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CONDITIONAL REZONING

DESIGN NARRATIVE: SUMMIT CHURCH CHATHAM COUNTY CAMPUS

Chatham County's rural heritage is woven into the fabric of its geographic location. Within the very names of its roads one can see how public centered entities of past generations, such as mills, ferries, churches, chapels, & farms that defined the landscape of generations past. When looking at the subject parcels on Chatham County's Map of Future Land Use and Conservation, one sees evidence of the cultural impact, specifically in the names of nearby Briar Chapel and Martha's Chapel roads. Traditionally, churches have served as catalysts for healthy communities, bringing people together for fellowship, support, and a sense of belonging. Chatham County's Comprehensive Plan has a clear vision for this stretch of US 15/501 N, with development patterns of compact communities and mixed-use commercial centers that will further strengthen its community focus, while seeking to preserving the rural character of the landscape. Along with new homes and businesses in this area, weaving in landmark support infrastructure such as churches and community centers is integral to the health and success of a growing community.

Summit Church has a proven record of positively impacting communities across North Carolina's Piedmont Region, with multiple thriving locations in Alamance, Durham, Orange and Wake Counties. As growth and development moves south and west of the Triangle, Summit Church seeks to do the same with a new location in Chatham County. This site matches their vision of the future along a major vehicular corridor adjacent to both residential and commercial land uses.

The project site is 50.12 acres, comprised of three parcels located along on the east side of US 15/501 N corridor: parcel #18750 (18.35 acres), parcel #18896 (6.3 acres) & parcel #18897 (25.47 acres). The site is in the WS-IV PA Watershed District, limiting impervious surface area to 24% of the total parcel acreage. A 325' wide Electrical Transmission Easement dissects the parcel assemblage, limiting development on nearly 8 acres of cleared land. The proposed development is primarily located on the Northern-most parcel (#18750), with some associated parking within the power easement and a multipurpose grass field located south of the easement. This site plan proposes approximately one third of the parcel acreage to remain undisturbed.

Beyond the benefits the church will provide to the people of the local community, there are ample benefits for the landscape as well. The site plan for the church will preserve or enhance forest buffers whenever possible, maintaining the rural character of the site, and limited the visual impact from the roadway. The development's wastewater facility below ground, fitting with the county's rural aesthetic. Above ground Stormwater management facilities will be woven into the surrounding environmental fabric, creating wildlife habitat while

improving water quality and recharging groundwater supplies. Beyond the rural aesthetics of forests and fields, the proposed site plan creates outdoor recreation opportunities for the community, through a multipurpose field, communal areas, and play spaces and acres of undisturbed lands.

FIVE FINDINGS

1. The alleged error in this Ordinance, if any, which would be remedied by the proposed amendment with a detailed explanation of such error in the Ordinance and detailed reasons how the proposed amendment will correct the same. There is no alleged error in the Ordinance.

N/A - No error alleged.

2. Changed or changing conditions, if any, of the area or in the County generally, which make the proposed amendment reasonably necessary to the promotion of the public health, safety and general welfare.

A. Need and desirability

Churches bring community members together. The population of Chatham County is growing and compact communities, similar to Fearington Village and Briar Chapel, will continue to appear along the US 15/501 Corridor as outlined in the Comprehensive Plan. The proposed church will serve the immediate and regional community as it continues to grow. Attendees of the Neighborhood meeting were excited to see a project proposed that will benefit the community and limit environmental impacts, with limited density.

B. Survey of similar uses

There are other churches in this area of different denominations. Evergreen United Methodist Church is on US 15/501, 1.4 miles North of this property. Mt Zion Baptist Church is on Fellowship Rd, 1.1 miles Northeast. Lystra Baptist Church is also on Fellowship Rd, 0.2 miles farther. Both have been part of the community for over 150 years. Iglesia Bautista Monte Carmelo is 1.6 miles Southeast of this property, on Jack Bennett Rd. These are the closest existing churches. No churches are located on any adjacent properties.

C. Public provided improvements

While the proposed development is a public resource, no public improvements are required for this project.

D. Tax considerations

The proposed community resource hold Tax Exempt status.

E. Employment

The church will create a limited number of onsite jobs, both full-time and part-time.

3. The manner in which the proposed amendment will carry out the intent and purpose of any adopted plans or part thereof.

A. Comprehensive plan, chapter two:

1. Issues and opportunities:

Land use: settlement patterns and features (comprehensive plan p.18)

Chatham County's Comprehensive Plan notes that Churches "remain central gathering places in towns and rural townships in the County." As development continues in the Chatham County, new churches should accompany new residential and commercial development. This property is adjacent to both residentially and commercially zoned properties. Per the UDO use table (5.1.2), churches are allowable in both residential and non-residential zoning.

Land use: rural character (Comprehensive Plan p.18)

This section of the Comprehensive Plan notes: "In Chatham County, rural character is manifested in a backdrop of forests and fields, dotted with natural features such as creeks and hills and structures such as barns, silos, churches" (Page 18). This conditional rezoning proposes a church, and will preserve approximately 18 acres of forested land on the Southern end of the assemblage and as natural perimeter buffers. The proposed plan sites the building back from the road, with the septic field and stormwater ponds closer to the road, giving the look and feel of pastureland and natural habitat. Existing forest buffers are maintained along the road frontage wherever possible, preserving and enhancing the rural character of the land.

Environment: water quality (Comprehensive Plan p.32)

The Comprehensive Plan identifies protecting water quality as a driving force of land use recommendations and notes a "growing concern over groundwater availability." Within the proposed site plan, stormwater from new impermeable surfaces will be treated onsite and stormwater control measures will ensure that post-development hydrological flows will remain equal to or better than the existing pre-development condition, ensuring continued groundwater infiltration after rain events. Approximately one-third of the property will remain as undisturbed land, which provide the best water quality credit.

Environment: unique assets (Comprehensive Plan p.33)

The Comprehensive Plan states that 'Chatham County's forests and streams are home to at least 49 rare, threatened or endangered species,' and the majority of these assets are on private land facing development pressures. The proposed plan maintains twice the recommended 50' buffer from the small intermittent stream found onsite and 18 acres of native lands. These areas include many mature shag-bark hickories, oaks, maple and other native trees that provide valuable habitat for native, threatened, and/or endangered species.

Environment: open space (Comprehensive Plan p.35)

According to the Comprehensive Plan, "The farms and forests that line rural roads contribute to the lifestyle that residents value." This proposed plan leaves 18 acres undisturbed land post development and over 3 acres of septic field will be maintained as grassland visible from the road.

B. Comprehensive plan, chapter three:

1. Goals and objectives

Goal #1: preserve the rural character and lifestyle of Chatham County (p.41)

- Preserve farms and "lifestyle" in the western part of the County as well as forests and open space in the eastern part of the County.

The proposed plan preserves forest and provides open space by locating the building approximately 500' back from the road and retaining existing trees along the road as a natural buffer. Behind these trees, required site infrastructure footprint as a grassy field and wildlife habitat area when seen from the road (septic field and stormwater pond read). Overall, the plan preserves 18 acres of the +50-acre site as undisturbed existing forest.

