parking areas is intended to shade and improve the attractiveness of large areas of pavement.

Required Landscaping

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

Required canopy tree areas must be located within the parking lot. They may be located in landscape islands, landscape divider medians between rows of parking, or in driveway medians.

Islands or other planting areas for canopy trees must have a minimum area of 200 square feet with a minimum dimension of 7 feet, measured in any direction. Islands or planting areas of less than 200 square feet may not be counted toward satisfying parking lot landscaping requirements.

The landowner may provide required landscape islands or planting areas using one or more of the planting area sizes below. Each parking space must be entirely within the designated distance of a parking lot planting area as specified below:

Table 10–4: Location of Parking Lot Planting Areas		
Size of Parking Lot Planting Area (sq. ft.)	Number of Trees In Planting Area	Max. Distance from Parking Space (feet)
200-499	1	100 (1)
500-899	3	130
(1) Canopy trees installed as part of a required planting yard that abuts the parking lot may be used for up to 50% of the required distance		

Grouping canopy trees within the same landscape island or planting area is strongly encouraged, even if this would decrease the number of islands within the parking lot.

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

36.92 ac. 10% of lot size

Requirements

Transportation

Street Classification:	Horse Pen Creek Road – Minor Thoroughfare Jessup Grove Road – Collector Street.
Site Access:	All access(es) must be designed and constructed to the City of Greensboro standards.
Traffic Counts:	Horse Pen Creek Road - AM Peak Hour = 953, PM Peak Hour = 1837. Jessup Grove Road - AM Peak Hour = 62, PM Peak Hour = 65.
Trip Generation:	24 Hour = 9,883, AM Peak Hour = 414, PM Peak Hour = 953.
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 not exist along the frontage of this property.
Transit in Vicinity:	No.
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-BP (Conditional District-Business Park)** and **CD-C-H (Conditional District-Commercial High)** zoning categories 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 **Institutional** and **Low Residential**. The requested **CD-BP (Conditional District-Business Park)** and **CD-C-H (Conditional District-Commercial High)** zoning districts are inconsistent with this GFLUM designation, however, this rezoning request is accompanied by a requested amendment to

the GFLUM which, if approved, would change the future land use designation of the subject site to **Mixed Use Corporate Park**, thereby resolving the 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 4A: Remove present impediments to infill and investment in urban areas.

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

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 6C: Promote the diversification of new housing stock to meet the needs of all citizens for suitable, affordable housing.

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.

Community Facilities, Services, and Infrastructure, Goal 9: Provide community facilities, services, and infrastructure in a cost-effective manner to meet citizens' needs, contribute to quality of life, and support desired land use patterns.

Policy 9A: Proactively target infrastructure (water/sewer) extensions to support desired land use patterns.

Connections 2025 Map Policies

Institutional – This designation applies to university and college campuses, major medical/health care concentrations, and similar large-scale institutional activity centers.

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.

Mixed Use Corporate Park – This designation is intended for large tracts of undeveloped land near the City's fringe that are appropriate for well planned, larger scale business/employment parks with supporting uses such as retail, hotels, and residential. Primary uses such as office, flex office, technology research and development, light manufacturing, distribution, and assembly should be placed in a campus-like or "corporate park" setting with generous, linked open space to maximize value and to promote visual quality and compatibility with the surrounding area. Pedestrian-friendly features such as buildings placed near the street, sidewalks, and trails leading to nearby uses such as retail and housing should be encouraged.

Comprehensive Plan Amendment History

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

Applicant Stated Reasons for Request

“The property is not suited for institutional use and is not owned by a University, Hospital, or other institutional entity. These parcels are being rezoned and the Future Land Use Plan must be amended to allow for said rezoning.”

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

“The zoning of this property already allows for a mix of office, retail, and service uses. In this way, the Future Land Use Plan is inaccurate and should be updated to highlight currently permitted uses.”

COMPREHENSIVE POLICY PLAN ANALYSIS**Need for Proposed Change**

The requested zoning would allow uses that are incompatible with the GFLUM category on the site, which is currently designated **Institutional** and **Low Residential**. This requested GFLUM amendment to **Mixed Use Corporate Park** 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 attached Traffic Impact Study.

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)

It may be appropriate to review the area surrounding the subject site during the update of the Comprehensive Plan and establish future land use designations that better reflect development trends in this vicinity.

PLANNING BOARD COMMENTS

At their April 17th meeting, the Planning Board was asked to make comments on the requested change to the Generalized Future Land Use Map necessitated by this rezoning request, as described above. The Planning Board stated that this change is consistent with changes that are occurring along Horse Pen Creek Road, and that office uses are a good addition to the current mix.

