



Z-17-04-004

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

Zoning Commission Hearing Date: April 17, 2017

GENERAL INFORMATION

APPLICANT The Alexander Company, Inc. for Printworks Properties, LLC

HEARING TYPE Rezoning

REQUEST Rezone from CD-RM-18 (Conditional District-Residential Multifamily) and CD-RM-18 (Conditional District-Residential Multifamily) to PUD (Planned Unit Development)

CONDITIONS

General Conditions (Both Tracts):

1. Applicant acknowledges that the property being zoned PUD may be impacted on occasion by the operation and traffic of nearby plant and its supporting facilities.
2. Impervious surface shall not be increased as to utilize existing stormwater infrastructure.
3. No drive thru uses shall be permitted.

Tract 1:

1. Uses limited to either
 - a. A maximum of 80 residential dwelling units or
 - b. A maximum of 9,000 square feet of a combination of eating and drinking establishment and retail and a maximum of 90,000 square feet of self-storage
2. Uses to be placed within the existing structure without expansion.

Tract 2:

1. Uses limited to a maximum of 217 residential dwelling units and accessory uses including interior parking and amenity spaces.
2. Uses to be placed within the existing

structure without expansion

LOCATION 1700 Fairview Street

PARCEL ID NUMBER(S) 7875261633

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). 133 notices were mailed to those property owners in the mailing area.

TRACT SIZE 18.22 Acres

TOPOGRAPHY Undulating

VEGETATION Minimal

SITE DATA

Existing Use Vacant Industrial building

	Adjacent Zoning	Adjacent Land Uses
N	HI (Heavy Industrial)	Industrial uses
E	HI (Heavy Industrial) RM-18 (Residential Multifamily)	Industrial uses Single-family dwellings
W	RM-18 (Residential Multifamily)	Park space
S	R-5 (Residential Single-Family)	Single-family dwellings and a City parking area

Zoning History

Case #	Date	Request Summary
CD4005	08/21/2015	The subject property was rezoned from HI to CD-RM-18 with the following conditions: 1.Uses limited to a maximum of 240 dwelling units and accessory uses. 2.Maintain the existing structure without expansion. 3.Applicant acknowledges that the property may be impacted on occasion by the operations and traffic of an adjacent industrial plant and its supporting facilities.
CD4006	08/21/2015	The subject property was rezoned from HI to CD-RM-18 with the following conditions: 1.Uses limited to a maximum of 80 dwelling units and accessory uses. 2.Maintain the existing structure without expansion. 3.Applicant acknowledges that the property may be impacted on occasion by the operations and traffic of an adjacent industrial plant and its supporting facilities.

ZONING DISTRICT STANDARDS

District Summary *

Zoning District Designation:	Existing (CD-RM-18)	Requested (PUD)
Max. Density:	N/A	N/A
Typical Uses	Conditioned to limit use to a maximum of 80 dwelling units and accessory uses on Tract 1 and a maximum of 240 dwelling units and accessory uses on Tract 2.	Conditioned to limit use to a maximum of 80 residential dwelling units or a maximum of 9,000 square feet of a combination of eating and drinking establishment and retail and a maximum of 90,000 square feet of self-storage for Tract 1 and a maximum of 217 residential dwelling units for Tract 2.

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

SPECIAL INFORMATION

Overlay District Ordinance/Historic Preservation

The subject site, Proximity Print Works, is listed on the National Register of Historic Properties. Proximity Print Works in northeast Greensboro is locally significant under Criterion A in the area of Industry for its place in the diversification and evolution of the textile industry in Greensboro. The mill was the first textile printery in the South and proved that southern mills could complete the more sophisticated tasks of printing cloth. The period of significance begins in 1913, the year after Proximity Manufacturing Company, which was owned by Moses and Caesar Cone, purchased a mill from the Van Deventer Carpet Company for the location of Proximity Print Works. It continued through 1964, a period during which the mill was expanded several times and produced large amounts of finished printed fabric for the Cone textile empire. Although production continued at Proximity Print Works after that date, the activity is not exceptionally significant.

