



TOWN OF CARRBORO

PLANNING BOARD

301 West Main Street, Carrboro, North Carolina 27510

7:30 P.M.

TOWN HALL BOARD ROOM, 301 WEST MAIN STREET

A G E N D A

THURSDAY, DECEMBER 1, 2016

Item	Topic/Action	Person/Agency	Time (Approx)
I.	INTRODUCTIONS & OVERVIEW	Chair	7:30
II.	JOINT REVIEW ITEMS		
	A) SUP for 610 Homestead Road Architecturally Integrated Subdivision	Staff/Jim Brandewie	7:35
III.	AGENDA ADJUSTMENTS		8:00
IV.	APPROVAL OF MINUTES		
	A) November 17, 2016 Meeting Minutes	Chair/Planning Board	8:05
V.	OTHER MATTERS		
	A) SUP for 610 Homestead Road Architecturally Integrated Subdivision	Chair/Planning Board	8:10
	B) Follow-up of Goals discussion from November 17th	Chair/Planning Board	8:40
VI.	ADJOURNMENT	Chair	9:00

Materials (PDF copies to be distributed separately via email):

PUBLIC COMMENT AT PLANNING BOARD MEETINGS

If members of the public wish to address the Planning Board, a time will be provided during the meeting. Speakers may address the Board only after being recognized by the Chair and only from the podium, subject to a three-minute time limit.

PLEASE NOTE: If you are unable to attend this meeting, please email or call 918-7325 to inform staff. Thank you!

JOINT REVIEW BOARDS

AGENDA ITEM ABSTRACT

MEETING DATE: DECEMBER 1ST, 2016

SUBJECT: JOINT REVIEW FOR THE 610 HOMESTEAD ROAD ARCHITECTURALLY INTEGRATED SUBDIVISION SPECIAL USE PERMIT.

DEPARTMENT: PLANNING DEPARTMENT	PUBLIC HEARING: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
ATTACHMENTS: A. STAFF REPORT B. PROJECT PLANS C. APPLICANT RESPONSES TO ADVISORY BOARD CONCEPT PLAN COMMENTS D. TRANSPORTATION IMPACT LETTER E. NEIGHBORHOOD INFORMATION MEETING INFO F. TREE REMOVAL JUSTIFICATION LETTER G. TREE CANOPY EXHIBIT H. BMP AMENITY EXHIBIT I. RESPONSES TO TOWN POLICY DOCUMENTS J. RESPONSES TO ARCHITECTURAL STANDARDS	FOR INFORMATION CONTACT: JEFF KLEAVELAND, 918-7332

PURPOSE

The Berryhill Group as represented by Veteran Engineering Associates, Inc., has submitted an application for the construction of a 12 lot Architecturally Integrated Subdivision residential development located at to above referenced addresses (Attachment B).

INFORMATION

The Special Use Permit, if approved, would allow the creation of a 12 lot residential subdivision, with common shared open spaces, recreation amenities and supporting infrastructure. The subject property is zoned R-20 and contains two parcels for a combined acreage of about 7.09 acres. These parcels are identified by Orange County PINs 9779182544, 9779184700. For a vicinity map, see cover sheet of Attachment B

STAFF RECOMMENDATION

The staff recommends that the Advisory Boards offer comments as needed (including review of the following staff recommendations) and prepare summary recommendations for a Special Use Permit to allow the construction of the proposed 610 Homestead Road AIS. Staff recommendations are as follows:

1. That Certificates of Occupancy for the final the two units may not be issued until such time as the *payment in lieu* for 1.8 affordable units is made (in accordance with the Town's fee schedule at the time of payment). A note to this effect shall be required on the final plat.
2. Prior to construction plan approval, the plans need to include a standard detail, per section 15-291 of the LUO, demonstrating that each lot can provide off-street parking sufficient to accommodate two cars, excluding those spaces provided within the garage.

3. That flexibility be allowed in the execution of the street tree planting plan (subject to the approval of public works and the planning department), such that the combination of existing and proposed trees along all publicly dedicated streets in the subdivision meet the street tree requirements of Section 15-315 of the Land Use Ordinance and that the final arrangement is such that 1/3rd of the street trees retained and/or proposed for this purpose are evergreen.
4. That the applicant shall provide to the Zoning Division, prior to the recordation of the final plat for the project or before the release of a bond if some features are not yet in place at the time of the recording of the final plat, Mylar and digital as-builts for the stormwater features of the project. Digital as-builts shall be in DXF format and shall include a base map of the whole project and all separate plan sheets. As-built DXF files shall include all layers or tables containing storm drainage features. Storm drainage features will be clearly delineated in a data table. The data will be tied to horizontal controls.
5. Per Section 15-263.1, that the developer shall include a detailed stormwater system maintenance plan, specifying responsible entity and schedule. The plan shall include scheduled maintenance activities for each stormwater BMP in the development, performance evaluation protocol, and frequency of self-reporting requirements (including a proposed self-reporting form) on maintenance and performance. The plan and supporting documentation shall be submitted to Town engineer and Environmental Planner for approval prior to construction plan approval.
6. That, prior to issuance of a CO, a final plat, or the certification of a stormwater BMP, the Town may require a performance security be posted for a period of two years per the provisions of Section 15-263(i).
7. That utilities shall be installed underground per the provisions or 15-246 of the Land Use Ordinance.
8. That the developer provide a written statement from the electrical utility stating that electric service can be provided to all locations shown on the construction plans prior to the approval of the construction plans;
9. That fire flow calculations must be submitted and approved by the Town Engineer and Town Fire Department prior to construction plan approval.
10. That the applicant submit a Voluntary Annexation Petition prior to final plat approval.
11. That the applicant receive(s) CAPS from the Chapel Hill-Carrboro City Schools district pursuant to Article IV, Part 4 of the Carrboro Land Use Ordinance prior to construction plan approval.
12. That, prior to final plat approval, the Homeowner's declarations and covenants shall satisfy the applicable provisions of the Land Use Ordinance subject to review and approval of the Town Attorney.

STAFF REPORT

TO: Advisory Boards

DATE: December 14, 2016

PROJECT: 610 Homestead Rd Architecturally Integrated Subdivision
Special Use Permit

APPLICANT
And OWNERS: The Berryhill Group, LLC
104 Painted Turtle Lane
Chapel Hill, NC 27516

PURPOSE: To acquire a Special Use Permit for the construction of a 12
lot single family residential subdivision

EXISTING ZONING: R-20.

TAX MAP NUMBER: 9779182544, 9779184700

LOCATION: 610 Homestead Rd & 8802 Lake Hogan Farm Rd

TRACT SIZE: 7.09 acres, combined (approximately 308,862 sf)

EXISTING LAND USE: Vacant & Single Family Home (to be removed)

PROPOSED LAND USE: 1.110 Residential, Single Family Detached, One dwelling
unit/lot

SURROUNDING
LAND USES: North: R-20; *single-family residential*
South: Homestead R/W, R-15; *single-family residential*
West: R-15; *single-family residential*
East: R-20; *single-family residential*

ZONING HISTORY: R-20 Since 1980

ANALYSIS

Background, Concept Plan

Background

The Berryhill Group as represented by Veteran Engineering Associates, Inc., has submitted an application for the construction of a 12 lot Architecturally Integrated Subdivision residential development located at to above referenced addresses (Attachment B).

The Special Use Permit, if approved, would allow the creation of a 12 lot residential subdivision, with common shared open spaces, recreation amenities and supporting infrastructure.

The subject property is zoned R-20 and contains two parcels for a combined acreage of about 7.09 acres. These parcels are identified by Orange County PINs 9779182544, 9779184700. For a vicinity map, see cover sheet of Attachment B

Concept Plan

Before formal plans were submitted, the applicant prepared a concept plan as required by Section 15-48.1 of the LUO. The conceptual design ordinance requires the designer to describe in detail their project and receive feedback from the Joint Advisory Boards (Planning Board, Appearance Commission, Economic Sustainability Commission, Environmental Advisory Board & the Transportation Advisory Board). The project was presented to these Boards on October 1st, 2015. As required, the applicant provide written responses to the advisory board's comments. These written responses are attached (Attachment C).

Density, Affordable Housing

Density.

As stated previously, the 12 unit density pursued by this project is below the 15 unit maximum base density allowed in the R-20 zoning district at 1 unit/20,000 sf of lot area. The applicant is not seeking any density bonus units.

Size-Restricted Units

Section 15-188 of the LUO includes provisions that require that the developer build a percentage of "size-limited" units between 1,350 and 1,100 square feet as a strategy to provide some affordable housing on the market. These provisions apply only for developments of at least 13 dwelling units thereby exempting the 610 Homestead Road subdivision from this requirement.

Affordable Housing

Per the provisions of Section 15-54.1 of the LUO, the applicant is providing a payment-in-lieu of affordable housing. This section states a goal of 15% affordable housing for new development, to this end, the applicant is proposing a payment in lieu of affordable units

equivalent to 15% of the 12 lots proposed, for a total of 1.8 units. These number of units, per the Town's fee schedule, amounts to a payment in lieu amount of 1.8 x \$32,167/point or **\$57,900.60**. The following condition provides a mechanism to assure the Town that it receives this payment.

- That Certificates of Occupancy for the final the two units may not be issued until such time as the *payment in lieu* for 1.8 affordable units is made (in accordance with the Town's fee schedule at the time of payment). A note to this effect shall be required on the final plat.

CONCLUSION – The project meets all the requirements of the Land Use Ordinance pertaining to density and affordable housing subject to the conditions mentioned above.

Streets & Sidewalks, Connectivity, Traffic Analysis, Traffic Calming, Greenways Transit, Parking:

Streets & Sidewalks

The proposed sub-collector street is built according to the public street standard of Article XIV of the LUO; this requires a minimum 26' wide pavement section with curb and gutter, and sidewalks on both side of the street; no bike lanes are required. The new street is about 665' in length and ties into Lake Hogan Farms Road about 380 feet from Homestead Road. Section 15-218 prefers a minimum intersection separation distance of 400 feet (instead of 380) but goes on to allow deviations from this standard when there is no other access alternative. To this end, the designer has maximized the available intersection separation.

Connectivity

In guiding Carrboro's growth, Town policy supports the development of an interconnected matrix of public streets. Section 15-214 of the Land Use Ordinance (LUO) requires new subdivisions to tie into anticipated streets outside the development, thereby providing "connectivity" to the Town's public road system. The 610 Homestead AIS has addressed this provision by ending the new street with a tee intersection that is configured to allow for a future extension to Homestead Road in the vicinity of Stratford Drive. This tee is built to the sub-collector standard.

Traffic Analysis

Vehicular traffic to the 12 new homes will be served off of Lake Hogan Farms Road about These dwellings are expected to add approximately 120 trips per day onto Lake Hogan Farms Road and the surrounding road network.

The additional traffic generated by this development is not expected to exceed the capacity of the surrounding road network. Lake Hogan Farms Road is a collector street which are generally designed to handle between 800 and 6000 trips per day. The most recent traffic counts taken by Town Staff in this area of Lake Hogan Farms road were approximately 2100 trips per day in 2003. This count was taken in association with a traffic calming request in 2003 that resulted in the installation of some stop signs and speed tables along Lake Hogan Farm Road.

Homestead Road is classified as an arterial with a design capacity of 11,000 trips per day. The 2015 NCDOT Annual Average Daily Traffic (AADT) counts on Homestead Road in this area show an average of 5200 trips per day. For comparison, the AADT for Jones Ferry Road between the NC 54 bypass and Main Street is 8300 trips per day.

NCDOT's review of the project did not mention any issues associated with impacts to Homestead Road's capacity. Because of the small number of additional trips generated by the development, NCDOT did not require that the applicant do an intersection analysis to see if signalization is required. The applicant has provided the attached traffic impact analysis (Attachment D)

At the Neighborhood Information Meeting a few of the citizens in the area reported peak morning and evening congestion at the Lake Hogan Farms/Homestead Road intersection (Attachment E). The proposed subdivision could someday alleviate some of this congestion at such time as it is extended to connect to Homestead in the vicinity of Stratford Drive. This connection would be the responsibility of the property owner to the south and not the applicant.

Traffic Calming

The Lake Hogan Farms subdivision has at this time only two main entrances; Hogan Hills Road located off Old NC 86 and Lake Hogan Farms Rd off of Homestead Road. This arrangement creates a bottleneck situation during peak travel periods. Future roadway connections as detailed in the Town's Connector Road plan could help alleviate some of these problems in the future. As street connections are completed, impacted streets, such as the proposed sub-collector will likely have an interest in traffic calming measures. The Town has requested that the applicant include traffic calming measures on the street to anticipate this future connection. The applicant does not wish to do this at this time. The Board may wish to discuss this matter in further detail with the applicant.

NCDOT and the Town Transportation Planner has reviewed and approved the configuration of the roads as shown on the plans. The developer will need to obtain a driveway permit which may include additional encroachment agreements from Public Works prior to construction plan authorization.

Greenways

No greenway facilities are being constructed on the site. Early in the review process the applicant and staff discussed the possibility of a pedestrian/bicycle path along the Homestead Road frontage.

Transit

Chapel Hill Transit has been notified of the proposed project and has no immediate plans in the vicinity that require the project to provide a bus stop.

Parking:

Per section 15-291 each lot will be required to park two cars safely outside of the street right-of-way. The parking spaces within the garage cannot be counted toward this requirement. Because of this the following condition is required:

- Prior to construction plan approval, the plans need to include a standard detail, per section 15-291 of the LUO, demonstrating that each lot can provide off-street parking sufficient to accommodate two cars, excluding those spaces provided within the garage.

CONCLUSION – The project meets all the requirements of the Land Use Ordinance pertaining to Streets & Sidewalks, Connectivity, Traffic Analysis, Traffic Calming, Greenways, Transit, & Parking.

Tree Protection, Street Trees, Homestead Road Buffer, Tree Canopy

Tree Protection

The site is almost completely wooded with primarily pines and a few hardwoods. Large trees, as defined by the LUO, having a diameter of 18 inches or greater are to be retained whenever possible (15-316). A complete tree survey has been performed identifying 10 such trees on these properties and all of them require removal to accommodate the installation of the road and related infrastructure as shown on the site plan. The development of individual lots will require additional tree removal. Trees on the lots will be retained at the discretion of the home builder and the developer. As required, the applicant has provided the attached tree removal justification letter (Attachment F).

