



AGENDA

Wednesday, July 7, 2021: 6:00 PM

Town Council Agenda Meeting

C. Michael Haney Community Room: Southern Pines Police Department
450 W. Pennsylvania Ave

1. CALL TO ORDER

2. TOWN MANAGER'S COMMENTS

3. REVIEW PROPOSED ITEMS FOR JULY 13 AGENDA

a. Council Recognition

i. Sprucing Up Southern Pines Winners

The Appearance Commission has received nominations for its 2021 Sprucing Up Southern Pines awards program. Eight winners have been chosen and they have been invited to the July 13 meeting.

ii. West Southern Pines Task Force

Mayor Haney would like to recognize the task force for their recent work in collaboration with the Town and Development Finance Initiative.

b. Public Hearings

i. AX-02-21: Voluntary Annexation Petition for 465 Petty Street

Gareth and Lorraine Williams have petitioned the Town for a voluntary annexation of a contiguous +.353-acre parcel, located at 465 Petty Street, PIN 858220802013 (PARID 00991745).

ii. CU-01-21: Conditional Use Permit Request for a Monopole at 184 Wooster Road

Mr. Ryan Woods of Tower Engineering Professionals has submitted an application on behalf of Carolina Power & Light to construct a new 140 foot-tall monopole tower at the existing Duke Energy substation.

c. Proposed Revisions to Town Code Chapter 50, Water and Sewer Use Ordinance

As discussed at the June 28 work session, staff has reviewed the current Water and Sewer Use Ordinance and proposes a number of revisions to the existing code. Staff has prepared the first set of amendments, which are largely administrative in nature, for consideration at the July 13 meeting. Revisions to the backflow ordinance will be presented at a future meeting, to allow for continued discussions and consistency with the surrounding communities who are also reviewing

their backflow ordinances.

d. Consent Agenda

All items listed below are considered routine and will be enacted by one motion and without discussion.

i. AX 03-21: Approve Resolution to Set Public Hearing for Annexation Petition

Robert and Tracy Currie have petitioned the Town for a voluntary annexation of a contiguous +.459-acre parcel, located at 260 Saunders Blvd. Upon receipt of a Certificate of Sufficiency from the Town Clerk, the next step is to adopt a resolution setting a date for a public hearing. The hearing is proposed for August 10.

ii. RA-02-21: Approve Resolution to Set Public Hearing for Right-of-Way Abandonment

The Town, in partnership with the Mid-South residential development, proposes to abandon 175 linear feet of an 80' right-of-way for West Michigan Avenue, northwest of the intersection with Pine Street. The hearing is proposed for August 10.

iii. Approve Minutes

1. April 7, 2021 Budget Retreat
2. April 26, 2021 Work Session
3. May 24, 2021 Work Session
4. June 2, 2021 Agenda Meeting
5. June 2, 2021 Closed Session
6. June 8, 2021 Business Meeting
7. June 28, 2021 Work Session

4. CLOSED SESSION UNDER NC GENERAL STATUTE 143-318.11(a) (4) TO DISCUSS POTENTIAL INCENTIVES RELATED TO AN ECONOMIC DEVELOPMENT PROJECT

5. ADJOURNMENT

**AN ORDINANCE TO EXTEND THE CORPORATE LIMITS
OF THE TOWN OF SOUTHERN PINES, NORTH CAROLINA
AX-02-21: 465 PETTY STREET**

THAT WHEREAS, the Town Council has been petitioned under G.S. 160A-31 as amended to annex the area described herein; and

WHEREAS, the Town Council has by resolution directed the Town Clerk to investigate the sufficiency of said petition; and

WHEREAS, the Town Clerk has certified the sufficiency of said petition and a public hearing on the question of this annexation, AX-02-21, was scheduled to be held in regular session of the Town Council at the Douglass Community Center at 6:00 P.M. on the 13th day of July, 2021 after due notice by publication on June 27, 2021; and

WHEREAS, after the completion of said public hearing and upon consideration of any comments, objections or presentation at that hearing, and

WHEREAS, based on the certification of the Town Clerk and other information presented at said hearing, Council finds it proper and in the best interest of the Town to annex the following parcel according to the requirements of G.S. 160A-31:

Lying and being in McNeill Township, Moore County, North Carolina, south of and adjoining a 50' road: BEGINNING at an existing iron pipe, most southerly corner of Lot 90, Map Book 2, Page 50 and runs as Lot No. 91, N 36-45 W 150.00' to an iron rod on the edge of a 50' road; thence as said road, N 53-15 E 100.00' to an iron rod; thence as Lot 88, S 36-45 E 150.00' to an existing concrete marker; thence S 53-15 W 100.00 to the BEGINNING, containing .34 acres, more or less. Being Lots 89 and 90, P.F. Buchan Subdivision recorded in Map Book 2, Page 50, Moore County Registry.

A map of the area herein described is provided with this Ordinance as Attachment A.

NOW, THEREFORE, BE IT ORDAINED AND ESTABLISHED by the Town Council of the Town of Southern Pines, North Carolina in regular session this 13th day of July, 2021:

Section 1. By virtue of the authority granted by G.S. 160A-31, as amended, the above described territory is hereby annexed and made part of the Town of Southern Pines as of the 13th day of July, 2021.

Section 2. Upon and after the 13th day of July, 2021 the above described territory and its citizens and property shall be subject to all debts, laws, ordinances and regulations in force in the Town of Southern Pines and shall be entitled to the same privileges and benefits as other parts of the Town of Southern Pines. Said territory shall be subject to municipal taxes according to G.S. 160A-58.10.

Section 3. The Mayor of the Town of Southern Pines shall cause to be recorded in the office of the Register of Deeds of Moore County, and in the office of the Secretary of State at Raleigh, North Carolina, an accurate map of the annexed territory, described in Section 1 hereof. Such a map shall also be delivered to the County Board of Elections as required by G.S. 163-288.1.

Section 4. This Ordinance shall be and remain in full force and effect from and after the date of its adoption.

Adopted this 13th day of July, 2021.

ATTEST:

TOWN OF SOUTHERN PINES

Elizabeth Robertson, Deputy Town Clerk

Carol R. Haney, Mayor

APPROVED AS TO FORM:

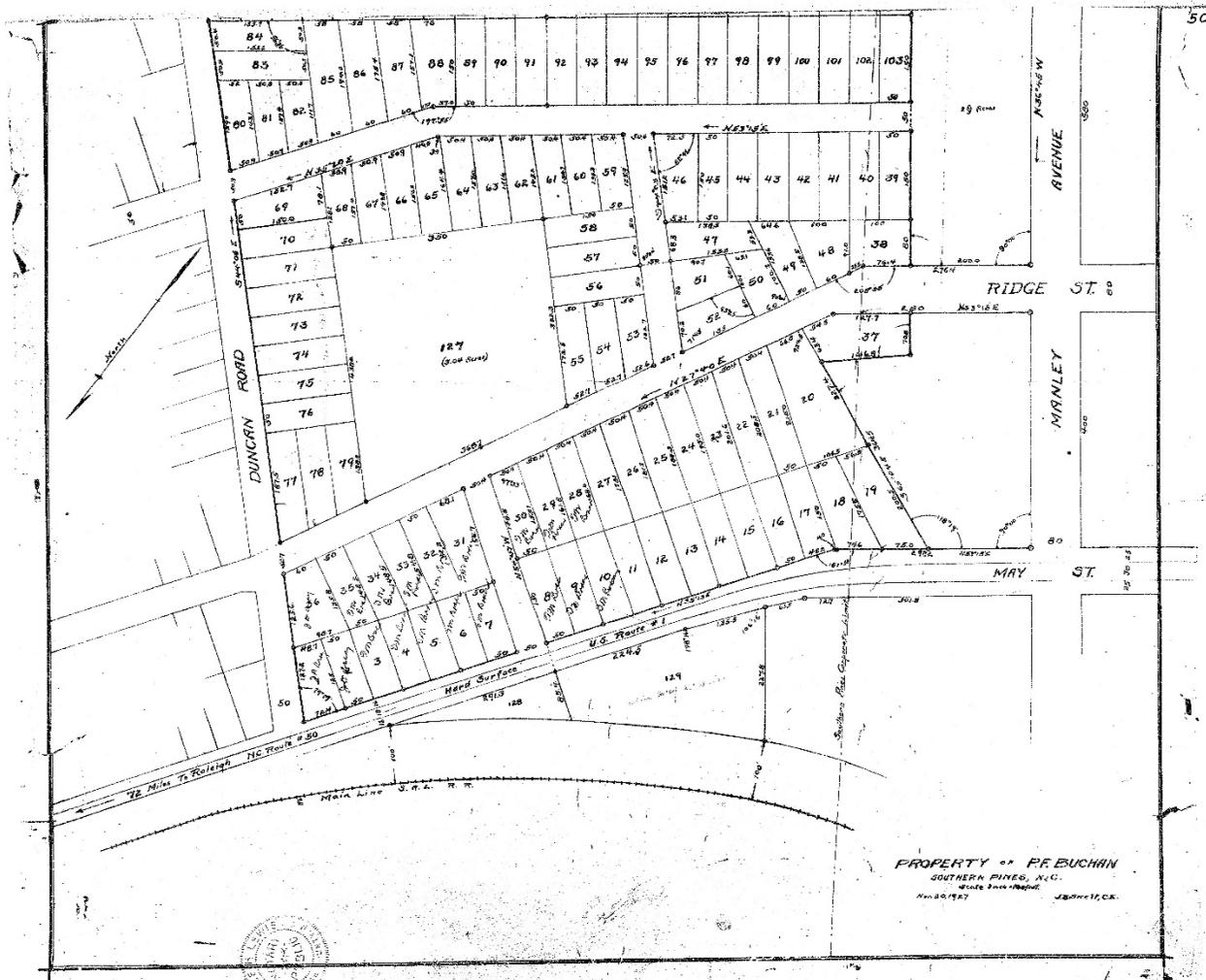
Douglas R. Gill, Town Attorney

I certify that this Ordinance was adopted by the Town Council of the Town of Southern Pines at its meeting on July 13, 2021 as shown in the Minutes of the Town Council for that date.

Elizabeth Robertson, Deputy Town Clerk

ATTACHMENT A

SECTION 1



Agenda Item

To: Reagan Parsons, Town Manager

Via: BJ Grieve, Planning Director

From: Cindy Williams, Planning Technician

Subject: AX-02-21: Hold a Public Hearing for a Request for Voluntary Annexation of Property Contiguous to the Corporate Limits of the Town of Southern Pines; ±.353 Acres; Petitioners: Gareth and Lorraine Williams

Date: July 13, 2021

I. SUMMARY OF APPLICATION REQUEST:

Gareth and Lorraine Williams are requesting voluntary annexation of a contiguous parcel that is currently outside of the corporate limits of the Town of Southern Pines. The subject parcel is identified PIN 858220802013 (PARID 00991745). Per the Moore County tax records, the property owners are listed as Gareth L. Williams and Lorraine A. Williams.

II. TOWN COUNCIL ACTION (June 8, 2021 Regular Meeting of the Town Council):

During the June 8, 2021 regular meeting of the Town Council, the Town Council approved a *Resolution Directing the Clerk to Investigate a Petition Received Under G.S. 160A-31* and a *Resolution Fixing Date of Public Hearing on Question of Annexation Pursuant to G.S. 160A-31, As Amended*. The public hearing is scheduled to be held on July 13, 2021 during the regular business meeting of the Town Council. All public notice requirements associated with this annexation request have been met.

III. PROJECT INFORMATION:

A. Physical Addresses:

465 Petty Street
Southern Pines, NC 28387

B. Property Owners/Applicants:

Gareth L. Williams
Lorraine A. Williams
465 Petty Street
Southern Pines, NC 28387

C. Property Identification Number (PIN) & Parcel Identification:

PIN: 858220802013; PARID: 00991745

D. Size of Property:

Total Current Acreage: ±.353 acres

IV. STAFF COMMENTS:

- The applicant has submitted an annexation petition accompanied by a map and a written metes and bounds description of the subject property.
- The request is a voluntary request for a contiguous annexation as the adjacent properties to the east are within the corporate limits of the Town of Southern Pines (see Figure 1). The subject property is presently zoned RS-1 (Residential Single-Family) and the adjacent properties are also presently zoned RS-1.
- At the June 8, 2021 regular meeting of the Town Council, the Town Clerk was directed to investigate a Petition for Voluntary Annexation received under G.S. 160A-31 and the Town Council approved a date for a public hearing on the annexation petition.
- The purpose of this agenda item is to hold a public hearing to consider the annexation request.
- **Comprehensive Long Range Plan Analysis:**
 - The subject property is identified as “Residential” on the Comprehensive Long Range Plan (CLRP) Future Land Use Map (see Figure 3). Per the CLRP 2015-2016 update:

“Residential. This designation encompasses the majority of Southern Pines’ residential land, providing for single-family and attached housing at development densities ranging from one unit per acre in areas that are less intensively developed to up to twelve units per acre that are clearly more urban. Elementary schools, civic uses, parks and neighborhood scale commercial services may be authorized through the rezoning process without amending the future land use map.”

Figure 1: Adjacent Property (Area to be Annexed Outlined in Red)



 Town of Southern Pines Corporate Limits

 Town of Southern Pines ETJ

Figure 2: Zoning Map (Area to be Annexed Outlined in Black)



Figure 3: CLRP Future Land Use Map (Area to be Annexed Outlined in Blue)



V. ATTACHMENTS:

1. Petition
2. Written metes and bounds description
3. Survey of subject property

VI. TOWN COUNCIL ACTION:

To either approve or deny the *Voluntary Annexation*, the Town Council may choose one of the following motions or any alternative they wish:

- 1) I move to adopt an Ordinance approving the Voluntary Annexation request in application AX-02-21 for the property as defined in the submitted written metes and bounds description, and to have the Ordinance effective immediately.

-or-

- 2) I move to deny the Voluntary Annexation in application AX-02-21 for the property as defined in the submitted metes and bounds description.

**PETITION FOR VOLUNTARY ANNEXATION OF REAL
PROPERTY CONTIGUOUS TO THE
TOWN OF SOUTHERN PINES, NORTH CAROLINA**

Town of Southern Pines
APR 26 2021
Administration

February 23, 2021

TO THE TOWN COUNCIL OF THE TOWN OF SOUTHERN PINES, NORTH CAROLINA:

- 1. We the undersigned owners of real property respectfully request that the area described in Paragraph 2 below be annexed to the Town of Southern Pines, North Carolina, pursuant to G. S. 160A-31.**
- 2. The area requested to be annexed is contiguous to the Town of Southern Pines, and the boundary of such territory is described by metes and bounds as follows:**

A legal metes and bounds description of boundaries of annexation, or a legal metes and bounds description of boundaries must be included.