Textile mills in Greensboro are significant as reflections of the growth of the city and its essential industrial economy. Individual mills must be built between 1880 and 1941 and must retain historic integrity sufficient to identify the building's historic function. The significance and registration requirements for industrial buildings are discussed on page F28. This building meets these requirements as one of a handful of surviving early twentieth-century industrial buildings that reflect the dramatic growth of the city during the period. Proximity Print Works, like the city's other textile mills, is a visual testimony to the city's most important and influential industry. Additional information is provided for the post-1941 time period.

Proximity Print Works is a mostly intact textile mill from the first half of the twentieth century. The floor plans, rectangular footprints, brick construction, and flat and low gable roofs at Proximity Print Works epitomize the types and forms of textile industrial buildings constructed in the Piedmont of North Carolina during this period. The many periods of physical growth that took place at Proximity Print Works illustrate the expansion of technology that occurred and the evolution of industrial processes over time.

Environmental/Soils

Water Supply Site is located within North Buffalo Creek, non-watersupply watershed Watershed

Floodplains Floodplains are onsite. Any disturbance within the FEMA1% Special Flood Hazard Area requires a Floodplain Development Permit. FEMA Floodway is onsite. No structures or obstructions can be located within the FEMA Floodway without a 'No Rise' Engineering certification to show that there will be a 'No Rise' in the FEMA Base Flood Elevation.

Streams 50ft Jordan stream buffer measured from top of stream bank on each side is required.

Other: If >1acre is disturbed *AND* the impervious area is increased, site must meet Phase 2 requirements, water quality and water quantity control must be addressed. An Elevation Certification will be required for the

building at initial construction and Final Construction. The Final Construction EC must be submitted to Stormwater and approved prior to issuance of any 'CO'. If the building is to have commercial use on the lower floor and the lower floor is below the Base Flood Elevation (BFE), the lower floor must be flood proofed. An engineers Flood Proof certification will be required. If the lower floor is below the BFE then it cannot be used for residential occupancy.

Utilities (Availability)

Potable Water Available

Waste Water Available

Airport Overlay District & Noise Cone

n/a

Landscaping & Tree Conservation Requirements

Landscaping:

Landscaping will be required as set out in the Unified Development Plan.

Tree Conservation:

Critical root zone equivalent to 10% of disturbed area for any new site disturbance.

Transportation

Street Classification: Fairview Street – Collector Street.
Ninth Street – Local Street.

Site Access: All access(s) must be designed and constructed to the City off Greensboro standards.

Traffic Counts: None Available.

Trip Generation: 24 Hour = 3,084, AM Peak Hour =159, PM Peak Hour = 279.

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: Yes, GTA Route 15 (Yanceyville Street / Brightwood School Road) is within 750 ft. of the subject site, along Yanceyville Street and GTA Route 6 (Summit Avenue) is within 1100 ft. of the subject site, along Fairview Street.

Traffic Impact Study: Yes, required per TIS Ordinance. Please see the end of this staff report for the Executive Summary of the TIS.
(TIS)

Street Connectivity: N/A.

Other: N/A.

IMPACT/POLICY ANALYSIS

Land Use Compatibility

The proposed **PUD (Planned Unit Development)** 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 **Industrial / Corporate Park** and **Low Residential (3-5 d.u./acre)** on the northwest and southeast portions, respectively. The requested **PUD (Planned Unit Development)** zoning district, as conditioned, is generally inconsistent with the **Industrial / Corporate Park** and **Low Residential (3-5 d.u./acre)** GFLUM designations, however, per City Council adopted policy, a GFLUM amendment is not required for rezoning requests that do not involve a significant physical change resulting in new or expanded structures. The Growth Strategy map identifies the subject site as being located within the **Cone Mills Reinvestment Area**.

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 4B: Target capital investments to leverage private 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.

Policy 4D: Identify potential opportunities and selectively target, plan and promote development/reuse initiatives.