CONFORMITY WITH OTHER PLANS

City Plans – N/A

Consolidated Plan 2010-2014: Plan for a Resilient Community

Principle 2 – Promote Equitable, Affordable Housing:

Goal A: Increase opportunities for choices in housing location, unit type and level of accessibility.

Principle 6 – Value Communities and Neighborhoods:

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

Other Plans – N/A

Staff/Agency Comments

Community Development

Applicant is strongly encouraged to discuss this proposed rezoning and development with owners of adjacent properties.

Planning

This property is currently zoned to facilitate a variety of office, warehouse, research and development and assembly uses on large sites in a planned setting. The site is adjoined to the north and east by property zoned PUD (existing multifamily and proposed non-residential uses) and R-3 (primarily undeveloped), to the south by property zoned PI (athletic fields for adjacent school) and R-3 (single family homes) and to the west by property zoned R-3 (school) and PI (physical fitness center/sports instructional school and associated fields).

The applicant intends to develop this site with a combination of higher intensity retail uses and offices uses. This request reflects both the significant expansion of residential uses along this roadway in recent years and the implementation of significant enhancements to Horse Pen Creek Road by the City using 2008 Transportation bond funds.

Approving this request meets the Comprehensive Plan's economic development goal to 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. The request also is consistent with the Comprehensive Plan's Reinvestment/Infill goal to promote sound investment in Greensboro's urban areas, including commercial and industrial areas. The request also includes use restrictions to limit potential negative impacts on surrounding properties.

Staff believes this request is consistent with the intent and purpose of the zoning code and the Comprehensive Plan (Connections 2025). Staff is also of the opinion that the request will be generally compatible with the existing development and trend in the surrounding area.

STAFF RECOMMENDATION

Staff recommends **approval** of the requested **CD-C-H** (Conditional District-Commercial-High) and **CD-BP** (Conditional District Business Park) zoning districts.

ADDITIONAL INFORMATION**Horse Pen Creek Commercial Development – Transportation Impact Analysis**

Prepared for Kotis Properties, Inc.

April 25, 2013

Executive Summary

The proposed Horse Pen Creek Commercial development is located on the southeast corner of the intersection of Horse Pen Creek Road and Jessup Grove Road in northwestern Greensboro, North Carolina. As currently planned, the site will include a 50,000 square foot grocery store, 63,000 square feet of retail space, and 55,000 square feet of office building. The site plan shows two driveways on Horse Pen Creek Road and one driveway on Jessup Grove Road (see Figure 1).

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 new development traffic. The following intersections were included in the study:

- Horse Pen Creek Road at Caldwell Academy North Driveway / Site Access 1
- Horse Pen Creek Road at Site Access 2
- Horse Pen Creek Road at Jessup Grove Road
- Jessup Grove Road Extension at Cutters Lane / Site Access 3

These intersections were analyzed during AM and PM peaks for the following conditions:

- 2013 Existing Conditions
- 2016 Future No Build (without Horse Pen Creek Widening Project)
- 2016 Scenario 1 Build (without Horse Pen Creek Widening Project)
- 2016 Future No Build with Horse Pen Creek Widening Project
- 2016 Scenario 2 Build with Horse Pen Creek Widening Project

The build-out year for this project is currently unknown, but was assumed to be 2016 for analysis purposes. The Greensboro Department of Transportation (GDOT) plans a widening project for Horse Pen Creek Road which is scheduled to be complete in Fall 2016. Hence, traffic conditions were analyzed with and without the Horse Pen Creek Widening project.

GDOT was contacted to obtain background information and to ascertain the elements to be covered in this Transportation Impact Analysis (TIA). Information regarding the property was also provided by the developer, Kotis Properties, Inc.

Existing Conditions

In order to measure the impact of this project and identify any pre-existing capacity problems, an analysis was conducted for the existing conditions for all the study intersections. Overall, our analysis shows LOS C or better at each of the study intersections in existing AM and PM peaks. The Sim Traffic simulation does not indicate any queuing issues at the study intersections. Table A summarizes the existing level of service results.

Level of Service Summary

Table A - Level of Service Summary (Existing Conditions)		
Intersection	AM Existing	PM Existing
Horse Pen Creek Road at Caldwell Academy North Driveway	C (16.0) EB Approach	C (15.0) EB Approach
Horse Pen Creek Road at Jessup Grove Road	B (18.8)	B (15.2)
Jessup Grove Road Extension at Cutters Lane	A (8.5) SB Approach	A (8.4) SB Approach
LOS (delay in seconds) Note for unsignalized conditions, LOS and delay indicates only minor street approach with longest delay		

Scenario 1 Level of Service Results

The following section discusses 2016 Scenario 1 level of service results for each intersection.