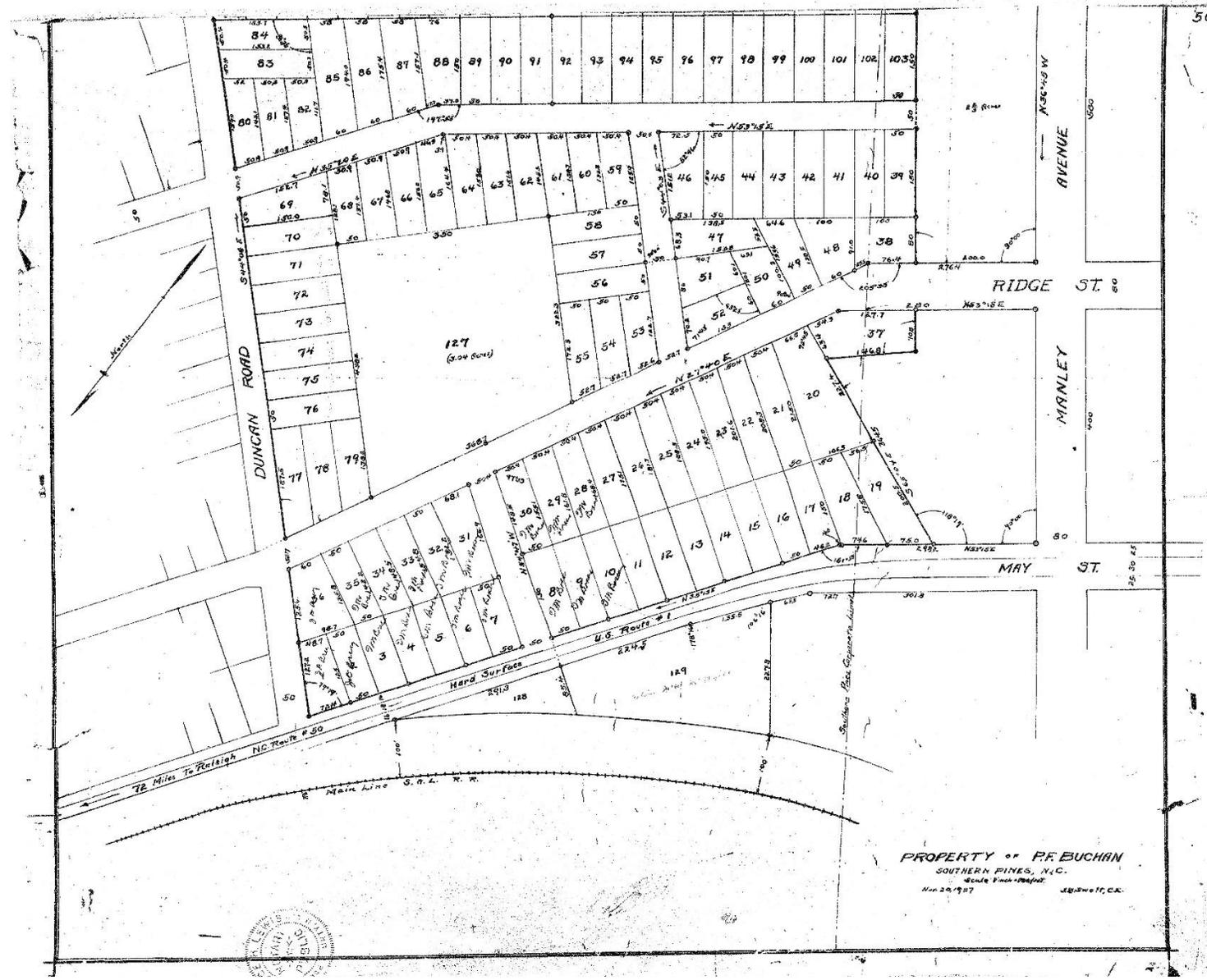
This property is located on Petty St near the new development, The Cottages on May St. It is .3 of an acre, and currently has town water. We would like to be annexed in to hook up to town sewer and trash removal.

<u>Name & Signature of Owner</u>	<u>Address of Owner</u>
<u>Ganesh Williams</u>	<u>465 Petty St, Southern Pines, NC</u>
<u>L Williams</u>	_____
<u>Lorraine A. Williams</u>	_____
<u>Lorraine A Williams</u>	_____
_____	_____
_____	_____
_____	_____
_____	_____

Two copies of the petition, an 11" x 17" map showing location and boundaries of the area requested to be annexed, a legal metes and bounds description and physical address for the property (new projects or properties that are being subdivided are to obtain address numbers from the Southern Pines Planning office while properties with existing structures are to obtain/confirm those addresses through the Southern Pines Fire Department) are to be filed with the Town Clerk, 125 S. E. Broad Street, Southern Pines, NC 28387.

Lying and being in McNeill Township, Moore County, North Carolina, South of and adjoining a 50' road: BEGINNING at an existing iron pipe, the most southerly corner of Lot 90, Map Book 2 Page 50, and runs as Lot No. 91, N 36-45 W 150.00' to an iron rod on the edge of a 50' road; thence as said road, N 53-15 E 100.00' to an iron rod; thence as Lot 88, S 36-45 E 150.00' to an existing concrete marker; thence S 53-15 W 100.00 to the BEGINNING, containing .34 acres, more or less. Being Lots 89 and 90, P. F. Buchan Subdivision recorded in Map Book 2 Page 50, Moore County Registry.

SECTION 1



Agenda Item

To: Reagan Parsons, Town Manager

From: Suzy Russell, Planner II

Subject: CU-01-21, Conditional Use Permit; New Construction of a Carolina Power & Light (Duke Energy) Monopole at the existing Duke Energy Substation; 184 Wooster Road; Authorized Agent, Tower Engineering Professionals, Owner, Carolina Power & Light

Date: July 13, 2021

I. SUMMARY OF APPLICATION REQUEST:

On behalf of Carolina Power & Light, Mr. Ryan Woods of Tower Engineering Professionals, has submitted an application for a Conditional Use Permit for the new construction of a 140', (20' embedded underground), Valmont Class HID direct embedded monopole tower at an existing Duke Energy substation. The purpose of installing this monopole is to upgrade Duke Energy's internal communications to control and run diagnostics on the existing substation located at 184 Wooster Road. The subject parcel is a 1.49 acre parcel located within the Town of Southern Pines extra-territorial jurisdiction (ETJ) and in the Rural Residential (RR) zoning district. The subject property is identified as PIN: 859205196117 (PARID: 00032107). The property owner according to the Moore County tax records is Carolina Power & Light.

II. PLANNING BOARD ACTION:

At the June 17, 2021 regular meeting of the Planning Board, with one (1) member absent (Mr. Andy Bleggi), the Planning Board held a public hearing and followed the rules for a legislative public hearing per UDO §2.5.2 which states that when the Planning Board serves as a recommending body for an action requiring a quasi-judicial hearing by the Town Council, the Board may follow the rules for a legislative hearing to gather broader public testimony. Planning II, Ms. Suzy Russell, presented a review of the Conditional Use Permit application. Ms. Russell reviewed the application for compliance with the criteria for a Conditional Use Permit and the standards for Towers and Related Structures, and the applicable sections of the Unified Development Ordinance.

Following staff's comments, the applicant, Mr. David McNeil, representation for Duke Energy, presented the case for approval of the Conditional Use Permit. Mr. McNeil explained that the existing towers in North Carolina are no longer going to be provided by Century Link so Duke Energy is in the process of providing them, and by doing so, will create a smarter grid. Mr. McNeil stated that the communications towers are used to improve communications and support for reporting and monitoring the transmission equipment. Duke Energy is able to collect data and control the transmission equipment

reliably. The Planning Board followed with questions for Mr. McNeil as well as the attorney, Mr. Toby Coleman, for Duke Energy. Mr. Carroll asked if anything will be added to the tower in the future. Mr. Coleman stated that they have no intent to have co-location and it has not been studied. Mr. Carter asked what the difference is between fiber versus cambium towers. Mr. Coleman stated that a cambium network creates a point to point network with the use of wide band radio. Mr. Dowdy asked how tall the tallest tower is at this site. Mr. Coleman stated that there are no towers, but the transmission line is in the 40-60-foot range.

After closing the public hearing, a motion was made by Mr. Lem Dowdy to adopt findings of fact, was seconded by Mr. Cooper Carter, and was approved by those in attendance for the Planning Board. Mr. Lem Dowdy moved to recommend approval of the Conditional Use Permit CU-01-21, Mr. Carter seconded the motion and was approved by those in attendance for the Planning Board.

III. PROJECT INFORMATION:

A. Property Owner & Applicant Information:

i. Property Owners:

Carolina Power & Light
Dale Brooks
PO Box 14042
Saint Petersburg, FL 33733

ii. Applicant / Authorized Agent:

Tower Engineering Professionals
Ryan Woods
326 Tryon Road
Raleigh, NC, 27603

B. Project History and Site Information:

i. Location:

The subject property is located at the northern end of Wooster Road and lies to the northwest side of Preston Lane. (See Figure 1).

ii. Zoning:

The site is currently zoned Rural Residential (RR). (See Figure 2).

iii. Comprehensive Long Range Plan and Future Land Use Map Designation:

The subject property is designated as Rural Residential in the GIS CLRP layer. The subject property is designated as low density residential on the Future Land Use Map. *The low-density residential designation applies to those single-family neighborhoods with development densities of between three-quarters of an acre to five acres per unit, restricting land uses to residential uses, small-scale institutional uses supporting low-density residential neighborhoods, and small-scale*

agricultural uses. Where residential development is already established at densities between five and twenty acres per unit, this designation anticipates that those properties will not be subdivided further. (See Figure 3).

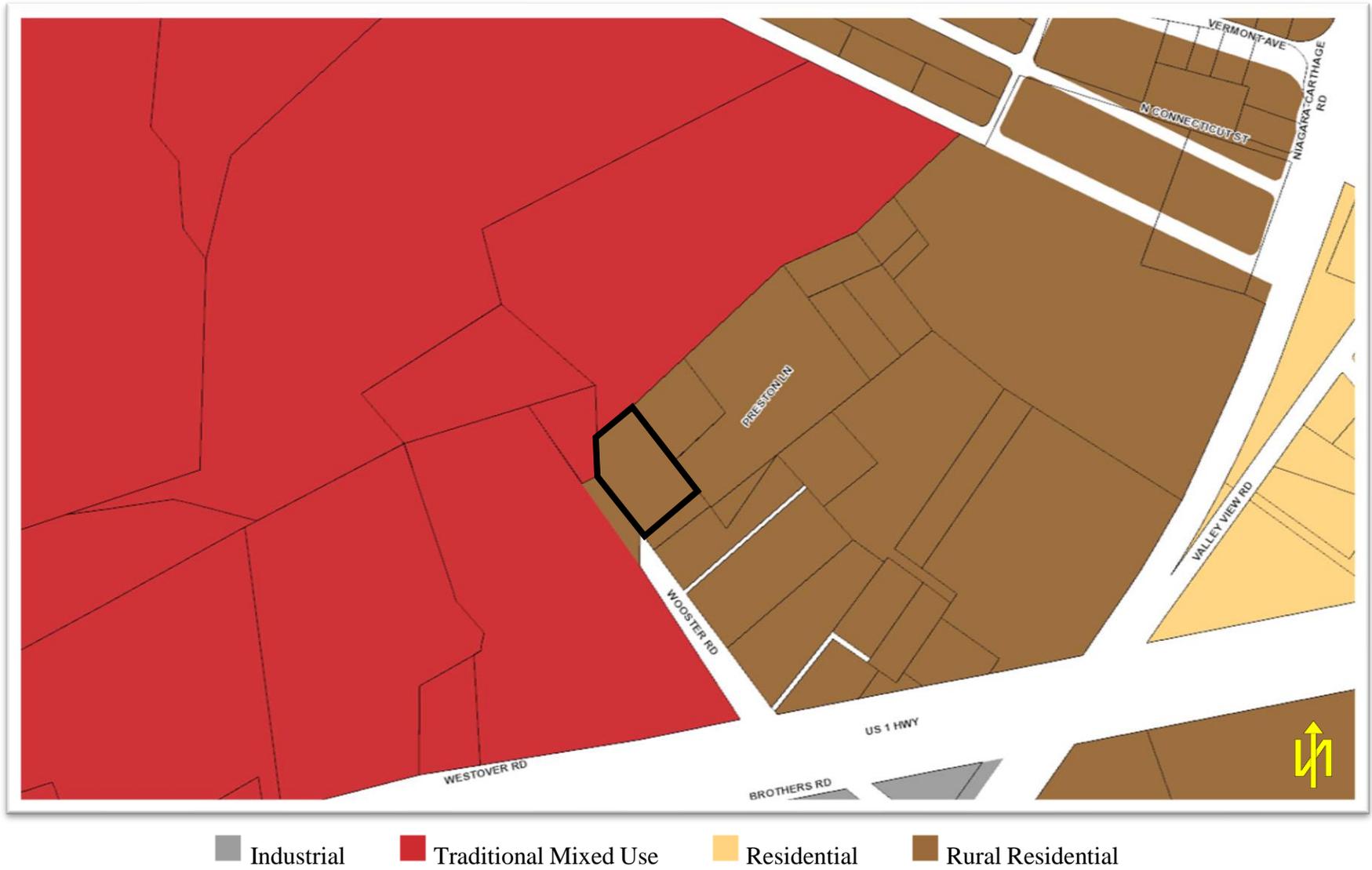
Figure 1: Vicinity Map (Subject Property Outlined in Black):



Figure 2: Zoning Map (Subject Property (RR) Outlined in Black):



Figure 3: Comprehensive Long Range Plan (CLRP) Map (Subject Property (RR) Outlined in Black):



IV. STAFF REVIEW:

A. Application Review Dates:

- Conditional Use Permit Application Submitted: February 01, 2021
- Application Complete: February 04, 2021
- TRC Review: March 02, 2021
- Notice of Planning Board Public Hearing:
 - Posted On-site: February 22, 2021
 - Mailed: February 25, 2021
 - Internet: March 3, 2021
 - Published: March 3, 2021
 - Administrative Continuance Requested and Granted: March 1, 2021
 - Continuance Notice Mailed: March 3, 2021
- Planning Board Agenda Meeting: Continued from March 11, 2021 to June 10, 2021
- Planning Board Public Hearing: Continued from March 18, 2021 to June 17, 2021
 - Posted On-site Checkup: May 12, 2021
 - Mailed: June 1, 2021
 - Internet: June 1, 2021
 - Published: June 2, 2021

- Town Council Public Hearing: July 13, 2021

B. Process of Review:

The procedures for review and approval of a Conditional Use Permit, per UDO §2.21 establishes a process and standards to approve certain uses that, because of unique characteristics or potential impacts on adjacent land uses, are not permitted in zoning districts as a matter of right.