Goal #5: conserve natural resources (p.42)

- Maintain and restore the quality and quantity of groundwater and surface water resources.

Proposed stormwater control measures will maintain pre-development hydrological patterns, create additional surface waters that provide wildlife habitat, and help stormwater infiltrate to recharge groundwater supplies.

- Preserve and protect the ecosystem services provided by green infrastructure

This site plan preserves 18 acres as undisturbed forest to maintain mature native trees as wildlife habitat.

- Avoid or minimize landscape fragmentation.

In the proposed site plan, the preserved acreage links this parcel with adjacent offsite forested lands thereby maintaining the existing wildlife corridor.

- Preserve night skies by minimizing light pollution.

The proposed site lighting plan meeting the regulatory criteria and is designed minimize to minimize light pollution and preserve night skies.

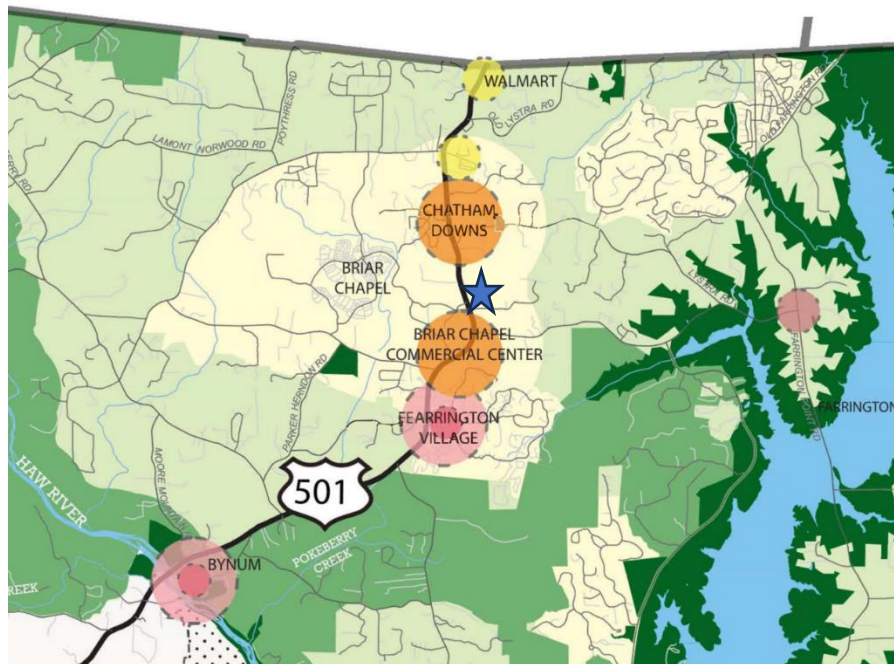
Goal #6: provide recreational opportunities and access to open space (p.42)

- Provide expanded recreation opportunities and improve access to parks, community facilities, trails, and open space.

The proposed development will create recreational opportunities on private land, that is open to the public, while maintained and managed by the landowner. The included multipurpose grass field and playground, and existing forest provide the surround community with increased access to park-like lands.

2. Land use description = Compact Residential

- Location: The property is located between the Chatham Downs and Briar Chapel Commercial Centers (indicated by the blue star on the Future Land Use Map below), within a larger 'Compact Residential' area.
- The Comprehensive Plans states that "Community centers, amenities, recreational uses, schools, and **churches** may be part of the fabric." (p.47)
- Building: The proposed building includes both 1-story and 2-story portions.
- Streets: The proposed site plan utilizes existing roads as it connects to US 15/501 N.
- Wastewater: The project will use a private onsite, underground drip septic system.



C. Comprehensive plan, chapter four:

1. Economic development (page 53)

Strategy 3.4 of the Comprehensive Plan seeks "to create attractive work environments with amenities to compete with other employment location options in the Southeastern United States. The mix of uses, development configuration and quality, variety of amenities, and connectivity affect the attractiveness—and competitiveness— of employment centers." (p.56) The proposed church community, along with the recreational open spaces of the site design, will serve as an amenity to enhance the appeal of the area, to help attract high-quality workers to other jobs in this area.

2. Land use (page 61)

The Design Details sidebar (p.63) notes that Compact Communities should include: "A mix of land uses, with residential, commercial, and civic components." The proposed church adds a civic component to the healthy mix of land uses within the community and will serve as a hub of community activity for the surrounding area.

STRATEGY 2.1: Allow areas within and near Community and Neighborhood Centers, as shown on the Future Land Use Map, to be developed for larger scale commercial, office and mixed use developments.

On the map, this property is located between two community centers and the proposed plan is an office & institutional use. Within the Comprehensive Plan, Churches are encouraged as part of the 'fabric' within the Comprehensive Plan

STRATEGY 5.1: Encourage context-sensitive development design. This type of design includes elements such as architectural features that resemble historical structures and local vernacular, site design that reduces impacts on historical structures, working landscapes and viewsheds from public roadways, integrated open space, and preservation of unique natural features such as heritage trees and mature forests.

The proposed plan considers the viewshed from the road by setting the building back 500 feet. Existing trees will be preserved as a natural buffer and the placement of new site infrastructure (septic and stormwater) uses these features as additional visual buffers. The septic area will be maintained as grasslands, yielding the appearance of over 3 acres of fields when viewed from the road. The stormwater pond will be planted as wildlife habitat, creating additional natural area between the new building and the road. Dozens of heritage trees will be preserved in the 18 acres of mature forest that will remain undisturbed during the proposed development. Both natural open space and recreation open space are incorporated into the design. This project will include a 240'x400' multipurpose grass field and retain large areas of existing forest as open space that is open to the public, while maintained and managed by the landowner.

3. Natural resources (page 103)

This project aligns with the following strategies listed in the Comprehensive Plan:

Strategy 1.1: Maintain riparian buffers in Watershed Protection Ordinance and minimize stream crossings in new developments.

There is a small intermittent stream onsite, in the Northeast corner of the property, which has a required 50' buffer. The proposed plan maintains twice the required buffer and all existing trees in this corner of the property.

Strategy 2.1: Encourage development design that preserves unique natural features on sites, including mature forest and riparian areas.

The proposed plan maintains approximately 18 acres of mature forest (roughly a third of the +50 acre site). The mature forest includes many mature shag-bark hickory, maple and oak trees that provide forage for native wildlife. An intermittent stream is also preserved.

Strategy 2.2: Encourage development design to preserve forest cover and additional uplands.

The proposed plan maintains approximately 18 acres of mature forest (roughly a third of the 50 acre site). Wherever possible, existing forest cover is preserved as a natural buffer around the entire perimeter of the property.

4. Parks and recreation (page 117)

The primary goal listed on page 117 is "Provide recreational opportunities and access to open space." This project includes multiple types of recreational amenities: children's play space, multipurpose grass field, outdoor communal areas, gathering spaces, and nature undisturbed lands. These areas will be open to the public, while maintained and managed by the landowner.

Strategy 4.1: Provide more outdoor recreational opportunities and open space.

The proposed plan provides recreational space for the community in three ways. First, it includes an outdoor children's play space adjacent to the building. Second, it includes a 2-acre multipurpose grass field that will be open to the community. Third, the preserved forest areas provide a natural play space for exploration and outdoor natural plan.

