# Memorandum



Planning Commission 01/17/2017

**Subject:** Site Plan Review Application – Chapel Hill Cooperative Preschool, 108 Mt. Carmel Church Rd. (Project #16-088)

Staff: Office:

Gene Poveromo, Development Manager Jay Heikes, Planner II Planning and Sustainability

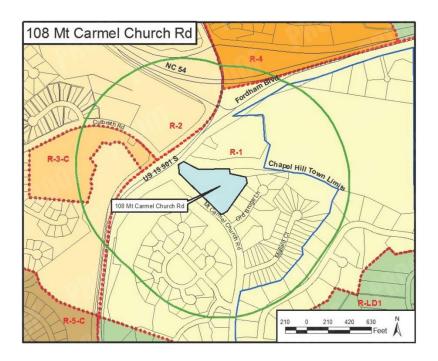
**Overview:** The applicant is proposing to construct an approximately 9000 square foot child day care facility for 80 children and 20 staff with 23 parking spaces.



## **Recommendation:**

We recommend that the Planning Commission adopt Resolution A, approving this Site Plan Review application, with the stipulations noted.

## Area Map:



**Application Description:** The application before you tonight proposes to construct a 9,000 square foot child day care center on a 3.97 acre property for 80 children and 20 staff with 23 parking spaces. This proposal includes 26,684 square feet of impervious surface and 39,942 square feet of land disturbance. The zoning district is Residential-1 (R-1). The property also contains Resource Conservation District (RCD), steep slopes and is partly within the 100-year floodplain.

## **Attachments:**

- 1. Staff Analysis
- 2. Resolution A Site Plan Review Approval

- 3. Resolution B Site Plan Review Denial
- 4. Traffic Impact Analysis Exemption5. Applicant's Combined Materials

## **STAFF REPORT**

SUBJECT: Application for Site Plan Review – Chapel Hill Cooperative Preschool, 108 Mt.

Carmel Church Rd. (Project #16-088)

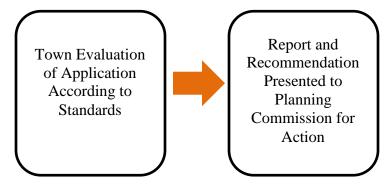
DATE: January 17, 2017

#### INTRODUCTION

The Site Plan Review application submitted by Philip Post and Associates, on behalf of the Chapel Hill Cooperative Preschool, seeks approval for construction of a new building containing a child day care facility with 23 vehicular parking spaces. The property is identified as Orange County Parcel Identifier Numbers 9787-29-6199, 9787-29-7266, 9787-29-9045, 9787-29-0047 and is located at 108 Mt. Carmel Church Rd.

## **PROCESS**

Where proposed construction of new floor area in excess of 2,500 square feet, but less than 20,000 square feet, a Site Plan Review is required. In this case, a 9,000 square foot child day care facility is proposed. We note that a child day care facility is a permitted use in the Residential-1 (R-1) zoning district, provided that the lot has access to a collector or arterial street. The Land Use Management Ordinance necessitates Planning Commission approval of a site plan review application. A site plan review is an administrative or by-right approval; if the application is found to be compliant with applicable regulations, including the Land Use Management Ordinance, then the application should be approved.



## STAFF ANALYSIS OF THE APPLICATION

Address	108 Mt. Carmel Church Rd.
Owner	Chapel Hill Cooperative Preschool
Location Description	Northeast corner of the intersection of U.S. 15-501 south and
	Mt. Carmel Church Rd. Refer to location map on item
	overview sheet.
County Parcel Identifier	Orange County Parcel Identifier Numbers 9787-29-6199,
Numbers	9787-29-7266, 9787-29-9045, 9787-29-0047
Property Description	Predominantly undeveloped property. Lot contains a single-
	family structure and accessory structures. The remaining three
	lots are vacant single-family lots that were subdivided in 2008.
Existing Zoning	Residential-1 (R-1)
Proposed Land Use	Child Day Care Facility, permitted in R-1 zoning district
	provided that access is available to a collector or arterial street.
Surroundings	
General Development Pattern	Single family residential development to south, east and west,
	and park / open space to the north
<b>Current Site Conditions</b>	
Lot Size (Net Land Area)	172,960 square feet (3.97 acres)
Lot Size (Gross Land Area)	190,256 square feet (4.36 acres)
Structures	One single family dwelling with three accessory structures.
Vegetation	Predominantly wooded.
Access	Single shared driveway providing access for all four lots to Mt.
	Carmel Church Rd.
Utility Easements	Existing sewer main within an easement serving vacant
	residential lots.
Existing Impervious Surface	7,896 square feet
Resource Conservation District	Perennial stream on northern lot line, 150-foot wide buffer
	applies from the top of bank and extends south into the site.
Watershed Protection District	Site is inside the Watershed Protection District
Jordan Riparian Buffer	Perennial stream on northern lot line, 50-foot wide buffer
	applies from top of bank and extends south into the site.
Wetlands	N/A
Steep Slopes	Site contains 50,356 square feet of moderate slopes with a
	grade between 15% and 25% and 91,307 square feet of steep
	slopes with a grade of 25% or more.
100-year floodplain	The northern portion of the site, adjacent to the stream, is
	within the 100-year floodplain.

*Site Plan Review:* The Planning Commission has the authority to approve new developments if the proposal involves less than 20,000 square feet of floor area and less than 40,000 square feet of land disturbance, and if the proposed use is permitted in the zoning district. The proposed child day care facility is a permitted use. This application proposes 9,000 square feet of floor

area and 39,942 square feet of land disturbance. This preliminary calculation includes all land disturbance associated with the project located within the project site.

We have included a stipulation in Resolution A that limits all associated on-site land disturbance to less than 40,000 square feet. We note that if 40,000 square feet or more of land disturbance is proposed, the application will require approval of a Special Use Permit by the Town Council. We have also included this as a stipulation in Resolution A.

## **Proposed Development**

The applicant is proposing the demolition of two existing accessory structures and construction of a new one-story 9,000 square foot building at 108 Mt. Carmel Church Rd. The existing house is proposed to remain for use as a construction trailer and demolition will be proposed by the applicant at a later date.

The Town staff has reviewed this application for compliance with <u>Land Use Management</u> <u>Ordinance<sup>1</sup></u> and the <u>Design Manual</u><sup>2</sup> and offers the following evaluation:

**Development Use and Intensity:** The following table provides details regarding proposed development intensity.

Standard	Residential-1 (R-1) Zoning Requirements	Site Plan Review Application	
Floor Area Maximum (sq. ft.)	10,730	9,000*	
Maximum Primary Height (ft.)	29	N/A	
Maximum Secondary Height (ft.)	40	16	
Minimum Solar Setback	17	144	
(northern property line) (ft.)	17	144	
Minimum Interior Setback (ft.)	14	43	
Minimum Street Setback (ft.)	28	104	
Maximum Impervious Surface (sq. ft.)	133,179 (70%)	26,684 (14%)	
Vehicular Parking Spaces	undefined for use	23 (incl. 1 HC)	
Bicycle Parking Spaces	undefined for use	4 (0 Class I and 4 Class II)	

\*The applicant is proposing to keep the existing 1,900 square foot single family house and use it as a construction office but demolish it after construction is completed. This demolition is necessary because the total floor area on the lot would be 10,900 square feet which is in excess of the allowable floor area of 10,730 square feet. The applicant has expressed concerns with the sequencing of construction and obtaining funding necessary to demolish the house prior to occupancy of the child day care facility. We believe this constraint is reasonable and that the applicant's proposal to cease use of the house prior to occupancy and demolish the house or a portion of the house after occupancy to comply with the floor area requirement is also reasonable. We have included a stipulation to this effect in Resolution A.

<sup>&</sup>lt;sup>1</sup> https://www.municode.com/library/nc/chapel hill/codes/code of ordinances?nodeId=CO APXALAUSMA

<sup>&</sup>lt;sup>2</sup> http://www.townofchapelhill.org/town-hall/departments-services/public-works/engineering/design-manual-and-standard-details

## **Transportation**

*Traffic Impact:* The proposed daycare is expected to generate approximately 360 daily trips, which is below the 500 daily trip threshold for a Traffic Impact Analysis (TIA). The Town granted a TIA exemption for this project (see attached). As this project was exempted from a TIA, the traffic impact of this project does not require mitigation measures to be constructed.

Town Roadway Improvements: However, we note that morning congestion on Mt. Carmel Church Rd. exists with vehicles queuing beyond the proposed site driveway to make a right turn onto northbound US 15-501. The Town Traffic Engineer and NCDOT have identified a measure from a previous Traffic Impact Analysis in response to concerns and ideas from neighboring residents that would address the existing and future congestion. The Town is planning to reconfigure the Mt. Carmel Church Rd. leg of the intersection that would result one shared lane for left turns and thru traffic and two dedicated right turn lanes from Mt. Carmel Church Rd onto northbound US 15-501 and accompanying traffic signal improvements and retiming. This work is scheduled to be completed by May of 2017.

Mt. Carmel Church Rd. Median: A single point of access to the site is proposed to Mt. Carmel Church Rd., with a new driveway to the southeast of the existing gravel driveway, which is proposed to be removed. NCDOT driveway permit standards require that a raised center median island be installed in the existing paved median in Mt. Carmel Church Rd. to prevent left turns into and out of the site; restricting the driveway to right-in-right-out movements only.

*Vehicular Access and Circulation*: Section 6.1 of the Land Use Management Ordinance requires that a child day care facility have access to an arterial or collector street when located in the Residential-1 or Residential-2 zoning districts. The proposed development is located in the Residential-1 zoning district and is located on an arterial street. Circulation through the site is proposed via a single drive aisle with a fire truck turn-around in front of the building.

Transportation Management Plan: In response to concerns from residents of Old Bridge Ln. that the street may be used as a turn-around and/or a parking area for the preschool, The Chapel Hill Cooperative Preschool is proposing a "Traffic and Parking Operations Plan" that will address the following: 1) access routes to the site to prevent use of Old Bridge Ln by preschool parents and teachers; 2) Carpool for parents and teachers and remote parking for teachers; 3) Onsite parking management, and 4) windows of time for parents to drop-off and pick-up their children. All of these things will serve to reduce the number of trips to the site. We believe that including this information in a transportation management plan that will allow for Town monitoring and enforcement, is a reasonable solution and have included a stipulation to this effect in Resolution A.

A Transportation Management Plan is not required with Site Plan Review approvals, but the applicant has voluntarily agreed to such a condition to reduce parking demand. We have included a stipulation requiring the property owner to submit a Transportation Management Plan, with detailed elements, including a vehicle access plan for parents and staff, in Resolution A.

*Bike and Pedestrian Access and Circulation*: Section 5.8.1 of the Land Use Management Ordinance requires that development front streets that meet Town Standards and require that bike and pedestrian facilities be provided to the extent practicable. Mt. Carmel Church Rd. is an arterial and requires both a five foot wide bike lane and a five foot wide sidewalk to be constructed along the property's frontage.

Sidewalk and Bike Lane: The adopted Bike Plan shows bike lanes on this segment of Mt. Carmel Church Rd. The Town's sidewalk prioritization program also includes a sidewalk on this segment of Mt Carmel Church Rd. We note that the mobility plan, which is under development, may include additional bike and pedestrian improvements in this area to provide better access to the Morgan Creek Trail system including Merritt's Pasture and provide additional connectivity between UNC's campus and the neighborhoods in southern Chapel Hill along US 15-501 south and Mt Carmel Church Rd.

*Sidewalk Payment-in-Lieu:* We note that a payment-in-lieu of \$32,831 was submitted as a part of the 2008 Minor Subdivision approval for construction of a sidewalk on Mt. Carmel Church Rd. The applicant is requesting credit for this payment and not proposing an additional payment in lieu for sidewalk. We believe this request is reasonable and have not included a condition requiring a payment-in-lieu for construction of sidewalk.

**Bike Lane Payment-in-Lieu:** The estimated cost of constructing a five-foot wide bike lane on Mt. Carmel Church Rd. along the property's frontage is \$36,575. We believe that a payment-in-lieu of this amount satisfies the requirement in section 5.8.1 of the Land Use Management Ordinance for the applicant to provide bike facilities to the extent practicable. We have included a stipulation to this effect in Resolution A.

Future Greenway Easement: A future greenway side path paralleling Mt. Carmel Church Rd. from Bennet Rd, passing along this property and under US 15-501 to connect with the existing Morgan Creek trail system is proposed by staff as a future amendment to the adopted Greenway Master Plan to provide safe and legal access to the Morgan Creek Trail system and Merritt's Pasture for residents of the neighborhoods along Mt. Carmel Church Rd. The applicant has agreed to dedicate a reserved easement for construction and maintenance of a greenway along the property and we have included a stipulation to this effect in Resolution A.

Vehicular Parking: The Land Use Management Ordinance does not specify vehicular parking standards for the child daycare use. In such cases, the number of parking spaces is to be determined during review of the application. The application proposes 23 regular parking spaces including 1 handicapped parking space. The applicant proposes to combine and relocate two existing daycare operations at this site and has provided parking survey information from those two sites demonstrating parking demand for staff and for parents. The operations plan, as noted above, provides additional information to justify this number of spaces. We have also reviewed three other recently constructed child day care facilities and found the proposed parking ratio to be in line with those facilities. We believe this parking count is reasonable and have included a stipulation to this effect in Resolution A.

**Bicycle Parking:** The Land Use Management Ordinance does not specify bicycle parking standards for child day care facility use. In such cases, the number of parking spaces is to be determined during review of the application. The developer is proposing to provide 4 Class II, uncovered spaces in compliance with the Design Manual. Based on the number of staff at this facility and comparison to other recently approved child day care facilities, we believe this number is reasonable and have included a stipulation to this effect in Resolution A.

## **Landscape and Architecture**

Landscape Buffers: The required and proposed buffers are as follows:

Location	Required Buffers	Proposed Buffer
Northern lot line (Morgan	20-foot wide Type 'C'	20-foot wide Type 'C'
Creek)	Internal Buffer	Internal Buffer and
Southeast lot line (Old Bridge	20-foot wide Type 'C'	Variable width Type 'C'
Lane properties)	Internal Buffer	Alternate Internal Buffer
Southwestern lot line (Mt	20-foot wide Type 'C'	20-foot wide Type 'D'
Carmel Church Rd.)	External Buffer	External Buffer
Western property line (US 15-	30-foot wide Type 'D	30-foot wide Type 'D'
501 south)	External Buffer	External Buffer

The developer is requesting an alternative buffer of variable width buffer along the southeastern property line shared with one single family property at 101 Old Bridge Ln. An alternate buffer is necessary as there is only fourteen feet of width between the existing structure and the adjoining property. The Community Design Commission must approve the detailed plantings and screening associated with any alternative buffer. Detailed plans for landscape buffers are required prior to issuance of a Zoning Compliance Permit. We have included a stipulation with these detailed requirements in Resolution A.

**Parking Landscape:** The application must meet the parking lot landscaping standards of Section 5.9.6 of the Land Use Management Ordinance. We have included this as a stipulation in Resolution A.

**Building Elevations and Lighting Plan:** We recommend that a condition of approval require that the applicant obtain approval from the Community Design Commission for detailed building elevations and site lighting plans. We have included this as a stipulation in Resolution A.

## **Environment / Stormwater Management**

Canopy Tree Requirements: The minimum tree canopy coverage requirement for a child day care facility is 40% of the lot. The applicant is proposing 66% (114,000 square feet) of total post construction canopy coverage. This calculation accounts for existing tree canopy to be preserved as a part of development. We have included a stipulation demonstrating protection of this area as a part of the required Landscape Protection Plan in Resolution A.

**Land Disturbance and Impervious Surface:** Currently, the site is predominantly undeveloped property with an existing single-family structure with three accessory structures. As noted above, we have included stipulation limiting land disturbance in Resolution A.

**Land Area/Proposed Development** 

	Square Feet	Acres	Percentage of GLA
Gross Land Area (GLA)	190,256	4.36	100%
Proposed Land Disturbance	39,942	0.91	23%
Proposed Net New Impervious Surface	26,684	0.61	14%

**Stormwater Management Plan:** Most stormwater runoff from this site is proposed to be routed to stormwater management structures located under the parking lot drive aisle. Additionally, the applicant proposes to reuse captured rainwater for irrigation.

Prior to the issuance of a Zoning Compliance Permit, the applicant must submit a Stormwater Management Plan for review and approval by the Town Manager. This project must comply with the stormwater management requirements of the Land Use Management Ordinance to provide for 85% total suspended solids removal from the increased impervious area, retention for 2-5 days of the increased volume of stormwater runoff from the 2-year, 24-hour storm, and control of the stormwater runoff rate for the 1-year, 2-year, and 25-year storms. We have included a stipulation with detailed requirements in Resolution A.

Stormwater Facilities, Reservations, and Operations and Maintenance Plans: All stormwater facilities shall be within a reserved area or easement where no development would impede the facilities' proper functioning. We have included a stipulation with detailed requirements in Resolution A.

Prior to building occupancy, a Stormwater Operations and Maintenance Plan, signed by the owner, shall be provided for the proposed stormwater management facilities and submitted to the Stormwater Management Engineer for approval. A schedule of inspection and maintenance tasks shall be included. We have included a stipulation with detailed requirements in Resolution A.

Steep Slopes: The site contains significant steep slopes, defined as 25% or more, on the northern portion of the lot above the bank of Morgan Creek and the southwestern portion of the lot along Mt. Carmel Church Rd. Section 5.3.2 of the Land Use Management Ordinance requires special construction techniques for slopes in excess of a 15% grade and restricts development on slopes with a grade of 25% or more. Land disturbance is limited to 25% of the area containing steep slopes with a grade of 25% or more. The application proposes to limit disturbance in the areas containing steep slopes by siting the building and parking area on a relatively flat portion of the lot.

Slope Category	Net Land Area (square feet)	Area Disturbed (Square Feet)	Percentage of Slope Category Disturbed
0-15%	31,297	11,643	37%
15-25%	50,356	26,414	52%
>25%	91,307	1,885	2% (25% limit)
Total	172,960	39,942	NA

We believe the application minimizes land disturbance in areas that contain steep slopes and have included a condition in Resolution A to this effect, requiring that steep slopes construction techniques be utilized during construction and demonstrated on the Final Plans prior to issuance of a Zoning Compliance Permit.

Resource Conservation District: The northern portion of the property is within a 150 foot wide Resource Conservation District (RCD) stream buffer that extends south from the bank of Morgan Creek. Section 3.6.3 of the Land Use Management Ordinance limits development activities within the RCD. The application does not propose any new permanent improvements within the RCD. An existing accessory structure that is 266 square feet in size is proposed to remain within the upland zone of the RCD, which is the outermost 50 feet of the buffer. A portion of a play area and a retaining wall ranging in height from zero feet to four feet are located just outside the RCD boundary. Approximately 350 feet of land disturbance within the RCD is necessary to construct these improvements. We believe this application minimizes land disturbance within the RCD and have included a condition requiring review and approval of a Resource Conservation District Encroachment Permit in accord with section 3.6.3 of the Land Use Management Ordinance prior to issuance of a Zoning Compliance Permit

*Jordan Riparian Buffer:* The northern portion of the property is within a 50 foot wide Jordan Watershed Riparian stream buffer that extends south from the bank of Morgan Creek. This application does not propose any activities or land disturbance within the Jordan Riparian Buffer.

100 Year Floodplain: The northern portion of the property is within the 100 year floodplain. However, the developed portion of the site and the proposed finished floor elevation of the proposed building are approximately 65 feet above the base flood elevation for the 100 year flood. This application does not propose any activities or land disturbance within the 100 year floodplain.

*Energy Management Plan:* In 2007, the Council adopted a resolution specifying the Council's expectations for energy efficiency and an energy management plan for applicants seeking approval of rezoning applications. No rezoning is proposed with this application. No Energy Management Plan is required. However, the applicant is encouraged to create an energy management plan that addresses the items listed in the staff's suggested framework, as well as any relevant elements related to the following categories:

Green Building Standard & Certification (e.g., LEED), Design for Performance (e.g., energy, water), Sustainable Energy (e.g., solar, wind, geothermal), Transportation (transit access), Urban Heat-Island Effect (e.g., green roof), Site Selection & Design (e.g., infill, xeriscaping, passive solar, solar orientation), Lighting (e.g., motion sensors, high efficiency fixtures), Building Envelope (e.g., low-e glazing, high R-value insulation), Building Materials (e.g., local, recycled, low VOC), Mechanical Equipment (e.g., highly-rated SEER unit, enthalpy wheel), Health and Safety (e.g., carbon dioxide monitors, access to natural light).

We have included a stipulation in Resolution A encouraging the applicant to consider these energy management features.

## **Utilities and Services**

*Utilities:* A new 30-foot public OWASA water main easement is proposed along the driveway. A portion of an existing 30-foot sewer main is proposed to remain at the southeastern edge of the property. All permits and plan approvals will need to be approved by Orange Water and Sewer Authority, Duke Energy, PSNC Energy and other utility providers as appropriate. We have included stipulations with detailed requirements in Resolution A.

*Fire/Emergency Access and Protection:* A fire hydrant must be located within 500 feet of the proposed building, as required by the Land Use Management Ordinance. Approval of a fire flow report is required by the Town and OWASA, showing the Town's 2,500 gallons per minute standard can be met, prior to issuance of a Zoning Compliance Permit. We have included stipulations with detailed requirements in Resolution A.

