



FINAL



PHASE 1 HAGGARD AVENUE CORRIDOR STUDY

SEPI



TOWN OF ELON | 2021



Acknowledgements

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Town of Elon, North Carolina

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Adopted
May 11, 2021



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01 Issues & Opportunities

1.1 What We Know

1.1.1. Project Description

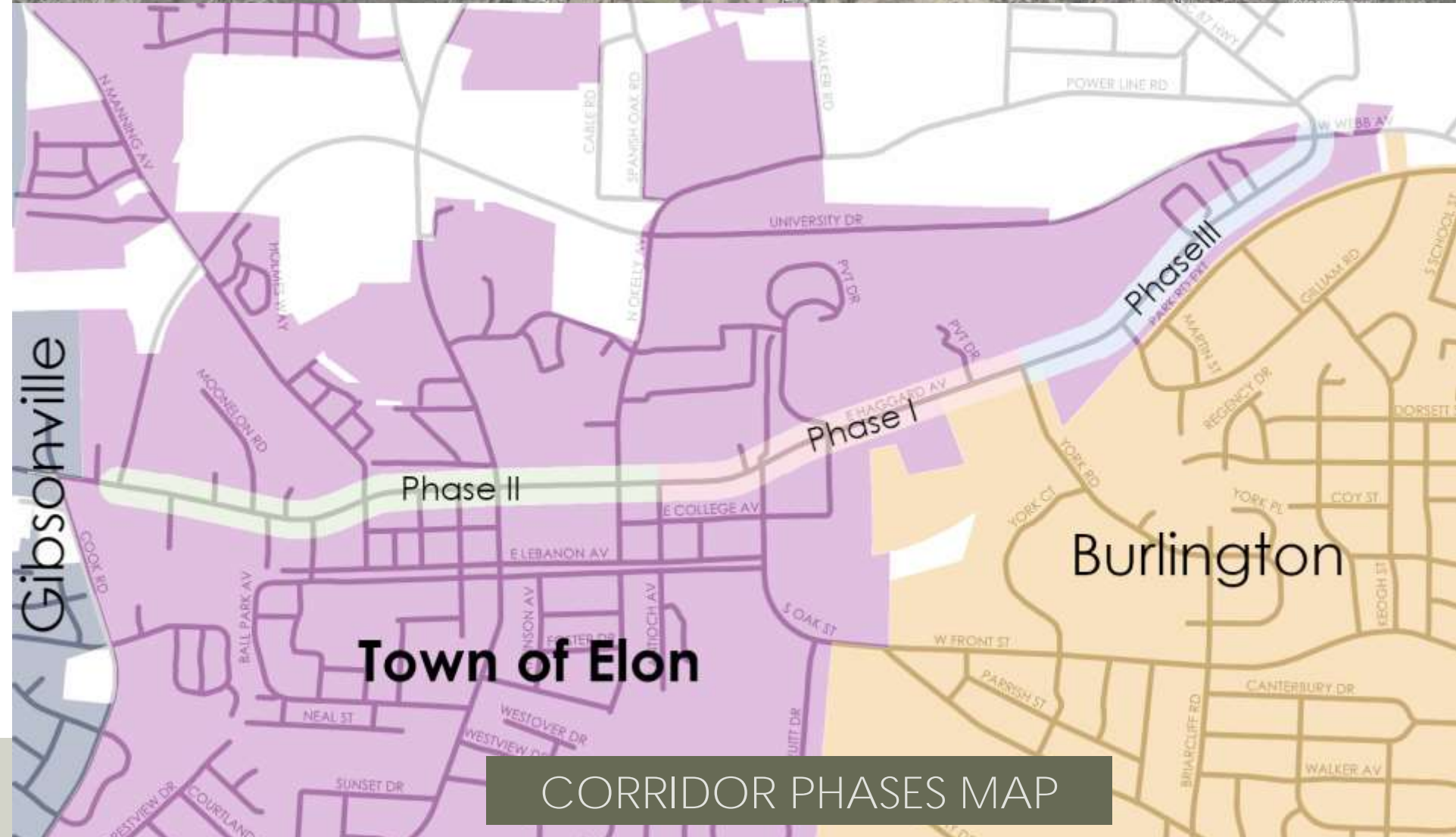
The Haggard Avenue Corridor Study is a 3-phase project that will, when complete, evaluate ways to improve the safety and multi-modal connectivity for the entire length of E. and W. Haggard Avenues in the Town of Elon's jurisdiction (approximately 2.65 miles). This corridor forms the primary east/west route through the Town of Elon, including Elon University's campus and Elon's downtown, connecting with the City of Burlington to the east and the Town of Gibsonville to the west (see Vicinity Map).

The Phase 1 project area is the subject of this report and comprises 0.75 miles of East Haggard Avenue (SR 1455) between Antioch Avenue and York Road, within the jurisdictions of both the Town of Elon and City of Burlington (see Corridor Phases Map). The future project phases include:

- Phase 2 – Western Gateway - Antioch Avenue west to University Drive/Burlington Avenue (1.1 miles)
- Phase 3 – Eastern Gateway - York Road east to University Drive/Webb Avenue (0.75 miles)

The Phase 1 corridor serves as a major access point for Elon University, the old Elon Elementary School (being redeveloped over the next decade in accordance with the University Master Plan), Elon School of Health Sciences, Danieley Center, and various residential neighborhoods, and churches.

The project corridor has been divided into these separate geographic phases due to project funding constraints. As discussed further in Section 1.1.5, several factors played a role in determining the area for Phase 1, including funding, potential for pedestrian conflicts, and existing conditions.



1.1.2. Project Goals / Purpose and Need

The Town of Elon established the following goals for the full study of the corridor:



Explore reducing the 3-lane section(s) to 2-lanes, or road diet



Investigate opportunities for additional on-street parking in and near Elon's downtown core



Improve multi-modal access, uses and connectivity (especially bicycles)



Calm traffic and include complete street elements



Improve safety for all users

The purpose of the project is to improve safety and multimodal connectivity by addressing the following needs in the corridor:

- 1 Reduce multi-modal conflict points and potential for crashes.
- 2 Improve multi-modal connectivity and access.
- 3 Improve motor-vehicle level of service and safety.
- 4 Create gateway themes at both the eastern and western edges of Elon.



1.1.3. Background / History

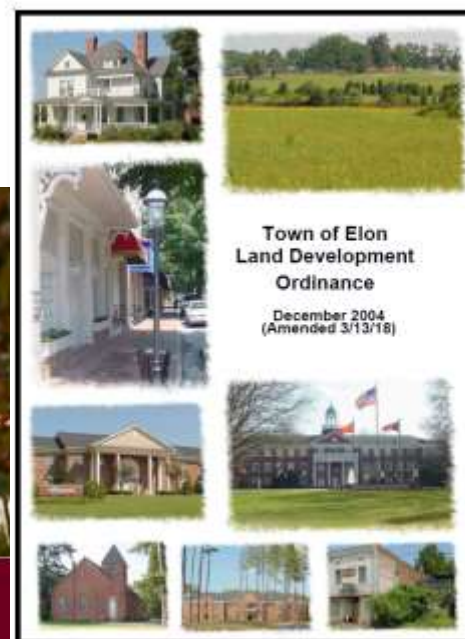
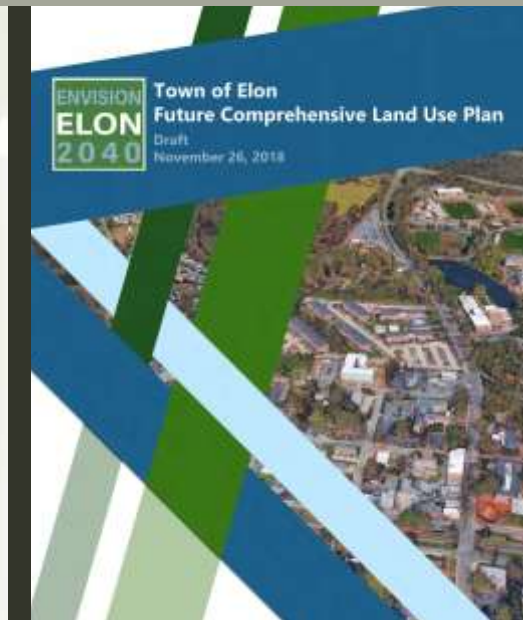
The Town of Elon adopted its new Future Comprehensive Land Use Plan (*Envision Elon 2040*) in February 2019 and continues to work on the Elon Land Management Ordinance (LMO) project, which will replace Elon's current *Land Development Ordinance* (LDO) with a new set of development regulations intended to implement the *Envision Plan*.

As described in *Envision*, improving the western and eastern gateways into the Town along Haggard Avenue are high priorities for improvement, as they make a first impression and shape visitor's image of the Town. "Streetscape, public art, and wayfinding signage are among the elements that contribute to creating a welcoming experience" at these gateways, as noted in the Plan.

Other long range land use, bike/ped, sustainability, and development plans for the area prepared by the Town of Elon, Elon University, City of Burlington, and Alamance County (some shown to the right), generally support the *Envision Plan* by calling for improved multi-modal opportunities (i.e. improved on-road bike and pedestrian facilities), improved parking, improved land use controls, and creation of a unified streetscape design and corridor theme along Haggard Avenue. In addition, the Town of Elon's *Bicycle, Pedestrian, and Lighting Plan* calls for on-road bicycle improvements and improvements to sidewalks along both East and West Haggard Avenues. Elon University's *Campus Master Plan* identifies streetscape improvements as a high priority for the corridor to address vehicle-pedestrian conflicts, reduce crossing distances, calm vehicular traffic as it transverses the campus core, and enhance the University's identity.

Conducting a Haggard Avenue Corridor Study was therefore identified as a Top 6 Priority Action Step in the *Envision Plan*, to "create a safe, comfortable environment for pedestrians and cyclists along Haggard Avenue with streetscape improvements and a better development edge." This project therefore implements Recommendation Item IS-4.2 from this Plan, which states:

"An examination of this road corridor that links the Town of Elon to Gibsonville and Burlington will help define on a segment-by-segment basis ways to introduce safe bike and pedestrian connections, enhance the streetscape, better manage vehicular circulation, and improve the relationship of adjacent development to the street to create a highly accessible and safe place to live, work, dine, or shop."



1.1.4. Environmental Constraints

The Existing Conditions Map displays the results of the project’s GIS land suitability analysis, which shows that two unnamed tributaries of Dry Creek cross the corridor:

- One is within a culvert in front of Elon Village Homes and to the east of Danielly Center Drive/ Lawrence Street. This tributary begins at a pond behind Elon Village Homes and drains north, where it meets up with Dry Creek near

the base of the dam at Lake Verona. As shown on the inset photo below, the sidewalk guard railing at this point is insufficient and dangerous.

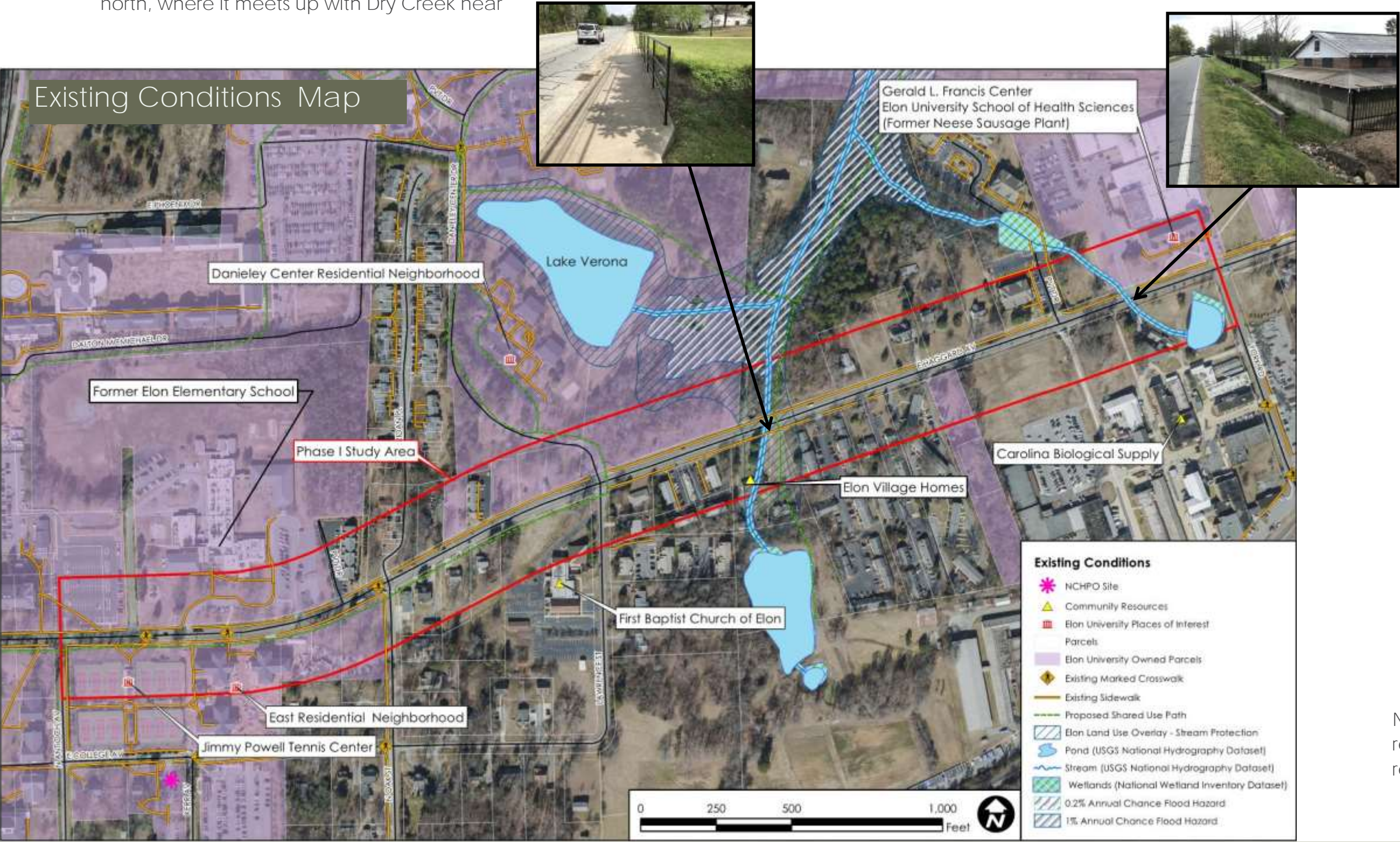
- The other crossing is within a culvert that drains the pond within the Carolina Biological Supply Company and then continues north through The Crest Apartments. As shown on the inset photo below, a building currently sits within the stream and drainage conveyances from the street need improvement.

These streams join within the largest undeveloped area in Phase 1, where it becomes Dry Creek and continues north and east from here, eventually draining to the Haw River in the City of Burlington’s ETJ.

These drainage areas contain streams, wetlands and floodplains, which will create physical limitations to development in the project area in terms of topography/ steep slopes, hydrology and hydric soils. There are several regulatory limitations that accompany these natural areas, including but not limited to:

- Town of Elon - Stream Protection Overlay Zoning and Floodplain restrictions
- NC Division of Water Resources - Cape Fear River/Jordan Lake Rules:
 - NSW (Nutrient Sensitive Waters) stormwater controls must meet specific nutrient loading rates
 - 50-foot stream buffer protection requirements
- Federal - Floodplain and wetland/ stream protection regulations

Note that further project development will be required to address all potential environmental resources and impacts of the project.



Existing Conditions

The Phase 1 portion of East Haggard Avenue (SR 1455) is a minor arterial roadway with 2-3 travel lanes (each between 9 and 13 feet), posted speed limits between 25 and 35 mph, and right-of-way widths varying between 57 and 70 feet. As shown on the Traffic and Safety Map, the portion of Phase 1 between N. Antioch Avenue and N. Oak Street is owned and maintained by the Town of Elon, and the portion east of N. Oak Street to York Road is owned and maintained by NCDOT.

Due to project funding restraints, no traffic forecasting or operational analyses have been completed for the project to date. However, according to 2018 NCDOT traffic data, traffic volumes for the Phase 1 corridor range from 3,200-4,300 AADT (average annual daily trips) and future phase areas to the west have traffic volumes ranging from 3,900-6,200 AADT. Neither area appears to approach capacity for a two-lane roadway which is generally considered less than 18,000 AADT. This means that traffic volumes do not warrant a third lane. However, intersection operational issues, such as excessive delays for turn movements or the need for new or modified signals or other traffic controls, have not been evaluated.

According to the BGMPO*, mobility along this facility is hampered due to the discontinuity of the existing cross-section from a three-lane section with a center turn lane to a two-lane section. In addition, DOT crash data for the entire corridor

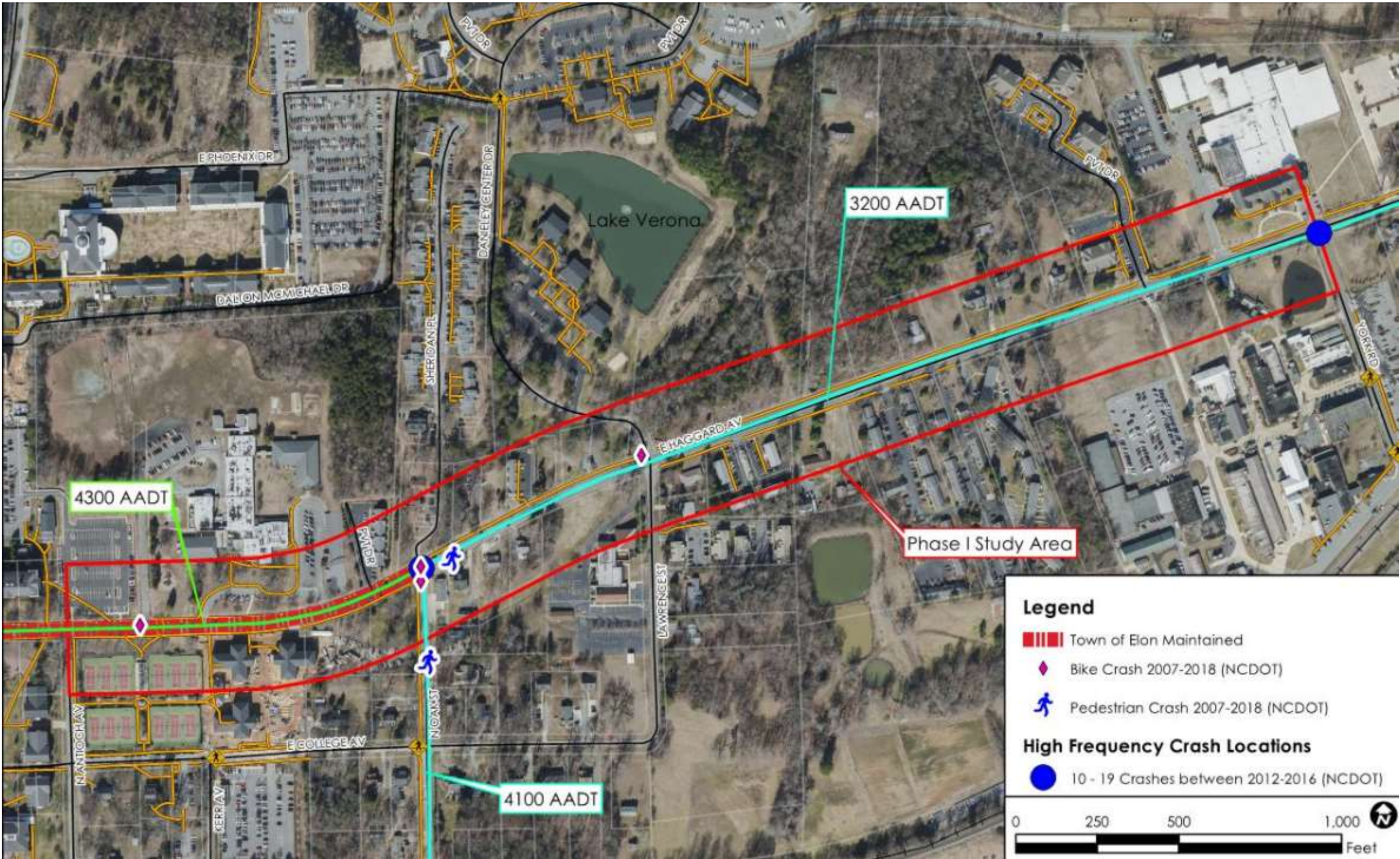
*BGMPO Comprehensive Transportation Plan, Adopted Sept. 2010, Chapter II Problem Statements, 2030 LRTP Horizon Year, E. Haggard Avenue (SR 1454), Local ID: ALAM0010-H, pg. II-15.

indicates nine bike crashes and 11 pedestrian crashes between 2007 and 2018, which highlights a safety issue and the need for additional pedestrian safety measures.

The existing conditions of the Phase 1 corridor greatly impact the strategy to improve multi-modal connectivity. Despite a fair amount of pedestrian and cyclist activity between N. Antioch Avenue and the

residential complexes on the south side of Haggard Avenue past Lawrence Street, the pedestrian environment in most areas is unsafe and inadequate, or non-existent.

In areas where a sidewalk is present, it is narrow and located directly along the back of curb, with the periodic presence of a utility pole or fire hydrant in the middle of the sidewalk. A sidewalk does not exist on the south side of Haggard Avenue, between N. Oak Avenue and



Lawrence Street. Bike lanes are not designated on the roadway, and the existing sidewalk width does not safely accommodate multiple modes of traffic.

In the Phase 1 segment of Haggard Avenue, crashes involving vehicles, cyclists and/or pedestrians are highest at the intersections of Oak Avenue and York Road, however crashes involving cyclists and pedestrians occurred at mid-block locations, and at the entry drive to the former elementary school*. The speed of vehicular traffic between N. Oak Avenue and York Road is a significant factor in the safety and experience of pedestrians and cyclists. The lack of striping on the outside of the vehicular travel lanes along with pavement covering the gutter pan influences the perception of the road's 'highway' character and allows vehicles to 'float' within a wider lane.

Despite a typical 5-foot-wide sidewalk, its location directly along the back of curb combined with high pedestrian volumes, high-speed traffic, and obstacles in the middle of the sidewalk (i.e., fire hydrants, utility poles, trash receptacles) create an unfriendly and unsafe pedestrian environment that is not compliant with the American with Disabilities Act (ADA) or FHWA and NCDOT guidance, as discussed further in Chapter 2.1.1. Bike lanes are not designated on-street along the entire roadway. Bicycles travelling on-street seem to compete with vehicles for safe space within the roadway, and when on the sidewalk, create conflicts with pedestrians. The maps on the following 4 pages display existing conditions along the corridor.

* It should be noted that high levels of traffic resulting from the former elementary school have subsided since the closure of the school. It is reasonable to speculate that crashes involving pedestrians and bicyclists have proportionately decreased as well.



ABOVE: On the south side of Haggard Avenue looking east from Oak Avenue.

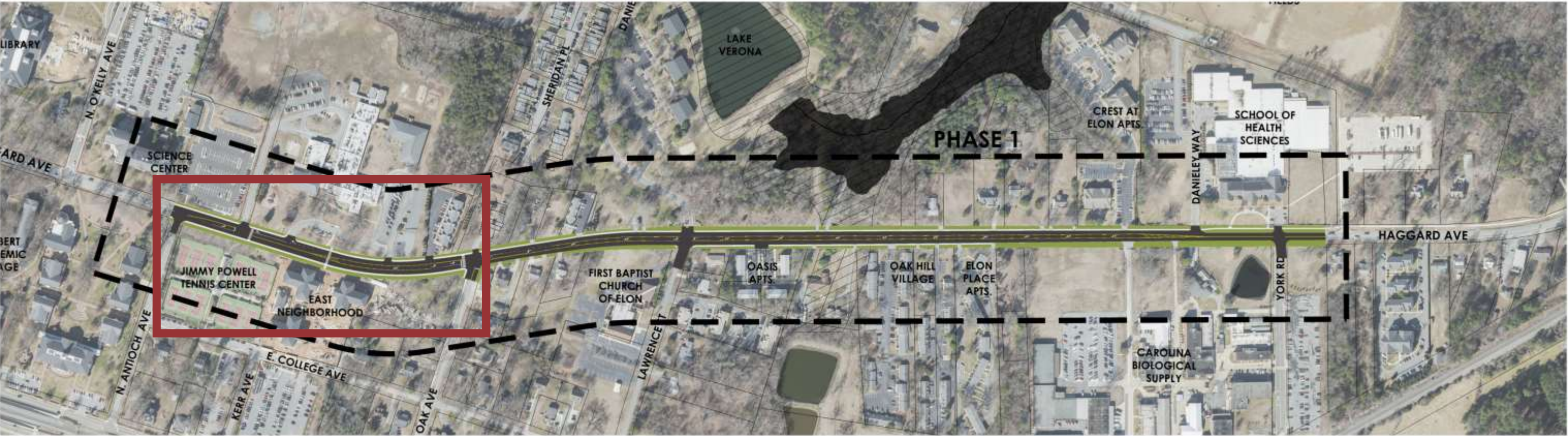
BELOW: On the south side of Haggard Avenue, east of Antioch Avenue, looking east in front of Elon University's East Neighborhood.

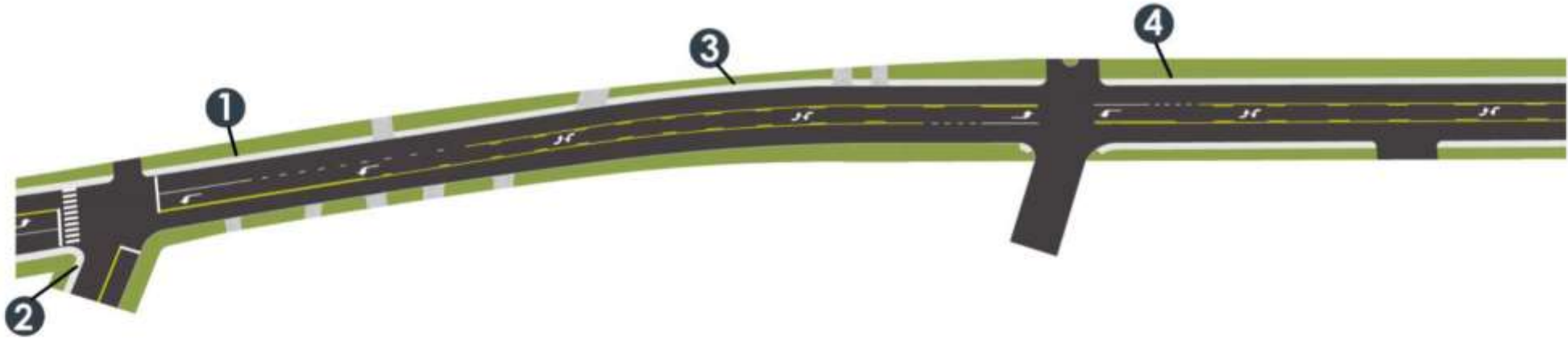
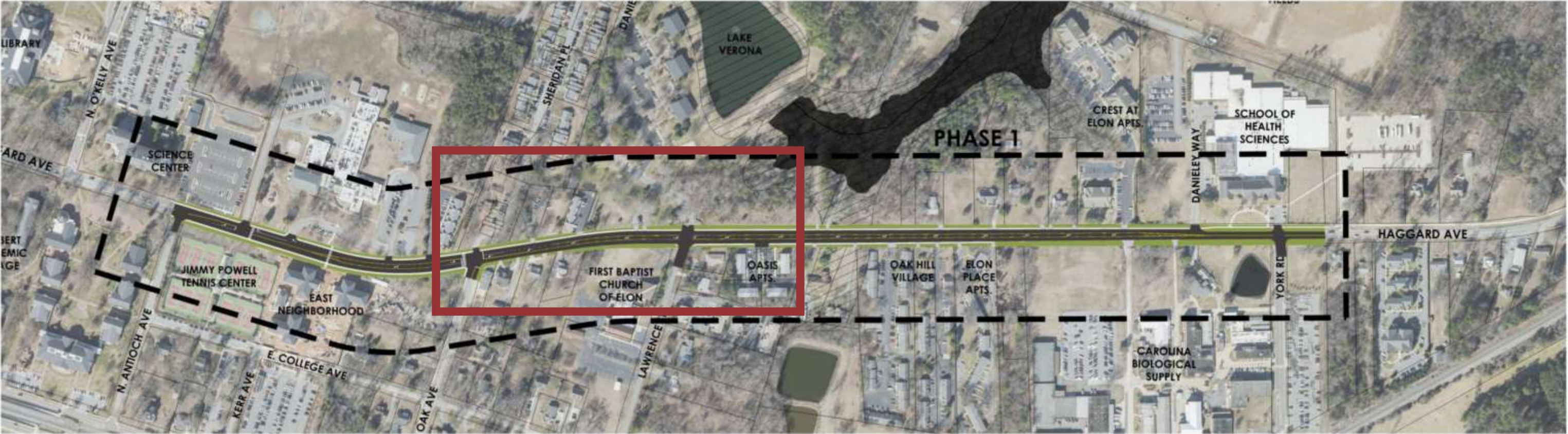


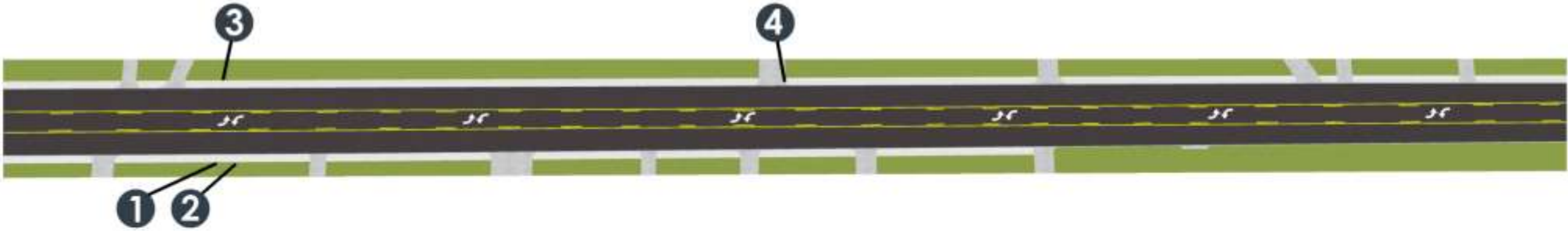
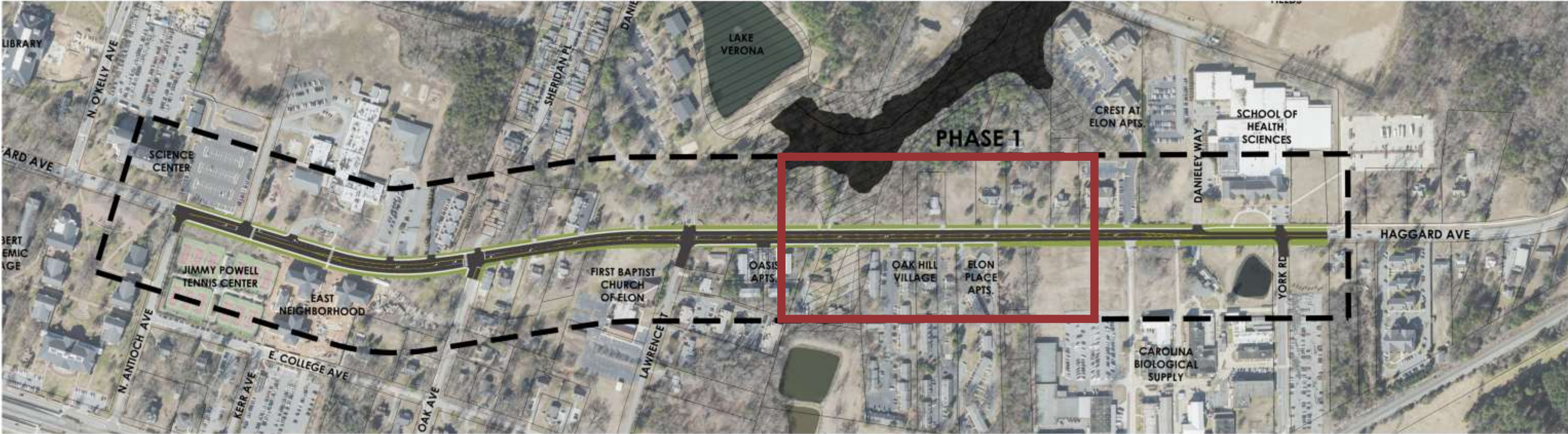
ABOVE: On the north side of Haggard Avenue looking east from Danieleley Way.

