

Washington Terrace

Infrastructure Due Diligence Report

28 March 2015 (Revised)

Executive Summary

Over the past 2 months, Grounded has conducted research regarding the existing infrastructure located in close proximity to the Washington Terrace development project. The Washington Terrace development is located in eastern downtown Raleigh. The project area totals approximately 26 acres. The redevelopment project is expected to include 300 – 400 residential units. This research has been conducted with a series of meetings, phone conversations, and review of available online information. The below information has been provided in bullet point summary as requested.

I. Transportation

General

- a. The City of Raleigh (COR) staff is not aware of any proposed City of Raleigh transportation improvements projects in the near future around the proposed development;
- b. The COR staff would be fine with the current alignment and location of Booker Drive and N. Fisher Street if that is the desired option;
- c. The COR staff would be supportive of the realignment of N. Fisher Street to align with Delaney Drive on the north end of the site if that is a desired option;
- d. The COR staff was non-committal regarding their support of an extension of Booker Drive to Raleigh Boulevard;
- e. The project will need to ensure it meets the current COR block perimeter requirements;

City Transit

- a. The COR staff would like to see one centrally located City bus stop and shelter. The preferred location was at the intersection of Booker Drive and N. Fisher Street. This would replace the multiple existing bus stops located along Booker Drive and N. Fisher Street;
- b. The COR staff would require a sidewalk connection from the proposed bus stop directly to Raleigh Boulevard. If Booker Drive is extended to connect to Raleigh Boulevard, the sidewalk along the roadway would suffice;

Milburnie Road

- a. Milburnie Road is classified by the City of Raleigh as an Avenue 2-Lane Undivided roadway (64' R/W, 36' B-B);
- b. Milburnie Road is currently constructed as a 35' B-B road based on provided survey information. The City of Raleigh would not require any road widening improvements;



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- c. The currently public right-of-way for Milburnie Road on the Washington Terrace side is approximately 27.5' from the roadway centerline. With this, an additional 4.5' of right-of-way dedication would be required along the property frontage on Milburnie Road to meet the City's requirements;
- d. A 5' wide concrete sidewalk currently exists along the property frontage on Milburnie Road. The new City of Raleigh standard is 6' wide. There are two (2) likely scenarios regarding this sidewalk;
 - i. If the owner and City agree that the existing sidewalk is in good condition and agree to keep it as is, the owner would be required to pay a fee-in-lieu for an additional 1' of sidewalk width along the entire Milburnie Road frontage (approximately 1,300 LF). The fee-in-lieu cost would be based on the City's Development Fee Schedule which is updated around July 1 of each year;
 - ii. If the owner and the City agree that the existing sidewalk is in poor condition or that the desire is to go ahead and install a 6' wide sidewalk, the owner would be eligible for reimbursement for the cost of a 5' wide sidewalk based on the values listed in the current Development Fee Schedule;

Raleigh Boulevard

- a. Raleigh Boulevard is a NCDOT maintained roadway. Any improvements within the Raleigh Boulevard right-of-way would be required to be approved and permitted through NCDOT;
- b. Raleigh Boulevard is classified by the City of Raleigh as an Avenue 4-Lane Divided roadway (104' R/W, 76' B-B);
- c. The City of Raleigh would not require any road widening improvements to Raleigh Boulevard. However, if a new roadway or driveway connection is desired along Raleigh Boulevard, NCDOT may require improvements such as a deceleration lane;
- d. If a new roadway or driveway connection was proposed and allowed along Raleigh Boulevard by NCDOT and the City of Raleigh, it would be limited to a right-in-right-out only driveway connection;
- e. The currently public right-of-way for Raleigh Boulevard is approximately 95'. With this, an additional 4.5' of right-of-way dedication would be required along the property frontage on Raleigh Boulevard to meet the City's requirements;
- f. A 5' wide concrete sidewalk currently exists along the property frontage on Raleigh Boulevard. The new City of Raleigh standard is 6' wide. There are two (2) likely scenarios regarding this sidewalk;
 - i. If the owner and City agree that the existing sidewalk is in good condition and agree to keep it as is, the owner would be required to pay a fee-in-lieu for an additional 1' of sidewalk width along the entire Raleigh Boulevard frontage (approximately 1,350 LF). The fee-in-lieu cost would be based on the City's Development Fee Schedule which is updated around July 1 of each year;
 - ii. If the owner and the City agree that the existing sidewalk is in poor condition or that the desire is to go ahead and install a 6' wide sidewalk, the owner would



be eligible for reimbursement for the cost of a 5' wide sidewalk based on the values listed in the current Development Fee Schedule;