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 5D: Preserve and promote Greensboro's historic resources and heritage.

Policy 5E: Improve the aesthetic quality of publicly owned and maintained 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 6C: Promote the diversification of new housing stock to meet the needs of all citizens for suitable, 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 7A: Target city investment and regulatory policies for economic development.

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

Industrial/Corporate Park: This designation applies to areas where present or anticipated uses include both light and heavy industrial uses, such as manufacturing, assembly, and fabrication; wholesaling and distribution; and corporate office and technology parks, which may be introduced to replace older heavy industrial uses. Although new residential development is discouraged in areas designated for this land use category, pre-existing residential uses may be present in or adjacent to these areas. As established industrial areas redevelop, such residential, institutional, or similar uses should be protected from adverse impacts (heavy truck traffic, significant outside storage, factors such as noise, dust, and glare, etc.) through performance-based standards, buffers, and proper separation from noxious uses.

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.

Reinvestment Area: Reinvestment Areas and Corridors represent priority opportunities for combined public and private sector reinvestment and the application of policies described in Section 4.5.1 (Reinvestment/Infill). More specifically, Reinvestment Areas are neighborhoods and districts within Greensboro's urban areas that would most benefit from actions to promote compatible infill development and other forms of investment and reinvestment.

CONFORMITY WITH OTHER PLANS

City Plans

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.

Balanced Economic Development: A Strategic Plan for East Greensboro

Retail Opportunities:

Adaptive Reuse of Retail – The presence of significant “Big Box” vacancy in the E. Cone Boulevard should be addressed. A program on identifying adaptive reuse opportunities should be implemented with the following categories as the primary focus:

- City and County Government facilities
- Churches
- Early Childhood Development
- For profit educational facilities
- Library
- Medical Facility
- Interior Design Center

Target Retailers – Retailer [categories] which should be considered as top prospect for the East Greensboro Study area include:

- Grocery stores
- Home décor centers
- Sporting goods
- Maternity & baby apparel and supplies
- Tools and hardware
- Apparel
- Home appliances
- Discount stores
- Warehouse club stores
- Fast casual restaurants

Other Plans

n/a

STAFF ANALYSIS AND RECOMMENDATION

Community Outreach

Applicant is strongly encouraged to discuss this proposed rezoning and development with owners of surrounding properties, with representatives of the Cone Mills Community

neighborhood, within which the subject site is located, and with representatives of the nearby Village at Northside neighborhood, located to the east.

Based on the proximity of the subject site to the planned North Buffalo Creek Greenway to the north of the subject site as specified in the 2015 Greensboro BiPed Plan, long term quality of life for future residents of this proposed multi-family residential facility would be greatly enhanced by provision of secure, convenient bicycle parking for use by residents, visitors, and employees.

The subject site is located within the area(s) eligible for the following economic development incentive or assistance program(s):

- New Markets Tax Credits (federal),
- Urban Development Investment Incentives (local), and
- Economic Development Impact Zone 1 (local).

Staff Analysis

This 18.22-acre subject site is currently a vacant historic industrial building. North and east of the request is an industrial operation and undeveloped property (zoned HI). South of the request are single-family dwellings (zoned R-5). West of the request is a City ball field and park area (zoned RM-18).

The Generalized Future Land Use Map designates this site primarily as Low Residential and Industrial/Corporate Park. The Low Residential category includes the City's predominantly 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 Industrial/Corporate Park designation applies to areas where present or anticipated uses include both light and heavy industrial uses, such as manufacturing, assembly and fabrications; wholesaling and distribution and corporate office and technology parks, which may be introduced to replace older heavy industrial uses. While the proposed request does not fall within the parameters of this future land use designation, a Generalized Future Land Use map amendment was not required because the applicant offered a condition to maintain the existing structure without expansion.

