STAFF REPORT Transportation Plan Amendments

November 17, 2020 Town Council Meeting



The Thoroughfare and Collector Street Plan map of Advance Apex: The 2045 Comprehensive Transportation Plan represents a network of current and future facilities that provide guidance on what is likely to be suitable for long term growth. The plan does not require a schedule for implementation nor does it set aside funding for improvements. Instead, the plan helps the Town establish long term priorities. The purpose of the public hearing is to consider proposed amendments to the network of planned thoroughfare and collector streets in order to formulate a decision.

The purpose of these amendments is to consider the possible reversal of two amendments adopted by the Town Council on October 6, 2020. Given the complexity of the decision for these two amendments, Town Council expressed an interest in holding a second public hearing to further discuss the amendments and provide an additional opportunity for public input to be heard.

Amendment 1. New Hill Olive Chapel Road between Old US 1 Highway and Olive Chapel Road

The proposed amendment would downgrade plans for this roadway from Future Four-Lane, Median-Divided Thoroughfare to Existing Two-Lane Rural Thoroughfare (see Figure 1). This amendment would reverse the decision made on October 6, 2020 to amend the Thoroughfare and Collector Street Plan map for consistency with recommendations from the regional Southwest Area Study (SWAS).

The SWAS recommendation is based on the need for increased capacity on this regional corridor and commuter route. The traffic model runs project 15,000 – 17,700 vehicles per day along New Hill Olive Chapel Road by 2045. The North Carolina Department of Transportation measured 6,900 vehicles per day along this corridor in 2019. The recommendation to upgrade this section of New Hill Olive Chapel Road to a Future Four-Lane, Median-Divided Thoroughfare is consistent with plans to upgrade the corridor to highway standards and designate it as NC 751. The extended corridor for future NC 751 would stretch 20 miles, from where it currently terminates north of US 64 to US 401 in Lillington. An image of the future NC 751 corridor from the SWAS is shown in Figure 2.

A Four-Lane, Median-Divided Thoroughfare provides both traffic capacity and potential safety benefits compared to a Two-Lane Rural Thoroughfare or undivided facility. The main concerns of the widened facility are the possible loss of the rural context of this corridor and property impacts. Known major constraints along the corridor include: a cemetery located approximately 420' south of Olive Chapel Road adjacent to Olive Chapel Baptist Church; historic structures along the corridor, but especially concentrated at the "crossroads" of Olive Chapel Road, Humie Olive Road and Old US 1 Highway; and floodway and a crossing of Little Beaver Creek through US Army Corps of Engineer property north of Humie Olive Road. The right-of-way for both the Town's Four-Lane, Median-Divided Thoroughfare and Two-Lane Rural Thoroughfare is 110' (see Figure 3 and Figure 4). This means, as redevelopment occurs, the same right-of-way is required (or requested as applicable) regardless of the designation on the Thoroughfare and Collector Street Plan map. At the time of project design, to avoid or minimize impacts in constrained areas, the minimum right-of-way needed for a Four-Lane, Median-Divided Thoroughfare is 80'. This right-of-way would not allow for turn lanes and would result in other tradeoffs, such as the reduction of space between pedestrian facilities and roadway edge and narrowing of shoulder or bicycle lanes. For this reason, and because conditions often change between project construction and long range planning; adjustments to the typical section are made during project design, with more detailed information, and not at the time of long range planning.

Widening this roadway is not programmed in the Town's 5-year Capital Improvement Program, nor the State's 10-year Transportation Improvement Program.

Staff Recommendation:

The original amendment to upgrade New Hill Olive Chapel Road to a Future Four-Lane, Median-Divided Thoroughfare was reviewed with staff from Public Works and Transportation, Police, Fire, and EMS. Given the added capacity, and potential safety benefit of a median, there were no concerns from these perspectives. The Fire Department asked to be involved in project design to have input on the location of median breaks for emergency access.