Horse Pen Creek Road at Caldwell Academy North Driveway/ Site Access 1

This unsignalized intersection is expected to operate at LOS C during future no build AM and PM peaks. With the addition of proposed site traffic, LOS F is expected in AM and PM peaks. In order to mitigate this condition, we recommend the following improvements:

- Monitor intersection for signalization, and install traffic signal when warranted
- Provide southbound left turn lane on Horse Pen Creek Road with 200 feet of storage and appropriate taper
- Provide northbound right turn lane on Horse Pen Creek Road with 200 feet of storage and appropriate taper
- Provide separate left and right turn lanes exiting from Site Access 1

In addition, we recommend coordination between the developer, Caldwell Academy, and GDOT. With these improvements in place, LOS A is expected in the AM peak and LOS C in the PM peak.

Horse Pen Creek Road at Site Access 2

In Scenario 1 future build conditions, LOS B is expected at this intersection in the AM peak and LOS C in the PM peak. The need for auxiliary turn lanes was reviewed based on page 23 of the 2004 GDOT Driveway Manual, and indicates that based on projected traffic volumes, a right turn lane is warranted. We recommend providing a northbound right turn lane on Horse Pen Creek Road with 100 feet of storage and appropriate taper.

Horse Pen Creek Road at Jessup Grove Road

This signalized intersection operates at LOS C in the future no build AM peak and LOS B in the PM peak. With the addition of site traffic, LOS C is expected in AM and PM peaks. Overall, the analysis indicates adequate capacity at this intersection. No improvements are recommended.

Jessup Grove Road at Cutters Lane / Site Access 3

This unsignalized intersection operates at LOS A in the future no build AM and PM peaks. With the addition of the proposed site, LOS B is expected in AM and PM peaks. Based on projected traffic volumes, no turn lane is warranted at this driveway. This driveway should be constructed to NCDOT/GDOT Driveway Manual where applicable.

Recommended improvements at the study intersections are illustrated in Figure 10 of the report.

Scenario 1 Level of Service Summary

Table B presents the summary of the level of service analysis for all study intersections.

Table B - Level of Service Summary (Without Horse Pen Creek Widening Project)			
AM Peak	2016 Future No Build	2016 Future Build	2016 Future Build with Improvements
Horse Pen Creek Road at Caldwell Academy North Driveway	C (17.1) EB Approach	F (55.4) WB Approach	A (7.2) Signalized
Horse Pen Creek Road at Site Access		B (10.6) WB Right	B (10.2) WB Right
Horse Pen Creek Road at Jessup Grove Road	C (21.3)	C (22.2)	
Jessup Grove Road Extension at Cutters Lane / Site Access	A (8.5) SB Approach	B (10.1) NB Approach	
PM Peak	2016 Future No Build	2016 Future Build	2016 Future Build with Improvements
Horse Pen Creek Road at Caldwell Academy North Driveway	C (16.1) EB Approach	F (***) WB Approach	C (23.1) Signalized
Horse Pen Creek Road at Site Access		C (19.0) WB Right	C (17.0) WB Right
Horse Pen Creek Road at Jessup Grove Road	B (16.8)	C (29.2)	
Jessup Grove Road Extension at Cutters Lane / Site Access	A (8.5) SB Approach	B (12.9) NB Approach	
LOS (delay in seconds)			
Note for unsignalized conditions, LOS and delay indicates only minor street approach with longest delay			

Scenario 2 Level of Service Results

The following section discusses 2016 Scenario 2 level of service results for each intersection, with the Horse Pen Creek Widening Project in place.

Horse Pen Creek Road at Caldwell Academy North Driveway/ Site Access 1

This unsignalized intersection is expected to operate at LOS B during future no build AM and PM peaks. With the addition of proposed site traffic, LOS C is expected in the AM peak and LOS F in the PM peak. In order to mitigate this LOS F condition, we recommend the following improvements:

- Monitor intersection for signalization, and install traffic signal when warranted
- Provide southbound left turn lane on Horse Pen Creek Road with 200 feet of storage and appropriate taper
- Provide northbound right turn lane on Horse Pen Creek Road with 200 feet of storage and appropriate taper
- Provide separate left and right turn lanes exiting from Site Access 1

In addition, we recommend coordination between the developer, Caldwell Academy, and GDOT. With these improvements in place, LOS A is expected in the AM peak and LOS B in the PM peak.