**Refuse / Recycling Collection:** Recycling is proposed to be collected by means other than public recycling collection. The Preschool is proposing to request a waiver from Orange County Solid Waste to allow private collection. The preschool is also proposing to reduce refuse generation by composting on site. The remaining refuse is proposed to be collected by either the Town or a private service. The detailed solid waste management plans for Orange County Solid Waste and the Town, including confirmation of service will be reviewed and approved prior to issuance of a Zoning Compliance Permit. We have included stipulations to this effect in Resolution A.

## Additional Stipulations in Resolution A (see resolution for detailed requirements)

4 47 474 70 4	
Accessibility Requirements	Prior to issuance of the Certificate of Occupancy the applicant
	shall provide the minimum required handicapped facilities and
	infrastructure required Americans with Disabilities codes and
	standards.
Engineering Construction	After issuance of a Zoning Compliance Permit and prior to
Permit	construction, the applicant shall obtain an Engineering
	Construction Permit.
NCDOT Approvals	Prior to initiation of work in the public right-of-way, the applicant
Required	shall obtain NCDOT permission.
Final Site Design	Prior to the issuance of a Zoning Compliance Permit the final
	design is subject to approval by the Town Manager.
Landscape Protection,	We have included our standard stipulation regarding approval of a
Screening and Shading	Landscape Plan, including screening of parking areas and
Plan	buildings, a maintenance schedule and shading plan.
Canopy Trees	The applicant has provided a landscape plan that proposes 66%
	total post construction tree canopy to comply with the Town's
	Tree Ordinance, made up of existing trees to be preserved.
Significant Tree Stands	N/A
Building Elevation,	Prior to the issuance of a Zoning Compliance Permit, we
Lighting Plans, and	recommend that detailed building elevations, lighting plans, and
Alternative Buffer Plan	alternative buffer plans be approved by the Community Design
	Commission.

Emarian Cantual	An Orongo County English Control narmit is required when
Erosion Control	An Orange County Erosion Control permit is required when
	20,000 square feet or more is uncovered. This project proposes
	more than 20,000 square feet of land disturbance, so an Erosion
	Control Permit is required.
Lighting Plan	Prior to issuance of a Zoning Compliance Permit, the applicant
	shall submit site plans and other required documents to satisfy the
	lighting requirements of Section 5.11 of the Land Use
	Management Ordinance, subject Town Manager approval.
Utilities	Prior to issuance of a Zoning Compliance Permit, the applicant
	shall provide documentation that all utility providers have
	approved the final plans.
Fire	Prior to the issuance of a Certificate of Occupancy, the applicant
	shall be required to obtain Fire Marshal approval for required fire
	safety features and infrastructure, such as fire hydrants and fire
	department connections, detailed fire access elements, fire
	protection devices, heavy-duty pavement and drive aisle design
	features. Prior to issuance of a Zoning Compliance Permit, design
	is subject to Fire Marshal approval.
Schools Adequate Public	N/A
Facilities Ordinance	
Construction Management	Prior to issuance of a Zoning Compliance Permit, a Construction
Plan	Management Plan shall be approved by the Town Manager.

## **CONCLUSION**

We believe the proposal, with the conditions in Resolution A, meets the requirements of the applicable sections of the Land Use Management Ordinance and the Design Manual.

Resolution A would approve the application with conditions.

Resolution B would deny the application.

## RECOMMENDATION

<u>Staff Recommendation</u>: We recommend that the Planning Board adopt Resolution A, approving the Chapel Hill Cooperative Preschool Site Plan Review application with conditions.

## PROJECT FACT SHEET REQUIREMENTS **Checklist of Regulations and Standards**

**Chapel Hill Cooperative Preschool Site Plan Review Application** 

Chapet Hill Cooperative Preschool Site Plan Review Application						
108 Mt. Carmel Church Rd	STAFF EVALUATIO	ON ON R-1 ZONING				
	COMPLIANCE	NON-COMPLIANCE				
Use Permitted in R-1 Zone	✓					
Gross Land Area	✓					
Minimum Lot Width	✓					
Maximum Floor Area	✓ (with conditions of					
	approval)					
Impervious Surface Limits	✓					
Maximum # Dwelling Units	N/A					
Minimum Recreation Space	N/A					
Minimum # Vehicular Parking	Use not indicated in Parking					
Spaces	Requirements – Staff believes					
	compliance demonstrated					
	adequately					
Minimum # Bicycle Parking	Use not indicated in Parking					
Spaces	Requirements – Staff believes					
	compliance demonstrated					
	adequately					
Minimum Setbacks (Street,	✓					
Interior, Solar)						
Maximum Height Limits	✓					
(Primary, Secondary)	1 6 1					
Minimum Landscape Bufferyards	✓ with approval of alternate					
· · · · · · · · · · · · · · · · · · ·	buffers by CDC					
Land Disturbance Minimized	<b>V</b>					
Minimum Land Disturbance	✓ (with conditions of					
in the Resource Conservation	approval)					
District Stean Slangs Compliance	,					
Steep Slopes Compliance	<b>V</b>					
Stormwater Management	✓ (with conditions of					
Doubing let accessing	approval)					
Parking lot screening	✓ (with conditions of					
D.I.I.	approval)					
Public water and sewer	✓					
Adequate public schools facilities	N/A					

N/A = Not Applicable

\* Denotes nonconforming feature

The chart shows that the application is compliant with the regulations.

(Approving the Site Plan Review Application)

A RESOLUTION APPROVING AN APPLICATION FOR A SITE PLAN REVIEW FOR THE CHAPEL HILL COOPERATIVE PRESCHOOL (PIN's 9787-29-6199, 9787-29-7266, 9787-29-9045, AND 9787-29-0047; PROJECT #16-088)

BE IT RESOLVED by the Planning Commission of the Town of Chapel Hill that it finds that the Site Plan Review application for the Chapel Hill Cooperative Preschool, proposed by Philip Post and Associates, on property identified as Orange County Property Identifier Numbers 9787-29-6199, 9787-29-7266, 9787-29-9045, 9787-29-0047, if developed according to the Site Plan dated August 24, 2016 (revised November 09, 2016 and November 17, 2016) and the conditions listed below would comply with all required regulations and standards of the Land Use Management Ordinance and Design Manual.

This finding is conditioned on the following:

## Stipulations Specific to the Development

- 1. <u>Construction Deadline</u>: That construction begins by January 17, 2018, to be completed by January 17, 2020.
- 2. Land Use Intensity: This Site Plan Review authorizes the following:

Use: Child Day	Care Facility:
Floor Area Permitted	9,000 square feet
Vehicular Parking Spaces	23
Minimum Bicycle Parking Spaces	4
Maximum Impervious Surface	26,684 square feet
Maximum Land Disturbance	39,942 square feet

3. <u>Demolition of existing house</u>: That a demolition permit for demolition of the existing house, or a portion thereof, be submitted and approved, and that the house, or a portion thereof, be demolished within three years of the date of the final Certificate of Occupancy and the property brought into compliance with the floor area requirement. That the use of the house cease prior to Certificate of Occupancy.

## Land Disturbance

4. <u>Land Disturbance Survey</u>: That prior to the issuance of a Certificate of Occupancy, it will be necessary to provide a survey confirming the amount of land disturbance associated with all on-site improvements. If land disturbance exceeds 40,000 square feet, the application will require approval of a Special Use Permit by the Town Council.

#### Access

5. Accessibility Requirements: That prior to issuance of a Certificate of Occupancy, the applicant shall provide the minimum required handicapped parking spaces and design all handicapped parking spaces, ramps, and crosswalks, and associated infrastructure according to Americans with Disabilities Act standards, North Carolina Building Code, American National Standards Institute (ANSI) Code, and Town standard.

## **Transportation**

- 6. Payment in Lieu for Bicycle Facilities: Prior to issuance of a Zoning Compliance Permit, the applicant shall submit a payment-in-lieu of \$36,575 to the Town of Chapel Hill for the construction of a five-foot wide bike lane on Mt. Carmel Church Rd. along the frontage of the property.
- 7. Dedication of Future Greenway Easement: That the applicant agrees to dedicate a variable-width easement along the property frontage with Mt. Carmel Church Rd and US 15-501 S for the purpose of constructing and maintaining a public multi-use path along Mt. Carmel Church Rd. and under the US 15-501 S bridge over Morgan Creek. Conditions of the easement will allow for construction and maintenance of a path that is 10-12 feet in width, with additional room for 3 foot shoulders, retaining walls, drainage structures, and other improvements needed to comply with AASHTO and NCDOT standards. The easement will allow access and use by Town maintenance vehicles and personnel, pedestrians, non-motorized vehicles, and reasonable use of motorized vehicles for those with disabilities. The Final Plans submitted for the Zoning Compliance Permit shall designate the specific location of the area to be dedicated as a variable-width pedestrian and non-motorized vehicle easement. The easement must be recorded prior to issuance of the Zoning Compliance Permit.
- 8. <u>Acceptance of Future Greenway Easement</u> That the Town agrees to accept the dedicated variable-width easement along the property frontage with Mt. Carmel Church Rd and US 15-501 S for the purpose of constructing and maintaining a public multi-use path along Mt. Carmel Church Rd. and under the US 15-501 S bridge over Morgan Creek.
- 9. <u>Parking Lot/Drive Aisles Town Standards</u>: Prior to a Certificate of Occupancy, the applicant shall construct the parking lot and drive aisles to Town standard, design subject to Town Manager approval prior to issuance of a Zoning Compliance Permit.
- 10. <u>Bicycle Access and Parking</u>: That prior to the issuance of a Zoning Compliance Permit, the applicant shall provide dimensioned details for a minimum of four (4) bicycle parking spaces (four (4) Class II) that comply with Town parking standards. The bicycle parking design must comply with the spring 2010 Association of Pedestrian and Bicycle Professionals Guidelines, and the bicycle parking standards required by the Town Design Manual.
- 11. <u>Transportation Management Plan</u>: Prior to issuance of a Zoning Compliance Permit that the applicant submits a Transportation Management Plan for review and approval by the Town

Manager. These plans are updated annually and approved by the Town Manager. The plan shall include an operations plan that addresses 1) access routes to the site to prevent use of Old Bridge Ln. by preschool parents and teachers; 2) Carpool for parents and teachers and remote parking for teachers; 3) Onsite parking management, and 4) windows of time for parents to drop-off and pick-up their children. Additional required components of the Transportation Management Plan typically include:

- a. A Transportation Coordinator to communicate and promote alternate modes of transportation;
- b. Submission of an Occupancy Survey due 90 days after building expansion occupancy;
- c. Submission of an updated annual Transportation Management Plan Report;
- d. Submission of Resident, Business and Employee Surveys during survey years; and
- e. Measures to gradually attain the goals of the program.

## Landscaping and Landscape Protection

12. <u>Landscape Buffers</u>: That the Landscape Planting Plan demonstrate compliance with the required buffers as described in the chart below:

Location	Required Buffers	Proposed Buffer
Northern lot line (Morgan	20-foot wide Type 'C'	20-foot wide Type 'C'
Creek)	Internal Buffer	Internal Buffer and
Southeast lot line (Old Bridge	20-foot wide Type 'C'	Variable width Type 'C'
Lane properties)	Internal Buffer	Alternate Internal Buffer
Southwestern lot line (Mt.	20-foot wide Type 'C'	20-foot wide Type 'D'
Carmel Church Rd.)	External Buffer	External Buffer
Western property line (US 15-	30-foot wide Type 'D	30-foot wide Type 'D'
501 south)	External Buffer	External Buffer

- 13. <u>Alternate Buffers</u>: That unless the applicant obtains alternate bufferyard approval from the Community Design Commission, that the standard buffers be provided continuously along all property lines. It will be necessary for the Community Design Commission to make the determination that any proposed alternative buffer shall provide the same degree of visual and noise obstruction as the required buffer.
- 14. <u>Landscape Protection</u>: That a detailed Landscape Protection Plan shall be approved prior to issuance of a Zoning Compliance Permit. The plan shall include critical root zones of all rare and specimen trees, and clearly indicate names and species. The plan shall indicate the area and percentage of existing tree canopy on the site to be preserved. The Plan shall also include details showing tree protection fencing around construction limits, areas designated for construction parking, materials staging/storage areas, and shall include Town standard landscaping protection notes.

- 15. <u>Tree Protection Fencing Prior to Construction</u>: Prior to issuance of a Zoning Compliance Permit the applicant shall provide a note on the Final Plans indicating that tree protection fencing will be installed prior to land-disturbing activity on the site.
- 16. <u>Landscape Planting Plan</u>: Prior to issuance of a Zoning Compliance Permit the applicant shall provide a detailed Landscape Planting Plan with a detailed planting list, subject to Town Manager approval. The Plan shall meet the required parking landscape requirements in LUMO 5.9.6.

#### Environment

- 17. <u>Steep Slopes Ordinance Compliance</u>: That the final plans application delimit areas containing steep slopes and include construction techniques for areas with steep slopes in accord with Section 5.3.2 of the LUMO
- 18. <u>Resource Conservation District Encroachment Permit Required</u>: That prior to issuance of a Zoning Compliance Permit that a Resource Conservation District Encroachment Permit application be submitted for review and approval by the Town Manager in accord with section 3.6.3 of the LUMO for work occurring within the Resource Conservation District.
- 19. <u>Energy Management Plan</u>: That the applicant consider providing an energy management plan that addresses the items listed in the staff's suggested framework, as well as any relevant elements related to the following categories:

Green Building Standard & Certification (e.g., LEED), Design for Performance (e.g., energy, water), Sustainable Energy (e.g., solar, wind, geothermal), Transportation (transit access), Urban Heat-Island Effect (e.g., green roof), Site Selection & Design (e.g., infill, xeriscaping, passive solar, solar orientation), Lighting (e.g., motion sensors, high efficiency fixtures), Building Envelope (e.g., low-e glazing, high R-value insulation), Building Materials (e.g., local, recycled, low VOC), Mechanical Equipment (e.g., highly-rated SEER unit, enthalpy wheel), Health and Safety (e.g., carbon dioxide monitors, access to natural light).

## Stormwater Management and Erosion Control

- 20. <u>Stormwater Management Plan</u>: That this project must comply with the Section 5.4 Stormwater Management of the Land Use Management Ordinance or whatever stormwater regulations are applicable at the time of issuance of a Zoning Compliance Permit.
- 21. <u>Silt Control</u>: That the developer takes appropriate measures to prevent and remove the deposit of wet or dry silt on adjacent paved roadways.
- 22. <u>Erosion Control</u>: The developer shall provide a copy of the approved erosion and sediment control permit from Orange County Erosion Control Division prior to receiving a Zoning Compliance Permit. During the construction phase, additional erosion and sediment controls

- may be required if the proposed measures do not contain the sediment. Sediment leaving the property is a violation of the Town's Erosion and Sediment Control Ordinance.
- 23. <u>Curb Inlets</u>: The developer shall provide pre-cast curb inlet hoods and covers stating, "Dump No Waste! Drains to Jordan Lake", in accordance with the specifications of the Town Standard Detail SD-5A, for all new curb inlets for private, Town and State rights-of-way.
- 24. <u>As-Built Plans</u>: That prior to Certificate of Occupancy, the developer shall provide certified as-built plans for building footprints, parking lots, street improvements, storm drainage systems and stormwater management structures, and all other impervious surfaces related to infrastructure development, and a tally of the constructed impervious area. The as-built plans should be in DXF binary format using State plane coordinates and NAVD 88.
- 25. <u>Phasing Plan</u>: Prior to issuance of a Zoning Compliance Permit, the developer shall obtain approval of a Phasing Plan that provides details of which improvements are to be constructed during each phase. The phasing plan shall detail public improvements and stormwater management structures will be completed in each phase prior to requesting a Certificate of Occupancy.
- 26. On-Site/Adjacent Stormwater Features: That the final plans locate and identify existing site conditions including all on-site and adjacent stormwater drainage features on the plans prior to issuance of a Zoning Compliance Permit. The final plans must provide proper inlet protection for the stormwater drainage inlets on or adjacent to the site to ensure the stormwater drainage system will not be obstructed with construction debris.
- 27. <u>P.E. Certification</u>: The developer shall provide a certification, signed and sealed by a North Carolina-licensed Professional Engineer, that the stormwater management facilities are constructed in accordance with the approved plans and specifications.
- 28. <u>Repair/Replacement of Damaged Stormwater Infrastructure</u>: Existing stormwater infrastructure that is damaged as a result the project demolition or construction, must be repaired or replaced, as specified by the Stormwater Management Engineer, prior to Town accepting the streets into its maintenance system.

## Water, Sewer, and Other Utilities

- 29. <u>Detailed Construction Drawings</u>: Detailed construction drawings shall be submitted to OWASA for review and approval prior to issuance of a Zoning Compliance Permit.
- 30. <u>Utility/Lighting Plan Approval</u>: The final utility/lighting plan shall be approved by the Orange Water and Sewer Authority, Duke Energy, Time Warner, AT&T or other applicable utility providers and the Town Manager before issuance of a Zoning Compliance Permit.
- 31. <u>Utility Easement Plats</u>: Prior to issuance of a Zoning Compliance Permit, easement and documentation shall be approved by the Town and OWASA and recorded by the applicant.

32. <u>Lighting Plan</u>: That prior to the issuance of a Zoning Compliance Permit, the applicant shall submit site plans and other required documents to satisfy the lighting requirements in Section 5.11 of the Land Use Management Ordinance, including submission of a lighting plan sealed by a Professional Engineer, to be reviewed and approved by the Town Manager. The lighting plan shall also address the requirements of Section 5.11.5 of the Land Use Management Ordinance.

## Fire Safety

- 33. <u>Hydrants Active</u>: It will be necessary to have active fire hydrant coverage, acceptable to the Fire Department, for any areas where combustible construction materials will be stored or installed, prior to having such materials delivered to the site. All required fire hydrants must be installed, active, and accessible for the Fire Department use prior to the arrival of combustible materials on site. Fire protection systems shall be installed according to Town Ordinance, the NC Fire Code, and NFPA 13.
- 34. <u>Fire Hydrant and FDC Locations</u>: That the Final Plans indicate the locations of existing and proposed fire hydrants and Fire Department Connections (FDC). Fire Department Connections shall be located on the street side of the building within 100 feet of a hydrant. Hydrant spacing shall comply with the Town Design Manual. Design shall be reviewed and approved by the Town Manager prior to issuance of a Zoning Compliance Permit.
- 35. <u>Firefighting Access During Construction</u>: During demolition and/or construction, all aspects of Chapter 14 of the NC Fire Prevention shall be followed. The owner/developer shall designate one person to be the Fire Prevention Program Superintendent who shall be responsible for enforcing Chapter 14 of the NCFPC and the on-site fire prevention program and ensure that it is carried out through completion of the project.
- 36. <u>Fire Flow Report</u>: Prior to issuance of a Zoning Compliance Permit, the applicant shall submit a fire flow report sealed by an engineer licensed in North Carolina certifying that the water supply available at the nearest fire hydrant(s) will meet the Town's fire flow requirements, 20 psi residual pressure. An Orange Water and Sewer flow test must be included with the report.
- 37. <u>Fire Access</u>: Any and all roads, driveways or dedicated fire lanes used for fire department access shall be all-weather and designed to support to carry the imposed load of fire apparatus weighing at least 75,000 lbs. Fire access roads shall have a minimum width of 20 feet with overhead clearance of 13ft. 6 in for structures not exceeding 30 feet in height and shall provide access to within 150 feet of all exterior portions of the building. Proximity to the building for aerial apparatus shall have at least one of the required access routes be located within 15 feet and a maximum of 30 feet from the building and shall be positioned parallel to one entire side of the building.

Fencing around projects shall include access gates with a 20 foot swing or slide motion. Any areas which will be inaccessible for firefighting or rescue operations shall be noted.

Emergency access designation for apparatus shall be provided. FDC 's shall not be obstructed by landscaping or hindered by parking spaces.

## Solid Waste Management and Recycling

- 38. <u>Solid Waste Management Plan</u>: That prior to issuance of a Zoning Compliance Permit a Solid Waste Management Plan for managing solid waste shall be approved by Orange County Solid Waste Management and the Town Manager. The plan shall include dimensioned, scaled details of any proposed refuse collection areas, associated screening, gate opening areas, and protective bollards, if applicable.
- 39. <u>Construction Waste</u>: Clean wood waste, scrap metal and corrugated cardboard, all present in construction waste, must be recycled. All haulers of construction waste must be properly licensed. The developer shall provide the name of the permitted waste disposal facility to which any land clearing or demolition waste will be delivered.
- 40. <u>Deconstruction/Demolition</u>: That the applicant shall hold a deconstruction assessment meeting with Orange County Solid Waste Management staff (919-968-2800) concerning the buildings to be removed from this site, with the following note on plans: "Prior to any demolition or construction activity on the site the applicant will hold a deconstruction assessment conference with the County's Solid Waste staff concerning buildings to be removed from this site. Prior to issuance of a Demolition Permit, the developer shall provide a demolition waste management plan.

## State and Federal Approvals

- 41. <u>State or Federal Approvals</u>: That prior to issuance of a Zoning Compliance Permit, the applicant shall obtain approval of any required State or federal permits or encroachment agreements from the Town Manager and NCDOT and/or OWASA, where necessary.
- 42. <u>North Carolina Department of Transportation Approvals</u>: Prior to issuance of a Zoning Compliance Permit, plans for any improvements to State-maintained roads or in associated rights-of-way shall be approved by NCDOT prior to issuance of a Zoning Compliance Permit.