C. Criteria for Review:

The criteria for review for this Conditional Use Permit application submittal and approval are as follows:

- Conditional Use Permit - UDO §2.21.7 (A-F):
- Towers and Related Structures – UDO §5.23 (A-D)

D. Staff Comments:

Compliance with the UDO:

i. Compliance with Conditional Use Permit – UDO §2.21.7 (A-F):

A conditional use is permitted only if the applicant demonstrates that:

- A. *The proposed conditional use shall comply with all regulations of the applicable zoning district and any applicable supplemental use regulations;*

The proposed 140' (20" embedded into the ground) monopole land use falls under towers taller than 50' in the land use code exhibit in the UDO, land use code 4233b, and is allowed in the RR zoning

district only after approval of a Conditional Use Permit. The applicable supplemental use regulations for proposed monopole found in UDO §5.23 can be found below. The applicant appears to be generally consistent with these criteria.

- B. The proposed conditional use shall conform to the character of the neighborhood in which it is located and not injure the use and enjoyment of property in the immediate vicinity for the purposes already permitted;*

The subject property is currently an existing Duke Energy substation and does not injure property in the immediate vicinity. Planning staff finds no reason to believe that the addition of the proposed tower will substantially change the current character. The applicant appears to be generally consistent with these criteria and planning staff has drafted findings of fact accordingly. However, those who reside in the neighborhood and may have testimony material to this criteria may attend the public hearing.

- C. Adequate public facilities shall be provided as set forth herein;*

The subject property is within the ETJ of Southern Pines and is not served by public facilities. The applicant appears to be generally consistent with these criteria.

- D. The proposed use shall not impede the orderly Development and improvement of surrounding property for uses permitted within the zoning district or substantially diminish or impair the property values within the neighborhood;*

The applicant has stated the proposed tower will provide an improvement to the existing Duke Energy Substation enabling faster response times for outages and diagnostics testing. The applicant appears to be generally consistent with these criteria. A notice of the public hearing was mailed to adjoining landowners who may attend the hearing and present evidence regarding impacts to orderly development and/or property values in the neighborhood.

- E. The establishment, maintenance, or operation of the proposed use shall not be detrimental to or endanger the public health, safety, comfort or general welfare;*

The Duke Energy substation is existing and operates to provide electrical distribution services to the surrounding area. Planning staff has drafted findings of fact regarding these criteria, but the Planning Board and Town Council should first consider any and all

evidence presented at the public hearing. A notice of the public hearing was mailed to adjoining landowners who may attend the hearing and present evidence regarding perceived detrimental effects to public health, safety, comfort and general welfare *and*,

F. The public interest and welfare supporting the proposed use shall be sufficient to outweigh individual interests that are adversely affected by the establishment of the proposed use

The Duke Energy substation benefits the surrounding neighborhood by supplying electrical distribution services and the new proposed monopole will allow for the reliable and safe operation of the electric system. The planning staff, prior to the public hearing, finds that the applicant appears to be generally consistent with these criteria and has drafted findings of fact accordingly. However, additional evidence may be presented at the public hearing.

ii. Compliance with Towers and Related Structures – UDO §5.23 (A-D):
Towers and related structures that are fifty (50) feet or taller in Height shall require a Conditional Use Permit prior to construction or installation and are subject to the following standards:

A. Towers cannot be located in the HCO, CB, NB or OS districts.

The subject property is within the Rural Residential (RR) Zoning District. The applicant appears to be generally consistent with these criteria

B. Towers cannot be located within one thousand (1,000) feet of any RE, RS or RM zoning district or any residential development in a PD zoning district.

The proposed monopole would be located next to a PD zoned property that does not have residential development located on it.

C. Towers taller than fifty (50) are allowed by Conditional Use Permit in the RR, GB and FRR districts.

This is why this CUP is before you today for the proposed 140' tower (20' embedded into the ground).

D. The Conditional Use Permit application shall provide information that:

(1) Demonstrates the antenna's compliance with State and Federal radio frequency emission standards.

(2) Specifies the tower height and design and include a cross-section of the structure.

- (3) Details any technical, engineering, economic and other pertinent factors governing the selection of the proposed design.*
- (4) Demonstrates the tower's compliance with applicable structural standards, which may include certification that the tower will withstand sustained winds in accordance with local building codes or nationally recognized standards.*
- (5) Describes the failure characteristics of the tower and demonstrates that the site and setbacks are of adequate size to contain debris.*
- (6) Describes the tower's maximum capacity, including the number of antennas that it can accommodate for collection, taking into consideration radio frequency interference, mass, height and other characteristics, as well as options to overcome any problems that these considerations may pose to service delivery.*
- (7) Assesses the environmental impact of the facility siting, including the impact on adjacent structures and districts as well as on historic sites and streetscapes.*
- (8) Determines whether the construction of the tower and its reception and transmission functions will interfere with the usual and customary transmission or reception of radio, television and other services on adjoining properties.*
- (9) Documents the due diligence in seeking and subsequent failure to find space on an existing tower to collocate their antenna(s) (if permission for tower construction is being sought).*
- (10) Documents compliance with or exemption from FCC, FAA, MEPA and any other federal or state regulations applicable to the siting; statements must be issued from the FCC, FAA or the state attesting to the proposed facility's compliance.*
- (11) Includes an agreement between the Town and the tower owners and their successors to allow shared use of the tower if:
 - (a) Capacity exists based on existing and planned use;*
 - (b) A future Applicant for space on the tower agrees in writing to pay any reasonable change for shared use; and*
 - (c) The potential use is technically compatible.**
- (12) Documents anticipated maintenance needs, including frequency of service, personnel needs, equipment needs and traffic, noise or safety impacts of such maintenance.*
- (13) Documents liability insurance or bonding where applicable.*
- (14) Includes approval of the site owner, if different from the tower owner, to apply for a permit.*

The applicant has provided adequate documentation and is generally compliant with the applicable standards. The documents submitted can be found in the attachment portion of this report.

iii. General Staff Comments

- The applicant has submitted a narrative addressing compliance with the criteria for a Conditional Use Permit as well as a narrative addressing compliance with Towers and Related Structures, copies of which are attached to this report.
- The Duke Energy substation located at the subject property is within the Town of Southern Pines extraterritorial jurisdiction.
- The proposed addition of the monopole at the existing Duke Energy substation does not trigger development design standards found within Chapter 4 of the UDO.
- The installation of the proposed monopole may be subject to permitting through the Inspections Division of the Community Development Department and site plan review. All state level development regulation and the applicable development regulations in the Unified Development Ordinance (UDO) must be met prior to site plan approval.

E. Outside Agency Comments:

A request for comments from agencies was emailed to representatives of the Town of Southern Pines Engineering, Streets, Utilities, Fire and Recreation & Parks Departments as well as representatives of the North Carolina Department of Transportation, U.S. Fish and Wildlife Service and the Regional Land Use Advisory Commission on February 25, 2021. Any comments received after the publishing of this report will be forwarded to the Planning Board at the public hearing as an exhibit.

- Comments from the North Carolina Department of Transportation were received on March 1, 2021. The comments state as follows:
We do not have any comments on this development at this time. I am verifying the length of a nearby Sate road. Depending on what information I get back, we may have further comments.
- Comments from the Town of Southern Pines Fire Marshal were received on February 24, 2021. The comments state as follows:
I see no issues with this project.
- Comments from the Town of Southern Pines Engineer were received on March 1, 2021. The comments state as follows:
No comments from Engineering.

V. ATTACHMENTS:

The following materials are provided as attachments to this staff memorandum:

1. Attachment A: Findings of fact for Conditional Use Permit CU-01-21
2. Conditional Use Permit Application
3. Narrative

4. Federal Aviation Administration Determination
5. Structural Analysis Report
6. Drawing Set

TOWN COUNCIL ACTION:

To approve or deny a *Conditional Use Permit* application, the Town Council shall make findings of fact and conclusions to the applicable standards. The Town Council may first vote on whether the application is complete and whether the facts presented are relevant to the case. The Town Council shall then vote on whether the application complies with the criteria as set forth in Section 2.21.7(A-F) Criteria for a Conditional Use Permit, Criteria A-F. The Town Council may choose from the following draft motions or any alternative they wish:

I move to:

1. Adopt Attachment “A” of the staff report as our Findings of Fact regarding the proposed Conditional Use Permit CU-01-21.
2. Adopt Attachment “A” of the staff report as our Findings of Fact regarding the proposed Conditional Use Permit CU-01-21 with the following changes_____.

Next, the Town Council shall vote on whether to approve, deny, or approve with conditions the proposed Conditional Use Permit. The Town Council may choose from the following draft motions, or any alternative they wish:

I move to:

1. Approve Conditional Use Permit CU-01-21.
2. Deny Conditional Use Permit CU-01-21
3. Approve Conditional Use Permit for CU-01-21 with the following additional conditions....

ATTACHMENT “A”
Draft Town Council Findings of Fact
Conditional Use Permit Application CU-01-21

Finding of Fact #1:

The Town Council finds that the application is complete and that the facts submitted are relevant to the case because the request for Conditional Use Permit approval has met the specified submittal requirements as required in the Town of Southern Pines UDO Appendices and the evidence submitted was sworn testimony by qualified experts or provided through substantiated documentation.

Finding of Fact #2:

The Town Council finds that the application complies with UDO §2.21.7 Criteria for a Conditional Use Permit, Criteria A-F, in that:

A. The proposed conditional use shall comply with all regulations of the applicable zoning district and any applicable supplemental use regulations;

1 The Town Council finds that the application CU-01-21 does not deviate from any
2 applicable standards summarized in §3.5.2 *Rural Residential Zoning District Standards* of
3 the Unified Development Ordinance and the applicable supplemental use regulations
4 summarized in §5.23 *Towers and Related Structures standards* of the Unified
5 Development Ordinance.

B. The proposed conditional use shall conform to the character of the neighborhood in which it is located and not injure the use and enjoyment of property in the immediate vicinity for the purposes already permitted;

6 The Town Council finds that the proposed installation of a new monopole at the existing
7 Duke Energy substation will not affect the character of the neighborhood because the
8 addition of the 140’ monopole will not alter the substation overall footprint.

C. Adequate public facilities shall be provided as set forth herein;

9 The Town Council finds the existing Duke Energy substation is located within the Southern
10 Pines extraterritorial jurisdiction and is not served by TOSP public facilities.

D. The proposed use shall not impede the orderly development and improvement of surrounding property for uses permitted within the zoning district or substantially diminish or impair the property values within the neighborhood;

11 The Town Council finds that the proposed development will likely not have detrimental
12 impacts on the permitted uses of adjacent properties or impair property values because it
13 is consistent with the existing zoning standards.
14

E. The establishment, maintenance or operation for the proposed use shall not be detrimental to or endanger the public health, safety, comfort, or general welfare; and

15 The Town Council finds that the installation of the 140' Duke Energy monopole will not
16 have detrimental impacts on the safety, comfort or general welfare because this
17 development will be required to adhere to all site development standards and building
18 standards, including, but not limited to compliance with the building and fire code. The
19 applicants will be required to meet all regulatory measures.

F. **The public interest and welfare supporting the proposed use shall be sufficient to outweigh individual interests that are adversely affected by the establishment of the proposed use;**

20 The Town Council finds that the proposed development complies with applicable standards
21 and regulations found within the Town of Southern Pines UDO that are based on the public
22 interest and welfare. Planning staff recommends that the Town Council carefully consider
23 the draft findings following the public hearing and evidence presented therein.



Conditional Use Permit

REQUIRED APPLICATION MATERIALS:

- ✓ **Application fee** in the amount of **\$1,500.00 + \$25.00 per lot for a Major Subdivision**
- ✓ **Completed Application** for a Conditional Use Permit signed by the applicant. Please do not leave anything blank and make sure that all of the information provided is correct.
- ✓ **Appointment of Agent**, if applicable, signed by the property owner(s) and the agent.
- ✓ **Deed** copy to provide proof of ownership and property boundaries.
- ✓ **Project description**: Please tell us what currently exists and what changes you are proposing. Please attach written descriptions, maps, illustrations/renderings, photographs, material samples, etc. as necessary.
- ✓ **Written narrative**: It is the responsibility of the applicant to demonstrate compliance with all applicable criteria. Please address all criteria listed in **UDO §2.21.7**. The list of criteria is attached.
- ✓ **Electronic copy (PDF) of all application materials** submitted to plan@southernpines.net.

PLEASE SUBMIT ONLY ONE (1) COMPLETE SET OF ALL MATERIALS.

REVIEW AND APPROVAL:

1. **Staff review**: Planning staff will review the application and notify the applicant if additional information or materials are needed.
2. **Public hearings**: The applicant is expected to attend a public hearing on the application before the Planning Board and before the Town Council the following month. (Please refer to the **Application Processing Timeline** to determine the hearing dates.) The Planning Board will recommend approval, conditional approval or denial to the Town Council. The Town Council will consider that recommendation, as well as evidence and testimony presented, and approve, conditionally approve or deny the Conditional Use Permit.
3. **Issuance of a Conditional Use Permit**: If the request is approved by the Town Council, a Conditional Use Permit setting forth any conditions of approval will be issued to the applicant.

PLANNING DEPARTMENT
TOWN OF SOUTHERN PINES
180 SW BROAD STREET
SOUTHERN PINES, NORTH CAROLINA 28387
plan@southernpines.net (910) 692-4003 www.southernpines.net



Conditional Use Permit Application

Fee: \$ _____ Date Paid: _____ Case No.: CU- _____ - _____

Project Information:

Street Address: 184 Wooster Road, Southern Pines, NC 28387

PIN: 859205196117

Parcel ID: 00032107

Site Size: 1.49 Acres

Zoning: RR - Rural Residential

Applicant:

Name(s): Tower Engineering Professionals (Ryan Woods)

Email: rjwoods@tepgroup.net

Phone: 919-943-0397

Mailing Address: 326 Tryon Rd, Raleigh, NC 27603

Authorized Agent, if different from Applicant:

Name(s): _____

Email: _____

Phone: _____

Mailing Address: _____

Legal Property Owner(s), if different from Applicant:

Name(s): Carolina Power & Light

Email: dale.brooks@duke-energy.com

Phone: (704) 868-6302

Mailing Address: PO Box 14042, Saint Petersburg, FL 33733

TO THE TOWN OF SOUTHERN PINES PLANNING BOARD AND TOWN COUNCIL:

I, the undersigned, do hereby make application to and petition the Planning Board and Town Council to grant a Conditional Use Permit as required by the Town of Southern Pines Zoning Ordinance. The following information is submitted in support of this application:

The property which is the subject of this application is located on the NW side of Preston Ln. (~~St./Ave.~~), between Wooster Rd (~~St./Ave.~~) and Preston Ln. (~~St./Ave.~~). The property has a frontage of 288 feet and a depth of 218 feet.