4. The requested amendment is either essential or desirable for the public convenience or welfare. (i.e., tell how and for what purpose/s the amendment would provide to the County as a whole)

A. Traffic:

See attachment A for the preliminary Traffic Summary letter.

B. Visual Impact & Screening

The church building is set back from both the road frontage and adjoining properties, while retaining natural forested buffer areas wherever possible. Areas of grading at the two entries

will have new tree and shrub buffer plantings. Additional plantings will serve to screen parking areas and service areas such as solid waste storage. The solid waste storage and mechanical areas will be screened with both fencing and evergreen shrubs. Parking areas will have shrub plantings and to mitigate potential glare from headlights along with shade trees within planting islands. See attachment B for Visual Impact Assessment.

C. Lighting

There will be three primary types of lighting: 1. Exterior lighting on the buildings; 2. Pole mounted lights within parking areas; 3. Pedestrian level lighting along paved pathways for safety and wayfinding. Lights will be oriented downward to minimize light pollution to the night sky. All site lighting is located away from the property lines and oriented towards the center of the property. Lighting in parking areas will be 150 watt 'shoebox' LEDs mounted 25' high, per design by Duke Energy. These are standard Duke Energy lights used throughout Chatham County along roadways and shopping centers. Proposed Pedestrian lighting along walkways ±47.9 watt LEDs atop approximately 12' tall posts. These lights will be international dark-sky approved, and the light casts downwards from a circular hood. Proposed Pedestrian wayfinding/safety lighting which are 15.9 watt LEDs on 10' tall posts. Lighting plans are included in the submittal drawings with additional detail.

D. Noise

No unusual noise will be generated by the church. Noise generation will be common sources such as cars within a parking area or hvac units for the building. There may occasionally be recreational activities or gatherings on the grass field.

E. Chemicals, Biological and Radioactive Agents.

N/A: No unusual chemical or biological agents are associated with the proposed use.

F. Signs.

Signage is proposed for each of the two entries, to identify the church. Plan and Elevation drawings for the proposed signage are included in the submittal. The signs will both be under 10 feet in height, and have a footprint of 14'-6" x 2'-4".

G. Emergency Services <Optional>

The proposed site plan is design to meet emergency services access requirements. Design coordination has been initiated with the County Fire Marshal, see Attachment C.

5. All other circumstances, factors and reasons which the applicant offers in support of the proposed amendment. (i.e. watershed classification, impervious surface, utilities, infrastructure, etc.)

A. Water Source and Requirements

The proposed project will connect to the existing main located in the US-15 51 right-of-way. See Attachment D for preliminary flow requirements for the development.

B. Wastewater Management

Domestic wastewater at the facility will be treated on-site using a drip type underground septic system. Septic system permits will be requested from the Chatham County Environmental Health Department once more detailed design allows proper sizing of the facilities. An NPDES permit may be required from the NC Department of Environmental Quality Western Intake Partnership.

C. Water/Sewer Impact Statement.

Water: The proposed project will connect to the existing main located in the US-15 51 right-of-way. See Attachment D for preliminary flow requirements for the development.

Sewer: The proposed project will use a private septic system and NOT impact the sewer system.

D. Access Roads

Proposed plans show two access drives to/from the Northbound lanes of US 15/501 N. This public road is a four-lane divided by highway, limiting vehicular access to right-in and right-out movements. Righthand turn lanes are proposed for both access points, as shown in the submittal drawings.

E. Stormwater Runoff

The project will not increase stormwater runoff to neighboring properties. During construction, stormwater will be controlled using temporary sediment and erosion control devices as outlined in a sediment and erosion control plan that will be submitted to the North Carolina Department of Environmental Quality. After pos-construction, stormwater will be managed using a stormwater control measure to collect and treat all stormwater onsite, helping recharge groundwater supplies. Stormwater permit applications for these measures will be submitted to Chatham County. The preliminary stormwater management plan is shown on the grading plans that are part of the submittal drawings.

Signed,



Jael Wagoner, PLA, ASLA
Assistant Vice President | Landscape Architect
Qunity, P.A.



MEMORANDUM

Date:	May 20, 2024
To:	Jael Wagoner, PLA, ASLA Qunity
From:	Baohong Wan, PhD, PE Gannett Fleming
RE:	Summit Church Chatham County Traffic Summary Letter

Gannett Fleming is contracted with Qunity to prepare the Summit Church Chatham County Traffic Impact Analysis (TIA) in accordance with the North Carolina Department of Transportation (NCDOT) Congestion Management Capacity Analysis Guidelines and Chatham County Unified Development ordinance (UDO) requirements.

The proposed development is located in Chatham County, North Carolina, and it encompasses approximately 30 acres of land with the assemblage properties of Chatham County parcel numbers 0018750, 0018896, and 0018897. The preliminary plan is to construct an 88,460 square foot (SF) church with a 1,200-seating capacity sanctuary. Construction of the site is assumed to occur in 2026.

This Technical Memorandum outlines Gannett Fleming’s preliminary findings and observations concerning the proposed development, while data collection and coordination with the NCDOT and Chatham County is underway with the final TIA anticipated to be completed in June 2024.

Trip Generation

The amount of traffic generated by a new development is a function of the size and type of development. Trip generation data for this report was conducted in accordance with the procedures outlined in the Institute of Transportation Engineers (ITE) report entitled **Trip Generation 11th Edition**¹. Table 1 illustrates the total number of weekday daily, weekday AM peak hour, weekday PM peak hour, Sunday daily, and Sunday peak hour trips expected to be generated by the proposed development.

As shown in Table 1, the proposed Summit Church Chatham County is projected to generate approximately 669 vehicular trips on a typical weekday, with 28 trips expected to occur during the AM peak hour and 43 trips during the PM peak hour; it is projected to generate approximately 2,768 trips on a typical Sunday, with 912 trips expected to occur during the Sunday peak hour.

Due to the proposed land use, majority of vehicular tips are anticipated to be passenger vehicles. ITE Trip Generation doesn’t contain truck trip generation data for church; for comparison purposes, an 88 KSF general office building is projected to generate 9 truck trips on a typical weekday. Based on the ITE data, the proposed site is projected to generate approximately 51 Walk + Bike + Transit trips during the Sunday peak hour.

Preliminary Roadway Capacity Assessment

The proposed Summit Church Chatham County is planned to be accessed via two new driveways along US 15-501 (Chapel Hill Road). Other secondary roadways that may be impacted by site traffic include Lystra Road (SR 1721), Briar Chapel Parkway (SR 1690), Vickers Road (SR 1719), and Jack Bennett Road (SR 1717).

US 15-501 is maintained by NCDOT as part of the US Highway System. US 15-501 is a north/south corridor that connects Chatham County with Chapel Hill in Orange County. Under the existing conditions, US 15-501 is a median divided four-lane roadway with little or moderate access control. The speed limit along US 15-501 is 55 miles per hour (mph). Potential capacity along US 15-501 is 35,700 vehicles per day (VPD), while the 2022 AADT along US 15-501 was measured at 22,000 vehicles per day (VPD) north of Briar Chapel Parkway/Vickers Road, and 17,000 VPD south of the same location. The annual average daily truck traffic (AADTT) along US 15-501 was at 550 VPD north of and 430 south of Briar Chapel Parkway/Vickers Road.