## **Miscellaneous**

- 43. <u>Construction Management Plan</u>: That a Construction Management Plan, be approved by the Town Manager prior to issuance of a Zoning Compliance Permit. The construction management plan shall: 1) indicate how construction vehicle traffic will be managed, 2) identify parking areas for on-site construction workers including plans to prohibit parking in residential neighborhoods, 3) indicate construction staging and material storage areas, 4) identify construction trailers and other associated temporary construction management structures, and 5) indicate how the project construction will comply with the Town's Noise Ordinance.
- 44. <u>Detailed Plans</u>: That prior to the issuance of a Zoning Compliance Permit final detailed site plans, grading plans, utility/lighting plans, stormwater management plans (with hydrologic

- calculations), landscape plans, and landscape maintenance plans shall be approved by the Town Manager. Such plans shall conform to plans approved by this application and demonstrate compliance with all applicable regulations and the design standards of the Land Use Management Ordinance and the Design Manual.
- 45. <u>Community Design Commission Approval</u>: That the developer obtain Community Design Commission approval of the alternative landscape buffers, building elevations and lighting, including the location and screening of all HVAC/Air Handling Units and refuse/recycling facility for this project, prior to issuance of a Zoning Compliance Permit.
- 46. <u>Recombination Plat Recordation</u>: That prior to issuance of a Zoning Compliance Permit an administrative recombination application for the four residential lots into one lot shall be reviewed and approved by the Town Manager and recorded in the Orange County Register of Deeds office.
- 47. Engineering Construction Permit Required: That following issuance of a Zoning Compliance Permit and prior to beginning land disturbing activity the applicant submit an Engineering Construction Permit application and four (4) sets plans for stamping to the Development Services Division. Contact Engineering and Design Services 919-969-5084 to discuss the requirements of an Engineering Construction Permit.
- 48. <u>Traffic and Pedestrian Control Plan</u>: That the applicant shall provide a Work Zone Traffic Control Plan for movement of motorized and non-motorized vehicles on any public street that will be disrupted during construction. The plan must include a pedestrian management plan indicating how pedestrian movements will be safely maintained. The plan must be reviewed and approved by the Town Manager prior to the issuance of a Zoning Compliance Permit. At least 5 working days prior to any proposed lane or street closure the applicant must apply to the Town Manager for a lane or street closure permit.
- 49. Construction Sign Required: That the applicant shall post a construction sign at the development site that lists the property owner's representative and telephone number, the contractor's representative and telephone number, and a telephone number for regulatory information at the time of issuance of a Building Permit, prior to the commencement of any land disturbing activities. The construction sign may have a maximum of 32 square feet of display area and maximum height of 8 feet. The sign shall be non-illuminated, and shall consist of light letters on a dark background. That prior to the issuance of a Zoning Compliance Permit a detail of the sign shall be reviewed and approved by the Town Manager.
- 50. <u>Open Burning</u>: That the open burning of trees, limbs, stumps, and construction debris associated with this development is prohibited.
- 51. <u>Continued Validity</u>: That continued validity and effectiveness of this approval shall be expressly conditioned on the continued compliance with the plans and conditions listed above.

52. <u>Non-Severability</u>: That if any of the above conditions is held to be invalid, approval in its entirety shall be void.

BE IT FURTHER RESOLVED that the Planning Commission hereby approves the application for a Site Plan Review for Chapel Hill Cooperative Preschool in accordance with the plans and conditions listed above.

This the 17<sup>th</sup> day of January, 2017.

## **RESOLUTION B**

(Denying the Site Plan Review Application)

A RESOLUTION DENYING AN APPLICATION FOR A SITE PLAN REVIEW FOR THE CHAPEL HILL COOPERATIVE PRESCHOOL (PIN's 9787-29-6199, 9787-29-7266, 9787-29-9045, AND 9787-29-0047; PROJECT #16-088)

BE IT RESOLVED by the Planning Commission of the Town of Chapel Hill that it finds that the Site Plan Review application for Chapel Hill Cooperative Preschool, proposed by Philip Post and Associates, on property identified as Orange County Property Identifier Numbers 9787-29-6199, 9787-29-7266, 9787-29-9045, 9787-29-0047, if developed according to the Site Plan dated August 24, 2016 (revised November 09, 2016 and November 17, 2016) and the conditions listed below would not comply with the provisions of the Chapel Hill Land Use Management Ordinance and Design Manual:

(INSERT REASON FOR DENIAL)

BE IT FURTHER RESOLVED that the Planning Commission hereby denies the Site Plan Review application for Chapel Hill Cooperative Preschool, located at 108 Mt. Carmel Church Rd.

This the 17<sup>th</sup> day of January, 2017.



## EXEMPTION FORM ENGINEERING DEPARTMENT

Request for exemption received from: Philip Post and Associates, 401 Providence Road, Chapel Hill, NC 27714; Telephone: (919)929-1173

Date: May 4, 2016

Type of exemption requested: TRAFFIC IMPACT ANALYSIS (TIA)

Type of justification submitted: a) Written Request with Trip Analysis

b) Site Plan

## **Key reasons why we support this exemption:**

- a) Net trip generation increase due to the proposed preschool: 360 trips/day. Town Consultant conducted a trip generation study and determined the above trip generation numbers.
- b) Meets the Town TIA Guidelines for an Exemption.

Based upon the attached request for exemption and supporting information, we recommend that the Town Manager approve an exemption for:

Chapel Hill Cooperative Preschool

Sioned.

Traffic Engineer

Date

Approved

Public Works Director

Date

Attachment(s):

- a) Written request from the Applicant/Developer
- b) Site Plan and Fee

RETURN TO ENGINEERING DEPARTMENT WHEN SIGNED



401 Providence Road Suite 200 Chapel Hill, NC 27514 T: 919-929-1173 F: 919-493-6548 Firm License #: F-1267 www.pennoni.com

## Narrative Describing Proposed Chapel Hill Cooperative Preschool

The Chapel Hill Cooperative Preschool was originally organized in 1960 by the Community Church in Chapel Hill as a parent cooperative and the first integrated preschool in the area. The Preschool is a non-profit childcare center governed by a board of directors, including parents and community representative(s). The preschool first extended its enrollment to the full year in 1972. The two (2) year old and Infant/Toddler programs were started in 1980 and 1997 respectively.

Currently there are two (2) school locations. Both Sites are state licensed through the Division of Child Development and accredited by the National Association for the Education of Young Children. The Preschool site is located at the Community Church (106 Purefoy Road, Chapel Hill) and the Infant/Toddler site is located at the Church of Reconciliation (110 N. Elliott Road, Chapel Hill). These two facilities contain a maximum of eighty (80) children and twenty (20) teachers (including the Executive Director). These existing facilities will be combined at the proposed Mt. Carmel Church Road site.

The Chapel Hill Cooperative Preschool is proposing to construct an 8,929-sf one-story building with an adjacent playground, a 23-space off-street parking area and associated site improvements.

The hours of operation for the school is 7:30-5:30. Families begin dropping off students between 7:30am and 9:00am and pick up times is between 12:00-5:30. There are several enrollment options for families to choose; consequently, it is not unusual to have fewer than 80 students and 20 staff on-site. Enrollment options (i.e.: duration of day) for the children are: half day (7:30-12:00), <sup>3</sup>/<sub>4</sub> day (7:30-3:00), and full day (7:30-5:30). Additionally, students can be enrolled on a full-time (5 days a week) or on a part-time basis (2 to 3 days per week). Staff have staggered work schedules; there are morning and afternoon shift teachers. The staggering of staff and children will minimize the traffic impact to the surrounding area. This as well as site access will be discussed in more detail in the Traffic section of this narrative.

CHCP offer a breakfast snack, lunch and afternoon snack to the children. Food preparation onsite is limited; most food is brought to the site prepared and only requires warming and portioning for the students.

The Chapel Hill Cooperative Preschool and the design team have thoroughly reviewed the site and the present/future needs for the school. The application being presented has been designed to utilize the character of this site while minimize the impact (to the site) and the surrounding area. A few examples of this are as follows:



- Existing on-site structures such as the "Sugar Shack" and the dwelling are being re-used. The "Sugar Shack" will be utilized by the staff/children for activities and learning opportunities within the woods.
- The existing dwelling will be used during construction as a construction office for the contractor(s). This has been reviewed with the Chapel Hill Inspections Department and found to be acceptable as a temporary use. Once the proposed preschool building has sufficiently progressed, the construction office will be relocated into the new building and the dwelling will be vacated. The dwelling will then be demolished to the existing foundation prior to obtaining a certificate of occupancy for the new preschool building.
- An effort was made to maintain as may existing trees as possible and to integrate them
  into the design of the site. Specifically, the 20" double Hemlock tree at the center of the
  site was the major factor for the placement of the proposed building and parking area.
  This CHCP wants to utilize this tree and the immediate area around it as another learning
  opportunity which is unique to this site.
- Land disturbance was minimized and kept below 40,000 sf.

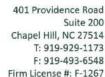
## Traffic

During the TRT meeting (including the comments issued by the TRT) the following topics were identified as concerns:

- Trip generation,
- The arrive/departure times of staff/students, and
- The concern of cars potentially queuing onto Mt. Carmel Church road if students are dropped off at a car loading zone within the driveway circle on-site

Based upon the comments received and discussions held during the TRT meeting, traffic counts were performed at both CHCP sites on Monday October 3, 2016, Tuesday October 4, 2016 & Wednesday October 5, 2016. The results of these counts have been attached to this narrative. These results indicate the following:

- On average, the majority of students arrive on-site between 8:00 and 9:10 with the peak occurring between 8:40 am to 9:00 am.
- Staff starts arriving on site around 7:00 am and is staggered throughout the morning.
- Approximately 40% of the students and approximately half of the staff (8-10) leave the site for the day by 4 pm.
- Based upon these counts, traffic generation is distributed throughout the day; this will
  minimize traffic impacts to the surrounding area/neighborhoods.
- To eliminate the concern of cars potentially queuing onto Mt. Carmel Church Road, the CHCP will have all parents park their cars on-site and walk the children into the building. To accommodate this volume of cars, the parking lot has been expanded to 23 spaces (including four (4) compact spaces). Operationally, the CHCP staff will occupy the westerly most spaces, this will also include temporary stacking of staff vehicles within the westerly end drive aisle during the peak morning time. The operational moving of staff vehicles is similar to how the current sites operate. This approach is being used to minimize the impervious area on-site.





Proposed access to the site will be restricted to right turns into the site and right turns out of the site. This will be accomplished using a raised brick median within Mt. Carmel Church Road. CHCP staff and families will be instructed to access the site via Bennett Road and not utilize the surrounding residential street such as Old Bridge Lane for any of their traffic movements (i.e.: U-turns). CHCP will work with families/neighborhood to enforce this policy.

Deliveries to the site are infrequent. Refuse collection will be coordinated with the private collection company (or town) to minimize traffic impacts to the surrounding area.

In conjunction with the development of this site, the CHCP is committed to working with the NCDOT and Town during the Mobility Plan update. This will include the institution of a Transportation Management Plan; said plan will encourage the staff/parents to carpool, possible use of an off-site parking areas for staff with shuttle service to/from the site and to use the walking/biking infrastructure in the area (once constructed) to the maximum extent practicable. As previously indicated, the parents will be instructed to utilize the Bennett Road roundabout (once constructed) to not impact the adjacent residential neighborhoods.

## Solid Waste

Due to the uniqueness of the site and how the CHCP is attempting to minimizing the impact of the development on the site; consequently, alternative methods of recycling/trash pick-up are being proposed. CHCP will be requesting a waiver from Orange County picking up the site recyclables; this will be accomplished by use of a private company or families taking the recyclables off-site to an Orange County facility. Regarding trash pickup, the CHCP is proposing to compost on-site to reduce the volume generated by the school; a preliminary composting plan has been prepared by the CHCP and has been attached to this narrative. The remaining trash from the site will need to be picked up. The CHCP would request to discuss the possibility with the Town of an alternative trash collection vehicle serving this site; if this is not possible then the CHCP will contract this service with a private collector.

Amended November 18, 2016



#### **Chapel Hill Cooperative Preschool Traffic and Parking Operations Plan**

#### **Summary Narrative (talking points)**

- It is in school's best short and long-term interest for teacher and family satisfaction and retention to have a safe, efficient, and low-stress arrival/departure and parking plan for the new school site
- Consolidating schools will reduce overall local and school site traffic and parking needs from current two-school situation
- 80 children and 20 teachers/staff (maximum enrollment and staff size due to 5-star certification) do not all arrive, stay, and depart at the same time every day
- CHCP's peak-time trip patterns do not overlap with the 15-501/Mt. Carmel Church Rd corridor peak-time travel patterns
- A round-a-bout at Mt. Carmel Church Rd (MCCR) and Bennett Rd will be constructed by NCDOT; this will improve traffic safety/flow in the area
- On-site parking combined with parking mitigation planning will provide ample capacity for peakarrival and departure needs for both teachers/staff and families

#### Intro

In anticipation of a move to our new consolidated school site in early 2018, the Board of Directors, in partnership with the teachers/staff of the school, have developed the following operations plan. The plan's goal is to create a safe and efficient protocol for access and egress from the new school site, as well as an orderly and coordinated approach to parking for all school participants.

#### **Traffic Management Plan**

## School traffic schedule

- Hours of operation for the school is 7:00am-5:30pm.
- Staff start to arrive on-site around 7:00am. Families drop off students between 7:30am and 9:30am and pick up times are between 12:00-5:30pm.
- There are several enrollment options for families to choose from, including full-day (7:30-5:30), 3/4 day (7:30-3), and half-day (7:30-12), and some students attend full-time (5 days a week), while others attend MWF or T/Th.
- On average, the majority of students arrive on-site between 8:00 and 9:10 with a peak arrival time between 8:40-9am (average of 10-11 student trips).
- Teacher schedules are staggered to meet the demands of the enrollment, arriving between 7-9am and leaving between 3:30-6pm.
- Approximately 40% of the students and half the staff leave the site by 4pm each day.

#### **Traffic Mitigation**

- Parents and teachers will be expected to arrive and depart the site via Mt. Carmel Church Rd using right-in and right-out turns with fines in place for failure to adhere to this stipulation
- Fines will also be levied if vehicles use Old Bridge Lane in order to turn around or park

- The Town of Chapel Hill and NCDOT are scheduled to begin construction of a round-a-bout at the intersection of Mt. Carmel Church Rd and Bennett Rd in October 2017
- Prior to the completion of the Bennett Rd. round-a-bout, if the school is operational, parents and teachers will be instructed to take 15-501 to Bennett Rd, and turn left off Bennett Rd onto Mt. Carmel to arrive
- After the completion of the round-a-bout, parents and teachers may use either Mt. Carmel or Bennett to arrive
- Parents will be assigned arrival windows based on enrollment plans in order to maintain a consistent arrival pattern that does not add to the current peak AM travel period for the 15-501/Mt Carmel corridor (7-8am)

#### **Parking Management Plan**

The new school site is scheduled to have 23 parking spaces (including 1 Handicapped Accessible space)

Note: The new school site will allow 3-5 families with more than 1 child who previously visited both sites for drop off/pick up to consolidate to one trip, reducing the max trips as indicated by the parking study

## **Parking Mitigation**

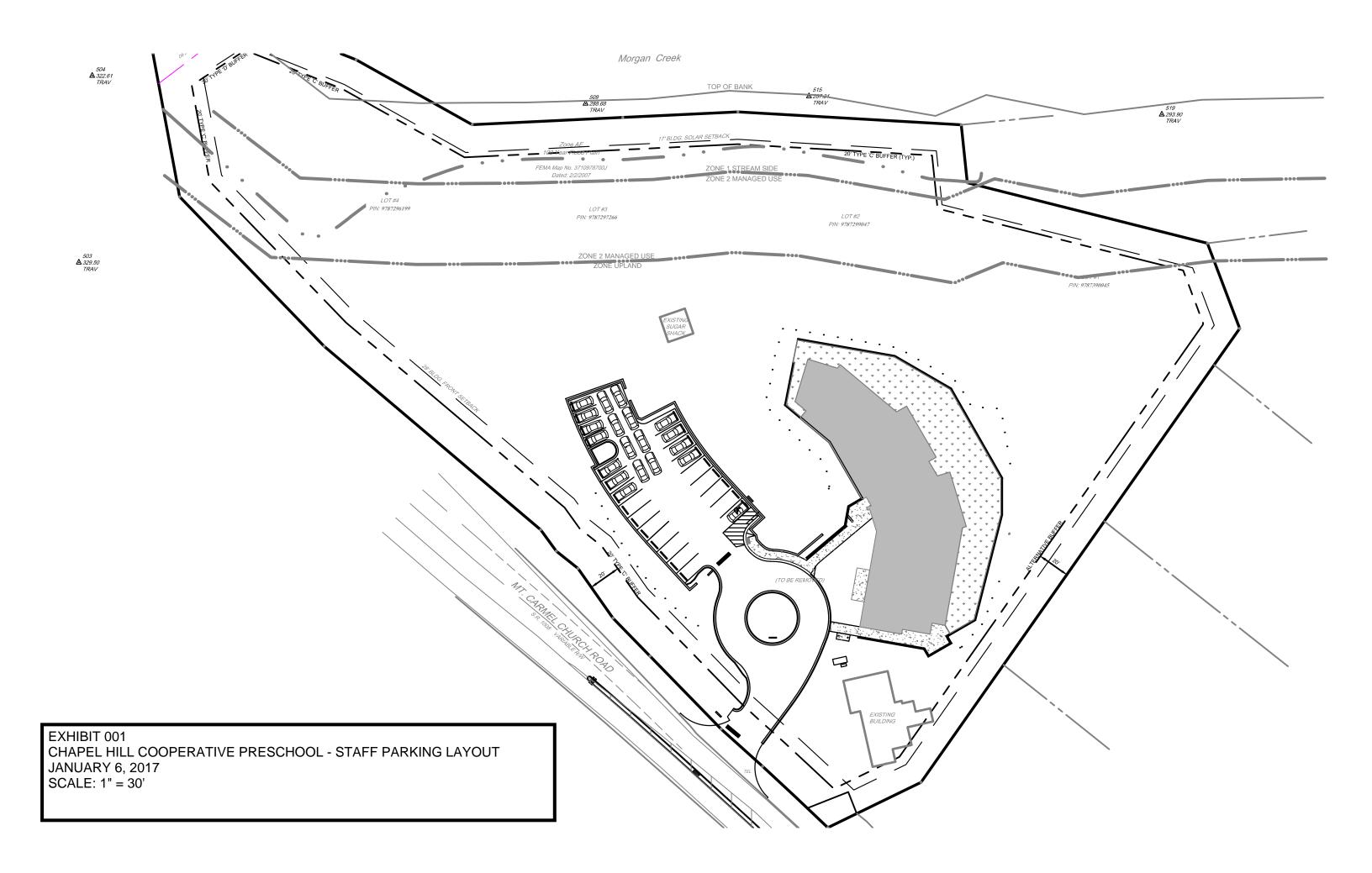
- The Handicapped Accessible space will be used daily by a current staff member with disability parking credentials
- 10 of the west-side parking spaces will be dedicated for staff/teacher AM parking (\*\*see Parking Exhibit 001)
- 8 additional staff/teacher vehicles will be able to "stack" in the west-side of the lot in the AM for a total of 19 dedicated staff/teacher spaces
- 11 spaces will be dedicated parent AM "drop-off" spaces (equivalent to the current avg peaktime need)
- A new parent volunteer role (consistent with the school's cooperative mission and volunteer hours program) will be dedicated to AM and PM parking monitoring, with a focus on efficient use of drop-off/pick-up spaces and managing any potential "queue" of vehicles that arrive when all spaces are taken
- Staff/teachers will be provided with carpool credits\* as an incentive to ride-share or use public and alternative transportation (e.g., bus, bike) to/from work, which we expect to reduce parking needs by up to 2-3 vehicles per day
- School will purchase staff/teacher parking spaces at both Merritt's and the Southern Village Park and Ride as needed or requested by staff, and staff using these parking options will also receive carpool credits as incentives
- Parents will be assigned arrival windows based on enrollment plans in order to maintain a consistent arrival pattern that:
  - does not exceed a max trips on site of more than 13 vehicles at any given 10 min window (current trip patterns indicate only one 10 min time period in excess of 10—AM or PM—trips on average)
- The school parking area will be closed off on weekends by a drop bar/chain
- Fines are in place if parents or teachers use Old Bridge Lane for parking

\*carpool credits- teachers will accumulate 1 credit for every day they carpool, use public transportation, bike, or use a park and ride option; every 50 credits = annual end-of-year bonus

## **Future Considerations**

The school's Board of Directors anticipates the development and submission of a Special Use Permit application to the Town of Chapel Hill within the next 3 years to address the existing remaining dwelling and potential future parking needs.

The school's Director will conduct an evaluation after move-in of parking and site access and make recommendations to the Board for additional mediation solutions as necessary.