Street Trees

The landscape plan proposes 43 large street trees, 21 of which are Red Maples and the remainder, Willow Oak. These are shown to demonstrate compliance with the street screening requirements of section 15-308. None of the proposed plantings are on the Town's List of Invasive Plant Species on Appendix E-17 of the LUO. These plans will be reviewed further during construction plan review.

Section 15-315 of the LUO provides guidelines for the planting and retention of trees adjacent-to and within street R/W's where an offer of dedication has been made to the Town. The landscape plan proposes a street tree layout primarily within the R/W with a fairly uniform pattern. However, because existing trees may be preserved during the construction process staff recommends that the proposed layout be considered only as a possible scheme and that the street tree requirement be revised as needed so that it may be field adjusted as conditions warrant. Additionally, the Town's policy is to require that 1/3rd of all such trees be evergreen. For these reasons, the following condition is recommended:

- That flexibility be allowed in the execution of the street tree planting plan (subject to the approval of public works and the planning department), such that the combination of existing and proposed trees along all publicly dedicated streets in the subdivision meet the street tree requirements of Section 15-315 of the Land

Use Ordinance and that the final arrangement is such that 1/3rd of the street trees retained and/or proposed for this purpose are evergreen.

Homestead Road Buffer

Section 15-312 requires that developments adjacent to Homestead Road (and others) to preserve an undisturbed Protective Buffer that is a minimum of 50' in width and an average of 100' in width. Further this Section requires that a Type A screen be provided on the development side of this buffer in places where the existing vegetation is insufficient. The proposed subdivision has existing dense vegetation in the vicinity of the road buffer. No additional screening should be required to meet the provisions of 15-312. These road buffer screening requirements are a continuous obligation of the permit; should the existing screening fail through fire or disease, the permit will require that it be replaced in accordance with the provisions of 15-312.

Tree Canopy

Section 15-319 requires that residential developments maintain a tree canopy equivalent to 40% of the lot area. The applicant has provided the attached exhibit demonstrating that they have satisfied this requirement by providing 41% tree canopy coverage (Attachment G).

CONCLUSION – The project meets all the requirements of the Land Use Ordinance pertaining to Tree Protection, Street Trees, the Homestead Road Buffer, and Tree Canopies.

Drainage and Water Quality, Stormwater Bonding, Stream Buffers, Grading, Erosion Control, and Phasing

Drainage and Water Quality

Section 15-263 of the LUO establishes stormwater management criteria that must be met for any project requiring a CUP. In particular the applicant must meet stormwater runoff standards with respect to water quality, quantity, and volume.

To this end, the grading and drainage plan show a system of curb and gutter, catch basins and pipes that collect and direct water to a large bioretention basin east of the lots. This basin and its associated appurtenance will be located off-site within a private stormwater easement on the adjacent lot.

Section 15-263 also regulates the *volume* increase of stormwater runoff as a result of the new development. In this instance, the LUO allows for a 400% increase in stormwater volume runoff. The project has been satisfactorily reviewed for compliance with this section and the bioretention facility has been designed to maximize infiltration of the stormwater by allowing additional volume storage.

Relative to the Town satisfying state requirements pertaining to the National Pollutant Discharge Elimination System (NPDES) Phase II permit, the following conditions are required:

- That the applicant shall provide to the Zoning Division, prior to the recordation of the final plat for the project or before the release of a bond if some features are not yet in place at the time of the recording of the final plat, Mylar and digital as-builts for the stormwater features of the project. Digital as-builts shall be in DXF format and shall include a base map of the whole project and all separate plan sheets. As-built DXF files shall include all layers or tables containing storm drainage features. Storm drainage features will be clearly delineated in a data table. The data will be tied to horizontal controls.
- Per Section 15-263.1, that the developer shall include a detailed stormwater system maintenance plan, specifying responsible entity and schedule. The plan shall include scheduled maintenance activities for each stormwater BMP in the development, performance evaluation protocol, and frequency of self-reporting requirements (including a proposed self-reporting form) on maintenance and performance. The plan and supporting documentation shall be submitted to Town engineer and Environmental Planner for approval prior to construction plan approval.

Stormwater Bonding

Section 15-263 (i) enables the Town to require the developer post a security to the Town to assure that the stormwater BMPs perform as designed; because of this, the following condition is recommended.

- That, prior to issuance of a CO, a final plat, or the certification of a stormwater BMP, the Town may require a performance security be posted for a period of two years per the provisions of Section 15-263(i).

Stream Buffers

The proposed grading and stormwater plan does not encroach into stream buffers.

Grading

The grading plan limits the grading disturbance to the installation of the street, stormwater devices and the walking path. Additional minor grading would be expected on the individual lots during home construction.

Erosion Control

A simple erosion control plan has been provided which is provisionally satisfactory to Orange County Erosion Control. Additional details will be provided as part of the Construction Plan review process.

Phasing

The project is not phased.

CONCLUSION – The project meets all the requirements of the Land Use Ordinance pertaining to Drainage and Water Quality, Stormwater Bonding, Stream Buffers, Grading, Erosion Control, and Phasing, subject to the conditions mentioned above.

Utilities, Fire Safety, Lighting, Refuse Collection

Utilities

The water and sewer plans have been reviewed by OWASA and meet with their general approval. OWASA will review the plans in greater detail during construction plan review.

The plans show that the applicant intends to tie into an existing waterline within Lake Hogan Farms Road while their proposed sewer connection will tie into the existing sewer stub-out at the north end of Stratford Drive via a 30' OWASA easement. This arrangement has been reviewed and provisionally approved both OWASA and NCDOT. Construction plans will require further approval.

Regarding electric and gas, utilities, the applicant has submitted letters by the respective providers indicating that they can serve the development.

Per Section 15-246 of the LUO, the plans must specify that all electric, gas, telephone, and cable television lines are to be located underground in accordance with the specifications and policies of the respective utility companies. Because of this the following condition is recommended:

- That utilities shall be installed underground per the provisions or 15-246 of the Land Use Ordinance.

The Public Works Department prefers to receive written confirmation from the electrical utility prior to construction plan approval. Because of this, staff recommends the following condition.

- That the developer provide a written statement from the electrical utility stating that electric service can be provided to all locations shown on the construction plans prior to the approval of the construction plans;

Fire Safety

The CUP plans have been reviewed and provisionally approved by the Fire Department subject to further review during construction plans. One new fire hydrants is provided in the mid-block section of the new road and one existing fire hydrant is available about 150 feet south on Lake Hogan Farms Road.

Fire flow calculations must be submitted and approved by the Town Engineer and Fire Department prior to construction plan approval. A condition to this effect shall be entered onto the permit.

- That fire flow calculations must be submitted and approved by the Town Engineer and Town Fire Department prior to construction plan approval.

Lighting

The Town's Street Lighting Policy regulates the lighting requirements for the proposed new street. To this end the applicant has proposed three street lights that satisfy the Town's current requirements.

Refuse Collection

The project's waste arrangements have been reviewed by both Public Works and Orange County. The Town and County will provide trash and recycling collection services for the development while the County will be involved in managing construction waste.

Waste management during construction requires from the County an approved Solid Waste Management Plan as well as a permit. The Solid Waste Management Plans and permit will be obtained prior to construction.

CONCLUSION – The project meets all the requirements of the Land Use Ordinance pertaining to Utilities, Fire Safety, Lighting and Refuse Collection subject to the conditions mentioned above.

Open Space, Recreation,Open Space

Per the provisions of 15-198, every residential development is required to set aside at least 40% of the total area of the development in permanent open space. "Open Space" as defined by the LUO excludes some parts of the development from being so defined. In particular the 30-40' in width area along the northern property line (located behind the lots) cannot be claimed as open space.

In order to satisfy the 40% requirement, the applicant is therefore claiming the area associated with the off-site BMP as illustrated in the exhibit on SP-1 of the attached project plans (Attachment B). In order for this facility to counted toward open space it must be improved in such a way as to be "conducive to actual use for passive recreation purposes by residents of the development where located" (15-198); to this end the applicant has provided the walking trail and gazebo rest-stations around the BMP and has taken steps to design the facility to be an attractive natural feature (Attachment H).

Note that during the concept plan phase of the project, primary and secondary conservation areas as defined by 15-198 are identified and prioritized for protection prior to locating lots and infrastructure. The small amount of primary constraints (19.2%) on the subject parcels results in a lot layout that preserves this constraint within the common open space.

Recreation

The proposed 12 residential dwelling units combine to require 124.68 recreation points, per Section 15-196 of the LUO. The applicant satisfies this requirement by providing a total of 127.32 points (80.37 points: walking trail, 46.94 points: two "gazebo" bench/shelters). As required per 15-196-f, 10% of the amenities must be suitable for

children under the age of 12; this amounts of 12.5 points; the applicant proposes that the walking path will serve to satisfy these regulations.

CONCLUSION – The project meets all the requirements of the Land Use Ordinance pertaining to Open Space and Recreation subject to conditions as needed.

Miscellaneous

Construction Management

Prior to construction plan approval the Town will inform the applicant and contractor of the requirements of the Town Code pertaining to construction noise and hours of operation and obstructing or excavating within public street rights of way. Section 15-49 (c-1) further enables the Town to require the applicant submit a construction management plan prior to construction plan approval.

Town Planning Documents

Regarding the following Town's long range planning documents the applicant has provided the attached written responses (Attachment I).

- a. Connector Roads Policy
- b. Facilitated Small Area Plan for Carrboro's Northern Study Area
- c. Vision 2020

Architectural Standards

The recommended architectural standards provisions of Section 15-177 of the LUO uses examples and descriptions of the Town's existing "vernacular" housing stock to exemplify coherent design standards. These standards are considered recommended due to changes in the state legislature that prohibit municipalities from regulating architectural design. The intention of this section is to support cohesive building design that is either in the Carrboro vernacular "style", or, is of another equally cohesive design language. In response to these provisions, the applicant has provided the attached letter along with representative examples of the proposed housing types (Attachment J).

Voluntary Annexation

The Town typically requests that a Voluntary Annexation Petition be submitted prior to Final Plat Approval. Because of this the following condition is recommended:

- That the applicant submit a Voluntary Annexation Petition prior to final plat approval.

CAPS

Per Article IV, Part 4 of the LUO, the applicant must receive the required Certificate(s) of Adequacy of Public School Facilities (CAPS) from the Chapel Hill Carrboro City Schools District prior to construction plan approval. The CAPS for the 610 Homestead Road subdivision were provisionally approved by the Board of Education on October, 6, 2016. This process will need to be reconfirmed prior to construction plan approval. Because of this the following condition is recommended.

- That the applicant receive(s) CAPS from the Chapel Hill-Carrboro City Schools district pursuant to Article IV, Part 4 of the Carrboro Land Use Ordinance prior to construction plan approval.

Neighborhood Information Meeting

The applicant conducted a neighborhood information meeting on November 1st, 2016. Staff was in attendance at this meeting. Seven (or so residents) attended the presentation by the developer and his two consultants. Attached are the minutes and sign-in sheet from the meeting (Attachment E).

Homeowner's Association Documents

Prior to construction plan approval Homeowner's Associations Declarations and Covenants will need to be submitted to the Town for review and approval by the Town Attorney. Section 15-83.36 of the LUO specifically prevents these documents from prohibiting "devices that generate or conserve energy or water". Photovoltaic panels and clotheslines are such devices that cannot be regulated by homeowner's associations. Because of this the following condition is recommended:

- That, prior to final plat approval, the Homeowner's declarations and covenants shall satisfy the applicable provisions of the Land Use Ordinance subject to review and approval of the Town Attorney.

CONCLUSION – The project meets all the requirements of the Land Use Ordinance pertaining to categories listed above subject to the aforementioned conditions.

STAFF RECOMMENDATIONS:

The staff recommends that the Advisory Boards offer comments as needed (including review of the following staff recommendations) and prepare summary recommendations for a Special Use Permit to allow the construction of the proposed 610 Homestead Road AIS. Staff recommendations are as follows:

1. That Certificates of Occupancy for the final the two units may not be issued until such time as the *payment in lieu* for 1.8 affordable units is made (in accordance with the Town's fee schedule at the time of payment). A note to this effect shall be required on the final plat.
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3. That flexibility be allowed in the execution of the street tree planting plan (subject to the approval of public works and the planning department), such that the combination of existing and proposed trees along all publicly dedicated streets in the subdivision meet the street tree requirements of Section 15-315 of the Land

Use Ordinance and that the final arrangement is such that 1/3rd of the street trees retained and/or proposed for this purpose are evergreen.

4. That the applicant shall provide to the Zoning Division, prior to the recordation of the final plat for the project or before the release of a bond if some features are not yet in place at the time of the recording of the final plat, Mylar and digital as-builts for the stormwater features of the project. Digital as-builts shall be in DXF format and shall include a base map of the whole project and all separate plan sheets. As-built DXF files shall include all layers or tables containing storm drainage features. Storm drainage features will be clearly delineated in a data table. The data will be tied to horizontal controls.
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6. That, prior to issuance of a CO, a final plat, or the certification of a stormwater BMP, the Town may require a performance security be posted for a period of two years per the provisions of Section 15-263(i).
7. That utilities shall be installed underground per the provisions or 15-246 of the Land Use Ordinance.
8. That the developer provide a written statement from the electrical utility stating that electric service can be provided to all locations shown on the construction plans prior to the approval of the construction plans;
9. That fire flow calculations must be submitted and approved by the Town Engineer and Town Fire Department prior to construction plan approval.
10. That the applicant submit a Voluntary Annexation Petition prior to final plat approval.
11. That the applicant receive(s) CAPS from the Chapel Hill-Carrboro City Schools district pursuant to Article IV, Part 4 of the Carrboro Land Use Ordinance prior to construction plan approval.
12. That, prior to final plat approval, the Homeowner's declarations and covenants shall satisfy the applicable provisions of the Land Use Ordinance subject to review and approval of the Town Attorney.