The PUD Planned Unit Development zoning district is intended to allow a diverse mixture of residential and/or nonresidential uses and structures that function as cohesive and unified projects. The districts encourage innovation by allowing flexibility in permitted use, design, and layout requirements in accordance with a Unified Development Plan.

The PUD request is consistent with the land uses established in close proximity and the proposed density is compatible with existing adjacent development. It also supports the recent development patterns in this larger area to convert vacant industrial buildings into moderate to higher density, retail, office and residential uses. The proposed residential densities are also in line with the previously approved rezonings for the property.

The proposed request supports the Comprehensive Plan's Reinvestment/Infill goal to promote sound investment in Greensboro's urban areas and the Housing and Neighborhoods goal to 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.

This request is consistent with the intent and purpose of the zoning code, the Comprehensive Plan (Connections 2025) and is generally compatible with the existing development and trend in the surrounding area.

Staff Recommendation

Staff recommends **approval** of the requested **PUD** (Planned Unit Development) zoning district.

Additional Information

Printworks Development – Transportation Impact Analysis

Greensboro, NC

Prepared for The Alexander Company

February 17, 2017

Executive Summary

The Printworks Development is a proposed mixed-use development located at the Proximity Print Works Mill site, on the northeast quadrant of the intersection of Fairview Street and Ninth Street in Greensboro, North Carolina. The site plan proposes 217 multifamily units, 9,000 square feet of retail space, and 90,000 square feet of conditioned storage units.

The site plan is shown in Figure 1. The site plan proposes two (2) full accesses, including one on Fairview Street and one on Ninth Street. A site location map and a vicinity map are provided in Figures 2A and 2B, respectively.

Previously, a transportation impact analysis (TIA) was performed for this site in June 2015, which at that time was called the 1700 Fairview Street Development. The previous developer proposed 320 multifamily units. The Greensboro Department of Transportation (GDOT) has required an updated TIA for the current site plan.

DAVENPORT was retained to determine the potential traffic impacts of this development and to identify any 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:

- Yanceyville Street at Water Street
- Yanceyville Street at East Cornwallis Drive
- Yanceyville Street at Revolution Mill Drive
- Yanceyville Street at Textile Drive
- Fairview Street at Water Street
- Fairview Street at Site Access 1
- Fairview Street at Ninth Street
- Fairview Street at Textile Drive
- Ninth Street at Site Access 2

The intersections were analyzed during the AM (7-9 am) and PM (4-6 pm) peaks for the following conditions:

- 2017 Base Conditions
- 2020 Future No Build Conditions
- 2020 Future Build Conditions
- 2020 Future Build Conditions with Improvements (as necessary)

This analysis assumed a build-out year of 2019 for the site. A study year of 2020 (build-out plus one year) was used for analysis purposes.

This Transportation Impact Analysis (TIA) was carried out based on GDOT and North Carolina Department of Transportation (NCDOT) typical standards. Information regarding the property was provided by the developer, The Alexander Company.

Trip Generation

Based on the latest site plan, the proposed land uses include 217 multifamily units, 90,000 square feet of storage units, and 9,000 square feet of retail space. TripGen 2013 software, based on the 9th edition of ITE Trip Generation Manual, was used to project trips for this development. Table A presents the results.

Table A - ITE Trip Generation									
Lewiston Road Residential Development									
Average Weekday Driveway Volumes					24 Hour	AM Peak Hour		PM Peak Hour	
					Two-Way				
Land Use	ITE Land Code	Size	Data Source	Volume	Enter	Exit	Enter	Exit	
Apartments	220	217	Dwelling Units	Equations	1439	22	88	89	48
Storage Units	151	90	Th.Sq.Ft. GFA	Rates	225	7	6	12	11
Retail	820	9.0	Th.Sq.Ft. GLA	Equations	1420	22	14	57	62
Total Trips					3,084	51	108	158	121

Typically, a portion of trips for retail uses are pass-by trips, which is existing traffic that will divert into the site before continuing toward their destinations. A pass-by trip reduction rate is typically applied to account for this portion of site trips that are pass-by rather than new trips to the study network. However, in this case no pass-by reduction was applied in order to give more conservative results.