# SITE PLAN REVIEW APPLICATION



## TOWN OF CHAPEL HILL Planning Department

405 Martin Luther King Jr. Blvd phone (919) 968-2728 fax (919) 969-2014 www.townofchapelhill.org

Parcel Identifie	ifier Number (PIN): 9787-29-6199; 9787-29-7266;9787-29-9047; 9787-39-0045 Date: Amended November 18, 2016							
Section A: Project Information							707 2015	
Project Name: Chapel Hill Cooperative Preschool								
Property Add	ress:	108 Mt	. Carmel C	hurch F	Road		Zip Code:	27516
Use Groups (A	A, B, and/o	r C):	В		Existing Zoning District:	R-1		
		Constru	uction of pro	posed	8,929 sf preschool and	d associate	ed site imp	rovements, including
Project Descr	iption:	the pre	eservation	of the e	xisting Sugar Shack	structure.		
Section B. A	nnlicant	Owner	and/or Co	ntract D	urchaser Information			
Section b. A	ippiicant,	Owner	anu/or co	ill oct F	orchaser milormation		08/02/1	
Applicant In	formation	to who	om correspo	ndence v	will be mailed)			
Name:	Philip F	Post & A	Associates,	a Divis	sion of Pennoni (Pete	er Bellanto	ni)	
Address:	401 Pr	ovider	nce Road	l, Suite	200			
City:	Chape	Hill l		State:	NC	Zip Code:	275	14
Phone:	919-92	29-117	3	Email:	pbellantoni@per	noni.con	n	
The undersign this applicate Signature:	ion is true	and acc	ellance		the best of his knowled		ef, all inforn	nation supplied with
☐ Owner					Contract Purcha	aser		
Name:	Chape	l Hill C	ooperativ	e Pres	school			
Address:				106 F	Purefoy Road			
City:	Chape	l Hill		State:	NC	Zip Code:	275	14
Phone:	919-94	2-395	5	Email:	chapelhillcooper	_ ativepres	chool@	gmail.com
Phone: 919-942-3955 Email: chapelhillcooperativepreschool@gmail.com  The undersigned applicant hereby certifies that, to the best of his knowledge and belief, all information supplied with this application is true and accurate.  Signature: Date: 11/10/16								

Revised 02.04.14

Parcel Identifier Number (PIN): \_\_\_\_\_



TOWN OF CHAPEL HILL Planning Department

Section A: Project Info	ormation							
Application type: Site	Application type: Site Plan Review Date: Amended November 18, 2016							
Project Name: Char	apel Hill Cooperative Preschool							
- Chaparini Cooperative i recentedi								
Use Type: (check/list all th	nat apply)							
Office/Institutional	Residential N	Mixed-Use	Other: Preschoo	ol				
Overlay District: (check al	I those that apply)							
	Neighborhood Conserva	ation District	Airport Hazard Zor	ne.				
	j recignocimoda conscivi	BUILDIN DISTINCT						
Section B: Land Area			TARREST .	1000		-		
Net Land Area (NLA): Area	within zoning lot hound	laries		NLA	= 172,960	sq. ft.		
	a) Credited Street Area		ntage) x ¼ width of nu		172,900			
Choose one, or both, of	of-way	a (total adjacent froi	reage) x 22 whath of pu	CSA	= 10% NLA	sq. ft.		
the following (a or b,) not to exceed 10% of NLA	b) Credited Permanent	t Open Space (total a	adjacent frontage) x ½	public or cos	= 10% NLA	sq. ft.		
to exceed 1070 of NEA	dedicated open space				- 10% NLA	34.10.		
TOTAL: NLA + CSA and/or	TOTAL: NLA + CSA and/or COS = Gross Land Area (not to exceed NLA + 10%)  GLA= 190,256 sq. ft.							
Section C: Special Prot	ection Areas, Land I	Disturbance, and	Impervious Area	No. Hilly Jo		7 18		
Cooriel Dretestion Avenue	Ishaek all those that any	alea)						
Special Protection Areas:  Jordan Buffer	Resource Conservation E	The second secon	0 Year Floodplain	■ Watersher	Protection Dist	rict		
	Nesource conservation E	District 10	o real Hoodplani	watersnee	T TOTCCTION DISC	icc		
Land Disturbance					Total (sq ft)			
Area of Land Disturbance		60	es la s					
(Includes: Footprint of prop	500 March 1980 (1) 1980 Bally (1) 100 Bally (1) 1981 Bally (1) 100 Bally (1) 1981 Bally (1) 1981 Bally (1) 198	a envelope, staging are	ea for materials, access/e	equipment paths,	39,942 SF (Zon	ing)		
all grading, including off-site clearing)  Area of Land Disturbance within RCD  349 SF								
Area of Land Disturbance	within Jordan Buffer				-0-			
				9				
Impervious Areas		Existing (sq ft)	Demolition (sq ft)	Proposed (sq ft	:) Total (so	(ft)		
Impervious Surface Area (		7,896	•	18,788	26,684	1		
	Impervious Surface Ratio: Percent Impervious Surface Area of Gross Land Area (ISA/GLA) %  4.41%  - 9.88%  14.03%							
If located in Watershood Protection District								
% of impervious surface o	n 7/1/1993	4.41%	-	N/A	N/A	١		

Page 2 of 10

Parcel Identifier Number (PIN):\_\_\_\_\_



TOWN OF CHAPEL HILL Planning Department

## **Section D: Dimensions**

Dimensional Unit (sq ft)	Existing (sq ft)	Demolition (sq ft)	Proposed (sq ft)	Total (sq ft)
Number of Buildings	4 (3,053 SF)	3 (2,787 SF)	1 New (8,929)	9,195
Number of Floors	1 Each	3	1 Each	2 (1 Each)
Recreational Space	N/A	N/A	N/A	N/A

Residential Space					
Dimensional Unit (sq ft)	Existing (sq ft)	Demolition (sq ft)	Proposed (sq ft)	Total (sq ft)	
Floor Area (all floors – heated and unheated)	3,053	2,787	0	266	
Total Square Footage of All Units	3,053	2,787	0	266	
Total Square Footage of Affordable Units	N/A	N/A	N/A	N/A	
Total Residential Density	1	1	0	0	
Number of Dwelling Units	1	1	0	0	
Number of Affordable Dwelling Units	N/A	N/A	N/A	N/A	
Number of Single Bedroom Units	N/A	N/A	N/A	N/A	
Number of Two Bedroom Units	N/A	N/A	N/A	N/A	
Number of Three Bedroom Units	N/A	N/A	N/A	N/A	

	Non-	Residential Space (Gro	ss Floor Area in Squ	are Feet)	
Use Type	Existing	Proposed	Uses	Existing	Proposed
Commercial	N/A	N/A			PILOTA
Restaurant	N/A	N/A	# of Seats	N/A	N/A
Government	N/A	N/A	A TOTAL PROPERTY.	I Was a series	
Institutional	N/A	8,929			
Medical	N/A	N/A			
Office	N/A	N/A			
Hotel	N/A	N/A	# of Rooms	N/A	N/A
Industrial	N/A	N/A		E BERTHALLES	
Place of Worship	N/A	N/A	# of Seats	N/A	N/A
Other	N/A	N/A			

Dimensional Requirements		Required by Ordinance	Existing	New Building Proposed
Street		28'	47'	104' +/-
Setbacks (minimum)	Interior (neighboring property lines)	14'	18'	43' +/-
()	Solar (northern property line)	17'	120'	144' +/-
Height	Primary	29'		<29'
(maximum)	Secondary	40'		<40'
F44.	Frontages	64'	>64'	>64'
Streets	Widths	80'	>80'	>80'

Page 3 of 10

9787-29-6199, 9787-29-7268,9787-29-9047; 9787-39-0045

Revised 02.04.14

Parcel Identifier Number (PIN):\_



TOWN OF CHAPEL HILL **Planning Department** 

Note: For approval of proposed street names, c	untuct the Engineering	Depurtment)	12		
Street Name	Right-of-way Width	Pavement Width	Number of Lanes	Existing Sidewalk*	Existing curb/gutte
Mt. Carmel Church Road	Varies	Varies	Varies 2 to 4	Yes	□Yes
				Yes	Yes
ist Proposed Points of Access (Fy: Number Str	eet Name): 108 Mt.	Carmel Ch	urch Road		
	ant is adding sidewalks		A-10 1.0. E-25.050	N/	
List Proposed Points of Access (Ex: Number, Str *If existing sidewalks do not exist and the applic	ant is adding sidewalks Sidewalk Inforr	s, please provid	e the following info	ormation: N/	Α
	ant is adding sidewalks	s, please provid	A-10 1.0. E-25.050	ormation: N/	A d Ramps
*If existing sidewalks do not exist and the applic	ant is adding sidewalks Sidewalk Inforr	s, please provid	e the following info	ormation: N/	Α

## **Section G: Parking Information**

Parking Spaces *	Minimum	Maximum	Proposed
Regular Spaces	19	23	23 (18 std+5 compact)
Handicap Spaces	1	2	1
Total Spaces	20	25	24
Loading Spaces	N/A	N/A	N/A
Bicycle Spaces	8	N/A	4
Surface Type	Asphalt		- Marie

<sup>\*</sup> Based on Elementary/Middle School

## Section H: Landscape Buffers

Location (North, South, Street, Etc.)	Minimum Width	Proposed Width	Alternate Buffer	Modify Buffer
North	20'	20'	Yes	Yes
South (Street)	20'	20'	Yes	Yes
East	20'	20'/Varies	■ Yes	☐ Yes
West (Street)	30'	30'	☐ Yes	Yes

Page 4 of 10 Parcel Identifier Number (PIN):\_



TOWN OF CHAPEL HILL Planning Department

## **Section I: Land Use Intensity**

Existing Zoning District: R-1

Proposed Zoning Change (if any): N/A

Note: Refer to Table 3.8-1 (Dimensional Matrix) in the Land Use Management Ordinance for help completing this table.

Zoning – Area – Ratio		Impervious Surface Thresholds			Minimum and Maximum Limitations		
Zoning District(s)	Floor Area Ratio (FAR)	Recreation Space Ratio (RSR)	Low Density Residential (0.24)	High Density Residential (0.50)	Non- Residential (0.70)	Maximum Floor Area (MFA) = FAR x GLA	Minimum Recreation Space (MSR) = RSR x GLA
R-1	0.076 Max	N/A	0.1222				
TOTAL				N/A	N/A	11,308 SF	
RCD Streamside	0.01	0.01					
RCD Managed	0.019	0.019					
RCD Upland	0,076						

## Section J: Utility Service

Water	■ OWASA	☐ Individual Well	Community Well	☐ Other
Sewer	■ OWASA	☐ Individual Septic Tank	Community Package Plant	Other
Electrical	■ Underground	Above Ground	<del>V</del> :	
Telephone	■ Underground	Above Ground		
Solid Waste	Town	Private		

Page 5 of 10

9787-29-6109; 9787-29-7286,9787-29-9047; 9787-39-0045

Revised 02.04.14

Parcel Identifier Number (PIN):\_



The following must accompany your application. Failure to do so will result in your application being considered incomplete. For assistance with this application, please contact the Chapel Hill Planning Department (Planning) at (919)968-2728 or at planning@townofchapelhill.org. For detailed information, please refer to the Description of Detailed Information handout.

J	Application fee (including Engineering Review fee) (refer to fee schedule) Amount Paid \$ 5,673.70
Done	Pre-application meeting – with appropriate staff
J	Digital Files - provide digital files of all plans and documents
J	Recorded Plat or Deed of Property
J	Project Fact Sheet
Exempt	Traffic Impact Statement – completed by Town's consultant (or exemption)
J	Mailing list of owners of property within 1,000 feet perimeter of subject property (see GIS notification tool)
J	Mailing fee for above mailing list (mailing fee is double due to 2 mailing) Amount Paid \$ 179.20
1	Written Narrative describing the proposal
1	Resource Conservation District, Floodplain, & Jordan Buffers Determination - necessary for all submittals
N/A	Jurisdictional Wetland Determination – if applicable
N/A	Resource Conservation District Encroachment Exemption or Variance (determined by Planning)
N/A	Jordan Buffer Authorization Certificate or Mitigation Plan Approval (determined by Planning)
V	Reduced Site Plan Set (reduced to 8.5"x11")

#### Stormwater Impact Statement (1 copy to be submitted)

- Written narrative describing existing & proposed conditions, anticipated stormwater impacts and management structures and strategies to mitigate impacts
- b) Description of land uses and area (in square footage)
- c) Existing and proposed Impervious surface area in square feet for all subareas and project area
- d) Ground cover and uses information
- e) Soil information (classification, infiltration rates, depth to groundwater and bedrock)
- f) Time of concentration calculations and assumptions
- g) Topography (2-foot contours)
- h) Pertinent on-site and off-site drainage conditions
- i) Upstream and/or downstream volumes
- j) Discharges and velocities
- k) Backwater elevations and effects on existing drainage conveyance facilities
- Location of jurisdictional wetlands and regulatory FEMA Special Flood Hazard Areas
- m) Water quality volume calculations
- n) Drainage areas and sub-areas delineated
- o) Peak discharge calculations and rates (1, 2, and 25-year storms)
- p) Hydrographs for pre- & post-development without mitigation, post-development with mitigation
- q) Volume calculations and documentation of retention for 2-year storm
- r) 85% TSS removal for post-development stormwater run-off

Page <b>6</b> of <b>10</b>	9787-29-8186; 9787-29-7298;9787-29-9047; 9757-39-0		
Parcel Identifier Number (PIN):			

Revised 02.04.14



- s) Nutrient loading calculations
- t) BMP sizing calculations
- u) Pipe sizing calculations and schedule (include HGL & EGL calculations and profiles)

#### Plan Sets (10 copies to be submitted no larger than 24"x36")

Plans should be legible and clearly drawn. All plan sets sheets should include the following:

- Project Name
- Legend
- Labels
- North Arrow (North oriented toward top of page)
- Property Boundaries with bearing and distances
- · Scale (Engineering), denoted graphically and numerically
- Setbacks
- Streams, RCD Boundary, Jordan Riparian Buffer Boundary, Floodplain, and Wetlands Boundary, where applicable
- Revision dates and professional seals and signatures, as applicable

#### Area Map

- a) Project name, applicant, contact information, location, PIN, & legend
- b) Dedicated open space, parks, greenways
- c) Overlay Districts, if applicable
- d) Property lines, zoning district boundaries, land uses, project names of site and surrounding properties, significant buildings, corporate limit lines
- e) Existing roads (public & private), rights-of-way, sidewalks, driveways, vehicular parking areas, bicycle parking, handicapped parking, street names.
- f) 1,000' notification boundary

#### **Existing Conditions Plan**

- Slopes, soils, environmental constraints, existing vegetation, and any existing land features
- b) Location of all existing structures and uses
- c) Existing property line and right-of-way lines
- d) Existing utilities & easements including location & sizes of water, sewer, electrical, & drainage lines
- e) Nearest fire hydrants
- f) Nearest bus shelters and transit facilities
- g) Existing topography at minimum 2-foot intervals and finished grade
- h) Natural drainage features & water bodies, floodways, floodplain, RCD, Jordan Buffers, & Watershed boundaries

age	7 of 10	9787-29-6199; 9787-29-7266,9787-29-9047; 9787-39-004
	Parcel Identifier Number (PIN):	

Revised 02.04.14



#### **Detailed Site Plan**

- a) Existing and proposed building locations
- b) Description & analysis of adjacent land uses, roads, topography, soils, drainage patterns, environmental constraints, features, existing vegetation, vistas (on & off-site)
- c) Location, arrangement, & dimension of vehicular parking, width of aisles and bays, angle of parking, number of spaces, handicapped parking, bicycle parking. Typical pavement sections & surface type
- d) Location of existing and proposed fire hydrants
- e) Location and dimension of all vehicle entrances, exits, and drives
- f) Dimensioned street cross-sections and rights-of-way widths
- g) Pavement and curb & gutter construction details
- h) Dimensioned sidewalk and tree lawn cross-sections
- i) Proposed transit improvements including bus pull-off and/or bus shelter
- j) Required landscape buffers (or proposed alternate/modified buffers)
- k) Required recreation area/space (including written statement of recreation plans)
- I) Refuse collection facilities (existing and proposed) or shared dumpster agreement
- m) Construction parking, staging, storage area, and construction trailer location
- n) Sight distance triangles at intersections
- o) Proposed location of street lights and underground utility lines and/or conduit lines to be installed
- p) Easements
- q) Clearing and construction limits
- r) Traffic Calming Plan detailed construction designs of devices proposed & associated sign & marking plan

#### Stormwater Management Plan

- a) Topography (2-foot contours)
- b) Existing drainage conditions
- c) RCD and Jordan Riparian Buffer delineation and boundary (perennial & intermittent streams, note ephemeral streams on site)
- d) Proposed drainage and stormwater conditions
- e) Drainage conveyance system (piping)
- f) Roof drains
- g) Easements
- h) BMP plans, dimensions, details, and cross-sections
- i) Planting and stabilization plans and specifications

#### Landscape Protection Plan

- a) Rare, specimen, and significant tree survey within 50 feet of construction area
- b) Rare and specimen tree critical root zones
- Rare and specimen trees proposed to be removed
- d) Certified arborist tree evaluation, if applicable

Page <b>8</b> of <b>10</b>	0787-20-6100; 0787-29-7260,0767-20-9047; 0787-39-004
Parcel Identifier Number (DIN	11.

Revised 02.04.14



- e) Significant tree stand survey
- f) Clearing limit line
- g) Proposed tree protection /silt fence location
- h) Pre-construction/demolition conference note
- Landscape protection supervisor note
- k) Existing and proposed tree canopy calculations, if applicable

#### **Planting Plan**

- a) Dimensioned and labeled perimeter landscape bufferyard
- b) Off-site buffer
- Landscape buffer and parking lot planting plan (including planting strip between parking and building, entryway planting, and 35% shading requirement

#### Steep Slope Plan

- a) Classify and quantify slopes 0-10%, 10-15%, 15-25% and 25% and greater
- b) Show and quantify areas of disturbance in each slope category
- c) Provide/show specialized site design and construction techniques

#### **Grading and Erosion Control Plan**

- a) Topography (2-foot contours)
- b) Limits of Disturbance
- c) Pertinent off-site drainage features
- d) Existing and proposed impervious surface tallies

#### Streetscape Plan, if applicable

- a) Public right-of-way existing conditions plan
- b) Streetscape demolition plan
- c) Streetscape proposed improvement plan
- d) Streetscape proposed utility plan and details
- e) Streetscape proposed pavement/sidewalk details
- f) Streetscape proposed furnishing details
- g) Streetscape proposed lighting details

Page 9 of 10

9787-29-6199, 6767-29-7266,9787-29-9047; 9787-39-0045

Revised 02.04.14

Parcel Identifier Number (PIN):



#### Solid Waste Plan

- a) Preliminary Solid Waste Management Plan
- b) Existing and proposed dumpster pads
- c) Proposed dumpster pad layout design
- d) Proposed heavy duty pavement locations and pavement construction detail
- Preliminary Shared dumpster agreement, if applicable

#### **Construction Management Plan**

- a) Construction trailer location
- b) Location of construction personnel parking and construction equipment parking
- c) Location and size of staging and materials storage area
- d) Description of emergency vehicle access to and around project site during construction
- Delivery truck routes shown or noted on plan sheets

#### **Energy Management Plan**

- a) Description of how project will be 20% more energy efficient than ASHRAE Standards
- b) Description of utilization of sustainable forms of energy (Solar, Wind, Hydroelectric, and Biofuels)
- Participation in NC GreenPower program c)
- Description of how project will ensure indoor air quality, adequate access to natural lighting, and allow for d) proposed utilization of sustainable energy
- Description of how project will maintain commitment to energy efficiency and reduced carbon footprint over e) time
- Description of how the project's Transportation Management Plan will support efforts to reduce energy f) consumption as it affects the community

#### **Exterior Elevations**

An outline of each elevation of the building, including the finished grade line along the foundation (height of a) building measured from mean natural grade).