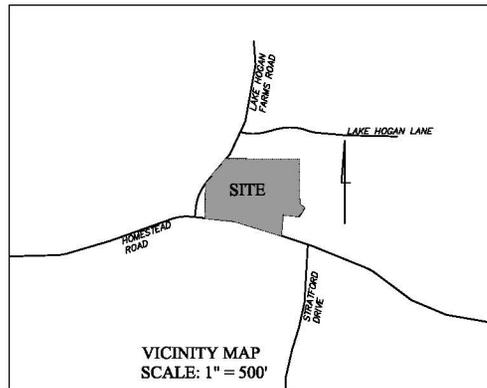
610 HOMESTEAD ROAD

SPECIAL USE PERMIT - A.I.S.

SITE DEVELOPMENT DATA

SITE DATA	
EXISTING ZONING	R-20
TOTAL AREA (APPROVED)	308862 SF 7.089 ACRES
PROPOSED DENSITY	12 D.U.
MAXIMUM ALLOWED DENSITY (1 D.U. / 50,000 SF)	15 D.U.
TOTAL NO OF PROPOSED LOTS	12 LOTS
ACREAGE IN LOTS	3.137 AC
ACREAGE IN R/W	0.83 AC
OPEN SPACE AREA REQUIRED (40% OF GROSS)	2,836 ACRES = 123544 SF
OPEN SPACE PROVIDED	2,836 ACRES = 123544 SF
ONSITE OPEN SPACE:	2,436 AC = 106,129 SF
OFFSITE OPEN SPACE (BMP):	0.40 AC = 17,724 SF
% SITE IN PRIMARY CONSTRAINT	18.2% = 59240 SF = 1.36 AC
% SITE IN SECONDARY CONSTRAINT	80.8% = 249622 SF = 5.73 AC
PRESERVED PRIMARY CONSTRAINT	100.0%
PRESERVED SECONDARY CONSTRAINT	21.8%
TREE CANOPY COVERAGE	45.7%
BUILDING HEIGHT MAXIMUM	35 FEET
REQ'D RECREATION POINTS (10.39 PTS/D.U. x 12 D.U.)	124.68
PROVIDED RECREATION POINTS	TRAIL = 5023.32 SQ. FT. x 0.016 PT/SQ. FT. = 80.37 PT COURT = 2 X (8' X 9') SQ. FT. x 0.326 PT/SQ. FT. = 46.94 PT 80.37 + 46.94 = 127.32
PROVIDED RECREATION POINTS	127.32 = 124.68 = 2.64 PT
SURPLUS RECREATION POINTS	SURPLUS POINTS TO BE APPLIED TO FUTURE DEVELOPMENT OF HOMESCAPE DEVELOPMENT COMPANY, INC. TRACT
BUILDING SETBACKS	SIDE YARD = 10 FEET REAR/FRONT = 20 FEET
MIN. LOT WIDTH	80 FEET
MIN. LOT AREA	10,000 S.F.
IMPERVIOUS IN R/W	0.68 AC
IMPERVIOUS IN LOT (ASSUMED)	3500 SF/LOT 1.52 AC
SITE % IMPERVIOUS	100 X 2.2/7.09 = 31.0%
SEWER FLOW FOR DEVELOPMENT	= 5,760 GPD [4 BEDROOM / D.U. x 120 G.P.D.]
WATERLINE TAKEOFF:	790 LF = 8" D.I.W.L. 1 FIRE HYDRANT
WATERLINE SERVICES:	12 SERVICE TAPS 3/4"
SEWER TAKEOFF:	1615 LF = 8" D.I.S.S.; 8 - 4" MH
SEWER SERVICES:	12 SERVICE TAPS
STREET LENGTH	828 LF
THERE ARE NO DENSITY REDUCTION ADJUSTMENTS REQUIRED ON THIS SITE DUE TO THE ABSENCE OF THE FEATURES DESCRIBED IN SECTION 15-182.3(C1-C8).	
THIS SUBDIVISION IS NOT SUBJECT TO THE SMALL HOUSE PROVISIONS OF 15-188.	
EACH LOT IS REQUIRED TO BE ABLE TO PARK TWO CARS SAFELY OUT OF THE STREET RIGHT-OF-WAY, IN ADDITION TO ANY PARKING PROVIDED ON THE LOT WITHIN A GARAGE.	
ALL OPEN SPACE IS PRIVATE	
PROPOSED USE CATEGORY: 26.200, MAJOR SUBDIVISION, CONSISTING OF 1.111, SINGLE-FAMILY HOMES.	
EXISTING PARCEL SIZE = 4.65 & 1.99 ACRES = 6.64 ACRES = 289328 SF	
PARCEL SIZE AFTER RECOMBINATION = 7.09 ACRES = 308840 SF	
PIN NUMBERS: 9779-18-2544 & 9779-18-4700	
CURRENT LAND USE: RESIDENTIAL - VACANT	
PROPOSED NEW RESIDENCES: 12 SINGLE FAMILY RESIDENCES	
A 100' AVERAGE ROADWAY BUFFER IS PROPOSED ADJACENT TO HOMESTEAD ROAD.	

OFF SITE HARDWOODS REMOVED DUE TO INSTALLATION OF BMP: 15054 SF = 0.35 AC



1ST ISSUE FOR REVIEW: 3/16/16
2ND ISSUE FOR REVIEW: 7/12/16
3RD ISSUE FOR REVIEW: 9/14/16
4TH ISSUE FOR REVIEW 10/20/16

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THIS PLAN IS A FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION UNLESS INITIALLED/DATED AS APPROVED:

APPROVED: _____ / _____
INITIALS / DATE

SHEET INDEX

SHEET 1	C1 - COVER SHEET
SHEET 2	EX1 - EXISTING CONDITIONS
SHEET 3	EX2 - EXISTING CONDITIONS
SHEET 4	EX3 - EXISTING CONDITIONS
SHEET 5	SP1 - SITE PLAN
SHEET 6	EC1 - GRADING / DRAINAGE EROSION CONTROL PLAN
SHEET 7	PP1 - ROADWAY PLAN AND PROFILE
SHEET 8	PP2 - SANITARY SEWER OUTFALL PLAN AND PROFILE
SHEET 9	D1 - EROSION CONTROL DETAILS

ENGINEERING FIRM:

PLANS PREPARED BY: **VETERAN ENGINEERING ASSOCIATES, INC. (C-3527)**
ADDRESS: **POST OFFICE BOX 1625 DURHAM N.C. 27701**
PHONE: **(919) 201-2175**
ATTN: **Thomas R. Kagorice, P.E., as President (11622)**

DEVELOPER

ADDRESS: **THE BERRYHILL GROUP, LLC**
104 PAINTED TURTLE LANE
CHAPEL HILL, NC 27516

PHONE:

(919) 730-6078
ATTN: **JAMES BRANDEWIE, as Manager**

PRELIMINARY PLANS
NOT RELEASED FOR
CONSTRUCTION

GENERAL NOTES

- BOUNDARY, TREE AND TOPOGRAPHIC SURVEY BY R.S. JONES & ASSOCIATES, INC. CIVIL PLANS PREPARED, DESIGNED AND DRAWN BY VETERAN ENGINEERING ASSOCIATES, INC.
- DEVELOPER SHALL COORDINATE A PRE-CONSTRUCTION CONFERENCE PRIOR TO ANY SITE DISTURBANCES WITH ALL APPROPRIATE PERMIT-ISSUING AUTHORITIES. THIS CONFERENCE WILL BE ATTENDED BY A REPRESENTATIVE FROM THE DEVELOPER, ENGINEER, CONTRACTOR, ZONING DIVISION, PUBLIC WORKS, AND THE CITY ENGINEER.
- AN OFFSITE BIO-RETENTION FACILITY ("BMP") IS PROPOSED WITH THIS PROJECT. THE BMP IS LOCATED WITHIN AN BASEMENT AND SAID BMP WILL SERVE NOT ONLY THIS PROJECT, BUT ALSO SERVE THE SITE WHEREIN IT IS SITUATED. THE BMP WAS SITED IN AN AREA WHERE FINE TREES EXIST SO AS TO AVOID HARDWOOD DEVELOPMENT CONSTRAINTS.
- IF ANY UTILITY IN ANY RIGHT-OF-WAY IS INSTALLED BY A UTILITY COMPANY, THE COMPANY SHALL MAINTAIN ACCURATE AS-BUILT DRAWINGS OF THE UTILITY'S INSTALLATION AND PROVIDE A COPY OF THESE CERTIFIED ACCURATE DRAWINGS TO THE TOWN.
- THE APPLICANT SHALL PROVIDE TO THE ZONING DIVISION PRIOR TO THE RECORDATION OF THE FINAL PLAN FOR THE PROJECT OR BEFORE THE RELEASE OF A BOND IF SOME FEATURES ARE NOT YET IN PLACE AT THE TIME OF THE RECORDING OF THE FINAL PLAN. MYLAR AND DIGITAL AS-BUILTS FOR THE HYDRAULIC FEATURES OF THE PROJECT. DIGITAL AS-BUILTS SHALL BE IN DXF FORMAT AND SHALL INCLUDE A BASE MAP OF THE WHOLE PROJECT AND ALL SEPARATE PLAN SHEETS. AS-BUILT DXF FILES SHALL INCLUDE ALL LAYERS OR TABLES CONTAINING STORM DRAINAGE FEATURES. STORM DRAINAGE FEATURES SHALL BE CLEARLY DELINEATED IN A DATA TABLE. THE DATA WILL BE TIED TO HORIZONTAL CONTROLS. ALL INSTALLED BMP (WATER QUALITY AND DETENTION DEVICES) MUST BE CERTIFIED BY THE ENGINEER OF RECORD AS CONSTRUCTED PER THE APPROVED CONSTRUCTION PLANS PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY AND THAT AS-BUILT CONSTRUCTION PLANS WILL BE SUBMITTED TO THE TOWN.

FIRE DEPARTMENT NOTES:

- NO TRAINING MAY BEGIN UNTIL FIRE HYDRANTS ARE OPERATIONAL.
- AN ALL WEATHER 30' WIDE TRAVEL SURFACE MUST BE IN PLACE PRIOR TO RECEIVING FINAL PLAN APPROVAL OR ANY BUILDING PERMIT.
- THE 2" DISCHARGE FROM ANY FIRE HYDRANT SHALL BE A MINIMUM OF 21 INCHES ABOVE FINAL GRADE.
- FIRE ACCESS ROAD MUST BE AN ALL WEATHER SURFACE AND MAINTAINED DURING DURING CONSTRUCTION.
- NO BURNING IS ALLOWED ON THE PROPERTY. ANY BRUSH OR TRASH SHALL BE HAULED FROM THE SITE OR MILLED ON SITE.
- ANY BLASTING REQUIRES A BLASTING PERMIT FROM THE FIRE DEPARTMENT.

CONSTRUCTION WASTE NOTES:

- BY ORANGE COUNTY ORDINANCE CLEAN WOOD WASTE, SCRAP METAL AND CORRUGATED CARDBOARD ALL PRESENT LN CONSTRUCTION WASTE MUST BE RECYCLED.
- BY ORANGE COUNTY ORDINANCE, ALL HAULERS OF CONSTRUCTION WASTE MUST BE PROPERLY LICENSED.
- ALL EXISTING STRUCTURES 500 SQUARE FEET AND LARGER SHALL BE ASSSESSED PRIOR TO THE ISSUANCE OF A DEMOLITION PERMIT TO ENSURE COMPLIANCE WITH THE COUNTY'S REGULATED RECYCLABLE MATERIALS ORDINANCE (ORMO) AND TO ASSESS THE POTENTIAL FOR DISCONSTRUCTION AND/OR THE REUSE OF SALVAGEABLE MATERIALS.
- PURSUANT TO THE COUNTY'S ORMO, CLEAN WOOD WASTE, SCRAP METAL, AND CORRUGATED CARDBOARD PRESENT IN CONSTRUCTION OR DEMOLITION WASTE MUST BE RECYCLED.
- PURSUANT TO THE COUNTY'S ORMO, ALL HAULERS OF MIXED CONSTRUCTION AND DEMOLITION WASTE WHICH INCLUDES ANY REGULATED RECYCLABLE MATERIALS SHALL BE LICENSED BY ORANGE COUNTY.
- PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITY ON THE SITE, THE APPLICANT SHALL HOLD A PRE-DEMOLITION/PRE-CONSTRUCTION CONFERENCE WITH SOLID WASTE STAFF. THIS MAY BE THE SAME PRE-CONSTRUCTION MEETING HELD WITH OTHER DEVELOPMENT/ENFORCEMENT OFFICIALS.
- THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIALS (ACM) AND/OR OTHER HAZARDOUS MATERIALS SHALL BE HANDLED IN ACCORDANCE WITH ANY AND ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND GUIDELINES.

RESIDENTIAL COLLECTION NOTES:

- RESIDENTIAL WASTE SHALL BE COLLECTED BY USING BOLL OUT CONTAINERS.

SIGNAGE NOTES:

- NO SIGNAGE IS PROPOSED AT THIS TIME.