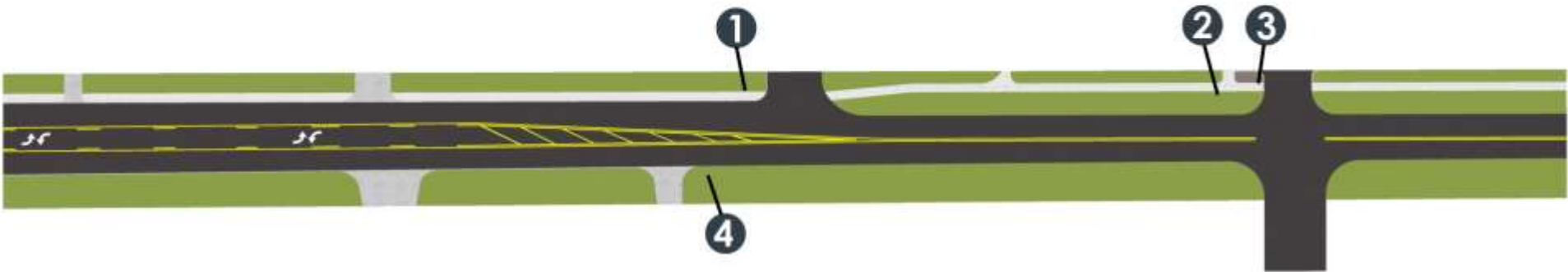
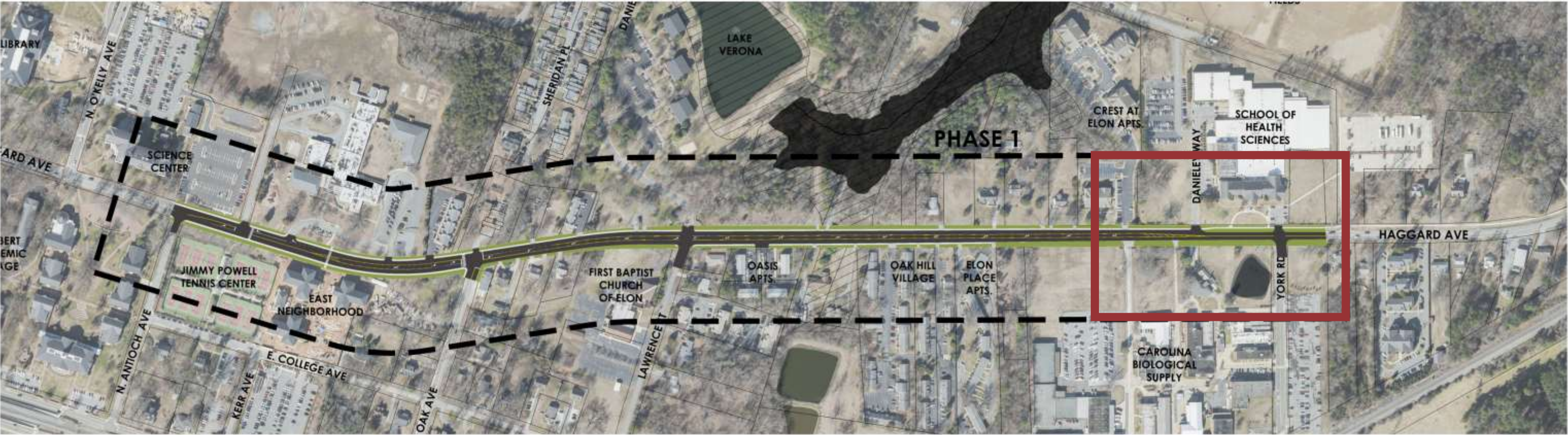
BELOW: On the south side of Haggard Avenue at the corner of Oak Avenue, looking east.











Planned Improvements

The BGMPO 2017 Amended Comprehensive Transportation Plan (CTP) shows widening of East Haggard Avenue between North Williamson Avenue and NC 87/100 to a four-lane major thoroughfare with curb and gutter. In addition, the June 2019 release of the BGMPO Draft 2045 Metropolitan Transportation Plan (MTP) shows two proposed Fiscally Constrained Projects over the full project corridor (MTP #Hwy-45 and #Hwy-46) for roadway modernization of West and East Haggard Avenues from University Drive to NC87/100, with a focus on traffic calming, bike/ped improvements, turn lanes, and complete streets. The Draft 2045 BGMPO MTP also proposes several other improvements in the vicinity of the project, including MTP #Bike-016 (a bike lane over 2.72 miles of East Haggard Avenue - no project start/end points were noted) and other improvements proposed on connecting roadways, including NC 87 (Webb Avenue). The listing of projects in the BGMPO plans are required before a project is approved for final design and construction in the State Transportation Improvement Program (STIP).



The following projects in the project area are currently programmed for construction in the latest approved STIP (2020-2029):

STIP Project No.	Description	Right of Way Scheduled to Begin (NCDOT FY)	Construction Scheduled to Begin (NCDOT FY)
EB-5988	West Lebanon Avenue to SR 1454 (West Haggard Avenue) in Elon. Construct side-walk.	2025	2026
U-6214	NC 87 (West Webb Avenue) / NC 100 (University Drive) in Elon. Improve inter-section.	2027	After 2029
U-6182	SR 1515 (Flora Avenue). In-stall traffic signal and turn lanes.	2027	After 2029

This Study is intended to inform decisions made by the Town of Elon, BGMPO and NCDOT on which improvements to carry forward with committed funding and schedules for design and construction in a future State Transportation Improvement Plan (STIP).

1.2.1. Stakeholder Committee

The Haggard Corridor Stakeholder Committee was formed at the onset of the project to provide feedback to the Town of Elon. It was lead by the Town of Elon with assistance from SEPI Inc. The Committee is composed of the following representatives:

Group / Organization / Agency	Representative
Town of Elon, Admin./Planning	Pamela DeSoto
Town of Elon, Downtown Development	Kathleen Patterson
Town of Elon, Public Works	Ed Madren
Elon University, Physical Plant	Tom Flood
City of Burlington, Planning	Mike Nunn
Town of Gibsonville, Planning	Brandon Parker
Town of Elon resident and walkability advocate	Margaret Skulnik
Burlington Velo Club President (bike club)	Tim Johnsey
Piedmont Triad Regional Council (PTRC)	Matthew Dolge
Burlington Graham MPO	Wannetta Mallette
NCDOT, Div 7 Corridor Development Engineer	Tamara Njegovan
NCDOT, Hwy Div 7, Div. Planning Engineer	Stephen J. Robinson, PE

Stakeholder Kickoff Meeting

On July 27, 2020 SEPI and the Town held a virtual meeting via GoToMeeting with the Stakeholder Committee to introduce the project, gather information and discuss the project goals and objectives. The existing roadway conditions were presented including current roadway profile, traffic counts, and crash data. The project goals and proposed plan elements were outlined, including an explanation of the intended project deliverables including: (a) roadway / streetscape schematic level design, and (b) land use and design recommendations for a Corridor Overlay Zoning District. Existing Conditions maps were reviewed, including zoning, pedestrian facilities, and community points of interest. The team discussed the existing conditions during a “fly through” of the corridor using Google Earth.

The SEPI Team explained the streetscape design approach, which emphasized the importance of understanding and integrating the user into the design of the roadway and streetscape. It was noted that the character of the corridor varies and this will not be a “one size fits all” approach; rather the streetscape design will respond to the surrounding uses (current / future), with the intent to unify the corridor and create safe modes of travel for all users.

The following are the most significant comments made by the Stakeholder Committee:

- a. The high incidence of accidents at the intersection of Oak Street may be exacerbated by the extreme angle of that intersection.
- b. The University developed a Bike/Ped Plan for a section of Haggard Avenue between Oak and York Streets that evaluated/recommended a roundabout at York Road.
- c. The waterline in Haggard Avenue is currently in the planning stages for replacement and its construction should (if possible) be coordinated with constructing any road improvements.
- d. The Town of Elon encouraged the team to consider burying overhead utilities as part of this project, especially in the downtown core.
- e. The Town provided clarification that the Overlay District recommendations included in the scope of this project are intended to be a framework that will be used by the Town of Elon in developing the overlay district zoning language.
- f. BGMPO inquired if a cost estimate and statement of purpose and need (for SPOT 7.0 funding) will be provided. A high-level cost estimate is currently under development and will be provided by the Final Draft (i.e. cost per mile).

Stakeholder Design Charette

A design charette was held on November 16, 2020, at the Elon Community Church Life Center. The in-person charette was facilitated by the SEPI Design Team and Project Manager in a format that respected the guidelines for gatherings and social distancing established by the State of North Carolina, and the Town of Elon to mitigate the spread of COVID-19. Since these guidelines limited indoor gatherings to 10 people, the Design Team held two sessions for the charette – morning and afternoon. The morning session was attended by 5 stakeholders, and the afternoon session by 3 stakeholders, and each session also included 4 members of the Design Team.

The charette's intent was to engage the stakeholders to further develop design ideas for the corridor, present the feedback generated from the first public meeting, and discuss options for a potential Corridor Overlay District. A presentation, coupled with interactive, yet socially distanced activities generated discussion to inform the scale, and arrangement of streetscape elements for the corridor. Detailed notes from the Charette are presented in the Appendix. For recommendations from the charette regarding the Schematic Designs, please refer to Chapter 3 and for recommended implementation measures (including recommended standards for the new Corridor Overlay Zoning District and Roadway Design Standards, please see Chapter 4.



Public Meeting #1

Public meeting #1 for Phase 1 of the Elon – Haggard Avenue Corridor Study was held virtually on Thursday September 10, 2020 (Via GoToMeeting). The purpose of the meeting was to introduce, educate and receive public comment on improving the safety and multi-modal connectivity/access of 0.75 miles of East Haggard Avenue (SR 1455) between N. Antioch Avenue and York Road in the Town of Elon, NC. In total, 85 comments were received between 9/25/20 and 10/6/20 through an online survey available on the Town's Project Website. (<https://www.townofelon.com/haggard-avenue-corridor-study/>)

The main results of the survey are shown through the following graphics and summaries. Additional details are provided in the Appendices.

Road Improvement Comments

What existing elements should be eliminated?

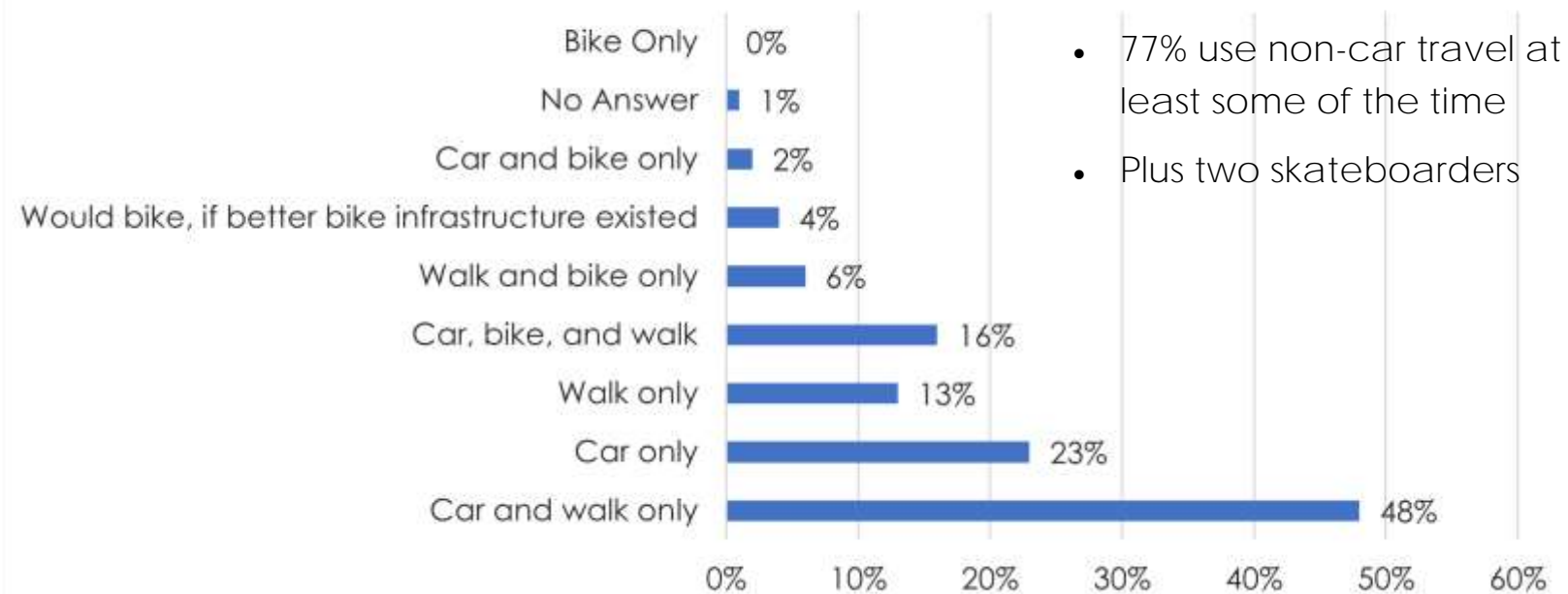
- Extra lane in the 3-lane section
- Overhead power lines
- Speed bumps – they damage cars

What existing elements should be retained?

- Scenic views of architecture / downtown / campus
- Gateway to / from Town and to/through University
- Street trees
- Sidewalks
- Streetlights
- Traffic lights / signals (to protect pedestrians and slow traffic)
- Good signal timing
- Existing crosswalks
- Raised crosswalks/ speed humps that help slow vehicular traffic

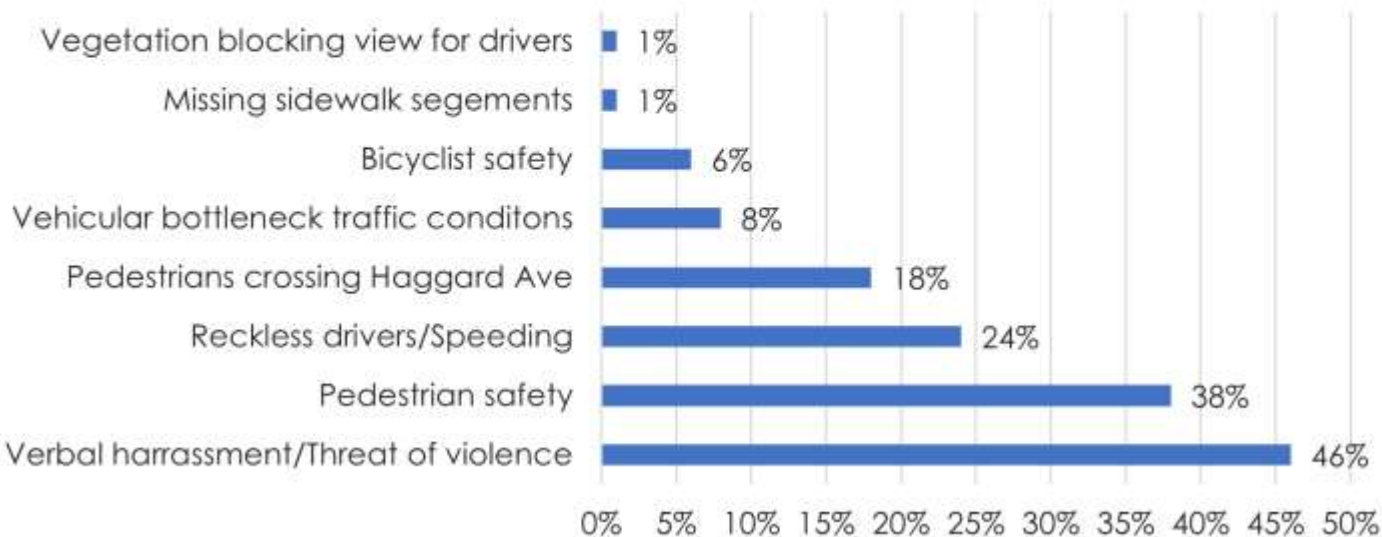


How do you use the existing corridor?

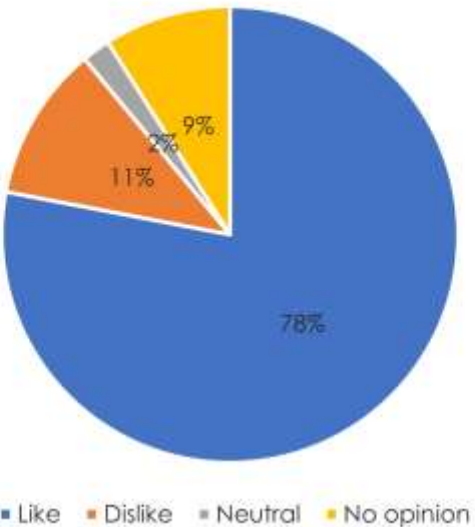


- 77% use non-car travel at least some of the time
- Plus two skateboarders

Safety issues noted by respondents (% of total responses)



Overall like or dislike of corridor

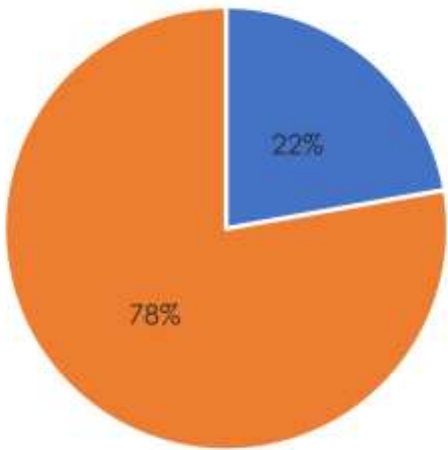


Majority (78%) Like the Existing Corridor

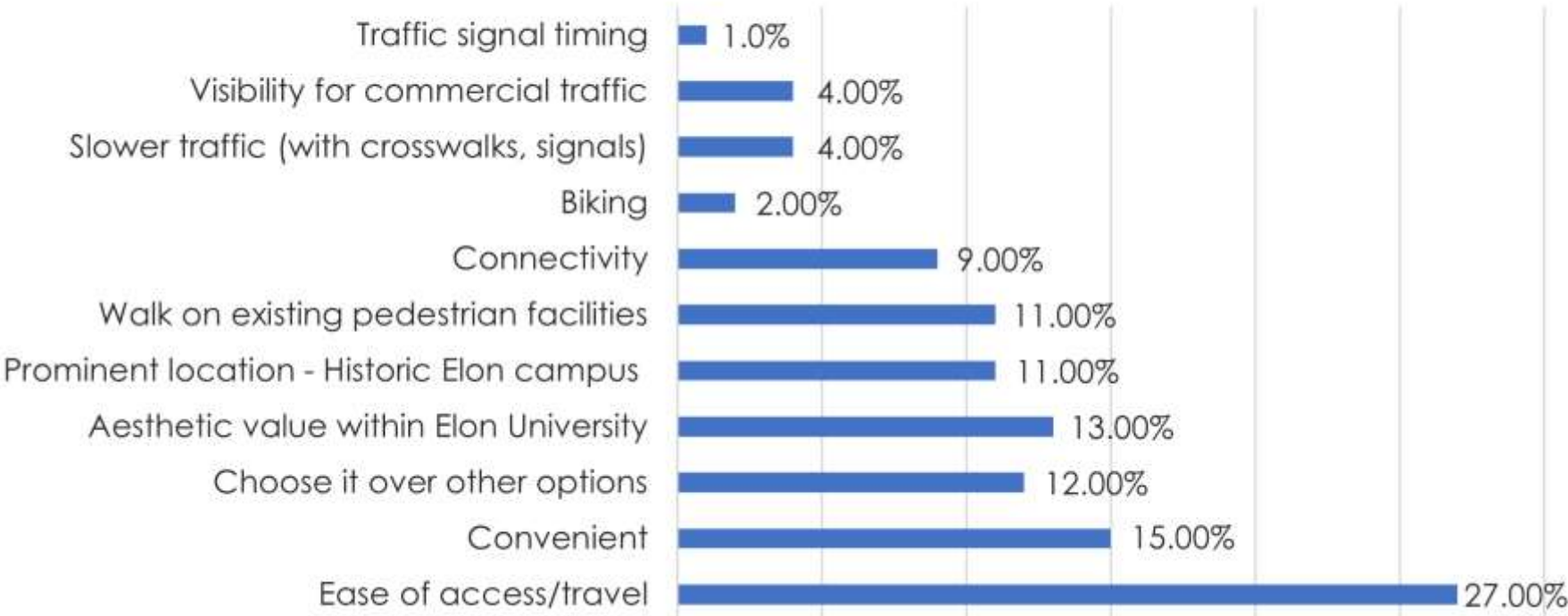
AND YET....

92% of Respondents were Concerned with the Existing Corridor

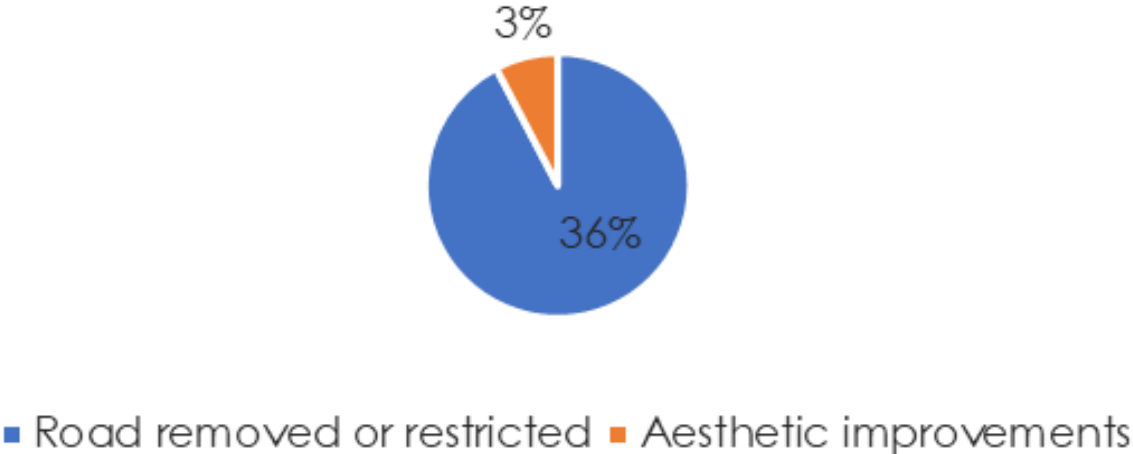
Why dislike?



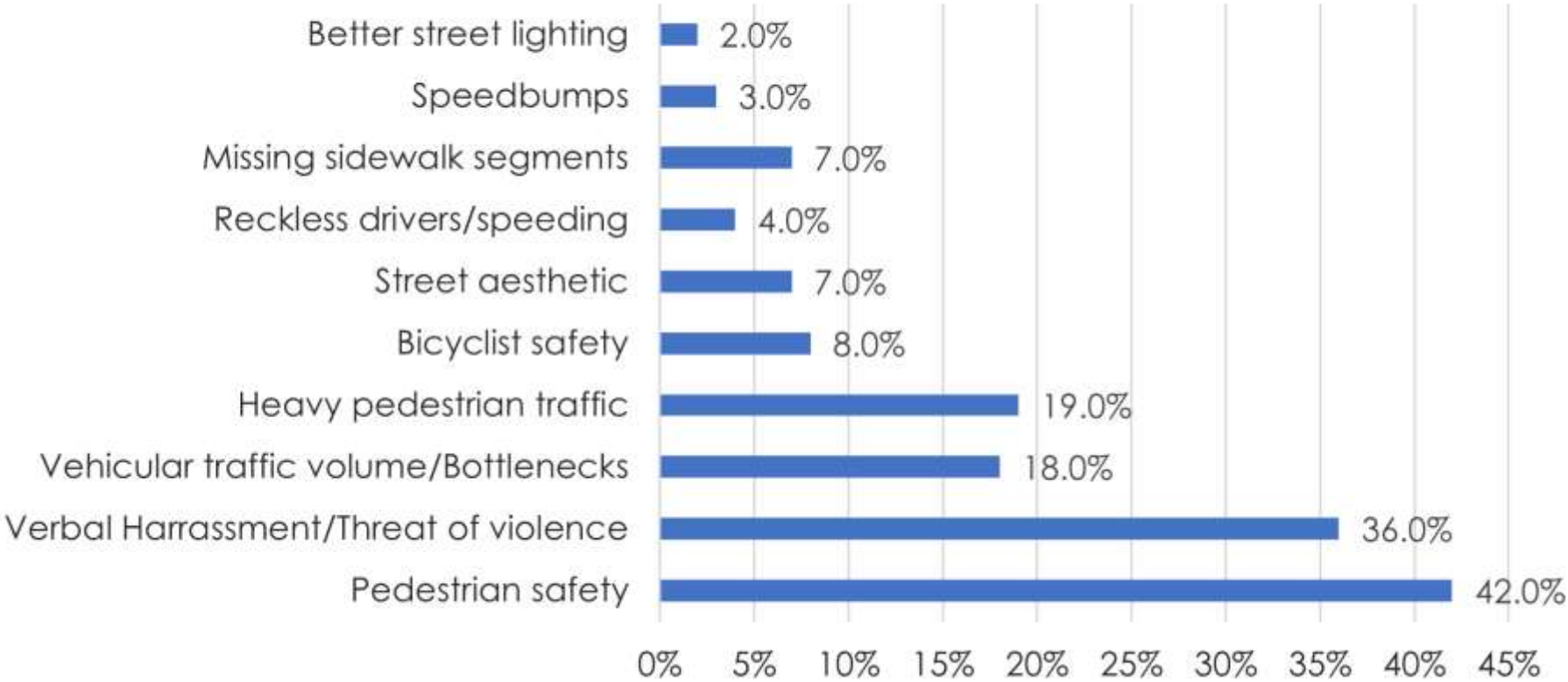
Of those who liked the existing corridor, why?



Of those who indicated some concern, they would like to see ...



Particular concerns (of those who mentioned any)?



Of those who dislike the Corridor, 73% Identify Pedestrian/Vehicle Conflicts as Reason

Road Closure Comments

It should be noted that right before this project was publicly announced and the public comment questionnaire made available, some events occurred in Elon that affected the survey results. This included a political rally that consisted of a caravan of vehicles that traveled along Haggard Avenue on the west end of the project area. Due to the harassing behaviors experienced, survey submissions went from one to over 30. Most of the comments at that time came from students who witnessed or are aware of the incidents (apparently some of the participants came through a second time later in the day). Consequently, the number of early comments received were largely focused on this experience and expressed strong support for closing the road to vehicular traffic as the primary solution to the problem.

While fewer of the comments received closer to October 6, 2020 (the end of the survey) were a response to these pre-election protests and events, the Town reports a history of catcalling and other types of harassment from drivers along Haggard in the past, so these activities are not isolated.

The following summary of public comments received regarding the positives and negatives of closing the roadway is provided to reflect a transparent discussion of the merits/ detriments of closing any portion of the corridor. While discussions regarding the use of the portion of Haggard Avenue that abuts University property will be ongoing, permanent closure of the corridor to public traffic is not considered a viable option at this time. This **action is not recommended by the Town’s Comprehensive Plan or the Elon University Master Plan**, and would require support from NCDOT, the entity responsible for maintenance of the vast majority of the corridor. This initial phase of the corridor study is tasked with recommending measures that improve multi-modal use and enjoyment of Haggard **Avenue, a goal that is consistent with both Plans and is further supported by NCDOT’s Complete Streets policy.**

Reasons Expressed for Closing East Haggard Avenue to Public Traffic:

- Open roadway is a safety issue / danger to students, faculty, staff and pedestrians:
 - Lack of adequate pedestrian and bicycle facilities
 - Unsafe due to non-university vehicles using road
 - Lots of crashes and near misses / very unsafe - high pedestrian volumes and speeding vehicles.
- Would eliminate traffic congestion/improve traffic flow from waiting for large groups of students to cross the road.

- Closing of adjacent Elon Elementary School makes it a less important street for local traffic. With new East Dorms there now, and a large new quad in near future, now is the time to reimagine this section altogether.
- Speeders are common (in spite of speed bumps).
- “The hill and the curve in this section make it difficult to see pedestrians”.
- Roadway perceived as part of campus, not public road and should not be open to public vehicle traffic:
 - Busy road through “the center of campus” is unnecessary
 - This is “the busiest / main part of campus”
 - “Public access prevents the University from fully securing the campus”
 - Roadway “breaks up campus feel”
 - Making it pedestrian only would “enhance the campus climate”



Reasons expressed for remaining open and retaining vehicular traffic:

- Traffic volumes have decreased with the opening of University Drive.
- University Drive is an acceptable bypass for traffic concerns.
- Retain easy access from downtown Elon to businesses on the far end of W Haggard and housing of many Elon students who live in the apartments and houses on E Haggard.
- Road belongs to all of Town, not just University.
- University controls too much of Town.
- Road should be upgraded, not closed, to make a welcoming entrance / gateway into the community and Town.

Specific reasons mentioned for keeping it open:




- To avoid other alts that require crossing train tracks.
- To provide delivery access to Univ facilities, businesses and churches.
- To provide convenient access to and through campus and to surrounding areas/towns.
- To avoid moving traffic (and harassing conflicts) to surrounding neighborhoods.
- To retain access to Community Life Center (used by public for community meeting space).



The following milestones have been completed on the project to date:

- March 2020 – Town of Elon issued Project RFP to hire consultant
- June 2020 – SEPI Engineering and Construction, Inc. is hired by the Town
- July 27, 2020 – Stakeholder Committee Meeting #1 is held virtually
- September 10, 2020, Public Meeting #1 is held virtually
- November 16, 2020 – Stakeholder Committee Design Charette
- February 8, 2021 – Draft Plan Published

WHAT'S NEXT:

- February 18, 2021, 6-7 pm – Virtual Public Meeting #2
- 
- March 8, 2021 – Public Comments Due on Draft Plan
- 
- March 9, 2021 – Elon Town Council Meeting on Draft Plan
- 
- Summer 2021 – Final Plan Published / Adopted



02 Streetscape Basics

2.1. Components of a Streetscape

Understanding and providing the physical space for the various components that make-up a streetscape is essential in creating a flourishing street. These components are often divided into two categories; 1) the pedestrian realm, and 2) the multi-modal vehicular realm.

2.1.1. Pedestrian Realm

The pedestrian realm is the space between the vehicular roadway and adjacent building frontage. Depending on the land use, this space should be designed to accommodate a range of activity including, walking, sitting, socializing, dining and commerce. The physical components of the pedestrian realm include:

- Sidewalks;
- Multi-use paths;
- Building frontage;
- Street trees;
- Bulb-outs;
- Furnishings;
- Signage, wayfinding and public art;
- Pedestrian Lighting; and
- Landscaping.



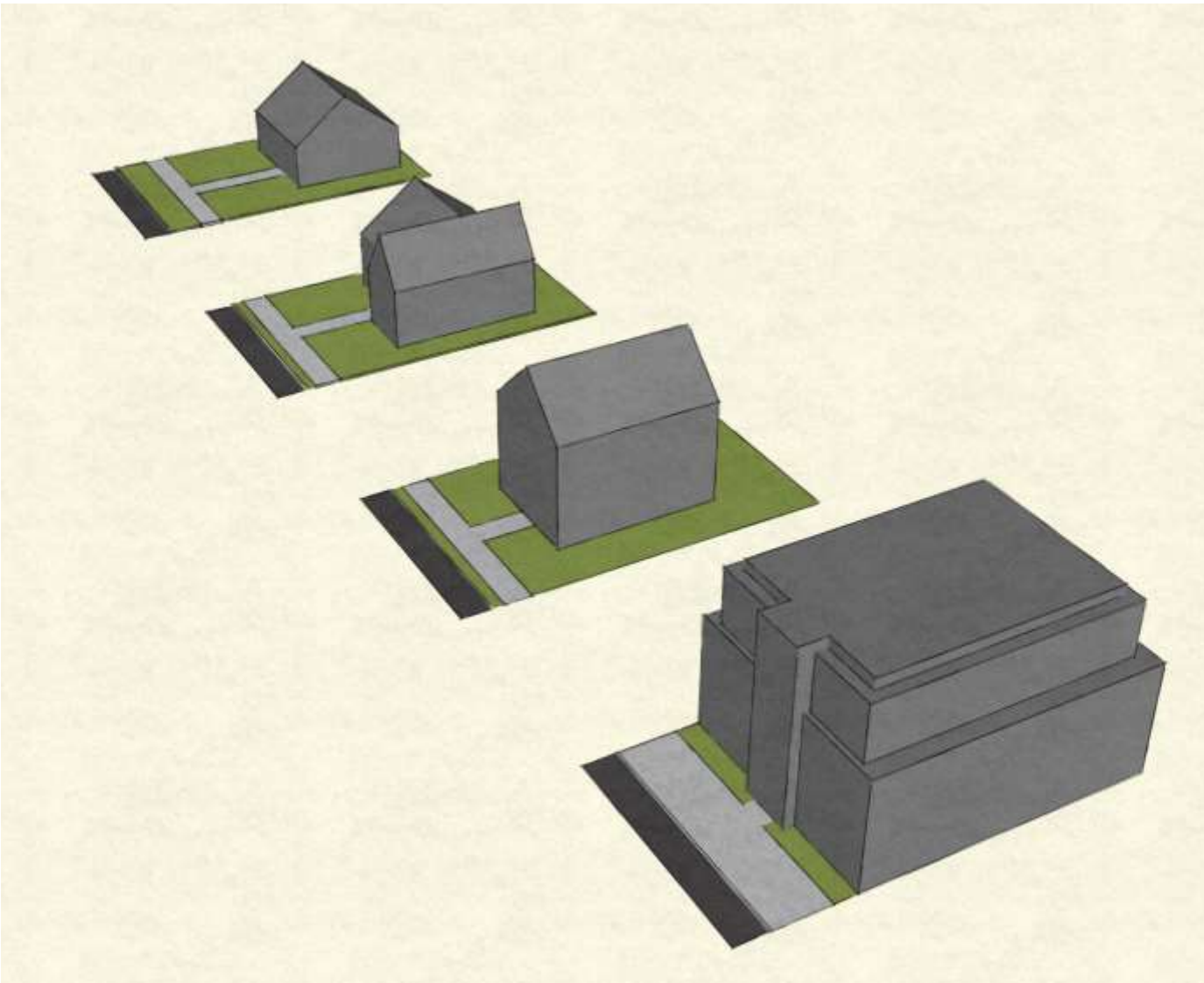
The Pedestrian Realm can further be divided into Development, Green and Sidewalk/Multi-Use Path Zones, components of which are discussed below.