Parcel Identifier Number (PIN):

Da	-	4	_	af.	10
Pa	KC.	-	v	UI	ΤU

R-1 (RESIDENTIAL)	REQUIRED	PROPOSED
MN. LOTAREA:	17,000 SF	172,960
MN LOTFRONTAGE	64FT	>64 FT
MN LOTWOTH	80FT	>80FT
MAX. BUILDINGHBIGHT	29 FT (PRIMARY)	<29 FT (PRIMARY)
IVAA. BOLDINGABGAI	40 FT (SECONDARY)	<40 FT (SECONDARY)
MAX. FLOOR AREARATIO	SEEBELOW	SEE BELOW
MAX. LOT COMPRAGE	0.7	26,684 SF (14.03% INPERMOU
BUILDING SETBACK		
MN. FRONT STREET YARD SETBACK	28FT	104FT+/-
MIN, SIDEYARD SETBACK	14FT	43 FT+/-
MIN. SOLAR (NORTHERN REAR) YARD SETBACK	17FT	144 FT+/-
BUFFERYARD SETBACK		
MIN. FRONTYARD SETBACK	20FT	20FT
M.N. SIDE YARD SETBACK	20FT	20 FT/ALT, BUFFER
MIN. REAR YARD SETBACK	20 FT	20FT
VEHICLEPARKING	20 min/25 max	23
BICYCLEPARKING	8	4
TOTAL IMPERMOUS AREA (OF GLA)	7,896 SF (4.15%)	26,684 SF (14.03%)
NON ROD ZONE IMPERMOUS AREA	7,630 SF (4.41%)	26,418 SF (13.89%)
ZONE 1 IN PERMOUS AREA	0 SF (0.0%)	0 SF (0.0%)
ZONE 2 IMPERMOUS AREA	0 SF (0.0%)	0 SF (0.0%)
ZONE3 INPERMOUS AREA	266 SF (0.15%)	266 SF (0.15%)
	OLIN CANADA	
TOTAL LAND DISTURBANCE AREA		39,942 SF (23.09%)
NON RCD ZONE LAND DISTURBANCE AREA	N/A	39,593 SF (22.89%) ZONING
ZONE1 LAND DISTURBANCE AREA	ŊA	0.SF(0.0%)
ZONE 2 LAND DISTURBANCE AREA	N/A	0 SF (0.0%)
ZONE3 LAND DISTURBANCE AREA	N/A	349 SF (0,20%)
SLOPECATEGORY	DELINEATED AREAS	DISTURBED AREAS
0%TO14.99%	31,297 SF (18.09%)	11,643 SF (6.73%)
15%TO24.99%	50,356 SF (29.11%)	26,414 SF (15.27%)
25% & GREATER	91,307 SF (52.79%)	1,885 SF (1.09%)
FLOOR AREACALCULATIONS	-	
GROSSLANDAREA(GLA)	172,960 sfx 1.10 = 190,256 sf	
NONRODZONE	87,212 sf (50.42%)	(87,212x0.076)=6,628 sf
ZONE1	24,311 sf(14.06%)	(24,311x0.01)=243 sf
ZONE2	31,149sf(18.01%)	(31,149x0.019)=592sf
ZONE3	30,288 sf(17.51%)	(30,288×0.076)=2,302 sf
EFFECTIVE FLOOR AREARATIO (EFAR)		(9,765 sf/172,960 sf) = 0.056
ALLOWABLE FLOOR AREAMAXIMUM(GLAX EFAR)		(190,256 sfx 0.0564)=10,730
PROPOSED FLOOR AREA		9,195 sf
TREE CANOPY AREA TO REVAIN	128,708 SF (74.41%)	114,068 SF (65.95%)

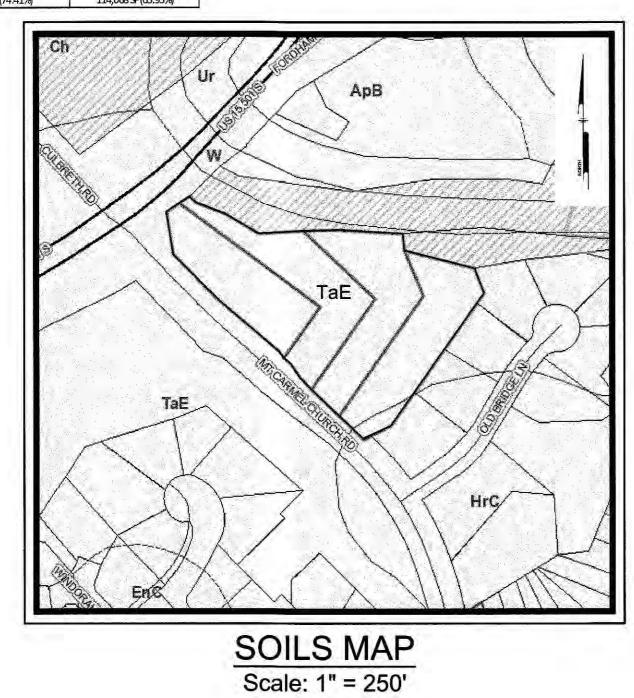
# CHAPEL HILL COOPERATIVE PRESCHOOL SITE PLAN APPROVAL

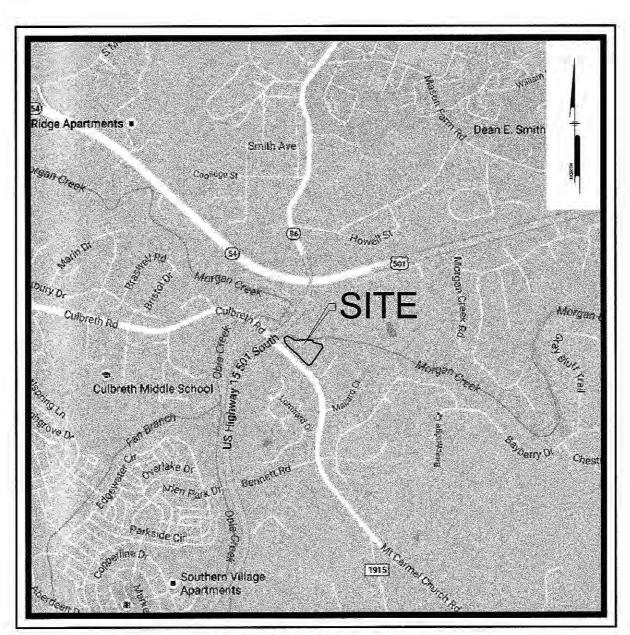
108 MT. CARMEL CHURCH ROAD 2016-08-24

PREPARED FOR:

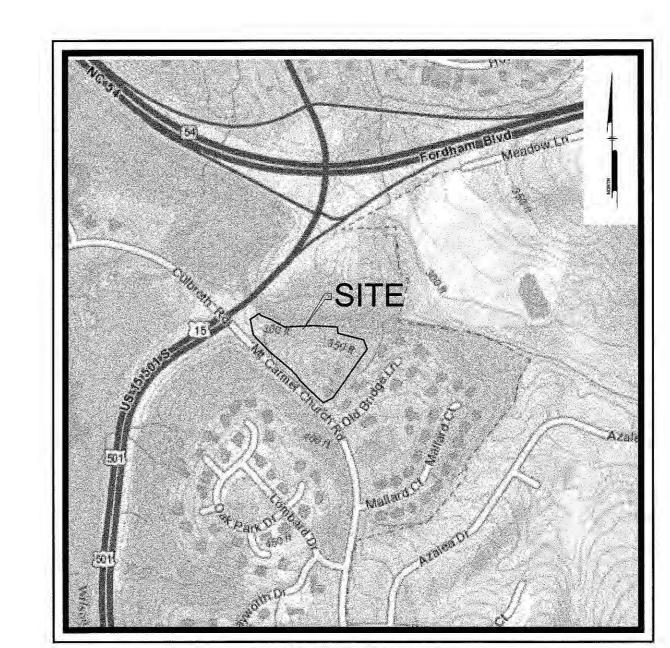
# CHAPEL HILL COOPERATIVE PRESCHOOL

106 PUREFOY ROAD CHAPEL HILL, NC 27514 (919) 942-3955





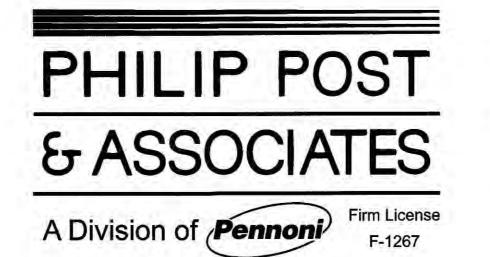




USGS MAP Scale: 1" = 700'

PREPARED BY:





401 Providence Road #200 Chapel Hill, NC 27514 **T** 919.929.1173 **F** 919.493.6548

NOT FOR CONSTRUCTION

SHEET NAME	Sheet Number	Sheet Title
CS001	1	COVER SHEET
CS002	2	GENERAL NOTES AND LEGENDS
CS0201	3	EXISTING CONDITIONS PLAN
CS0202	4	SLOPE ANALYSIS PLAN
CS0501	5	DEMOLITION PLAN
CS1001	6	SITE PLAN
CS1501	7	SITE GRADING & DRAINAGE PLAN
CS1701	8	SITE UTILITY PLAN
CS2001	9	LANDSCAPE & LIGHTING PLAN
CS6001	10	SITE DETAILS
CS8001	11	EROSION CONTROL PLAN
CS8002	12	CONSTRUCTION MANAGEMENT PLAN
CS9001	13	EXISTING PLAT
A1.02		FIRST FLOOR PLAN
A1.03		ROOF PLAN
A2.01		3D EXTERIOR VIEWS
A2.02		3D EXTERIOR VIEWS

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR
AND OWNER MUST BE NOTIFIED OF ANY
DISCREPANCIES BEFORE PROCEEDING WITH WORK

CAROLLING
BE

ON MT. CARMEL CHURCH ROAD
CHAPEL HILL, NC 27514
COVER SHEET

PG	PCB	ВУ
REVISED PER AMENDED LAND DISTURBANCE RULING	REVISED PER 10/3/16 C.H. MEMO	REVISIONS
2 4	-	ò
2016-11-17	2016-11-09	DATE

SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES A
EXPENSES ARISING OUT OF OR RESULTING THEREFRO

ROJECT

CHCP1601

ATE

2016-08-24

RAWING SCALE

RAWN BY

DMC

PPROVED BY

PCB

PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE

EXISTING	PROPOSED	CABLE TV, JUNCTION BOX	CH	PPLICANT: HAPEL HILL COOPERATIVE PRESC 6 PLIREFOY ROAD	CHOOL RESPONSIBLE OFFICER: MARIA DICKINSON
₩	®	CABLE TV, MANHOLE		6 PUREFOY ROAD HAPEL HILL, NORTH CAROLINA 27	7514
oc	oc oc	CABLE TV, OVERHEAD  CABLE TV, PANEL BOX			S WERE TAKEN FROM A TOPOGRAPHIC SURVEY PLAN
(T)	0	CABLE TV, PEDESTAL  CABLE TV, STUB OUT	PR	ROVIDED BY PHILIP POST & ASSO	C. DATED: 6/14/2016.
	UCUC	CABLE TV, UNDERGROUND		FILITY NOTES: OMPLETENESS OR ACCURACY OF	F LOCATION AND DEPTH OF UNDERGROUND UTILITIES
-0-	-0-	CABLE TV, WITNESS POST  CHANNEL	B. L	AND STRUCTURES IS NOT GUAR LOCATION OF ALL EXISTING AND	RANTEED. PROPOSED SERVICES ARE APPROXIMATE AND SHALL
	0	COMMUNICATION, HANDHOLE		COMMENCEMENT OF ANY CON	TLY WITH LOCAL UTILITY COMPANIES PRIOR TO STRUCTION OR EXCAVATION, SANITARY SEWER AND E CONNECTION POINTS SHALL BE CONFIRMED
	©	COMMUNICATION, JUNCTION BOX COMMUNICATION, MANHOLE		INDEPENDENTLY BY THE	CONTRACTOR IN THE FIELD PRIOR TO THE UCTION, ALL DISCREPANCIES SHALL BE REPORTED
- OC - OC -	oc oc	COMMUNICATION, OVERHEAD		IMMEDIATELY IN WRITING TO BEGINNING AT THE LOWEST IN	THE ENGINEER. CONSTRUCTION SHALL COMMENCE IVERT (POINT OF CONNECTION) AND PROGRESS UP
	<b>23</b> ©	COMMUNICATION, PANEL BOX COMMUNICATION, PEDESTAL		GRADIENT. PROPOSED INTE UNDERGROUND UTILITIES SHA COMMENCEMENT OF CONSTRUCT	ERFACE POINTS (CROSSINGS) WITH EXISTING ALL BE FIELD VERIFIED BY TEST PIT PRIOR TO
7	₹	COMMUNICATION, STUB OUT	C. 1	ALL UTILITIES AND SERVICES INC	CHON.  CLUDING BUT NOT LIMITED TO GAS, WATER,  M SEWER, TELEPHONE, CABLE, FIBER OPTIC, ETC.
	UC UC	COMMUNICATION, UNDERGROUND COMMUNICATION, WITNESS POST		WITHIN THE LIMITS OF DISTURBALLOCATED. THE CONTRACTOR SI	ANCE SHALL BE VERTICALLY AND HORIZONTALLY HALL USE AND COMPLY WITH THE REQUIREMENTS OF
<b>◆</b>		CONTROL, BENCHMARK CONTROL, GPS		UTILITIES. THE CONTRACTOR IS	ICATION SYSTEM TO LOCATE ALL THE UNDERGROUND RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY NSTRUCTION AT NO COST TO THE OWNER.
Δ		CONTROL, MAPPING			NCE RATE MAP FOR ORANGE COUNTY, NC, MAP
Δ		CONTROL, REFERENCE CONTROL, TRAVERSE	#4	3710978700J (PANEL 9787J), EFFE	CTIVE DATE 2/2/2007 THE SITE AREA PROPOSED TO X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE
		CURB		HE 100 YEAR FLOOD PLAIN.	ION AND DEMOLITION WHERE HOT WORK, MATERIALS
	-	CURB DEPRESSION	SU	JBJECT TO SPONTANEOUS COME	BUSTION, OR OTHER HAZARDOUS CONSTRUCTION OR DWNER OR THEIR DESIGNEE SHALL BE RESPONSIBLE
		EDGE OF PAVEMENT  EDGE OF GRAVEL	PE	RSON WITH A MEANS OF COM	THE FIRE WATCH SHALL CONSIST OF AT LEAST ONE MUNICATING AN ALARM TO 911, SHALL A WRITTEN
		EASEMENT		ODRESS POSTED IN A CONSPIC ATROLS. NC FPC 2012 SECTION 14	CUOUS LOCATION AND SHALL MAINTAIN CONSTANT 104.
		FENCE	6. CC SH	ONSTRUCTION / DEMOLITION; ALL	CONSTRUCTION AND DEMOLITION CONDUCTED CURRENT EDITION OF CHAPTER 14 OF THE NC FPC.
	<b>®</b>	FIBER OPTIC, HANDHOLE FIBER OPTIC, JUNCTION BOX	7. PR	RIOR TO ISSUANCE OF A CERTIFIC	CATE OF OCCUPANCY APPLICANT SHALL REPLACE
<b>(</b>	<b>(D)</b>	FIBER OPTIC, MANHOLE  FIBER OPTIC, OVERHEAD	PL		D-PROTECTED ON THE LANDSCAPE PROTECTION POOR HEALTH AS A RESULT OF LAND DISTURBING
	FO ——— FO ——	FIBER OPTIC, PANEL BOX		elite annual celtiti de la Vica ed	COMPLIANCE PERMIT APPLICANT SHALL RECORD A
	© •	FIBER OPTIC, PEDESTAL FIBER OPTIC, STUB OUT	RE	GISTRY. AN EXEMPT PLAT APPLI	OUR PROPERTIES WITH THE ORANGE COUNTY CATION TO BE REVIEWED AND APPROVED BY THE
	F0 F0	FIBER OPTIC, UNDERGROUND		OWN IS REQUIRED FOR THIS ACTI TE LAND DISTURBANCE CALCULA	
—5- • • • • • • • • • • • • • • • • • • •	-0-	FIBER OPTIC, WITNESS POST FLOODPLAIN		/ERALL LAND DISTURBANCE	MIONS
0	<b>(D)</b>	FUEL, MANHOLE	ii. OF	TE LAND DISTURBANCE: 39,942 SO F-SITE LAND DISTURBANCE: 828	SQ.FT.
	OFG OFG	FUEL, OVERHEAD FUEL, PLUG	III. TO	OTAL LAND DISTURBANCE: 40,770	) SQ.FT,
EMI VEC		FUEL, PUMP FUEL, UNDERGROUND			
I I I	I I I	GUIDE RAIL			
	<b>&amp;</b> . □	MARKING, HANDICAP PARKING NATURAL GAS, METER			
(6)	©	NATURAL GAS, MANHOLE			
<i>───06───06──</i>	—— og ——— og ——	NATURAL GAS, OVERHEAD  NATURAL GAS, STUB OUT			
<b>10</b> 1	M	NATURAL GAS, VALVE  NATURAL GAS, UNDERGROUND	EXISTING	LEGEND PROPOSED	DESCRIPTION
-D-	-D-	NATURAL GAS, WITNESS POST	0	O	SANITARY SEWER, CLEAN-OUT
		PHONE, HANDHOLE  PHONE, JUNCTION BOX	FM FM		SANITARY SEWER, FORCE MAIN SANITARY SEWER, FORCE MAIN MANHOLE
$\overline{\mathbb{O}}$	<u></u>	PHONE, MANHOLE		<b>F</b>	SANITARY SEWER, FORCE STUB OUT
	— от — от —	PHONE, OVERHEAD PHONE, PANEL BOX	— s — s — s — (\$)	<u> </u>	SANITARY SEWER, LATERAL SANITARY SEWER, MANHOLE
① ***	<b>(T)</b>	PHONE, PEDESTAL	s s	ss	SANITARY SEWER, UNDERGROUND (4" DIA TO 10" DIA)
	— uт — uт —	PHONE, STUB OUT  PHONE, UNDERGROUND	\$	\$	SANITARY SEWER, SEPTIC TANK SANITARY SEWER, STUB OUT
- <del>-</del>	-0	PHONE, WITNESS POST POWER, GUY POLE	<b>M</b>	M	SANITARY SEWER, VALVE SANITARY SEWER, WITNESS POST
<u>k</u>	<del>(</del>	POWER, GUY WIRE		Annu Tannasaniana F. F. E. Erickenskinsteinen F. F. E. Erickenskinsteinen	STREAM
		POWER, HANDHOLE POWER, JUNCTION BOX			STORM SEWER, INLET STORM SEWER, HEADWALL
0-□ □-0-□	o-□	POWER, SINGLE HEAD LIGHT	0	0	STORM SEWER, MANHOLE
		POWER, DOUBLE HEAD LIGHT POWER, THREE HEAD LIGHT		D	STORM SEWER, UNDERGROUND STORM SEWER, ROOF DRAIN
<b>-</b> }0	~~~	POWER, FOUR HEAD LIGHT	0	0	STORM SEWER, STAND PIPE STORM SEWER, CLEAN-OUT
<b>\$</b>	Ď.	POWER, LIGHT POWER, SPOTLIGHT	-0-	-0-	STORM SEWER, WITNESS POST
0-0	0	POWER, LIGHT POLE SINGLE	100 marie 100 mm	101 100	MINOR CONTOUR  MAJOR CONTOUR
<b>a—0</b> — <b>◎</b> ⑤	Ē	POWER, LIGHT POLE DOUBLE POWER, MANHOLE	X 100.5	100.5	SPOT ELEVATION
OE	OE OE	POWER, OVERHEAD POWER, METER	R	T.B.R.	TO BE REMOVED  TRAFFIC, PAVEMENT MARKING, BIKE LANE
	<b>②</b> <b>™</b>	POWER, PANEL BOX	\$ \$ \$ \$ \$ \$	50 S S S S S S S S S S S S S S S S S S S	and the state of t
© \$\pi\$	(E)	POWER, PEDESTAL POWER, STUB OUT	√√ , n [] (t,	10 10 C	TRAFFIC, PAVEMENT MARKING, TURN ARROWS
团	Ø	POWER, TRANSFORMER	会的公司的	45 415	
<u>−−−</u> υε−−− − ```Q	£	- POWER, UNDERGROUND POWER, UTILITY POLE	۸	٥	TRAFFIC, PAVEMENT MARKING, HOV LANE
-0-		POWER, WITNESS POST	<b>V</b>	V	TRAFFIC, HAND HOLE
*	*	POWER, YARD LIGHT  PROPERTY, LINE	(IC)	(TC)	TRAFFIC, JUNCTION BOX TRAFFIC, MANHOLE
		_ LEGAL RIGHT-OF-WAY			TRAFFIC, PANEL BOX
<b>©</b>	<b>©</b>	PROPERTY, CORNER FOUND  PROPERTY, CORNER FOUND (OTHERS)	<b>-</b>	- <del>-</del> -	TRAFFIC, PEDESTAL TRAFFIC, PEDESTRIAN SIGNAL
ē	•	PROPERTY, CONCRETE MONUMENT PROPERTY, ADJOINING LINED	<b></b>	·	TRAFFIC, SIGNAL POLE TRAFFIC, SIGNAL POLE & LIGHT ARM
		PROPERTY, LINE RESERVED		•	TRAFFIC, STUB OUT
©	©	RAIL, MILE MARKER RAIL, PANEL BOX	0		VEGETATION, SHRUB VEGETATION, STUMP
		RAIL, TRACK	(0)		VEGETATION, DECIDUOUS SHOWING CANOPY
<b>3</b>	<b>8</b>	SITE, AIR COMPRESSOR SITE, AIR CONDITIONER	annum munit	~ ~~~~	VEGETATION, CONIFEROUS SHOWING CANOPY  VEGETATION, TREE LINE
0	0	SITE, BOLLARD	\$	\$	WATER, HOSE BIB
	8	SITE, BORING LOCATION  BUILDING	•	<b>◆</b> ⊕	WATER, FIRE HYDRANT WATER, IRRIGATION HEAD
de tantan kerilan kerika kalan kerika k E	<b>U</b>	SITE, FLAG POLE		×	WATER, IRRIGATION VALVE BOX
<b>23</b>	<b>™</b>	SITE, HEAD STONE SITE, MAIL BOX	₩	<b>(w</b> ) □	WATER, MANHOLE WATER, METER
<b>©</b>	<b>@</b>	SITE, MONITOR WELL SITE, PARKING METER	<b>⊗</b>	⊗	WATER, POST INDICATOR VALVE
<b>⊕</b>	0	SITE, PARKING METER SITE, POST	♥	<b>趣</b> 不	WATER, SIAMESE CONNECTION WATER, STUB OUT
-0-0-	<del>-00</del>	SITE, SIGN POST AND BOARD SITE, TRAFFIC SIGN		ww	WATER, UNDERGROUND WATER, UNDERGROUND FIRE
ROUGES PRODUCE CHARGES CONTROL PRODUCT SERVICES SERVICES		SOIL BOUNDARY		— F —— F ——	WATER, VALVE
WaC		SOIL LABEL	~ <del>G</del> ÷	-0-	WATER, WITNESS POST

**GENERAL NOTES** 

LEGEND

PROPOSED

DESCRIPTION

GENERAL CONSTRUCTION AND GRADING NOTES

BE UNACCEPTABLE.

1. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL AND LOCAL CODES AND OSHA STANDARDS ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER/DEVELOPER.

STORMWATER MANAGEMENT PLAN.