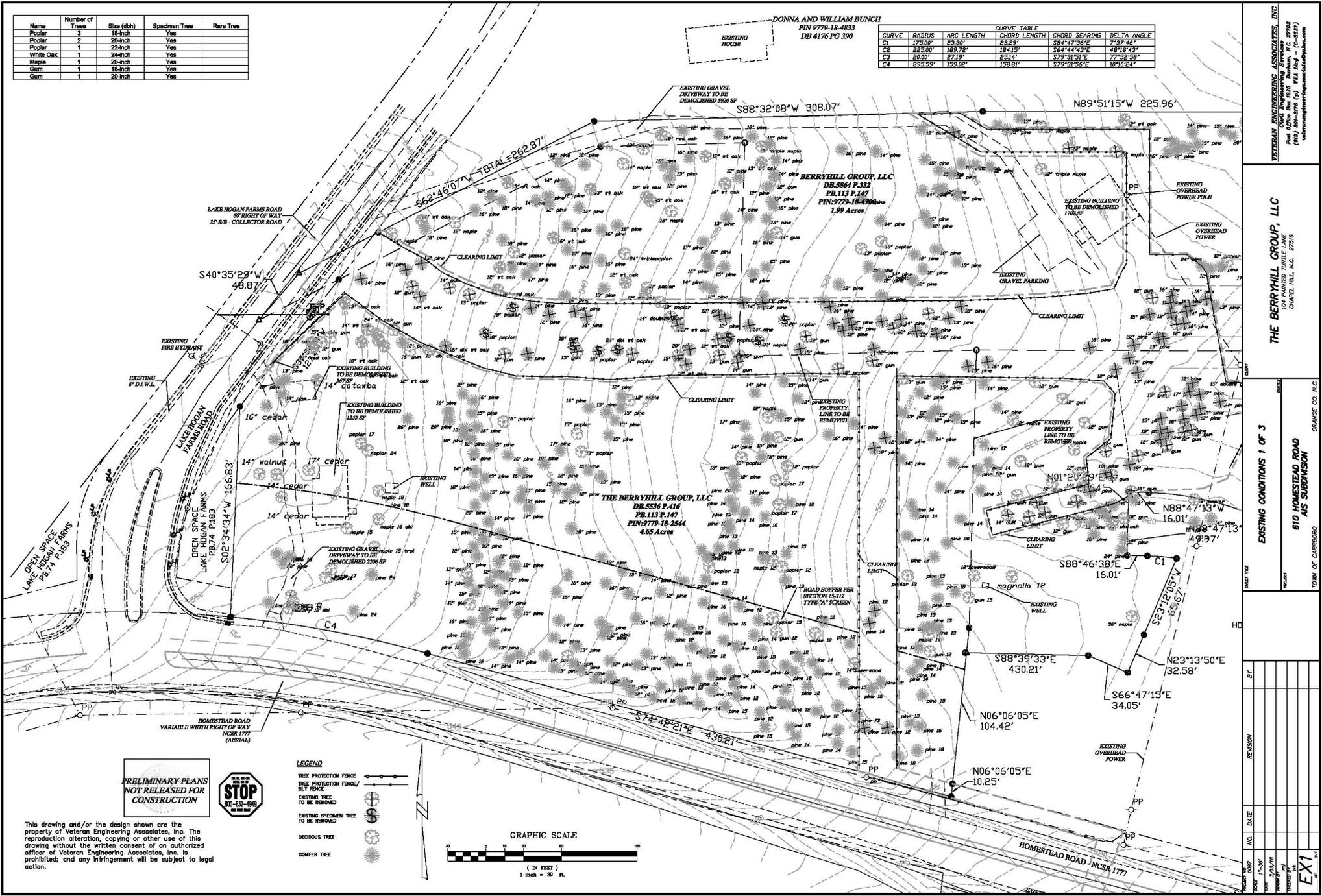
A COPY OF THE APPROVED SITE PLAN MUST BE DISPLAYED IN A KIOSK AT THE SITE SHOWING LOT CONFIGURATION, BASEMENTS, STREETS, AMENITIES, AND OTHER DESIGN FEATURES (WATER, SEWER, OPEN SPACE, ETC). PUBLIC INFORMATION SIGNS ALSO MUST BE ERECTED ON THE SITE PRIOR TO FINAL PLAN APPROVAL.

PUBLIC WORKS NOTES:

- DEVELOPER/OWNER IS RESPONSIBLE FOR SCHEDULING AND COORDINATING AN ON-SITE PRE-CONSTRUCTION MEETING WITH ALL APPLICABLE AGENCIES PRIOR TO ANY SITE DISTURBANCES. THIS PRE-CONSTRUCTION MEETING SHOULD BE IN PLACE AT TIME OF MEETING. (I.E.: TOWN OF CARRBORO - ZONING, ENGINEER AND PUBLIC WORKS, ORANGE COUNTY EROSION CONTROL, ORANGE WATER AND SEWER AUTHORITY, ETC.)
 - AT NO TIME SHALL CONSTRUCTION RELATED VEHICLES, EQUIPMENT, TRAILER OR MATERIALS BE PLACED OR STORED WITHIN THE PUBLIC RIGHT-OF-WAY FOR EXISTING PUBLIC STREETS, SIDEWALKS AND BIKEWAYS AREAS, WITHOUT PRIOR APPROVAL FROM ERIC NESMITH, CONSTRUCTION INSPECTOR, 919-865-0016.
 - THE DEVELOPER/OWNER/CONTRACTORS SHALL BE RESPONSIBLE FOR THE PROMPT REMOVAL OF ANY AND ALL MUD, SOILS, STONE AND/OR CONSTRUCTION RELATED MATERIALS DEPOSITED UPON THE SIDEWALK AND STREET SURFACES IN CONNECTION WITH ANY AND ALL CONSTRUCTION ACTIVITIES. THIS WOULD INCLUDE MAINTENANCE AS NEEDED FOR THE REQUIRED CONSTRUCTION DRIVE ACCESS, DESIGNATED CONSTRUCTION ENTRANCE.
 - THE DEVELOPER/OWNER/CONTRACTOR SHALL FURNISH AND MAINTAIN WORK ZONE TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR WORK ZONE OPERATIONS WITHIN ALL PUBLIC STREET RIGHT-OF-WAYS.
 - PRIVATE STORM DRAINAGE FACILITIES SHALL BE MAINTAINED BY PRIVATE HOMEOWNERS AND/OR A HOMEOWNERS ASSOCIATION.
- TRUTH IN DRAINAGE STATEMENT: THE PROPOSAL MEETS OR EXCEEDS LOCAL AND STATE DESIGN GUIDELINES.

Name	Number of Trees	Size (dbh)	Specimen Tree	Rare Tree
Poplar	3	18-inch	Yes	
Poplar	2	20-inch	Yes	
Poplar	1	22-inch	Yes	
White Oak	1	24-inch	Yes	
Maple	1	20-inch	Yes	
Gum	1	18-inch	Yes	
Gum	1	20-inch	Yes	

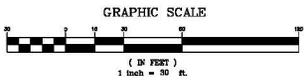
CURVE	RADIUS	ARC LENGTH	CURVE TABLE		
			CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	175.00'	23.39'	83.29'	S84°47'35"E	7°37'46"
C2	225.00'	169.72'	184.15'	S64°44'43"E	48°18'43"
C3	200.00'	27.15'	26.14'	S79°31'01"E	77°32'38"
C4	895.59'	159.25'	158.81'	S79°31'35"E	10°10'54"



**PRELIMINARY PLANS
NOT RELEASED FOR
CONSTRUCTION**



- LEGEND**
- TREE PROTECTION FENCE
 - TREE PROTECTION FENCE / SILENT FENCE
 - EXISTING TREE TO BE REMOVED
 - EXISTING SPECIMEN TREE TO BE REMOVED
 - DECIDUOUS TREE
 - CONIFER TREE



VETERAN ENGINEERING ASSOCIATES, INC.
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veteranengineering.com

THE BERRYHILL GROUP, LLC
104 PAINTED TURTLE LANE
CHAPEL HILL, N.C. 27616

EXISTING CONDITIONS 1 OF 3

610 HOMESTEAD ROAD
AUS SUBDIVISION

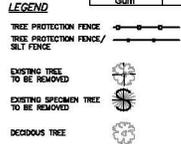
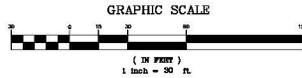
TOWN OF CARBORO
ORANGE CO. N.C.

PROJECT: 170718
DATE: 11/27/18
DRAWN BY: [Signature]
CHECKED BY: [Signature]

NO. DATE
BY: REVISION
DATE: 11/27/18
BY: [Signature]

EX1

Name	Number of Trees	Size (dbh)	Specimen Tree	Rare Tree
Poplar	3	18-inch	Yes	
Poplar	2	20-inch	Yes	
Poplar	1	22-inch	Yes	
White Oak	1	24-inch	Yes	
Maple	1	20-inch	Yes	
Gum	1	18-inch	Yes	
Gum	1	20-inch	Yes	

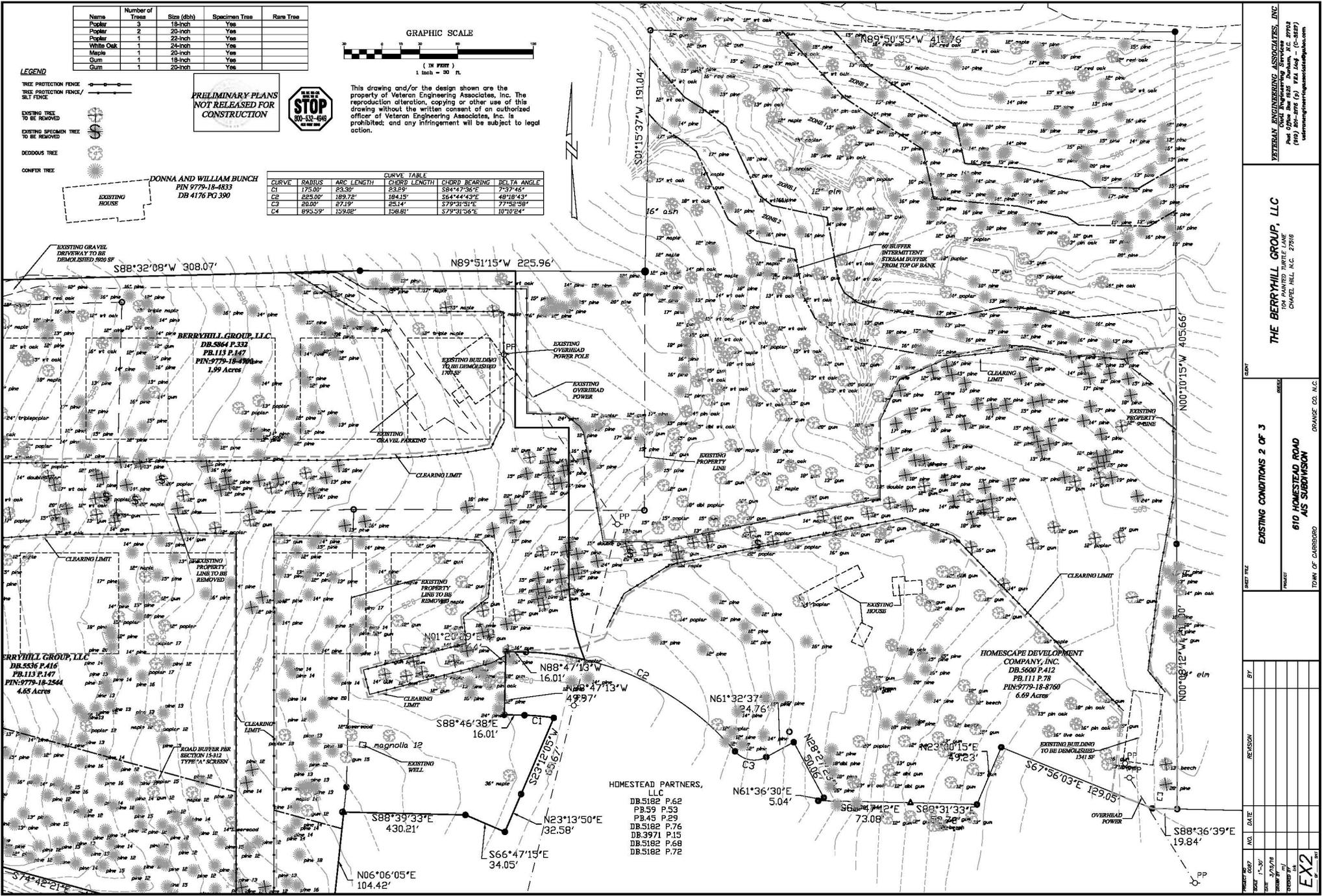


**PRELIMINARY PLANS
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CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	175.00'	23.20'	23.29'	S84°47'36"E	7°37'44"
C2	225.00'	189.72'	184.15'	S64°44'43"E	48°18'43"
C3	200.00'	27.19'	25.14'	S79°31'51"E	77°52'58"
C4	695.59'	109.02'	158.61'	S79°31'56"E	10°18'24"



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veteranengineeringassociates.com

THE BERRYHILL GROUP, LLC
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CHAPEL HILL, N.C. 27516

EXISTING CONDITIONS 2 OF 3

**610 HOMESTEAD ROAD
AUS SUBDIVISION**

TOWN OF CARRBORO ORANGE CO. N.C.