Discussion of Results

The results of the study are discussed by intersection below and are summarized in Table B:

Yanceyville Street at Water Street

This unsignalized intersection currently operates at LOS B during the AM peak and LOS C during the PM peak. In 2020 future no build conditions, the intersection is expected to remain at a LOS B in the AM and LOS C in the PM peaks. With the addition of site traffic, the intersection is expected to remain at LOS B and LOS C in AM and PM peaks, respectively. No improvements are recommended.

Yanceyville Street at East Cornwallis Drive

This signalized intersection currently operates at LOS B during the AM and PM peaks. In 2020 future no build conditions, the intersection is expected to remain at a LOS B in the AM and PM peaks. With the addition of proposed site traffic, the level of service is expected to remain unchanged. No improvements are recommended.

Yanceyville Street at Revolution Mill Drive

This unsignalized intersection currently operates at LOS B during the AM and PM peaks. In future no build and future build conditions, the level of service is expected to remain at LOS B during AM and PM peaks. No improvements are recommended.

Yanceyville Street at Textile Drive

This signalized intersection currently operates at LOS A during the AM and PM peaks. In future no build and future build conditions, the level of service is expected to remain at LOS A during AM and PM peaks. No improvements are recommended.

Fairview Street at Water Street

This unsignalized intersection currently operates at LOS A during the AM and PM peaks. In future no build and future build conditions, the level of service is expected to remain at LOS A during AM and PM peaks. No improvements are recommended.

Fairview Street at Site Access 1

In 2020 future build conditions, this site access is expected to operate at LOS A during the AM peak and LOS B during the PM peak. The need for left and right turn lanes was reviewed based on pages 23 and 27 of the 2004 GDOT Driveway Manual. Based on projected traffic volumes, no right turn lane or left turn lane is warranted on Fairview Street. We recommend that this site access be designed according to the GDOT Driveway Manual.

Fairview Street at Ninth Street

This unsignalized intersection operates at LOS A during existing and future no build AM and PM peaks. With the development of the site, LOS A is expected in the AM peak and LOS B in the PM peak. Based on projected traffic volumes, left or right turn lanes are not warranted at this intersection. No improvements are recommended.

Fairview Street at Textile Drive

This unsignalized intersection currently operates at LOS B during AM and PM peaks. In 2020 future no build conditions, the intersection is expected to remain at a LOS B in the AM and PM peaks. With the addition of proposed site traffic, a LOS B is expected in the AM and LOS C in the PM peaks. No improvements are recommended.

Ninth Street at Site Access 2

In 2020 future build conditions, this site access is expected to operate at LOS A during AM and PM peaks. No turn lanes are warranted based on projected traffic volumes. We recommend that this site access be designed according to the GDOT Driveway Manual.

The recommended improvements are illustrated in Exhibit A.

Level of Service Summary

Table B summarizes the level of service analysis at the study intersections:

Table B - Level of Service Summary			
AM Peak	2017 Base	2020 Future No Build	2020 Future Build
Yanceyville Street at Water Street	B (13.1) WB Approach	B (13.4) WB Approach	B (14.3) WB Approach
Yanceyville Street at Cornwallis Drive	B (12.3)	B (13.2)	B (14.0)
Yanceyville Street at Revolution Mill Drive	B (11.1) EB Approach	B (11.0) EB Approach	B (11.1) EB Approach
Yanceyville Street at Textile Drive	A (5.9)	A (6.0)	A (9.4)
Fairview Street at Water Street	A (8.7) EB Approach	A (8.7) EB Approach	A (8.6)* EB Approach
Fairview Street at Site Access 1			A (9.3) WB Approach
Fairview Street at 9th Street	A (8.6) EB Approach	A (8.6) EB Approach	A (9.7) WB Approach
Ninth Street at Site Access 2			A (8.4) SB Approach
Fairview Street at Textile Drive	B (11.1) NB Approach	B (11.2) SB Approach	B (11.7) NB Approach
PM Peak	2017 Base	2020 Future No Build	2020 Future Build
Yanceyville Street at Water Street	C (19.6) WB Approach	C (20.0) WB Approach	C (21.6) WB Approach
Yanceyville Street at Cornwallis Drive	B (17.9)	B (18.3)	C (23.7)
Yanceyville Street at Revolution Mill Drive	B (11.4) EB Approach	B (11.4) EB Approach	B (11.5) EB Approach
Yanceyville Street at Textile Drive	A (6.2)	A (6.4)	A (9.4)
Fairview Street at Water Street	A (9.0) EB Approach	A (9.0) EB Approach	A (8.8)* EB Approach
Fairview Street at Site Access 1			B (10.2) WB Approach
Fairview Street at 9th Street	A (8.8) EB Approach	A (8.8) EB Approach	B (10.6) WB Approach
Ninth Street at Site Access 2			A (8.4) SB Approach
Fairview Street at Textile Drive	B (13.8) SB Approach	B (14.1) SB Approach	C (19.7) NB Approach
LOS (delay in seconds)			
Note for unsignalized conditions, LOS and delay indicates only minor street approach with longest delay			
* Reduction in average minor street delay due to addition of right turns, which have lower delay than left turns			