The conditional use sought is based upon Section(s) 5.23 of the **Town of Southern Pines Unified Development Ordinance**. The proposed use of the property is as follows:
Public Utility. The new monopole will be utilized by Duke Energy to upgrade their internal communications to control and run
diagonostics on the existing Duke Energy substation.

ADJACENT PROPERTY OWNERS:

Please list all properties that are that are within two hundred (200) feet of the outermost boundaries of the subject property. Attach additional pages if needed. No fewer than ten (10) property owners shall be notified by mail.

1. Adjacent property: #1 - Northwest of the site Parcel ID #: 32240
Property owner(s): Nancy Chambers & Ruby Verbal
Mailing address: 6110 Ashemont Rd, Aberdeen, NC 28315
2. Adjacent property: #2 - East of the site Parcel ID #: 33262
Property owner(s): Preston Evans & Glenn Evans
Mailing address: 258 E Cedar St., Livingston, NJ 07039
3. Adjacent property: #3 - South of the site Parcel ID #: 34630
Property owner(s): Dorothy M Hodges & Adele Hodges
Mailing address: 550 James Farm Road, Stratford, CT 06614
4. Adjacent property: #4 - Northwest of the site Parcel ID #: 36501
Property owner(s): McNair, C Leigh
Mailing address: 209 Isabel Ln., Carthage, NC 28327
5. Adjacent property: #5 - Directly North of the site Parcel ID #: 37113
Property owner(s): Jessica Ray Marsh Trustee
Mailing address: 170 Lindenhurst Farms Road, Aberdeen, NC 28315
6. Adjacent property: #6 - Northeast of the site Parcel ID #: 41586
Property owner(s): Mitchell, Lonnie Jr Hrs
Mailing address: 111 Ester Rd, West End, NC 27376

- 7. Adjacent property: #7 - South-Southeast of the site Parcel ID #: 20071167
Property owner(s): Hodges, Ronald G Sr. & Hodges, Frankie A & Others
Mailing address: 550 James Farm Road, Stratford, CT 06614

- 8. Adjacent property: #8 - South-Southeast of the site Parcel ID #: 20071168
Property owner(s): Hodges, Dorothy M Hrs
Mailing address: 550 James Farm Road, Stratford, CT 06614

- 9. Adjacent property: #9 - West of the site Parcel ID #: 20150305
Property owner(s): Moredock, Rose A
Mailing address: 185 Wooster Road, Southern Pines, NC 28387

- 10. Adjacent property: _____ Parcel ID #: _____
Property owner(s): _____
Mailing address: _____

Date: 01/20/21

Ryan Woods
Applicant

APPOINTMENT OF AGENT

The undersigned owner(s), Duke Energy Progress, LLC, hereby appoint(s) Tower Engineering Professionals as the exclusive agent for the purpose of making an application to the Town of Southern Pines for a Conditional Use Permit on the property described in the attached application. The owner(s) hereby agree that this agent has the authority to act for and on behalf of the owner(s) as follows:

1. to submit an application and required supplemental materials;
2. to appear at public meetings and give representation and comments on behalf of the owner(s);
3. to accept conditions or recommendations made by the Town of Southern Pines Planning Board and Town Council for the issuance of a Conditional Use Permit on the subject property; and
4. to act on behalf of the owner(s) without limitations with regard to any and all things directly or indirectly connected with or arising out of any application for a Conditional Use Permit under the Southern Pines Unified Development Ordinance.

This Appointment of Agent shall remain in effect until final resolution of the attached application.

Signed this 14th day of January, 2021.

Duke Energy Progress, LLC

Property Owner

Dale Brooks

Property Owner

Ryan Woods

Agent

UDO §2.21.7. Criteria for a Conditional Use Permit

A Conditional Use Permit is permitted only if the Applicant demonstrates that:

- (A) The proposed conditional use shall comply with all regulations of the applicable zoning district and any applicable supplemental use regulations;
- (B) The proposed conditional use shall conform to the character of the neighborhood in which it is located and not injure the use and enjoyment of property in the immediate vicinity for the purposes already permitted;
- (C) Adequate public facilities shall be provided as set forth herein;
- (D) The proposed use shall not impede the orderly development and improvement of surrounding property for uses permitted within the zoning district or substantially diminish or impair the property values within the neighborhood;
- (E) The establishment, maintenance, or operation of the proposed use shall not be detrimental to or endanger the public health, safety, comfort or general welfare; and

The public interest and welfare supporting the proposed use shall be sufficient to outweigh individual interests that are adversely affected by the establishment of the proposed use.

Project Description & Narrative – Southern Pines 115kV Sub

See below for our response to the standards set forth in section 2.21.7 in Southern Pines' UDO:

- A. The proposed conditional use shall comply with all regulations of the applicable zoning district and any applicable supplemental use regulations.

This monopole design and construction will adhere to all restrictions and regulations put forth by the district.

- B. The proposed conditional use shall conform to the character of the neighborhood in which it is located and not injure the use and enjoyment of property in the immediate vicinity for the purposes already permitted.

The proposed monopole will be utilized to aid Duke Energy's substation and its ability to provide power to the nearby properties. It will not change the current use of the property. The monopole allows Duke to remotely monitor the substation and, in some cases, manipulate the substation. This will help response times to outages and everyday functions.

- C. Adequate public facilities shall be provided as set forth herein.

The property's use will not change with the addition of the monopole. It will still be utilized for public utility and require access from Duke Energy representatives.

- D. The proposed use shall not impede the orderly Development and improvement of surrounding property for uses permitted within the zoning district or substantially diminish or impair the property values within the neighborhood.

The proposed monopole will be utilized to aid Duke Energy's existing power coverage of the surrounding area. This will improve response times to power outages and should prove to be a benefit to the surrounding properties.

- E. The establishment, maintenance, or operation of the proposed use shall not be detrimental to or endanger the public health, safety, comfort, or general welfare.

The proposed monopole design has been certified by a licensed engineer in a corresponding Structural Analysis Report.

- F. The public interest and welfare supporting the proposed use shall be sufficient to outweigh individual interests that are adversely affected by the establishment of the proposed use.

The monopole will aid Duke Energy in their ability to provide reliable power to the surrounding properties. This should provide a great benefit to those within its coverage area.

The Conditional Use Permit application shall provide information that:

1. Demonstrates the antenna's compliance with State and Federal radio frequency emission standards.

The proposed installation has minimal RF emissions and complies with all applicable standards.

2. Specifies the tower height and design and include a cross-section of the structure.

Please reference the structural analysis and Construction Drawings for any questions regarding the design of the monopole.

3. Details any technical, engineering, economic and other pertinent factors governing the selection of the proposed design.

Please reference the structural analysis and Construction Drawings for any questions regarding the design of the monopole.

4. Demonstrates the tower's compliance with applicable structural standards, which may include certification that the tower will withstand sustained winds in accordance with local building codes or nationally recognized standards.

Please reference the structural analysis for any questions regarding the structural integrity of the proposed monopole installation.

5. Describes the failure characteristics of the tower and demonstrates that the site and setbacks are of adequate size to contain debris.

This tower has been certified by a design professional, please reference the structural analysis for any concerns regarding tower integrity. For setback questions, please reference the Construction Drawings. Approximate setbacks to each property line can be found there.

6. Describes the tower's maximum capacity, including the number of antennas that it can accommodate for collection, taking into consideration radio frequency interference, mass, height and other characteristics, as well as options to overcome any problems that these considerations may pose to service delivery.

Please see the Structural Analysis certified by a professional engineer for any questions regarding tower capacity and load. Any future colocations be certified with further study by a design professional. If needed, tower modifications can be made to increase bearing capacity of the monopole.

7. Assesses the environmental impact of the facility siting, including the impact on adjacent structures and districts as well as on historic sites and streetscapes.

The proposed monopole will be installed within Duke Energy's existing substation. This design has been certified by an engineering professional and should have no

additional adverse effects on the area. Any potential negative effects should be outweighed by the public utility benefits afforded by the monopole installation.

8. Determines whether the construction of the tower and its reception and transmission functions will interfere with the usual and customary transmission or reception of radio, television, and other services on adjoining properties.

The current proposed loading of this monopole is one microwave dish. This dish will not interfere with any existing transmissions of radio, television, or other existing services nearby.

9. Documents the due diligence in seeking and subsequent failure to find space on an existing tower to collocate their antenna(s) (if permission for tower construction is being sought).

This monopole is being used to enhance the capabilities of Duke Energy's substation. As such, it must be located at the substation to meet its intended use. Due to this, no other collocation options were pursued.

10. Documents compliance with or exemption from FCC, FAA, MEPA and any other federal or state regulations applicable to the siting; statements must be issued from the FCC, FAA or the state attesting to the proposed facility's compliance.

This tower has been certified and approved by the FAA. A copy of this determination has been included with the submitted documents.

11. Includes an agreement between the Town and the tower owners and their successors to allow shared use of the tower if:
 - a. Capacity exists based on existing and planned use;
 - b. A future Applicant for space on the tower agrees in writing to pay any reasonable change for shared use; and
 - c. The potential use is technically compatible.

This monopole will be located on Duke Energy's substation. As such for security reasons this monopole will be purely for Duke's internal use. No collocations outside of Duke Energy applications will be allowed on the monopole.

12. Documents anticipated maintenance needs, including frequency of service, personnel needs, equipment needs and traffic, noise, or safety impacts of such maintenance.

Once constructed the proposed monopole will have little to no maintenance. Outside of structural reviews every few years the monopole will function autonomously and require no onsite personnel to operate it.

13. Documents liability insurance or bonding where applicable.

This monopole will be owned and operated by Duke Energy. As such, Duke Energy will be held liable for any damages potentially incurred by this installation.

14. Includes approval of the site owner, if different from the tower owner, to apply for a permit.

Duke Energy is the entity requesting to construct this monopole and owns the parcel and substation.

Sincerely,

Ryan Woods

Tower Engineering Professionals

(919) 943-0397

rjwoods@tepgroup.net



Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2021-ASO-6940-OE

Issued Date: 03/23/2021

Kevin Hursey
 Duke Energy Business Services, LLC
 401 South College Street
 Charlotte, NC 28202

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Monopole Southern Pines 115 Sub
 Location: Southern Pines, NC
 Latitude: 35-12-11.80N NAD 83
 Longitude: 79-21-46.40W
 Heights: 393 feet site elevation (SE)
 120 feet above ground level (AGL)
 513 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 09/23/2022 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (718) 553-2611, or angelique.eersteling@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2021-ASO-6940-OE.

Signature Control No: 469895379-475374561

(DNE)

Angelique Eersteling
Technician

Attachment(s)
Case Description
Frequency Data
Map(s)

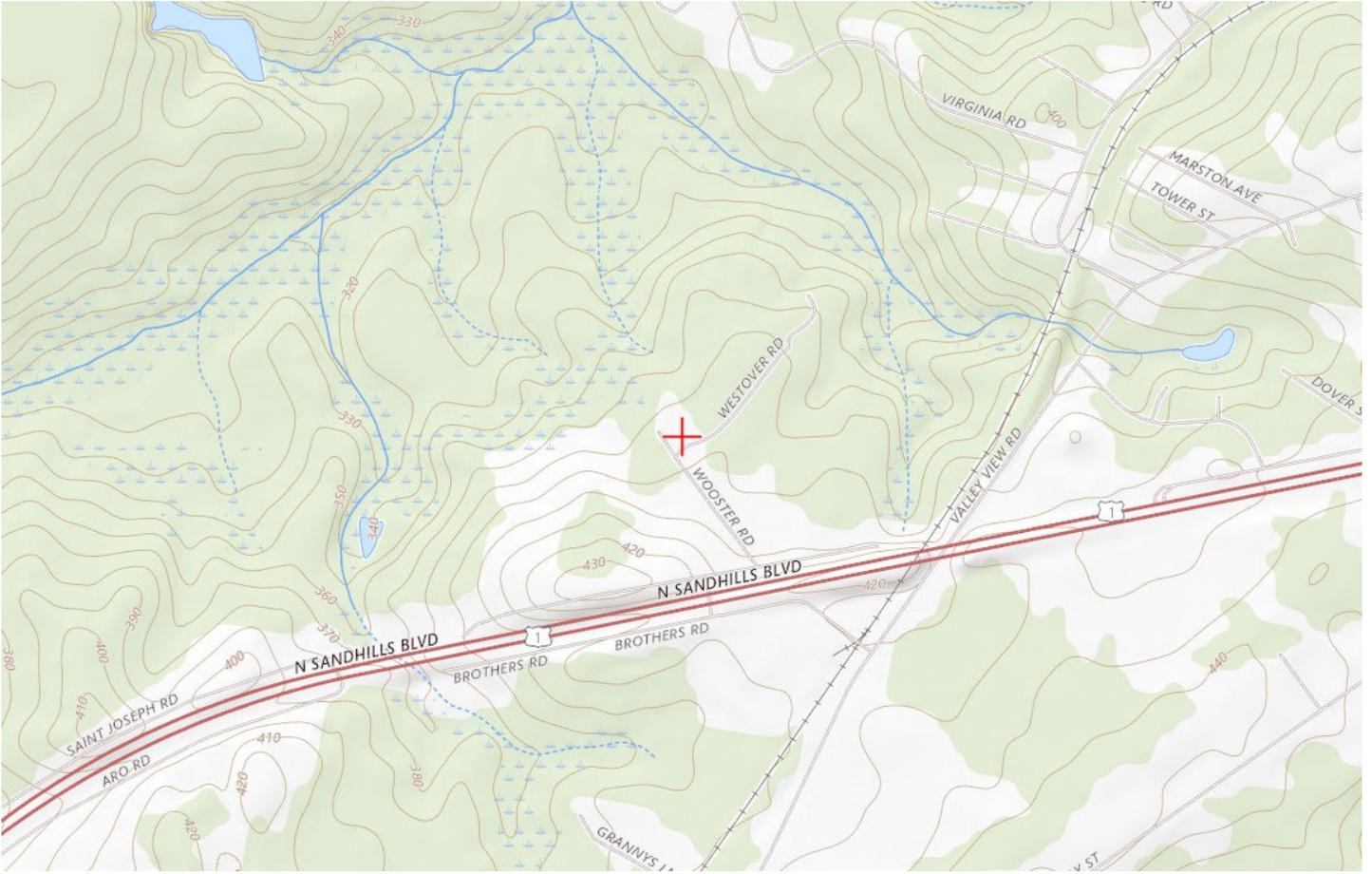
cc: FCC

Case Description for ASN 2021-ASO-6940-OE

This will be an 120' monopole at Duke Energy's substation to add to their Cambium Network.