PROJECT: REVISION: BY: DATE: SCALE: 1"=30'

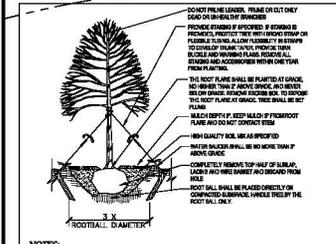
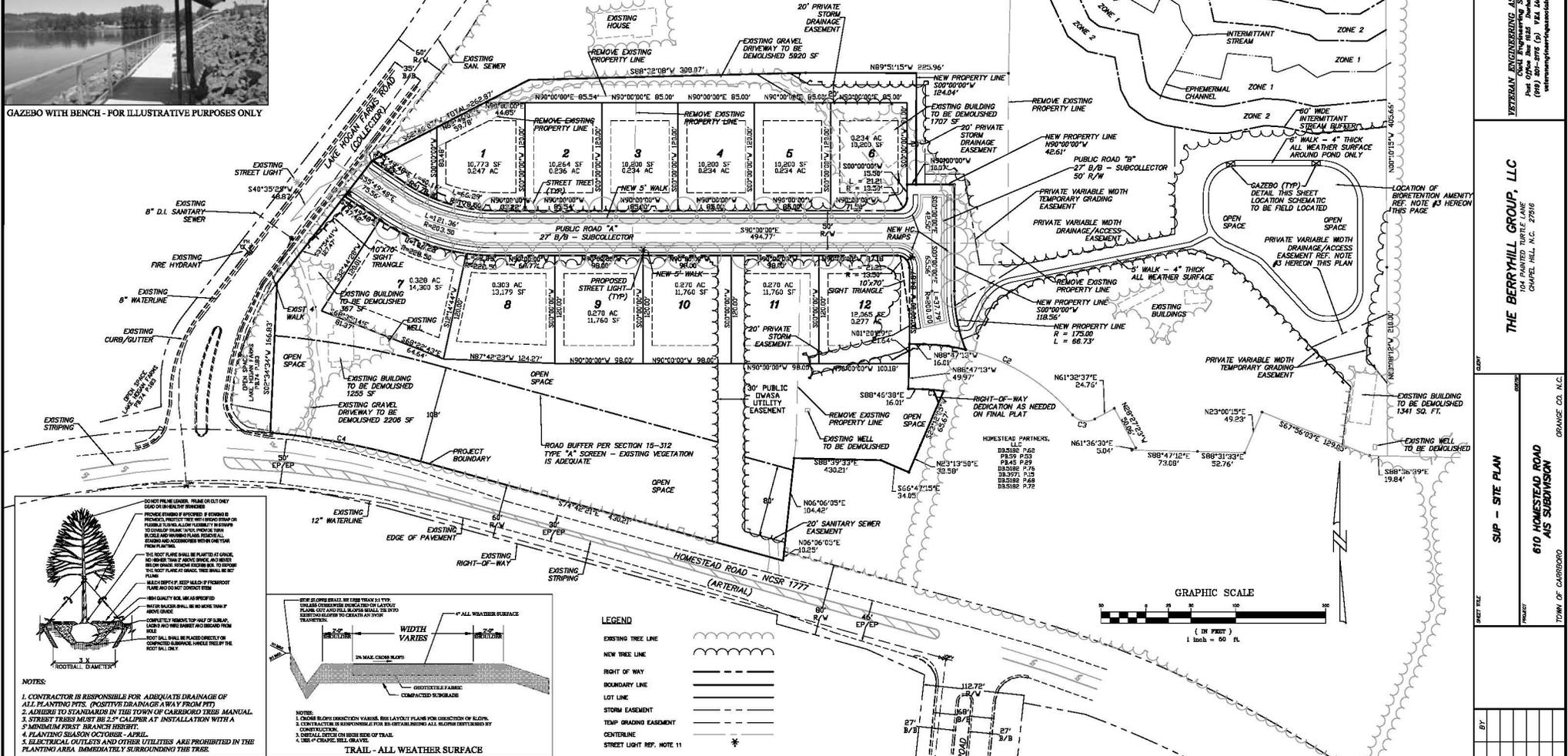
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DRAWN BY: [Signature]
CHECKED BY: [Signature]

EX2

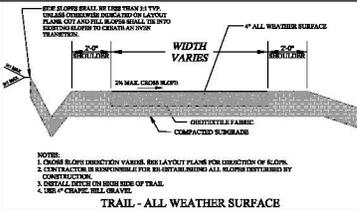


GAZEBO WITH BENCH - FOR ILLUSTRATIVE PURPOSES ONLY

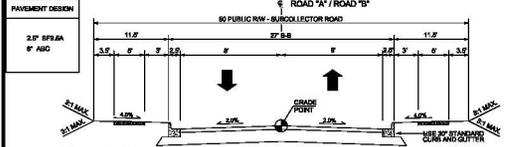
CURVE TABLE					
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	175.00'	23.30'	23.29'	S84°47'36"E	7°37'45"
C2	225.00'	189.72'	184.15'	S54°44'43"E	49°18'43"
C3	250.00'	12.19'	25.14'	S72°31'01"E	77°05'59"
C4	893.59'	159.68'	188.81'	S72°31'56"E	10°10'24"



NOTES:
 1. CONTRACTOR IS RESPONSIBLE FOR ADEQUATE DRAINAGE OF ALL PLANTING PITS. (POSITIVE DRAINAGE A WAY FROM PIT)
 2. ALLOWED TO STAND IN THE TOWN OF CARBORO (2) THESE MANUALLY
 3. STREET TREES MUST BE 2" CALIBER AT INSTALLATION WITH A 5" MINIMUM FIRST BRANCH HEIGHT.
 4. PLANTING SEASON OCTOBER - APRIL.
 5. ELECTRICAL OUTLETS AND OTHER UTILITIES ARE PROHIBITED IN THE PLANTING AREA IMMEDIATELY SURROUNDING THIS TREE.



TRAIL - ALL WEATHER SURFACE

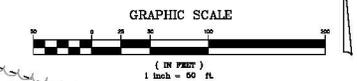


WORKS POSSIBLE EXISTING TREES SHALL BE RELIED UPON FOR STREET TREE REQUIREMENTS. TREES WILL BE PLANTED PER THE SCHEDULE SHOWN HEREIN THIS PLAN AS NECESSARY TO COMPLY WITH SECTION 15-114 OF THE CARBORO Z.O.C. THIS STREET TREE SCHEDULE HEREIN THIS PLAN IS NEARLY THE ONLY AND SHALL BE PLANTED IN ANY TRIANGULAR MANHOLES. AS SUCH, THE TREES SHOWN IN THIS CHART ARE A MAXIMUM NUMBER OF TREES TO BE PLANTED, AND IF EXISTING TREES CAN BE USED, THEN THE AMOUNT OF STREET TREES WILL BE ADJUSTED ACCORDINGLY.

CONTRACTOR SHALL NOT PLANT SAME SPECIES OF TREES SIDE BY SIDE. IN REGARD TO THE RED MAPLE, CONTRACTOR WILL PROVIDE AN ALTERNATIVE STREET TREE, IF AVAILABLE, COMPLYING WITH THE TOWN OF CARBORO APPROVED LIST OF STREET TREES IN ORDER TO PROVIDE SUSTAINABLE DIVERSITY.

Tree Name	Species	Variety	Quantity	Caliper	On Center Spacing	Container of/bb
Red Maple	Acer Rubrum	Oscodora Glory	21	2.5"	30' o.c.	bb
Willow Oak	Quercus Phellos		22	2.5"	30' o.c.	bb

GENERAL NOTES:
 1. BOUNDARY AND TOPOGRAPHIC SURVEY PROVIDED BY: R.S. JONES & ASSOCIATES, INC.
 2. THE PURPOSE OF THE PLANS IS TO SUBDIVIDE THE LAND INTO TWELVE (12) NEW RESIDENTIAL LOTS.
 3. AN OFFSITE BIO-RETENTION FACILITY ("BMP") IS PROPOSED WITH THIS PROJECT. THE BMP IS LOCATED WITHIN AN EASEMENT AND SHD BMP WILL SERVE NOT ONLY THIS PROPOSED SITE BUT ALSO SERVE THE SITE IMMEDIATELY TO ITS EAST. THE BMP WAS SITED IN AN AREA WHERE THE TREES EXIST SO AS TO AVOID HARDWOOD DEVELOPMENT CONSTRAINTS.
 4. MAINTAIN APPROPRIATE AND REQUIRED TRAFFIC CONTROL DEVICES AT ALL PUBLIC ROADWAY CONNECTIONS. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "MCDOT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
 5. ALL SOIL FILL MATERIAL SHALL BE SUITABLE, STABLE SOILS LARGER THAN 6" IN DIAMETER. SOIL SHALL BE PLACED IN APPROXIMATELY 6" LIFTS COMPACTED TO A DENSITY OF 95 PERCENT LIGHT DENSITY DESIGN. DEVELOPER SHALL FURNISH A SOILS ENGINEERING AND TESTING FIRM TO OBTAIN AND PERSONALLY TEST ALL MATERIAL FOR OPTIMAL PLACEMENT AND COMPACTION. COPIES OF ALL REPORTS, CONTAINING OBSERVATION AND GENSITY TEST RESULTS, SHALL BE FORWARDED TO THE ENGINEERING DEPARTMENT.
 6. THERE ARE EXISTING UNDERGROUND UTILITIES ON THIS SITE. CONTRACTOR SHALL CALL, NO-NO-CUTS AND LOCAL AUTHORITIES TO VERIFY ALL UTILITY LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.
 7. ALL ROADS LOCATED IN THIS DEVELOPMENT ARE PUBLIC.
 8. UNLESS OTHERWISE SPECIFIED, ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF CARBORO STANDARDS AND SPECIFICATIONS.
 9. THERE IS NO FEMA 100 YEAR FLOOD PLAIN ON THIS SITE.
 10. THE CONTRACTOR WILL FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ANY EXISTING UTILITIES SHOWN HEREON ARE TO BE CONSIDERED APPROXIMATE. SHOULD THE CONTRACTOR FIND THAT THERE MAY BE A CONFLICT WITH INFORMATION SHOWN IN THESE CONTRACT DOCUMENTS, THE CONTRACTOR WILL REPORT THE INFORMATION FOUND TO THE ENGINEER OF RECORD AND THEN AWAIT FURTHER DIRECTION FROM THE ENGINEER OF RECORD.
 11. STREET LIGHTS: USE HIGH PRESSURE SODIUM (HPS) 8,500 LUMENS (100 WATT) MOUNTED ON 20" BRASSLESS POLES. THE STANDARD LIGHT FIXTURE SHALL BE THE COBRA-HEAD STYLE OR TOWN APPROVED EQUAL.
 12. ALL TREES PLANTED AND MAINTAINED WITHIN THE PUBLIC RIGHT-OF-WAY SHALL PROVIDE A CLEAR ZONE BETWEEN 2' AND 7' ABOVE GROUND TO PREVENT THE CONTACT OF PEDESTRIANS, DRINKWAYS AND TO ACCOMMODATE PEDESTRIANS.
 13. PROVIDE CONCRETE TRAIL ACROSS EMERGENCY SPILLWAY.



GRAPHIC SCALE
 1 inch = 60 ft.

STOP
80-52-498

**PRELIMINARY PLANS
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 info@veteraneng.com

THE BERRYHILL GROUP, LLC
 610 HOMESTEAD ROAD
 A15 SUBDIVISION
 CARROLL HILL, N.C. 27016
 ORANGE CO., N.C.

SUP - SITE PLAN

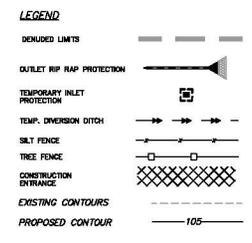
SHEET NO. 1

NO.	DATE	BY	REVISION
1	10/17/24	JZ/KAC	PER TOWN COMMENTS
2	10/17/24	JZ/KAC	PER TOWN COMMENTS
3	10/17/24	JZ/KAC	PER TOWN COMMENTS

SP1

- CONSTRUCTION SEQUENCE:**
1. SUBMIT DOCUMENTATION REQUIRED UNDER THE SITE NOTES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY (NCO10000) TO STORMWATER INSPECTIONS THROUGHOUT THE PROJECT. INSTALL TREE PROTECTION FENCING.
 2. PRIOR TO BEGINNING CONSTRUCTION, CALL INSPECTOR STEVE KALTENBACH (919) 245-2586 TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING WITH ORANGE COUNTY AND THE ENGINEER OF RECORD.
 3. USE EXISTING GRAVEL ACCESS DRIVEWAY (ACCESS FROM HOMESTEAD ROAD) AT SOUTHEAST CORNER OF THE HOMESCAPE DEVELOPMENT COMPANY INC PROPERTY, TO ACCESS THE SITE IN ORDER TO CONSTRUCT THE SILT FENCE AND SILT FENCE OUTLETS AND PROPOSED SEDIMENT BASIN AND IT ASSOCIATED APPURTENANCES.
 4. CLEAR AS NECESSARY TO INSTALL CONSTRUCTION ENTRANCE.
 5. BEGIN CLEARING AND GRUBBING THE ROADWAY RIGHT OF WAY. INSTALL TEMPORARY DIVERSIONS AND SILT FENCES AS CLEARING PROGRESSES.
 6. CLEAR AROUND THE PERIPHERY OF THE STORMWATER BMP TO INSTALL THE SILT FENCE AND SILT FENCE OUTLETS. CLEAR AND GRUB THE AREA WHERE THE STORMWATER FACILITY WILL BE CONSTRUCTED AND CONSTRUCT THE STORMWATER BMP.
 7. BEGIN CONSTRUCTION OF THE PROPOSED WATERLINES, SANITARY SEWER COLLECTORS AND THE STORM DRAINAGE PIPES. INSTALL ALL INLET PROTECTIONS AT THE STORM INLETS AS PROPOSED.
 8. ONCE THE UPSTREAM SITE HAS BEEN STABILIZED THEN CONVERT THE SEDIMENT BASIN TO THE PERMANENT BIO-RETENTION FACILITY AND STABILIZE THE DENUDATED AREA IMMEDIATELY.
 9. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED AS REQUIRED.
 10. STABILIZATION IS REQUIRED WITHIN 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING OR INACTIVITY ON PROJECT SITE.
 11. THE CONTRACTOR WILL KEEP RECORDS REQUIRED BY NPDES OF ALL EROSION CONTROL DEVICES. THE CONTRACTOR WILL CHECK EACH DEVICE AFTER EVERY SIGNIFICANT RAINFALL EVENT (1" OR MORE OF RAINFALL). THE CONTRACTOR WILL SUBMIT THESE RECORDS TO THE OWNER. THE CONTRACTOR WILL MAKE HIMSELF AWARE OF NPDES REQUIREMENTS FOR RECORD KEEPING.
 12. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO KEEP SEDIMENT FROM LEAVING THE SITE.