Development Zone

According to the 2012 NCDOT Complete Streets Planning and Design Guidelines*, “the Development Zone is the area outside the street right of way (ROW) where public or private property is located or may be planned in the future. The relationship of the buildings in the development zone to the street is an important component of the character of the street, as well as how it functions for the street users. In a downtown area, it is likely that this zone includes buildings fronting or very near the back of the sidewalk. In suburban or rural areas, the development zone is more likely to include a deeper setback between the street and the developed portion of the street front (the buildings). Depending on context, this area could be a parking lot, a front lawn to a residence, or undeveloped land. In some cases, ROW for a utility strip is required behind a sidewalk which effectively shifts the development zone farther from the street.”

“Since the Development Zone is outside the street ROW, the types of street elements in this area can vary widely. Elements specific to the transportation network may include:

- Bicycle or pedestrian paths;
- Transit stops or facilities;
- Public parking lots; or
- Driveway connections between private parcels.”



Example of Building Sites with Different Development Zones

* This study references several different NCDOT Roadway Design documents for the following reasons —

The 2019 Complete Streets Policy (<https://www.ncdot.gov/divisions/bike-ped/Pages/complete-streets.aspx>) states that it supersedes the 2012 Complete Streets Planning and Design Guidelines (http://www.completestreetsnc.org/wp-content/themes/CompleteStreets_Custom/pdfs/NCDOT-Complete-Streets-Planning-Design-Guidelines.pdf), which are being currently revised. As such, it refers to the Current Roadway Design Manual (<https://connect.ncdot.gov/projects/Roadway/Pages/Roadway-Design-Manual.aspx>) for design guidance. However, except for a few basic elements, the Current Roadway Design Manual provides limited guidance for complete street elements. In those instances, this study refers to the 2012 Complete Streets Design Manual for guidance.

Green Zone

It is widely accepted roadway design practice that there should be a green zone or buffer between moving traffic and pedestrians, as noted below (see bottom of page for references):

According to the 2012 NCDOT Complete Streets Manual, “the green zone is generally a landscaped area between the street pavement (or curb) and the sidewalk. In general, the street designs provide a minimum of 6 to 8 feet in this area to allow space for street trees. Street trees buffer pedestrians and other street users from vehicular traffic, as well as providing for shade and an attractive public realm. Within a high-density urban area, the green zone may be hardscaped with trees in planters. In addition to street trees, green zone elements may include features such as other landscaping, signs, benches, fire hydrants, street and pedestrian light poles, and utility poles. Transit amenities such as bus shelters can be considered, but would typically be accommodated behind the green zone.”

FHWA states that, “the preferred minimum width for a nature strip is 5 to 7 feet. A nature strip this wide provides ample storage room for many utilities. The width provides an essential buffer between an out-of-control motorist and a pedestrian, improved sight distances at driveways, and adequate width for landscaping and street trees.” (1)

According to PEDSAFE (Pedestrian Safety Guide and Countermeasure Selection System) which evaluates FHWA and AASHTO (American Association of State Highway and Transportation Officials) guidance among others, “the ideal width of a planting strip is 6 ft. Minimum allowable landscape buffer widths are 2-4 feet for local or collector streets and 4-6 feet for arterial/major streets.” (2)

According to the Sustainable City Code, “The size of a buffer zone can and should vary according to the sidewalk location. For instance, in downtown or commercial districts street furniture, low vegetation, trees, or a bike lane may be an appropriate buffer, while in more suburban areas, a landscape strip or increased vegetation may be preferable. When drafting an ordinance to address sidewalk width and buffer zones, local governments should consider the following factors: street type, adjacent land use, adjacent building height, and roadway characteristics. Areas with higher pedestrian traffic, such as large shopping centers, schools, or tourist attractions, may require wider minimum requirements, such as fifteen feet, which may help encourage pedestrian mobility. In more rural or suburban areas, narrower sidewalk requirements may suffice, such as six feet.” (3)

NOTED References:

(1) FHWA COURSE ON BICYCLE AND PEDESTRIAN TRANSPORTATION WALKWAYS, SIDEWALKS, AND PUBLIC SPACES LESSON 13

(2) http://www.pedbikesafe.org/pedsafe/resources_guidelines_sidwalkswalkways.cfm

(3) <https://sustainablecitycode.org/brief/minimum-width-and-buffer-requirements-for-sidewalks-3/>



Examples of Green Zones



Sidewalk / Multi-Use Path Zone

According to the 2012 NCDOT Complete Streets Manual, “this area is reserved primarily for a paved sidewalk to carry pedestrians and provide access to transit and to adjacent land uses. In urban and suburban areas, the expectation is to provide sidewalks on both sides of the street unless there are site-specific constraints that make this impossible. When planning for, or accommodating, transit, safe and accessible pedestrian connections are needed between adjacent land uses and transit stops.”

“Detached sidewalks (located behind the green zone) are preferred because they separate (or buffer) pedestrians from moving traffic and allow for a planting area between the sidewalk and travel lanes. Sidewalk widths vary based on the street type and context. Recommended sidewalk widths range from 6 to 12 feet. Narrower sidewalks (5 feet) may be sufficient for local/subdivision streets in areas with low to medium land use densities. Wider sidewalks (up to 12 feet) are preferred in urban or main street settings with higher levels of pedestrian activity.”

“In urban areas or other areas with intensive development, it may be necessary to provide wider sidewalks extending to the face of existing buildings. Generally, the sidewalk zone should allow for unobstructed sidewalk width. Street and transit furniture (such as benches, trash cans, and newspaper racks), should be placed within the green zone or development zone, rather than the sidewalk zone, if there is sufficient width and offset from the curb.”

“On parkways or rural roads, instead of a sidewalk, the pedestrian space may consist of a multi-use path zone set back from the roadway. Multi-use paths are separate facilities that serve pedestrians and bicyclists. The multi-use path should be wide enough to serve bicyclists and pedestrians safely. The preferred cross-section is 10 to 12 feet with two-foot gravel shoulders on each side. A green zone and natural zone help provide a buffer from the main travel way.”

Narrow Sidewalks

According to the FHWA document *Designing Sidewalks and Trails for Access: Best Practices Guide* (September 2001)*, which specifies the requirements of ADA-

complaint roadway design, narrow sidewalk corridors (like in portions of the project corridor) are “unsatisfactory because they limit the number of pedestrians that can use the area, require pedestrians to travel single file, and force pedestrians to travel uncomfortably close to buildings and/or automobile traffic. Access is easily compromised on narrow sidewalk corridors by objects, such as utility poles, that create even narrower spaces. Sometimes, narrow sidewalks do not provide enough clear space for people who use walking aids or wheelchairs to travel down the length of the sidewalk. In addition, narrow sidewalk corridors often have driveway crossings with steep cross slopes and curb ramps with insufficient landings and/or steep ramp grades.”



* https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwimxMCVptPuAhXF1FkKHGXG5CQMqFJARegQIKxAC&url=http%3A%2F%2Fsafety.fhwa.dot.gov%2Fintersection%2Fother_topics%2Ffhwas09027%2Fresources%2FDesigning%2520Sidewalks%2520and%2520Trails%2520for%2520Access.pdf&usg=AOvVaw37RHUlrIYKp1qZrQ7-jfs

2.1.2. Motor Vehicle / Shared Vehicle (or Multi-Modal Vehicle) Realm

The physical components of the motor / shared / multi-modal vehicle realm includes:

- Travel lanes and medians;
- Turn lanes and tapers;
- Channelized or striped pavement areas;
- Gutter pans;
- On-street / striped bicycle lanes;
- Crosswalks
- Shared travel lanes / Sharrows (where vehicles and bicycles share the lane)
- Transit pull offs and stops;
- On-street parking;
- Street lighting; and
- Intersections.

According to the *2012 NCDOT Complete Streets Manual*, “the multi-modal vehicular realm is generally considered the paved travel way of a street. Travel lanes are important for vehicular movement and capacity along a corridor. Travel lane considerations include the number and width of lanes, the street direction (one-way or two-way), and the width and incorporation of turn lanes. It is also important to consider these elements from the standpoint of their impact on other users. Street width, for example, can affect the ability of pedestrians to cross the street or the potential provision of bike lanes.”

“The majority of street cross-sections in these guidelines show a range of lane widths from 10 to 12 feet. The recommendation for 10- to 11-foot lanes reflects that, for most urban and suburban street types, lanes less than 12 feet wide are both safe and appropriate, can help to reduce the overall footprint of the street, and/or allow space for other users of the street. Additional considerations include the need for turn lanes at intersections. Sufficient width and need for turn lanes should be evaluated within the context of the larger corridor.”



“A shared vehicle zone allows for both motorized and non-motorized vehicles, and typically includes additional pavement for bicycles. The preferred treatment for bicycles on higher volume and speed streets is a separate bicycle lane. If a shared vehicle zone is used instead, it might consist of additional space for a shared lane, additional space with shared lane markings, or on very low-volume, low-speed streets, a regular travel lane. The gutter pan is not considered part of the bicycle facility.”

“Parking may or may not be provided along a street. The relationship between parking lane width and vehicular lane width should be evaluated (in corridors with parking, vehicular lanes may need to be wider, depending on the street type and context). If a parking zone is adjacent to the traveled way, additional offset may be provided. Transit vehicles will often utilize the motor vehicle zone for bus stops if bus pull-offs are not provided or appropriate.”

Medians may or may not be provided along a street. “The median zone typically provides a landscaped buffer between traffic moving in opposing directions. Medians can also help to provide for pedestrian refuge opportunities in some contexts. Parkways and boulevards typically have a median, avenues may have a median, and main streets may have a median, though it is atypical. Rather than continuous medians, avenues may typically include intermittent landscaped islands to allow for more access, breaks in center turn lanes, and provide pedestrian refuge opportunities. Most two-lane streets do not have a median.”

“The primary considerations with medians include width and treatment. Median widths vary from 8 feet to 46 feet depending on street type and context. In most urban and suburban locations, curbs will be used to delineate the median from the traveled way. Median breaks should be identified early in the design and should be located to allow for access and to maintain network connectivity. The median zone typically includes

street trees and shrubbery. Hardscaping may be provided at narrow points and at specified crossing points to facilitate pedestrian use. At crossing points, landscaping and limbs should be maintained to allow visibility for the pedestrian and motorist.”

2.2. What Makes a Great Street?

The character of a street is defined by both land use and street design. And streets can achieve a variety of community goals when thought of as more than a way to get from point “a” to point “b.” Urban designer Allan Jacobs describes “great streets” as those that “make community” and a “great street should be a most desirable place to be, to spend time, to live, to play, to work, at the same time that it markedly contributes to what a city should be.”



Great streets are therefore not simply about the street itself, but the space from building face to building face, including surrounding parks and open spaces, that enclose a public realm and houses a diverse range of uses and needs.

Great streets do not happen by accident. They require a thoughtful and negotiated balance of sometimes competing uses and functional desires.

According to the American Planning Association (APA)*, elements that make a great street include “maintenance, sustainability, and safety.

A key element of a great street is connectivity: whether it is linked to a larger street network.

Great streets are those that take advantage of natural features and bow to fine architecture. They encourage social activities and take all types of users into account, not just drivers. Most important, great streets have some memorable feature — tall trees, pleasant houses, a row of small shops, a popular cafe.”

* - <https://www.planning.org/planning/2008/jan/greatstreets.htm>

The APA* further lists the following characteristics of great streets:

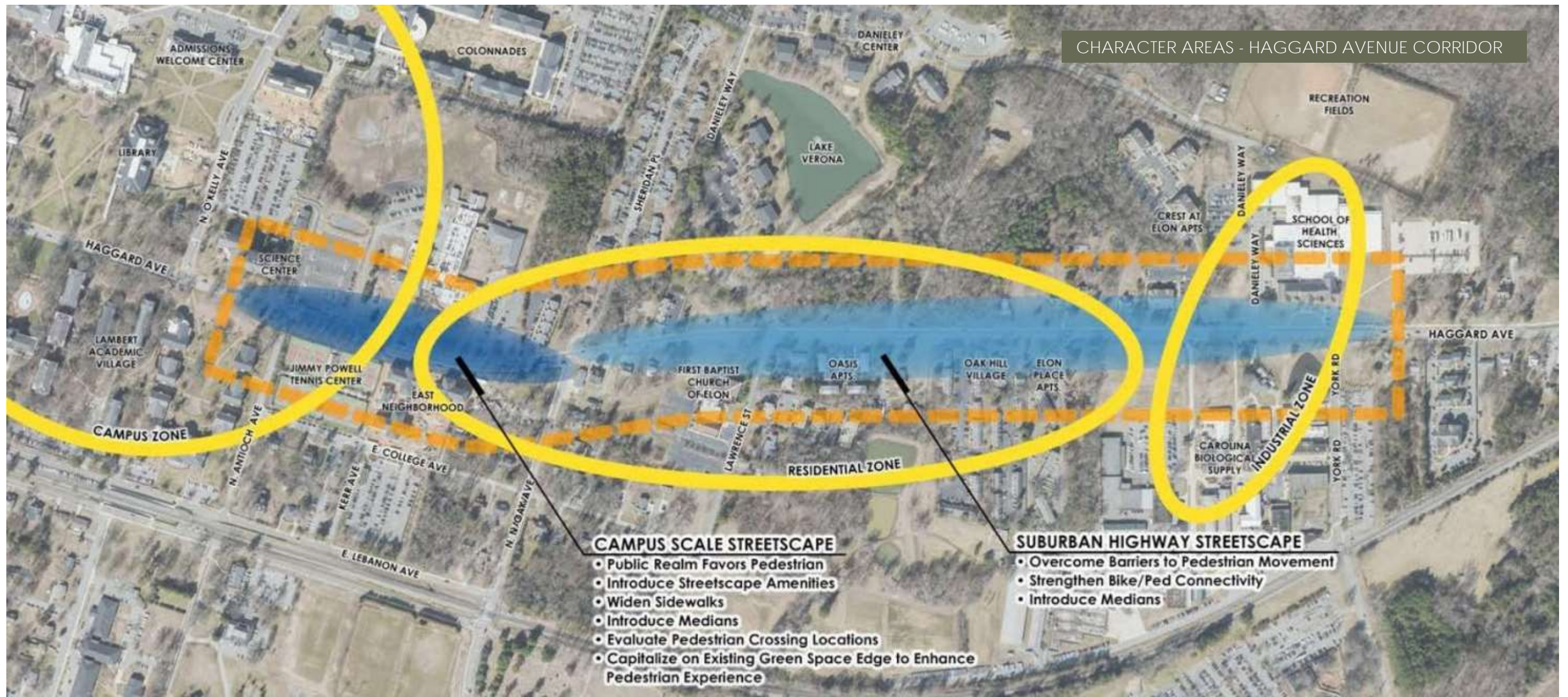
- Provides orientation to its users, and connects well to the larger pattern of ways.
- Balances the competing needs of the street — driving, transit, walking, cycling, servicing, parking, drop-offs, etc.
- Fits the topography and capitalizes on natural features.
- Is lined with a variety of interesting activities and uses that create a varied streetscape.
- Has urban design or architectural features that are exemplary in design.
- Relates well to its bordering uses — allows for continuous activity, doesn't displace pedestrians to provide access to bordering uses.
- Encourages human contact and social activities.
- Employs hardscape and/or landscape to great effect.
- Promotes safety of pedestrians and vehicles and promotes use over the 24-hour day.
- Promotes sustainability through minimizing runoff, reusing water, ensuring groundwater quality, minimizing heat islands, and responding to climatic demands.
- Is well maintained, and capable of being maintained without excessive costs.
- Has a memorable character.

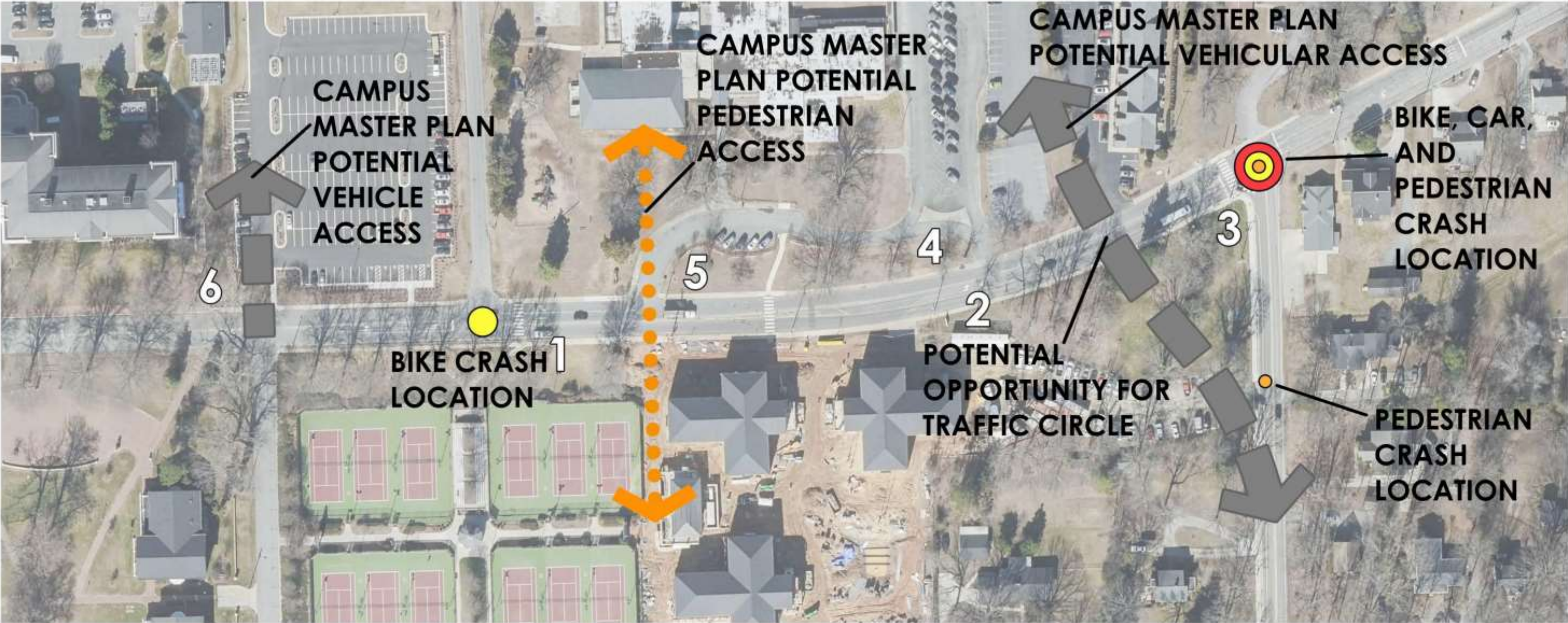
03 Proposed Schematic Design

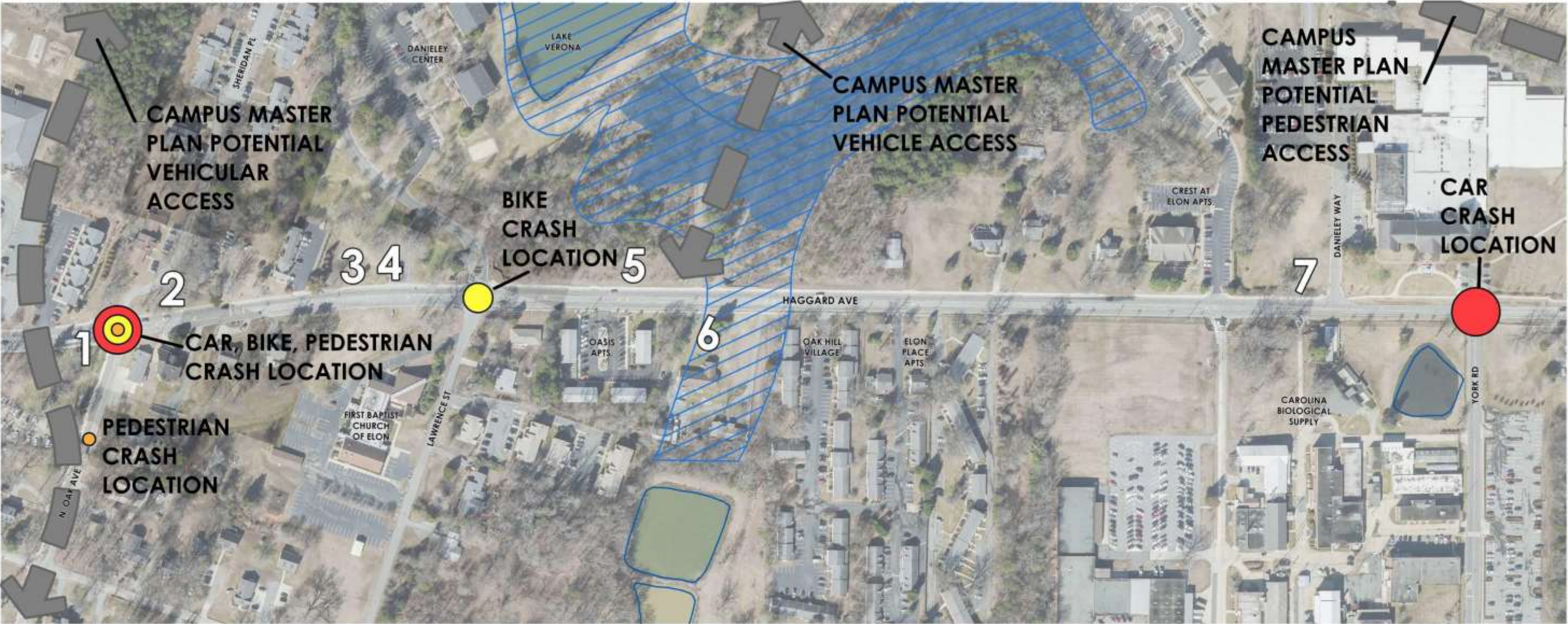
3.1. Character Areas

General character areas for the Phase 1 corridor were presented to the Stakeholders at the Design Charette to provide guidance for different applications of streetscape elements [See Character Areas Diagram below]. The existing, varying character along the corridor relates to the surrounding land uses and roadway design and provides a framework for the scale and location of streetscape elements (as shown on the Existing

Mobility Conditions Maps on the next pages). In Phase 1, the ±0.75-mile corridor from N. Antioch Avenue to York Road, we have identified two general character areas designated as Campus Scale and Suburban Highway. These descriptions refer to the character and scale of the streetscape and can accommodate a variety of design elements, respond to future development, and provide flexibility in the strategies to improve the multi-modal environment.





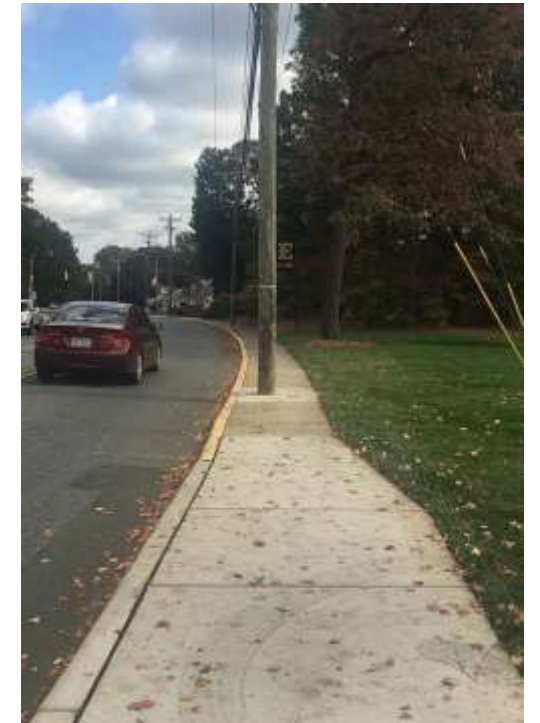


Within the character areas, there are existing zones that further define the corridor, based on patterns of movement and current and proposed land use. These include a Campus Zone, Residential Zone, and Industrial Zone [See Character Areas Diagram].

A transition between each of these zones would better define the pedestrian, bicycle, and vehicular paths of travel by considering the volume of each mode of travel within and between each zone.

Generally, the Campus Zone is heavily pedestrian-focused, the Residential Zone balances all modes of travel, and the Industrial Zone remains more vehicle-focused. In the Campus Scale streetscape, which generally extends along the corridor from N. Antioch Avenue to N. Oak Avenue, the public realm favors the pedestrian. The primary land uses along this segment are University-owned, and are a combination of student housing, recreational facilities (tennis courts), and academic buildings. The University's Campus Master Plan shows additional development of housing, and support services in this area. The existing condition generates a high volume of pedestrians moving along and crossing the road, and with the future planned development at the former Elon Elementary school site, that volume is anticipated to increase. The existing sidewalks are narrow and placed directly at the back of curb; the combination of which creates a generally inhospitable environment for pedestrians. Currently, there are no designated on-street bike lanes, and the volume of bicyclists is low. This could be attributed to the fact that safe access for bicyclists is not available. There are opportunities to widen sidewalks, introduce medians and plant material, and enhance the users' experience in all modes of travel within the ± 60 -foot-wide existing right-of-way. An evaluation of the current pedestrian crosswalk locations compared to future development plans can be beneficial in consolidating crossings and improving safety and connectivity.

The Suburban Highway streetscape, which generally overlays the corridor from N. Oak Avenue to York Road, is vehicle-focused, with a wider roadway pavement section, higher vehicular speeds, and narrow sidewalks located at the back of curb, where present. The variety of land uses along this segment heavily influence the character and pedestrian environment, including single- and multi-family residential, religious institutions, vacant land, University-owned support services, and industrial uses. The pedestrian environment in this segment continues to be inhospitable, not ADA compliant, with a narrow sidewalk that has numerous obstructions within the path of travel, including utility poles, fire hydrants, and trash receptacles. There are opportunities to strengthen pedestrian and bicycle connectivity, to enhance the users' experience, and reduce the speed of vehicular traffic within the varying ± 65 -75-foot-wide existing right-of-way.



3.2. Visual Preference Survey

During the Charette, a series of images containing various streetscape elements were used to engage with the stakeholders and begin to understand the various design elements that could be incorporated into Phase 1 of the corridor plan. The images presented can be grouped into the following general categories: Crosswalks, Wide Sidewalks / Multi-Use Path, Separation of Pedestrian, Bike Lanes, Green Stormwater Infrastructure, and Median Plantings. The imagery was presented on display boards and participants identified images as 'favored' or 'not favored' by using green or red stickers, respectively.

The presence of crosswalks in the imagery was favored, and overwhelmingly so when the image included elements of pedestrian refuge, speed tables, and differentiation in pavement color to distinguish the pedestrian crossing area. Additionally, the use of bollards to identify the threshold between the vehicular travel lane and the pedestrian crosswalk was a generally favored element.

Responses overwhelmingly favored a widened linear path to accommodate more people. There was a clear preference for a widened sidewalk for pedestrians or a multi-use path for pedestrians and bicycles in the Campus Scale Area. However, a multi-use path was also favored for the Suburban Highway Area between N. Oak Avenue and York Road.

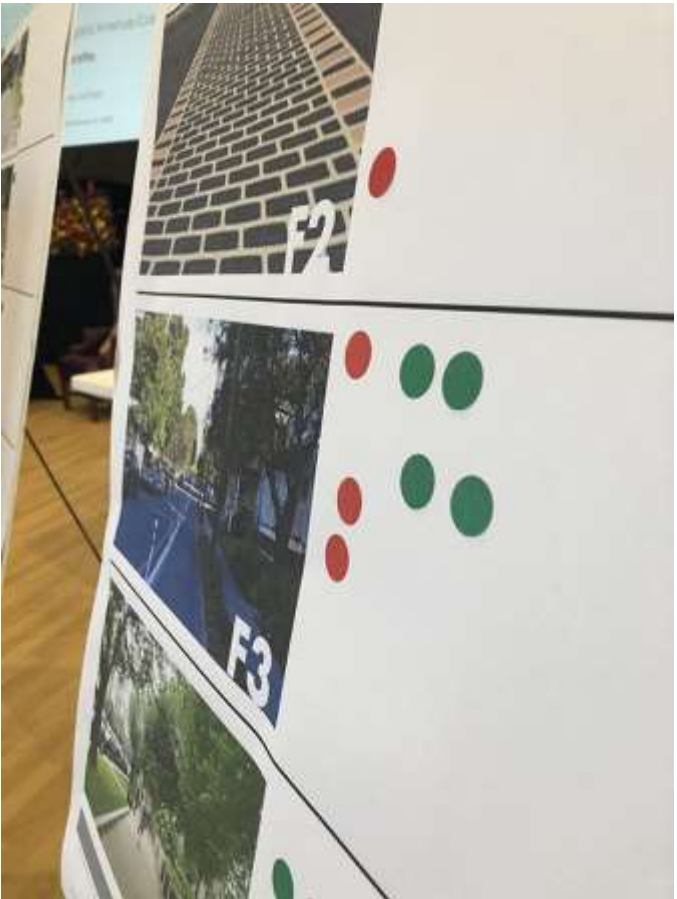
Feedback about the images showing the pedestrian separated from other modes of travel was generally positive, particularly in instances where a planting area created the separation.

Separate bike facilities are favored, however preference varied between on-street bike lanes and a multi-use path depending on the character area of the corridor. Generally, an on-street, designated bike lane was preferred in the Suburban Highway

segment between York Road and N. Oak Avenue, whereas in the Campus Scale segment between N. Antioch Avenue and N. Oak Avenue, participants favored the use of an on-street bike lane or a multi-use path separated from the vehicular lane equally. In either instance, participants strongly favored situations where there was a clear distinction for modes of travel.

Imagery showing Green Stormwater Infrastructure (GSI) was generally favored, particularly when located in medians. Some varying opinion cited concerns with maintenance which can significantly impact functionality and aesthetics.

Median plantings were generally favored, particularly when used to create pedestrian refuge at crossings, as a device for traffic calming, and, combined with various landscape plantings, to reinforce the transitions between character areas along the corridor.



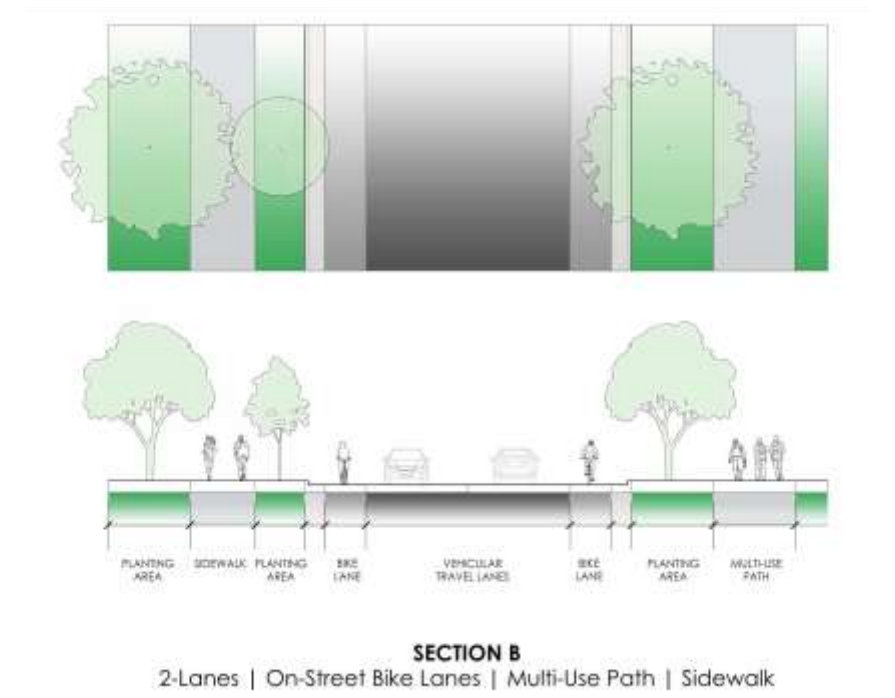
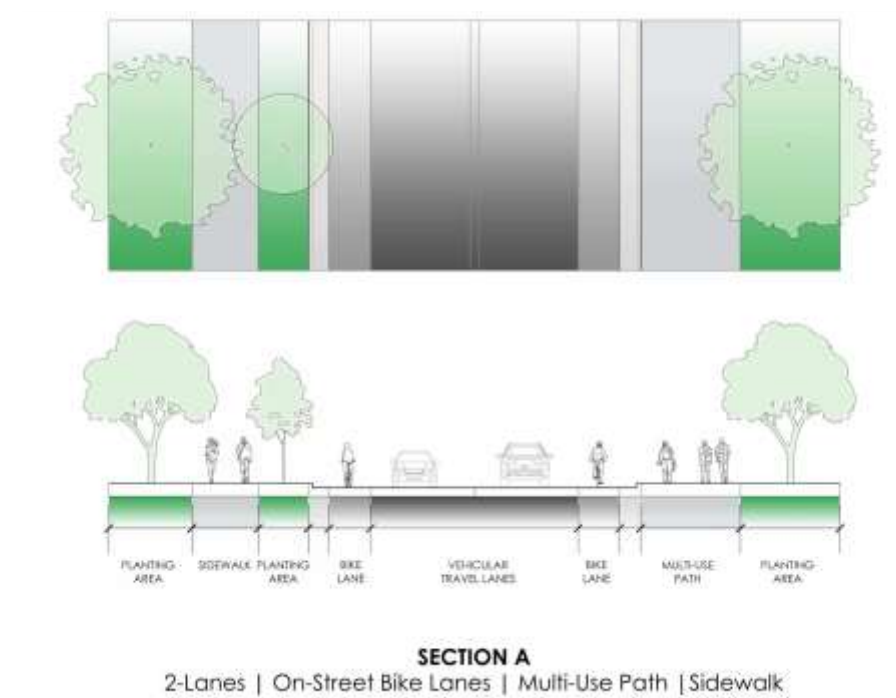
3.3. “Kit of Parts” | Schematic Applications

As a final component of the Charette, the Design Team further engaged the stakeholders with an exercise that translated the existing conditions analysis and input from the Visual Preference activity into schematic applications for this phase of the corridor. Building upon the idea that the character along the corridor varies, the design solutions for improving safety and multi-modal access would similarly vary along the corridor. Key design elements, or “parts” were considered in a variety of combinations to achieve the desired pedestrian environment. The design elements, or “parts”, shown in the various combinations included: sidewalk, multi-use path, median, planting area with trees, planting area with low shrubs, planting area with lawn, on-street bike lane, and vehicular travel lanes.