- 2. THE CONTRACTOR SHALL BE REQUIRED TO REVIEW AND ABIDE BY SPECIFICATIONS OF THE PLAN AND ALL SUPPORTING DOCUMENTS, PERMITS, AND REPORTS FOR THIS SITE, INCLUDING NOT BUT NOT LIMITED TO: EROSION AND SEDIMENTATION CONTROL PLAN
- THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER OF ANY
- DISCREPANCIES OR ERROR THEY DISCOVER IN THE PLANS. 4. DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR CONSENT OF THE OWNER OR HIS REPRESENTATIVE OR THE ENGINEER MAY BE CAUSE OF THE WORK TO
- 5. UTILITY COORDINATION SHALL BE INCLUDED IN THE PROJECT SCHEDULE AND IT IS THE EXPLICIT RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT THE PROJECT SCHEDULE INCLUDES THE NECESSARY RELOCATIONS. THE CONTRACTOR WILL NOT BE PAID ADDITIONALLY FOR THIS COORDINATION. THE CONTRACTOR SHOULD SEEK ASSISTANCE FROM ALL UTILITY COMPANIES TO LOCATE AND PROTECT THEIR FACILITIES. IF CONFLICTS ARE FOUND. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND DESIGN ENGINEER FOR INSTRUCTION BEFORE PROCEEDING WITH
- 6. ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE OWNER AND APPLICANT.
- TRAFFIC CONTROL METHODS, SUCH AS BARRICADES, SUFFICIENT LIGHTS, SIGNS, ETC. MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC SHALL BE PROVIDED AND MAINTAINED THROUGHOUT THE CONSTRUCTION IN ACCORDANCE WITH CURRENT AND NCDOT STANDARDS.
- CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES, FENCING AND OTHER APPROPRIATE SAFETY ITEMS/MEASURES NECESSARY TO PROTECT THE PUBLIC FROM THE WORK AREA CONSTRUCTION ACTIVITIES.
- 9. HIGH INTENSITY LIGHTING FACILITIES SHALL BE SO ARRANGED THAT THE SOURCE OF ANY LIGHT IS CONCEALED FROM PUBLIC VIEW AND FROM ADJACENT RESIDENTIAL PROPERTY AND DOES NOT INTERFERE WITH TRAFFIC.
- 10. THE CONTRACTOR SHALL MAINTAIN ACCESS FOR EMERGENCY VEHICLES AROUND AND TO ALL BUILDINGS NEAR CONSTRUCTION. IN TIME OF RAIN OR MUD, ROADS SHALL BE ABLE TO CARRY A FIRE TRUCK BY BEING PAVED OR HAVING A CRUSHED STONE BASE ETC., WITH A MINIMUM WIDTH OF 20 FEET. ACCESS TO BUILDINGS THAT HAVE SPRINKLER OR STANDPIPE SYSTEMS SHALL BE WITHIN 40 FEET OF THE FIRE DEPARTMENT CONNECTOR, (NFPA 1141 3-1)
- 11. BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONALLY BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES AND WET AREAS. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE WORK.
- 12. BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY OF 95% OF THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED IN LAYERS NOT TO EXCEED SIX (6) INCHES IN COMPACTED FILL THICKNESS. A REPORT FROM A GEOTECHNICAL ENGINEER MAY BE REQUIRED BY THE PUBLIC WORKS INSPECTOR. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 13. THE CONTRACTOR WILL ENSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT BE LIMITED TO. A) REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED, OR B) REGRADING AS REQUIRED BY THE ENGINEER, EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC LOCATIONS AND HAVING SPECIFIC PAY ITEMS IN THE DETAILED ESTIMATE. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COSTS INCURRED TO COMPLY WITH THIS REQUIREMENT
- 14. THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 15. SOIL TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. A GEOTECHNICAL ENGINEER IS REQUIRED TO INSPECT TEST AND CERTIFY TO THE COMPACTION OF ALL LOAD BEARING FILLS. THE GEOTECHNICAL ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, THE OWNER AND TO THE OWNER'S REPRESENTATIVE AND SHALL PROMPTLY NOTIFY THE OWNER, HIS REPRESENTATIVE AND THE CONTRACTOR, SHOULD WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET THESE SPECIFICATIONS.
- 17. ALL PAVEMENT MARKINGS AND REGULATORY SIGNS ON PRIVATE PROPERTY SHALL CONFORM TO CURRENT MUTCD STANDARDS.

#### WATER AND SEWER SERVICE NOTES HORIZONTAL AND VERTICAL SEPARATION

- SANITARY SEWERS SHALL BE LAID AT LEAST 10-FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A 10-FOOT SEPARATION, THE PUBLIC WORKS SUPPLY MAY ALLOW DEVIATION A CASE-BY-CASE BASIS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH DEVIATION ON MAY ALLOW THE INSTALLATION OF THE SANITARY SEWER CLOSER TO A WATER MAIN, PROVIDED THAT THE WATER MAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SANITARY SEWER AND AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18-INCHES ABOVE THE TOP OF THE SEWER.
- IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED ABOVE OR ANYTIME THE SANITARY SEWER IS OVER THE WATER. MAIN. BOTH THE WATER MAIN AND SANITARY SEWER MUST BE CONSTRUCTED OF FERROUS PIPE COMPLYING WITH THE PUBLIC WATER SUPPLY DESIGN STANDARDS AND BE PRESSURE TESTED TO 150PSI TO ASSURE WATER TIGHTNESS BEFORE BACKFILLING.
- 1.3. A 24-INCH VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN STORM SEWER AND SANITARY SEWER LINES OR FERROUS PIPE SPECIFIED. A 12-INCH VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN STORM SEWER AND WATER MAIN.
- IF A 12-INCH VERTICAL SEPARATION IS NOT MAINTAINED AT A CROSSING BETWEEN STORM SEWER AND WATER MAINS (OR PRESSURE SEWERS). THE WATER MAIN SHALL BE CONSTRUCTED OF FERROUS PIPE AND A CONCRETE COLLAR SHALL BE POURED AROUND WATER MAINS AND STORM SEWER TO IMMOBILIZE THE CROSSING.

## CROSSINGS

- SANITARY SEWER CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18-INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SANITARY SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE SANITARY SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS.
- WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, ONE OF THE FOLLOWING METHODS MUST BE
- THE SANITARY SEWER SHALL BE DESIGNED AND CONSTRUCTED OF FERROUS PIPE AND SHALL BE PRESSURE TESTED AT 150-PSI TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING, OR
- EITHER THE WATER MAIN OR THE SANITARY SEWER LINE MAY BE ENCASED IN A WATERTIGHT CARRIER PIPE, WHICH EXTENDS 10-FEET ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN, THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE PUBLIC WATER SUPPLY FOR USE IN WATER MAIN CONSTRUCTION.

GENERAL UTILITY NOTES:

- ALL UTILITIES AND SERVICES INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER. TELEPHONE, CABLE, FIBER OPTIC, ETC. WITHIN THE LIMITS OF DISTURBANCE SHALL BE VERTICALLY AND HORIZONTALLY LOCATED. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE OWNER.
- 2. UTILITY COORDINATION SHALL BE INCLUDED IN THE PROJECT SCHEDULE AND IT IS THE EXPLICIT RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT THE PROJECT SCHEDULE INCLUDES THE NECESSARY RELOCATIONS. THE CONTRACTOR WILL NOT BE PAID ADDITIONALLY FOR THIS COORDINATION.
- 3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATIONS AND DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK AND TO TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING FACILITIES ON THESE PLANS; HOWEVER, THIS INFORMATION IS SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.
- 4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES FOR EXACT LOCATION AND PROTECTION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR.
- 5. CONTRACTOR MUST APPLY FOR ALL UTILITY CONNECTION APPLICATIONS. CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY CONNECTION FEES FOR CONSTRUCTION. REFER TO COVER SHEET FOR AVAILABLE UTILITY COMPANY LIST.
- CONTRACTOR MUST OBTAIN ANY REQUIRED UTILITY DETAILS FOR RECONNECTION OF EXISTING SERVICES OR NEW SERVICE AND IS RESPONSIBLE FOR THE CONSTRUCTION OF EACH NEW SERVICE PER THE APPROPRIATE UTILITY COMPANY'S SPECIFICATIONS.
- 7. THE CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL UNDERGROUND UTILITIES AND APPURTENANCES TO MINIMIZE DISTURBANCE TO CURBING, PAVING, AND COMPACTED SUB-GRADE.
- 8. IF CONFLICTS ARE FOUND, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND ENGINEER FOR INSTRUCTION BEFORE PROCEEDING WITH WORK
- ALL PIPE LENGTHS AND DISTANCES BETWEEN STRUCTURES ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE ALONG A HORIZONTAL PLANE.
- 10. THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 11. SOILS TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. THE SOILS ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, THE OWNER AND THE OWNER'S REPRESENTATIVE AND SHALL PROMPTLY NOTIFY THE OWNER, HIS REPRESENTATIVE AND THE CONTRACTOR SHOULD WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET THESE SPECIFICATIONS.
- 12. CONTRACTOR SHALL EXCAVATE ONLY ENOUGH TRENCH FOR WHICH PIPE CAN BE INSTALLED AND TRENCH BACKFILLED BY THE END OF EACH WORK DAY.
- 13. BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES AND WET AREAS. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE WORK.
- 14. COMPACTION OF THE BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY OF 95% OF THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED IN LIFTS NOT TO EXCEED 6 INCHES IN COMPACTED FILL THICKNESS. A REPORT FROM A GEOTECHNICAL ENGINEER MAY BE REQUIRED BY THE PUBLIC WORKS INSPECTOR. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 15. RUNOFF FROM IMPERVIOUS AREAS SHALL NOT BE DIRECTED INTO THE SANITARY SEWER NOR ONTO ADJACENT PROPERTIES.
- ALL JOINTS ON THE STORM WATER CONVEYANCE SYSTEM SHALL BE WATERTIGHT
- 17. ALL CONSTRUCTION ASSOCIATED WITH WATER AND SANITARY SEWER SHALL BE IN ACCORDANCE WITH O.W.A.S.A. STANDARDS AND SPECIFICATIONS.
- ALL ELECTRICAL SERVICE LINES TO OR AROUND THE PROPOSED STRUCTURE SHALL BE UNDERGROUND.

## ADA INSTRUCTIONS TO CONTRACTOR

CONTRACTORS MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA (HANDICAP) ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH THE CURRENT ADA STANDARDS AND REGULATIONS' BARRIER FREE ACCESS AND ANY MODIFICATIONS, REVISIONS OR UPDATES TO SAME. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE(S), PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS. TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT. MUST COMPLY WITH THESE ADA CODE REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- 1. PARKING SPACES AND PARKING AISLES SLOPE SHALL NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.
- 2. CURB RAMPS SLOPE MUST NOT EXCEED 1:12 (8,3%) FOR A MAXIMUM OF SIX (6) FEET.
- 3. LANDINGS MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2,0%) IN ANY
- 4. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE MUST PROVIDE A 36-INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS CANNOT REDUCE THIS MINIMUM WIDTH). THE SLOPE MUST BE NO GREATER THAN 1:20 (5.0%) IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5.0%), ADA RAMP REGULATIONS MUST BE ADHERED TO. A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM RISE OF 2.5 FEET, MUST BE PROVIDED. THE RAMP MUST HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1:50 IN ANY DIRECTION (1/4" PER FOOT OR NOMINALLY 2.0%) FOR
- 5. DOORWAYS MUST HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO LESS THAN 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2003 AND OTHER REFERENCED INCORPORATED BY COD.)
- 6. WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ADA COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN ON THE PLAN NOTE THAT TABLE 405.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOWS FOR STEEPER RAMP SLOPES, IN RARE CIRCUMSTANCES. PRIOR TO THE COMMENCEMENT OF WORK, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER IN WRITING OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS, IN WRITING, BEFORE COMMENCEMENT OF WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ADA REQUIREMENTS.
- 7. THE CONTRACTOR MUST VERIFY THE SLOPES OF CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE IS OBSERVED OR EXISTS. CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO POURING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETE.
- 8. THE SITE SHALL 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.
- 9. ACCESSIBILITY REQUIREMENTS: THAT PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE APPLICANT SHALL PROVIDE THE MINIMUM REQUIRED HANDICAPPED PARKING SPACES AND DESIGN ALL HANDICAPPED PARKING SPACES, RAMPS, AND CROSSWALKS, AND ASSOCIATED INFRASTRUCTURE ACCORDING TO AMERICANS WITH DISABILITIES ACT STANDARDS, NORTH CAROLINA BUILDING CODE, AMERICAN NATIONAL STANDARDS INSTITUTE ANSI CODE. AND TOWN STANDARD.1. PARKING - NUMBER OF SPACES TO COMPLY WITH NCBC 2012 SECTION 1106.1, 1 PER 6 COMPLIANT SPACES OR PORTION THEREOF MUST BE VAN ACCESSIBLE. NO SLOPE TO EXCEED 2 PERCENT IN ANY DIRECTION. SIGNAGE PER NC REQUIREMENTS, MUT-CD AND ICC A 117.1.2. CURB CUTS AND ACCESSIBLE ROUTES PER ICC A117.1 2009 ED. CROSS SLOPE LIMITED TO 2 PERCENT, CALL FOR INSPECTION BEFORE PLACEMENT OF CONCRETE.€¢ SLOPE **GREATER THAN 5 PERCENT REQUIRES CONSTRUCTION AS A RAMP**

IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCEMENT OF ORANGE COUNTY SOLID WASTE NOTES

1. CONSTRUCTION WASTE

- a. ALL EXISTING STRUCTURES 500 SQUARE FEET AND LARGER SHALL BE ASSESSED PRIOR TO THE ISSUANCE OF A DEMOLITION PERMIT TO ENSURE COMPLIANCE WITH THE COUNTY'S REGULATED RECYCLABLE MATERIALS ORDINANCE (RRMO) AND TO ASSESS THE POTENTIAL FOR DECONSTRUCTION AND/OR THE REUSE OF SALVAGEABLE MATERIALS...
- b. PURSUANT TO THE COUNTY'S RRMO, CLEAN WOOD WASTE, SCRAP METAL, AND CORRUGATED CARDBOARD PRESENT IN CONSTRUCTION OR DEMOLITION WASTE
- c. PURSUANT TO THE COUNTY'S RRMO, ALL HAULERS OF MIXED CONSTRUCTION AND DEMOLITION WASTE WHICH INCLUDES ANY REGULATED RECYCLABLE MATERIALS
- SHALL BE LICENSED BY ORANGE COUNTY. d. 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.
- E. THE PRESENCE IF 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.

#### INSPECTION NOTES

- 1. A SINGLE ELECTRICAL SERVICE SHALL BE PROVIDED TO SERVE THE STRUCTURE WITH THE EXCEPTION IF A FIRE PUMP WAS REQUIRED, ARTICLE 230.2 A 2014 EDITION OF NORTH CAROLINA ELECTRIC CODE.
- ADDRESS NUMBERS MUST BE A MINIMUM OF 4 INCHES HIGH AND OF CONTRASTING COLOR TO THEIR BACKGROUND, REFLECTIVE NUMBERS ARE PREFERRED, WHEN THE DISTANCE FROM THE STREET OR FIRE DEPARTMENT ACCESS LANE TO THE FRONT OR ADDRESS SIDE OF THE BUILDING EXCEEDS 25 FEET, LARGER NUMBERS ARE REQUIRED. 26 FEET TO 50 FEET SHALL HAVE 8 INCH NUMBERS, 51-75 FEET SHALL HAVE 12 INCH NUMBERS AND OVER 75 FEET SHALL HAVE 18 INCH NUMBERS. WHERE ACCESS IS BY PRIVATE MEANS OF A PRIVATE ROAD AND THE BUILDING CANNOT BE VIEWED FROM THE PUBLIC WAY, A MONUMENT, POLE OR OTHER SIGN OR MEANS SHALL BE USED TO IDENTIFY THE STRUCTURE
- KEY BOXES SHALL BE REQUIRED ON ANY BUILDING THAT HAS A FIRE ALARM SYSTEM. A FIRE SPRINKLER SYSTEM, AN ELEVATOR, OR SPECIAL LOCKING ARRANGEMENTS. THE KEY BOX SHALL BE OF AN APPROVED TYPE AS REQUIRED FROM THE CHAPEL HILL FIRE DEPARTMENT. THE SIZE OF THE KEY BOX WILL BE DETERMINED BY THE NUMBER OF KEYS NECESSARY TO MITIGATE ANY EMERGENCY SITUATION BASED ON THE BUILDING AND ITS OCCUPANCY. AN APPROVED LOCK SHALL BE INSTALLED ON GATES OR SIMILAR BARRIERS WHEN REQUIRED BY THE FIRE CODE OFFICIAL, KEYS SHALL BE CHANGED OUT IMMEDIATELY IF THE LOCKS ARE CHANGED OR REKEYED. ALL FENCE GATES IN PLAYGROUND AREA SHALL OPEN IN THE DIRECTION OF EGRESS
- TRAVEL WITH PANIC HARDWARE. OWASA REQUIRES A LEAD-FREE RPZ WITH BYPASS FOR THE BACKFLOW
- PROTECTION. ENSURE AT LEAST 18 INCHES OF WORKING CLEARANCE IS PROVIDED AROUND OR MORE IF MANUFACTURER'S INSTRUCTIONS REQUIRE MORE. DEMOLITION OF THE EXISTING STRUCTURES WILL REQUIRE AN ASBESTOS TEST
- PRIOR TO DEMOLITION AND A SECOND ASBESTOS TEST OF THE SOIL AFTER THEY HAVE BEEN REMOVED.
- THE PROPOSED BUILDING SHALL BE PROTECTED BY NFPA 13 SPRINKLER SYSTEM

#### FIRE DEPARTMENT NOTES

- FIRE APPARATUS ACCESS ROADS; ANY FIRE APPARATUS ACCESS ROADS, ANY PUBLIC/PRIVATE STREET, PARKING LOT ACCESS, FIRE LANES AND ACCESS ROADWAYS, USED FOR FIRE DEPARTMENT ACCESS SHALL BE ALL WEATHER AND DESIGNED TO CARRY THE IMPOSED LOAD OF FIRE APPARATUS WEIGHING AT LEAST 80,000 LBS. FIRE APPARATUS ACCESS ROADS SHALL HAVE A MINIMUM WIDTH OF 201 EXCLUSIVE OF SHOULDERS WITH AN OVERHEAD CLEARANCE OF AT LEAST 13'-6" FOR STRUCTURES NOT EXCEEDING 30' IN HEIGHT AND SHALL PROVIDE ACCESS TO WITHIN 150' OF ALL EXTERIOR PORTIONS OF THE BUILDING. STRUCTURES EXCEEDING 30' IN HEIGHT SHALL BE PROVIDED WITH AN AERIAL APPARATUS ACCESS ROAD 26' IN WIDTH IN THE IMMEDIATE VICINITY OF THE BUILDING OR PORTION THEREOF AND SHALL PROVIDE AT LEAST ONE OF THE REQUIRED ACCESS ROADS TO BE LOCATED NOT LESS THAN 15' AND NOT MORE THAN 30' FROM THE STRUCTURE PARALLEL TO ONE ENTIRE SIDE OF THE STRUCTURE. NC FPC 2012 502.1,503.1.1, 503.2.1. D102.1
- GRADE AND APPROACH; FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 10% IN GRADE UNLESS APPROVED BY THE FIRE CHIEF AND ALL APPROACH AND DEPARTURE ANGLES SHALL BE WITHIN THE LIMITS ESTABLISHED BASED ON THE
- DEPARTMENT'S APPARATUS. NC FPC 2012, 503.2.7, 503.2.8 and D103.2 GATES AND BARRICADES; WHERE REQUIRED OR AUTHORIZED BY THE FIRE CODE OFFICIAL AND PERMANENT OR TEMPORARY CONSTRUCTION, ANY GATES ACROSS FIRE APPARATUS ACCESS ROADS SHALL BE A MINIMUM WIDTH OF 20 FEET, BE OF SWINGING OR SLIDING TYPE, HAVE AN EMERGENCY MEANS OF OPERATION, SHALL BE OPENABLE BY EITHER FORCIBLE ENTRY OR KEYED, CAPABLE OF BEING
- OPERATED BY ONE PERSON, AND SHALL BE INSTALLED AND MAINTAINED ACCORDING TO UL 325 and ASTM F 2200, NC FPC 2012, 503.5, 503.6, D103.5 FIRE LANES; WHERE REQUIRED, APPROVED MARKING SIGNS INCLUDING THE WORDS, NO PARKING-FIRE LANE SIGNS SHALL BE PROVIDED FOR FIRE APPARATUS ACCESS ROADS TO IDENTIFY SUCH ROADS. NC FPC 2012, 503.3, D103.6, D103.6.1,
- PREMISE IDENTIFICATION; APPROVED BUILDING ADDRESS NUMBERS, PLACED IN ACCEPTABLE POSITION TO THE FIRE CODE OFFICIAL, SHALL BE REQUIRED ON ALL NEW BUILDINGS, NC FPC 2012, 505.1
- KEY BOXES; WHERE REQUIRED BY THE FIRE CODE OFFICIAL. A SECURE KEY BOX. MOUNTED ON THE ADDRESS SIDE OF THE BUILDING, NEAR THE MAIN ENTRANCE. SHALL BE PROVIDED TO ENSURE ADEQUATE ACCESS TO THE BUILDING BASED ON
- LIFE SAFETY AND/OR FIRE PROTECTION NEEDS, NC EPC 2012, 506. FIRE HYDRANTS; THE ADDITION OF ANY REQUIRED HYDRANTS TO SERVE THE SUBMITTED BUILDING MUST FLOW A MINIMUM OF 2500 GPM PER TOWN ENGINEERING STANDARDS UNLESS APPROVED BY THE FIRE CODE OFFICIAL. THE FARTHEST HYDRANT SERVING A PROPOSED STRUCTURE MUST BE NO MORE THAN 500 FEET DISTANT. A MAXIMUM DISTANCE OF 500 FEET SPACING BETWEEN HYDRANTS MUST BE MAINTAINED UNLESS OTHERWISE APPROVED BY THE FIRE CODE OFFICIAL. LESSER SPACING DISTANCES MAY BE REQUIRED. A MINIMUM WORKING SPACE OF 3 FEET MUST BE MAINTAINED AROUND ALL HYDRANTS. WHERE HYDRANTS ARE SUBJECT TO PHYSICAL IMPACT, PHYSICAL PROTECTION MAY BE REQUIRED, NC FPC 2012. 507.5.6. THE MINIMUM NUMBER OF REQUIRED HYDRANTS AND THEIR SPACING
- MUST MEET NC FPC 2012, APPENDIX C. TABLE C 105.1 FIRE DEPARTMENT CONNECTIONS, LOCATIONS; ANY REQUIRED FDCS FOR ANY BUILDINGS SHALL MEET THE DESIGN AND INSTALLATION REQUIREMENTS FOR THE CURRENT, APPROVED EDITION OF NFPA 13, 13D, 13R, OR 14 OF THE NC FPC 2012 AND TOWN ORDINANCES; 7-38 FOR LOCATION. FDCS SHALL BE INSTALLED ON THE STREET/ ADDRESS SIDE OF THE BUILDING AND WITHIN 100' OF A HYDRANT OR UNLESS OTHERWISE APPROVED BY THE FIRE CODE OFFICIAL AND SHALL NOT BE OBSTRUCTED OR HINDERED BY PARKING OR LANDSCAPING. FDC'S SHALL BE
- EQUIPPED WITH NST. FIRE DEPARTMENT CONNECTIONS, INSTALLATION; A WORKING SPACE OF NOT LESS THAN 36 INCHES IN WIDTH AND DEPTH AND A WORKING SPACE OF 78 INCHES IN HEIGHT SHALL BE PROVIDED ON ALL SIDES WITH THE EXCEPTION OF WALL MOUNTED FDC'S UNLESS OTHERWISE APPROVED BY THE FIRE CODE OFFICIAL. THE FDC'S WHERE REQUIRED MUST BE PHYSICALLY PROTECTED BY AN APPROVED BARRIER FROM IMPACTS. NC FPC 2012, 912.1, 912.2 912.2.1, 912.3.2, 312