Planning Department staff did not make a recommendation regarding the original amendment to upgrade the corridor, suggesting the determination of the balance between traffic capacity and context is best made by the Planning Board and Town Council as representatives of the public. Two Town Council members expressly requested that Planning staff offer a recommendation. While Planning Staff recognizes the desire to maintain a rural corridor and minimize property impacts, the regional importance of this route as future NC 751 is the driving factor. For this reason, Planning Staff recommends maintaining the Four-Lane Median-Divided Thoroughfare designation, for consistency with regional plans, and rejecting the proposed reversal of the recently-approved amendment to the Thoroughfare and Collector Street Plan Map.

Planning Board Recommendation:

The Planning Board considered the amendments during their November 9, 2020 meeting and unanimously recommend rejecting the proposed amendment to downgrade New Hill Olive Chapel Road, between Old US 1 Highway and Olive Chapel Road, to an Existing Two-Lane Rural Thoroughfare, in favor of maintaining plans to upgrade this roadway to a Future Four-Lane Median-Divided Thoroughfare.

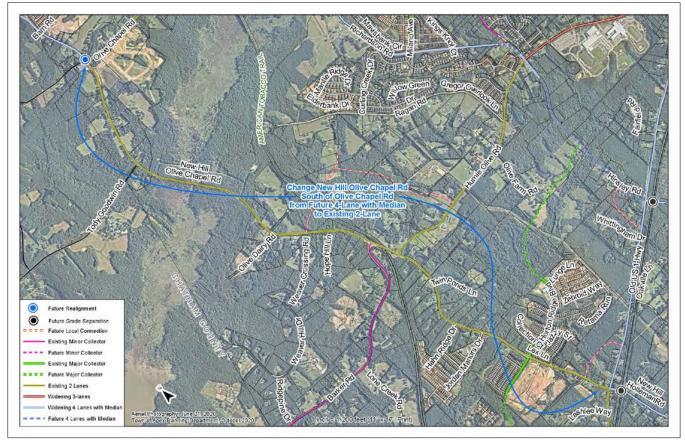


Figure 1. Proposed amendment to New Hill Olive Chapel Road corridor

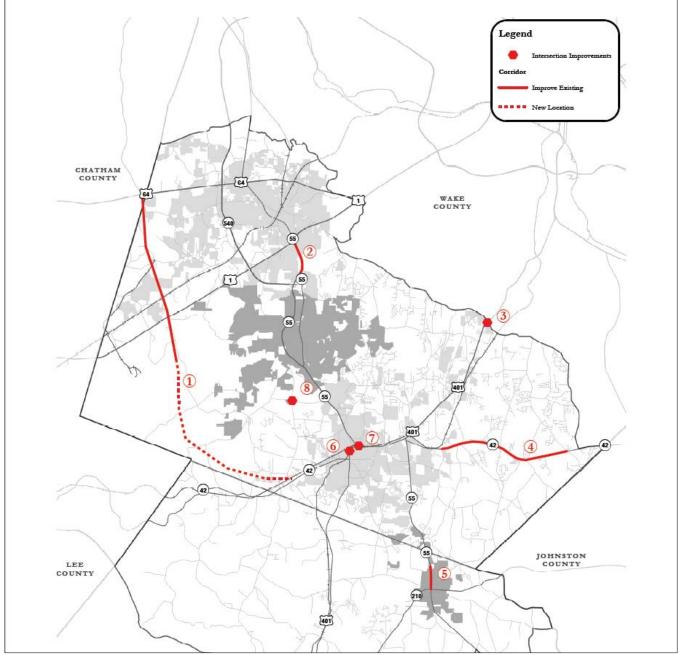
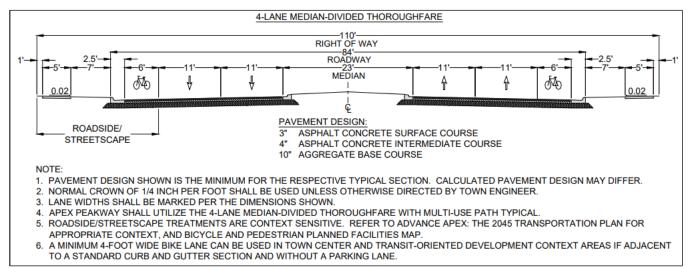