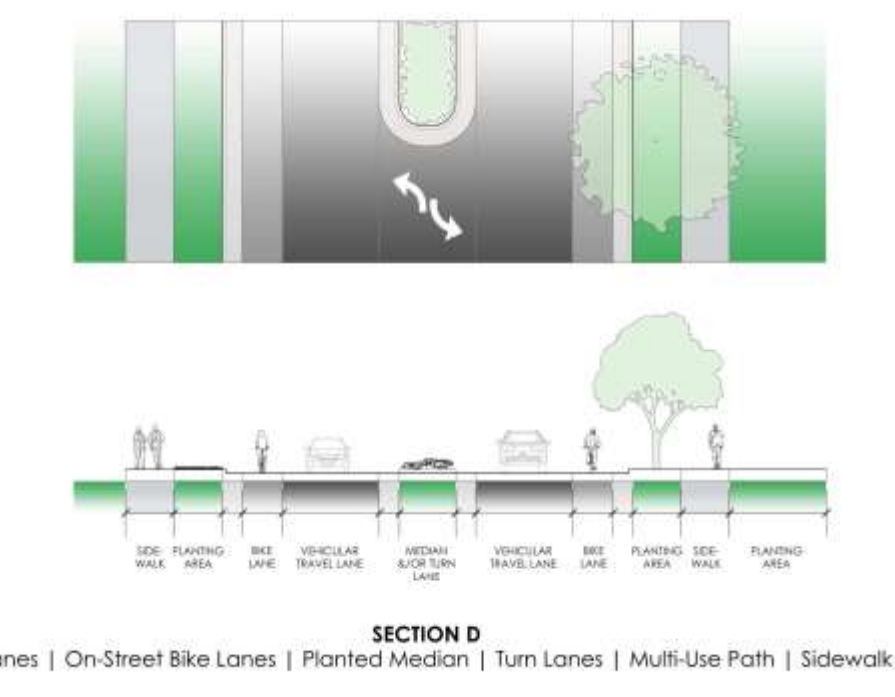
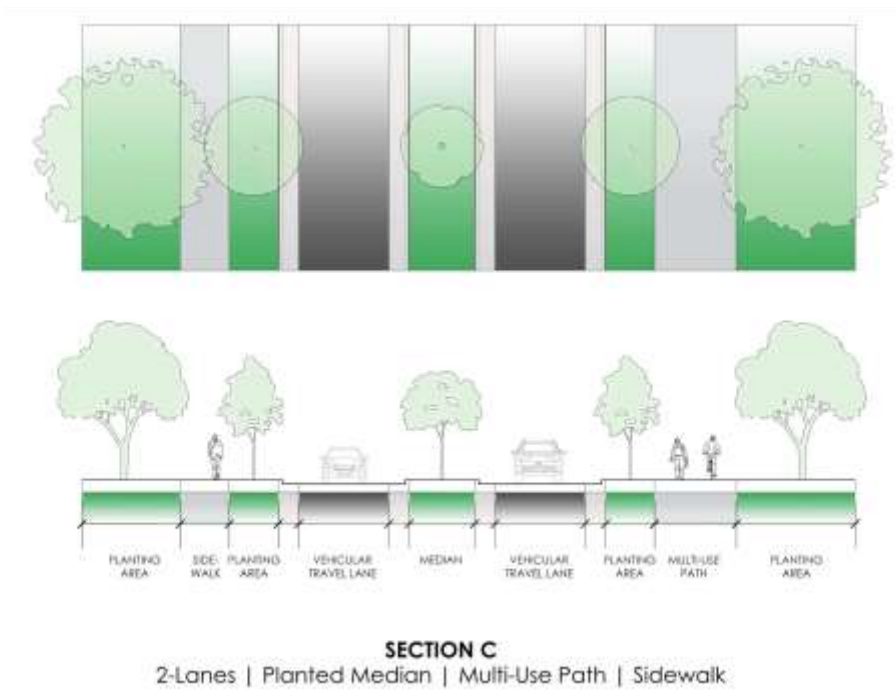
Conceptual roadway sections with different combinations of these design elements were used to illustrate the various ways the elements can be combined. [see Conceptual Sections A, B, C, D to the right]

In addition, the imagery from the Visual Preference activity informed preferred combinations of elements, including materials and placement of modes of travel. Specific imagery from the Visual Preference boards was identified by participants for application at certain locations. The participants discussed the schematic section drawings, but specific sections were not assigned to segments of the roadway. [See Visual Preference Boards on next page]

In general, the group supported the concept of reinforcing the character of the zones within the corridor by transitioning from a car-oriented to a pedestrian-oriented roadway between York Road to N. Antioch Avenue, respectively. From a design standpoint, this transition can be communicated with the use of plantings, the location of the sidewalk/multi-use path and bike lanes, and by introducing medians. Additionally, participants agreed that the intersections at York Road and N. Oak Avenue could be considered ‘gateways’ into town, and the campus area, respectively. The way to distinguish a gateway could incorporate signage, lighting, banners, landscape plantings, or a different roadway configuration. An opportunity for a potential traffic circle at the intersection of N. Oak Avenue was generally favored, with acknowledgement that needs further consideration and study by roadway and traffic engineers.



Conceptual Roadway Sections





Further discussion revealed strong support for a clear delineation between vehicular and pedestrian movement, achieved with the use of medians with pedestrian refuge islands, bollards, and planting areas between the curb and sidewalk. Participants expressed considerable concern about the speed of vehicular traffic along the roadway and for the safety of all users. The use of traffic calming techniques was overwhelmingly favored, particularly the use of raised crosswalks and curb bump-outs in Campus Scale area, and medians to replace the center turn lane in the Suburban Highway area.

3.4. Schematic Design

To reinforce the character of the zones and establish the framework for more detailed design, a schematic (or conceptual) design was developed by the SEPI Team. The intent of this phase of design is to create a general description of the proposed spatial arrangement and functions of corridor elements, and overall aesthetics. The Schematic Designs presented herein include general recommendations that address vehicle-pedestrian conflicts, calm vehicular traffic, and enhance the user experience in the corridor.

SCHEMATIC DESIGN PLAN NOTES: The potential roadway and streetscape improvements shown herein are conceptual in nature based on current information and will require more detailed roadway design, transportation engineering, environmental analysis and traffic/crash studies in the future. Additionally, to accomplish some of the recommended configurations, right-of-way acquisition from property owners along the corridor may be required. This detailed information is not available at this time, but will be developed once the project is approved and funded by NCDOT for construction. Some of the information that will be developed during those future NCDOT evaluations include updated traffic volumes, safety/crash details, detailed intersection operations and specific safety issues in need of correction (such as insufficient pedestrian guardrails over a creek crossing). Also to be addressed at that time will be optimal median break locations, locations of turn-around bulbs, optimal intersection designs (e.g., roundabout versus traditional) and traffic controls (stop, signalized, roundabout, etc.), minimization of property and public vehicle access impacts, and avoidance and mitigation of the project's human and environmental impacts.

3.4.1. *Campus Scale*

The recommended schematic design for the Campus Scale area of the corridor between N. Antioch Ave and N. Oak Avenue includes strategies to address vehicle-pedestrian conflicts, reduce crossing distances, calm vehicular traffic, and enhance the pedestrian and bicyclist experience. [see Phase I - Schematic Plan - N. Oak Avenue to York Road] This portion of the roadway is controlled by the Town of Elon, and all improvements will require their approval.

The Campus Scale Schematic Design illustrates a planted median to reduce traffic speed and decrease crossing distance with pedestrian refuge at potential mid-block crossings. Medians planted with small trees and low-growing shrubs lend additional spatial awareness for vehicles to reduce speed and increase awareness of other modes of travel. Where mid-block pedestrian crossings occur, plantings, pavement markings, materials changes, and signage can visually indicate the approaching crosswalk. The predictability created with these visual cues can increase pedestrian safety in a subtle but effective manner.

The volume of pedestrian activity in this segment supports the recommendation for widened sidewalks, or a multi-use path. To improve the pedestrian experience, a wider sidewalk or multi-use path separated from vehicular traffic is recommended. Like the Suburban Highway area discussed next, the design suggests improvements for bicycle access via a multi-use path or on-street bike lanes. Additionally, the design illustrates trees along the roadway that vary in size, spacing and location based on the visual cues desired for users. Where the tree canopy reduces in size, spacing, location and median plantings change, the intent is to inform users of an upcoming pedestrian crosswalk.

These design plans also denote intersection improvements at Antioch Avenue, which may include roadway modifications such as right and left turn lanes, as well as safe and legible places for pedestrians to be directed along Haggard towards a major pedestrian crossing planned by Elon University. These design plans also illustrate the proposed realignment of N. Oak Avenue as it crosses Haggard Avenue, extending into Elon University property. This realignment, which is based on the University's Campus Master Plan, would provide an opportunity for a roundabout at the newly created intersection. A potential roundabout would calm vehicular traffic and encourage a reduction in speed, create a transition between character areas, and serve as a gateway for the campus zone.

3.4.2. *Suburban Highway*

The schematic design for the corridor between N. Oak Avenue and York Road (Suburban Highway area) recommends strategies to address vehicle-pedestrian conflicts, reduce traffic speed, and enhance the pedestrian and cyclist environment. [See Phase I - Schematic Plan - N. Oak Avenue to York Road] This portion of the roadway is maintained by NCDOT, and all improvements will require their approval.

The Suburban Highway schematic design introduces planted medians as a traffic calming device and proposes to reduce the road from its existing 3-lane section to a 2-lane section. The introduction of regularly planted street trees of varying canopy heights is intended to provide all users with visual and spatial cues about an approaching decision point. Where the tree canopy reduces both in size and spacing, the intent is to reinforce the presence of an upcoming intersection.

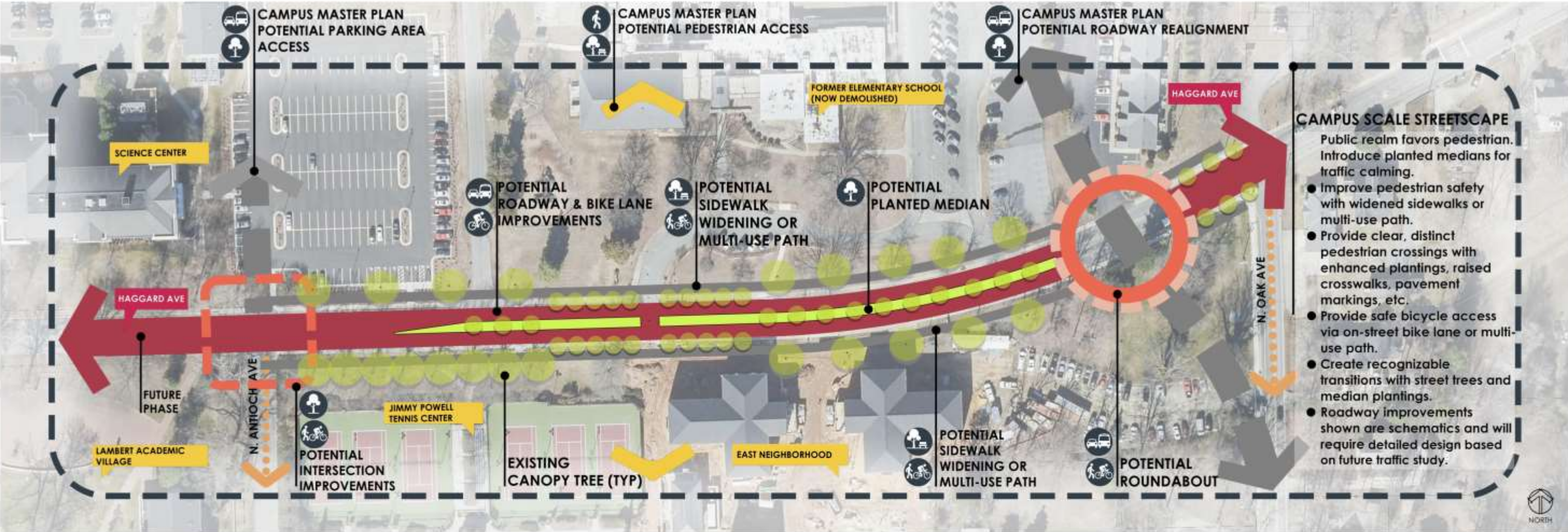
To strengthen pedestrian connectivity and access, the sidewalk on the south side of Haggard Avenue should be completed. Additionally, pedestrian safety and experience along the roadway can be improved by providing a wider sidewalk or multi-use path and by separating the walkway from the vehicular traffic with a planting area between the back of curb and walkway.

The plans suggest intersection improvements at Lawrence Street and York Road to create safe, legible, and predictable places for pedestrian crossings, which may include distinct crosswalks, and/or pedestrian refuge within the proposed median in conjunction with roadway modifications. To provide full multi-modal access, this plan suggests a discernible area for bicyclists, either with an on-street bike lane or via an off-street multi-use path.

These plans also specifically illustrate an opportunity for a roundabout at York Road to improve the safety and congestion issues noted at this intersection, as discussed at the July 2020 Project Stakeholder Meeting as well as the Public Meeting in October 2020.

SCHEMATIC PLAN* - CAMPUS AREA - N. ANTIOCH AVENUE TO N. OAK AVENUE

* See Plan Notes on Page 35



CAMPUS SCALE STREETSCAPE
Public realm favors pedestrian. Introduce planted medians for traffic calming.

- Improve pedestrian safety with widened sidewalks or multi-use path.
- Provide clear, distinct pedestrian crossings with enhanced plantings, raised crosswalks, pavement markings, etc.
- Provide safe bicycle access via on-street bike lane or multi-use path.
- Create recognizable transitions with street trees and median plantings.
- Roadway improvements shown are schematics and will require detailed design based on future traffic study.

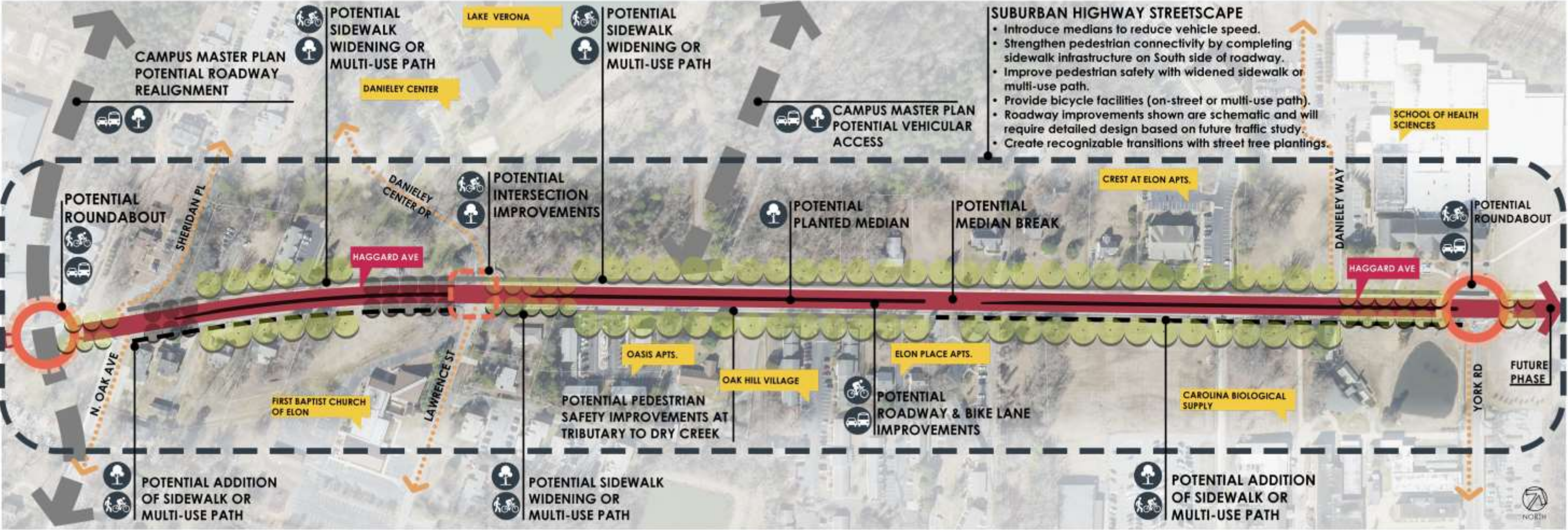
PLAN LEGEND

- NEW SIDEWALK
- WIDEN EXISTING SIDEWALK
- HAGGARD AVENUE
- POTENTIAL ROUNDABOUT
- PEDESTRIAN ZONE
- INTERSECTION IMPROVEMENTS
- EXISTING ROADWAY
- POTENTIAL STREET TREES
- DESIGN ELEMENTS ICON
- CAMPUS MASTER PLAN POTENTIAL ACCESS
- EXISTING LAND USE
- CAMPUS SCALE STREETSCAPE AREA

INSPIRATION | IMAGES

SCHEMATIC PLAN* - SUBURBAN HIGHWAY - N. OAK AVENUE TO YORK ROAD

* See Plan Notes on Page 35



PLAN LEGEND

- NEW SIDEWALK
- WIDEN EXISTING SIDEWALK
- HAGGARD AVENUE
- POTENTIAL ROUNDABOUT
- PEDESTRIAN ZONE
- INTERSECTION IMPROVEMENTS
- EXISTING ROADWAY
- POTENTIAL STREET TREES
- Ⓜ DESIGN ELEMENTS ICON
- ↔ CAMPUS MASTER PLAN POTENTIAL ACCESS
- Existing Land Use (yellow callout)
- SUBURBAN HIGHWAY STREETSCAPE AREA

INSPIRATION | IMAGES

04 Project Implementation

4.1. Ordinance Changes

4.1.1. *Proposed Haggard Corridor Overlay Zoning District*

As discussed in the Charette summary notes found in the Appendix, the Town of Elon, with the advice of the Stakeholders, is recommending that changes be made to the Town of Elon Land Development Ordinance (LDO adopted 2/04, amended 3/13/18) to implement the vision for the Haggard Corridor as discussed and mapped in Chapter 3.

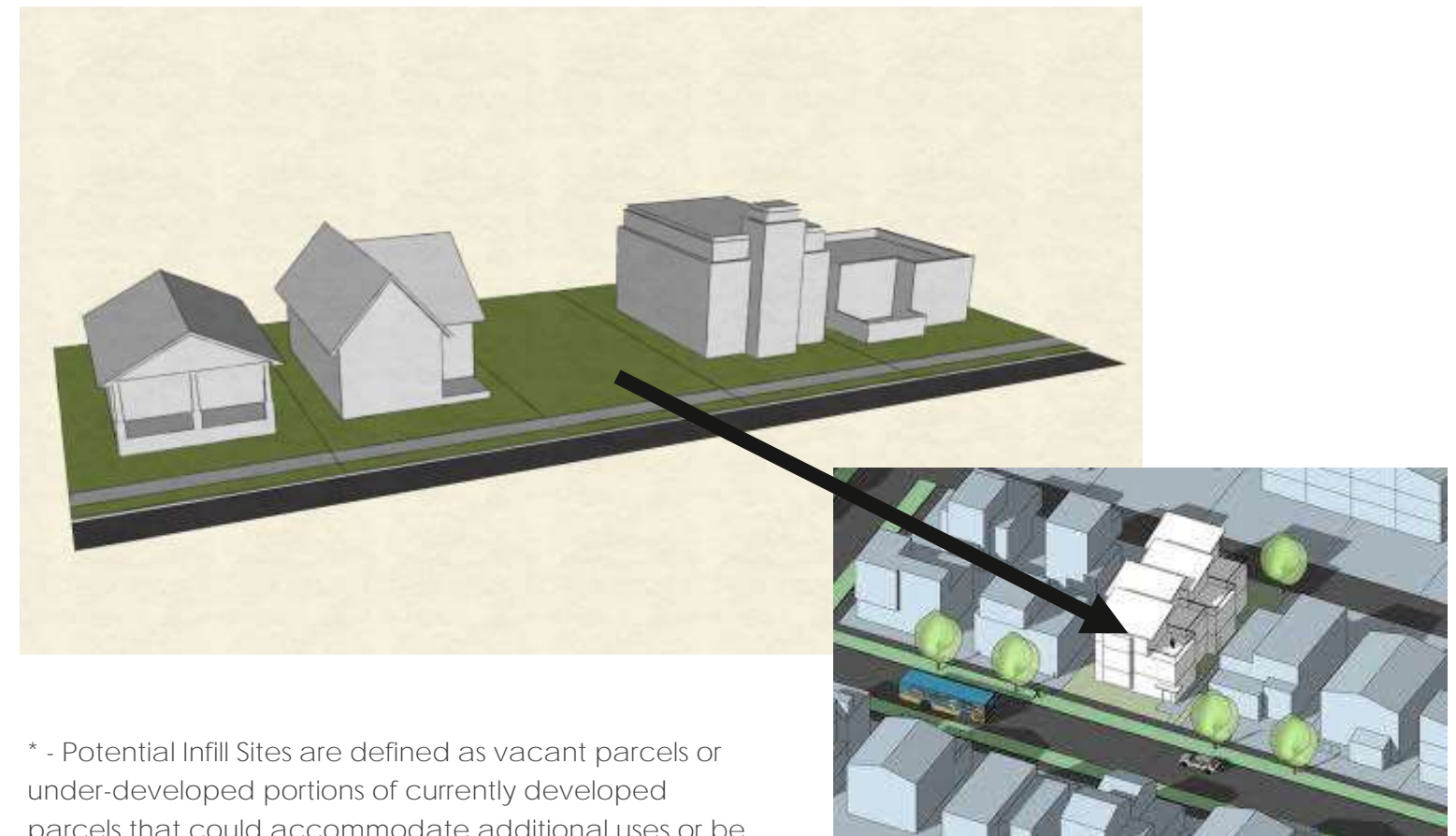
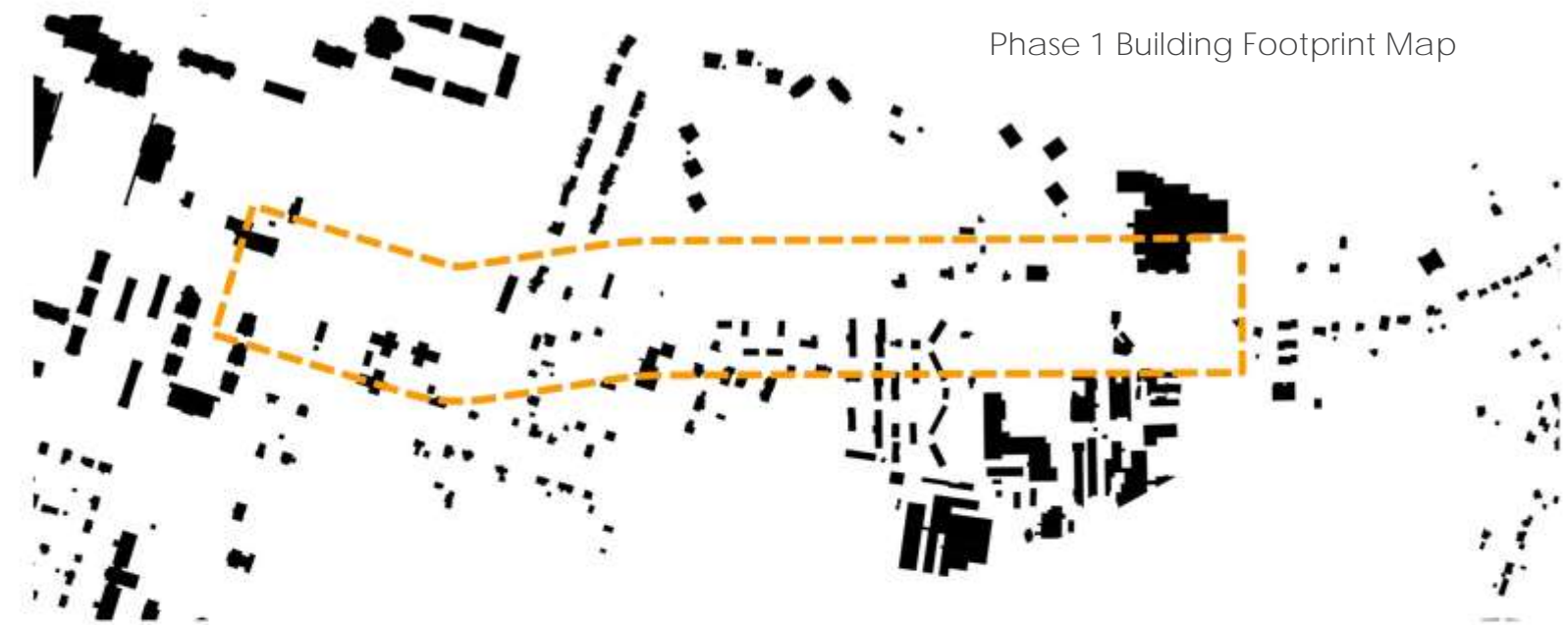
The following sections provide the rationale for a recommended new Corridor Overlay Zoning District, as well as areas of the Town's Roadway Design Standards that should be further evaluated for modification (currently within Section 5.7 of the Land Development Ordinance (LDO)). The Town intends to implement these new ordinance requirements with adoption of the Town's new Land Management Ordinance (LMO) (currently under preparation), which will replace the LDO.

Land Use

Given the dramatic impact land development has on the function and feel of adjacent roadways, the potential for new development or redevelopment in the corridor was evaluated to determine if current land use controls or additional controls are needed in the Overlay District. As shown on the Potential Infill Development Map* on page 40, there are a total of 13 parcels (totaling 157.7 acres) located mostly in the Suburban Highway (eastern) portion of the corridor with the greatest potential for new development from infill or redevelopment. Of those, the one University-owned parcel totaling 86 acres east of the Danieleley Center and the three privately owned parcels immediately to its east make up the main vacant/underdeveloped area in the center/north of the corridor. The next largest developable area involves two parcels totaling 36 acres within the City of Burlington's Zoning Jurisdiction near York Road.

As most of the future developable sites within Phase 1 are owned by Elon University with their intention of developing them for University purposes, it is the commitment of the Town to continue to collaborate with the University on future long -range planning and site development review to address the Town's potential land use concerns. There are no specific land use elements recommended to be added to the Overlay District.

Phase 1 Building Footprint Map



* - Potential Infill Sites are defined as vacant parcels or under-developed portions of currently developed parcels that could accommodate additional uses or be combined with adjacent vacant or underdeveloped land and redeveloped.



Access Management

Good transportation planning acknowledges that the placement, size and orientation of new driveways, entrances/exits and cross streets along urban roadways must be carefully planned and controlled, as they can either positively or negatively impact traffic flow, safety, development potential, environmental resources, and more broadly, community character.

FHWA’s Access Management Guidance* specifically calls attention to the importance of managing access along arterials such as Haggard Avenue because of the need to protect both its mobility and access functions.

Given that every legal parcel of land is allowed at least one driveway, and new development could add even more, several new driveways may be constructed on the corridor. Elon University is also proposing a new cross street (“Elon University (EU) Collector”) that would intersect the project corridor on the north side of East Haggard Avenue, across from Elon Village Homes and extending north to University Drive (see Future Land Use and University Roadways Map) This future roadway, along with other “ring roads” planned by the University further to the east in the Phase III project area (also shown on that map), are intended to provide non-arterial access to new University development in the area and help bypass (and therefore reduce vehicular traffic) on Haggard Avenue in the congested Campus Scale area.

The “EU Collector” is shown to lie on the University Master Plan directly within an Unnamed Tributary to Dry Creek where it extends under East Haggard Avenue at a culvert (see Existing Conditions Map).

Given the above conditions, it is recommended that the Overlay District contain the following requirements to adequately manage access (and therefore protect the long term functionality and safety) of East Haggard Avenue after new infill / redevelopment:

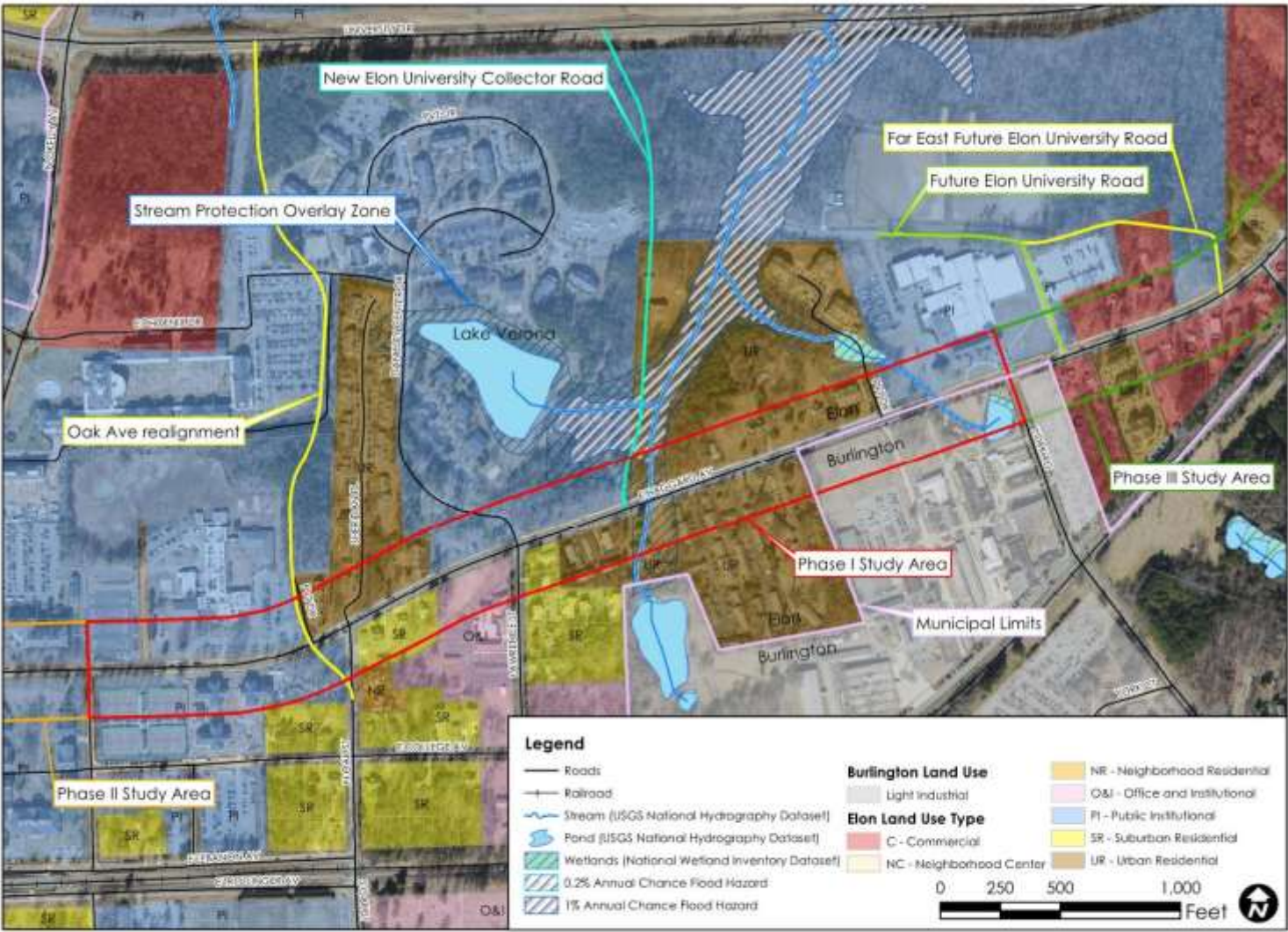
- Multiple driveway cuts on to East Haggard Avenue should be restricted to the maximum extent possible.
- All future new public roads, including the “EU Collector” road proposed by Elon University, should be located outside of

environmentally sensitive areas to the maximum extent practicable.

- The Traffic Impact Analysis (TIA) prepared by Elon University for the development of its 86 acre parcel to the east of the Danieley Center (soon to be a requirement for all large developments as part of the new Elon LMO) should include:
 - ⇒ Analysis of the “EU Collector” roadway and its intersection with Haggard Avenue as part of the development of the site. The Town prefers that the this collector be public to help divert traffic through the Campus Scale area, but if the University proposes it to be private, which would allow closure on occasion, the TIA must also evaluate the impacts of this restriction on the transportation network, especially within the Campus Scale area. The TIA should evaluate all alternatives on how well they reduce traffic and improve safety on Haggard Avenue.
 - ⇒ Evaluation of the “EU Collector” as the primary means of access to the 86-acre development so that campus traffic is funneled to Haggard at one controlled location, with other access points for the development onto East Haggard Avenue restricted.
 - ⇒ Alternative locations of the “EU Collector” be evaluated to determine if placement near the eastern property line will allow/provide primary access for future development of that private parcel and also be used as the “front”/primary access point for infill / redevelopment of other surrounding private-owned parcels.