Lystra Road (SR 1721) is maintained by NCDOT as a secondary roadway. Under the existing conditions, Lystra Road is a two-lane, undivided roadway with 45 mph speed limit. Potential capacity along Lystra Road is 12,700 vehicles per day. The 2022 AADT was measured at 6,000 VPD along Lystra Road between US 15-501 and Jack Bennett Road.

Briar Chapel Parkway (SR 1690) is maintained by NCDOT as a secondary roadway. Under the existing conditions, Briar Chapel Parkway is a two-lane, partially divided roadway with 35 mph speed limit. Potential capacity along Briar Chapel Parkway is 12,900 vehicles per day. There was no AADT information provided by NCDOT along Briar Chapel Parkway.

Vickers Road (SR 1719) is maintained by NCDOT as a secondary roadway. Under the existing conditions, Vickers Road is a two-lane, undivided roadway with 35 mph speed limit. Potential capacity along Vickers Road is 11,600 vehicles per day. There was no AADT information provided by NCDOT along Vickers Road.

Jack Bennett Road (SR 1717) is maintained by NCDOT as a secondary roadway. Under the existing conditions, Jack Bennett Road is a two-lane, undivided roadway with 45 mph speed limit. Potential capacity along Jack Bennett Road is 12,700 vehicles per day. The 2022 AADT was measured at 3,600 VPD along Jack Bennett Road east of US 15-501.

Anticipated Transportation Improvements

The section of US 15-50 was specified as a synchronized street in the DCHC MPO 2050 Metropolitan Transportation Plan (MTP). Conversion of remaining non-synchronized sections to synchronized street along US 15-501 from Smith Level Road to US 64 Bypass in Chatham County is planned with NCDOT TIP U-6192 as part of 2024-2033 State Transportation Improvement Program (STIP). The right-of-way year for TIP U-6192 is anticipated to be 2028, and construction is expected to start in 2031. With the completion of TIP U-6192, capacity along US 15-501 is expected to improve to 43,900 VPD with moderate access control in place.

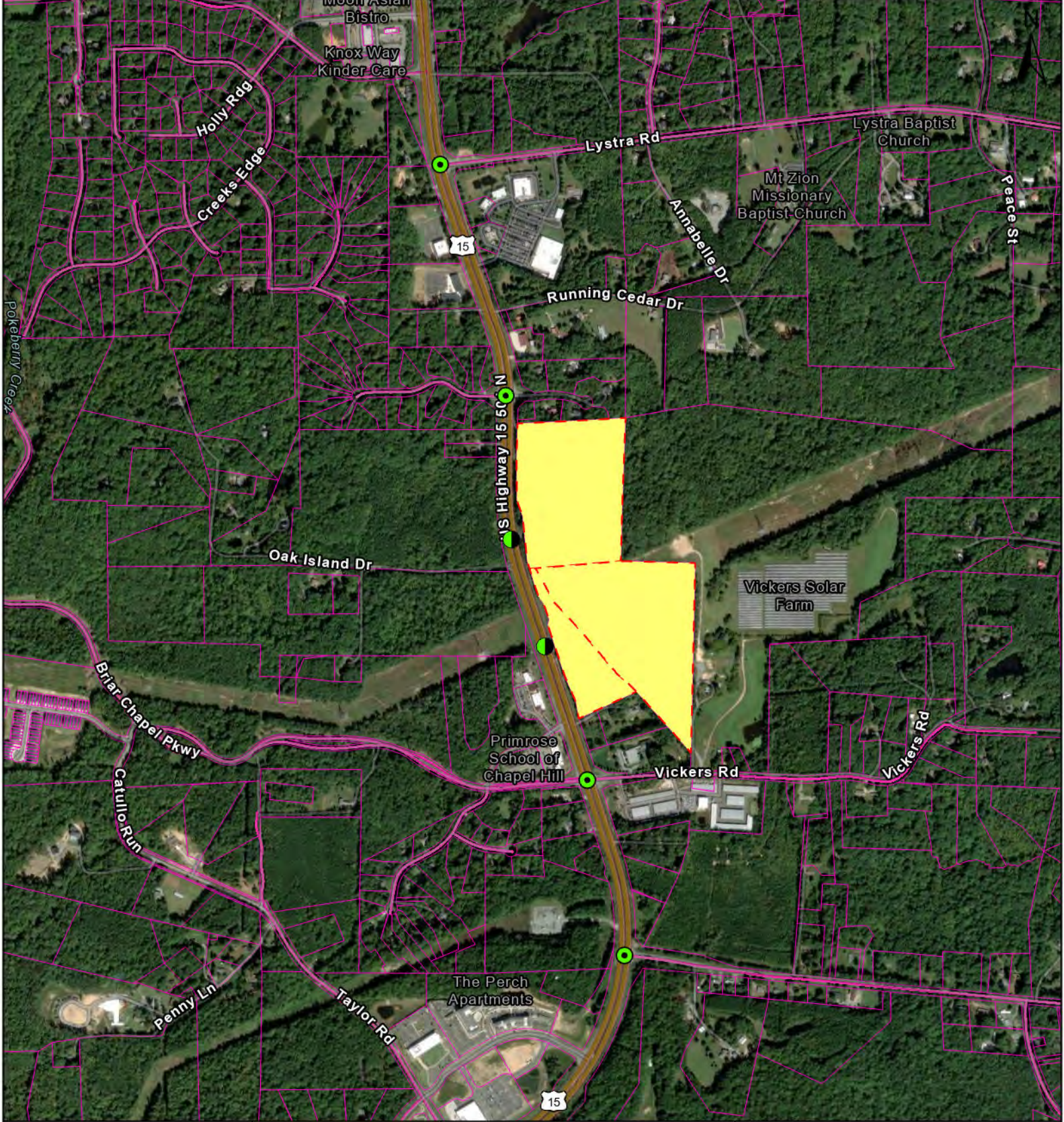
In the DCHC MPO 2050 MTP, the section of Jack Bennett Rd/Lystra Rd from US 15-501 to Farrington Mill/Point Road was recognized as candidate roadway section for potential modernization improvements, although the project funding has not been identified.

Since the proposed Summit Church Chatham County is projected to generate minimal trips on a typical weekday (less than 700 VPD), mitigation measures along off-site roadways are not anticipated, as the roadways should be



able to operate under capacity after buildout of the proposed site. Nevertheless, due to potential large amounts of inbound and outbound trips during Sunday peak hour (over 900 trips), dedicated turn lanes along US 15-501 will likely be required. Final mitigation determinations and turn lane decisions will be updated with the completion of TIA.

