



County of Albemarle
COMMUNITY DEVELOPMENT
DEPARTMENT
401 McIntire Road, North Wing
Charlottesville, VA 22902-4579

phone: 434-296-5832
www.albemarle.org

Date: December 7, 2022

To: Albemarle County Board of Supervisors

From: Community Development – Planning

Subject: Lambs Road Campus and Adjacent Transportation Improvements – Additional Study Needed

Purpose:

Albemarle County Schools recently completed the Lambs Lane Campus Master Plan, a 30-year vision for development of the campus. Recommendations include the construction of a loop road connecting to Hydraulic Road at Lambs Road and Georgetown Green. Separately, CDD Planning staff and VDOT are aware of existing transportation concerns along Hydraulic Road within the vicinity of the Lambs Lane campus. Further study of the proposed loop road, the existing transportation concerns, and interactions between the loop road and the Hydraulic Road corridor require further study and the development of reliable project cost estimates.

Background:

Existing Conditions

Traffic Volumes – On average, 18,000 vehicles travel on this section of Hydraulic Road and about 5,000 vehicles travel on Lambs Road each day.

Speed – Along Hydraulic Road, the speed limit is posted 35mph with a 25mph school zone.

Safety and Access Concerns

Pedestrian Network Gaps – There is no sidewalk on the west side of Hydraulic Road north of Lambs Road.

Limited Marked Pedestrian Crossings – There are no marked crossings for pedestrians traveling along Hydraulic Road at Lambs Road, the driveway to the high school parking lot, or Georgetown Green; the latter two intersections feature slip lanes for traffic turning from Hydraulic.

While there is a pedestrian crossing of the south leg of the intersection of Hydraulic Road and Lamb's Road, the turn lanes, wide turning radii, and diagonal crosswalk alignment result in a 109' pedestrian crossing distance. The north and west legs of the intersection do not have marked crosswalks or pedestrian push buttons.

Bicycle Network Gaps -There is a sub-standard, multi-use path, on the west side of Hydraulic Road directly adjacent to the sidewalk which extends from Lambs Lane past Georgetown Green. This multi-use path is in need of repair.



County of Albemarle COMMUNITY DEVELOPMENT DEPARTMENT

401 McIntire Road, North Wing
Charlottesville, VA 22902-4579

phone: 434-296-5832

www.albemarle.org

Crash Data – Crash data quantify safety concerns for the corridor. See images from the Virginia Department of Transportation's (VDOT) crash maps on the right. Orange dots indicate severe injury crashes; yellow dots indicate crashes involving visible injuries; green dots indicate crashes involving non-visible injuries; gray dots indicate property damage only crashes. Crashes are from 2015 through early 2022.



Potential Safety Improvements Priority List – As part of the Virginia Highway Safety Improvement Program, the segment of Hydraulic Road immediately north of Lamb's Road ranks 27th among VDOT-maintained roadway segments in need of safety improvements in the Culpeper district.

Corridor and Campus Improvements

Corridor – While specific improvements for the Hydraulic Road corridor have not been planned yet, intersection improvements at the Hydraulic Road /Lamb's Road intersection and the Hydraulic/Georgetown Green intersection should be considered as part of the Campus Master Plan. These could include introduction of a roundabout or other innovative intersection concepts in addition to bicycle and pedestrian improvements. These potential projects would warrant further study.

Safe Routes to School – A previously completed Safe Routes to School-funded study indicated a need for increased investment in pedestrian and bike infrastructure for this area. That study paved the way for the shared use path currently under construction on the Lamb's Lane campus; however, the study also identified several other projects that need additional planning before they can be implemented.

Campus Master Plan: Loop Road – The Lamb's Lane Campus Master Plan proposes a future loop road that would connect to Hydraulic Road at Lamb's Road and Georgetown Green; the existing driveway to the high school parking lot would be eliminated.

Loop Road Transportation Concerns: The loop road proposal must be considered within the context of the Hydraulic Road corridor. One very specific consideration is minimum spacing requirements for new intersections, as defined in VDOT's Road Design Manual. Along this section of Hydraulic Road, new



**County of Albemarle
COMMUNITY DEVELOPMENT
DEPARTMENT**
401 McIntire Road, North Wing
Charlottesville, VA 22902-4579

phone: 434-296-5832
www.albemarle.org

signalized intersections must be spaced no less than 1,050’ apart and new unsignalized intersections must be spaced no less than 660’ apart. Georgetown Green is approximately 1,025’ from Lambs Road and 590’ from Georgetown Road. More broadly, the addition of a loop road would have impacts on Hydraulic Road and adjacent intersections; these impacts are not well-defined and warrant further study.

Additional Study – Additional study is needed to fully develop the plans for the proposed loop road and determine an accurate cost estimate. Similarly, additional study is needed to fully develop plans for improvements to the Hydraulic Road corridor – including costs estimates and an implementation plan.

Such a study would be completed by planning/engineering consultants and led by CDD Planning staff and/or Albemarle County Schools staff. The cost of the study would likely be between \$100,000 and \$300,000 depending on the scope and detail. The study would take at least 4 months to complete from issuing Notice to Proceed to the consultant.

Funding Opportunities – Likely funding opportunities for various improvements include Smart Scale (highly competitive), Revenue Sharing (not competitive), Transportation Alternatives (somewhat competitive), and local funding. Application submittals for Smart Scale occur in even years and for Revenue Sharing and Transportation Alternatives in odd years. Information regarding maximum funding requests, required local match, application due dates, and dates awarded funding becomes available for use are specified below.

The orange arrows help to visualize the long timelines between the submission of an application and the date by which a project can be expected to be completed.

| | Max Request and Match | Application Due Date | Funding Available |
|-----------------------------|---------------------------------|--------------------------------|----------------------|
| Smart Scale | (technically) unlimited; \$0 | Pre-apps Spring 2024 | (around) Summer 2029 |
| ~8-11 years | | | |
| Revenue Sharing | \$10 million request; 50% match | Summer 2023 | Summer 2028 |
| ~5-8 years | | | |
| Transportation Alternatives | \$1 million; 50% | Summer 2023 | Summer 2028 |
| ~5-8 years | | | |
| CIP/Other local funds | N/A | Request during budget planning | |
| ~3-5 years | | | |



County of Albemarle
COMMUNITY DEVELOPMENT
DEPARTMENT

401 McIntire Road, North Wing
Charlottesville, VA 22902-4579

phone: 434-296-5832

www.albemarle.org

Timeline for Improvements

Original – Albemarle County Schools staff have planned to fund further study of the proposed loop road in FY25. This would result in missing the FY23 application period for the Revenue Sharing grant program; the next submittal round would be at the end of FY25.

Proposed Revision – Upon discussion with CDD Planning staff, Albemarle County Schools staff are open to the possibility of moving forward the proposed loop road study to FY23 and combining it with additional study of the adjacent portion of the Hydraulic Road corridor. This would allow for submission of a Revenue Sharing grant application in FY23, in addition to other future funding opportunities.

It is vital to note that funding would need to be identified and made available by the Board of Supervisors and/or School Board in order to complete the study in the current fiscal year. If that funding is not immediately available then it is unlikely a Revenue Sharing application would be possible in 2023.



County of Albemarle
**COMMUNITY DEVELOPMENT
DEPARTMENT**

401 McIntire Road, North Wing
Charlottesville, VA 22902-4579

phone: 434-296-5832

www.albemarle.org

[End]