According to FHWA, it is best to manage driveways so that access is provided to and from the roadway with the lower functional classification, as these roadways typically have lower traffic volumes and speeds. This helps to reduce the frequency of conflicts, which minimizes both the opportunity for crashes and the severity of those crashes, should they occur.

Thus, in planning, designing and managing access (i.e., driveways, entrances or exits), critical consideration must be given to arterial and collector streets as these streets serve both mobility and access functions. (https://safety.fhwa.dot.gov/intersection/other_topics/fhwasa10002/#s11)



Future Land Use and University Roadways

Front Yard Building Setbacks

Front yard building setback is the minimum distance between the front edge of a parcel (measured at the public right-of-way line) and where a structure can be built. As noted in Section 7.2 of the current Elon LDO (see below), this setback is very important, as it provides the public spaces and green areas between buildings and streets, literally forming the “streetscape” zone as discussed in Chapter 2.

The following table shows current front yard building setbacks for the Elon and Burlington Zoning Districts.

Current Front Yard Setback Zoning (Elon LDO - Adopted 12/04; Amended 3/18; Burlington UDO – Last Updated 10/20/20)		
Urban Residential (UR) (Elon)	Public Institutional (PI) (Elon)	Light Industrial (LI) (Burlington)
10 ft min / 25 ft max	30 ft	40 ft*

* - On corner lots of record, the street setback may be reduced by 50 percent on the long side lot.

It was noted by the Stakeholder Committee that, with most of the corridor planned for Public Institutional (PI) and owned by the University, collaboration between the Town and the University on future development plans should address most of the potential front yard setback concerns in the PI zoned areas.

Although the setbacks for the PI and LI zoned areas are sufficiently wide to provide the needed space for the amenities recommended for the corridor (30 and 40-ft, respectively), the minimum setback standard for the Urban Residential (UR) Zoning District (10 feet) may not be sufficient. Given the setback variation currently allowed in the UR zoning and the need for a consistent theme along the corridor, it is recommended that the minimum front yard setbacks for UR development in the Overlay District be increased by 10-ft, such that a minimum of 20-ft front yard setback is required. It is also recommended that the maximum front yard setback in the UR zoned areas be increased to 30-ft, which would meet the minimum PI setback.

7.2 Defining the Public Space of the Street (Current Elon LDO)

As the most prevalent public spaces in Elon, streets should be spatially defined by buildings. Proper alignment and delineation of the public street space occurs when the facades of adjacent buildings are aligned much like the walls forming a room. Buildings that make up the street edges are aligned in a disciplined manner. The defined space observes a certain ratio of height to width. Building articulation must take place primarily in the vertical plane of the façade. Appendages such as porches, balconies, and bay windows are encouraged to promote the transition between the public street and the private dwelling.





Utilities

The current presence of above ground utilities (e.g., telephone poles carrying electrical and communications lines) in the sidewalk along portions of the existing corridor was identified as unattractive, inconsistent with FHWA and NCDOT guidance, and violates ADA requirements by making the sidewalk impassable for wheelchairs. Furthermore, this issue was recognized as in need of correction with the project by the Town and some Stakeholders.

According to the 2012 NCDOT Complete Street Design Manual, “when planning, designing and constructing sidewalks, planting strips, medians and other street features provided on complete streets, the design input team must allow for service access to underground and overhead utilities.” Placement of utilities in the design of the street side should therefore (according to this Manual) consider the following guidance:

- Longitudinal underground utility lines should be placed in a uniform alignment as close to the right of way line as practical, or within a planting strip or amenity zone.
- Consolidate utility poles and signage poles where possible. Remove redundant poles in retrofit situations.
- Whenever possible, utilities should be placed underground to preserve sidewalk capacity for pedestrians and allow for street trees and aesthetic treatments.
- When underground placement is not possible, consider alternative locations for utility poles including the back of the right of way or in the planting strip.”

If not placed underground, the DOT 2019 Complete Streets Policy would require new ones built within the corridor and placed “outside the Clear Zone”, or “a minimum of 12 feet from the face of the curb. And all utility poles that are placed closer than 12 feet shall be breakaway poles.”

Placing utilities underground is therefore recommended for the corridor, as doing so will improve aesthetics as well as preserve sidewalk capacity for pedestrians and allow for street trees and aesthetic treatments.



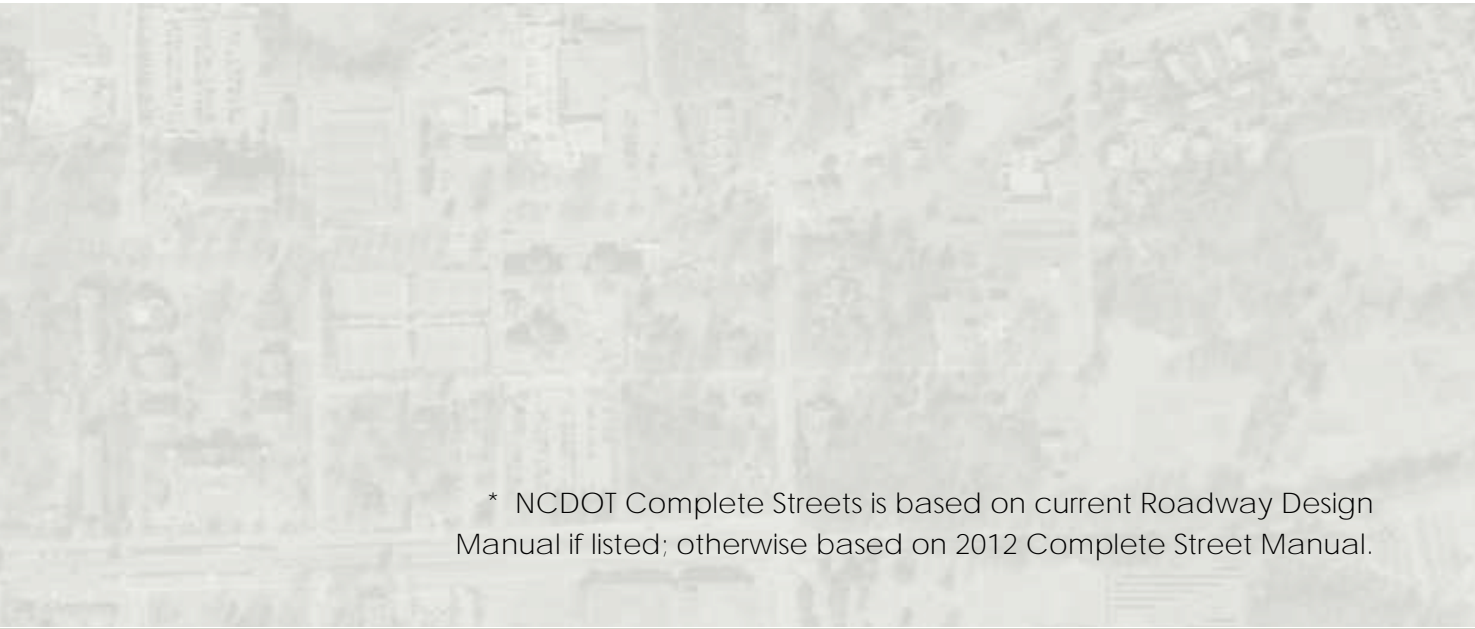
4.1.1. Roadway Design Standards

Public roadways are not built randomly. The portion of the corridor under control of the Town of Elon (between Antioch Avenue and N. Oak Street) is dictated by the Town's Street Design Standards, as contained in the Elon LDO (Adopted 12/04; Amended 3/18). The portion of the corridor under NCDOT control (east of N. Oak Street) is controlled by NCDOT Roadway Design Standards, as explained on page 23.

The recommended Roadway Design Standards for the Haggard Corridor Overlay Zoning District are identified in the final column of the adjacent table. These recommendations are based on: feedback received from the Town, Stakeholders, the Public; the proposed design schematics shown in Chapter 3; and various FHWA and NCDOT roadway design guidance, as discussed in Chapter 2.

This list of recommended standards has two purposes:

- 1) To inform the final design and construction of the improvements when eventually funded by NCDOT in a future STIP.
- 2) To become the basis of a Haggard Overlay Zoning District, which will ONLY become mandatory for development that occurs after the Overlay District is adopted as part of the new LMO being prepared separately by the Town. These regulations may be implemented with some flexibility to accommodate existing conditions in the corridor when applied to new development prior to the corridor being reconstructed with the future STIP Project.



* NCDOT Complete Streets is based on current Roadway Design Manual if listed; otherwise based on 2012 Complete Street Manual.

Streetscape Element	Town of Elon Standards	NCDOT Complete Streets Standards*	Recommended Overlay District Standard
Travel Lane Width	13-feet (included as an engineering technical standard, not listed in LDO)	12-ft (may be reduced to 11-ft in urban areas)	Min. 11-ft
Sidewalks	min. 5-ft, 8-ft for commercial, 12-ft for retail/activity centers	Minimum – 4-ft (resid.), 5-ft (commercial/school routes) Desirable – 5-ft (residential), 10-ft (commercial/school routes) Areas with heavy pedestrian traffic warrant wider widths	Min. 8-ft in Suburban Zone, 10-12 ft in Campus Zone
	Both sides of street	Both sides of street	Both sides of street
Multi-Use Paths	8-ft	Not Mentioned	12-ft
Bike Lanes	4-ft striped/dedicated	5-6 ft on-street striped	5-6-ft striped/dedicated on street
	Required on-street	14-ft shared lane / sharrow	Or 14-15-ft sharrow
Green Zone / Sidewalk Buffer / Planting Strip	2 ft 6 in (included as an engineering technical standard, (not listed in LDO) for standard residential street)	6-8 ft (8-ft preferred for street trees)	Min. 8-ft
Streetlights	160-200 ft separation	not mentioned	Equally spaced. Light footprint must overlap on roadway. Use manuf. lumen specs/ratings for each light type.
Pedestrian Lights	not mentioned	Equally spaced, Recommended	Equally spaced. Light footprint must overlap on sidewalk. Use manuf. lumen specs/ratings for each light type.
Pedestrian Crosswalks	min 10-ft in width	no specifics	Min 10-ft in width
Landscaping	1 large mature tree / 40 ft (should shade sidewalk)	no specifics	Min of 1 large mature tree / 40 ft (should shade sidewalk)

4.2. Study Recommendations (Listed in Order of Priority)

- 1) Work with BGMPO and NCDOT to receive approval for the project to be included in a future STIP, which will provide funding for traffic engineering, final design, environmental impact analysis, permitting and construction of the following recommended corridor improvements:
 - a) Implement Campus Scale Improvements between N. Antioch Ave and N. Oak Avenue:
 - Realignment of N. Oak Avenue intersection, potential roundabout to serve as a corridor gateway
 - Planted medians
 - Mid-block pedestrian crossings (potential) with pedestrian refuge, plantings, pavement markings, materials changes, and signage.
 - Widened sidewalks or a multi-use path separated from vehicular traffic.
 - Bicycle access via a multi-use path or on-street bike lanes.
 - Street trees that vary in size, spacing and location
 - b) Implement Suburban Highway Improvements between N. Oak Avenue and York Road:
 - Reduce travel lanes from 3 to 2
 - Complete sidewalk on southern side
 - Intersection improvements at Lawrence Street with potential roundabout at York Road
 - Provide wider sidewalk or multi-use path
 - Add planting area between the back of curb and sidewalk
 - Planted medians
 - Pedestrian crossings, including distinct crosswalks and/or pedestrian refuges within median
 - Bicycle access via a multi-use path or on-street bike lanes
 - Street trees that vary in size, spacing and location

- 2) Develop and adopt a Haggard Avenue Corridor Overlay District that considers the following recommended requirements for new development:
 - Streetscape Standards as shown in Section 4.1.1
 - Front-yard Setbacks - Consider setting the minimum front yard setbacks for UR development in the Overlay District to be 20-ft min. and 30-ft max. to provide adequate room for streetscape amenities and provide a consistent theme along the corridor.
 - Underground Utilities - It is the goal of the future Haggard Avenue corridor that all streetscape utilities will be placed underground to improve aesthetics as well as preserve sidewalk capacity for pedestrians and allow for street trees and aesthetic treatments. As such, when the Town submits its request to BGMPO and NCDOT for funding the improvements discussed in this Plan, it will specifically call out the need to fund the undergrounding of utilities along the streetscape. Given that it may take several years for NCDOT to construct these roadway improvements, it is important that any new development that occurs in the intervening time provide the improvements discussed in this plan. Therefore, it is recommended that the Overlay District contain language that requires applications for new development on parcels fronting on Haggard Avenue to either provide for the relocation of streetscape utilities underground, or provide hardship reasoning / justification as to why the developer does not propose to do so.
 - Environmental Protection– Require all future new public roads, including the “EU Collector” road proposed by Elon University, to be located outside of environmentally sensitive areas to the maximum extent practicable.
 - Access Management - Restrict multiple driveway cuts on to East Haggard Avenue to the maximum extent possible.
- 3) Require that the Traffic Impact Analysis (TIA) prepared by Elon University for the development of its 86 acre parcel to the east of the Danieleley Center (which will soon be a

requirement for all large developments as part of the new Elon LMO) include the following:

- ⇒ **Analysis of the “EU Collector” roadway and its intersection with Haggard Avenue as part of the development of the site.** The Town prefers that the this collector be public to help divert traffic through the Campus area, but if the University proposes it to be private, which would allow closure on occasion, the TIA must also evaluate the impacts of this restriction on the transportation network. The TIA should evaluate all alternatives as to how well they reduce traffic and improve safety on network roadways.
 - ⇒ **Evaluation of the “EU Collector” as the primary means of access to the 86-acre development so that campus traffic is funneled to Haggard at one controlled location, with other access points for the development onto East Haggard Avenue restricted.**
 - ⇒ **Evaluate alternative locations of the “EU Collector” to determine if it can feasibly provide “frontage”/ primary access for infill / redevelopment of surrounding privately-owned parcels.**
- 4) Continue collaboration with Elon University on future long-range planning efforts and site development to address the elements discussed throughout this plan.

05 Appendices

- 5.1. Stakeholder Meeting #1 Notes
- 5.2. Public Meeting #1 Summary
- 5.3. Design Charette Summary
- 5.4 Cost Estimate



MEETING MINUTES – Project Kick Off Meeting

Project Name: Town of Elon – Haggard Avenue Phase 1

Owner: Town of Elon

Date/Time: 07.27.2020, 10:00 AM

Location: Virtual via GoToMeeting

Parties in Attendance:

Name	Organization	E-Mail	Phone
Pamela DeSoto	Town of Elon	pdesoto@elon.gov	336.584.2859
Kathleen Patterson	Town of Elon	kpatterson@elon.gov	336.584.3601
Ed Madren	Town of Elon	emadren@elon.gov	336.584.9600
Tom Flood	Elon University	tflood2@elon.edu	336.278.6549
Brandon Parker	Town of Gibsonville	bparker@gibsonville.net	336.449.4144
Margaret Skulnik	Town of Elon resident / walkability advocate	mskulnik@me.com	919-219-1245
Wannetta Mallette	Burlington Graham MPO	wmallette@burlingtonnc.gov	336.513.5418
Tamara Njegovan	NCDOT	tmnjegovan@ncdot.gov	336.487.0109
Stephen Robinson	NCDOT	sjrobinson@ncdot.gov	336.487.0000
Rajit Ramkumar	SEPI	rramkumar@sepiinc.com	919.573.9915
Michelle Suverkrubbe	SEPI	msuverkrubbe@sepiinc.com	919.573.9935
Nicole Young	SEPI	nyoung@sepiinc.com	919.747.5873

1. Presentation was led by Michelle Suverkrubbe (SEPI) and began with introductions of all participants.
2. Project Schedule reviewed, with expanded information as follows.
 - a. Public Meeting #1 (currently targeted for end of August 2020) will most likely be a virtual public meeting.
 - b. Design Charette (currently targeted for September 2020) is intended to be an in-person, interactive session for the Stakeholder Group. The forum style for the charette will continue to be evaluated depending on COVID-19 guidance from the State.
 - Goals and objectives for the charette were reviewed as outlined in the presentation.
3. Overall Project Orientation
 - a. The larger project area was introduced which consists of Haggard Avenue beginning from the west at Cook Road at the Gibsonville Town Limits, extending east through downtown Elon to University Drive near the Burlington Town Limits.

- b. The overall project area is divided into three (3) phases as depicted by the maps in the presentation, and the limits of Phase 1, which is the focus of this effort, were defined.
 - c. It was noted by Pam DeSoto (Town of Elon) that the more intense pedestrian conflicts exist in Phase 1 of the corridor, and that Phase 3 will be negotiated for funding in a future budget year.
4. The main objectives of Phase 1 were outlined: to improve safety and multi-modal connectivity and access. The existing roadway conditions were presented including current roadway profile, traffic counts, and crash data.
5. The project goals and proposed plan elements were outlined, including an explanation of the project deliverables that will consist of (a) roadway / streetscape schematic level design, and (b) land use and design recommendations for a Corridor Overlay Zoning District.
6. Existing Conditions along Phase 1 of the corridor were mapped, including zoning, pedestrian facilities, and community points of interest.
7. The team discussed the existing conditions during a “fly through” of the corridor using Google Earth.
8. The streetscape design approach was explained by Nicole Young (SEPI) which emphasized the importance of understanding and integrating the user into the design of the roadway and streetscape. It was noted that the character of the corridor varies and this will not be a “one size fits all” approach; rather the streetscape design will respond to the surrounding uses (current / future), with the intent to unify the corridor and create safe modes of travel for all users.
9. The following comments / questions were noted following the presentation:
 - a. Margaret Skulnik: Noted that the high incidence of accidents at the intersection of Oak Street may be exacerbated by the extreme angle of that intersection.
 - b. Tom Flood: Noted that the University developed a Bike/Ped Plan for a section of Haggard Avenue between Oak and York Streets. A survey was done for that study and it can be made available to this team as needed.
 - c. Ed Madren: Noted that the waterline in Haggard Avenue is currently in the planning stages for replacement; and encouraged a coordinated effort for construction.
 - d. Kathleen Patterson: Encouraged the team to consider burying overhead utilities as part of this project, especially in the downtown core.
 - e. Pam DeSoto: Provided clarification that the Overlay District recommendations included in the scope of this project are intended to be a framework that will be used by a separate planning consultant to develop the overlay district zoning language.
 - f. Michelle Suverkrubbe: Requested that if any participating organization has redevelopment plans for the property along the corridor that those plans be shared with the SEPI team.
 - g. Tom Flood indicated that the Campus Master Plan is available online and that it would be beneficial for Brad Moore, University Architect to attend the charette.
 - h. Wannetta Mallette: Inquired if a cost estimate and statement of purpose and need (for SPOT 7.0 funding) will be provided. Rajit Ramkumar added that a high-level cost estimate could be provided (i.e. cost per mile).
 - i. It was noted that the Burlington Bike/Ped Plan can be found online.





- j. Kathleen Patterson shared links via the Chat function during the meeting, as well as through emails after the meeting, to the Gibsonville Bike Plan (under development), Gibsonville Comprehensive Pedestrian Plan (2014), Burlington Pedestrian Master Plan (2012), and Burlington Greenway and Bicycle Plan (2017).
- k. Communications with Brandon Parker after the meeting indicate that the Draft Gibsonville Bike Plan is slated for Council review in Sept/Oct. He also indicated that Gibsonville recently submitted a multi-use path for Burlington Ave., connecting Haggard Ave. and downtown Gibsonville through the BGMPO Spot 6.0 project review process.

Prepared By: Nicole Young 07.27.2020; Reviewed/edited by Michelle Suverkrubbe 07.29.20



Town of Elon – Haggard Avenue Corridor Study, Phase 1 Public Meeting (9-10-20) Summary Report

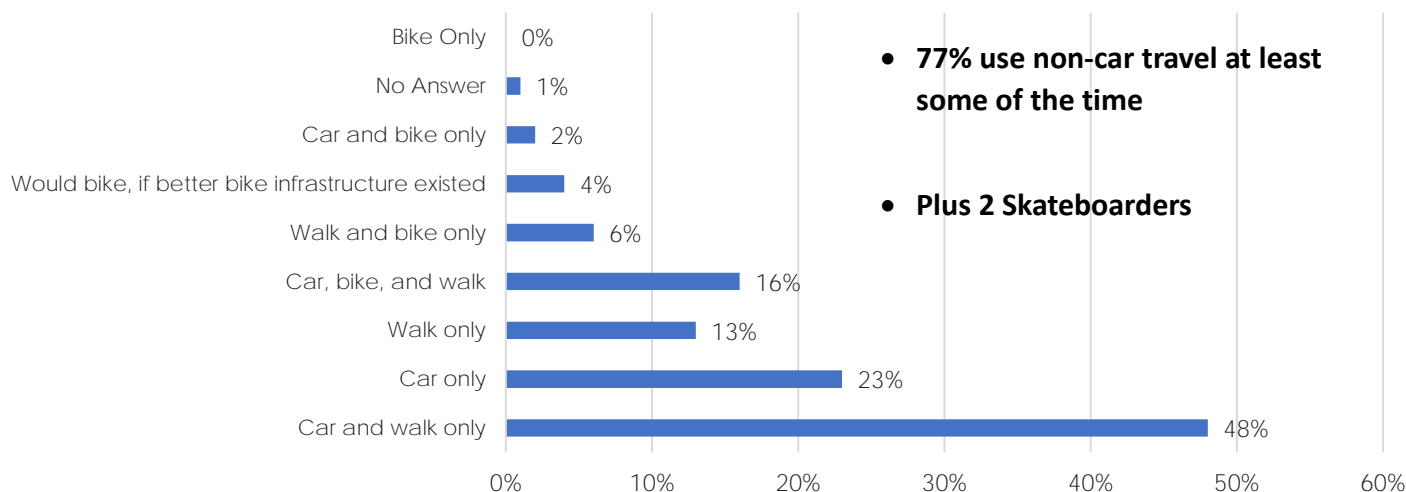
EXECUTIVE SUMMARY

Public meeting #1 for Phase 1 of the Elon – Haggard Avenue Corridor Study was held virtually on Thursday September 10, 2020 (Via GoToMeeting, hosted by SEPI Inc.). The purpose of the meeting was to introduce, educate and receive public comment on improving the safety and multi-modal connectivity/access of 0.75 miles of East Haggard Avenue (SR 1455) between N. Antioch Avenue and York Road in the Town of Elon, NC.

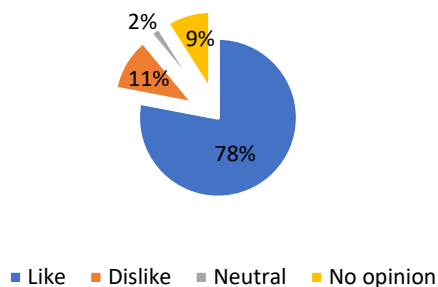
In total, 85 comments were received between 9/25/20 and 10/6/20 through an online survey available on the Town's Project Website¹.

The main results of the survey are shown through the following graphics. The remainder of this report provides detailed results of the survey results.

How do you use the existing corridor?



Overall like or dislike of corridor

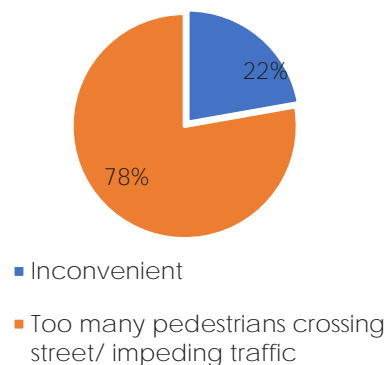


*Majority (78%) Like
the Existing Corridor*

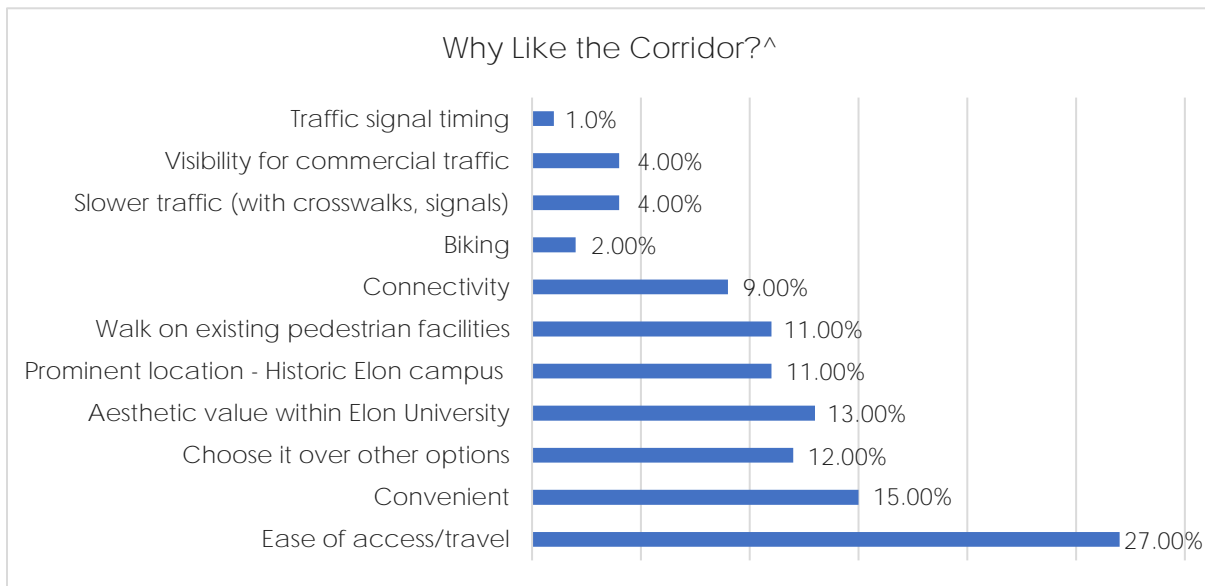
AND YET....

*92% of Respondents were Concerned
with the Existing Corridor*

If dislike, why?

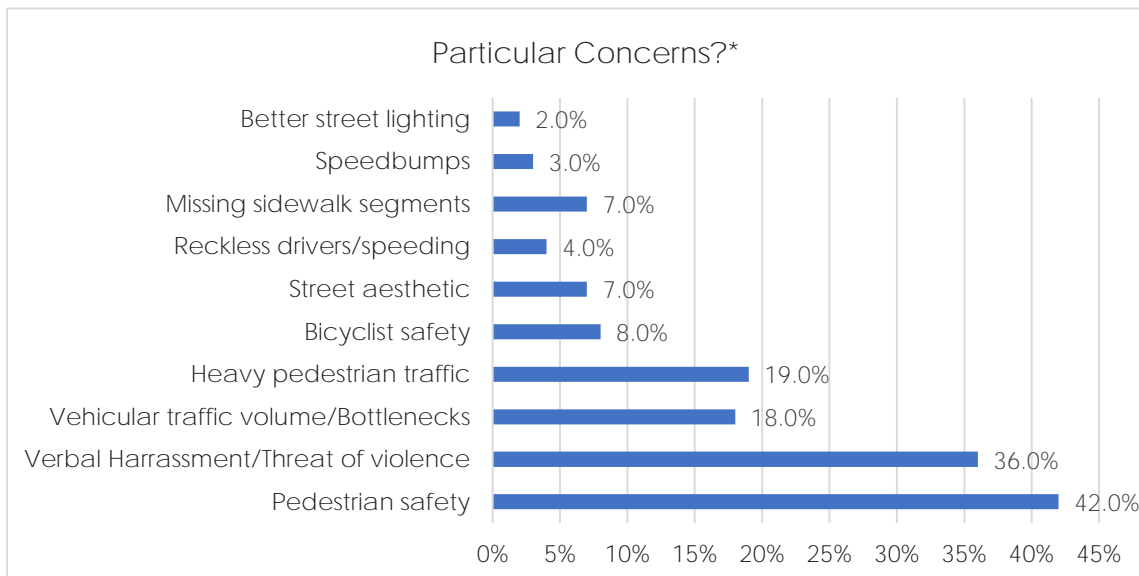


¹ <https://www.townofelon.com/haggard-avenue-corridor-study/>

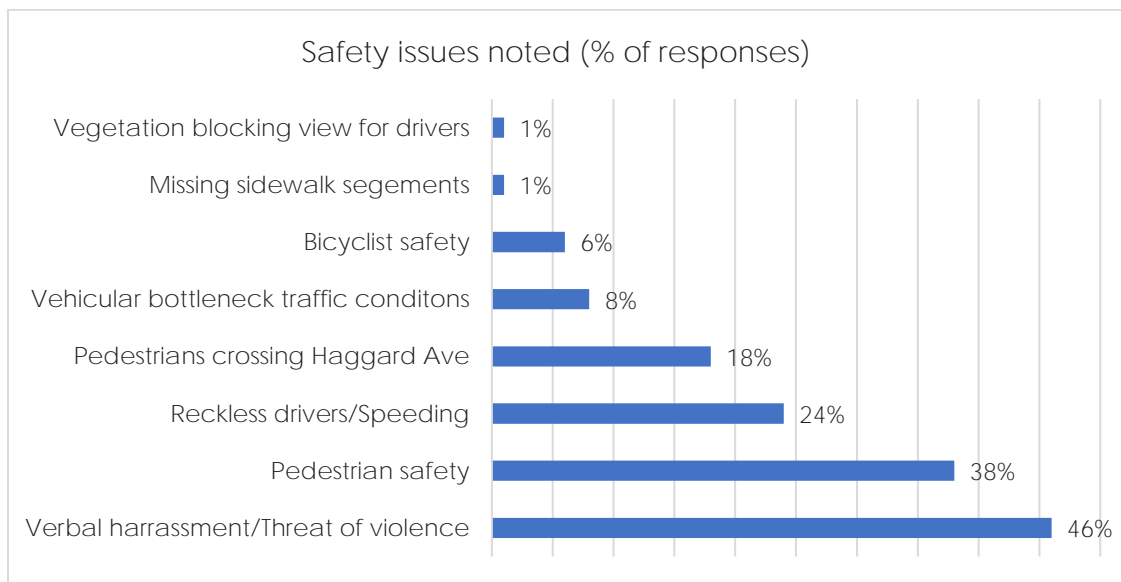


^ - of those who liked the corridor

*Of those who Dislike the Corridor,
73% Identify Pedestrian / Vehicle
Conflicts as Reason*

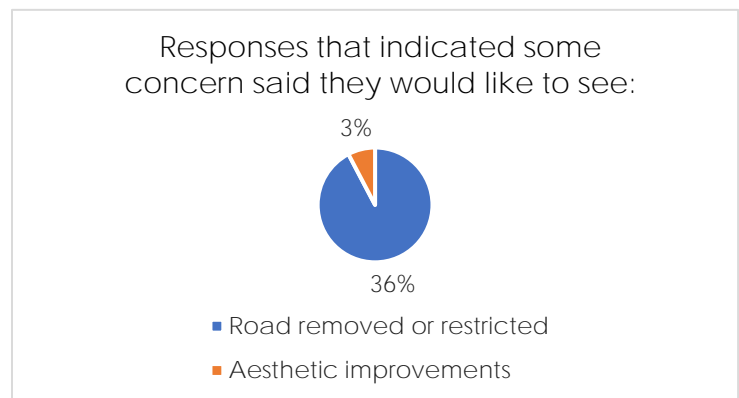


* of those who voiced concerns



Road Closure Comments

It should be noted that right before this project was announced and the public comment questionnaire made available, some events occurred in Elon that affected the survey results. This included a "Trump Rally" that consisted of a caravan of vehicles that traveled along Haggard Avenue on the west end of the project area. By several accounts and supported by video, the participants engaged in hate speech and other obnoxious and harassing behavior, and since that day, survey submissions went from one to over 30. Most of the comments at that time came from students who witnessed or are aware of the incidents (apparently some of the participants came through a second time later in the day). Consequently, the number of early comments received were largely focused on this experience and expressed strong support for closing the road to vehicular traffic as the primary solution to the problem.



While fewer of the comments received closer to October 6, 2020 (the end of the survey) were a response to these pre-election protests and events, the Town reports a history of catcalling and other types of harassment from drivers along Haggard in the past, so these activities are not isolated. The following summary of public comments therefore reflects the Town's desire to discuss the merits/detriments of closing any portion of the corridor.

Reasons expressed in the survey for eliminating vehicular traffic and close Haggard Avenue as a public road:

- Open roadway is safety issue / a danger to students, faculty, staff and pedestrians:
 - "Take your life in your hands" if pedestrian or bicyclist.

- Unsafe due to non-university vehicles using road to politically protest and verbally harass minorities, LGBTQ and females.
 - Lots of crashes and near misses / very unsafe - high pedestrian volumes and speeding vehicles.
- Would eliminate traffic congestion/improve traffic flow from waiting for large groups of students to cross the road.
- Closing of adjacent Elon Elementary School makes it a less important street for local traffic. With new East Dorms there now, and a large new quad in near future, now is the time to reimagine this section altogether.
- Speeders are common (in spite of speed bumps).
- "The hill and the curve in this section make it difficult to see pedestrians".
- Roadway perceived as part of campus, not public road and should not be open to public vehicle traffic:
 - Busy road through "the center of campus" is unnecessary
 - This is "the busiest / main part of campus"
 - "Public access prevents the University from fully securing the campus"
 - Roadway "breaks up campus feel"
 - Making pedestrian only would "enhance the campus climate"

Reasons expressed for remaining open and retaining vehicular traffic:

- Traffic volumes have decreased with the opening of University Drive.
- University Drive is an acceptable bypass for traffic concerns.
- Retain easy access from downtown Elon to businesses on the far end of W Haggard and housing of many Elon students who live in the apartments and houses on E Haggard.
- Road belongs to all of Town, not just University.
- University controls too much of Town.
- Road should be upgraded, not closed, to make a welcoming entrance / gateway into the community and Town.