Table 1 – ITE Trip Generation Summary														
Weekday Site Trips						Weekday			AM			PM		
LUC	Description	Density	Variable	PK HR	METHOD	Daily	In	Out	Total	In	Out	Total		
560	Church [Data Range: 10-50]	88	1000 GFA	Adjacent	RATE*	669	17	11	28	19	24	43		
	Church Total					669	17	11	28	19	24	43		
Sunday Site Trips						Sunday			Sunday Peak					
LUC	Description	Density	Variable	PK HR	METHOD	Daily	In	Out	Total					
560	Church [Data Range: 10-50]	88	1000 GFA	Adjacent	RATE*	2,768	438	474	912					



Legend

- Project Site
- Intersection
- Site Access
- Cross Connection

0 600 1,200 Feet



NCDOT
Division 8 District 1:
Chatham County

Figure 1
Summit Church Chatham County
Study Area Map
Chapel Hill, NC

5/20/2024



CIVIL ENGINEERING LANDSCAPE ARCHITECTURE

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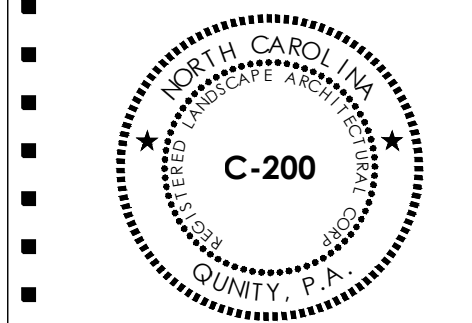
NORTH CAROLINA BOARD OF EXAMINERS FOR ENGINEERS AND SURVEYORS LICENSE NO.: C-0676