DRAWING SCALE

DMC

DRAWN BY

**NOT FOR CONSTRUCTION** 

SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNE SHALL INDEMNIFY AND HOLD HARMLESS PENNON EXPENSES ARISING OUT OF OR RESULTING THEREFRO CHCP1601 PROJECT 2016-08-24

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATE

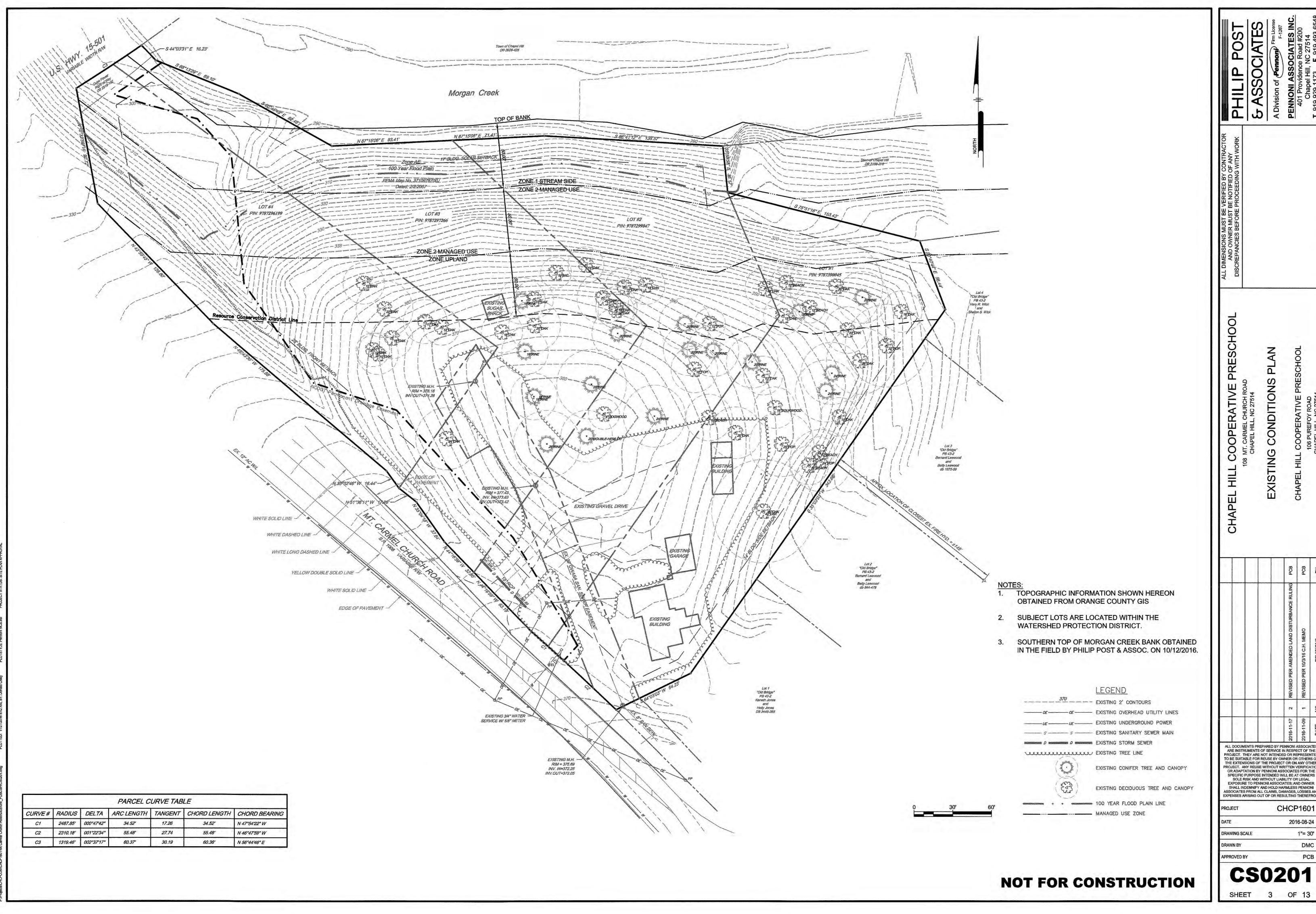
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE

PROJECT. THEY ARE NOT INTENDED OR REPRESENTED

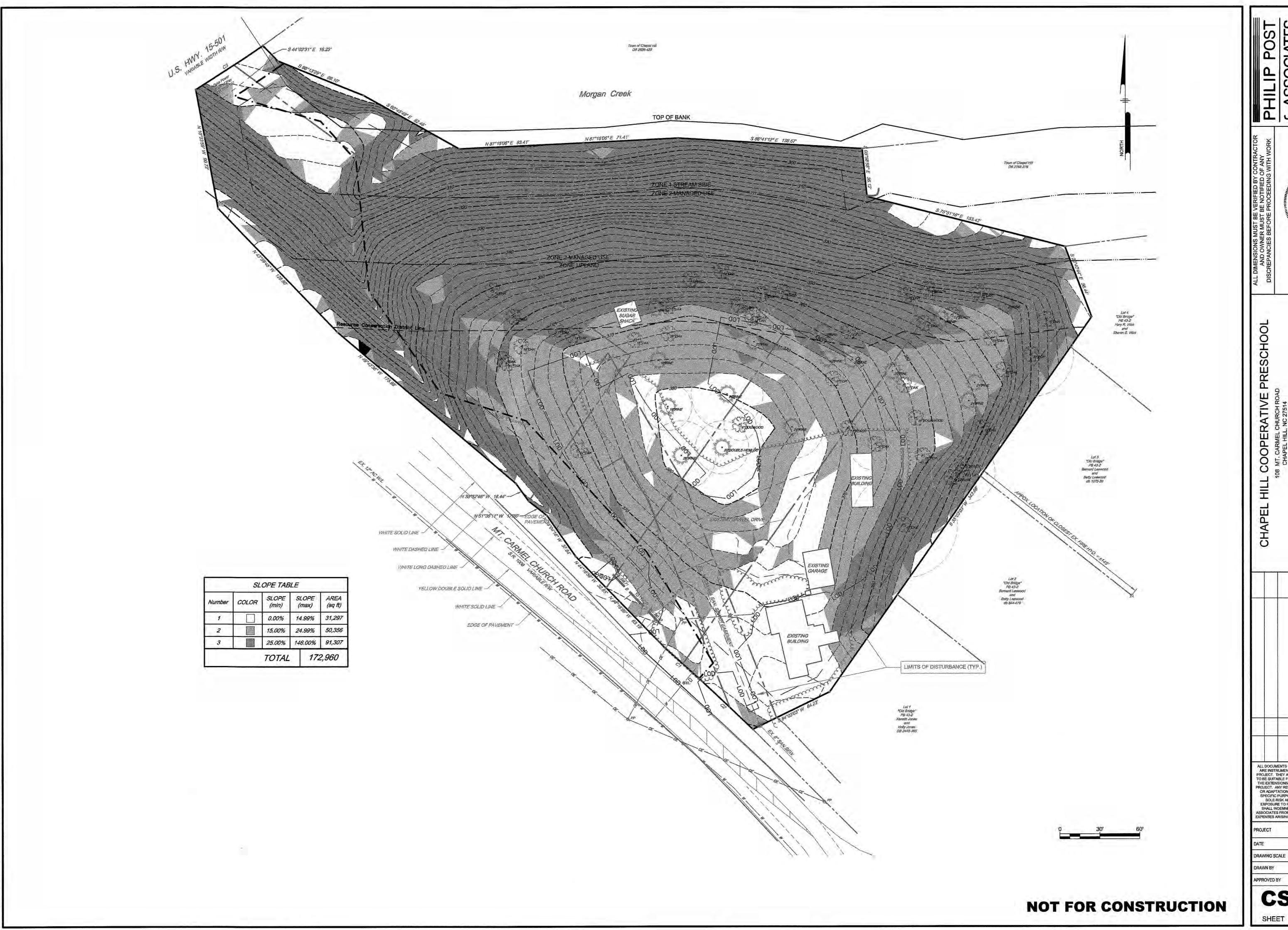
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER

PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE

APPROVED BY

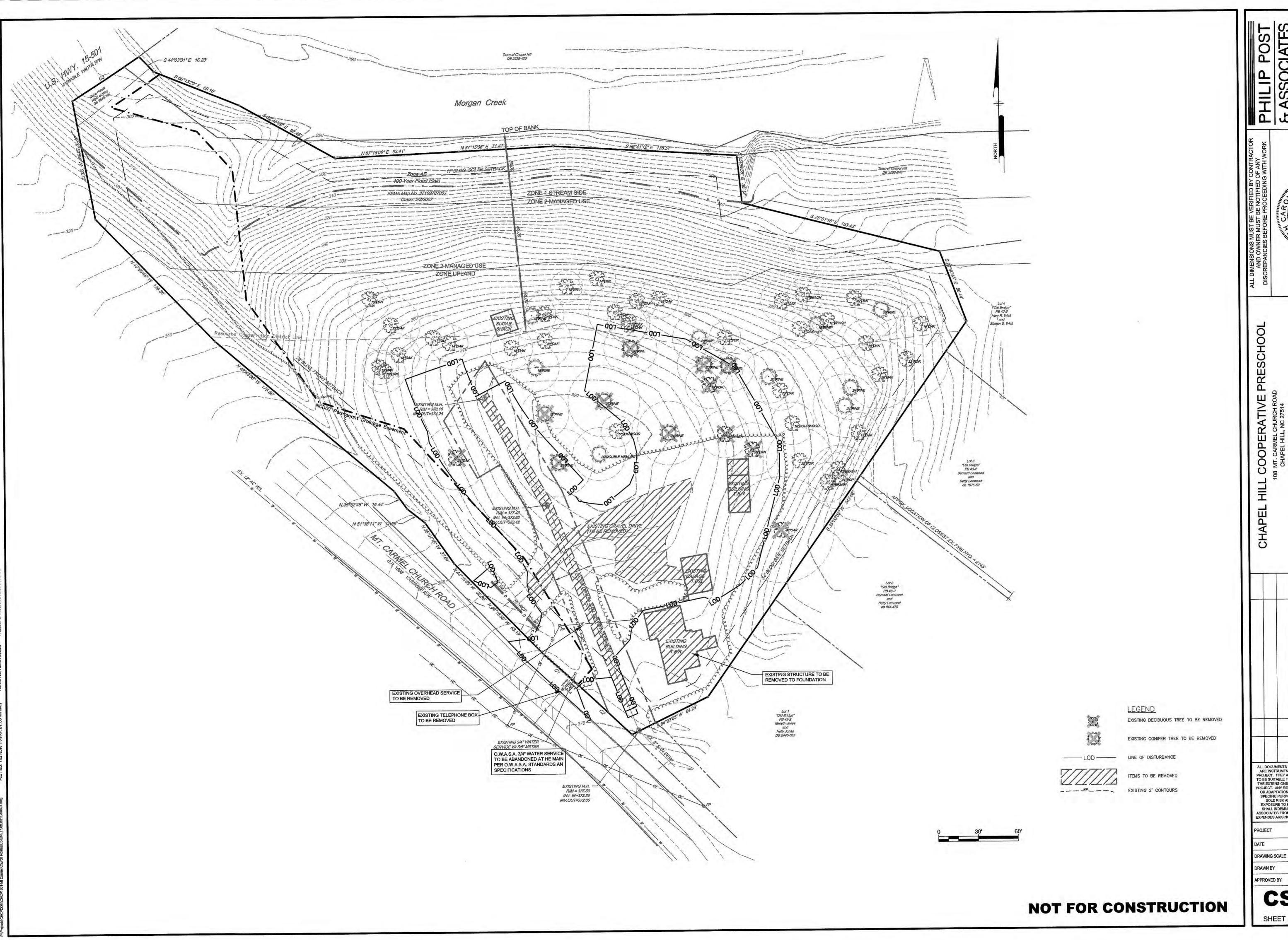


ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM. CHCP1601 2016-08-24



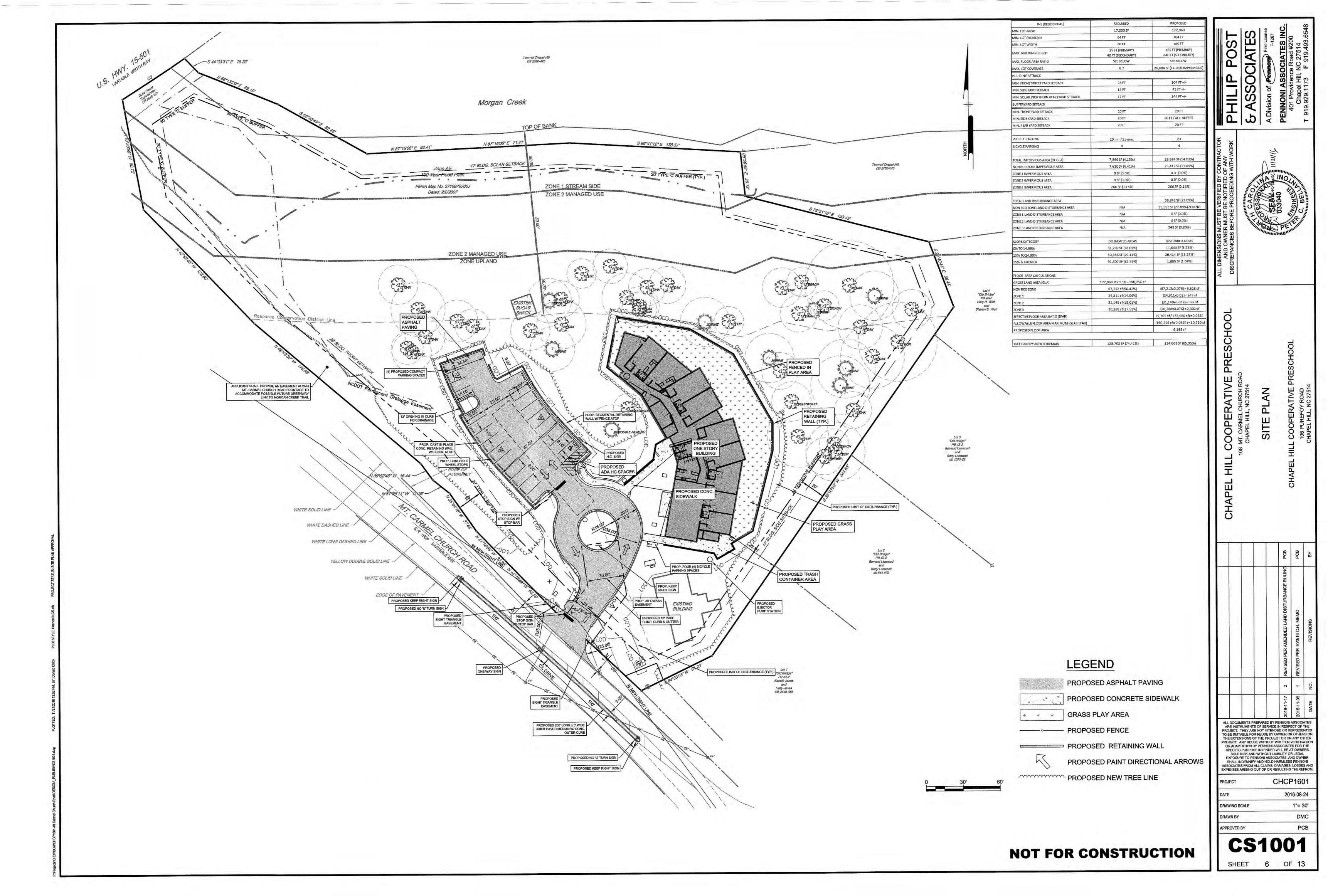
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND
EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

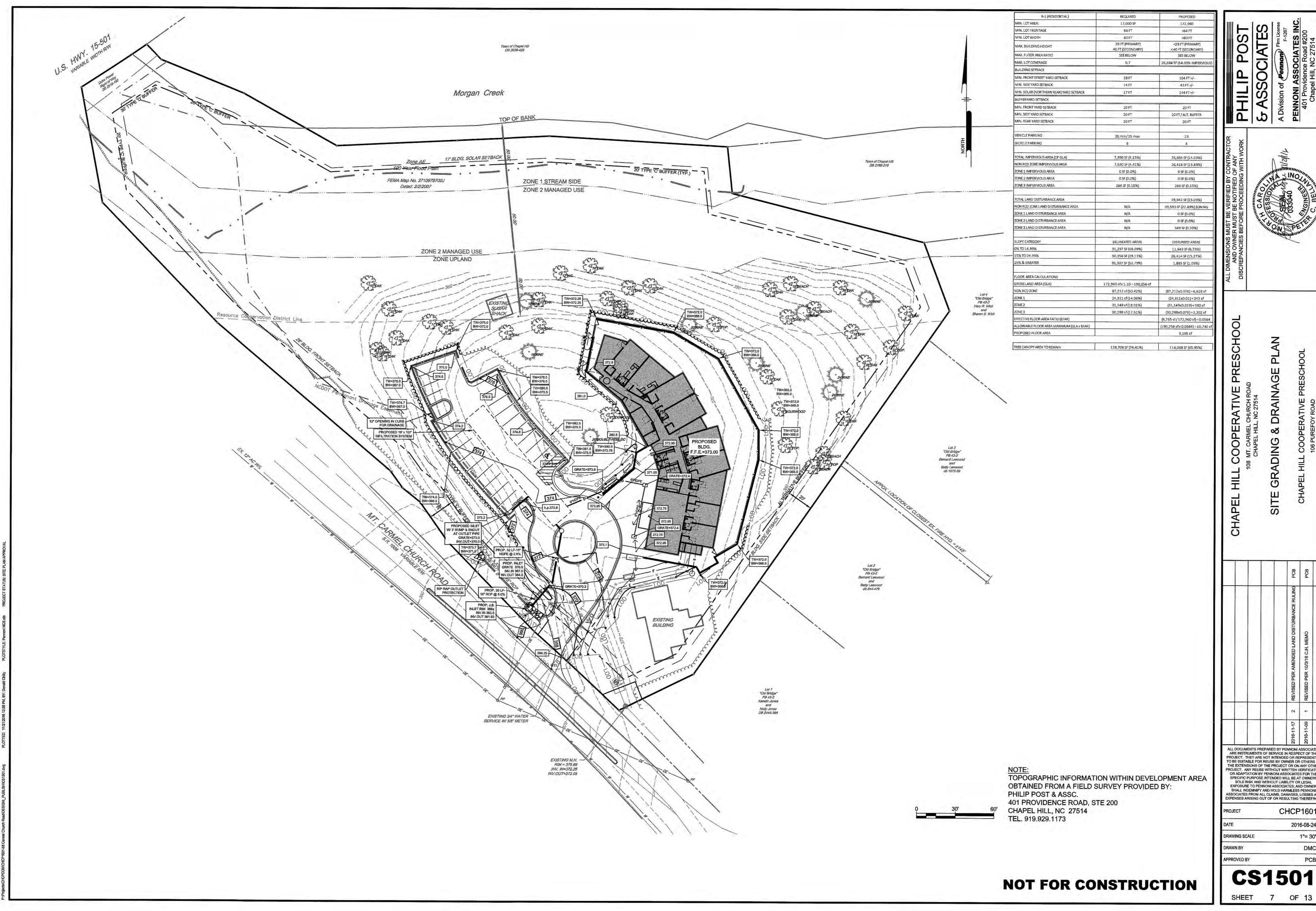
CHCP1601 2016-08-24



ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND
EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CHCP1601 2016-08-24 DMC