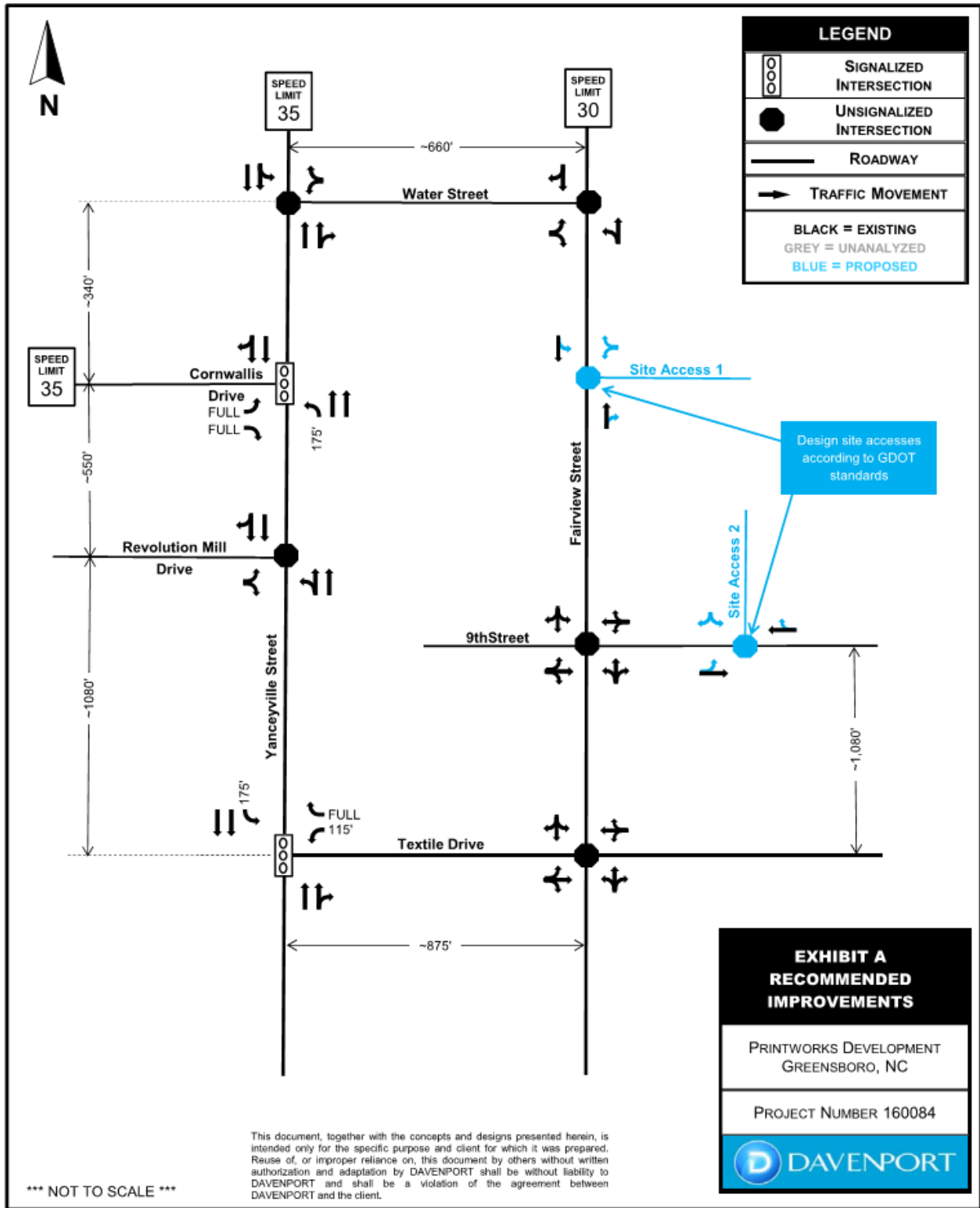
Site Access Throat Distance

The internal throat distance for the site accesses was reviewed based on the GDOT Driveway Manual, which states that the distance from the adjacent street right of way to the near side of any internal service drive or parking aisle should be 25 feet, or greater than the expected inbound queue at the location. The expected inbound queue is calculated as the peak hour volume entering the site access multiplied by a factor of 0.833. Table C below summarizes the peak hour volumes and the required throat distances which were calculated. **Based on these volumes, a minimum clear throat distance of 100 feet is recommended at Site Access 1 and 25 feet is recommended at Site Access 2.**

Table C - Level of Service Summary				
Driveway	Adjacent Street	Entry Volume (AM / PM peaks)	Calculated Inbound Queue*	Recommended Clear Throat Distance
Site Access 1	Fairview Street	39 / 119	33 / 99	100
Site Access 2	Ninth Street	13 / 40	11 / 33	25

* Inbound Queue = (5/6)(Entry Volume)





Summary and Conclusion

The Printworks Development is a proposed mixed-use development located at the Proximity Print Works Mill site, on the northeast quadrant of the intersection of Fairview Street and Ninth Street in Greensboro, North Carolina. The site plan proposes 217 multifamily units, 9,000 square feet of retail space, and 90,000 square feet of conditioned storage units.

DAVENPORT was retained to determine the potential traffic impacts of this development and to identify any transportation improvements that may be required to accommodate the impacts of both background traffic and new development traffic.

Based on trip generation equations published in Trip Generation (Institute of Transportation Engineers, 9th Edition), this development has a trip generation potential of 159 trips in the AM peak and 279 trips in the PM peak.

Overall, the traffic analysis shows adequate capacity at the study intersections, with each of the study intersections expected to operate at level of service (LOS) C or better. The site plan proposes two (2) full accesses to the site: one on Fairview Street and one on Ninth Street. LOS B or better is anticipated at both access points during AM and PM peaks. Based on projected traffic volumes and GDOT turn lane criteria, these locations do not warrant left or right turn lanes. We recommend that the site accesses be designed according to the GDOT Driveway Manual.

The internal throat distance for the site accesses was reviewed based on the GDOT Driveway Manual, which states that the distance from the adjacent street right of way to the near side of any internal service drive or parking aisle should be 25 feet, or greater than the expected inbound queue at the location. Based on the traffic volumes and expected inbound queues, a minimum clear throat distance of 100 feet is recommended at the site access on Fairview Street, and 25 feet is recommended at the site access on Ninth Street.

In conclusion, this study has reviewed the impacts of both background traffic and proposed development traffic, and has determined that there is adequate capacity for expected future traffic volumes. Please note the site accesses should be designed according to the GDOT Driveway Manual.