STRUCTURE	DEPTH	WIDTH	LENGTH	AREA	% OF DIST
8 TO 5	506.00	504.50	470.00	234	0.84
4 TO 3	216.00	209.00	106.00	23	2.46
3 TO 2	222.00	215.00	109.00	24	1.11
8 TO 5	592.00	511.00	310.00	22.0	1.23
7 TO 5	517.00	518.00	519.00	24.0	1.18
8 TO 7	580.00	518.00	512.00	23.0	1.23
8 TO 5	582.00	511.00	510.00	27.0	1.09
8 TO 5	524.00	512.00	511.00	27.0	1.25
11 TO 10	528.10	512.40	512.50	27.0	0.81
12 TO 11	517.00	511.00	512.00	26.0	0.96
8 TO 5	505.00	514.00	513.00	27.0	0.98
14 TO 13	508.00	518.00	514.00	28.0	2.04
16 TO 14	505.00	520.00	518.00	28.0	1.42
16 TO 14	507.00	523.00	518.00	28.0	1.42
17 TO 16	540.00	520.00	523.00	29.0	0.92
18 TO 16	508.00	520.00	520.00	27.0	0.81
18 TO 16	509.00	521.00	521.00	27.0	0.81
20 TO 18	507.00	523.00	523.00	27.0	0.81



RIP RAP APRON DIMENSION DATA

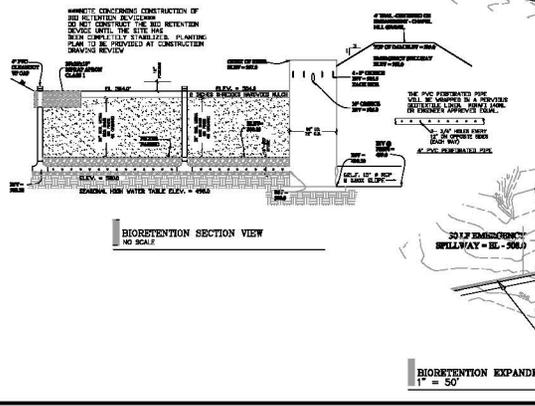
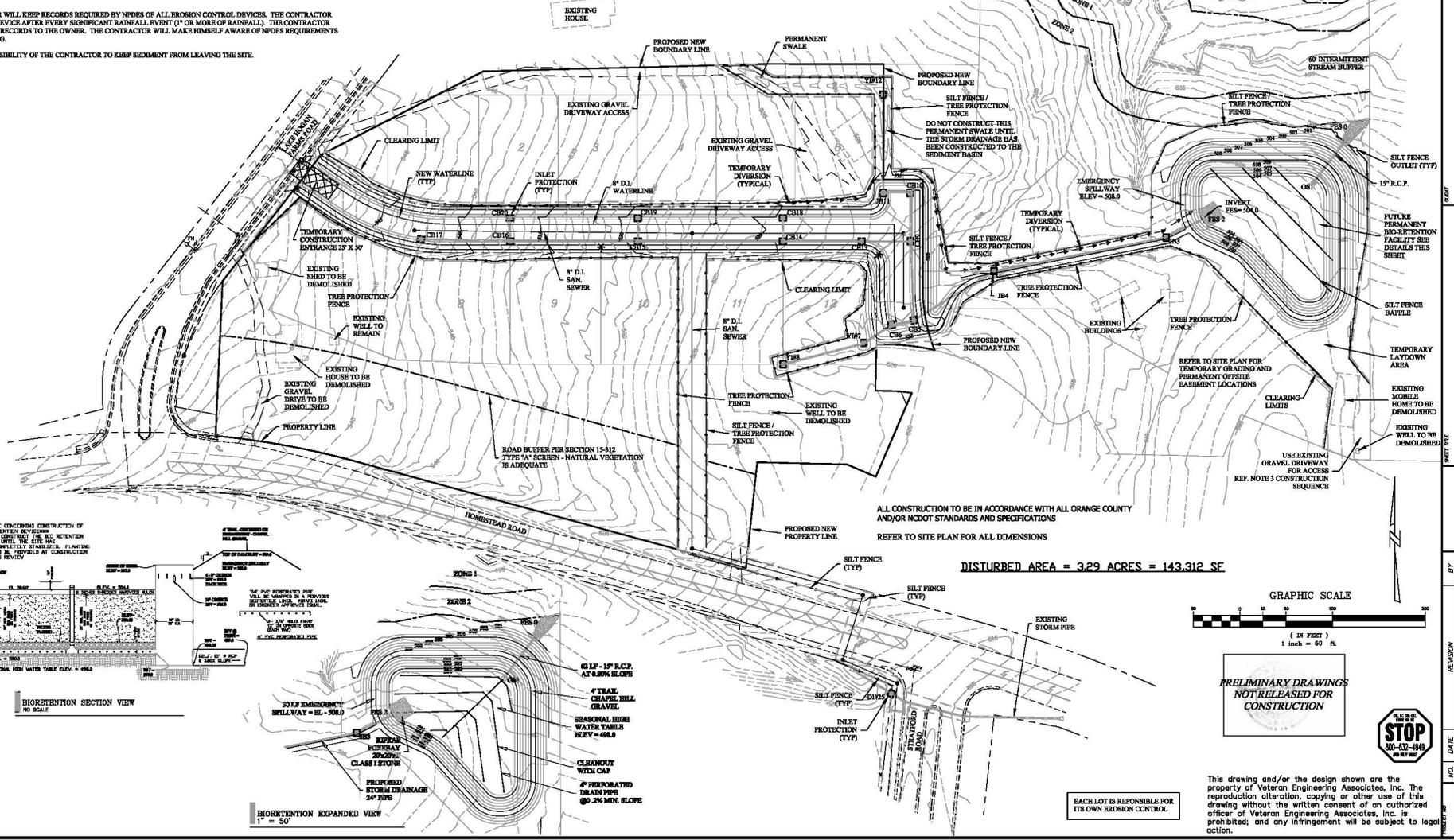
STRUCTURE NO.	D	Q	L	UPSTREAM WIDTH	DOWNSTREAM WIDTH	D 50	D MAX	DEPTH
		cfs	ft	X 50		ft	1.5 X Q	ft
FES#0	15	12	18'	3.8	18	12	18	24.0
FES#2	24	12.5	18'	5.0	18	12	18	24.0

DO NOT CONSTRUCT THE RIP RAP APRON AT FES-2 UNTIL THE UPSTREAM SITE IS STABILIZED AND CONVERSION FROM THE SEDIMENT BASIN TO THE BIO-RETENTION FACILITY IS COMPLETE.

ALL PIPE IS CLASS III R.C.P. UNLESS OTHERWISE SPECIFIED

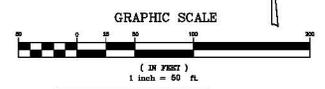
FES = FLARED END SECTION
 VT = RAISED COVER YARD INLET
 JB = JUNCTION BOX
 CB = CATCH BASIN

STORM DRAINAGE SHALL CONFORM TO NCDOT STANDARDS AND SPECIFICATIONS



ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL ORANGE COUNTY AND/OR NCDOT STANDARDS AND SPECIFICATIONS
 REFER TO SITE PLAN FOR ALL DIMENSIONS

DISTURBED AREA = 3.29 ACRES = 143,312 SF



**PRELIMINARY DRAWINGS
 NOT RELEASED FOR
 CONSTRUCTION**



EACH LOT IS RESPONSIBLE FOR ITS OWN EROSION CONTROL.

This drawing and/or the design shown are the property of Veteran Engineering Associates, Inc. The reproduction, alteration, copying or other use of this drawing without the written consent of an authorized officer of Veteran Engineering Associates, Inc. is prohibited, and any infringement will be subject to legal action.

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 Civil Engineering Services
 104 Painted Turtle Lane
 Orange, NC 27518
 (919) 201-2755 (F) 252-224-1100 (C) 252-275-1100
 vetaas@vetaas.com

THE BERRYHILL GROUP, LLC
 104 Painted Turtle Lane
 Orange, NC 27518
 919-201-2755

GRAVING / EROSION CONTROL PLAN

**610 HOMESTEAD ROAD
 A15 SUBDIVISION**

CARRBORO, NC
 ORANGE COUNTY

NO.	DATE	REVISION
1	10/27/16	PER TOWN COMMENTS

PROJECT NO: 16-001
 DATE: 10/27/16
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 PROJECT: 610 HOMESTEAD ROAD A15 SUBDIVISION

EC1

TOWN OF CARRBORO



Environmental Advisory Board
301 West Main Street, Carrboro, North Carolina 27510

R E C O M M E N D A T I O N

THURSDAY, NOVEMBER 5, 2015

Motion was made by Reddy and seconded by Turner that the EAB recommends that the applicant consider the following input as part of the concept review for the Preserve at Lake Hogan Farm.

One or more of the existing wells be used for irrigation or other purposes. In an effort to reduce impervious surface, limit sidewalks to one side of the road. Locate stormwater facilities to minimize impacts to hardwood and mature pine stands. **One well is to be used for irrigation B.M.P. located in pine stand.**

The EAB is also forwarding on, for the applicant's reference and as a separate document, a checklist that the EAB intends to use for the final review prior to the public hearing.

VOTE:**AYES:** Cotter, Crook, O'Connor, Patrick, Reddy, Sinclair, Turner**ABSENT/EXCUSED:** None**NOES:** None**ABSTENTIONS:** None

Bruce Sinclair 11/5/15

 (Chair) (Date)



TOWN OF CARRBORO PLANNING BOARD

301 West Main Street, Carrboro, North Carolina 27510

Thursday, January 7, 2016

PLANNING BOARD COMMENTS - CONCEPT PLAN FOR 610 HOMESTEAD ROAD (Tentatively called The Preserve at Lake Hogan Farms)

The Planning Board would like to see the applicant consider further the possibilities available in the lot and the options provided for an Architecturally Integrated Subdivision. In particular, the Concept Plan would be improved upon if:

- the subdivision were designed to relate to the surrounding residential areas not as a copy but as a complement. **noted**
- the plan were revised to include a variety of lot sizes and housing types. **noted**
- the plan were revised to include more lots, greater unit density, and at least one affordable unit. **noted**
- the plan went beyond the minimum requirements for pedestrian and bicycle connectivity not only within the development but to surrounding areas, including sidewalk along Lake Hogan Farms Road and Homestead Road. **noted**
- the plan looked forward to future road connectivity to surrounding areas. **noted**

Moved: Adamson

Seconded: Tiemann

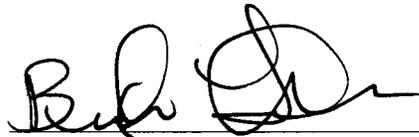
Vote:

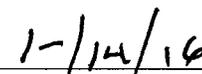
Ayes (8) Foushee, Adamson, Clinton, Haggerty, Hunt, Pendergrass, Tiemann, Whittemore

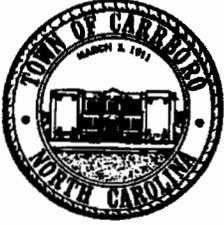
Noes: (0)

Absent/Excused: (2) Cohen, Poulton

Abstentions: (0)


Chair


Date



TOWN OF CARRBORO

Transportation Advisory Board

301 West Main Street, Carrboro, North Carolina 27510

THURSDAY, OCTOBER 1, 2015

Transportation Advisory Board Recommendation re: Preserve at Lake Hogan Farms Concept Plan

The Transportation Advisory Board discussed the concept plan for the Preserve at Lake Hogan Farms subdivision. The TAB offers the following comments:

- 1) Please consider providing an easement or other accommodations on site for a future bike/ped path from the stub street, through the Litchfield property, connecting to Stratford Road. It is understood that the Litchfield property is not under your control, so this comment refers to the parts of your property that a path would pass through. **noted**
- 2) Consider constructing a 12'-15' wide multi-use path along the property frontage on Homestead Road, beginning at the end of the sidewalk at the corner of Homestead and Lake Hogan Farm Rd. The approximate length of this path would be .1 miles. **noted**
- 3) Please plan to accommodate on-street parking when designing the lots and driveway locations. **noted**
- 4) Consider narrowing the width of the street to reduce speeding in the neighborhood.
town requires 27' b/b in 50' r/w for sub-collector

For Linda Haac

Transportation Advisory Board Chair

10/8/15

Date

VETERAN ENGINEERING ASSOCIATES, INC.

Civil Engineering Services

Post Office Box 1625 Durham, North Carolina 27702

919-201-2175 (phone) email: tom@veteranengineeringassociates.com

610 Homestead Road Transportation Impact Statement

1. The proposed residential development contemplates twelve new dwellings. The proposed roadway connects to existing Lake Hogan Farms Road approximately 380 [as measured from Centerline to Centerline] feet North of the intersection of Lake Hogan Farms Road and Homestead Road. According to 2015 ANNUAL AVERAGE DAILY TRAFFIC MAP generated by the TRAFFIC SURVEY GROUP it appears that Homestead Road has an average daily traffic count of approximately 5200 trips per day. Furthermore, according to the Town of Carrboro Transportation Planner the CTP contemplates a design capacity of 11,000 trips per day on Homestead Road thought to be reached in the year 2040.

As per Chuck Edwards, NCDOT the proposed site would generate approximately 12 peak hour trips and in accord with the Town of Carrboro TRIP GENERATION RATES table, the proposed site would generate approximately 120 trips per day.

As per the Town of Carrboro planning department, it appears that Lake Hogan Farms subdivision has approximately 452 residential lots and two points of ingress/egress at Lake Hogan/Homestead intersection and Hogan Hills/Old 86 [Hillsborough Road] intersection. If one divides the number of lots in half then that would generate approximately 226 peak hour trips at Lake Hogan Farms Road/Homestead Road intersection.

The increase of peak hour trips at the intersection of Lake Hogan Farms Road/Homestead Road is approximately 2.5-5.0% increase.

The proposal is in conformance with the Town of Carrboro's long range policies in terms of Connector Roads. According to said policies, The Town of Carrboro desires connector roadways [sub-collector] to be constructed connecting the intersection at Stratford Road/Homestead Road to Lake Hogan Farms Road. Furthermore, Lucas Lane is to be connected to said roadway

and the development proposes the construction of said connector road within the limits of the property. The future connection would provide for two additional points of connection to Homestead Road which will be a benefit to the residents of the Town of Carrboro.

2. In accord with the Town of Carrboro's Transportation planning, the proposed roadway is required to be a sub-collector road in a fifty-foot right of way. And said roadway will have sidewalk on each side of the road and the cross section is twenty-seven feet back to back [curb and gutter]. Examining average daily traffic it appears that Lake Hogan Farms receives approximately 2,260 ADT [10 x (452/2)]. The newly proposed twelve lot subdivision would provide approximately 120 ADT. That is an approximate increase of 5 percent. Sight triangle looking Southward towards Homestead Road at the intersection of Lake Hogan Farms Road and the New proposed roadway is proposed. The existing roadway configuration allows ample sight distance to the North. Additionally, a stop sign is proposed on the New proposed roadway at the intersection with Lake Hogan Farms Road. An analysis of accident data in the vicinity of Homestead Road and Lake Hogan Farms Road and a detailed conversation with the Carrboro Police Department about the available accident data reveals that only one accident occurred between automobiles over the last five years. That accident occurred in 2013. Given all the data presented herein, no additional safety measures appear to be warranted.