SUMMIT CHURCH CHATHAM COUNTY

9780 US 15-501 N. CHAPEL HILL, NC 27517

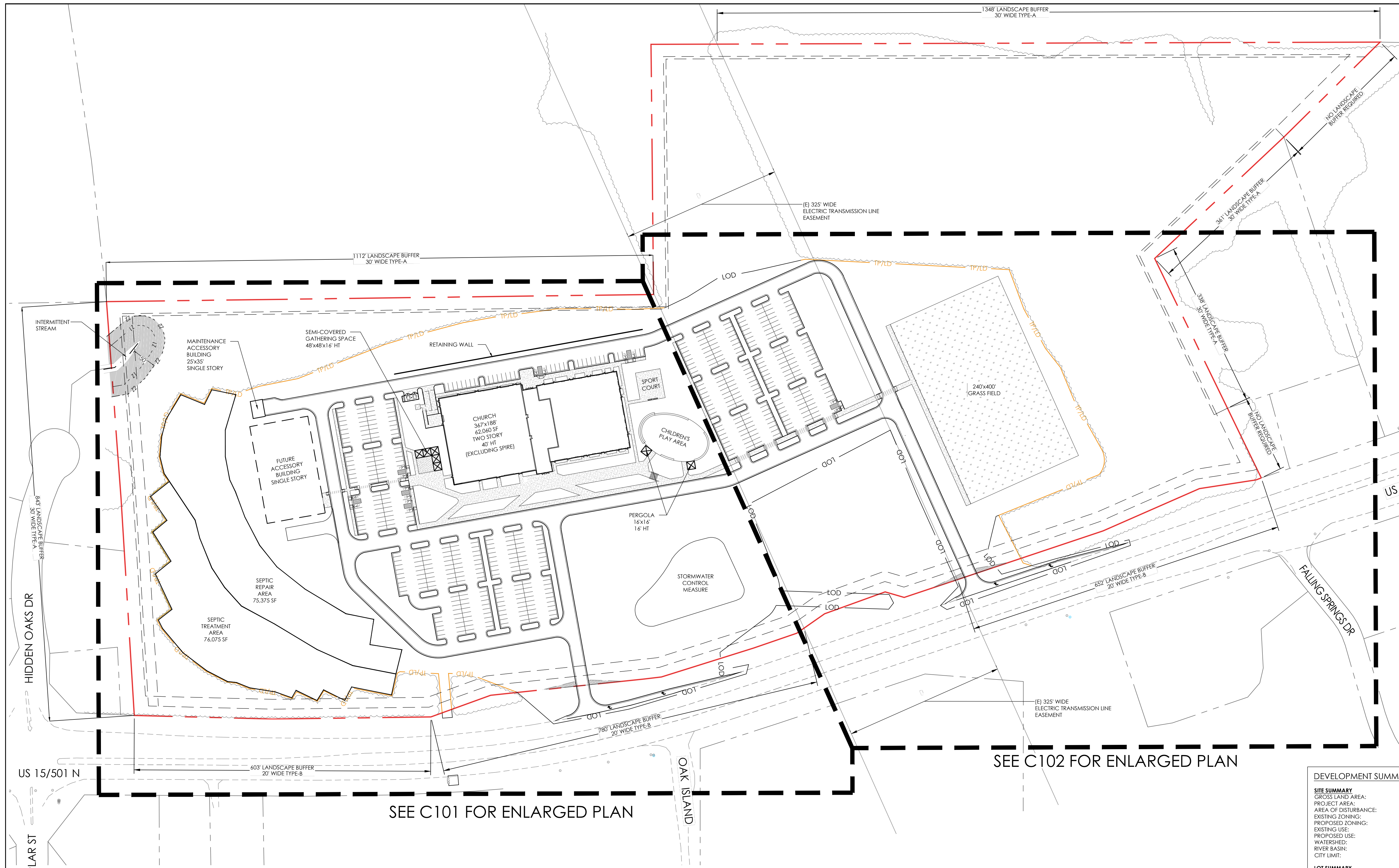
Figure 2

SITE PLAN OVERALL



PRELIMINARY DO NOT USE FOR CONSTRUCTION

PIN: 9775-01-45-4512 PID: 0018750 PIN: 9775-03-44-4270 PID: 0018896 PIN: 9775-04-54-0411 PID: 0018897



SEE C101 FOR ENLARGED PLAN

SEE C102 FOR ENLARGED PLAN

GENERAL SITE NOTES

- 1. BUILDING AND ROADWAY STAKE OUT TO BE PERFORMED BY A REGISTERED LAND SURVEYOR... 2. ALL PARKING LOT DIMENSIONS ARE TO BACK OF CURB AND FACE OF SIDEWALK... 3. ALL ON SITE PERIMETER CURB & GUTTER SHALL BE 24" UNLESS OTHERWISE NOTED... 4. CURB & GUTTER TO SLOPE (NEGATIVE OR POSITIVE) SAME AS PAVEMENT EDGE... 5. ALL CURB & GUTTER RADII SHALL BE 3' (TO BC) UNLESS OTHERWISE NOTED... 6. ALL SIDEWALKS ARE 5' WIDE WITH EXPANSION JOINTS @ 30' OC UNLESS OTHERWISE NOTED ON THE DRAWINGS... 7. ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE IN STRICT ACCORDANCE WITH CHATHAM COUNTY STANDARDS AND SPECIFICATIONS... 8. THE ESTABLISHMENT OF FIRE LANES, IN ACCORDANCE WITH SECTION 303.3 OF THE 2012 IBC FIRE CODE, MAY BE REQUIRED WHERE IT BECOMES APPARENT AFTER OCCUPANCY OF THE DEVELOPMENT THAT PARKING WITHIN ROADWAYS CREATES DIFFICULTIES FOR THE PASSAGE OF FIRE EQUIPMENT... 9. CONTRACTOR TO VERIFY THE WORK TAKING PLACE RELATED TO THE CHANGES IN THIS SITE PLAN WILL BE FULLY COMPLIANT WITH THE NORTH CAROLINA ACCESSIBILITY CODES (ANSI 117.1 - 2009 AND CHAPTER 11 OF THE NCBC) UNLESS AND EXCEPT IN AREAS WHERE AN APPROVED STATEMENT FROM A SITE ENGINEER, SURVEYOR OR ARCHITECT VERIFIES THAT SITE CONDITIONS EXIST WHERE THE TOPOGRAPHY OF THE SITE IS EXTREME AND ONLY ALTERNATE METHODS OF COMPLIANCE ARE POSSIBLE... AN ANALYSIS AND CERTIFICATION OF THE SITE PERFORMED BY THE DESIGN PROFESSIONAL OR DESIGNEE, MUST BE SUBMITTED TO THE BUILDING INSPECTIONS DEPARTMENT CERTIFYING THAT ALL SITE ACCESSIBILITY CODE REQUIREMENTS SUCH AS CURB CUTS, RAMP SLOPES, SIDEWALK SLOPES AND WIDTHS, AND CROSS SLOPES MEET THE REQUIREMENTS OF THE NC ACCESSIBILITY CODE PRIOR TO CO ISSUANCE... 10. THE PROPER PROCEDURE FOR COMPACTED SOIL REMEDIATION IS AS FOLLOWS: a. REMOVE ALL IMPERVIOUS SURFACES FROM THE SUBJECT AREA. b. TILL THE AREA TO A DEPTH OF 12" BELOW THE TOP OF COMPACTED SUBGRADE. c. SUITABLE RATES AND TYPES OF SOIL AMENDMENTS SHOULD BE DETERMINED THROUGH SOIL TESTS. LIMESTONE AND FERTILIZER SHOULD BE APPLIED UNIFORMLY DURING SEEDBED PREPARATION AND MIXED WELL WITH THE TOP 4 TO 6 INCHES OF SOIL.

1 SITE PLAN SCALE: 1"=100'



LEGEND (PROPOSED CONDITIONS) table with symbols for LOD, TPF, TP/LD, Riparian Buffer, Stream Buffer, and Multipurpose Field.

DEVELOPMENT SUMMARY:

Summary table with categories: SITE SUMMARY, LOT SUMMARY, BUILDING SUMMARY, PARKING SUMMARY, and IMPERVIOUS SUMMARY.

811 - CALL BEFORE YOU DIG DRAWN BY: SBM CHECKED BY: JEW DATE: 05/07/2024 PROJECT NO.: 2339 SHEET NO.: C100 CONDITIONAL REZONING

SUMMIT CHURCH | CHATHAM CAMPUS
VISUAL IMPACT ANALYSIS MEMO

US 15 – 501 N
Chapel Hill, Chatham County, North Carolina

Qunity Project Number: 2339

April 12, 2024



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1 Introduction

Visual Impact assessments (VIA) document the existing visual quality of the surrounding environment and evaluate the expected visual change caused by a project, assess public reaction to the expected change, identify visual impacts, and recommend measures to avoid, minimize or mitigate adverse visual impacts to protect and preserve scenic, aesthetic, and environmental resources.

The purpose of this VIA memorandum is to document potential visual change in the Area of Visual Effect (AVE) for the Summit Church | Chatham County.

2 Site Inventory

2.1 Location and Description

The proposed project is located at 9780 US 15-501 N, Chape Hill, NC, between Vickers Rd and Hidden Oaks Dr in Chatham County, North Carolina. The project assigned Chatham County PIDs 0018750, 0018896, and 0018897 and subject to the Chatham County Jurisdictional requirements. This parcel assemblage is located approximately 10 miles north of the center of Pittsboro NC and 7.5 miles south of the center of Chapel Hill, NC.

2.2 Existing Site Summary

The parcel assemblage is located within the Jordan Lake Watershed or the Cape Fear River Basin. The current land uses are residential and tree farming. The site is primarily wooded, with an electrical power easement dissects the site east/west. The parcels largely slope to the easement and west toward US 15-501N. An existing farmhouse with out buildings is present south of the electrical easement. A buffered stream is present in the northeast corner.

2.3 Existing Visual Impacts

The existing landscape is characterized by undulating, rolling topography that is primarily wooded. There is approximately 80 feet of vertical change in the area of development. There are no visually dominant landforms. The surrounding area is rural.

3 Project Description

3.1 Proposed Project

The proposed project includes a 1,200 seat church with outdoor gathering area(s), playgrounds, paved sport court, maintenance shed, open field area, required utility infrastructure, required stormwater control measure(s), and provision for a future accessory structure.

3.2 Proposed Visual Impacts

The proposed church structure sits back from the road to best fit in within the fabric of the surrounding community, reduce the visual impact of the massing/scale of the building, and placement of the sanitary sewer infrastructure where soil percolation allows. Building facade materials and color pallet have been intentionally selected to blend in with the rural aesthetic.

The proposed site development strategically responds to the challenging existing site topography, minimizes environmental impacts, and maximizes the use of existing trees. Natural perimeter buffers will be utilized to the extent possible. These buffers will be augmented with native plants as needed, to ensure a natural transition to neighboring properties. Where possible,

existing specimen quality trees will be relocated to support this effort. Any areas of the perimeter buffers that require augmentation will be planted with native tree species. These areas will be maintained to achieve a natural, yet well vegetative transition to neighboring properties.

Parking has been positioned to surround the proposed building to reduce site walls and maximize pedestrian safety. Vehicle Use and Site Lighting is preliminarily shown, in keeping with the required Chatham County lighting requirements and matching with the building materials. The Developer is committed to providing lighting and fixtures that suit the developments aesthetic and make the proposed project safe with as little impact as possible on offsite wildlife and neighboring properties.

Monument sign locations are identified on the Site Plan. The proposed monument sign meet the Chatham County Sign Ordinance requirements and will be aesthetically consistent with the proposed builds and the surrounding community.

4 Visual Impact Assessment Conclusions

The following are standard VIA considerations;

The project's aesthetic approach appear to be consistent with applicable laws, ordinances, regulations, policies, or standards? The current design strategically considered landform, environmental preservation, and screening through the site development and conceptual layout phases. The final site plan meets the intent of the Chatham County UDO.

Will permits be required by outside regulatory agencies (i.e., federal, state, or local)? An existing US Army Corps of Engineering Jurisdictional Stream Determination was founded in July 2021. NCDOT Encroachment Agreements are anticipated.

Will the project character be compatible with the visual character of the existing landscape? The design team has taken steps to utilize the existing landscape and limit environmental impacts to the extent practical. Additionally, the team has considered the building placement, materiality and visual consistency and relationships with those of the surrounding area.

Will the project contrast adversely with the memorability (vividness), natural harmony and/or cultural order (unity) of the existing landscape? The design team has taken steps to utilize the existing landscape and limit environmental impacts to the extent practical. Additionally, the team has considered the building placement, materiality and visual consistency and relationships with those of the surrounding area.

