CITY OF DURHAM | DURHAM COUNTY
NORTH CAROLINA

ATTACHMENT 6:
SUMMARY OF DEVELOPMENT IMPACTS

This attachment provides a summary of the potential infrastructure 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

Page Road and T.W. Alexander Drive are the major roads impacted by the proposed zoning change. Table 1 below provides a description of each affected segment, its roadway characteristics, current roadway capacity and the latest traffic volumes.

Table 1: Existing Roadway Characteristics		
Affected Segment	T.W. Alexander Drive	Page Road
Type of Roadway	4-lane divided class I arterial with left-turn lanes	2-lane divided class II arterial without left-turn lanes
Current Roadway Capacity (LOS D) (AADT)*	39,800	14,200
Latest Traffic Volume (AADT)**	25,000	15,000

Source of LOS Capacity: FDOT Generalized Level of Service Volume Table 4-1 (2012)
Source of Latest Traffic Volume: 2015 NCDOT Traffic Count Map

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

Table 2: Traffic Generation	
Traffic Generated by Present Designation (average 24 hour)*	*930
Traffic Generated by Proposed Designation (average 24 hour)**	**23
Impact of Proposed Designation	-927

*Assumption (existing zoning) – OI: 63,500 square feet of office space
**Assumption (proposed zoning) – IL: 16,700 square feet of light industrial uses

Transit service is not currently provided within one-quarter mile of the site.

Utility Impacts

This site will be served by city water and sewer. This site is estimated to generate a total of 2,254.50 gallons per day (GPD) if developed to its maximum potential with the proposed zoning district.

As shown in Table 3, this represents a decrease of 4,762.50 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	26.31 MGD
Approved Zoning Map Changes (October 2013 – September 2016)	0.89 MGD
Available Capacity	9.80 MGD
Estimated Water Demand Under Present Zoning*	4762.5 GPD
Potential Water Demand Under Proposed Zoning**	2,254.5 GPD
Potential Impact of Zoning Map Change	-2,508 GPD

Notes: MGD = Million gallons per day

*Assumption (existing zoning) – OI: 63,500 square feet of office space

**Assumption (proposed zoning) – IL: 16,700 square feet of light industrial uses

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

The proposed zoning map change is solely for non-residential uses, which have no impact on the school system.

4. Summary

The proposed IL district and associated development plan is consistent with *Comprehensive Plan* policies regarding the infrastructure impacts of the transportation system, utilities, and schools.