Frequency Data for ASN 2021-ASO-6940-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
5732.5	5842.5	MHz	0.105	W









Date: **August 14, 2020**

Rick Trujillo
Duke Energy
Telecommunications Engineer II
(919) 306-5367

Subject: **Structural Analysis Report**

Duke Energy Designation: **Duke Energy Site Name:** Southern Pines 115kV Sub

Engineering Firm Designation: **ETS, PLLC Job Number:** 203281.ST.01

Site Data: **160 Wooster Rd, Southern Pines, Moore County, NC**
Latitude 35° 12' 12.6", Longitude -79° 21' 47.2"
140-ft Valmont Class H10 (120-ft AGL) - Monopole Tower

Dear Rick Trujillo,

Engineered Tower Solutions is pleased to submit this “**Structural Analysis Report**” to determine the structural integrity of the above-mentioned tower.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

Proposed Equipment Configuration	Tower: 45.4%	Sufficient Capacity
	Foundation: 45.4%	Sufficient Capacity

This analysis utilizes an ultimate 3-second gust wind speed of 116 mph as required by the 2018 North Carolina Building Code (2015 IBC). Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by:

Tomas Martin Sosa
Structural Engineer I

Respectfully submitted by:

J. Scott Hilgoe, PE
Structural Engineering Lead
NC License # P-1016



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6) APPENDIX B

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1) INTRODUCTION

This tower is a proposed 140-ft Valmont Class H10 direct-embedded monopole tower designed by Valmont. This pole is at the location shown in the Duke Energy Conceptual General Location Plan (see Table 3) of this document.

This pole is to be embedded 20-ft for a final height above grade of 120-ft.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	116 mph
Exposure Category:	C
Topographic Factor:	1
Ice Thickness:	1.5 in
Wind Speed with Ice:	30 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
118.0	118.0	1	Radiowaves	HPD4-5.2	1	CAT5e
		1	Cambium	PMP 450i (Integrated)		
		1	Tower Mounts	4.5"Ø x 6-ft Pipe Mount		
		1	SitePro 1	DCH8 Chain Mount		

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Pole Specifications	Valmont Utility Rapid Response Engineered Class Poles – H10	2018 Valmont Industries, Inc.	Duke Energy
General Location Plan	Duke Energy Drwg. No. RDC-12675	Conceptual	Duke Energy
Geotechnical Report	S&ME, Proj. No. 1305-20-070	July 9, 2020	Duke Energy
Geotechnical Report Addendum	S&ME, Proj. No. 1305-20-070	July 29, 2020	Duke Energy

3.1) Analysis Method

tnxTower (version 8.0.7.4), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

- 1) Tower and structures were built and have been maintained in accordance with the manufacturer's specifications.
- 2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Table 1 and the referenced drawings.
- 3) Pole steel grade is assumed to be A572-65.
- 4) Proposed cable was assumed to be banded to the exterior of the pole.

This analysis may be affected if any assumptions are not valid or have been made in error. Engineered Tower Solutions should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 3 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
L1	120 - 67.1	Pole	TP25.72x16.51x0.22	1	-3.13	1023.35	22.9	Pass
L2	67.1 - 31.5	Pole	TP31.92x24.59x0.25	2	-6.62	1447.89	36.0	Pass
L3	31.5 - 0	Pole	TP37.41x30.5x0.28	3	-11.87	1965.16	45.4	Pass
							Summary	
						Pole (L3)	45.4	Pass
						RATING =	45.4	Pass

Table 4 - Tower Component Stresses vs. Capacity

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Embedded Pole Foundation	0	45.4	Pass
1	Base Foundation Soil Interaction	0	37.9	Pass

Structure Rating (max from all components) =	45.4%
---	--------------

Notes:

- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.

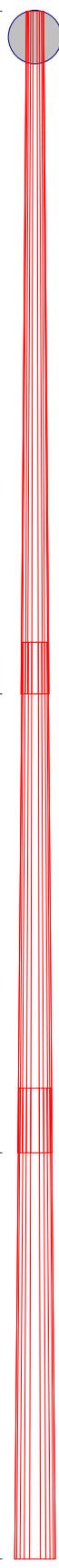
4.1) Recommendations

The tower and its foundation have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.

APPENDIX A
TNXTOWER OUTPUT

Section	1	2	3
Length (ft)	52.90	39.60	36.50
Number of Sides	12	12	12
Thickness (in)	0.22	0.25	0.28
Socket Length (ft)	4.00	5.00	30.50
Top Dia (in)	16.51	24.59	37.41
Bot Dia (in)	25.72	31.92	37.41
Grade		A572-65	
Weight (K)	2.7	3.0	3.8

120.0 ft



67.1 ft

31.5 ft

0.0 ft

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
5/8-in x 4-ft Lightning Rod	120	PMP 450i (Integrated)	118
Pipe Mount [PM 601-1]	118	HPD4-5.2	118

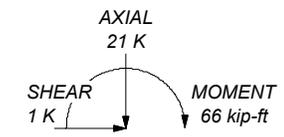
MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

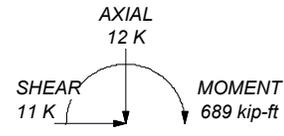
TOWER DESIGN NOTES

1. Tower designed for Exposure C to the TIA-222-H Standard.
2. Tower designed for a 116 mph basic wind in accordance with the TIA-222-H Standard.
3. Tower is also designed for a 30 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Risk Category II.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. TOWER RATING: 45.4%

ALL REACTIONS ARE FACTORED



TORQUE 0 kip-ft
30 mph WIND - 1.50 in ICE



TORQUE 1 kip-ft
REACTIONS - 116 mph WIND

CU-01-21 Duke Energy Monopole

Engineered Tower Solutions, PLLC
3227 Wellington Court
Raleigh, NC 27615
July 2021
FAX:

Job: Southern Pines 115kV Sub		
Project: ETS Job No. 203281.ST.01	Drawn by: Tomas Martin Sosa	App'd:
Client: Duke Energy	Date: 08/18/2019	Scale: NTS
Code: TIA-222-H	Path:	Dwg No. E-1

<p style="text-align: center;">tnxTower</p> <p style="text-align: center;">Engineered Tower Solutions, PLLC</p> <p style="text-align: center;">3227 Wellington Court Raleigh, NC 27615 Phone: (919) 782-2710 FAX:</p>	Job Southern Pines 115kV Sub	Page 1 of 12
	Project ETS Job No. 203281.ST.01	Date 12:44:53 08/14/20
	Client Duke Energy	Designed by Tomas Martin Sosa

Tower Input Data

The tower is a monopole.

This tower is designed using the TIA-222-H standard.

The following design criteria apply:

- Tower base elevation above sea level: 382.00 ft.
- Basic wind speed of 116 mph.
- Risk Category II.
- Exposure Category C.
- Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- Topographic Category: 1.
- Crest Height: 0.00 ft.
- Nominal ice thickness of 1.50 in.
- Ice thickness is considered to increase with height.
- Ice density of 56 pcf.
- A wind speed of 30 mph is used in combination with ice.
- Temperature drop of 50 °F.
- Deflections calculated using a wind speed of 60 mph.
- A non-linear (P-delta) analysis was used.
- Pressures are calculated at each section.
- Stress ratio used in pole design is 1.
- Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification √ Use Code Stress Ratios √ Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile Include Bolts In Member Capacity Leg Bolts Are At Top Of Section Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) SR Members Have Cut Ends SR Members Are Concentric | <ul style="list-style-type: none"> Distribute Leg Loads As Uniform Assume Legs Pinned √ Assume Rigid Index Plate √ Use Clear Spans For Wind Area Use Clear Spans For KL/r Retention Guys To Initial Tension √ Bypass Mast Stability Checks √ Use Azimuth Dish Coefficients √ Project Wind Area of Appurt. Autocalc Torque Arm Areas Add IBC .6D+W Combination √ Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Treat Feed Line Bundles As Cylinder Ignore KL/ry For 60 Deg. Angle Legs | <ul style="list-style-type: none"> Use ASCE 10 X-Brace Ly Rules Calculate Redundant Bracing Forces Ignore Redundant Members in FEA SR Leg Bolts Resist Compression All Leg Panels Have Same Allowable Offset Girt At Foundation √ Consider Feed Line Torque Include Angle Block Shear Check Use TIA-222-H Bracing Resist. Exemption Use TIA-222-H Tension Splice Exemption <li style="text-align: center;">Poles √ Include Shear-Torsion Interaction Always Use Sub-Critical Flow Use Top Mounted Sockets Pole Without Linear Attachments Pole With Shroud Or No Appurtenances Outside and Inside Corner Radii Are Known |
|--|---|---|

Tapered Pole Section Geometry

Section	Elevation	Section Length	Splice Length	Number of Sides	Top Diameter	Bottom Diameter	Wall Thickness	Bend Radius	Pole Grade
	ft	ft	ft		in	in	in	in	

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Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	120.00-67.10	52.90	4.00	12	16.51	25.72	0.22	0.88	A572-65 (65 ksi)
L2	67.10-31.50	39.60	5.00	12	24.59	31.92	0.25	1.00	A572-65 (65 ksi)
L3	31.50-0.00	36.50		12	30.50	37.41	0.28	1.12	A572-65 (65 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	It/Q in ²	w in	w/t
L1	17.02	11.49	389.16	5.83	8.55	45.50	788.55	5.65	3.84	17.524
	26.55	17.98	1493.03	9.13	13.32	112.05	3025.28	8.85	6.31	28.797
L2	26.13	19.59	1481.20	8.71	12.74	116.30	3001.32	9.64	5.92	23.678
	32.96	25.50	3264.33	11.34	16.54	197.41	6614.41	12.55	7.88	31.54
L3	32.45	27.34	3185.66	10.82	15.80	201.67	6455.02	13.46	7.42	26.405
	38.63	33.59	5910.00	13.29	19.38	305.00	11975.27	16.53	9.27	32.997

Tower Elevation ft	Gusset Area (per face) ft ²	Gusset Thickness in	Gusset Grade	Adjust. Factor A _f	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L1 120.00-67.10				1	1	1			
L2 67.10-31.50				1	1	1			
L3 31.50-0.00				1	1	1			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
*** Safety Line 3/8	C	No	Surface Ar (CaAa)	120.00 - 5.00	1	1	0.000 0.000	0.38		0.22
Step Pegs (5/8" SR) 7-in. w/ 30" Step ***	C	No	Surface Ar (CaAa)	120.00 - 5.00	2	2	0.000 0.000	0.35		0.49
CAT5E(1/4) ***	A	No	Surface Ar (CaAa)	118.00 - 5.00	1	1	0.000 0.000	0.25		0.10

Feed Line/Linear Appurtenances - Entered As Area

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Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	C _{AA} ft ² /ft	Weight plf

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L1	120.00-67.10	A	0.000	0.000	1.273	0.000	0.01
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	5.687	0.000	0.06
L2	67.10-31.50	A	0.000	0.000	0.890	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	3.827	0.000	0.04
L3	31.50-0.00	A	0.000	0.000	0.662	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	2.849	0.000	0.03

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L1	120.00-67.10	A	1.662	0.000	0.000	18.191	0.000	0.20
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	46.176	0.000	0.52
L2	67.10-31.50	A	1.560	0.000	0.000	12.723	0.000	0.14
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	31.075	0.000	0.35
L3	31.50-0.00	A	1.392	0.000	0.000	8.932	0.000	0.09
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	21.920	0.000	0.24

Feed Line Center of Pressure

Section	Elevation ft	CP _x in	CP _z in	CP _x Ice in	CP _z Ice in
L1	120.00-67.10	-0.12	0.55	-0.77	1.80
L2	67.10-31.50	-0.13	0.56	-0.90	2.03
L3	31.50-0.00	-0.11	0.47	-0.81	1.84

Note: For pole sections, center of pressure calculations do not consider feed line shielding.