Horse Pen Creek Road at Site Access 2

In Scenario 2 future build conditions, LOS A is expected at this intersection in the AM peak and LOS B in the PM peak. In order to enhance the safety of right turn maneuvers into the site, a northbound right turn lane is recommended on Horse Pen Creek Road with 100 feet of storage and appropriate taper.

Horse Pen Creek Road at Jessup Grove Road

This signalized intersection operates at LOS C in the future no build AM peak and LOS B in the PM peak. With the addition of site traffic, LOS C is expected in AM and PM peaks. Overall, the analysis indicates adequate capacity at this intersection. No improvements are recommended.

Jessup Grove Road at Cutters Lane / Site Access 3

This unsignalized intersection operates at LOS A in the future no build AM and PM peaks. With the addition of the proposed site, LOS B is expected in AM and PM peaks. Based on projected traffic volumes, no turn lane is warranted at this driveway. This driveway should be constructed to NCDOT/GDOT Driveway Manual where applicable.

Recommended improvements at the study intersections are illustrated in Figure 11 of the report.

Scenario 2 Level of Service Summary

Table C presents the summary of the level of service analysis for all study intersections.

Table C - Level of Service Summary (With Horse Pen Creek Widening Project)			
AM Peak	2016 Future No Build	2016 Scenario 2 Build	2016 Scenario 2 Build with Improvements
Horse Pen Creek Road at Caldwell Academy North Driveway	B (12.8) EB Approach	C (20.8) WB Approach	A (5.5) Signalized
Horse Pen Creek Road at Site Access		A (9.6) WB Right	A (9.3) WB Right
Horse Pen Creek Road at Jessup Grove Road	C (20.3)	C (22.4)	
Jessup Grove Road Extension at Cutters Lane / Site Access	A (8.5) SB Approach	B (10.1) NB Approach	
PM Peak	2016 Future No Build	2016 Scenario 2 Build	2016 Scenario 2 Build with Improvements
Horse Pen Creek Road at Caldwell Academy North Driveway	B (12.4) EB Approach	F (672.4) WB Approach	B (18.1) Signalized
Horse Pen Creek Road at Site Access		B (13.0) WB Right	A (9.6) WB Right
Horse Pen Creek Road at Jessup Grove Road	B (11.9)	C (27.1)	
Jessup Grove Road Extension at Cutters Lane / Site Access	A (8.5) SB Approach	B (12.9) NB Approach	
LOS (delay in seconds)			
Note for unsignalized conditions, LOS and delay indicates only minor street approach with longest delay			

Summary and Conclusion

The proposed Horse Pen Creek Commercial development is located on the southeast corner of the intersection of Horse Pen Creek Road and Jessup Grove Road in northwestern Greensboro, North Carolina. As currently planned, this development will include a 50,000 square foot grocery store, 63,000 square feet of retail space, and 55,000 square feet of office building. Based on trip generation equations published in Trip Generation (Institute of Transportation Engineers, 8th Edition, 2008), this development has a trip generation potential of 9,883 net daily trips.

DAVENPORT was retained to determine the potential traffic impacts of the proposed Horse Pen Creek Road Commercial Development and the transportation improvements that may be required to accommodate these impacts. This study analyzed the development of this site under two (2) scenarios: Scenario 1 analyzed the site based on existing roadway geometry on the adjacent streets, *without* the future Horse Pen Creek Widening Project. Scenario 2 considered build-out of the site *with* the Horse Pen Creek Widening Project in place. Under both scenarios, LOS F conditions are expected at the proposed Site Access 1 on Horse Pen Creek Road with full build-out of the site. We recommend monitoring this intersection for signalization and signalize when warranted. We also recommend providing auxiliary left and right turn lanes on Horse Pen Creek Road at Site Access 1, and separate left and right turn lanes exiting the site. Coordination between the developer, Caldwell Academy, and GDOT will be required. A northbound right turn lane is also recommended on Horse Pen Creek Road at Site Access 2 based on projected traffic volumes.

Overall, the Horse Pen Creek Road Widening project will improve the operation of the study intersections along the corridor. Scenario 1 recommended improvements are illustrated in Figure 10, and Scenario 2 recommended improvements are illustrated in Figure 11.

In conclusion, this study has reviewed the impacts of both background traffic and this development traffic, and has determined that with the recommended improvements in place, there will be adequate capacity to accommodate future traffic. Please note that all driveway connections are required to be constructed to GDOT or NCDOT Driveway Manual where applicable.