Specific reasons mentioned for keeping it open:

- to avoid other alts that require crossing train tracks.
- to provide delivery access to Univ facilities, businesses and churches.
- to provide convenient access to and through campus and to surrounding areas/towns.
- to avoid moving traffic (and harassing conflicts) to surrounding neighborhoods.
- to retain access to Community Life Center (used by public for community meeting space).

Road Improvement Comments

What existing elements should be eliminated?

- Too wide for traffic volumes (especially 3-lane section)
- Speed bumps – they damage cars
- Overhead power lines

What existing elements should be retained?

- Scenic views of architecture / downtown / campus
- Gateway to / from Town and to/through University
- Street trees
- Sidewalks

- Streetlights
- Traffic lights / signals (to protect pedestrians and slow traffic)
- Good signal timing
- Existing crosswalks
- Raised crosswalks/ speed humps that help slow vehicular traffic

Issues to be Addressed by Corridor User

Drivers:

- Pedestrian congestion / too much pedestrian traffic (even in crosswalks) when school is open
- Too many crosswalks and students still cross between them
- Distracted pedestrians and those walking within the roadway causing traffic jams and safety issues
- Missing signage / other indicators of pedestrian crossing
- Speedbumps slowing down traffic flow

Pedestrians:

- Reckless and speeding drivers
 - Too high a speed limit
 - Roadway too wide (encourages speeding)
- Narrow sidewalks
- Dangerous / steep culvert wash out & drop off adjacent to sidewalk (@ 715 E. Haggard)
- Gaps in sidewalk / missing connections
- Sidewalk placed behind curb makes you walk very close to the road
- Too dark at night / needs better lighting
- Blind entrances and no pedestrian signals
- Lack of sidewalks on the south side of the road with the Carolina Biological Supply
- No crosswalks east of N Oak Ave

Bicyclists:

- No dedicated/stripped bike lanes, forcing bikers to use the street or sidewalks, if they exist.
- No room for cars to give bikes space
- Difficult to cross with a bike – aggressive drivers don't want to stop.
- Missing bike friendly roads that allow connection from downtown Burlington to Elon Campus.

Property Owners / Businesses that responded, which may want to expand:

- Deep Roots Nutrition – Unknown location
- Beer Republic – in Phase 3
- Acorn Inn (301 W Haggard) – in Phase 2
- Simply Oak Boutique – On Lebanon, Not in project area

DETAILED SUMMARY

Project & Meeting Background

SEPI, Inc. on the behalf of the Town of Elon, is studying Phase 1² of Haggard Avenue in an effort to improve safety and multi-modal connectivity/access of 0.75 miles of East Haggard Avenue (SR 1455) between N. Antioch Avenue and York Road, including portions of Elon University Campus, Downtown Elon, and the City of Burlington. Study goals include the creation of a Unified Roadway and Streetscape Vision with conceptual designs, along with recommended standards for a Corridor Overlay Zoning District that will support the Plan.

The first public meeting for Phase 1 of the Study took place virtually on Thursday September 10, 2020 (Via GoToMeeting, hosted by SEPI Inc.), for the purpose of introducing and educating the public regarding the proposed project, as well as to receive public comment on the project. This summary report documents and quantifies all public input received anonymously through the Town of Elon's Project Comment Sheet Form, which was available on the project web site from 9/25/20 through 10/6/20 on the Project Website¹.

Notices and Advertising of the Public Meeting

A postcard notice advertising the meeting (including date, time, URL and project description) was mailed on August 28, 2020 to all property owners and tenants/occupants within a ½ mile of the project study area using the most recent property ownership and site address information on file with the Alamance County Tax Department. In addition, information regarding the public meeting was advertised on the project web site, shared online via the Town of Elon Facebook Page <https://www.facebook.com/TownofElon/> as well as via email to the Burlington Velo Club.

Presentation

The presentation included an introduction to the project, an assessment of existing conditions including traffic and safety, established shared goals and objectives, and project schedule. The presentation was followed up by a short question and answer session. A link was provided to the Project Comment Form for virtual meeting attendees to further provide feedback, if desired.

Q&A

After the presentation was completed, several questions were asked, and responses provided by project staff on the call. The following table paraphrases this conversation:

² The complete project area includes the entire length of E. and W. Haggard Avenues in the Town of Elon's jurisdiction (approximately 2.65 miles). To facilitate detailed study, it has been divided into three separate project Phases, with only Phase 1 underway at this time. The three different project phases are shown on the Haggard Avenue Study Phases Map, and described below:

Phase 1 – Antioch Avenue to York Road (0.75 miles) – CURRENT STUDY

Phase 2 – Western Gateway – Antioch Avenue west to University Drive/Burlington Avenue (1.1 miles) – Future Study

Phase 3 – Eastern Gateway – York Road east to University Drive/Webb Avenue (0.75 miles) – Future Study

Commenter	Comment	Response	Responder
Darrell Gauthier	<p>So, I have a couple of questions. The first question is of course, ultimately, Who's going to end up paying for the study and implementation? And the next question I had was Is the intention to not have any local traffic on Haggard? I felt it was curious on how you phrased a few things where you said driver and uber, but I didn't hear anything associated with continuing it as a local road. I'm not, I was opposed when we shut down railroad crossings. I would be opposed to anything that caused resistance. I have lived in Elon for 30 years and so I would be resistant to anything like shutting down the road for townsfolk.</p>	<p>The study right now, is being paid for through a grant that the Town of Elon has received. Later on, we would have to get this into the state transportation plan to be paid for by state or federal money. The improvements are not yet funded. We are not at this time considering removing local traffic. Are you of the opinion that you would like to see local traffic removed? I don't know if Pamela the Town planner would like to add to that; Pamela, would you like to add to that?</p> <p>There has been some discussion by the University in the potential interest in removing vehicular traffic along at least a portion of Haggard Avenue through campus. That has not really come up recently. I wanted to put it up front and center as a discussion point in this plan to get input and address it to see what those impacts might be. We feel those impacts will be quite large, particularly negative impacts to folks trying to reach our downtown and some other areas and then where will that traffic be routed to? Because there is not really a good alternative route close by. So, we are not expecting any sort of recommendation for closing Haggard to vehicle traffic. Regarding funding for implementation, we will look for any avenue towards funding. I am interested in advocating for Town investment, particularly in pedestrian improvements. They would be smaller in scale since we don't really have funds to pay for large scale improvements. I felt it should be a part of our annual capital improvements, of course not this year due to budget constraints due to the pandemic. But we hope to do incremental capital improvements to do 1 or 2 small projects a year and will look for outside funding wherever we can find it.</p>	<p>Michelle Suverkrubbe</p> <p>Pamela Desoto</p>
Gene Swift	<p>I have a question. You might have covered this earlier. I live in Phase I and I know that things have to be approved and various things have to happen, but is there a timeframe for phase I?</p>	<p>I will let Michelle add to this but the intent of this is to get a start on a plan, first identifying needs and deficiencies and then some recommendations for how we might address those through design. So that is what this plan will do. If you were here at the very beginning of the presentation, this will be done in 3</p>	<p>Pamela Desoto</p>

		<p>phases and this is phase 1. You've identified that this [phase 1] is where you are interested in, so we will do these incrementally and what we hope is a comprehensive design that gives us some continuity along the corridor and improves the safety for multiple types of users of the corridor. Implementation will be slow, no doubt, because it does require money. And what I would hope to see out of this is some prioritized recommendations for the three phases for where the greatest needs, safety needs are identified and then prioritize projects based on that and then look for money to do those. I would say that we would not see anything implemented for the next 2 years, but we will begin to look at smaller projects with town funding. If we look towards state or federal funding, that typically pushes the timeline out further, say 5 or 10 years. We do want to see improvements made quickly, it's just hard to say how long we can anticipate the process will take.</p> <p>I think Pam did great, if there are any other questions please feel free to ask now.</p>	Michelle Suverkrubbe
	<p>Is this a state-controlled road? I live near the Health and Science school and the reason I asked the question is that the portion of the road from Lawrence street on down is 35 mph speed limit. The reason I ask this is because I am a retired person here, and traffic is very heavy during school times and sometimes cars speed. I am not talking about a little over the speed limit, but I am concerned about the number of students, and a lot of people have been using the street as a drag raceway.</p>	<p>West of N Oak Avenue is Town-maintained. Okay sir, thank you for that.</p> <p>That is the kind of input we need, especially from folks who are directly impacted as you are. The section of Haggard Avenue between Williamson and Oak Avenue is town maintained and the remainder of the corridor is state maintained, so we have a little bit more control over what happens in the town-maintained section.</p> <p>Hopefully you all can see the map where it shows the town-maintained section. Hope that helps.</p>	<p>Michelle Suverkrubbe</p> <p>Pamela Desoto</p> <p>Michelle Suverkrubbe</p>
Darrell Gauthier	<p>How did you choose York to be the terminus of phase I, knowing that there is somewhere about a thousand student</p>	<p>I broke this up into 3 parts and went after some funding through a regional transportation agency – the Burlington Graham Municipal Planning Organization – and we are limited to a project that did not exceed \$50,000, so I</p>	Pamela Desoto

	bedrooms further down Haggard?	knew we could not do the entire corridor for that, so we broke it up into 3 phases, and we chose the middle section – with input from town and University staff – that section seemed to be the most critical because of the high number of pedestrian users and also because we knew there were some upcoming development projects along that section of the road. Phase 2 we believe we will be able to begin that in 2021.	
	I see phase I but where is phase 2?	Let me get the map back up for you, sir. Phase 2 is on the map, it goes from Antioch, west to University Drive.	Michelle Suverkrubbe
	Okay I'm talking about East.	That is Phase 3, we will do phase 3 after phase 2. It extends East from York Road to NC 87. It will be middle to later of next year 2021. We are looking at the edges of the corridor in the Burlington area, but right now we are focused on Phase I.	Michelle Suverkrubbe
		It is dependent on funding, since our fiscal year begins at the beginning of July. Phase 3 was not budgeted in our current budget. My intent is to ask for the money to do phase 3 in our next budget, which begins July 2021. If that is approved by our board of alderman, then we could begin that right away. They do, however, need to run consecutively. With phase 1 finishing up later this year or in early 2021 and phase 2 following that, then phase 3 could potentially begin sometime in the middle of next year, but certainly after the July 1 st budget begins.	Pamela Desoto
Ralph Farwood	I am a little disappointed. My wife told me she was heading down Haggard towards the University and she saw a big group of students walking in the road down to fat frogg. The other thing was development in that area could be attracted if we built more sidewalks. So hopefully Phase 2 will come along very quickly after the first phase because I think it [phase 2] will be important to the town because of the safety of students who walk along the edge of	Ralph, I appreciate your comment, I will add your name to the list of folks who have mentioned the need for a sidewalk between fat frogg and manning and as our MPO representative is on the line I believe, we have asked for federal funding/federal highway dollars to put in a sidewalk just along that section of Haggard, but we are waiting to finish this plan because we might need something other than a sidewalk like a multi-use path or something, but we do know that it is an area of great need given the poor conditions and there is a lot of pedestrian traffic, so we are trying to hit this from multiple fronts and we appreciate your interest in it.	Pamela Desoto

	the roadway and as well as the railroad. There is a sidewalk missing from fat frog to manning.		
Claudia Sparks	<p>I agree with Mr. Swift, I think speed calming is needed for the corridor. I walk the corridor with my kids, and I don't feel safe, it is so narrow unless you are walking on the University side, there are cars speeding and I just don't feel safe. The area of phase 1 walking past the old elementary school the sidewalks are pretty narrow, and you are close to the road where people are speeding past, so we are not even using that sidewalk anymore. My question though, what is the implication for landowners along Haggard Avenue with this project? Some of the houses are very close to the road. I heard you talk about the sidewalks (the yellow lines on the map) and some of them go through people's yards. Will the Town be asking for parts of people's land? How does that work?</p>	<p>Because this is a conceptual study at this time, we want to make sure that property owners are happy with where our conceptual placement of improvements may be, this is still conceptual though. When the project is funded later on, there will be more concrete designs, specific designs, once funding is available. That is the time that the project engineer will be working with the town or state DOT to talk to [property owners] about Right of Way or temporary access for putting in a sidewalk that may be in the public right of way, that is your yard, but is actually public right of way. Those things will all be addressed at a later date with more specific design. Right now, we are doing a concept design, but we are always trying to keep property owners informed in the case that you might want something different.</p>	Michelle Suverkrubbe
Kathleen Patterson	<p>Is there potential for traffic lights at the intersections or something to help with the crashes?</p>	<p>At this time, because we are not doing a traffic analysis as a part of this study, we will make note of areas where there will be a need for further traffic analysis and I think one of the key intersections is the Sheridan Place and N Oak Avenue, where we see a lot of traffic accidents and pedestrian accidents and bike crashes. When there is an actual design going forward, we will have traffic analysis that will look at the operations of existing intersections to see whether a signal is warranted. There are specific requirements under NCDOT to warrant a traffic signal. We will note comments from folks, but there will be a more specific traffic analysis with numbers of traffic volumes, turn lanes, timing, how long people are sitting at lights and what would happen if a new light was put in. Those are all things that are future</p>	Michelle Suverkrubbe

		elements of this study, but they will be looked at. We may look at re-orienting the driveway at Sheridan Place in our design. It's the specifics of the light – their placement, timing, the way traffic is moving through the light that we will not be able to get into right now, but we will look at that in our conceptual design.	
Darrell Gauthier	The intersection at Oak and Haggard has an issue regarding the stoplight. When you are traveling west on Haggard, approaching Oak, there is a large maple tree branch that hangs down so low and blocks some visibility of the light. You have to get right under it to see the light.	<p>Good input.</p> <p>Really good input, Claudia lives just a couple blocks from that intersection. And Oak comes in at an odd angle – not a typical 90 degree traffic intersection, but we can see if there is a way to remedy it [the tree branch], we will talk to DOT about that tree branch.</p> <p>This is Stephen with NCDOT - I will have our maintenance crews take a look at that vegetation</p>	<p>Michelle Suverkrubbe</p> <p>Pamela Desoto</p> <p>Stephen Robinson</p>
Gene Swift	That intersection at Oak and Haggard is very difficult coming east, especially for trucks trying to make that turn. I have noticed that if there is not heavy traffic, you sometimes have to back up to let the trucks make their turn – actually both ways. Has there been a study down at York? In the mornings and afternoons during work time, that is a terrific intersection for turns, you might have mentioned that earlier and I missed it. I really appreciate this virtual meeting. Its very informative and helpful. Again, thank you.	<p>Pamela, I am not sure if the University study that Tom Flood forwarded us had any traffic analysis in it?</p> <p>No, I don't believe so. But Mr. Swift makes a good point. I have been down there at 5pm rush hour and its kind of funny until you see it, Carolina Biological is right there and there are a lot of cars trying to make left and right turns on to Haggard from York during morning and afternoon rush hour, but the rest of the time I suspect its relatively low traffic. The rush hour traffic at that light does create some queuing and some hazards, but I don't think we have a traffic study associated with that yet.</p>	<p>Michelle Suverkrubbe</p> <p>Pamela Desoto</p>
Lisa Pennington	Please speak to the importance/consideration of art installations.	<p>Part of the streetscape that Nicole mentioned, the visioning that's going on for creating a sense of place, it often does include street art installations, but because that is sometimes a local driven effort, especially with money and design, I don't know if you Pam, have thought about street art along the corridor?</p> <p>We have recently just created an art and policy committee. We will be</p>	<p>Michelle Suverkrubbe</p> <p>Pamela Desoto</p>

		<p>having some discussions on this so I will try and bring those forward as well as recommendations to the committee for this project/corridor.</p> <p>One thing I used to do at the Town of Cary was gateway art features. We tried to encourage public art with a town committee that had an oversight function which looked at design. I know they were most of the time privately funded artworks placed on public land, so I don't know how that works but opportunities to include art work like that in gateways or other main locations could be a good idea. Nicole, in your experience, with other projects, how do you deal with public art?</p> <p>I think it varies depending on municipality and at this concept level, what we might do is locate areas suitable for public art whether it be a placemaking element or gateway element, as a way to welcome people to the Town, but it does vary from municipalities. Here in the city of Raleigh, there is a 2% development fee that contributes those funds towards public art, the developer pays into a fund that goes towards public art. For projects that are over a certain budgetary number, that goes towards public art. There is an arts commission and they put out a RFQ for local or national artists depending on the scale of that public art. So it really does vary, and as Pam talked about the recently formed committee, as they get their legs under them, we can certainly talk about how to incorporate that or at least talk about how we can include public art as a recommendation as we move forward into the next phases. So, there is definitely an opportunity for that.</p> <p>Yeah, I think it helps in terms of making a unique setting, because obviously art is always unique unto itself. But if there can be a theme for the corridor that if the town involves specific artists that can create a theme that meshes with the vision, then that can be a good thing to do. So those are good thoughts to put forward as we go into our charette with the stakeholder group to discuss what elements we want to incorporate.</p>	<p>Michelle Suverkrubbe</p> <p>Nicole Young</p> <p>Michelle Suverkrubbe</p>
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		<p>Yeah, and to keep in mind, art can take many forms. Art can be a pavement pattern; art can be an interesting crosswalk design. There are some cool stuff happening in downtown Raleigh. There are identified crosswalks, but they have different imagery that helps you get across the pavement. One looks like a hopscotch. You've maybe seen some public art on some bus shelters or incorporate public art as bike racks. There is a restaurant here in Raleigh at the site of an old Piggly Wiggly and they have bike racks that are the shape of pigs in commemoration of the old grocery store. So, that's where some creativeness can come in. You're providing the pedestrian element, and the streetscape element, but you're adding art to those elements rather than providing a specific space for something like a statue. So that's another way to think about it as well.</p>	Nicole Young
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Detailed Responses

Based on public comments gleaned from the submitted comment forms, several critical issues or common themes were identified and are discussed below. Details of responses to Questions 1 through 4 are provided in Appendix A, attached.

Question 1 – What do you like about the existing corridor?

Out of a total of 85 comments captured for question 1, 78% of all respondents (66 comments) indicated a general liking of the existing corridor, while 11% of all respondents (9 comments) indicated a general disliking of the existing corridor. The greatest reasons cited for liking the existing corridor include:

- 27% (23 comments) noted that that corridor provides easy access or travel.
- 15% (13 comments) indicated that the existing corridor is convenient
- 12% (12 comments) showed a preference for driving through the corridor.
- 13% (11 comments) noted affinity for the existing corridor because of its aesthetic value within the Elon University Campus.
- 11% (9 comments) thought that the existing corridor is a positive feature for Elon University because of its prominent location adjacent to the historical Elon campus.
- 11% (9 comments) indicated that they liked the pedestrian infrastructure or walking through the corridor.
- 9% (8 comments) stated they liked the connectivity to the surrounding area the corridor offered.
- 2% (2 comments) indicated that they liked the biking opportunities in the existing corridor.
- 4% (3 comments) noted that they liked the fact that the existing corridor had slow traffic due to pedestrian crosswalks and traffic lights.

- 4% (3 comments) mentioned that they liked the corridor because it brought visibility as well as consumers to their organization/businesses.
- 1% (1 comment) indicated that they were pleased with how the traffic lights were timed.

Of the 9 comment forms (11% of respondents) that indicated a general dislike of the corridor, the reasons cited include:

- 2% (2 comments) indicated that the existing corridor was not convenient.
- 7% (6 comments) that indicated a dislike of the corridor explicitly mentioned that there were too many pedestrians crossing the street, which impeded the flow of traffic.

Furthermore, 2% of all respondents mentioned that they did not use the corridor and showed a neutral indifference to the existing corridor. That leaves 11% who did not answer the question.

Question 2 - What do you not like, or are concerned about, regarding the corridor? What would you like done about it?

Out of a total of 99 comments captured for question 2, 91% of respondents (91 comments) indicated some dislike or concern for the existing corridor. Of the comments, the following issues were identified:

- 42% (42 comments) noted a concern for pedestrian safety regarding existing traffic patterns/conditions.
- 36% (36 comments) indicated a specific concern regarding verbal harassment or the threat of violence from outside agitators using the corridor.
- 18% (18 comments) mentioned a specific concern for vehicular traffic volume resulting in bottlenecks.
- 19% (19 comments) noted a concern for heavy pedestrian traffic crossing Haggard Avenue, including some haphazard crossings by unaware pedestrians.
- 8% (8 comments) mentioned concern for the safety of bicyclists using the existing corridor, due to the lack of bicycle infrastructure.
- 7% (7 comments) indicated a concern related to the aesthetic nature of Haggard Avenue or how it could be improved.
- 4% (4 comments) explicitly noted reckless drivers or speeding vehicles as being a concern for the existing corridor.
- 7% (7 comments) noted sidewalk gaps or sections of Haggard Avenue that lacked sidewalks on both sides of the corridor, making it harder for pedestrians to walk to and from campus.
- 3% (3 comments) mentioned speedbumps as a concern. With 2 comments noting that the speed bumps were damaging to their cars and 1 comment mentioning the need for more speed bumps.
- 2% (2 comments) indicated the need for better lighting for sidewalks and pedestrians.

Of the comments that indicated concern for the corridor, several comments mentioned what they would like to be done:

- 34% of all respondents to question 2 (34 comments) mentioned explicitly that they would like to see vehicular traffic restricted or completely cut off to the section of Haggard Avenue between N Williamson Avenue and Oak Avenue.
- 3% (3 comments) indicated that they would like to see improvements that build upon the aesthetic value of the corridor, such as street art, improved landscaping, or turning the section of Haggard Avenue between N Williamson Avenue and Oak Avenue into a landscaped pedestrian and bike concourse.

8% of all respondents to question 2 (8 comments) indicated no concern for the existing corridor. Of these comments, the following reasons are cited for keeping the corridor as it is:

- 1% (1 comment) noted that the corridor was useful to the community because of the way it engages non-university affiliated community members with Elon University faculty, staff, and students.
- 1% (1 comment) noted the concern for connectivity as a reason as to why the road should be left open.
- 7% of all respondents to question 2 (6 comments) indicated that they thought the road should be left as it is – open to the public.

Question 3 - Are there particular safety issues we should know about? If so, please provide details.

Out of a total of 78 comments captured for question 3, 94% (73 comments) indicated safety issues worth noting. The remaining 6% (5 comments) indicated no safety issues worth mentioning. The safety issues that were identified in question 3 include:

- 46% (36 comments) noted a specific safety concern regarding verbal harassment and violence from outside agitators.
- 38% (30 comments) mentioned that the existing corridor is a threat to pedestrian safety.
- 24% (19 comments) noted a safety concern regarding reckless drivers or speeding vehicles through the existing corridor.
- 18% (14 comments) mentioned pedestrians crossing Haggard Avenue in the campus area as being a safety issue.
- 8% (6 comments) noted that bottleneck traffic conditions along Haggard Avenue (specifically near the campus area) as being a safety hazard.
- 6% (5 comments) noted bicyclist safety and bicyclist accidents along Haggard Avenue.
- 1% (1 comment) noted missing sidewalk sections as presenting a safety hazard to pedestrians.
- 1% (1 comment) noted some vegetation that blocked the view of drivers pulling out in front of Skid's restaurant.

Question 4 - How do you use the corridor, including what modes of transportation you use when traveling the corridor. For example, car only, car and bike, walk, etc.

A total of 82 responses were collected for question 4. Answers are broken into the following categories:

- 48% of respondents (39 comments) use a car and walk only.

- 23% (19 comments) use a car only.
- 13% (11 comments) walk only.
- 16% (13 comments) use a car, bike, and walk.
- 6% (5 comments) walk and bike only.
- 4% of respondents (3 comments) indicated that they would bike the corridor if better bicycle infrastructure existed.
- 2% (2 comments) use a car and bike only.
- 0% (0 comments) use a bike only.
- 1% (1 comment) had no answer.

Questions 5 & 6 –

Do you attend Elon University?	
Yes	55
No	51

If yes, do you plan to stay in the Town of Elon after graduation?	
Yes	10
No	41

Question 7 – If you are planning to stay in the Town of Elon, do you currently own a home or property in the Town or plan to purchase a home or property?

Comment	Own Property in the Town of Elon	Own Property outside Town of Elon	Don't own property in the Town of Elon	Plan to buy property in the Town of Elon	Homeowner, no location specified	N/A
Total = 36	18	6	10	8	7	12

Questions 8 & 9 –

Do you rent a home or apartment in the corridor?	
Yes	24
No	79

Do you live in University Housing?	
Yes	24
No	66

Question 10 – If yes, which one?

Brannock	Danieley
Global Neighborhood	Danieley Center
Station at Mill Point	Global neighborhood
Oaks Neighborhood	Millpoint
Oaks	Oaks C (Apartment Manager)
Kenan Pavilion	A Loy neighborhood house
The station at Mill Point	global
Crest	Historic [campus]
Colonnades	Colonnades D

Questions 11 & 12 –

Do you own property in the corridor?	
Yes	3
No	96

Are you considering developing or redeveloping your property?	
Yes	3
No	80
Maybe	1

Question 13 - If you answered yes or maybe to question 12, are your plans consistent with current development regulations and existing zoning? Please tell us where the site is located, what you intend to develop, potential timing, and if you would like to be contacted personally.

We are planning to add an outdoor seating area behind our business, Beer Republic, as well as, potentially updating our exterior appearance

I own property on both ends of Haggard that are currently residential; some of which could be developed for various uses.

Yes, 301 W Haggard Ave

Questions 14 & 15 -

Do you have a business in the corridor?	
Yes	3
No	84

Are you looking to expand your business?	
Yes	1
No	65
Maybe	3

If yes, what is the name of your business?

Beer Republic

Simply Oak Boutique

Acorn Inn

Deep Roots Nutrition

Appendix A

Individual Responses from Questions 1 – 4

Question 1 Table -

Comment	Like	Easy Access/Travel	Convenient	Driving	Aesthetically Pleasing	Positive Asset for Elon University	Don't Like	Walking/Sidewalks/ Pedestrian Spaces	Connectivity to surrounding area	Too many pedestrians crossing street	Biking/Other	Slowed Traffic	Good for Visibility of Businesses/Churches	Doesn't use Street	Not Convenient	Well-timed traffic lights
Question - What do you like about the existing corridor?																
It is nice for driving but when racial, insensitive slurs, and cursing is yelled towards Elon students and faculty are used within this corridor it is not okay.	1			1												
The convenience	1		1													
The short section of Haggard that is in the middle of the university is really nice to look at.	1				1											
I like that much of Haggard has sidewalks, and that the road is generally wide enough for bikes to ride comfortably on the side of the road	1							1			1					

not much							1									
It allows you to cross campus easier and get to classes.	1	1														
It works	1															
I think it provides convenient access through campus.	1		1													
Speed bumps/pedestrian crossings to slow traffic								1				1				
Ease of travel		1														
I like being able to drive down Haggard ave from Front St to get to work at Elon University				1												
I used to like it due to convenience. Theses days that convenience has diminished due to the number of students making use of the crosswalks (and not making use of the crosswalks). Those areas include the two raised crosswalks in the middle of the campus, the intersection of Haggard and O'Kelly, and students crossing without a crosswalk near the old elementary school, just past the Haggard/O'Kelly intersection.							1			1						
I like the iconic view of campus from Haggard.	1				1											
I actually do not like this road, as it is often flooded with students.							1			1						
It provides a pretty view of Elon University's campus.	1				1											

It provides easy access for students living in the historic neighborhood to being dropped off in a safe manner and it provides a throughway for students coming from the student parking lot.		1														
I don't really use this street at all.														1		
It's a convenient way to get to the businesses on the way to the interstate	1		1													
It's convenient to get from my home to S. Church St. (I live off power line rd.)	1		1													
It provides easy access on the side coming from oak street. Removing the corridor would essentially split the campus/town in half. A large number of students live past oak street. Closing Haggard would make it more difficult to reach businesses/places on the other side of campus. I use this corridor multiple times a day	1	1														
It connects campus and town. Especially when you're driving, you can easily move back and forth from campus to town. It creates a feeling of openness, suggesting that the university is open & welcoming to everyone.	1	1		1	1											
It's easy to get to parts of campus and off campus. Especially oak hill and areas around there. Also, it's the closest route from millpoint to the mailroom.	1	1														

It's a road that gets me where I need to go.	1	1														
I am a member of First Baptist Church. Closing Haggard would negatively impact our members and potential members. Many live in the University Blvd./Gibsonville area and regularly use Haggard Avenue. In addition, if it was closed, we would lose all our visibility to passing public. We have been good neighbors for years and I hope our concerns will be given some consideration.													1			
Convenience and ability to move through town easily.	1		1					1								
I like how the sidewalks span the majority of the corridor	1															
Nothing.							1									
That the Town of Elon is reviewing Haggard Ave. and considering alternative routes to improve the safety of pedestrians.																
I like that it's an easy way for people to access and see the heart of campus	1	1				1										
Closing for lessons and student use is a great idea!						1										
Very convenient access for me.	1		1													
The ability to drive through campus because it's a fXXXing road that's meant for cars to drive on.	1			1												

It channels a lot of out of town traffic past our business as they travel to Elon U.	1												1			
Seems pretty necessary for commuting to different spots on campus. I think its a poor way to approach the issue of things like cat calling, its still gonna happen on other roads to we have to shut those down too? I think closing the road only serves to hurt the elon student body and is poorly thought out.	1	1														
I love walking to class and having drivers respectfully yield to pedestrians. I enjoy knowing that the drivers, both the Elon University Community and the presiding residents, acknowledge students and enjoy their active presence. I take for granted those who are cautious. I skateboard every day successfully across the Haggard Avenue Corridor. Most times I can time it perfectly as cars naturally are stopping; other times, I do have to abruptly stop due to a driver's negligence. Yet to be hit tho.	1							1				1				
I like the accessibility to Elon as a current Elon student.	1	1				1										
It's easy access when driving but I think if you made it only two lanes wide it would be better.	1			1												

I like very little about it, and I rarely drive the corridor between Williamson and the stoplight at O'Kelly Drive, even when classes are not in session and the students are gone. I'm an Elon employee, and I usually take other routes to get around and avoid the Haggard avenue corridor. I'll drive down to the drive that goes up to Rhodes stadium, or I drive over to Trollinger or Lebanon streets.							1							1		
Medeterranean deli (need more structures like that)	1															
I use Haggard Avenue to travel east and west in Elon. The alternatives are Lebanon and Trollinger and both of those are narrow and congested.	1	1														
I think the road provides easy (but unnecessary) access across campus.	1	1														
I like that Elon's campus feels connected with the corridor from town to town. However, I don't use it frequently because students often cross the street especially during class times and there is a large back up.	1					1				1					1	
I do like the small convenience of connecting one side of Elon University to the other, however, I feel like I mainly use the other side roads such as Lebanon mainly due to pedestrian congestion on Haggard.	1	1								1					1	

Nothing. It is bad for pedestrians and drivers.							1									
The road itself is well maintained.	1				1											
There are a lot of crosswalks to get across campus.	1							1								
The traffic lights are well-timed.	1			1												1
I love driving through Elon - it's such a beautiful campus!	1			1	1											
It is convenient to drive across Elon, but unnecessary due to other rides a block or two away that bring you to the same place.	1		1													
nothing, its inconvenient and causes a massive amount of traffic							1			1						
I like that it's well-connected to the surrounding area	1								1							
It's easy to drive across campus at night.	1	1														
It serves its purpose as a crosswalk.	1							1								
It provides a direct path to opposite parts of campus.	1								1							
It makes driving through campus easier by avoiding the train tracks.	1	1														
It makes driving across campus more convenient.	1		1													
It's convenient, but there are ample paths that can replace this for cars. It will still be available for bikes and walking, but most cars don't even drive through here to begin with because it is so slow.	1		1							1						

That it runs through the campus of Elon	1					1			1							
Convenience for Elon students to travel around campus.	1		1			1										
Nothing. It's horrible when Elin is in session and I avoid it.							1									
I like that I can get through Elon relatively quickly with minimal lights.	1	1														
Provides a thoroughfare to easily get from one side of campus to the other. For deliveries to any of the office buildings in the historic area, companies will pull to the side with flashers on to make deliveries.	1								1							
The existing corridor serves to quickly feed traffic between east and west campus. That's about all that I like.	1	1				1			1							
I drive down that road maybe 3 times a day. I use that road to get to class, food, see friends, and to drive to other places. I would be so inconvenienced if we couldn't drive down that road end, I don't really understand why it would need to be closed.	1	1	1	1												
Convenience of access instead of having to loop around the campus.	1		1													
It allows people to drive by and witness the beautiful Alamance Fountain and Young Commons. This is the hallmark of Elon University for sure.	1				1	1										

I love driving through campus and remembering my time at Elon. I go to church in Elon and drive down Haggard all the time.	1			1	1											
It is a convenient way to get from downtown Burlington to downtown Elon by motor vehicle.	1	1	1													
I like the raised crosswalks through the Elon campus which help to slow vehicular traffic in a high pedestrian-traffic area.	1							1				1				
It a nice artery that runs through Elon's lovely campus. Very walkable and lively.	1				1											
It is a short cut from Burlington to Elon.	1	1														
That it is one entrance to the Elon campus with the potential to be a wonderful entrance without car traffic. I live on S. Antioch Ave, around the corner.	1								1							
0							1									
The Corridor belongs to the entire Town, not just to EU or the parcels along it. This stretch of the corridor is generally nicely developed, although the road is way too wide for the traffic volume. It is a gateway into the community and sections further out should be upgraded to make a welcoming entrance to the Town.	1				1											