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Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L1	2	Safety Line 3/8	67.10 - 120.00	1.0000	1.0000
L1	3	Step Pegs (5/8" SR) 7-in. w/ 30" Step	67.10 - 120.00	1.0000	1.0000
L1	5	CAT5E(1/4)	67.10 - 118.00	1.0000	1.0000
L2	2	Safety Line 3/8	31.50 - 67.10	1.0000	1.0000
L2	3	Step Pegs (5/8" SR) 7-in. w/ 30" Step	31.50 - 67.10	1.0000	1.0000
L2	5	CAT5E(1/4)	31.50 - 67.10	1.0000	1.0000
L3	2	Safety Line 3/8	5.00 - 31.50	1.0000	1.0000
L3	3	Step Pegs (5/8" SR) 7-in. w/ 30" Step	5.00 - 31.50	1.0000	1.0000
L3	5	CAT5E(1/4)	5.00 - 31.50	1.0000	1.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment	Placement	C _A A _A Front	C _A A _A Side	Weight	
			ft ft ft	°	ft	ft ²	ft ²	K	

5/8-in x 4-ft Lightning Rod	A	From Leg	0.00 0.00 2.00	0.00	120.00	No Ice 0.25 1/2" Ice 0.66 1" Ice 0.97 2" Ice 1.49	0.25 0.66 0.97 1.49	0.00 0.01 0.01 0.03	

Pipe Mount [PM 601-1]	A	From Leg	0.50 0.00 0.00	0.00	118.00	No Ice 1.32 1/2" Ice 1.58 1" Ice 1.84 2" Ice 2.40	1.32 1.58 1.84 2.40	0.07 0.08 0.09 0.13	
PMP 450i (Integrated)	A	From Leg	0.50 0.00 0.00	0.00	118.00	No Ice 0.45 1/2" Ice 0.54 1" Ice 0.64 2" Ice 0.85	0.28 0.36 0.44 0.64	0.01 0.01 0.01 0.03	

Dishes

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Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft	Aperture Area ft ²	Weight K	

HPD4-5.2	A	Paraboloid w/Shroud (HP)	From Leg	1.00 0.00 0.00	5.60		118.00	4.21	No Ice 1/2" Ice 1" Ice 2" Ice	13.91 14.47 15.02 16.13	0.20 0.27 0.34 0.49

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service

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Comb. No.	Description
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	120 - 67.1	Pole	Max Tension	14	0.00	-0.00	0.00
			Max. Compression	26	-6.57	0.15	0.69
			Max. M _x	8	-3.16	-111.06	6.01
			Max. M _y	14	-3.13	2.13	-130.40
			Max. V _y	8	4.27	-111.06	6.01
			Max. V _x	14	4.69	2.13	-130.40
			Max. Torque	9			1.08
L2	67.1 - 31.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-12.71	0.29	0.36
			Max. M _x	8	-6.64	-311.96	10.12
			Max. M _y	14	-6.62	3.72	-346.12
			Max. V _y	8	7.37	-311.96	10.12
			Max. V _x	14	7.79	3.72	-346.12
			Max. Torque	9			1.08
L3	31.5 - 0	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-20.75	0.42	0.02
			Max. M _x	8	-11.87	-639.32	14.38
			Max. M _y	14	-11.87	5.37	-688.93
			Max. V _y	8	10.52	-639.32	14.38
			Max. V _x	14	10.94	5.37	-688.93
			Max. Torque	9			1.08

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	26	20.75	-0.00	-0.00
	Max. H _x	21	8.91	10.50	-0.03
	Max. H _z	3	8.91	-0.03	10.77
	Max. M _x	2	669.68	-0.03	10.77
	Max. M _z	8	639.32	-10.52	0.12
	Max. Torsion	9	1.08	-10.52	0.12
	Min. Vert	15	8.91	0.04	-10.93
	Min. H _x	9	8.91	-10.52	0.12
	Min. H _z	15	8.91	0.04	-10.93
	Min. M _x	14	-688.93	0.04	-10.93
	Min. M _z	20	-637.47	10.50	-0.03
	Min. Torsion	21	-0.99	10.50	-0.03

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Tower Mast Reaction Summary

Load Combination	Vertical	Shear _x	Shear _z	Overtuning Moment, M _x	Overtuning Moment, M _z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
Dead Only	9.90	0.00	0.00	-0.28	0.01	-0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	11.88	0.03	-10.77	-669.68	-3.39	-0.01
0.9 Dead+1.0 Wind 0 deg - No Ice	8.91	0.03	-10.77	-666.76	-3.38	-0.01
1.2 Dead+1.0 Wind 30 deg - No Ice	11.88	5.22	-9.37	-585.91	-314.81	-0.47
0.9 Dead+1.0 Wind 30 deg - No Ice	8.91	5.22	-9.37	-583.29	-313.48	-0.47
1.2 Dead+1.0 Wind 60 deg - No Ice	11.88	9.04	-5.55	-354.71	-545.55	-0.84
0.9 Dead+1.0 Wind 60 deg - No Ice	8.91	9.04	-5.55	-353.08	-543.28	-0.84
1.2 Dead+1.0 Wind 90 deg - No Ice	11.88	10.52	-0.12	-14.38	-639.32	-1.08
0.9 Dead+1.0 Wind 90 deg - No Ice	8.91	10.52	-0.12	-14.21	-636.66	-1.08
1.2 Dead+1.0 Wind 120 deg - No Ice	11.88	8.98	5.60	359.92	-538.20	-0.49
0.9 Dead+1.0 Wind 120 deg - No Ice	8.91	8.98	5.60	358.42	-535.94	-0.49
1.2 Dead+1.0 Wind 150 deg - No Ice	11.88	5.15	9.54	605.07	-306.24	-0.07
0.9 Dead+1.0 Wind 150 deg - No Ice	8.91	5.15	9.54	602.55	-304.98	-0.07
1.2 Dead+1.0 Wind 180 deg - No Ice	11.88	-0.04	10.93	688.93	5.37	0.12
0.9 Dead+1.0 Wind 180 deg - No Ice	8.91	-0.04	10.93	686.07	5.34	0.12
1.2 Dead+1.0 Wind 210 deg - No Ice	11.88	-5.26	9.54	605.62	320.05	0.27
0.9 Dead+1.0 Wind 210 deg - No Ice	8.91	-5.26	9.54	603.10	318.71	0.27
1.2 Dead+1.0 Wind 240 deg - No Ice	11.88	-9.03	5.70	372.14	544.58	0.49
0.9 Dead+1.0 Wind 240 deg - No Ice	8.91	-9.03	5.70	370.59	542.30	0.49
1.2 Dead+1.0 Wind 270 deg - No Ice	11.88	-10.50	0.03	3.23	637.47	0.99
0.9 Dead+1.0 Wind 270 deg - No Ice	8.91	-10.50	0.03	3.30	634.81	0.99
1.2 Dead+1.0 Wind 300 deg - No Ice	11.88	-9.03	-5.49	-347.31	544.36	0.85
0.9 Dead+1.0 Wind 300 deg - No Ice	8.91	-9.03	-5.49	-345.72	542.09	0.85
1.2 Dead+1.0 Wind 330 deg - No Ice	11.88	-5.13	-9.38	-587.01	303.86	0.37
0.9 Dead+1.0 Wind 330 deg - No Ice	8.91	-5.13	-9.38	-584.38	302.59	0.37
1.2 Dead+1.0 Ice+1.0 Temp	20.75	0.00	0.00	-0.02	0.42	-0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	20.75	0.00	-1.01	-64.22	0.18	-0.00
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	20.75	0.49	-0.88	-56.07	-30.09	-0.04
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	20.75	0.85	-0.52	-33.66	-52.47	-0.07
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	20.75	0.99	-0.01	-1.14	-61.38	-0.09

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Load Combination	Vertical	Shear _x	Shear _z	Overturning Moment, M _x	Overturning Moment, M _z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	20.75	0.85	0.52	34.01	-51.90	-0.04
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	20.75	0.49	0.89	57.51	-29.43	-0.01
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	20.75	-0.00	1.02	65.66	0.86	0.01
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	20.75	-0.49	0.89	57.56	31.38	0.02
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	20.75	-0.85	0.53	34.96	53.27	0.04
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	20.75	-0.99	0.00	0.23	62.12	0.08
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	20.75	-0.85	-0.51	-33.09	53.26	0.07
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	20.75	-0.48	-0.88	-56.16	30.12	0.03
Dead+Wind 0 deg - Service	9.90	0.01	-2.58	-160.08	-0.80	-0.00
Dead+Wind 30 deg - Service	9.90	1.25	-2.24	-140.07	-75.15	-0.11
Dead+Wind 60 deg - Service	9.90	2.16	-1.33	-84.88	-130.23	-0.20
Dead+Wind 90 deg - Service	9.90	2.52	-0.03	-3.64	-152.62	-0.26
Dead+Wind 120 deg - Service	9.90	2.15	1.34	85.70	-128.47	-0.12
Dead+Wind 150 deg - Service	9.90	1.23	2.28	144.23	-73.10	-0.02
Dead+Wind 180 deg - Service	9.90	-0.01	2.62	164.26	1.29	0.03
Dead+Wind 210 deg - Service	9.90	-1.26	2.28	144.36	76.41	0.06
Dead+Wind 240 deg - Service	9.90	-2.16	1.36	88.62	130.01	0.12
Dead+Wind 270 deg - Service	9.90	-2.51	0.01	0.56	152.19	0.24
Dead+Wind 300 deg - Service	9.90	-2.16	-1.31	-83.11	129.96	0.20
Dead+Wind 330 deg - Service	9.90	-1.23	-2.25	-140.33	72.55	0.09

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.00	-9.90	0.00	-0.00	9.90	-0.00	0.000%
2	0.03	-11.88	-10.77	-0.03	11.88	10.77	0.006%
3	0.03	-8.91	-10.77	-0.03	8.91	10.77	0.005%
4	5.22	-11.88	-9.37	-5.22	11.88	9.37	0.003%
5	5.22	-8.91	-9.37	-5.22	8.91	9.37	0.005%
6	9.04	-11.88	-5.55	-9.04	11.88	5.55	0.002%
7	9.04	-8.91	-5.55	-9.04	8.91	5.55	0.002%
8	10.52	-11.88	-0.12	-10.52	11.88	0.12	0.006%
9	10.52	-8.91	-0.12	-10.52	8.91	0.12	0.005%
10	8.98	-11.88	5.60	-8.98	11.88	-5.60	0.002%
11	8.98	-8.91	5.60	-8.98	8.91	-5.60	0.005%
12	5.15	-11.88	9.54	-5.15	11.88	-9.54	0.003%
13	5.15	-8.91	9.54	-5.15	8.91	-9.54	0.002%
14	-0.04	-11.88	10.93	0.04	11.88	-10.93	0.006%
15	-0.04	-8.91	10.93	0.04	8.91	-10.93	0.005%
16	-5.26	-11.88	9.54	5.26	11.88	-9.54	0.003%
17	-5.26	-8.91	9.54	5.26	8.91	-9.54	0.002%
18	-9.03	-11.88	5.70	9.03	11.88	-5.70	0.002%
19	-9.03	-8.91	5.70	9.03	8.91	-5.70	0.002%
20	-10.50	-11.88	0.03	10.50	11.88	-0.03	0.006%
21	-10.50	-8.91	0.03	10.50	8.91	-0.03	0.005%
22	-9.03	-11.88	-5.49	9.03	11.88	5.49	0.002%
23	-9.03	-8.91	-5.49	9.03	8.91	5.49	0.002%
24	-5.13	-11.88	-9.38	5.13	11.88	9.38	0.002%

<p style="text-align: center;">tnxTower</p> <p style="text-align: center;">Engineered Tower Solutions, PLLC</p> <p style="text-align: center;">3227 Wellington Court Raleigh, NC 27615 Phone: (919) 782-2710 FAX:</p>	Job	Southern Pines 115kV Sub	Page	9 of 12
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Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
25	-5.13	-8.91	-9.38	5.13	8.91	9.38	0.005%
26	0.00	-20.75	0.00	-0.00	20.75	-0.00	0.001%
27	0.00	-20.75	-1.01	-0.00	20.75	1.01	0.002%
28	0.49	-20.75	-0.88	-0.49	20.75	0.88	0.002%
29	0.85	-20.75	-0.52	-0.85	20.75	0.52	0.002%
30	0.99	-20.75	-0.01	-0.99	20.75	0.01	0.002%
31	0.85	-20.75	0.52	-0.85	20.75	-0.52	0.002%
32	0.49	-20.75	0.89	-0.49	20.75	-0.89	0.002%
33	-0.00	-20.75	1.02	0.00	20.75	-1.02	0.002%
34	-0.50	-20.75	0.89	0.49	20.75	-0.89	0.002%
35	-0.85	-20.75	0.53	0.85	20.75	-0.53	0.002%
36	-0.99	-20.75	0.00	0.99	20.75	-0.00	0.002%
37	-0.85	-20.75	-0.51	0.85	20.75	0.51	0.002%
38	-0.48	-20.75	-0.88	0.48	20.75	0.88	0.002%
39	0.01	-9.90	-2.58	-0.01	9.90	2.58	0.004%
40	1.25	-9.90	-2.24	-1.25	9.90	2.24	0.004%
41	2.16	-9.90	-1.33	-2.16	9.90	1.33	0.004%
42	2.52	-9.90	-0.03	-2.52	9.90	0.03	0.004%
43	2.15	-9.90	1.34	-2.15	9.90	-1.34	0.004%
44	1.23	-9.90	2.28	-1.23	9.90	-2.28	0.004%
45	-0.01	-9.90	2.62	0.01	9.90	-2.62	0.004%
46	-1.26	-9.90	2.28	1.26	9.90	-2.28	0.004%
47	-2.16	-9.90	1.36	2.16	9.90	-1.36	0.004%
48	-2.51	-9.90	0.01	2.51	9.90	-0.01	0.004%
49	-2.16	-9.90	-1.31	2.16	9.90	1.31	0.004%
50	-1.23	-9.90	-2.25	1.23	9.90	2.25	0.004%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	6	0.0000001	0.0000001
2	Yes	13	0.00008759	0.00010589
3	Yes	13	0.0000001	0.00008803
4	Yes	14	0.0000001	0.00008261
5	Yes	13	0.0000001	0.00013510
6	Yes	14	0.0000001	0.00010955
7	Yes	14	0.0000001	0.00008935
8	Yes	13	0.00008770	0.00013722
9	Yes	13	0.0000001	0.00011438
10	Yes	14	0.0000001	0.00008535
11	Yes	13	0.0000001	0.00013905
12	Yes	14	0.0000001	0.00010076
13	Yes	14	0.0000001	0.00008177
14	Yes	13	0.00008750	0.00010964
15	Yes	13	0.0000001	0.00009089
16	Yes	14	0.0000001	0.00011247
17	Yes	14	0.0000001	0.00009120
18	Yes	14	0.0000001	0.00009426
19	Yes	14	0.0000001	0.00007643
20	Yes	13	0.00008771	0.00012272
21	Yes	13	0.0000001	0.00010244
22	Yes	14	0.0000001	0.00010710
23	Yes	14	0.0000001	0.00008747
24	Yes	14	0.0000001	0.00008067
25	Yes	13	0.0000001	0.00013258

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26	Yes	6	0.0000001	0.0000841
27	Yes	12	0.0000001	0.00004549
28	Yes	12	0.0000001	0.00004526
29	Yes	12	0.0000001	0.00004384
30	Yes	12	0.0000001	0.00004198
31	Yes	12	0.0000001	0.00004256
32	Yes	12	0.0000001	0.00004470
33	Yes	12	0.0000001	0.00004523
34	Yes	12	0.0000001	0.00004568
35	Yes	12	0.0000001	0.00004422
36	Yes	12	0.0000001	0.00004261
37	Yes	12	0.0000001	0.00004413
38	Yes	12	0.0000001	0.00004533
39	Yes	12	0.0000001	0.00007442
40	Yes	12	0.0000001	0.00006905
41	Yes	12	0.0000001	0.00006708
42	Yes	12	0.0000001	0.00007057
43	Yes	12	0.0000001	0.00006529
44	Yes	12	0.0000001	0.00007080
45	Yes	12	0.0000001	0.00007660
46	Yes	12	0.0000001	0.00007150
47	Yes	12	0.0000001	0.00006663
48	Yes	12	0.0000001	0.00007003
49	Yes	12	0.0000001	0.00006661
50	Yes	12	0.0000001	0.00006884

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	120 - 67.1	10.07	45	0.65	0.01
L2	71.1 - 31.5	3.90	45	0.49	0.00
L3	36.5 - 0	1.08	45	0.26	0.00