3. As per previous item, the proposed roadway contemplates five feet sidewalk both sides of the street to accommodate pedestrian use. The proposal also contemplates the construction of an all weather surface trail system that is connected to the sidewalk system and can accommodate bicycle uses extending towards the Eastern property line.

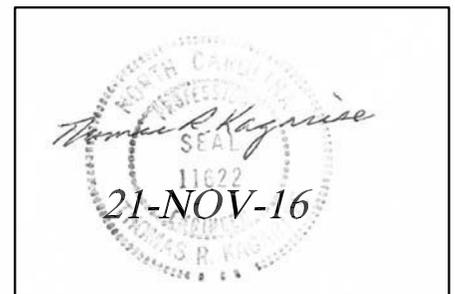
4. The Developer contacted the Chapel Hill transit system and found that they have no plans to extend bus service to this area.

Sincerely,

Veteran Engineering Associates, Inc. (C-3527)

by, Thomas Ray KAGARISE, P.E. (011622)

Veteran Engineering Associates, Inc.



<u>Name</u>	<u>Address</u>
POLO MUELLER	114 HOGAN WOODS CIR
Maurice Blom	102 LAKE MANOR RD CH
Derek Solum	113 Shadow Ridge Place
Bree Horant	604 Lake Hogan Lane CH
LUCIA SHWARTZ	644 Lake Hogan Lane CH
Steve Shaw	131 Larkin Lane
Shawn Powers	137 S Fields Cir, CH

Jim Brandewie	owner/developer
Tom Kagarise	Veteran Engineering
Michael Dykes	Veteran Engineering
Jeff Kleveland	Town of Carrboro

Two projects

→ 600 Homestead Rd @ Lake Hogan Farm
Public Information Meeting 11/1/16 6PM Town Hall

→ 716 Homestead Rd

- Road system discussed. Town Plan for connectivity Litchfield approved, not built.
- Parcels discussed (3)
 - 1) 610 Homestead Rd.
 - 2) 716 " " "
 - 3) 8802 Lake Hogan Farms Rd. 716 Homestead Rd property
Easement (Existing) from ~~existing~~ home to Lake Hogan Farm Rd
to be abandoned because no longer necessary
- Discussion of Burch position regarding the above
- All parcels zoned R-20
27-40 lots on 125 to 13 acres (too intense, want less dense)
- Reasons for road location
Too close to Lake Hogan Farm Rd to access Homestead Rd
- 100' average buffer along Homestead Rd
- Tee (Hammerhead), instead of cul-de-sac
- Eventual extension to Homestead @ Stratford per Town Requirement
- Lots 13-17 on 716 property

Q • What happened to Litchfield? 2008 crash

Q • Would property touching on Lake Hogan Lane ever be developed? No, if current project approved

Q • Concern about congestion. "When will Planning Board stop it?"
17 lots instead of 27-40 allowed
Develop within the rules
Board wanted more density

Q • Did Lake Hogan Farm HOA have to approve road connection? No

Q • Future widening of Homestead Rd - how would it impact buffer?

Q • What size lots? What size houses? 1/4 acre average houses similar to Lake Hogan estates
Similar to Copperleaf
Price range similar to Estate section of Lake Hogan
Set backs discussed

- Q What is the name of project? developer considered being
 • Lake Hogen Farm HOA asked if ~~wanted to be~~ included
 in Lake Hogen Farm community
- Met with HOA on several occasions (\$35,000 payment)
 Recreation point sharing of excess points discussed.
 Payment in lieu Discussion
 Trail system and gazebos around BMP proposed
 Discussion of value to being in Lake Hogen Farms
 452 homes in CUP (original)
 Lake Hogans Farms would control entrance
- Q Could BMP be moved if recreation points were no longer needed.
 Discussion of BMP location
- Q How wide is the road? 50' ROW 27' Back to back, SW both sides
- Q Where are we in the renew process?
 12 → ^{Concept plan} SUP Town & Advisory Board, 4 reviews to staff, Dec Advisory Bd
 5 → Concept plan ^{& Bd of Adjustment hopefully}
- Break ground 2 QTR 2017 hopefully
- Q Water? Sewer? Issues with Litchfield, Pump station
 Sewer connection in Wexford
- * Q Traffic issues @ Lake Hogen Farm Rd and Homestead Rd
 "Town needs to upgrade infrastructure" townwide
 Jeff suggests HOA prepare exhibit of traffic concerns
 When was last traffic impact study done on Homestead Rd?
- Q How will trees be saved? 100' buffer, 40'+ open space, street trees

Will trees be saved on each lot? ^{some yes but builder decision}
 "Sea of mud" - likened to other projects along Homestead
 Control of house builders clearing trees? - developer part of ARB

Q Why has Homestead Rd become a development corridor?

Q Sight distance requirements discussed

More road?

Q What will pond look like? Planted, not grassed, ^{bio retention & pollinator garden}

Q Is there a town limit on size of a house that can be built?

Jeff's permitting process controls that for infill, residents need to raise the issue.

AIS setbacks set by developer

Q Is 500' notification enough? developer decided to increase notification area

Q Shared driveways? not marketable

Q How far are houses in 5 lot phase off road?

From: [Tom Kagarise](#)
To: [Jeff Kleaveland](#)
Cc: ["Tom Kagarise"](#)
Subject: 610 Homestead Road
Date: Thursday, September 22, 2016 1:18:23 PM

On behalf of the developer, please find the following narrative response for removal of specimen trees.

Tree Removal Narrative/Justification:

In considering the design of a road system to serve this development, the alignment flexibility is limited due to several factors. The parcel shape is generally rectangular and is longer (east to west) than wide (north to south). With no ability to access the site from the north (developed lots) or south (NCDOT won't allow access from Homestead Rd), the only access point is from the west off Lake Hogan Farm Road. Due to the narrow width of the parcel, the access point off Lake Hogan Farm Road has been pushed as far away (north) from the intersection with Homestead Road as possible. This condition relates to public safety in terms of distance between intersections.

In order to satisfy the requirement for connectivity, the designed road system must extend west to east from the western access point off Lake Hogan Farm Road to the eastern border with Homescape Development Company and southern border with Homestead Partners. A west to east road system design allowing for houses on both sides of the road is further constrained by a 20' setback along the northern border and a 100' average setback from Homestead Road along the southern border. Given the fact that the parcel has trees with diameters of 12" or greater throughout the site, it is necessary to remove some of these trees when constructing a road

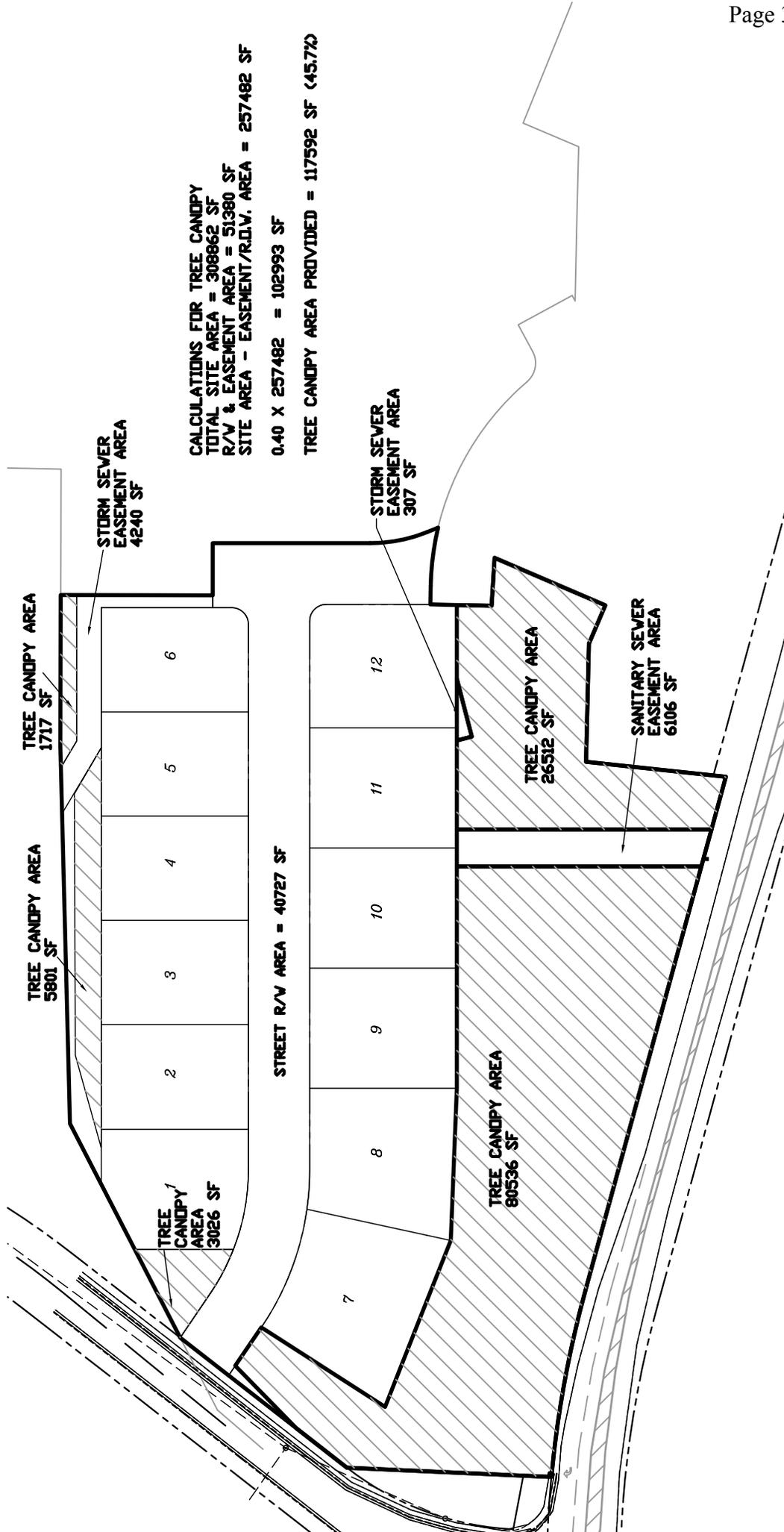
system for this project. Given the constraints detailed above, the ability to shift the road system north or south is very limited. With several specimen trees just outside of the roadway clearing limit, shifting the road system north or south would not result in the removal of fewer specimen trees and, in some cases, necessitate the removal of more specimen trees than currently proposed.

Sincerely,

Veteran Engineering Associates, Inc. (C-3527)

by, Thomas Ray KAGARISE, P.E. (011622)

Veteran Engineering Associates, Inc.
Post Office Box 1625
Durham, North Carolina 27702
919-201-2175 (phone)



CALCULATIONS FOR TREE CANOPY
TOTAL SITE AREA = 308662 SF
R/W & EASEMENT AREA = 51380 SF
SITE AREA - EASEMENT/R.D.V. AREA = 257482 SF
0.40 X 257482 = 102993 SF
TREE CANOPY AREA PROVIDED = 117592 SF (45.7%)



Applicant responses to the applicable provisions/recommendations and goals of the

following planning documents (which can be found here: <http://www.ci.carrboro.nc.us/750/Planning-Library>)

- a. Connector Roads Policy
- b. Facilitated Small Area Plan for Carrboro's Northern Study Area
- c. Vision 2020

Connector Road Policy:

The proposed project complies completely with this policy as it contemplates future connectivity with Lake Hogan Farms and Stratford - which are respectively Connectors but are classified as Collectors according to the Town of Carrboro Transportation department. This proposal supports a construction and maintenance of a sound traffic plan for the Town.

Small Area Plan

The proposed project contemplates the goals of the small area plan to provide access to Homestead Road from Lake Hogan Farms. Said connection to Homestead Road shall be made in the future; however, this project contemplates this connection as approximately 100 feet of new roadway is proposed stubbing toward the South to be connected at the intersection of Homestead Road and Stratford Road.

The proposal contemplates sidewalks on both sides of the proposed roadway as well as a "nature walk/trail" from the proposed subdivision to the BMP. Said sidewalks run the full length of the

With regard to trend of the reduction of Federal moneys, the proposal adds tax base in support of maintenance and thus lessens the possibility of increased ad valorem tax. Also the projects provides for the adequate flow of bus, auto, bicycle, and pedestrian traffic in addition to the proposed nine hundred feet of unpaved nature trail.

The proposal contemplates contiguous wooded areas to remain undisturbed on the North and South sides of the site.

Vision 2020

The proposal provides for preservation of the natural environment - especially along the Homestead Road corridor as the proposal contemplates more than one-hundred feet of natural preserved open space in excess of the required buffer. Also, the proposal intends to maintain the character of the existing surrounding neighborhoods such as Lake Hogan Farms and Wexford.

Regarding pedestrian access, proposal contemplates the addition of sidewalks on both sides of the new public sub-collector.

From: [Jim Brandewie](#)
To: [Jeff Kleaveland](#)
Cc: [Thomas Kagarise](#); tom@veteranengineeringassociates.com
Subject: Homestead Road development
Date: Thursday, September 15, 2016 11:51:20 AM

Jeff,

The narrative below indicates how we plan to adhere to Carrboro's vernacular architectural standards. Will this suffice as an accompaniment to the housing style pictures submitted previously?

Thanks,
Jim

Homestead Road development: Architectural Narrative

The Architectural Guidelines for the Homestead Road development at Lake Hogan Farms have been established to assure that improvements are constructed in a manner that provides for harmony of external design with utmost respect for the natural features and topography of the land. The Homestead Road project will amalgamate the Vernacular Architectural Standards (VAS) which define Carrboro's unique sense of place and the existing architectural features predominant in Lake Hogan Farms to create a neighborhood of aesthetically pleasing homes and landscape.

Home facades will showcase front porches with a minimum depth of seven (7) feet with beautiful detailing including old style columns, wrought iron railings and hardscaping of brick and stone composition. Diversity in size and shapes of front porches or entryways will add character to each home.