Plenty of room for cars, trucks.	1			1												
Leave it like it is. There is University Drive to help alleviate traffic through town, so leave Haggard open. The college rules enough of the town.	1															
It connects our great town with both Burlington and Gibsonville. It has safe sidewalks that are used by both Elon students and residents alike.	1							1	1							
The speed bumps and traffic lights slow traffic considerably.												1				
It allows traffic from all directions to access my business	1								1				1			
It is a nice, easy cut through for campus. Allows access to both ends.	1	1														
Is fine, has been there longer than I have.	1															
I like it because you can see the campus with ease.	1	1				1										
The section through the University is scenic. There are sidewalks along that stretch of the avenue.	1				1			1								
The ease of getting off University Drive and onto Haggard.	1	1														
N/a																
Total Number of Comments = 85	66	23	13	10	11	9	9	9	8	6	2	3	3	2	2	1
Percentage	78 %	27 %	15 %	12 %	13%	11%	11 %	11%	9%	7%	2 %	4 %	4%	2%	2 %	1 %

Question 2 Table -

Comment	Better Lighting												
	Connectivity through Town												
	Concern about speed bumps												
	Connected sidewalks (no sidewalk gaps)												
	Reckless or Speeding Drivers												
	Landscaping/Street art/aesthetics												
	Concerned about bicyclist safety												
	No concern/leave as is												
	Heavy pedestrian Traffic/Haphazard street crossings												
	Concerned about Traffic volume/Bottle Necks												
	Want road to be removed through campus or restricted												
	Concerned about verbal harassment/violence from outside agitators												
	Concerned about pedestrian safety												
Question - What do you not like, or are concerned about, regarding the corridor? What would you like done about it?													
The caravan that drove on that street really scared me and I was astounded at the lack of support received from our university during the event. I know many of my fellow students would also feel more comfortable seeing that road close down		1	1										
Racist, white-supremacist, neoconfederate groups and people from local areas driving through.		1											
I'd like it filled in to become a part of campus			1										

The road is not easy to travel by bike or walk because in some places you have to cross the street to continue walking. There should be sidewalks on both sides of the street. Some of the sidewalks are not well kept.	1						1			1			
Safety of Elon students. I would love it if Haggard could be blocked off between Williamson and Oak - either permanently, or during times of high pedestrian traffic. Now that the Elementary School has moved, blocking off Haggard seems possible	1		1										
I am concerned for my safety when walking across campus. I live in an apartment off campus and have to walk up and down Haggard every day to get to campus, which is dangerous in itself with no sidewalks, but I also fear crossing the street while on campus. After the white supremacists purposefully drove through Elon shouting racist slurs and "white power," I am of the mindset that the road needs to be blocked off and the parts of campus connected.	1	1											
I would like it closed. I have felt so unsafe as, a women walking and being catcalled by men in red trucks.		1	1										
I'm not.						1							
Leave it how it is						1							

As a student of Elon, I feel unsafe with the constant traffic running through campus. I constantly have to cross East Haggard for classes and some people stop and others don't. Additionally, the convoy that recently came through East Haggard was not safe and was dangerous for many students at Elon from minority and marginalized identities. I would like the section of East Haggard that runs from North O'Kelly Avenue to North Williamson be closed.	1	1	1	1									
This stretch of road has become unsafe. It should be closed to vehicular traffic	1		1										
Prefer it to be closed through the Elon campus			1										
3 lanes not neccessay - landscape, street art, periodic turnoffs available in middle lane to beautify main entrance to town/University								1					
It's become easier and faster to go around Haggard by University Dr, Lebanon, or Trollinger. I'm also concerned about the potential for conflict between local residents and Elon's students. It's my understanding that there have been instances of individuals driving directly through campus and yelling, sometimes profane or racist comments, at some of the students (even prior to the recent caravan). Personally, I'd close a portion of the road and let the University use the land for something else.		1	1										

Haggard brings too much traffic through the heart of the most pedestrian-intensive spot in Elon, the university campus. I think it'd be safer if traffic (particularly through traffic) could be re-routed or minimized. At some times of the year, it's already much faster to go around than through the campus. Why not encourage all drivers to do that?	1			1									
Whenever I drive through Haggard that runs through campus, I'm always worried about I might be going too fast over the speed humps and whether they will damage my car's tires. I'm also concerned about students crossing the street without paying attention.					1						1		
On a separate note, I have experienced unwanted and unwarranted catcalling and derogatory comments from trucks that drive through the Haggard corridor. In one instance, a man in a truck with Trump flags yelled expletives at me when crossing.		1											
I am concerned that I have almost been hit by drivers crossing the roads, and have seen many cars speeding through campus. I would like there to be permanent traffic lights along the road to direct pedestrian traffic, and perhaps more speedbumps added.	1			1							1		

It provides risk to Elon University students on a number of fronts: 1) A number of students over the years have been hit by automobiles. Cars passing through campus on Haggard Ave during class changes can be dangerous as cars get aggressive and try to shoot through gaps of students crossing the road. 2) It provides a platform for individuals to verbally harass students students/faculty/staff as they cross Haggard.	1	1											
I see nothing wrong with the street, it is used often and necessary for students to drive.						1							
I don't like that it passed through the middle of Elon. I think it is a safety issue and it allows anyone through our school which can make a lot of people unsafe.	1	1	1										
Now that the elementary school has moved, although it is convenient at times, it is also frequently a dangerous place for pedestrians. Not everyone stops for folks in the crosswalks and on more than one occasion I have been nearly hit by a car. If it could be closed from N. Antioch to Williamson, it might take a bit longer to go around this portion of campus, but it would be safer for all. (Eventually it would be good to build the ring road I saw in some plans.)	1		1										

It is too crowded and difficult to navigate at class times. I worry I will hit a student as they flood from one side to the other. Turning left off of Haggard onto N O'Kelly is a nightmare. Further the use of haggard and n O'Kelly roads by folks from outside the university community to intimidate Elon students is frustrating and scary. My husband and I have been yelled at or witnessed students being yelled at multiple weekend evenings over the past two years by men in pick up trucks.	1	1			1								
I am concerned with the sentiment Elon University has about shutting it down. Also the crosswalks are not well constructed (with the only exception being the one at the N O Kelley traffic light). It absolutely destroys vehicle suspension and impedes traffic when vehicles have to slow to a crawl to go over them				1							1		
Using the corridor for hate speech directed at students, staff, or faculty. I am a libertarian and fiercely support free speech... but not hate speech.		1											
I'm concerned about students not looking where they're going. Also I think that the corridor should be restricted to people with university parking passes			1		1								

There aren't any bike lanes, there are not lights for pedestrian crossings at multiple spots of the road, there are not sidewalks on the entirety of the corridor. Please add bike lanes, sidewalks and lights. It is the only road that quickly gets you from each side of campus and beyond, which is not entirely safe for pedestrians and bikers of a college campus. Having a main road for thru-traffic diverted away from the busiest part of campus would be safest for everyone.	1		1				1						
I'm very concerned about it being closed to car traffic. Then the University really would have more control of the town. Non University related people rely on that stretch of road to get around. It will increase traffic in area neighborhoods with people trying to get through as well as limit access to the Community Life Center for important community events.				1								1	
Haggard Ave. goes directly through the center of Elon University and makes students, faculty & staff vulnerable. The University is unable to fully secure the campus due to this public access - as evidenced by the convoy that traveled through campus and yelled threatening and abusive comments to students and staff members.		1											
There is a stretch of sidewalks on the western side of the corridor that don't connect. Community members have to walk very close to the road where the speed limit is as high as 45 mph.	1									1			

There needs to be campus police check pointing pass throughers. Must be a campus community member and show proof.	1	1	1										
Not 100% sure what the study is considering for the area of Haggard from Williamson to O'Kelly. I feel this area sees a great deal of pedestrian traffic and this section should be closed to traffic. Not sure what re-routing will have to take place and what that will do for other areas, but this strip is currently not safe for pedestrians and those on bikes.	1		1				1						
I don't like that it doesn't feel safe to combine a pedestrian-heavy area with motor vehicles. It would be safer for pedestrians to have this be closed to traffic.	1		1										
too much traffic with students crossing				1	1								
Needs to remain open public street.						1							
How about not closing a fXXXing road that is meant for cars to drive on.						1							
I dislike the look of the power lines.								1					
It is too crowded and difficult to navigate at class times. I worry I will hit a student as they flood from one side to the other. Turning left off of Haggard onto N O'Kelly is a nightmare. Further the use of haggard and n O'Kelly roads by folks from outside the university community to intimidate Elon students is frustrating and scary. My husband and I have been yelled at or witnessed students being yelled at multiple weekend evenings over the past two years by men in pick up trucks.	1	1		1									

Closing Haggard from basically McMichael Hall (or even East Neighborhood) across campus and creating a concourse (for use by walkers, runners, bikers, outdoor events, etc.) is an excellent idea. This was done years ago at Auburn University and it created a much more pleasant walking experience on special event days, but more importantly, normal class days.	1		1				1	1					
Nothing really, just shouldn't have been un authorized rally.		1				1							
The corridor is an amazing way to see the campus from your car. It engages the rest of the community with the school a little bit more; however, the community continues to display disdain for students with disagreeing values or lifestyles. Yes, it is their right to freedom of speech to use hate speech on public property. I am not saying that fault lies in one sect of the community. Tensions are high, but this has national public recognition leaving the possibility for expensive consequences.		1				1							
Racist comments, speeding, so many cops pulling people over (does not give off a message of safety), etc.	1	1											
I'm concerned about the amount of times I've seen students nearly run over at the University intersection. If you don't shut down the corridor, please put up signage about yielding to pedestrians.	1			1									

I do not like the fact that any car or truck can access a road that is placed in the middle of Elon University's campus. I am only a first-year at Elon University and men driving trucks have shouted slurs at female students, cat-called female students, and are able to access all parts of Elon's campus through Haggard Avenue, making students feel highly unsafe.		1											
It's too wide which allows for people to speed easily. It cuts through the middle of campus which isn't ideal for walking and keeping the campus connected. There's also only sidewalks spanning one side of the road.	1									1			
Congestion during Elon University class changes. Recommend making the section in the middle of campus (especially between O'Kelly and Williamson) pedestrian only.			1	1									
It's really dangerous for pedestrians, and pedestrian traffic creates bottlenecks between classes. Most drivers respect the crosswalks, but not all; many times I've watched drivers zoom by me as I try to cross at the Powell building or at the crosswalk near Alumni gym. In my opinion, the time has come to close the stretch of Haggard between Williamson and O'Kelly to car traffic, and make it a pedestrian street. It can be opened during certain times, like move-in day.	1		1										
Pedestrian safety	1												
Congested intersections				1									
The nature of the businesses- some are inconsistent with the direction the Town wants to go in													

People tend to drive to fast on both ends of the corridor. Slower traffic may help.									1				
The corridor concerns me to for two reasons. The first is that students often cross the road leading to blockage on the road and a potentially dangerous situation for pedestrians.	1												
Second, the road can be (and recently was) used by a hate group to intentionally scare and harass students by driving through campus which is unacceptable especially on an unnecessary road.		1			1								
I am not a fan of the corridor. I don't believe that it is productive, as I mentioned above, because students create heavy flows of pedestrian traffic. Additionally, the corridor has often created unsafe circumstances due to the fact that many larger community members use the corridor and have been reported to harass students. It no longer serves a purpose as a gateway, but rather, is a street I would prefer to avoid because I do not feel safe using it when walking.	1	1			1								
I do NOT think that it is a safe road. There have been repeated instances of students and other community members being harassed while walking on the sidewalk of Haggard or across campus. I am particularly concerned about the strip of Haggard between Williamson and O'Kelly where students walk between classes. The parade of Neo-Confederates that used this road is only the latest example of safety concerns regarding this road.		1											

The safety of students and pedestrians. Personally, I have almost been hit by cars on multiple occasions, and I have friends who have been verbally harassed by drivers. The road is also bad for drivers due to the high volume of pedestrian traffic at certain hours of the day. It takes longer than it should to drive through such as short length of road.	1	1		1	1								
There are no sidewalks on the side of the road with the Carolina Biological Supply and there are no crosswalks after N Oak Ave. I think that there should be a crosswalk so people that live in Provence can walk to campus if they want to.	1									1			
The Haggard Corridor needs to be closed to through track. On 9/19/20, but also throughout previous semesters, there have been racist incidents that threaten the safety of Elon University students and the town of Elon.		1	1										
The corridor should be closed to thru-traffic. After the incident on September 19th, 2020 where my fellow students were harassed by passing traffic that was not affiliated with the university, I do not feel safe having it as public domain. As long as there are those who would use it to inflict terror on the students here, it should be a protection measure for the students to have it closed to the public.		1	1										
racists using the corridor as a convenient means harass and threaten community members of color from their vehicles		1											
pedestrian safety	1												

Closing the area of the corridor from Antioch Ave to Williamson Ave is the best solution. It maintains vehicular accessibility to most of campus, but cuts off the area most used by pedestrians and makes more difficult the harassment of pedestrians in the middle of campus by people in vehicles.		1	1										
I do not like how easy it is for people to drive by and harass students nearly anonymously. I have seen cars with hateful symbols drive by and heard of many students being yelled slurs and catcalled on this ride. The neo confederate "parade" down this road exposed the dangers of it being open to through traffic. Cars yelled slurs and even through things at pedestrian bystanders.		1											
I think that closing it would solve a lot of traffic issues and would allow students to move more freely across campus. I think closing it (for most days or even between a certain time) would be a great idea			1	1									
It has a lot of traffic jams caused by cars waiting for pedestrians to cross, even though there are other routes that take less or similar time to use.					1								
It is dangerous for pedestrians, backs up traffic in between classes and makes it hard to get to N O'Kelley coming from the East, cars ruin the picturesque scene of young's commons.	1				1								
That non-university traffic can come through with no regulation.		1	1										

I would not like for Trump rallies to run through the corridor; this is terrifying to students and Elon students and faculty were harassed on Saturday, September 20th, 2020. This is not okay, in any regard, to allow students to feel as unsafe as they felt when the Trump rally happened. I would not like protests to be allowed on the corridor, or at the very least I would not like protestors to harass pedestrians.		1	1										
The traffic during class changes is tough for both drivers and students trying to cross the street. I will discuss this point further in my next question response, but female students and students of color are consistently and continuously harassed along the corridor from residents (not fellow students) driving through. Closing the corridor might be a traffic inconvenience, but it will make students on campus feel much safer.	1	1											
The traffic is not great and crossing is not very easy. When you're trying to cross, it creates a lot of traffic. I don't like how it breaks up campus and it's not aesthetically pleasing.	1				1			1					
I would like it to be blocked off. As an Elon student, it runs directly through our campus and it allows people to speed through campus, almost hitting people every day. Also, it also isn't practical for driving in the first place, especially during school hours. It takes so long to drive and having any urgency could result in someone being killed.	1		1		1								

I don't like that it goes right through the main part of campus and is often used to harass people. Also it can be noisy for people in classrooms		1											
The speed at which vehicles travel through campus, I think it should be made to a walking only road through campus.			1						1				
It makes me uncomfortable to see non-university affiliated people use it as students, including myself, have been harassed and catcalled and safety is on the line. I want to restrict access for more university use instead of public use if possible.		1	1										
The kids don't look when crossing the road. Traffic back up horribly.				1	1								
There is too much congestion between vehicles and pedestrians, especially during class changes. Many times, traffic is backed up for a long time waiting for pedestrians to cross.				1	1								
Williamson Ave to N. O'Kelley is honestly a danger to pedestrians. Depending on where the sun is in the sky pedestrians can be hard to spot due to glare. Lebanon is perfectly fine to drive through, as is driving past the lake. It take us a little out of the way, but for safety what is an additional 2 minutes, honestly? I would put up the barriers that can be lowered to make sure emergency personnel can enter with trucks.	1												

Vehicles exceed the speed limit regularly and have little concern for pedestrians. Vehicles that do slow for pedestrians tend to accelerate quickly over the raised crosswalk, which isn't safe. There's a stop light that serves no purpose. The road is very busy and gets backed up during major class changes.	1			1	1				1				
Even though crosswalks are clearly marked, many vehicles excessively speed on Haggard.													
Traffic flows and some people's inconsistency in yielding to pedestrians at the crossings. Not always safe to cross at times.	1			1	1				1				
I'm concerned about the safety of students who cross the road at all hours of the day. There have been a number of instances where students are verbally threatened by drivers passing by. The road is also not conducive to how much foot-traffic there is on Elon's campus, and does not make it bike-friendly either. I would like to see the road closed off between Williamson and N Antioch. This would create a closed campus that makes students feel safe to walk around campus and into town.	1	1	1				1						
I am scared of the racist white supremacists who drive though campus, harass others, and try to run over people . They need to go to jail for disturbing the peace and for hate speech.		1											

It is not bike-friendly or pedestrian friendly. I would love to use the new bike/walk path from downtown Burlington to get to Elon campus, but once I pass Loy Farm the roads are no longer bike friendly. A more bike friendly and pedestrian-friendly environment would encourage more environmentally-friendly commuting options.	1						1						
It should only be used for pedestrians' usage. Please shut it down to vehicles permanently. By doing this, you protect those enjoying Elon's downtown businesses and campus on foot or bicycle. Right now, it feels very unsafe. Please shut it down permanently to vehicle traffic.	1		1										
I'm concerned about the part of the corridor that runs through Elon University — as the campus grows, it seems dangerous for drivers and students to have the road run right through campus — I'd rather have Haggard closed to traffic and to be able to drive the speed limit, more safely, around the campus.	1		1										
I believe too much traffic flows through the Elon University campus area of Haggard Ave. Many drivers go too fast and do not yield to pedestrian traffic. It is generally unsafe. Additionally, each semester a handful of disruptive, vulgar drivers drive along Haggard and yell racist, homophobic, antisemitic and vulgar things to pedestrians. I believe the street should be closed during the academic year at a minimum.	1	1	1	1									

I would like to see this corridor reimagined so that all vehicle traffic is routed along S. Oak Avenue to Lebanon and Trollinger. Haggard would thus end at Oak Avenue for all cars, and a beautiful entrance to the college could be constructed at Haggard and Oak, welcoming pedestrians and bicycles.			1					1					
Freedom for political parades!!! Don't discriminate against Trump supporters. You are already in a corrupt state. Support good not bad.						1							
Sidewalks & streetlights are needed on both side of the road, even by Carolina Biologics. The paved road is too wide for the relatively small amount of traffic carries. No need for a center turn lane, or 20' wide travel lanes. Where the existing pavement is 40', it could be restriped with a landscaped (rain garden?) center boulevard strip (5' bike lane, 10' lane, 10' boulevard, 10' lane, 5' bike lane). Where turn lanes are needed, they can come out of the boulevard								1		1			1
Sidewalk at 715 needs to be addressed.										1			
sidewalks all the way down and better crosswalks, bike lanes all the way down							1			1		1	
As we have done to some degree, we need to make it a safe and appealing street for vehicles, pedestrians, and bicycles alike to move freely. It should include adequate lighting to permit users to navigate while dark.	1						1						1

There has been past discussions about creating a median in the center lane. I'm not sure if that would be too restrictive to residents that live along it now having to perform U-turns to cross over when they needed to turn left.				1									
There is significant foot traffic alongside and across Haggard, and times when students change classes are particularly busy. I'd like to see Haggard closed to traffic and reserved only for pedestrians and cyclists. This would enhance the campus climate and be better for drivers who are stuck for minutes waiting for large groups of students to cross the road.	1		1		1			1					
Closing part of the road will eliminate easy access from downtown Elon to businesses on the far end of e Haggard and housing of many Elon students who live in the apartments and houses one Haggard												1	
I think crosswalk lights to make a timed event for drivers and students would be helpful.					1								
I don't like it that the students think that they can walk out in front of traffic. They don't even look to see if anything is coming.					1								
I would like to see sidewalks extended to Huffines Road. There are too many crosswalks and students still cross between them. Maybe add a pedestrian bridge for students. I would also like a few more restaurants and shops.					1								
I would like it to be closed because the enabling of dangerous racist behavior to students and faculty		1	1										
Total number of comments = 99	42	36	34	18	19	8	8	7	4	7	3	3	2

Percentage	42%	36%	34%	18%	19%	8%	8%	7%	4%	7%	3%	3%	2%
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Question 3 Table -

Comment	Concerned about verbal harassment/violence from outside agitators	Concerned about pedestrian safety	Concerned about speeding cars/reckless driving	Pedestrians crossing street	Bottleneck Traffic	Concerned about bicyclist safety	No concern	Sidewalk gaps	Plantings blocking view
Question - Are there particular safety issues we should know about? If so, please provide details.									
People also drive very quickly down that road when there are pedestrians walking and I have almost been hit several times. Additionally during the caravan at least 6 cars drove through that red light by the circle K (I was present for 4 of them) and the police standing by did nothing so that additionally almost caused an accident. There is also video evidence (not mine unfortunately as I did not want to give the caravan more attention than it wanted) but there is plenty of evidence on Twitter	1	1	1						

Same as the two responses above. I feel unsafe at a school where these insensitive comments are made without any punishment	1								
reckless driving and harassment	1		1						
On any given school day there are often hundreds of students crossing Haggard every hour, and many of them are not the greatest at looking out for cars (bless their hearts). There have also been several recent incidents of drivers harassing students.	1			1					
The white supremacists driving through campus, not just this past weekend, but for the past year and a half, shouting racial slurs at students while walking and purposefully almost hitting students in the crosswalks.	1	1	1						
yes, there is always a man in a red truck catcalling women.	1								
No							1		
No							1		
The traffic backs up constantly because of students crossing through. Some cars just speed through and don't follow the pedestrian right of way. Some drivers are texting, which is a hazard to students. The convoy that went through East Haggard posed a huge safety risk to students with yelling and the throwing of objects at students with marginalized identities.	1				1				

Pedestrians are always at risk. In addition, the corridor has become a primary route for those who wish to harrass Elon students and staff members.	1	1							
Trucks/vehicles driving through catcalling/shouting at students (sometimes derogatory comments)	1								
I feel like I've already covered it, but I don't think it's safe for either the pedestrians or commuters to continue to allow traffic through such a high volume foot traffic area. I'm also worried about the safety of the students from individuals that don't care for them or have ill intent.	1			1	1				
Beyond the volume of traffic and pedestrians, there's the issue of people driving on Haggard (and nearby streets) with the intention of harassing or provoking students -- with cat calls, racial slurs, rev'd engines, and such. This has been an issue for the 15 years I've lived in Elon. The town (and the university) seem to just tolerate this, but it seems like something that traffic routing or calming could greatly reduce without too much difficulty.	1				1				

I think it would be beneficial to the Elon community if Haggard were closed to cars. I am concerned about students' safety while crossing the street. Also the traffic flow is often blocked when classes change because of the number of students crossing, which could cause traffic accidents. closing down Haggard through campus would also prevent people with bad intentions from driving through campus and threatening people walking there	1	1			1				
Speeding drivers, pedestrians not following traffic rules, and the racist/sexist drivers that speed through campus cat-calling and yelling slurs at pedestrians. This last issue has personally happened to me more than once, and makes me feel very unsafe on the campus.	1		1						
I mentioned these above. Automobile Traffic poses a risk to students/faculty/staff/community members crossing Haggard on the 4 crosswalks in this area. Several students have been hit by cars. Class changes can be dangerous. Additionally, this section has repeatedly proven to be used as a platform for individuals to shout hate speech at students.	1	1		1					
No							1		

I have to cross this street multiple times to get to class and work. I feel very unsafe if I have to cross it when it's dark outside. Some cars try to speed to avoid giving students the right of way.		1	1						
Pedestrian traffic—class time in particular makes it dangerous to cross through. I typically take a less direct route rather than drive through it				1					
More traffic-calming measures please. Despite the crosswalks and speed bumps, some people drive too fast.			1						
Ideas would be to narrow the street or add large planters.									
Unsafe for pedestrians because of blind entrances across the road and no signals above the road. Unsafe for bikers, there is no room for cars to give space.		1				1			
Increased speeding and traffic on surrounding roads and neighborhoods.			1						
Yes, this public access through campus causes safety issues and vulnerability to students and faculty. Also during this time, when the University is attempting to provide more outdoor spaces for classes and gatherings, this additional use of space would benefit the safety and health of those attending the University.	1								

The gap in the sidewalk feels like a huge safety issue for bikers and walkers. I am a female and a lot of cars honk at me as they drive by. Often I have people shouting sexist/inappropriate terms at me while I walk.	1	1				1		1	
Yes. White male truck drivers that harass women, particularly women of color or black women on this campus. We are scared to even leave our dorms especially after the Trump caravan incident where they yelled racial and sexist slurs at students. I've gotten 20+ reports about incidents other than mine, where a white male yelled that he wanted to pull my hair outside from his truck. This was within 3 minutes of me trying to just peacefully get back to my apartment	1								
As a staff member at Elon, I frequently feel that I am taking my life is at risk when I cross Haggard Ave. in front of the Alamance building. The strip from Williamson to O'Kelly is not safe for people on foot or on bikes.		1				1			
Cars don't always cede the right of way to pedestrians; pedestrians do not always pay attention and assume safety before stepping out into the crosswalks or walk against traffic lights when they do not have right of way.		1		1					

Only when students walk out in front of you while looking at their phones.				1					
It's a road. It has safety issues. Next question.									
Not that I can think of							1		
Pedestrian traffic—class time in particular makes it dangerous to cross through. I typically take a less direct route rather than drive through it				1					
Yes! On various occasions excluding the most recent convoy, I have witnessed and fallen victim to aggression and harassment from non-Elon University members of the community. Multiple occurrences a red truck has revved its engine and increased velocity towards pedestrians in anticipation to scare, antagonize, and humiliate. As the town of Elon increasingly neglects the students due to a four-year revolving door, incoming applications will decrease as word starts to spread that Elon isn't safe.	1	1							
Speeding. I actually witnessed a crash yesterday, which appeared to be two middle-aged men in trucks horsing around.			1						
Cars driving on this road have often shouted slurs and cat-called female students walking across campus.	1								

Cars spending. Heavy foot traffic with a lot of drivers on their phones			1	1					
Elon University students don't always look carefully when crossing, when students emerge from the historic campus side of the crosswalk near the gym it can be hard to see them. People who like to gun their engines aggressively to scare pedestrians at crosswalks are an increasing concern, as is the increase in hateful things being shouted from vehicles (not limited to Haggard, but a pedestrian zone might help).	1	1		1					
The safety issues are that it is a hazard for pedestrians, especially students who cross it every day to get to and from classes.		1							
Vehicles ignore pedestrian safety and right of way and speed through the section from Williamson to O'Kelly without regard for pedestrian safety.		1	1						
Both of the major intersections (Williamson and O'Kelly) are highly congested and it is difficult to determine who has the right of way. Would be nice if we developed roundabouts at those intersections				1	1				
The bushes in front of SKIDS are too high and create a hazard for cars pulling out from their driveway									1
Jaywalking is common.				1					

The corridor is a predominately pedestrian area, and a very busy one at that, meaning that cars driving through pose a risk to students, faculty, and staff at the university. Additionally, as there are other paths around campus, having a road through the center of campus is unnecessary and causes unnecessary safety issues.		1							
I have had multiple sexist and racial slurs yelled at me while walking down the corridor. As a university student, this is terrifying and difficult as it makes me feel unsafe on my own campus. While I believe we need to extend our connections to the greater Elon community, the corridor is one instance of bringing the community into our space that has negative repercussions for minorities and women to make them feel vulnerable. This question of comfort is also a question of safety.	1								

The Neo-Confederate group that hosted a parade through the center of campus yelling profanities at pedestrians and running red lights is a huge concern of mine and I worry that it will only get worse as we approach the election. I have friends that constantly are cat-called and harassed by strangers driving by. I hear stories of this daily. Closing the strip of road between N Williamson and N O'Kelly would create a safer community environment and would allow focus on greenway initiatives.	1								
Safety of pedestrians. Personally, I have almost been hit by a car on multiple occasions, and I have experienced trouble with pedestrians as a driver. There is not a lot of signage or other indicators for drivers that someone is crossing besides the pedestrian themselves.		1		1					
Additionally, I think that the road should be closed between North Williamson Ave and North O'Kelley Ave. I think that it can be very dangerous to cross-campus at high traffic times. Many of my friends and I have almost been hit by cars before. Additionally, the pedestrian symbol at the intersection of N Williamson Ave and Haggard Ave when crossing from Circle K to the Church never changes from a red hand to a walk symbol.		1							

I have almost hit pedestrians (and almost been hit as a pedestrian) countless times along that corridor, particularly on the crosswalks near Elon University Moseley Center and Alamance Building, because pedestrians and drivers alike are often careless in those areas. Because they are such commonly used crosswalks, traffic often backs up along Haggard Ave during class changes, leading to more impatience on drivers' parts.		1	1	1	1				
The neo confederate parade mentioned above.	1								
yes, if there are white supremacists are allowed to drive through campus that poses a massive risk to students, faculty, and staff of all identities	1								
Haggard has a lot of pedestrian use and their safety is often put at risk by cars coming through.		1							
Cars drive through there fast and they don't always see pedestrians or stop for them, which is illegal.		1	1						
People speeding through these areas while pedestrians are walking.		1	1						

<p>Crossing the street can be unsafe if people in cars are not looking out for pedestrians. Student's that go to Elon know to cautiously look both ways, it is usually drivers in the Burlington community that drive unsafely. The Trump rally that happened also involved many harassments to pedestrians for no reason. My friend had a milkshake thrown at her car by a car in the rally. My friend did nothing to cause this, she simply was driving and has brown skin. This is not okay for any community.</p>	1	1	1						
<p>Female students, including myself, have consistently dealt with truck revving, cat calling, and inappropriate harassment in our time at Elon - typically not from fellow students, but from local residents not associated with the university. Students of color have also dealt with harassment. I often do not feel particularly safe running or walking alone on campus because I know that on any main road, especially haggard and Williamson, I will most likely deal with some level of harassment.</p>	1								
<p>Biking is very difficult. There is no bike lane so you have to either go in the street or on the side walk and neither of those options are ideal. Crossing with a bike is also difficult because people don't want to stop for you.</p>						1			

Everything I said above rings true. Also the fact that this avenue provided easy access for hate speech protestors is unacceptable. Free speech is allowed of course, but for God's sake, protect the people who live in your town.	1								
Yes, while for the most part it is used by just people passing by, there have been countless instances of local people driving on the road and shouting racial and homophobic slurs. It's definitely a hot spot for harassment and there's nothing Elon U can do to protect these people since it's technically in the town of Elon's jurisdiction.	1								
Closing the street would allow for more social distanced walking as well.									
Catcalling, being followed, harassments from strangers to the university.	1								
Yes- I have an office right on East Haggard and witness many cars flying through this area. As a pedestrian, I have almost been hit on numerous occasions.		1	1						

There was a stalking incident that a student had to deal with where the same car would drive through at specific class changing periods in order to seek out this student. They didn't know the person in the car and Elon Campus Police and Safety finally were able to find him and pull him over and issue a no trespass. There are also several cars that drive through yelling at students with confederate flags trying to antagonize. With no road immediately through campus, we don't have to worry	1								
With distracted driving being more prevalent everywhere, it is concerning for the safety of faculty, staff, and students all of whom use this to get from one side of campus to the other for everything from tours to meetings to classes and meals.			1						
As this road is often busy with people in cars and walking to get to work or classes, it can be dangerous for pedestrians during times of a lot of activity during the day.		1							
Especially now that the Elementary school has been moved, there's no real reason to leave the corridor open to thru traffic. There have been plenty of bike accidents and driver-pedestrian accidents-too many to be acceptable now.		1				1			

The racist white supremacists that drive through campus are a serious safety issue. They are harassing students and almost ran over students this weekend.	1	1							
Every year vehicles from off-campus use the corridor to shout racist, homophobic, and sexist slurs at Elon students, driving up and down Haggard in apparent attempts to intimidate and harass students. This behavior could be mitigated by closing Haggard to thru-traffic and keeping vehicular traffic on the campus perimeter.	1								
The vocal threats and cat-calls made to pedestrians on these streets are frightening and need to be prevented and/or STOPPED!	1								
Many drivers go too fast and do not yield to pedestrian traffic. It is generally unsafe. Additionally, each semester a handful of disruptive, vulgar drivers drive along Haggard and yell racist, homophobic, antisemitic and vulgar things to pedestrians. Most recently trucks associated with the Trump Truck Parade on Sat. Sept. 19, some pedestrians were nearly hit and at least 2 trucks had people yelling at students and faculty.	1	1	1						

This section thru campus is a danger to pedestrians, day and night. In spite of the speed bumps, I often see speeders (including students) and I know that the hill and the curve in this section make it difficult to see pedestrians. The closing of the elementary school makes this a less important street for residents. With new East dorms there now, and a large new quad in near future, now is the time to reimagine this section altogether.		1	1						
None that I am aware of, other than lack of pedestrian and bike facilities.		1				1			
At 715 e Haggard culvert washes really bad. There is a steep drop off there where many of drunk college students have fallen down and passed out in the mans yard.		1							
Speed is an issue with all our streets. I think we see this straight away as an enabler for some to exceed the speed limit along that stretch.			1						
A recent caravan of alt-right agitators compromised the safety of campus and surrounding community members. This could easily happen again, and is just one more reason for closing Haggard.									