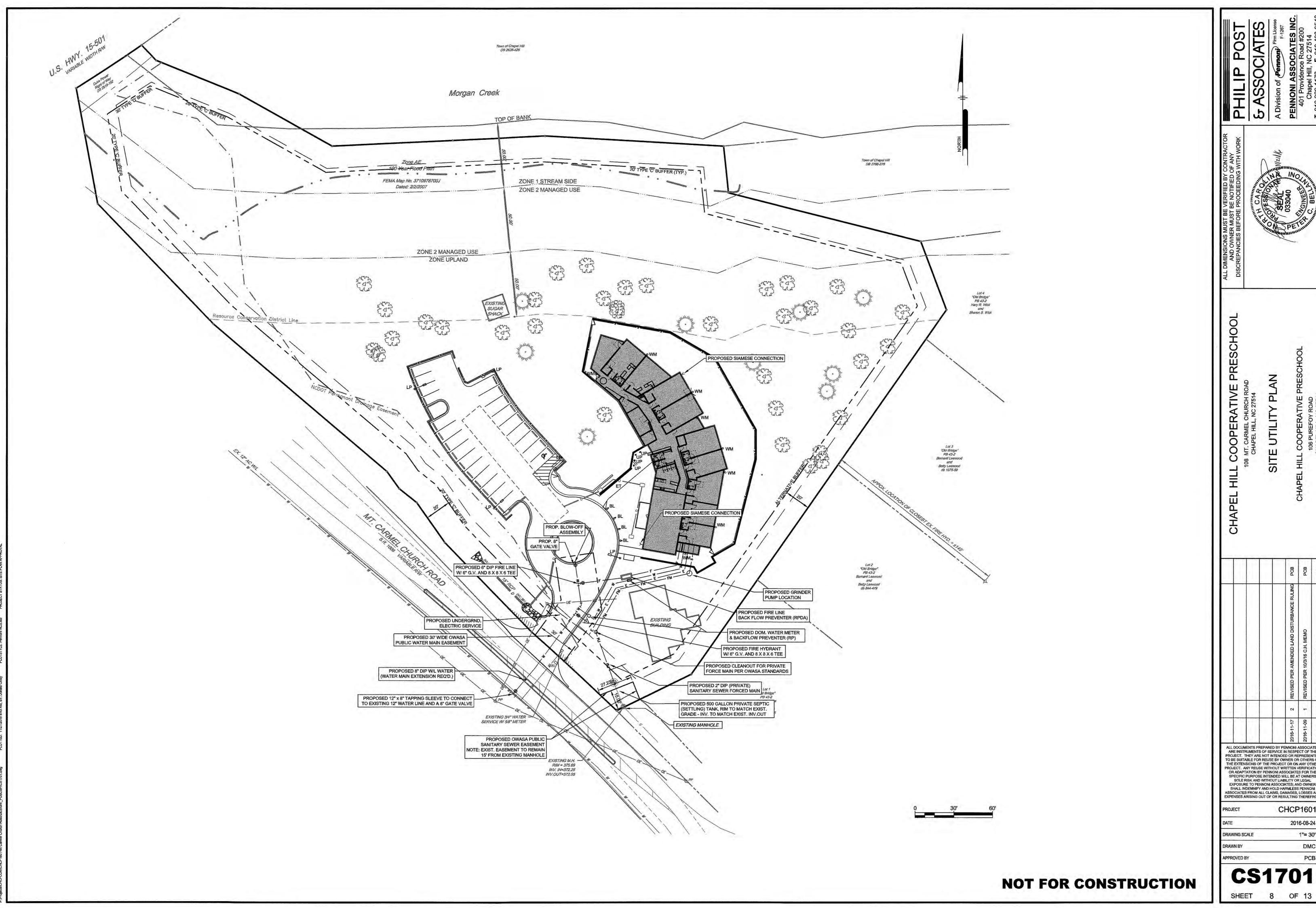




DRAIN oŏ

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OF ADAPTATION BY DENIAND ASSOCIATES FOR THE PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

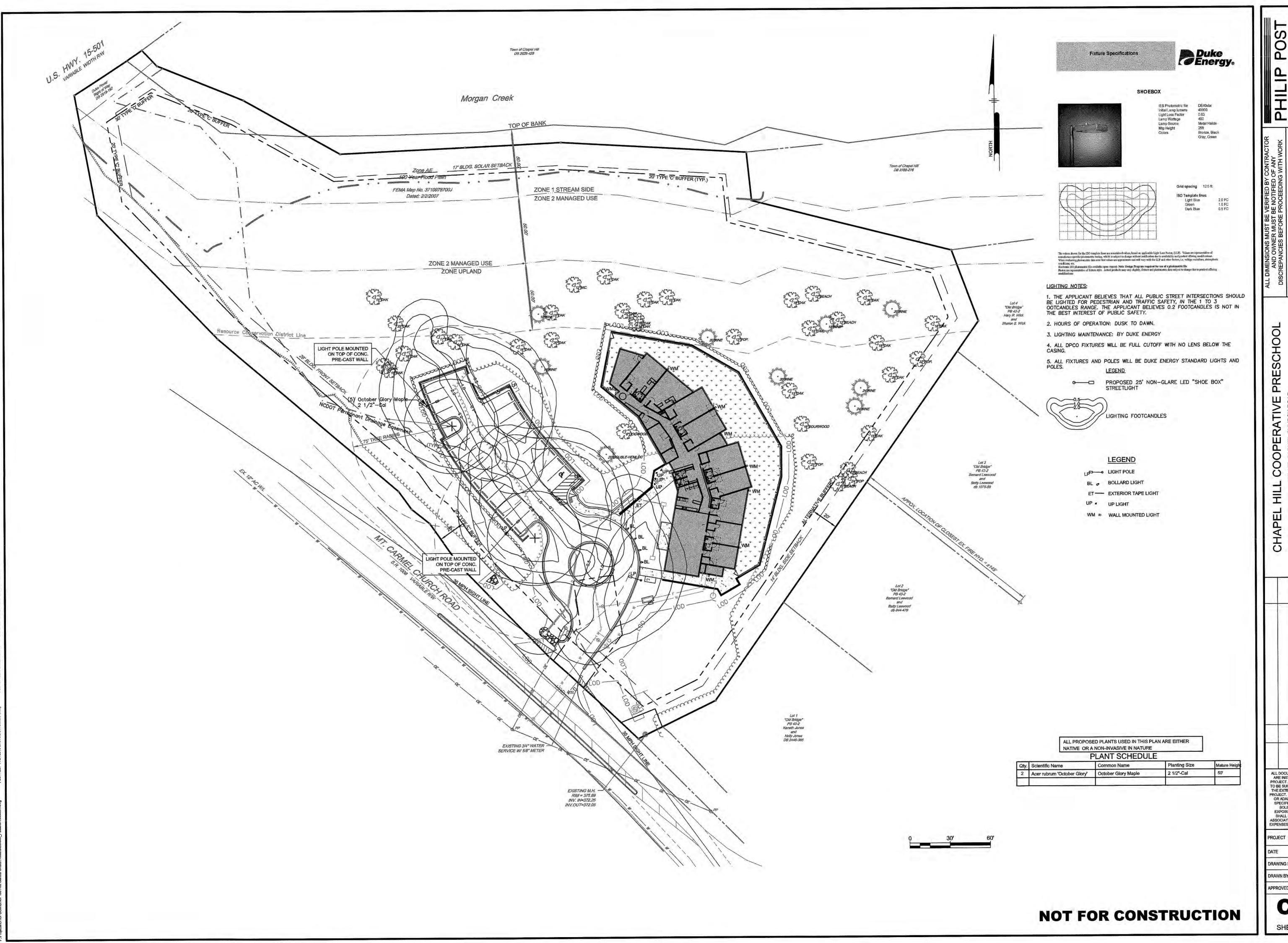
PROJECT	CHCP1601
DATE	2016-08-24
DRAWING SCALE	1"= 30'
DRAWN BY	DMC
APPROVED BY	РСВ
00	4 - 64



SITE UTILITY PLAN

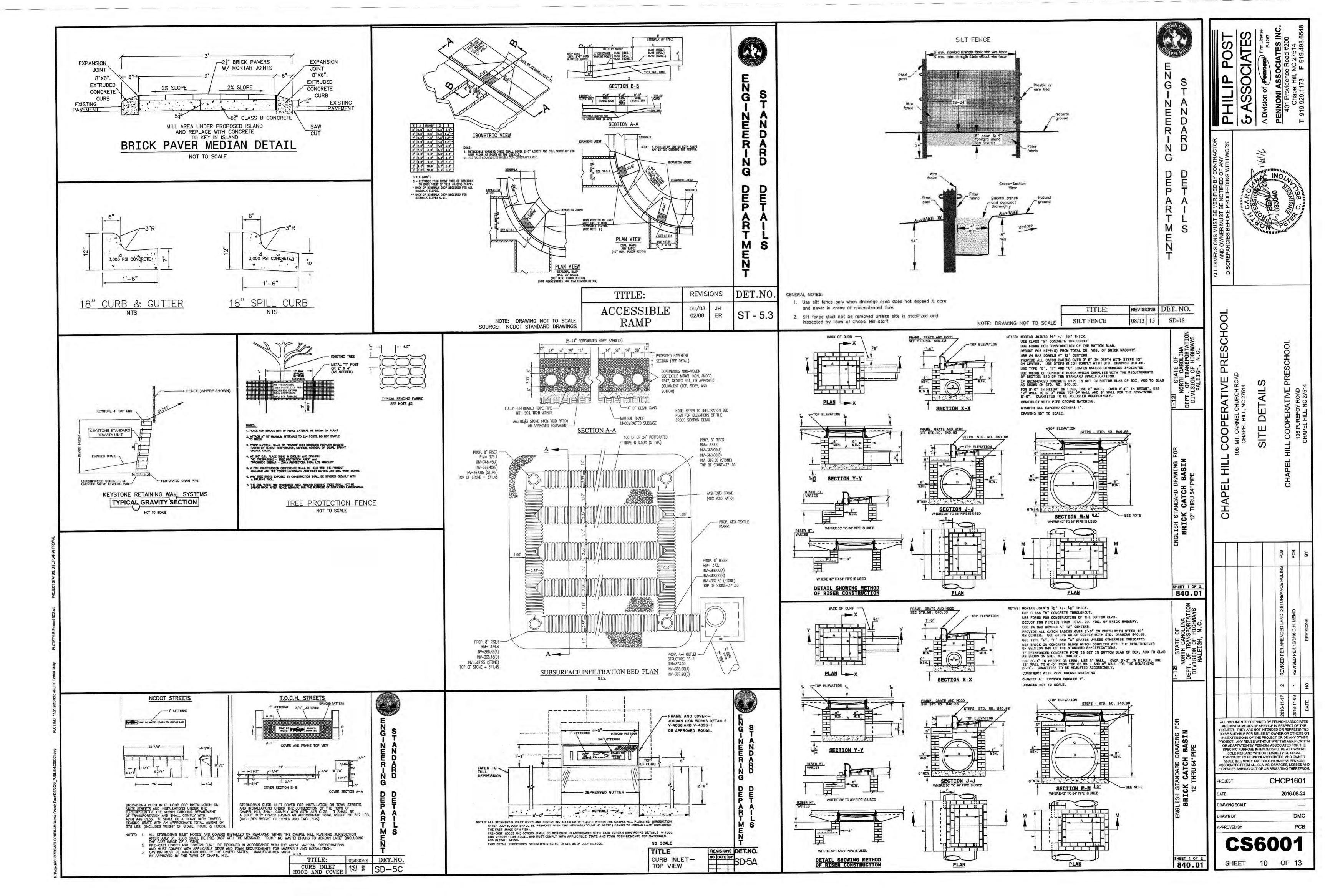
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CHCP1601 2016-08-24 DMC



ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CHCP1601 2016-08-24



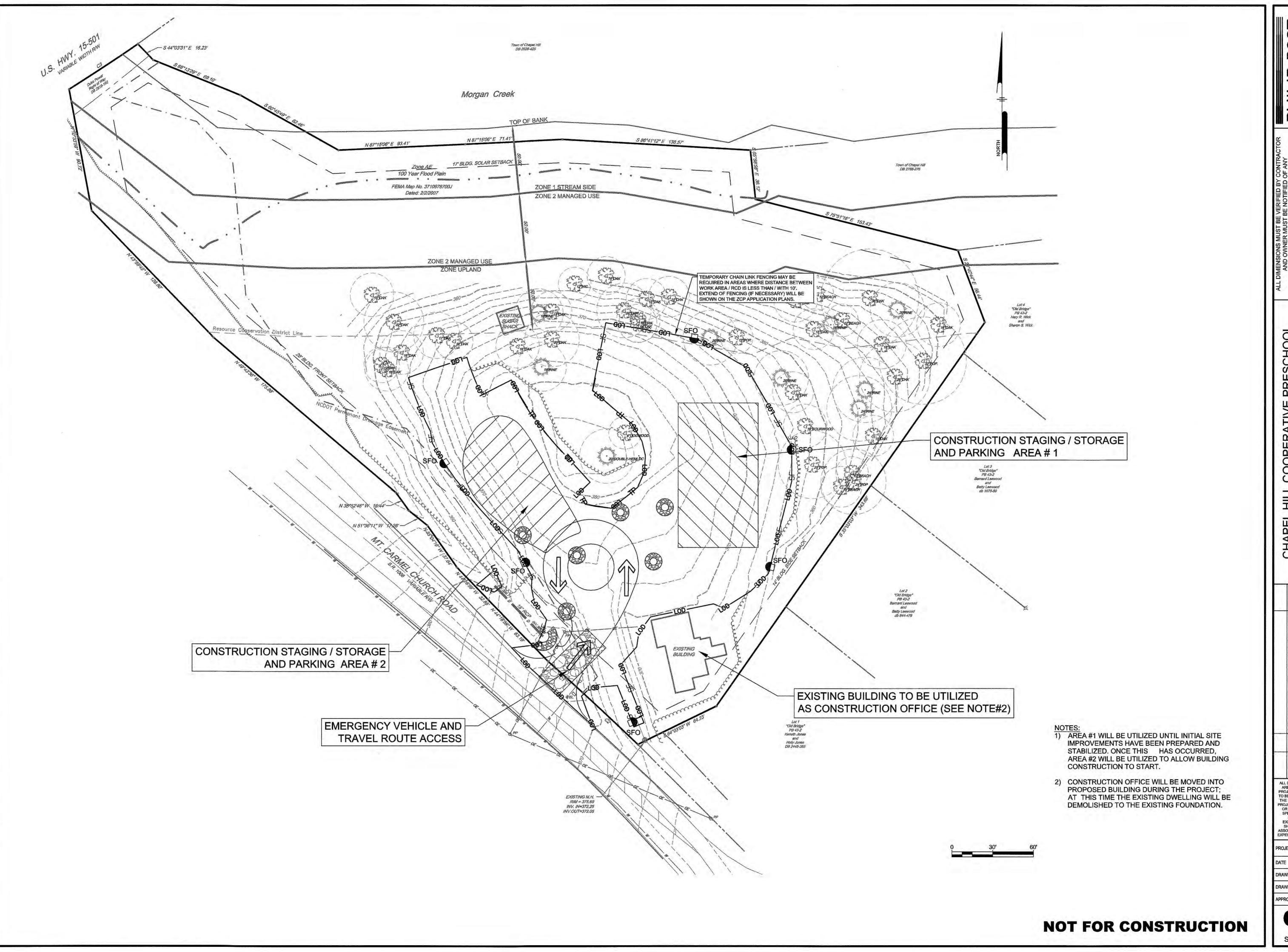


ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CHCP1601

**CS8001** 

SHEET 11 OF 13

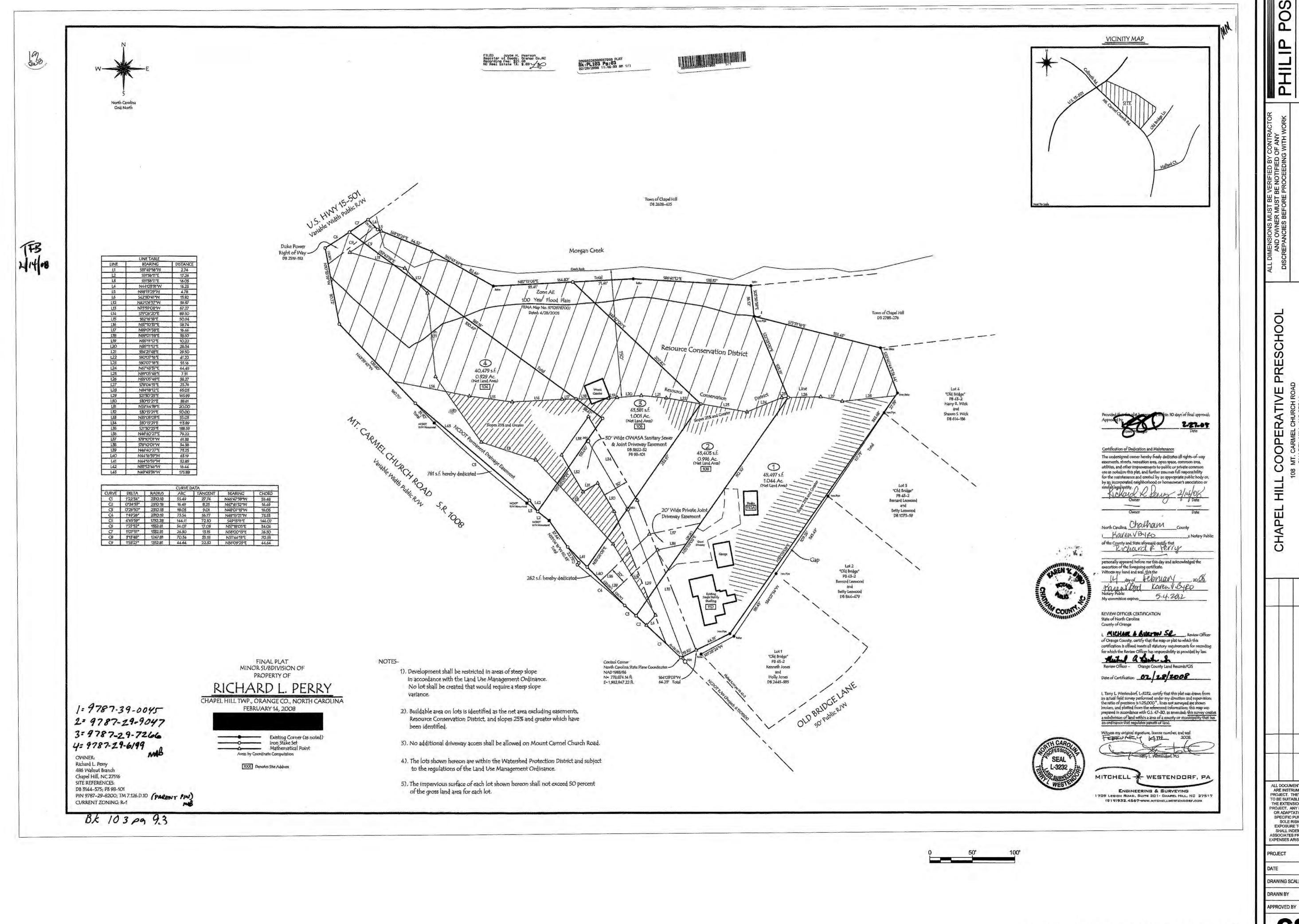


ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIEY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND
EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CHCP1601 2016-08-24 DRAWING SCALE APPROVED BY

**CS8002** 

SHEET 12 OF 13



NOT FOR CONSTRUCTION

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATES; AND OWNER
SHALL INDEMNIFY AND HOLD HARMLESS PENNONI
ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND
EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PROJECT CHCP1601

DATE 2016-08-24

DRAWING SCALE 1"= 50'

DRAWN BY DMC

APPROVED BY PCB

**CS9001** 

SHEET 13 OF 13

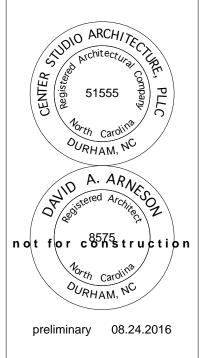
CENTER STUDIO ARCHITECTURE

www.centerstudioarchitecture.com downtown durham, nc 919.688.2700

> 0 S S Φ Φ

0 C a C

 $\boldsymbol{\omega}$ S



first floor plan

A1.02

### roof plan key notes

1 standing seam galvalume roof 2 white TPO roof

3 round skylights

4 parapet wall

5 hvac equipment mounted on roof 6 wood awning below

7 existing double 20" hemlock tree to remain

8 round skylight above 9 downspout

10 cistern below for rainwater harvesting

11 scupper

## roof plan legend

indicates extent of roof

indicates exterior wall below

0 S

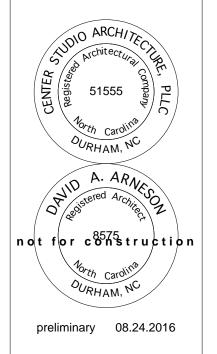
CENTER STUDIO ARCHITECTURE

www.centerstudioarchitecture.com

downtown durham, nc 919.688.2700

S Φ a ç o o p rrmel c a c

 $\boldsymbol{\omega}$ S



roof plan

A1.03

1 roof plan A1.03 1/8"= 1'-0"