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
120.00	5/8-in x 4-ft Lightning Rod	45	10.07	0.65	0.01	96992
118.00	HPD4-5.2	45	9.80	0.65	0.01	96992

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	120 - 67.1	42.40	14	2.77	0.03
L2	71.1 - 31.5	16.38	14	2.08	0.01
L3	36.5 - 0	4.52	14	1.10	0.00

tnxTower Engineered Tower Solutions, PLLC 3227 Wellington Court Raleigh, NC 27615 Phone: (919) 782-2710 FAX:	Job	Southern Pines 115kV Sub	Page	11 of 12
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	Client	Duke Energy	Designed by	Tomas Martin Sosa

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
-------------	-----------------	------------------------	-----------------	-----------	------------

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
120.00	5/8-in x 4-ft Lightning Rod	14	42.40	2.77	0.03	22831
118.00	HPD4-5.2	14	41.25	2.75	0.03	22831

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
L1	120 - 67.1 (1)	TP25.72x16.51x0.22	52.90	0.00	0.0	17.49	-3.13	1023.35	0.003
L2	67.1 - 31.5 (2)	TP31.92x24.59x0.25	39.60	0.00	0.0	24.75	-6.62	1447.89	0.005
L3	31.5 - 0 (3)	TP37.41x30.5x0.28	36.50	0.00	0.0	33.59	-11.87	1965.16	0.006

Pole Bending Design Data

Section No.	Elevation ft	Size	M _{ux} kip-ft	φM _{ux} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{ux}}$	M _{uy} kip-ft	φM _{uy} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{uy}}$
L1	120 - 67.1 (1)	TP25.72x16.51x0.22	130.41	578.52	0.225	0.00	578.52	0.000
L2	67.1 - 31.5 (2)	TP31.92x24.59x0.25	346.14	975.59	0.355	0.00	975.59	0.000
L3	31.5 - 0 (3)	TP37.41x30.5x0.28	688.95	1538.71	0.448	0.00	1538.71	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V _u K	φV _n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T _u kip-ft	φT _n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	120 - 67.1 (1)	TP25.72x16.51x0.22	4.69	307.00	0.015	0.12	669.90	0.000
L2	67.1 - 31.5 (2)	TP31.92x24.59x0.25	7.79	434.37	0.018	0.12	1174.73	0.000
L3	31.5 - 0 (3)	TP37.41x30.5x0.28	10.94	589.55	0.019	0.12	1925.30	0.000

<p style="text-align: center;">tnxTower</p> <p style="text-align: center;">Engineered Tower Solutions, PLLC</p> <p style="text-align: center;">3227 Wellington Court Raleigh, NC 27615 Phone: (919) 782-2710 FAX:</p>	<p>Job</p> <p style="text-align: center;">Southern Pines 115kV Sub</p>	<p>Page</p> <p style="text-align: center;">12 of 12</p>
	<p>Project</p> <p style="text-align: center;">ETS Job No. 203281.ST.01</p>	<p>Date</p> <p style="text-align: center;">12:44:53 08/14/20</p>
	<p>Client</p> <p style="text-align: center;">Duke Energy</p>	<p>Designed by</p> <p style="text-align: center;">Tomas Martin Sosa</p>

Pole Interaction Design Data

Section No.	Elevation ft	Ratio P_u	Ratio M_{ux}	Ratio M_{uy}	Ratio V_u	Ratio T_u	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		ϕP_n	ϕM_{nx}	ϕM_{ny}	ϕV_n	ϕT_n			
L1	120 - 67.1 (1)	0.003	0.225	0.000	0.015	0.000	0.229	1.000	4.8.2
L2	67.1 - 31.5 (2)	0.005	0.355	0.000	0.018	0.000	0.360	1.000	4.8.2
L3	31.5 - 0 (3)	0.006	0.448	0.000	0.019	0.000	0.454	1.000	4.8.2

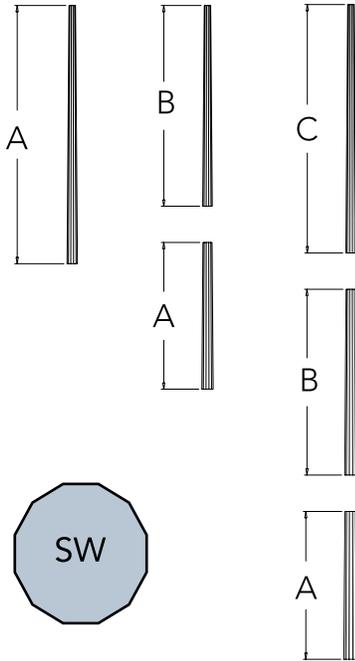
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail	
L1	120 - 67.1	Pole	TP25.72x16.51x0.22	1	-3.13	1023.35	22.9	Pass	
L2	67.1 - 31.5	Pole	TP31.92x24.59x0.25	2	-6.62	1447.89	36.0	Pass	
L3	31.5 - 0	Pole	TP37.41x30.5x0.28	3	-11.87	1965.16	45.4	Pass	
							Summary		
							Pole (L3)	45.4	Pass
							RATING =	45.4	Pass

Program Version 8.0.7.4 - 5/11/2020 File:C:/Users/Tomas.Sosa/Desktop/Towers/2020/3281/Analysis/Tower/Duke Energy_Southern Pines 115kV Sub_Tower Analysis.eri

APPENDIX B
POLE DESIGN SPECIFICATIONS

Standard Pole Classification (Class H10, RUS S-11.0 & 12.0)



Valmont Utility offers Steel (SW), Concrete and Hybrid (New Pole®) poles that closely match standard wood pole classification and offer the best choice among all materials for new and replacement construction. Standardized poles are designed in accordance with ASCE/SEI 48-11 and the correlation of standardized Steel pole size to wood pole class is based on Grade B construction. Horizontal tip load = 12,000 lbs.

Concrete, Hybrid (NewPole®) & Steel Flanged designs available upon request.

H10 12-Sided Steel Designs (SW) Top Diameter 16.51" Taper .181 (in/ft)						
Total Pole Length	Base OD in. (Across Flats)	Estimated Weight (Black) lbs.	Ultimate Moment (ft-kips)	Section Length (A)/ Thickness	Section Length (B)/ Thickness	Section Length (C)/ Thickness
30'	21.94	1365	403.6	30.0' / .219"	----	----
35'	22.85	1630	436.2	35.0' / .219"	----	----
40'	23.75	1906	468.5	40.0' / .219"	----	----
45'	24.65	2193	503.3	45.0' / .219"	----	----
50'	25.55	2491	539.3	50.0' / .219"	----	----
55'	26.46	2800	576.6	55.0' / .219"	----	----
60'	27.36	3119	615.1	60.0' / .219"	----	----
60' J	26.93	3502	676.7	21.3' / .250"	42.8' / .219"	----
65'	27.83	3873	721.3	26.3' / .250"	42.8' / .219"	----
70'	28.73	4256	767.3	31.3' / .250"	42.8' / .219"	----
75'	29.64	4610	814.8	26.3' / .250"	52.9' / .219"	----
80'	30.54	5018	863.6	31.3' / .250"	52.9' / .219"	----
85'	31.45	5438	913.9	36.3' / .250"	52.9' / .219"	----
90'	32.35	5871	965.3	41.3' / .250"	52.9' / .219"	----
95'	33.25	6316	1005.0	46.3' / .250"	52.9' / .219"	----
100'	34.16	6774	1044.7	51.3' / .250"	52.9' / .219"	----
105'	35.06	7244	1084.3	56.3' / .250"	52.9' / .219"	----
110'	35.46	8399	1291.6	26.5' / .281"	39.6' / .250"	52.9' / .219"
115'	36.37	8947	1356.7	31.5' / .281"	39.6' / .250"	52.9' / .219"
120'	37.27	9509	1410.8	36.5' / .281"	39.6' / .250"	52.9' / .219"
125'	38.18	10085	1461.1	41.5' / .281"	39.6' / .250"	52.9' / .219"
130'	39.08	10675	1511.3	46.5' / .281"	39.6' / .250"	52.9' / .219"
135'	39.98	11279	1561.4	51.5' / .281"	39.6' / .250"	52.9' / .219"
140'	40.89	11897	1611.3	56.5' / .281"	39.6' / .250"	52.9' / .219"

Estimated Weight does not include any accessories. The moment capacities listed are based on an embedment depth of 10% of the total pole length + 2 ft. Actual embedment depth is dependent upon the soil and backfill conditions and it the responsibility of the purchaser to define.

Valmont taper per section: 0.181 in/ft
 Overall taper: 0.174142857 in/ft

Section	Length (ft)	Elev (ft)	Diameter (in)	Thickness (in)
C	52.9	120	16.51	0.219
C		67.1	25.72215714	0.219
B	39.6	71.1	25.02558571	0.25
B		31.5	31.92164286	0.25
A	56.5	36.5	31.05092857	0.281
A		0	37.40714286	0.281
A		-20	40.89	0.281
Embedment Length:		-20	40.89	

Valmont Lap Splice	Min. Lap Splice per TIA-222-H Sect. 4.9.7.1.
48 in	37.92624
60 in	47.13246
39.14857	

APPENDIX C
ADDITIONAL CALCULATIONS

Embedded Pole Foundation

Site Name: Southern Pines 115kV

TIA-222 Revison: H
Tower Type: Monopole

Applied Loads		
	Comp.	Uplift
Moment (kip-ft)	689	
Axial Force (kips)	12	
Shear Force (kips)	11	

Material Properties		
Pole Strength:	65	ksi

Pier Design Data		
Depth	20	ft
Ext. Above Grade	0	ft
Pier Section 1		
<i>From 0' below grade to 20' below grade</i>		
Pier Diameter	3.262381	ft

[Rebar & Pier Options](#)

[Embedded Pole Inputs](#)

[Belled Pier Inputs](#)

Analysis Results		
Soil Lateral Check		
	Compression	Uplift
D _{v=0} (ft from TOC)	4.74	-
Soil Safety Factor	3.51	-
Max Moment (kip-ft)	724.45	-
Rating	37.9%	-
Soil Vertical Check		
	Compression	Uplift
Skin Friction (kips)	173.56	-
End Bearing (kips)	43.89	-
Weight of Concrete (kips)	0.28	-
Total Capacity (kips)	217.45	-
Axial (kips)	12.28	-
Rating	5.6%	-
Embedded Pole Interaction		
	Compression	Uplift
Critical Depth (ft from TOC)	3.57	-
Critical Moment (kip-ft)	721.38	-
Critical Moment Capacity	1610.14	-
Rating	45.4%	-

Soil Interaction Rating	37.9%
Structural Foundation Rating	45.4%

Soil Profile														
Groundwater Depth	16	# of Layers		5										
Layer	Top (ft)	Bottom (ft)	Thickness (ft)	γ _{soil} (pcf)	γ _{concrete} (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	Calculated Ultimate Skin Friction Uplift (ksf)	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Gross Bearing Capacity (ksf)	SPT Blow Count	Soil Type
1	0	3	3	110	150	0	30	0.000	0.000	0.00	0.00			Cohesionless
2	3	10.5	7.5	120	150	0	32	0.837	0.837				14	Cohesionless
3	10.5	16	5.5	125	150	0	34	1.587	1.587				21	Cohesionless
4	16	18	2	62.6	87.6	0	34	1.868	1.868				21	Cohesionless
5	18	20	2	62.6	87.6	0	35	1.919	1.919			7	23	Cohesionless

Site Name: Southern Pines 115kV Sub

Embedded Pole Properties

Encased in Concrete: No
 Number of Sides: 12
 Yield Strength (ksi): 65
 Thickness (in): 0.281
 Bend Radius (in): 1.124
 Taper Factor (in/ft): 0.1741

Maximum Axial Rating

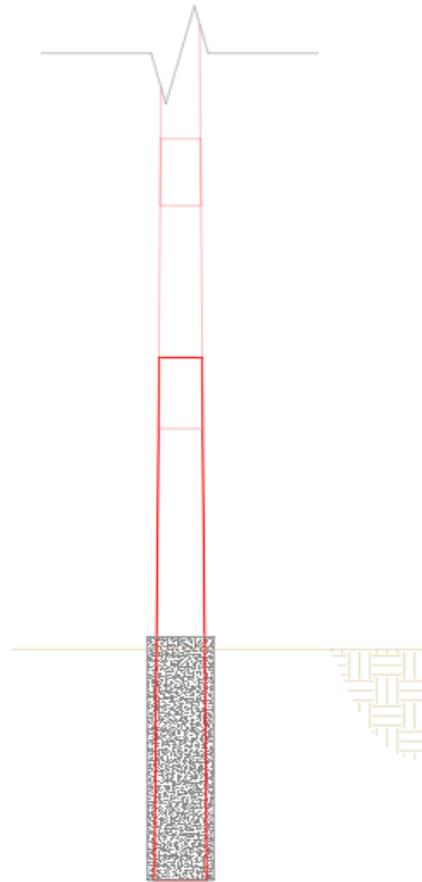
Depth from Grade (ft): 3.01
 Diameter (in): 37.93
 Axial Demand (kip): 12.27
 Axial Capacity (kip): 2090.46
 Rating: **0.6%**

Maximum Flexural Rating

Depth from Grade (ft): 3.63
 Diameter (in): 38.04
 Flexural Demand (kip-ft): 721.67
 Flexural Capacity (kip-ft): 1610.78
 Rating: **44.8%**

Maximum Interaction Rating

Depth from Grade (ft): 3.57
 Diameter (in): 38.03
 Axial Demand (kip): 12.11
 Axial Capacity (kip): 2092.75
 Flexural Demand (kip-ft): 721.38
 Flexural Capacity (kip-ft): 1610.14
 Rating: **45.4%**



Structural Rating:	45.4%
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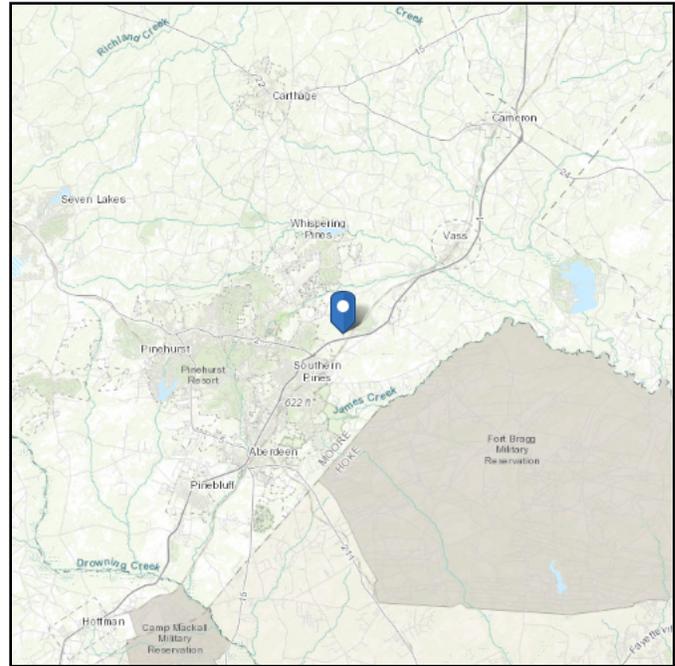
Version 4.0.0

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-10
Risk Category: II
Soil Class: D - Stiff Soil

Elevation: 382.14 ft (NAVD 88)
Latitude: 35.2035
Longitude: -79.363111



Wind

Results:

Wind Speed:	116 Vmph
10-year MRI	76 Vmph
25-year MRI	84 Vmph
50-year MRI	90 Vmph
100-year MRI	96 Vmph

Data Source: ASCE/SEI 7-10, Fig. 26.5-1A and Figs. CC-1–CC-4, incorporating errata of March 12, 2014

Date Accessed: Fri Aug 14 2020

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-10 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Site is in a hurricane-prone region as defined in ASCE/SEI 7-10 Section 26.2. Glazed openings need not be protected against wind-borne debris.

