

Transportation Planning Staff Review of TIA for Barnes Lumber Site

Staff has reviewed the TIA for Barnes Lumber Site – Phase 1 produced by EPR, P.C. (April 2016) and has the following comments.

- Traffic data used for this 2016 TIA was based on counts collected in 2014 for the original TIA for the site. This data is no longer a valid assessment of current conditions but is the best we have at this time. The applicant has committed to perform a full transportation study for the Central Crozet Area that will include updated counts, assessments of current and future network operations, and recommendations for improvements. Major transportation improvements (and ongoing development) currently underway in the area will have major impacts on traffic patterns and there is a need to evaluate the system in consideration of these changes.
- The data and analysis from the 2016 TIA showed that existing (2016) operations at all intersections on Crozet Ave were operating at acceptable levels of service. The 2019 modeled conditions showed worsening delays for left turn movements from Jarmans Gap Rd and Library Ave onto Crozet Ave and Crozet Ave NB traffic approaching Three Notch'd, although service levels were still acceptable at those intersections.
- Traffic generation from the proposed Phase 1 of Barnes Lumber redevelopment, with use and density similar to the current proposal, is extremely high. New external site generated trips are 3,450 vehicle trips per day and 353 and 381 trips in the AM and PM peak hours, respectively. This evaluation did not assume a connection between Crozet Ave and Western Ridge which would provide an alternative option for trips to exit the eastern Crozet Neighborhoods.
- The Barnes Lumber developer has now committed to building that connection which, in combination with the road system of the Foothills Development will provide a more complete network and an alternate route to Route 240 (Three Notch'd Road) which will especially benefit travelers going to and from Charlottesville with an origin or destination in the Eastern Crozet Neighborhoods. The roundabout at Route 240 and US 250 currently in design and fully funded will also benefit these travelers. This option will remove some level of traffic from Crozet Avenue although may also add additional trips from neighborhoods that have better access to Crozet Avenue. The specific impacts of these changes will not be fully understood until the completion of the proposed Central Crozet Transportation Study which staff believes will be an invaluable benefit to transportation planning in the Crozet area and will inform transportation improvement decisions in the future.
- County Staff is currently seeking funding for an extension of Eastern Ave south to US 250 which will also reduce traffic levels on Crozet Ave once that connection is built.
- In evaluating the transportation impacts of the Barnes Lumber redevelopment, a number of potential scenarios were examined for improvements and signalization. These will be reevaluated in the proposed Transportation Study. However, based on the results of the 2016 TIA, a number of impacts can be expected from the Barnes Lumber development. These include overall failure of LOS at the Crozet Ave/Three Notch'd Rd intersection in the PM peak hour. Crozet Square is now in design to be rebuilt and will become a right in/right out movement and therefore will operate sufficiently in the future. The Crozet Ave/Library Ave intersection will also fail without improvements because of the heavy traffic attempting to turn left onto Crozet Ave. Crozet Ave/Jarmans Gap intersection will experience failing movements for left turning vehicles onto Crozet Ave in the AM and PM.
- The internal street network, primarily the High street intersections with Library Ave and Crozet Square will operate efficiently with the proposed roundabouts.

In summary, Barnes Lumber can be expected to have a profound effect on the transportation system in Crozet with the increase in traffic resulting in the degradation of operations at many of the Crozet Ave intersections. However, the improvements to the transportation system underway, both by the developer and other public projects will be creating a better road network with which to work in creating the ultimate desired network for the community. Future improvements will be necessary and should be identified and conceptualized through the proposed Transportation Plan allowing the County to properly plan to meet those future transportation needs.

Kevin M. McDermott
Principal Planner – Transportation
Albemarle County
401 McIntire Road
Charlottesville, VA 22902
(434) 296-5832 Ext. 3414
kmcdermott@albemarle.org