Figure 2. Future NC 751 Corridor as shown in the Southwest Area Study





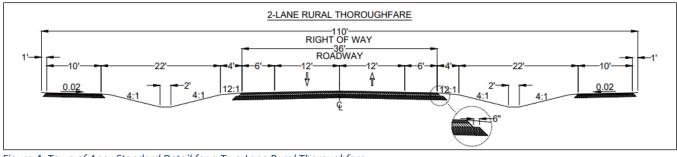


Figure 4. Town of Apex Standard Detail for a Two-Lane Rural Thoroughfare

Amendment 2. North Salem Street between Apex Peakway and All Wheel Drive

The proposed amendment would downgrade plans for this roadway between All Wheel Drive and Apex Peakway from Future Four-Lane, Median-Divided Thoroughfare to Future Three-Lane Thoroughfare (see Figure 5). The Thoroughfare and Collector Street Plan Map has been updated to reflect existing conditions between All Wheel Drive and US 64. This amendment would reverse the decision made on October 6, 2020 to amend the Thoroughfare and Collector Street Plan map for consistency with recommendations from the SWAS.

The SWAS recommendation is based on the need for increased capacity on this route. The traffic model runs project anticipated traffic volumes of 23,000 – 26,400 vehicles per day by 2045. The North Carolina Department of Transportation measured 9,500 vehicles per day along this corridor in 2019. The main concern heard regarding future widening is potential impacts to historic resources and the urban character of this corridor.

As explained with Amendment 1, the Town's typical section for a Four-Lane Median-Divided Thoroughfare is 110'. At the time of project design, to avoid or minimize impacts in constrained areas, the minimum right-of-way needed for a Four-Lane, Median-Divided Thoroughfare is 80'. This right-of-way is consistent with the Town's typical section for a Three-Lane Thoroughfare. This right-of-way would not allow for turn lanes and would result in other tradeoffs. For this reason, and because conditions often change between project construction and long range planning; adjustments to the typical section are made during project design, with more detailed information, and not at the time of long range planning.

Widening this roadway is not programmed in the Town's 5-year Capital Improvement Program, nor the State's 10-year Transportation Improvement Program.

Staff Recommendation:

The original amendment to upgrade North Salem Street to a Future Four-Lane, Median-Divided Thoroughfare was reviewed with staff from Public Works and Transportation, Police, Fire, and EMS. Given the added capacity, there were no concerns from these perspectives. The Police Department noted the possible benefit of maintaining traffic flow during school arrival and dismissal times for Thales Academy Junior High/High School, which can create long queues.

Planning Department staff did not make a recommendation regarding the original amendment to upgrade the corridor, suggesting the determination of the balance between traffic capacity and context is best made by the Planning Board and Town Council as representatives of the public. Two Town Council members expressly requested that Planning staff offer a recommendation. Given the high traffic volumes projected for this corridor, the strong public sentiment to address traffic congestion, the change in the context that has already occurred along this corridor between US 64 and Apex Peakway, and the flexibility during design; Planning Staff recommends maintaining the Four-Lane Median-Divided Thoroughfare designation and rejecting the proposed reversal of the recently-approved amendment to the Thoroughfare and Collector Street Plan Map.

Planning Board Recommendation:

The Planning Board considered the amendments during their November 9, 2020 meeting and, in a vote of 6 in favor to 2 against, recommend rejecting the proposed amendment to downgrade North Salem Street, between All Wheel Drive and Apex Peakway, to a Future Three-Lane Thoroughfare, in favor of maintaining plans to upgrade this roadway to a Future Four-Lane Median-Divided Thoroughfare.



Figure 5. Proposed amendment to plans for North Salem Street