

Town of Rolesville Town Hall and Police Station Site Due Diligence

EXISTING PROPERTY SUMMARY

- Approximately 17.4 Total Acres (Including Woodlief and Hood Properties fronting on E. Young Street southwest of S. Main and E. Young
- Approximately 700 LF of Frontage on E. Young Street
- Approximately 1.7 acres of existing residences, 0.7 acres wooded, and 15.0 acres of farmland – Zoned R-1 (partial annexation needed)
- No utility or easement encumbrances
- Existing homes and structures to be demolished – existing wells and septic to be abandoned

PROPOSED SITE PLAN SUMMARY

- The Site Plan proposes a recombination of the subject properties to one parcel containing the Town Hall, Police Station, and Wake County Library. The proposed buildings are shown at 20,000 SF, 15,000 SF, and 11,000 SF respectively. CJS utilized the previous Town studies and presentations as a reference for proposed square footages and site programming. CJS also coordinated with Wake County to obtain metrics for the proposed Library – funded by Wake County
- The site is composed of a total of approximately 360 parking spaces – 96 spaces at the Police Department and 264 spaces shared between the Town Hall and Library site. This provides ample parking for future expansion or for Town events
- Road widening along the E. Young Street frontage will be required and will entail the addition of ½ lane of pavement, a bike lane, curb and gutter, and 6' sidewalk
- A new 27' public street is proposed to bisect the site and tie to a proposed public street at the Scarboro property. This street will include curb and gutter and 6' sidewalk
- The public open space is in the form of a Town Green, which the Town Hall and Library will front on (see precedent images)
- The remaining future development parcels are sized at 1.25 Acres and 2.92 Acres

SITE UTILITIES, GRADING, & LANDSCAPING

- Water, Sewer, Gas, Electric, and telcom existing adjacent to the site in E. Young Street Right-of-way
- Water for construction of a public right-of-way is required by COR and is extended down the new Public Street
- Proposed buildings will tie fire and domestic water to the existing and the proposed mains in E. Young and the new Public Street
- Sewer to each building will be serviced to the existing forcemain in E. Young. There is no proposed Public Sewer extension shown or required
- Gas, electric – underground, telcom and other dry utilities are available and will be provided by their respective service providers
- Storm drainage will be provided on site and will be managed at the rear of the property utilizing a permanent Wet Pond
- Grading and earthwork evaluations revealed that due to existing site topography, the site should be able to balance, unless significant amounts of imported structural material is required.
- Proposed Landscaping is code required landscaping only – associated with street trees, perimeter buffers, and VUA screening.

ENVIRONMENTAL EVALUATION

- Wetlands have been preliminarily evaluated at 0.76 acres along existing swales in cultivated areas – these areas may be reduced during drier times of year
- No Jurisdictional Streams have been identified
- Wetland Impact will be limited to approximately 0.30 acres (within nationwide permit threshold)
- Additional evaluation will be needed by the Army Corps of Engineers to produce Office Jurisdictional Determination

GEOTECHNICAL EVALUATION

- Rock was encountered in a few locations, but not most. The shallowest was 3', this was near the back of the site and close to where our street may extend to the proposed senior apartment site that KDM has submitted. This will not be an issue for construction of the street. The other locations where rock was encountered was at +12' and won't impact our construction.
- The soil conditions vary a bit across the site. The soil is generally pretty good on the higher end of the site near E. Young. The borings along the frontage of the site show good soil in the top several feet. Quality of the soils decreases further toward the back of the site, especially near the ditches and near the proposed pond area. This developed portion of this site will be in fill based on the existing topography, so I'm not very concerned about soils. The Geotech also notes that the elastic soils should not be much of an issue or additional expense. I was pleased to see that their recommendations for pavement sections are very standard and not increased because of soils. Also, footing and pavement sections assumptions are very standard.

FIRE HYDRANT FLOW TEST

- The testing was completed utilizing two existing hydrants along the E. Young Street frontage. The flow rate at 20 psi (standard) revealed substantial flowrate that should not require individual or site booster pumps to meet fire and domestic demand. Additional evaluations will be required to confirm once permitting design is underway.