Garages will be set behind the front façade of the home with every intention of any double garage to be turned away from the street in a side loading capacity. Garage roofs will offer similar roof pitches to the homes and any special detailing on the home will carry through to the garage design.

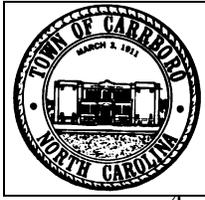
The main goal of the exterior design is to combine appropriate scaling of homes with the proper massing and textures. Exterior materials will include a mix of brick and stone as well as hardiplank siding and shakes. Special attention will be given to assure window sizes are properly proportioned and spaced. Simulated divided light grilles will enhance historical accuracy to the VAS. Details such as colonial styled moldings, wrought iron railings, moderate roof overhangs will be showcased throughout the streetscape.

From: Jim Brandewie
To: Jeff Kleaveland
Subject: Homestead Road project: representative house renderings (1 of 2)
Date: Thursday, September 15, 2016 1:36:31 PM

Jeff, representative house renderings for the Homestead Road project are shown below. Thanks, Jim







TOWN OF CARRBORO

PLANNING BOARD

301 W. Main Street, North Carolina 27510

THURSDAY, NOVEMBER 17, 2016

MEMBERS		GUESTS		STAFF	
Catherine Adamson	Heather Hunt	Grace Holton		Tina Moon	
Tom Tiemann	Braxton Foushee	Meg Holton		Jane Tuohey	
Blake Rosser	Andrew Whittemore				
Susan Poulton					
Hathaway Pendergrass					
David Clinton					

Board Liaison:

Absent/Excused:

David Clinton announced that he made and brought a PowerPoint presentation of the last walking conversation and that he would like to show it to the Planning Board members.

I. APPROVAL OF MINUTES

November 3, 2016

It was noted to remove the comment of Meg and Grace Holton from being the owners of Club Nova. Pendergrass moved to approve the minutes, Tiemann seconded the motion. **VOTE:** AYES (8) Adamson, Tiemann, Poulton, Clinton, Hunt, Foushee, Pendergrass, Whittemore, NOES (0); ABSENT/EXCUSED (1) Rosser (Rosser arrived after the minutes were approved). The November 3, 2016 Planning Board minutes were approved.

II. OTHER MATTERS

A) Concept Plan for Food First

Moon gave brief overview of the concept plan and noted that it is the step before they submit their formal application. Moon went through the plans presented at the November 3rd meeting. Members discussed moving the tower back so that it didn't feel as tall against the surrounding buildings.

Planning Board members like the concept plan overall and the effort to keep clients on the property within the courtyard while they are waiting to get in the building to eat rather than waiting and potentially blocking the sidewalk. Members also liked the idea of moving the stair tower back from façade, which could soften the visual impact of having a tall building right next to the sidewalk and could potentially enlarge the courtyard area. Repositioning the stair tower would affect the entrance to the ground level parking; the entrance drive would likely have to be relocated to the east end of the building. They also

1 liked the idea of planting trailing vegetation from the second story balcony area down
2 toward the courtyard. Clinton recommended the use of EIFs painted a light color instead
3 of Stucco for the façade treatment. Members encouraged additional plantings as space
4 permitted.

5 Meg and Grace Holton who own property across the road from this building had a few
6 questions regarding the required setback from the property line and if there is a drop off
7 area in front of the proposed building as they are concerned about people crossing West
8 Main Street as well as the potential for NCDOT to widen Main Street in the future.

9
10 Adamson summarized the comments and prepared a draft set of comments. Clinton
11 moved to approve; Poulton seconded the motion. **VOTE:** AYES (9) Adamson, Tiemann,
12 Poulton, Clinton, Hunt, Foushee, Pendergrass, Whittemore, Rosser; NOES (0);
13 ABSENT/EXCUSED (0).

14 15 **B) Community Planning Month - Debrief**

16 Clinton made a PowerPoint presentation of the third walking conversation on gathering
17 space and showed and explained the comments that were made by citizens who attended.
18 The presentation showed all the areas that they walked. Once everyone feels comfortable
19 with their discussion of the three walks, members can prepare a summary of each walk
20 that can be combined into a single report for presentation to the Board of Aldermen. It
21 was suggested that a few members of Planning Board could go to the Board Meeting in
22 case they have questions. Clinton will go and present his PowerPoint presentation at the
23 meeting.

24 25 **C) Discussion of Potential Goals for 2017**

26 Members expressed their enthusiasm from the walking conversations and some of the
27 good ideas on public art and gathering places. An idea for a bench competition emerged
28 and members discussed coming up with ideas for unique benches that could be installed
29 around town. It was suggested to talk to the Arts Committee and the Appearance
30 Commission about this idea.

31
32 Everyone felt that the walks were really successful and said that they think a sign-up sheet
33 should be taken with them so that participants can be informed via email for future events.

34
35 Whittemore suggested a Better Block project for next year where a stretch of street could
36 be visually transformed, so people can imagine what it could look like. This idea was
37 started in Dallas, TX and has spread worldwide. There is a tool kit that can be purchased,
38 volunteers would sign up to help. Planning Board members discussed possible segments
39 of streets which might benefit from a better walk intervention.

40 <http://teambetterblock.com/about/>

41
42 Another goal that was suggested was putting proposals together to give to the Board of
43 Aldermen related to affordable housing. As there is an Affordable Housing Task Force
44 Committee it was suggested to check with Nate Broman-Fulks in case this has already
45 been done. They discussed asking Nate to come to a future Planning Board meeting to

1 provide an update so possibly the Planning Board could support what the Task Force
2 Committee is already doing.
3

4 Another idea was to think about how the Land Use Ordinance guides commercial uses
5 along segments of the downtown, what type of development does the LUO allow and
6 whether that vision is still desirable.
7

8 **IV. ADJOURNMENT**

9 Poulton motioned to adjourn the meeting; Pendergrass seconded the motion. The
10 November 17, 2016 Planning Board meeting adjourned at 9:25 pm.

DRAFT

ARTICLE XI

SUPPLEMENTARY USE REGULATIONS

PART II. MISCELLANEOUS SUPPLEMENTARY USE PROVISIONS

Section 15-178 Architectural Standards for Downtown Development. (AMENDED 6/20/06)

(a) The Board has established a policy that encourages the evolution of a downtown district that embodies the Town's character and includes medium-rise buildings that are appropriately sited with adequate public access in keeping with downtown design guidelines. High-quality building design and construction are considered primary elements of the built environment in downtown Carrboro. Creativity is encouraged to the extent that new architectural design is harmonious and complementary with existing buildings and with the community as a whole. Standards have been developed to add consistency and predictability to the permit review process. The following provisions shall apply to new construction within the B-1(c), B-1(g), CT, M-1, and B-2 zoning districts. All projects must conform with the following requirements to the extent practicable, except as otherwise provided in subsection (b):

(1) A primary entrance shall be oriented toward the right of way and shall be articulated either by a recess or by a detachable awning.

(2) With respect to any side of a building that faces the street adjacent to the lot where the building is located and is visible from such street right-of-way, a minimum of 40 percent of the elevation of such side shall consist of a glass surface, and a minimum of 60 percent of the elevation of the ground level of such façade shall consist of a glass surface.

(3) Buildings taller than 40 feet shall maintain a 20-percent shade free area within the public right of way between two lines extended north from the easternmost and westernmost points of the building at the street right of way as measured at noon on September 21.

(4) Parking or utility areas shall be substantially shielded from the view of adjoining streets by habitable space. For the purposes of this subsection, the term habitable shall mean partially or fully enclosed space within a building that is actively used or occupied by the residents of the building. The active use of these spaces is characterized by the routine and regular presence of the building's residents rather than the routine and regular presence of stored goods, equipment, or other materials.

(5) A building more than 45 feet in width shall be divided into increments of no more than 45 feet through articulation of the façade achieved through the following techniques:

- (a) Divisions or breaks in materials
- (b) Window bays
- (c) Separate entrances and entry treatments
- (d) Variation in roof line
- (e) Building setbacks

(6) The following exterior materials are prohibited: metal siding with exposed fasteners, vinyl siding, and processed wood panel products (e.g. hardboard).

Art. XI SUPPLEMENTARY USE REGULATIONS

(b) Notwithstanding the foregoing, applicants for projects that do not comply with the standards specified above may voluntarily participate in an alternative design review process that involves input from or a decision by the Appearance Commission as follows: **(AMENDED 2/23/10)**.

- (1) If the project requires the issuance of a zoning permit and the Appearance Commission certifies to the zoning administrator that the alternative design substantially achieves the purpose (as spelled out in subsection (a) of this section) of the architectural standards for downtown development, then the development shall not be required to comply with the standards set forth in subsection (a).
- (2) If the project requires a special use or conditional use permit, then the Appearance Commission shall review the alternative design and make a recommendation to the permit-issuing authority as to whether that design substantially achieves the purpose (as spelled out in subsection (a) of this section) of the architectural standards for downtown development. If the permit issuing authority concludes that the alternative design substantially achieves the purpose of these architectural standards, then the development shall not be required to comply with the standards set forth in subsection (a).

ARTICLE XII

DENSITY AND DIMENSIONAL REGULATIONS

Section 15-185.1 Downtown Neighborhood Protection Overlay District Requirements **(AMENDED 8/23/05)**

(a) Lots that are within the Downtown Neighborhood Protection (DNP) Overlay District shall be subject to the requirements of this section.

(b) Within the DNP district, the portion of any lot so zoned that lies within 50 feet of a boundary line that abuts or is located directly across the street from residentially zoned property, other than property that is zoned R-2, shall constitute an area referred to in this section as the DNP Buffer Area.

(c) Within the DNP Buffer Area:

- (1) A building or buildings constructed within such buffer area may not extend laterally along the affected boundary for more than 80% of the lot width at its narrowest point within the buffer area; and
- (2) The maximum horizontal run of a single building shall be 80 feet; and
- (3) If more than one building is constructed, there shall be a separation of at least 30 feet between one building and another.

(d) With respect to lots where the underlying zoning is B-1(c) or B-1(g), the provisions of Subsection 15-185(a)(3) shall not apply and the provisions of subsections (f), (g) and (h) of this section shall apply in lieu thereof. **(AMENDED 1/23/07)**.

- (1) A third story not exceeding a building height of 42 feet shall be permissible if a gable, or gambrel roof with a roof pitch no greater than 70 degrees and a continuous eave line substantially contains the third story (i.e. the height of the space that constitutes the story is provided primarily by the roof of the building rather than vertical exterior walls). When dormers are constructed on such roofs, the total width of all such dormers shall not exceed two-thirds of the width of the roof on which such dormers are constructed. **(AMENDED 2/27/07)**.

(2) A third story shall be permissible if:

- a. All portions of such third story are set back at least ten feet from the second story façade of the building wall that faces a boundary line that abuts or is located directly across the street from residentially zoned property.

Art. XII DENSITY AND DIMENSIONAL REGULATIONS

- (3) Towers, cupolas, and similar architectural features intended to complement the building design may extend to a height of not more than 42 feet, so long as such features do not contain more than 400 square feet and no elevational width of such features exceeds 25 feet.

(e) With respect to lots where the underlying zoning is B-1(c) or B-1(g), the provisions of Subsection 15-185(a)(3) shall not apply and the provisions of subsections (f), (g) and (h) of this section shall apply in lieu thereof.

(f) With respect to lots where the underlying zoning is B-1(c) or B-1(g), the portion of such lots within the DNP Buffer Area shall be subject to a maximum height limitation of two stories, except as set forth below: **(AMENDED 1/23/07)**.

- (1) A third story not exceeding a building height of 42 feet shall be permissible if a gable, or gambrel roof with a roof pitch no greater than 70 degrees and a continuous eave line substantially contains the third story (i.e. the height of the space that constitutes the story is provided primarily by the roof of the building rather than vertical exterior walls). When dormers are constructed on such roofs, the total width of all such dormers shall not exceed two-thirds of the width of the roof on which such dormers are constructed. **(AMENDED 2/27/07)**

- (2) A third story shall be permissible if:

- a. All portions of such third story are set back at least ten feet from the second story façade of the building wall that faces a boundary line that abuts or is located directly across the street from residentially zoned property; and

- (3) Towers, cupolas, and similar architectural features intended to complement the building design may extend to a height of not more than 42 feet, so long as such features do not contain more than 400 square feet and no elevational width of such features exceeds 25 feet.

(g) With respect to lots where the underlying zoning is B-1(c) or B-1(g), the portion of such lots that lie outside the DNP Buffer Area shall be subject to a maximum height limitation of three stories except as set forth below:

- (1) A fourth story may be constructed if such fourth story is either set back at least ten feet from the edge of the DNP Buffer Area or is substantially contained within a mansard, gable, or gambrel roof with a roof pitch no greater than seventy degrees and a continuous eave line (i.e. the height of the space that constitutes the story is provided primarily by the roof of the building rather than vertical exterior walls).

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- (2) If a fifth story is constructed, either all portions of such fifth story must be set back at least ten feet from the fourth story façade of the building wall that faces a boundary line that abuts or is located directly across the street from residentially zoned property, or the fifth story must be substantially contained within a mansard, gable, or gambrel roof with a roof pitch no greater than seventy degrees and a continuous eave line (i.e. the height of the space that constitutes the story is provided primarily by the roof of the building rather than vertical exterior walls).
 - (3) In addition, if a fifth story is constructed, either all portions of such fifth story must be set back from any street right-of way line other than that associated with establishing the DNP buffer area a distance of ten feet beyond the setback specified in Section 15-184, or the fifth story must be substantially contained within a mansard, gable, or gambrel roof with a roof pitch no greater than seventy degrees and a continuous eave line (i.e. the height of the space that constitutes the story is provided primarily by the roof of the building rather than vertical exterior walls).
- (h) Notwithstanding the permit requirements established in Sections 15-146 and 15-147, if a developer proposes to construct within those areas of the DNP district where the underlying zoning is B-1(c) a building that exceed two stories in height, or where the underlying zoning is B-1(g) a building that exceeds three stories, a conditional use permit must be obtained.