I also walk from campus down to Simply Thai and there is currently no safe way to do that. The sidewalk ends and cars speeding by me pose a safety threat. Students coming to and from campus buildings also are endangered by speeding motorists.	1								
N/A							1		
Students crossing between crosswalks.				1					
It makes it easy for neo-confederates to harass people on Elon's campus	1								
Total number of comments = 78	36	30	19	14	6	6	5	1	1
Percentage	46%	38%	24%	18%	8%	8%	6%	1%	1%

Question 4 Table -

Question - How do you use the corridor, including what modes of transportation you use when traveling the corridor. For example, car only, car and bike, walk, etc.	Car and Walk Only	Car Only	Walk Only	Car, Walk, and Bike	Walk and Bike Only	Would Bike if better bicycle infrastructure existed	Car and Bike Only	Bike Only
Comment								
Walk and car. However, there are several other roads that I can use to get around	1							
I walk from classes and I drive my car	1							
Walk			1					
I walk, ride a bike and travel by car.				1				

bike, walk, and occasionally drive				1				
I walk and I drive	1							
Car		1						
With my car to get to class		1						
Car		1						
I walk or drive.	1							
There is no detriment to closing the section between North O'Kelly and North Williamson. There are plenty of paths for students and drivers to traverse via other roads. This section is dangerous to students and pedestrians crossing the road as students frequently do multiple times a day.								
car and walk	1							
Car, walk (I'm a member of the Elon faculty)	1							
Car only		1						
Car, but without the corridor I would just drive around campus.		1						
Car or walk.	1							
Mainly walking, sometimes car	1							
I use the street mostly to cross campus by foot. I very seldom drive down the street because pedestrians do not cross carefully.	1							
I walk across the crosswalks on foot, golfcart, and bike. I also drive through that part of town as well.				1				
I use it with a car as well as walking, it would make life extremely hard to travel if it was closed to drivers.	1							

Walk			1					
car or walk	1							
I walk the corridor twice daily with my pets. I drive through a couple times a week.	1							
I mostly only use my car		1						
car, walk, run	1							
Car and walk	1							
Bike and drive.							1	
Car only.		1						
Walking, while visiting my daughter who is an Elon student.			1					
I walk on it several times a week. If the sidewalk was continuous I would bike on it daily.					1			
Walking			1					
Car and walking	1							
I primarily walk through this area of campus, but occasionally drive through as well.	1							
drive through to cut through campus		1						
Car and bike							1	
I drive on it. Because it's a road.		1						
car mostly, sometimes walking	1							
I usually only walk but if I need to go to the store my friends take me on this road			1					

Car, bike, skateboard, walking, food truck, rallies, protest, celebration, illuminations, field activities. The road is used inefficiently. It is perceived to be the fastest route from the Elon Bookstore to Grillworx; however, additional routes are abundant. One would agree on the reliance of the Haggard Avenue Corridor often causes congestion midday. Plus, the elementary relocated, with the help of the university, greatly decreasing demand for the street's relevant and necessary use.				1				
Walk, run, bike. I use it for crossing. To get to the fields for a workout, or to grab food (live in historic).					1			
Most of the time I walk, but every now and then I drive through.	1							
I walk across the corridor almost every single day.			1					
Car and walking.	1							
I work at Elon University, and cross Haggard often in the course of my work and when I am visiting businesses in Downtown Elon.								
I only walk across it when I have to, and when I do I try to go during classes, when there is a lot less automobile traffic. I rarely drive it anymore, but will do so once in a while, but only when classes are not in session (students are gone).	1							
Car and walk	1							

car only		1						
Bike and walk					1			
I sometimes drive through, only when I know classes are not taking place or else, I will get stuck on the road. Otherwise, I would walk down the corridor. If campus/Elon were more bike friendly with specific bike lanes, I would absolutely consider biking.	1					1		
I mainly walk through the corridor to and from my residence and classes.			1					
car or walking	1							
I drive through the corridor to get to different places on campus or to get to off-campus housing. I walk the corridor to get to Carlton and other academic buildings from my apartment.	1							
Car, walk, bike				1				
I have walked, biked on the sidewalk, biked on the street, and driven along the corridor.				1				
Walking and driving	1							
I avoid it as often as possible in my car, but I cross it walking every single day	1							
I typically use all three modes-car, biking, and walking				1				
I walk across it all the time. I only drive through at night because it doesn't get backed up then. During the day, I avoid it.	1							
Car and walk	1							
Car and walk.	1							

Walk, car, bike				1				
I use my car; I walk and bike when traveling the corridor.				1				
Walking, biking, and car.								
I think it should only be bike and walk only. Currently I do drive on this road, but if it keeps people on Elon's campus safe by blocking off this road, I have no problem taking a different route		1						
Walking and biking. Have almost been hit several times by distracted drivers.					1			
Walking mostly, occasional car to get to other side of campus.	1							
Car		1						
Mostly walk, but sometimes car	1							
I walk it and drive my car through it.								
Mainly walk and crosswalks are used by me.			1					
I currently use a vehicle to drive along the corridor and regularly walk across it.	1							
Mainly my car and walking	1							
Walking			1					
Car, bike, walk				1				
Mostly walking, sometimes biking. I wish there were wider pathways though for biking.					1	1		
I drive through campus for the most part. But I would change my route if needed to keep the racist white supremacists from harassing and trying to run over students.		1						

I drive along the corridor from my home in downtown Burlington to campus. I would like to bike, but do not feel safe biking on Haggard. I walk along Haggard in the Elon campus area when I am at work.	1					1		
Walking or running on the sidewalks.			1					
Car and walking	1							
Walk, bike, and car is how I use the corridor.				1				
I walk my dog on the sidewalks on both sides of Haggard here every day. Except on the south side where of course the sidewalks disappear between Lawrence and Oak and then again farther east towards York. Seems like the car lanes could be narrowed there and sidewalks improved on both sides. I see a lot more pedestrians in this corridor than I see car traffic, even during "rush hours."			1					
Car and walking	1							
Total number of comments = 82	36	13	11	11	5	3	2	0
Percentage	44%	16%	13%	13%	6%	4%	2%	0%

Haggard Avenue Corridor Plan, Phase 1

Town of Elon



DESIGN CHARETTE – NOVEMBER 16, 2020

SUMMARY NOTES

A design charette for Phase 1 of the project was held on November 16, 2020, at the Elon Community Church Life Center. The in-person charette was facilitated by the SEPI Design Team and Project Manager in a format that respected the guidelines for gatherings and social distancing established by the State of North Carolina, and the Town of Elon to mitigate the spread of COVID-19. Since these guidelines limited indoor gatherings to 10 people, the Design Team held two sessions for the charette. The morning session was attended by 5 stakeholders, and the afternoon session by 3 stakeholders, and each session also included 4 members of the Design Team¹.

The charette's intent was to engage the stakeholders to further develop design ideas for the corridor, present the feedback generated from the first public meeting, and discuss options for a potential Corridor Overlay District. A presentation, coupled with interactive, yet socially distanced activities generated discussion to inform the scale, and arrangement of streetscape elements for the corridor.

Character Areas

General character areas were identified for the corridor to provide guidance for different applications of streetscape elements. The existing, varying character along the corridor relates to the surrounding land uses and roadway design and provides a framework for the scale and location of streetscape elements. In Phase 1, the ±0.75-mile corridor from N. Antioch Avenue to York Road, we have identified two general character areas designated as Campus Scale and Suburban Highway. These descriptions refer to the character and scale of the streetscape and can accommodate a variety of design elements, respond to future development, and provide flexibility in the strategies to improve the multi-modal environment.

Within the character areas, there are existing zones that further define the corridor, based on patterns of movement and current and proposed land use. These include a

¹ The following stakeholders attended the morning session: Tom Food (Elon Univ.), Richard Roedner (Town Manager), Kathleen Patterson (Downtown Development), Blake Cashmore (Burlington) and Stephen Robinson (DOT). The following stakeholders attended the afternoon session: Brandon Parker (Gibsonville), Wannetta Mallette (BGMPO) and Josh Johnson (Elon and Gibsonville Town Engineer and consultant from Alley Williams Carmen and King). The Design Team was represented by Pamela DeSoto (Elon Planning Director/Asst Town Manager) and 3 SEPI staff (Michelle Suverkrubbe (PM), Nicole Young (PLA) and Jeff Westmoreland (PLA).

Campus Zone, Residential Zone, and Industrial Zone. A transition between each of these zones would better define the pedestrian, bicycle, and vehicular paths of travel by considering the volume of each mode of travel within and between each zone. Generally, the Campus Zone is heavily pedestrian-focused, the Residential Zone balances all modes of travel, and the Industrial Zone remains more vehicle-focused.

In the Campus Scale streetscape, which generally extends along the corridor from N. Antioch Avenue to N. Oak Avenue, the public realm favors the pedestrian. The primary land uses along this segment are University-owned, and are a combination of student housing, recreational facilities (tennis courts), and academic buildings. The University's Campus Master Plan shows additional development of housing, and support services in this area. The existing condition generates a high volume of pedestrians moving along and crossing the road, and with the future planned development, that volume is anticipated to increase. The existing sidewalks are narrow and placed directly at the back of curb; the combination of which creates a generally inhospitable environment for pedestrians. Currently, there are no designated on-street bike lanes, and the volume of bicyclists is low, which could be attributed to the fact that safe access for bicyclists is not available. There are opportunities to widen sidewalks, introduce medians and plant material, and enhance the users' experience in all modes of travel within the ± 60 -foot-wide existing right-of-way. An evaluation of the current pedestrian crosswalk locations compared to future development plans can be beneficial in consolidating crossings and improving safety and connectivity.

The Suburban Highway streetscape, which generally overlays the corridor from N. Oak Avenue to York Road, is vehicle-focused, with a wider roadway pavement section, higher vehicular speeds, and narrow sidewalks located at the back of curb, where present. The variety of land uses along this segment heavily influence the character and pedestrian environment, including single- and multi-family residential, religious institutions, vacant land, University-owned support services, and industrial uses. The pedestrian environment in this segment continues to be inhospitable, with a narrow sidewalk that has numerous obstructions within the path of travel, including utility poles, fire hydrants, and trash receptacles. There are opportunities to strengthen pedestrian and bicycle connectivity, to enhance the users' experience, and reduce the speed of vehicular traffic within the varying ± 65 -75-foot-wide existing right-of-way.

The existing conditions of the Haggard Avenue corridor greatly impact the strategy to improve multi-modal connectivity. Despite a fair amount of pedestrian and cyclist activity between N. Antioch Avenue and the residential complexes on the south side of Haggard Avenue past Lawrence Street, the pedestrian environment in most areas is unsafe and inadequate, or non-existent. In areas where a sidewalk is present, it is narrow and located directly along the back of curb, with the periodic presence of a

utility pole or fire hydrant in the middle of the sidewalk. A sidewalk does not exist on the south side of Haggard Avenue, between N. Oak Avenue and Lawrence Street. Bike lanes are not designated on the roadway, and the existing sidewalk width does not safely accommodate multiple modes of traffic.

In the Phase 1 segment of Haggard Avenue, crashes involving vehicles, cyclists and/or pedestrians are highest at the intersections of Oak Avenue and York Road, however crashes involving cyclists and pedestrians occurred at mid-block locations, and at the entry drive to the former elementary school. The speed of vehicular traffic between N. Oak Avenue and York Road is a significant factor in the safety and experience of pedestrians and cyclists. The lack of striping on the outside of the vehicular travel lanes along with pavement covering the gutter pan influences the perception of the road's 'highway' character and allows vehicles to 'float' within a wider lane. Despite a typical 5-foot-wide sidewalk, its location directly along the back of curb combined with high-speed traffic, and obstacles in the middle of the sidewalk (i.e., fire hydrants, utility poles, trash receptacles) create an unfriendly pedestrian environment. Bike lanes are not designated on-street along the entire roadway. Bicycles travelling on-street seem to compete with vehicles for safe space within the roadway, and when on the sidewalk, create conflicts with pedestrians.

Visual Preference Survey

During the charette session, a series of images containing various streetscape elements were used to engage with the stakeholders and begin to understand the various design elements that could be incorporated into Phase 1 of the corridor plan. The images presented can be grouped into the following general categories: *Crosswalks, Wide Sidewalks / Multi-Use Path, Separation of Pedestrian, Bike Lanes, Green Stormwater Infrastructure, and Median Plantings*. The imagery was presented on six display boards and participants identified images as 'favored' or 'not favored' by using green or red stickers, respectively.

The presence of crosswalks in the imagery was favored, and overwhelmingly so when the image included elements of pedestrian refuge, speed tables, and differentiation in pavement color to distinguish the pedestrian crossing area. Additionally, the use of bollards to identify the threshold between the vehicular travel lane and the pedestrian crosswalk was a generally favored element.

Responses overwhelmingly favored a widened linear path to accommodate more people. There was a clear preference for a widened sidewalk for pedestrians or a multi-use path for pedestrians and bicycles in the Campus Scale Area. However, a

multi-use path was also favored for the Suburban Highway Area between N. Oak Avenue and York Road.

Feedback about the images showing the pedestrian separated from other modes of travel was generally positive, particularly in instances where a planting area created the separation.

Separate bike facilities are favored, however preference varied between on-street bike lanes and a multi-use path depending on the character area of the corridor.

Generally, an on-street, designated bike lane was preferred in the Suburban Highway segment between York Road and N. Oak Avenue, whereas in the Campus Scale segment between N. Antioch Avenue and N. Oak Avenue, participants favored the use of an on-street bike lane or a multi-use path separated from the vehicular lane equally. In either instance, participants strongly favored situations where there was a clear distinction for modes of travel.

Imagery showing Green Stormwater Infrastructure (GSI) was generally favored, particularly when located in medians. Some varying opinion cited concerns with maintenance which can significantly impact functionality and aesthetics.

Median plantings were generally favored, particularly when used to create pedestrian refuge at crossings, as a device for traffic calming, and, combined with various landscape plantings, to reinforce the transitions between character areas along the corridor.

“Kit of Parts” / Schematic Applications

As a final component of the charette, the Design Team further engaged the stakeholders with an exercise that translated the existing conditions analysis and input from the Visual Preference activity into schematic applications for this phase of the corridor. Building upon the idea that the character along the corridor varies, the design solutions for improving safety and multi-modal access would similarly vary along the corridor. Key design elements, or “parts” were considered in a variety of combinations to achieve the desired pedestrian environment. The design elements, or “parts”, shown in the various combinations included: sidewalk, multi-use path, median, planting area with trees, planting area with low shrubs, planting area with lawn, on-street bike lane, and vehicular travel lanes. Conceptual roadway sections with different combinations of these design elements were used to illustrate the various ways the elements can be combined. In addition, the imagery from the Visual Preference activity informed preferred combinations of elements, including materials and placement of modes of travel. Specific imagery from the Visual Preference boards was identified by

participants for application at certain locations. The participants discussed the schematic section drawings, but specific sections were not assigned to segments of the roadway.

In general, the group supported the concept of reinforcing the character of the zones within the corridor by transitioning from a car-oriented to a pedestrian-oriented roadway between York Road to N. Antioch Avenue, respectively. From a design standpoint, this transition can be communicated with the use of plantings, the location of the sidewalk/multi-use path and bike lanes, and by introducing medians. Additionally, participants agreed that the intersections at York Road and N. Oak Avenue could be considered 'gateways' into town, and the campus area, respectively. The way to distinguish a gateway could incorporate signage, lighting, banners, landscape plantings, or a different roadway configuration. An opportunity for a potential traffic circle at the intersection of N. Oak Avenue was generally favored, with acknowledgement that needs further consideration and study by roadway and traffic engineers.

Further discussion revealed strong support for a clear delineation between vehicular and pedestrian movement, achieved with the use of medians with pedestrian refuge islands, bollards, and planting areas between the curb and sidewalk. Participants expressed considerable concern about the speed of vehicular traffic along the roadway and for the safety of all users. The use of traffic calming techniques was overwhelmingly favored, particularly the use of raised crosswalks and curb bump-outs in Campus Scale area, and medians to replace the center turn lane in the Suburban Highway area.

Schematic Design

To reinforce the character of the zones and establish the framework for more detailed design, the development of schematic (or conceptual) designs for the corridor were discussed with the participants. The intent of this phase of design is to create a general description of the proposed spatial arrangement and functions of corridor elements, and overall aesthetics.

Elements suggested by the committee to be included in schematic designs for the entire corridor include:

- Planted medians as a traffic calming device
- Reduction of the road from its existing 3-lane section to a 2-lane section
- Introduction of regularly planted street trees of varying canopy heights to provide all users with visual and spatial cues about an approaching decision point
- Where the tree canopy reduces both in size and spacing, the intent is to reinforce the presence of an upcoming intersection.

Campus Scale Schematic Designs

An initial Schematic Design for the Campus Scale area of the corridor between N. Antioch Ave and N. Oak Avenue was presented to the Committee. It recommended strategies to address vehicle-pedestrian conflicts, reduce crossing distances, calm vehicular traffic, and enhance the pedestrian and bicyclist experience.

This portion of the roadway is controlled by the Town of Elon, and all improvements will require their approval. The schematic design for this segment also illustrates a planted median to reduce traffic speed and decrease crossing distance with pedestrian refuge at potential mid-block crossings. Medians planted with small trees and low-growing shrubs lend additional spatial awareness for vehicles to reduce speed and increase awareness of other modes of travel. Where mid-block pedestrian crossings occur, plantings, pavement markings, materials changes, and signage can visually indicate the approaching crosswalk. The predictability created with these visual cues can increase pedestrian safety in a subtle but effective manner. The volume of pedestrian activity in this segment supports the recommendation for widened sidewalks, or a multi-use path. To improve the pedestrian experience, a wider sidewalk or multi-use path separated from vehicular traffic is recommended. The design also suggests improvements for bicycle access via a multi-use path or on-street bike lanes.

Additionally, the plan illustrates trees along the roadway that vary in size, spacing and location based on the visual cues desired for users. Where the tree canopy reduces in size, spacing, location and median plantings change, the intent is to inform users of an upcoming pedestrian crosswalk.

These plans also illustrate the realignment of N. Oak Avenue as it crosses Haggard Avenue, extending into Elon University property. This realignment, which is based on the University's Campus Master Plan, would provide an opportunity for a roundabout at the newly created intersection. This approach would require further evaluation and feasibility analysis by roadway and traffic engineers. A potential roundabout would calm vehicular traffic, eliminate the current skewed alignment of N. Oak Street, encourage a reduction in speed, create a transition between character areas, and serve as a gateway for the campus zone.

Suburban Highway Schematic Designs

The general elements desired in a schematic design for the corridor between N. Oak Avenue and York Road (Suburban Highway area) were discussed with the Committee, with strategies recommended to address vehicle-pedestrian conflicts, reduce traffic speed, and enhance the pedestrian and cyclist environment. Because this portion of the roadway is maintained by NCDOT, all improvements will require their approval.

It was expressed that the sidewalk on the south side of Haggard Avenue should be completed to strengthen pedestrian connectivity and access. Additionally, pedestrian safety and experience along the roadway can be improved by providing a wider sidewalk or multi-use path and by separating the walkway from the vehicular traffic with a planting area between the back of curb and walkway.

Intersection improvements were suggested at Lawrence Street and York Road to create safe, legible, and predictable places for pedestrian crossings, which may include distinct crosswalks, and/or pedestrian refuge within the proposed median in conjunction with roadway modifications. Signalization should also be evaluated through future traffic forecast and operational analyses (required during the next project phase). To provide full multi-modal access, the plan suggests a discernible area for bicyclists, either with an on-street bike lane or via an off-street multi-use path.

Corridor Overlay Zoning District

Upon conclusion of the design elements discussion, the charrette shifted focus to a discussion of an Overlay Zoning District that would codify the streetscape standards into the Town's new Land Management Ordinance (LMO), which is under separate development.

The question raised with the stakeholders was whether they felt a Corridor Overlay Zoning District was needed at all to control/implement the discussed streetscape design improvements. In other words, did they feel current regulations and requirements are adequate to implement the streetscape vision or are additional regulations needed through an Overlay Zoning District? To answer this question, the DESIGN Team facilitated discussions with each stakeholder group regarding current land use, access, setbacks and street design regulations and requirements, as summarized below:

Land Use

The first element to consider in any zoning district is the use of land, given that land development dramatically impacts the function and feel of adjacent roadways. To help determine if planned land uses and the potential for land use changes in the corridor may affect the streetscape, a potential infill map and associated parcel data (see table below) were displayed and discussed with each stakeholder group that highlighted the following:

- Vacant parcels

- Potential Infill sites - vacant or under-developed portions of currently developed parcels that could accommodate additional uses or be combined with adjacent vacant or underdeveloped land and redeveloped
- Future planned/designated land uses (from the Elon 2045 Envision Plan)
- Existing zoning (which reflects existing use)
- Parcel ownership and acreage
- Municipal jurisdiction boundaries

In total, there are 13 parcels that total 157.5 acres that have the greatest potential for additional development in the Suburban Highway (eastern) portion of the corridor. This includes 105.8 acres of PI (Public Institutional), 14.8 acres of Urban Residential and 36.1 acres of Light Industrial zoned land.

Specifically, there are the following opportunities for infill and/or redevelopment in the project area, which were reviewed with the Committee:

- Within the Town of Elon's Zoning Jurisdiction:
 - 3 vacant University-owned parcels totaling 2.1 acres that are zoned for Urban Residential uses;
 - 5 underdeveloped University-owned parcels totaling 105.8 acres that are zoned for Public Institutional uses;
 - 3 Privately-owned vacant or underdeveloped parcels totaling 12.7 acres that are zoned for Urban Residential uses; and,
 - 1 Privately-owned underdeveloped parcel totaling 0.81 acres that is zoned for Office and Institutional uses.
- Within the City of Burlington's Zoning Jurisdiction:
 - 2 Privately-owned vacant or underdeveloped parcels totaling 36 acres that are zoned for Light Industrial uses.

After the presentation, the stakeholders were asked if they felt the planned land use designations from the Elon 2045 Plan (which corresponds to the current zoning of the parcel) adequately controlled future land uses or if the proposed Overlay District would need to further address it. For example, could they recall instances where land use changes felt intrusive or undesirable in this portion of the corridor or do they see any current land use designations as out of place for the future vision of the corridor? To this, the participants in both sessions mostly indicated NO. It was also noted that the majority of the corridor frontage in this phase is owned and would be developed by Elon University, which the committee expressed confidence in to continue to develop in ways that benefitted the Town and surrounding communities.

The Town also remarked that its recently adopted Envision 2045 Future Land Use Plan (which generally matches existing uses in the corridor) did not perform a detailed evaluation of land uses for this portion of the corridor. There was, however, some discussion of whether the allowed uses in the current UR (Urban Residential) Zoning District would be appropriate/compatible in some areas and whether commercial/retail might be desirable or consistent. However, no specific changes to

the Future Land Use designations for any parcels within the corridor were recommended.

The Committee concluded that the potential Overlay District should not focus on future planned land uses but rather other roadway design factors, as discussed below.

Infill and Redevelopment Potential within Phase 1²						
PARCEL NUMBER	ACRES	OWNER	REDEVELOPMENT OR INFILL	LAND USE DESCRIPTION	ZONING	Future Land Use Designation(s)
8855373203	0.343591	ELON UNIVERSITY	Infill (Vacant Parcel)	VACANT LAND 0-9 ACRES	UR - Urban Residential	Neighborhood Living
8855570346	0.370682	ELON UNIVERSITY	Infill (Vacant Parcel)	SINGLE FAMILY	UR - Urban Residential	Multifamily Living
8855570350	1.413835	ELON UNIVERSITY	Infill (Vacant Parcel)	VACANT LAND 0-9 ACRES	UR - Urban Residential	Multifamily Living
8855571093	33.905707	CAROLINA BIO SUPPLY CO	Redevelopment	MANUFACTURING	LI - Light Industrial (Burlington Zoning)	Employment Area
8855670751	2.169675	CAROLINA BIOLOGICAL SUPPLY CO	Redevelopment	VACANT INDUSTRIAL LAND	LI - Light Industrial (Burlington Zoning)	Employment Area
8855471806³	0.19776	ELON TOWN OF	Redevelopment	EXEMPT	PI - Public Institutional	Conservation Area
8855264449	9.574475	ELON UNIVERSITY	Redevelopment	OWNED BY COLLEGE/UNIV/ACA	PI - Public Institutional	Institutional
8855388672	86.16	ELON UNIVERSITY	Redevelopment	OWNED BY COLLEGE/UNIV/ACA	PI - Public Institutional	Institutional/Conservation Area
8855585333	9.28563	ELON UNIVERSITY	Redevelopment	OWNED BY COLLEGE/UNIV/ACA	PI - Public Institutional	Institutional
8855588271	0.788949	ELON UNIVERSITY	Redevelopment	VACANT LAND 0-9 ACRES	PI - Public Institutional	Institutional
8855365957	0.81	FIRST BAPTIST CHURCH OF ELON I	Redevelopment	PRIVATE NON PROFIT	O&I - Office and Institutional	O&I - Office and Institutional
8855483160	4.951883	HODGE FAMILY IRREVOCABLE TRUST	Redevelopment	SINGLE FAMILY	UR - Urban Residential	Multifamily Living/Conservation Area
8855485191	4.44542	ISLEY JODI ANITA	Redevelopment	VACANT LAND 0-9 ACRES	UR - Urban Residential	Multifamily Living/Conservation Area
8855486068	3.294343	SWIFT R GENE IRREVOC TRUST	Redevelopment	SINGLE FAMILY	UR - Urban Residential	Multifamily Living/Conservation Area

² After the Charette, SEPI discovered that one parcel below the Lake Verona Dam on the infill map was hidden / not visible (#...1806). It is owned by Elon University (purchased in 1999) and from aerial imagery it seems to be used as a cell tower or communications. The infill parcel data contained here is therefore updated from the Charette using the most recent parcel data from July 2020. Apparently, the previous data used in the last version of the parcel map was from 2019 (the link to Alamance county open data site - parcel data – provided outdated data).

³ This 0.19 acre parcel is shown on the Infill Map because it initially appeared vacant, but is not considered likely to be redeveloped as it contains a cell phone tower and is designated for conservation.

Access

Good transportation planning acknowledges that the placement, size and alignment of new driveways and cross streets with along an urban corridor must be carefully planned and controlled, as they can either positively or negatively impact traffic flow, safety, development potential, environmental resources, and more broadly, community character. Regarding new driveways within the project corridor, the Committee noted that every legal parcel of land is allowed at least one driveway, plus new development could add additional driveways on parcels and/or intersections with the construction of new cross streets. It was also acknowledged that NCDOT will continue to control the number and location of driveway cuts and intersecting new roadways within its right-of-way.

As for new planned cross streets that may intersect the project corridor, the Elon University Master Plan shows a new "Elon University (EU) Collector" beginning on the north side of East Haggard Avenue, across from Elon Village Homes and extending north to University Drive. This future roadway, along with other "ring roads" planned by the University further to the east in the Phase III project area (also shown on the Future Land Use Map), are intended to provide access to northern and eastern portions of the University to help bypass (and therefore reduce vehicular traffic) in the congested Campus area. However, it was also noted that the EU Collector is planned to be located very close to a stream, its culvert under Haggard, as well as the floodplain and stream protection zones. The DESIGN Team recommended (and the University representative in attendance agreed) that the location of this future roadway should be shifted outside of this environmentally sensitive area to facilitate design, functionality and ultimate approval and permitting.

Given that the areas with the greatest future development potential are owned by Elon University, and would not be developed by private landowners, the Town and Elon University representatives in the early meeting agreed that future potential corridor access issues would be resolved by collaborating on future planning efforts.

In total, the Committee did not identify any specific areas where driveway cuts or new roadway connections should be limited, except at the stream area mentioned earlier.

Front Yard Building Setbacks

The final zoning standard that was reviewed with the Committee was front yard building setbacks, which is the minimum distance between the front edge of a parcel (measured at the public right-of-way line) and where a structure can be built. This setback is very important, as it provides the public spaces and green areas between buildings and streets, literally forming the "streetscape" zone.

The following table of current front yard building setbacks for the Elon and Burlington Zoning Districts was discussed with the Committee. After discussing the requirements for the UR Zoning District, the Committee noted the minimum standard may not provide

enough space for streetscape amenities in some areas but may work for the downtown portion of the corridor, which is to the west, within the Phase II project area. Overall, the Committee did not recommend any additional front yard setback standards included within the Overlay District.

Front Yard Setback Zoning (Elon LDO - Adopted 12/04; Amended 3/18; Burlington UDO – Last Updated 10/20/20)		
Urban Residential (Elon)	Public Institutional (Elon)	Light Industrial (Burlington)
10 ft min / 25 ft max	30 ft	40 ft*

* - On corner lots of record, the street setback may be reduced by 50 percent on the long side lot.

In summary, like the other zoning standards previously discussed, the Stakeholder Committee felt that collaboration between the Town and the University on future development plans should address any potential front yard setback concerns.

Roadway Design Standards

Public roadways are not built randomly. The portion of the corridor under control of the Town of Elon (between Antioch Avenue and N. Oak Street) is dictated by the Town's Street Design Standards, as contained in the Elon LDO (Adopted 12/04; Amended 3/18). The remaining portion of the corridor is under control of NCDOT, which generally uses the NCDOT Complete Street Manual to guide its roadway design standards. Both sets of standards (shown in the following table for each streetscape design element) were discussed with the stakeholders. It was noted that due to funding limitations, no traffic forecasts or operational analyses are currently available for the project that might address the need for specific intersection improvements, such as turn lane capacity or signal timing.

<u>Streetscape Element</u>	<u>Town of Elon</u>	<u>NCDOT Complete Streets</u>
Sidewalks	min. 5-ft, 8-ft for multi-use/comm., 12-ft for retail/activity centers	6 ft (ave.) - 12 ft (urban main street)
	Both sides of street	Both sides of street
Bike Lanes	4-ft striped/dedicated	5-6 ft on-street striped
	Required on-street	14-ft shared lane / sharrow
Green Zone / Sidewalk Buffer / Planting Strip	not mentioned	6-8 ft (8-ft preferred for street trees)
Streetlights	160-200 ft separation	not mentioned
Pedestrian Lights	not mentioned	Equally spaced, Recommended

Pedestrian Crosswalks	min 10-ft in width	no specifics
Landscaping	1 large mature tree / 40 ft (should shade sidewalk)	no specifics

The following summarizes the Stakeholder comments on these standards, whether Elon's should be amended and what values should apply in the project Character Areas:

- Although the Elon LDO does not contain a specific requirement for the width of travel lanes, the Town noted during the charrette that in practice this width is 13-feet. The NCDOT Complete Streets manual provides varying lane widths of 9-14 feet.
- 5-ft sidewalk width seems too small; 6-ft seems better as minimum.
- 8-ft minimum makes more sense for areas with high pedestrian traffic; 12-ft might be best for the Campus area, but not the Suburban area. Larger widths would apply to multi-use paths.
- A sidewalk on both sides of the corridor is needed, especially where currently lacking on the south side of East Haggard, west of York Road. The need for multi-modal connectivity along this stretch is too important to exclude, as discussed earlier.
- A wider dedicated bike lane should be larger than 4 feet – more like 5 feet.
- Streetlights need to be closer than 160 – 200 feet for safety, especially in areas with high pedestrian crossings. Need to use the lumen specs/ratings for each light type to know their range and specify that light footprint overlaps.
- Pedestrian lights are needed in the corridor. Also, like streetlights, need to use the lumen specs/ratings for each light type to know their range and specify that the light footprint completely covers the sidewalk.

Miscellaneous Participant Comments

- The University's proposed "Ring Road" around the campus core (formed by N and S Williamson Avenues, Phoenix Drive, S Oak Avenue and E Lebanon Avenue) was intended to reduce traffic on Haggard Avenue.
- The construction of University Drive reduced big rig trucks on Haggard.
- Rolled curbs can allow cars to crash into and damage trees/median vegetation if median is narrow
- Dedicated bike lane may not be practical on east side – no connections planned / not practical. Casual bikers do not want to be "on road" with cars.
- 1st opportunity for a "gateway" to signify entering different space is at York, next to signify entering campus would be at Oak
- DOT Maintenance is not a fan of large trees in their ROW
- University maintains city ROW for Town Owned areas on corridor

- Gibsonville recently adopted a MUP for Haggard in its jurisdiction (to west of Ph 2 corridor)



February 5, 2021

SEPI has prepared an estimate based on projects of similar size and magnitude in the Triad region to assist the Town in developing a cost for the proposed improvement. With the proposed streetscaping and landscaping, the Town's preference is to relocate all overhead utilities underground. An opinion of probable cost was prepared which included paving details, stormwater, landscape, streetscape amenities and utilities.

The estimate was prepared without the benefit of a survey or utility maps, therefore the estimate may not be completely applicable based on the actual field conditions. Some general assumptions were made:

1. Existing storm drainage is expected to be upgraded and updated
2. Two new roundabouts with landscaping are assumed along the corridor
3. Burying the existing above ground power lines in a duct bank or relocating the existing power lines is included in the estimate.
4. New Street lighting and new landscaping is assumed
5. Approximate utility and right-of-way costs are assumed

Therefore, it is recommended that prior to finalizing a streetscape budget for any Capital Improvement Project, the existing storm drainage system, power lines and other utilities be verified, and the cost estimate be adjusted accordingly. The schematic estimate listed below is based on 2020 costs. The Town should also factor in inflation and market conditions when estimating future projects.

Construction Cost: \$7,00,000

Utility Cost: \$3,500,000

Right of Way Cost: \$1,500,000

Total: \$12,000,000