Will the project, when viewed together with other past or foreseeable projects, result in a cumulative adverse change in the visual quality or character of the existing landscape? The design team has taken steps to utilize the existing landscape and limit environmental impacts to the extent practical. Additionally, the team has considered the building placement, materiality and visual consistency and relationships with those of the surrounding area. There are no known new projects adjacent to the site.

Will the project produce a new source of substantial light or glare, which will adversely affect daytime or nighttime views within the area? Final site lighting will be in accordance with the Chatham County UDO will be included as part of this project.

What is the potential that the project proposal will be controversial within the community? Based on the current feedback from the Pre-Application Meeting held with the Chatham County Reviewers and current discussions with surrounding neighbors, little to no public objection is anticipated. The neighborhood meeting is scheduled for 4/29.

How sensitive are potential key stakeholder likely to be regarding visible changes proposed by the project? Based on the current feedback from the Pre-Application Meeting held with the Chatham County Reviewers and current discussions with surrounding neighbors, little to no public objection is anticipated. The neighborhood meeting is scheduled for 4/29.

What level of local concern is there for the types of specific project features and construction impacts that are proposed? There are no known concerns with the proposed land use or current design. The current design strategically considered landform, environmental preservation, and screening through the site development and conceptual layout phases of this site plan.

Are there federally, state, locally designated scenic or historic resources, or other visual resources within the project area of visual effect (i.e., viewshed)? None

Will the public benefit from a more detailed visual analysis in order to help reach consensus on a course of action to address potential visual impacts? The design team has worked diligently to reduce any visual or environmental impacts, within the requirements of the UDO.

Will the project likely require design changes to reduce the extent of visual resource impacts? The design team has worked diligently to reduce any visual or environmental impacts, within the requirements of the UDO.

Based on the information presented above, there are no visual resource related regulatory requirements. No or negligible visual changes to the environment are proposed. None or minimal public concern has been identified. It is our professional opinion that all Visual Impacts have been mitigated to the extent practical.

Jael Wagoner

From: Scott Muir
Sent: Monday, April 15, 2024 8:30 AM
To: William Judson
Cc: Jael Wagoner
Subject: RE: Fire Lane Design Questions

Well, Jael has the answer – wall mounted – I’m still curious of your preference?

Thanks,

Scott Muir, PLA
Landscape Architect



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From: Jael Wagoner <JWagoner@Qunity.com>
Sent: Friday, April 12, 2024 10:46 AM
To: William Judson <william.judson@chathamcountync.gov>; Scott Muir <smuir@Qunity.com>
Subject: RE: Fire Lane Design Questions

Billy,
Good morning. Thank you so much for your continued dialog with Scott on this project. The Civil Engineer provided me with the attached is the preliminary utility plan. The current design shows wall mounted FDC for the buildings. Please let me know if you have any questions.

Jael Wagoner, PLA, ASLA
Assistant Vice President | Landscape Architect



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From: William Judson <william.judson@chathamcountync.gov>
Sent: Friday, April 12, 2024 10:29 AM
To: Scott Muir <smuir@Qunity.com>
Cc: Jael Wagoner <JWagoner@Qunity.com>
Subject: RE: Fire Lane Design Questions

Good morning Scott,

I appreciate you sending this over. Based on this preliminary design, it appears to meet the intent of the code. I noticed you added the grass pavers by the gym to meet the hose lay distances.

The one question I have is if you know if the FDC will be remote or wall mounted on both buildings?

Billy Judson
Chatham County Fire Marshal
80-D East St.
Pittsboro NC 27312
919.548.1770 -c

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From: Scott Muir <smuir@Qunity.com>
Sent: Tuesday, April 9, 2024 2:37 PM
To: William Judson <william.judson@chathamcountync.gov>
Cc: Jael Wagoner <JWagoner@Qunity.com>
Subject: RE: Fire Lane Design Questions

Billy,

Your past communications have been so helpful that we wanted to send you a Preliminary Draft of our Fire Safety Exhibit. We're specifically interested in your feedback on the layout of Fire Lanes, which are shown in light red on the attached plan drawing – particularly between the two buildings on the left side of the drawing.

Thanks in advance,

Scott Muir, PLA
Landscape Architect



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From: William Judson <william.judson@chathamcountync.gov>
Sent: Monday, April 1, 2024 4:18 PM
To: Scott Muir <smuir@Qunity.com>
Cc: Jael Wagoner <JWagoner@Qunity.com>
Subject: RE: Fire Lane Design Questions

Yes sir,

Appendix D references this, while not currently a requirement as it has not been adopted into the fire protection ordinance, we will typically request that designer's try to meet these. Most of it is based on the height of the building and the required response vehicle (aerial/ladder truck). Many times the width of the aerial is much wider with the outriggers (jacks) out. That's a short background on why the request for 26 feet.

SECTION D105

AERIAL FIRE APPARATUS ACCESS ROADS

D105.1 Where required.

Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet (9 apparatus access roads shall be provided. For purposes of this section, the highest roof surface shall be the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, which

D105.2 Width.

Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm), exclusive vicinity of the building or portion thereof.

D105.3 Proximity to building.

At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet 30 feet (9144 mm) from the building, and shall be positioned parallel to one entire side of the building. The aerial fire apparatus access road is positioned shall be approved by the *fire code official*.

D105.4 Obstructions.

Overhead utility and power lines shall not be located over the aerial fire apparatus access road or between and the building. Other obstructions shall be permitted to be placed with the approval of the *fire code official*.

Billy Judson
Chatham County Fire Marshal
80-D East St.
Pittsboro NC 27312
919.548.1770 -c

In keeping with the NC Public Records Law, e-mails, including attachments, may be released to others upon request for inspection and copying

From: Scott Muir <smuir@Qunity.com>
Sent: Monday, April 1, 2024 4:11 PM
To: William Judson <william.judson@chathamcountync.gov>
Cc: Jael Wagoner <JWagoner@Qunity.com>
Subject: RE: Fire Lane Design Questions

Billy,
Thank for the quick response and helpful information. For the building height: though the architecture is still being refined, I believe it will indeed be above 30' in height, Yes. We're planning for (2) separate entry drives that connect around both sides of the primary building. Are there other implications related to the height??

Thanks again,
Scott Muir, PLA
Landscape Architect



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From: William Judson <william.judson@chathamcountync.gov>
Sent: Monday, April 1, 2024 4:03 PM
To: Scott Muir <smuir@Qunity.com>
Cc: Jael Wagoner <JWagoner@Qunity.com>
Subject: RE: Fire Lane Design Questions

You don't often get email from william.judson@chathamcountync.gov. [Learn why this is important](#)

Good afternoon Mr. Muir,

I appreciate you reaching out to me during the design phase of your project. I have attached the truck specs for North Chatham Fire Department's aerial apparatus. I added the turning performance of their older truck for you – this would be best to use for your design. It shows a 25 ft + turn radius see below.

Will the proposed building exceed 30 feet at its highest point?