Oakwood Avenue

- a. Oakwood Avenue is classified by the City of Raleigh as an Avenue 2-Lane Undivided roadway (64' R/W, 36' B-B);
- b. Oakwood Avenue is currently constructed as 35' B-B roads in a 50' right-of-way based on provided survey information;
- c. The currently public right-of-way for Oakwood Avenue is 50'. Therefore, an additional 7' of right-of-way dedication would be required along the property frontage on Oakwood Avenue to meet the City's requirements;
- d. There is currently no sidewalk along the property frontage on Oakwood Avenue. A 6' wide concrete sidewalk will be required to comply with current City standards;

Booker Drive and N. Fisher Street

- a. Booker Drive and N. Fisher Street are currently constructed as 35' B-B roads in a 50' right-of-way based on provided survey information;
- b. Based on the proposed development and the proposed number of units, Booker Drive and N. Fisher Street will most likely be classified as Neighborhood Local streets (59' R/W, 31' B-B). This is based on the logic that 400 units would have at least three (3) access points in and out of the development for an average of 133 units per access point. If the number of units were to increase to more than 150 units per access point, Booker Drive and N. Fisher Street would need to be classified as Neighborhood Streets (64' R/W, 36' B-B);
- c. If Booker Drive and N. Fisher Street remain in their current location, no roadway widening improvements would be required. The existing 4' wide concrete sidewalks on either side would need to be removed and replaced with 6' wide concrete sidewalks matching the City's current standards;

II. Stormwater

General

- a. Per City of Raleigh regulations, stormwater management is not required if the proposed project does not result in a net increase to impervious area. However, a stormwater
- b. The site essentially drains to a series of storm drainage structures located along the east edge of the development project. The inlets connect and travel under Raleigh Boulevard. The City will require that we evaluate the storm drainage system that we tie into to ensure the existing pipe can handle the proposed storm drainage runoff. If it is determined that the existing pipe to which we are connecting is insufficient, we will have a couple of options:



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- i. Provide stormwater management on site that retains a portion of the stormwater runoff and releases it at a slower rate that the existing pipe can handle;
 - ii. Replace the existing storm drainage pipe to which we are connecting with an adequately sized pipe;
- c. If we are required to provide either of the scenarios listed above in items b(i) or b(ii), this may be considered going above and beyond normal stormwater requirements and could qualify the site for a stormwater fee credit;
- d. If we elected to provide stormwater management voluntarily that reduces the pollutant discharge from the site when it is not required by City standards, the site may be eligible for the City's Water Quality Cost Share program.

III. Public Utilities

General

- a. The site is currently served by City of Raleigh water and sanitary sewer. Copies of the utility maps provided by the City of Raleigh are attached for your reference;
- b. As shown on the attached utility maps, a portion of the site is currently served with sanitary sewer to the south while the majority of the site appears to be served with sanitary sewer that flows to the northeast corner of the property;

IV. PSNC Gas

General

- a. PSNC currently has a 4" gas line along Raleigh Boulevard and a 2" line on the other adjacent streets. PSNC indicated that the existing lines should be sufficient to service a project of this size if desired.

V. Duke-Progress Energy

General

- a. The site is currently served by Duke-Progress Energy via overhead utility lines. The overhead lines are located along each of the interior and perimeter public roadways. In meeting with representatives from Duke, they indicated that the cost associated with the relocation of their poles and overhead utility lines to accommodate roadway realignments would not be "earth shattering". They are unable to provide a more accurate understanding of estimated costs until they see a plan and can evaluate the implications.
- b. The existing utility poles on site appear to have three (3) different utility providers hanging on them. Duke Energy is on the top, Time Warner Cable is in the middle, and AT&T is at the bottom.

