



CITY OF DURHAM | DURHAM COUNTY
NORTH CAROLINA



ATTACHMENT 6:
SUMMARY OF DEVELOPMENT IMPACTS

This attachment provides a summary of the potential development impacts associated with the proposed request in terms of how it affects the transportation system, utilities (water, sewer systems, and stormwater) and schools.

1. Transportation Impacts

The project is located on the east side of Page Road just west of the Wake County line. Page Road is the major road impacted by the proposed zoning change.

Table 1 below provides a description of the affected segment, its roadway characteristics, current roadway capacity and the latest traffic volumes.

Table 1: Existing Roadway Characteristics	
	Page Road
Type of Roadway	2-lane undivided city/county class I arterial with left-turn lanes.
Current Roadway Capacity (LOS D) (AADT)*	14,200
Latest Traffic Volume (AADT)**	7,700

*Source: FDOT Generalized Level of Service Volume Table 4-1 (2012)

**Source: 2015 NCDOT Traffic Count Map

Table 2 shows the projected vehicle trips generated under the proposed zoning compared to the present zoning designation.

Table 2: Traffic Generation	
Traffic Generated under Present Zoning Designation (average 24 hour)*	*29
Traffic Generated by Proposed Zoning Designation (average 24 hour)**	**44
Impact of Proposed Designation	+15

*Assumption- (Max Use of Existing Zoning) – RR: 2 single-family lots

**Assumption- (Max Use of Proposed Zoning) – IL: 6,276 SF Light Industrial (0.05 FAR)

There are no scheduled City of Durham or NCDOT roadway improvements projects in the area. Transit service is not currently provided within one-quarter mile of the site.

2. Utility Impacts

This site is estimated to generate a total of 847.26 gallons per day (GPD) if developed to its maximum potential with the proposed zoning district. Advisory Comment: Any future connection to the City of Durham water system will require a Utility Extension Agreement and may require voluntary annexation.

As shown in Table 3, this represents an increase of 537.26 GPD over the existing zoning district. The City of Durham Water Management Department has determined that adequate service is available to support the proposed development intensity.

Table 3: Water Supply Impacts	
Current Water Supply Capacity	37.00 MGD
Present Usage	31.51 MGD
Approved Zoning Map Changes (October 2013 – September 2016)	1.03 MGD
Available Capacity	4.46 MGD
Estimated Water Demand Under Present Zoning*	310 GPD
Potential Water Demand Under Proposed Zoning**	847.26 GPD
Potential Impact of Zoning Map Change	+537.26 GPD

Notes: MGD = Million gallons per day

*Assumption- (Max Use of Existing Zoning) – RR: 2 single-family lots

**Assumption- (Max Use of Proposed Zoning) – IL: 6,276 SF Light Industrial (0.05 FAR)

In terms of drainage and stormwater, the impacts of any change based upon the proposed rezoning will be assessed at the time of site plan review. The subject site is of sufficient size and shape to accommodate appropriate stormwater facilities that may be required.

3. School System Impact

Durham Public Schools serving the area are Pearisontown Elementary School, Rogers-Herr Middle School, and Hillside High School.

Table 4 provides a summary of the current building capacity for the elementary, middle and high schools, as well as the current enrollment and the available capacity.

Table 4: School Enrollment and Capacity Figures			
	Elementary School Students	Middle School Students	High School Students
Current Building Capacity	16,218	7,871	10,433
Maximum Building Capacity (110% of Building Capacity)	17,840	8,658	11,476
20 th Day Attendance	15,737	6,764	10,576

(2016-2017 School Year)			
Committed to Date, Based on Recent Approvals (July 2014-June 2016)	282	115	92
Available Capacity	1,831	1,779	808

As shown in Table 5, the proposed zoning is estimated to decrease the number of additional students compared to the current zoning by one.

Table 5: Number of Projected Students Under Rezoning			
	Elementary School Students	Middle School Students	High School Students
Potential Students Generated – Current Zoning Durham*	1	0	0
Potential Students Generated – Proposed Zoning Durham**	0	0	0
Impact of Proposed Zoning	0	0	0

*Assumption- (Max Use of Existing Zoning) – RR: 2 single-family lots

**Assumption- (Max Use of Proposed Zoning) – IL: 6,276 SF Light Industrial (0.05 FAR)

4. Summary

The proposed Industrial Light district is consistent with *Comprehensive Plan* policies regarding the infrastructure impacts of the transportation system, utilities, and schools.