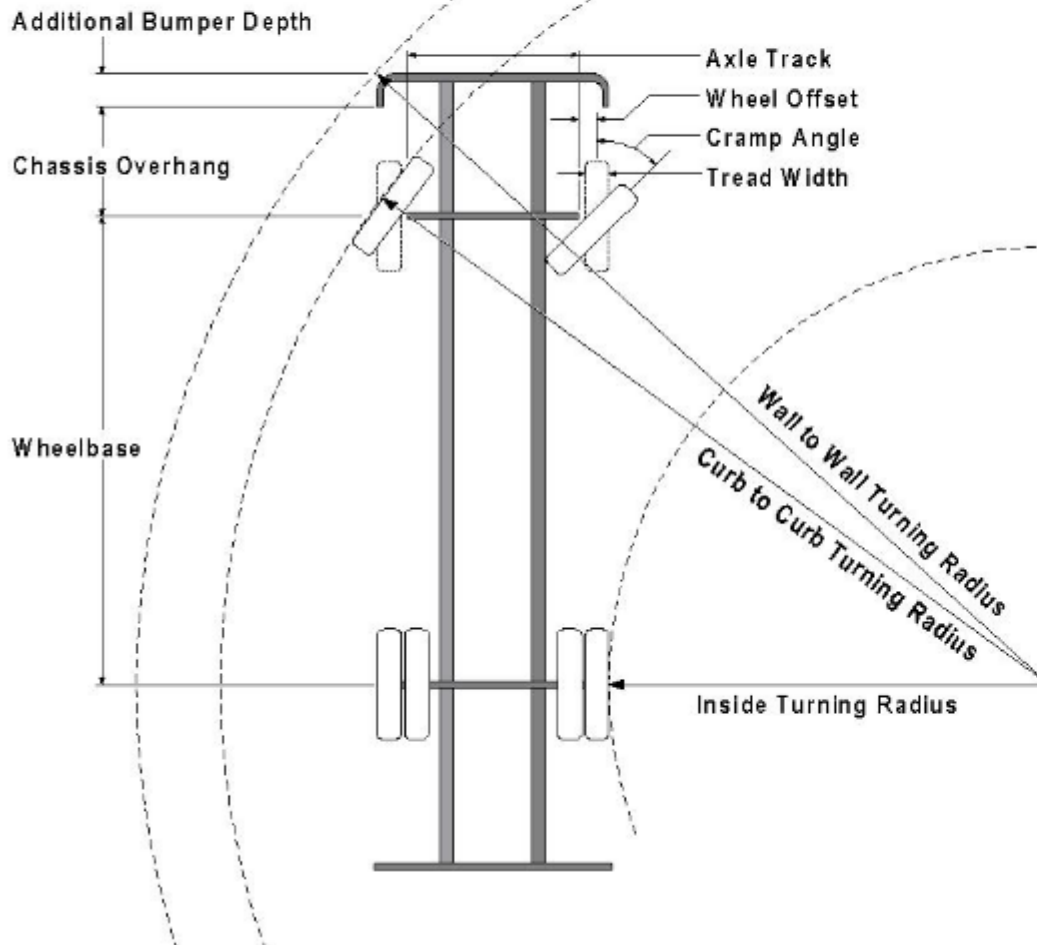
I would also ask that you provide a fire truck exhibit for the project, showing truck routing, proposed hydrants, FDC location (wall mounted or remote), hose lay distances and proposed fire lanes on that plan as well. Hope this helps and please let me know if you have any other questions.

Parameters

*Inside Crar
 Axle Track:
 Wheel Offse
 Tread Width
 Chassis Ov
 Additional B
 Front Overh
 Wheelbase:

Calculated

Inside Turn:
 Curb to curb
 Wall to wall:



Billy Judson
 Chatham County Fire Marshal
 80-D East St.
 Pittsboro NC 27312
 919.548.1770 -c

In keeping with the NC Public Records Law, e-mails, including attachments, may be released to others upon request for inspection and copying

From: Scott Muir <smuir@Qunity.com>

Sent: Monday, April 1, 2024 2:13 PM

To: thomas.bender@chathamnc.org; William Judson <william.judson@chathamcountync.gov>

Cc: Jael Wagoner <JWagoner@Qunity.com>

Subject: Fire Lane Design Questions

Hello Thomas / William,

We're working on designs for a proposed Church Building in Chatham County and would like to confirm some design criteria related to fire safety in our preliminary parking layout. The project site is on US 15/501 N, near Vickers Rd.

Our past projects have primarily been in Durham, which has a few design criteria that differ slightly from North Carolina State Fire Code based on the trucks used by the local department, and we'd like to confirm requirements for Chatham County. The project will include a primary Church Building (62,000 sf), as well as a separate Gym and small maintenance building. The buildings will be all be single story, but with tall ceilings in the gym and church sanctuary. We've used a **26' wide fire lane** and would like to confirm what sort of fire truck to accommodate and its related turning radius. Will a **20' inside turning radius** be sufficient on the fire lanes where they curve?? We appreciate your feedback in ensuring this design meets the safety requirements for Chatham County. We will be submitting site plans later this month for conditional rezoning, so if there are any other specifics we should include, such as fire-related notes, please let us know.

Thanks so much,

Scott Muir, PLA
Landscape Architect



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Flow Estimation

Mt Summit Church

3/4/2024 SRG

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Total Seating - Adult	1200	1200	1200	1200	1200	1200	1200
Total Seating - Children	1200	1200	1200	1200	1200	1200	1200
Adult Utilization (%)	0	20	0	100	0	0	100
Children Utilization (%)	0	16	0	80	0		80
Adult Attendance	0	240	0	1200	0	0	1200
Child Attendance	0	192	0	960	0	0	960
Total Occupancy	0	432	0	2160	0	0	2160
Sewer flow for Church (GPD)	0	1296	0	6480	0	0	6480
Flow from other Buildings (GPD)	1000	1000	1000	1000	1000	1000	1000
Total Daily Flow (GPD)	1000	2296	1000	7480	1000	1000	7480

Assumptions

- 1 Services at the Church will be held only twice per week on Sunday Morning and Thursday evening.
- 2 Eight (8) out of Ten (10) families will attend with a child - on average. Childrens occupancy will be 80% of the adult occupancy.
- 3 Children will be at the church only when accompanied by parents(s). A dayvacre is not part of this estimation.
- 4 Occasional meetings will be held. This is assumed to be a maximum of once per week with a 20% occupancy rate.
- 5 Occasional meetings will tentatively occur on Tuesday.
- 6 Low-flow fixtures will be utilized to reduce projected flow by 20%.
- 7 A flow of 3 gpd/seat is used for the estimation assuming a medium sized kitchen is included.
- 8 A previously calculated flow of 5,000 gal/week has been rounded to 1000 gpd and is assumed sufficient for the ancillary buildings and structures
- 9 Assumed allowable infiltration rate is 0.1 gpd/ft²
- 10 Repair area to has same infiltration rate as application area.
- 11 The total area recommended has a safety factor of 1.2 to account for unusable areas due to elevation or unforeseen conditions.

Total Weekly Flow	21,256	gallons	per week
Reduction for Low-Flow Fixtures	17,005	gallons	per week
Equilibrated Daily Flow	2,429	gallons	per day

Estimated ft² needed for Infiltration	24,293	ft ²
Estimated ft² needed for Repair Area	24,293	ft ²
Total Area Required	48,585	ft ²
Total Area Suggested for Preliminary Planning	58,302	ft ²
	1.3	Acres