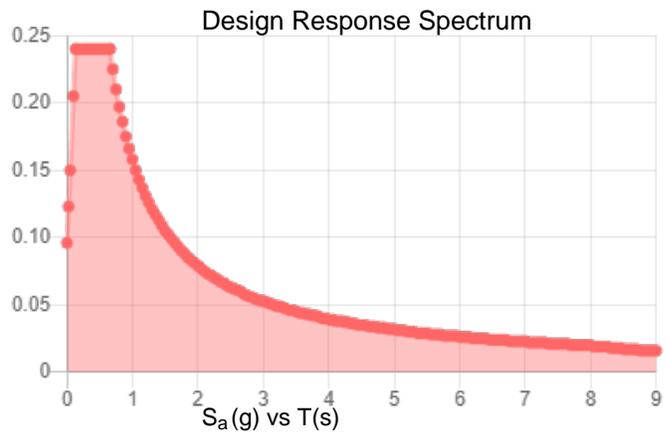
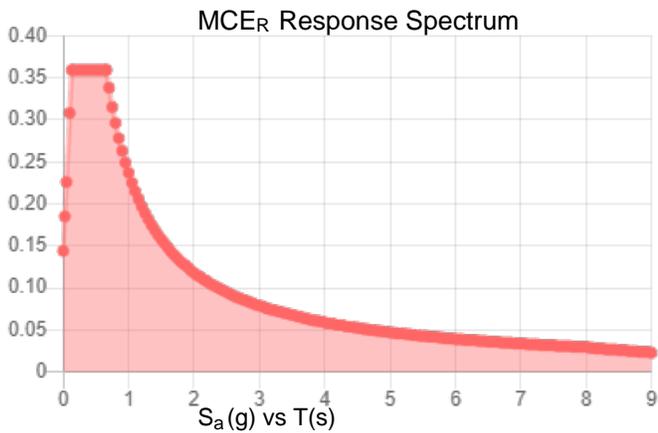
Mountainous terrain, gorges, ocean promontories, and special wind regions should be examined for unusual wind conditions.

Site Soil Class: D - Stiff Soil

Results:

S_s :	0.225	S_{DS} :	0.24
S_1 :	0.099	S_{D1} :	0.158
F_a :	1.6	T_L :	8
F_v :	2.4	PGA :	0.112
S_{MS} :	0.359	PGA _M :	0.176
S_{M1} :	0.237	F _{PGA} :	1.577
		I_e :	1

Seismic Design Category C



Data Accessed:

Fri Aug 14 2020

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-10, incorporating Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-10 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness: 0.75 in.
Concurrent Temperature: 15 F
Gust Speed: 30 mph

Data Source: Standard ASCE/SEI 7-10, Figs. 10-2 through 10-8

Date Accessed: Fri Aug 14 2020

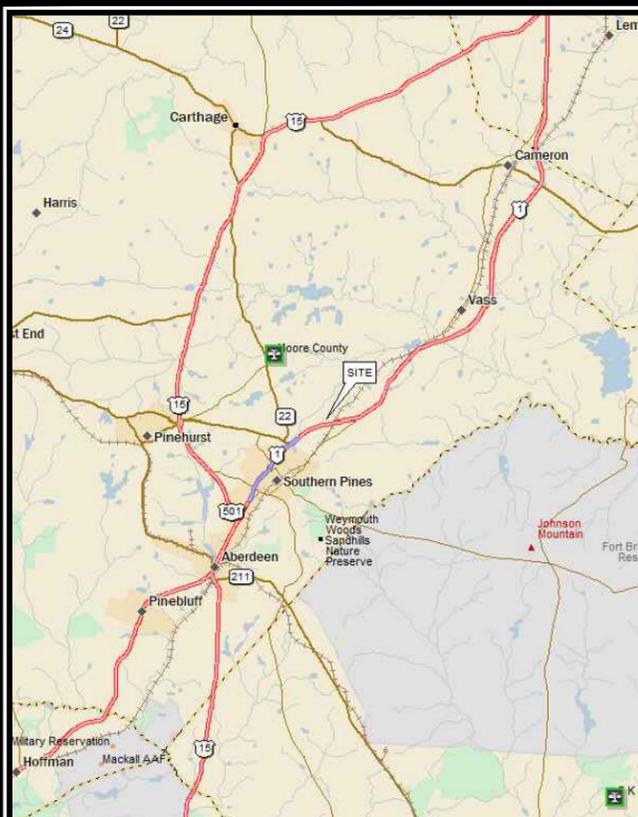
Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 50-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

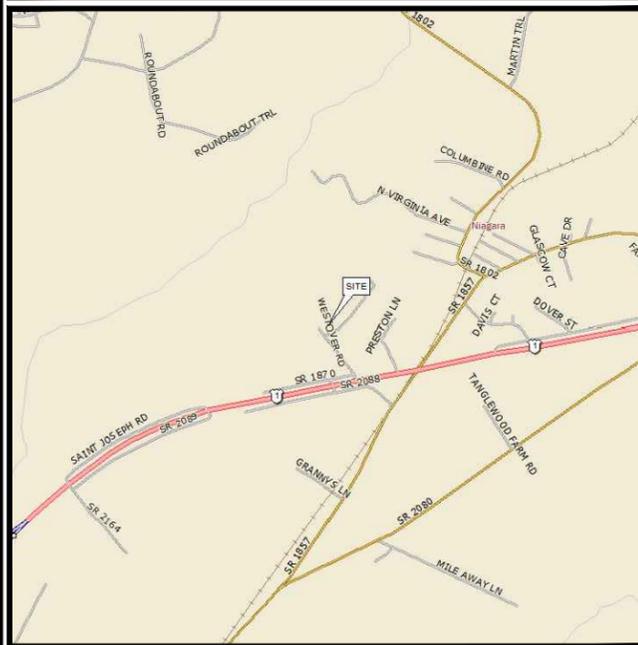
The ASCE 7 Hazard Tool is provided for your convenience, for informational purposes only, and is provided “as is” and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE 7 standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

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VICINITY MAP



LOCATION MAP

FROM RALEIGH, NC: TAKE PREFERRED ROUTE TO I-40 W. CONTINUE TO EXIT 293 TOWARDS US-1 S/US-64 W. TAKE EXIT 293A. IN 0.3 MILES TAKE A LEFT ONTO EXIT 101B AND FOLLOW SIGNS FOR BUCK JONES RD/CROSSROADS BLVD. IN 0.4 MILES TURN LEFT AND MERGE ONTO US-1 S/US-64 W. CONTINUE ON US-1 S FOR APPROXIMATELY 58 MILES THEN TURN RIGHT ONTO WESTOVER ROAD. IN 300 FEET TURN LEFT ON WESTOVER ROAD. IN 0.1 MILES CONTINUE STRAIGHT ONTO WOOSTER ROAD. SITE WILL BE ON THE RIGHT IN 300 FEET.

DRIVING DIRECTIONS

PROJECT INFORMATION:

PROPOSED TELECOMMUNICATIONS POLE

SITE NAME:
SOUTHERN PINES 115 SUB

SITE ADDRESS:
**184 WOOSTER ROAD
SOUTHERN PINES, NC 28387
(MOORE COUNTY)**

LATITUDE N 35° 12' 11.90" (NAD '83)
LONGITUDE W 79° 21' 46.40" (NAD '83)

GROUND ELEVATION (AMSL) = 393±**

*LATITUDE AND LONGITUDE INFORMATION PER DUKE ENERGY
**GROUND ELEVATION PER GOOGLE EARTH PRO

TOWER COORDINATES

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING:

- 2018 NORTH CAROLINA BUILDING CODE (2015 IBC W/ AMENDMENTS)
- NORTH CAROLINA CODE COUNCIL
- ANSI/TIA-222-G-2-2009
- NATIONAL ELECTRIC CODE (2017 EDITION)
- CITY/COUNTY ORDINANCES
- LOCAL BUILDING CODE

CODE COMPLIANCE

TOWER OWNER:
NAME: DUKE ENERGY
ADDRESS: 400 SOUTH TRYON STREET
CITY, STATE, ZIP: CHARLOTTE, NC 28285
CONTACT: DALE BROOKS
PHONE: (704) 382-0913

PROPERTY OWNER:
NAME: CAROLINA POWER & LIGHT CO.
ADDRESS: PO BOX 14042
CITY, STATE, ZIP: ST. PETERSBURG, FL 33733
CONTACT: UNKNOWN
PHONE: UNKNOWN

SITE APPLICANT:
NAME: DUKE ENERGY
ADDRESS: 400 SOUTH TRYON STREET
CITY, STATE, ZIP: CHARLOTTE, NC 28285
CONTACT: DALE BROOKS
PHONE: (704) 382-0913

AREA OF CONSTRUCTION: 180± S.F.
PRESENT OCCUPANCY TYPE: ELECTRICAL SUBSTATION
PROPOSED OCCUPANCY TYPE: MICROWAVE POLE
CURRENT ZONING: RR
PARCEL ID: 00032107
JURISDICTION: CITY OF SOUTHERN PINES

UTILITIES:
POWER COMPANY: DUKE ENERGY
CONTACT: CUSTOMER SERVICE
PHONE: (800) 452-2777
POLE # NEAR SITE: UNKNOWN
TELEPHONE COMPANY: UNKNOWN
CONTACT: UNKNOWN
PHONE: UNKNOWN
PEDESTAL # NEAR SITE: UNKNOWN

PROJECT SUMMARY

SURVEYOR:
NAME: N/A
ADDRESS: N/A
CITY, STATE, ZIP: N/A
CONTACT: N/A
PHONE: N/A

CIVIL ENGINEER:
NAME: TOWER ENGINEERING PROFESSIONALS, INC.
ADDRESS: 326 TRYON ROAD
CITY, STATE, ZIP: RALEIGH, NC 27603
CONTACT: JOHN B. GOINS, P.E.
PHONE: (919) 661-6351

STRUCTURAL ENGINEER:
NAME: N/A
ADDRESS: N/A
CITY, STATE, ZIP: N/A
CONTACT: N/A
PHONE: N/A

ELECTRICAL ENGINEER:
NAME: TOWER ENGINEERING PROFESSIONALS, INC.
ADDRESS: 326 TRYON ROAD
CITY, STATE, ZIP: RALEIGH, NC 27603
CONTACT: MARK S. QUAKENBUSH, P.E.
PHONE: (919) 661-6351

GEOTECHNICAL ENGINEER:
NAME: N/A
ADDRESS: N/A
CITY, STATE, ZIP: N/A
CONTACT: N/A
PHONE: N/A

TOWER MANUFACTURER:
NAME: VALMONT
ADDRESS: N/A
CITY, STATE, ZIP: N/A
CONTACT: N/A
PHONE: N/A

PROJECT TEAM

PLANS PREPARED FOR:

401 SOUTH WILMINGTON STREET
RALEIGH, NC 27601
OFFICE: (800) 452-2777

THE UTILITIES SHOWN HEREON ARE FOR THE CONTRACTORS CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER/SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

UTILITY STATEMENT

SHEET	DESCRIPTION	REV
T1	TITLE SHEET	0
N1	PROJECT NOTES	0
C1	SITE PLAN	0
C2	COMPOUND DETAIL	0
C3	TOWER ELEVATION	0
C4	MICROWAVE MOUNTING DETAILS	0
E1	ELECTRICAL NOTES	0
E2	TOWER GROUNDING AND ROUTING PLAN	0
E3	GROUNDING DETAILS I	0
E4	GROUNDING DETAILS II	0

INDEX OF SHEETS

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
www.tepgroup.net

REV	DATE	ISSUED FOR:
0	01-22-21	PRELIMINARY

DRAWN BY: RJW CHECKED BY: JBG

SEAL:

SEAL:

SHEET NUMBER: T-1	REVISION: 0
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TEP#:248931.417993

GENERAL NOTES:

1. ALL REFERENCES TO OWNER IN THESE DOCUMENTS SHALL BE CONSIDERED DUKE ENERGY OR ITS DESIGNATED REPRESENTATIVE.
2. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE OF NORTH CAROLINA.
3. STRUCTURE IS DESIGNED IN ACCORDANCE WITH ANSI/TIA-222-G, 2009, AND CONFORMS TO THE REQUIREMENTS OF THE 2018 NORTH CAROLINA STATE BUILDING CODE.
4. WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE 2018 NORTH CAROLINA STATE BUILDING CODE.
5. UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.
6. ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
7. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE, TO INSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
8. ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATIONS. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND THE OWNER'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE PROCEDURES.
9. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
11. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE RESIDENT LEASING AGENT FOR APPROVAL.
12. BILL OF MATERIALS AND PART NUMBERS LISTED ON CONSTRUCTION DRAWINGS ARE INTENDED TO AID CONTRACTOR. CONTRACTOR SHALL VERIFY PARTS AND QUANTITIES WITH MANUFACTURER PRIOR TO BIDDING AND/OR ORDERING MATERIALS.
13. ALL PERMITS THAT MUST BE OBTAINED ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
14. 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY OR CITY) ENGINEER.
15. THE CONTRACTOR SHALL REWORK (DRY, SCARIFY, ETC.) ALL MATERIAL NOT SUITABLE FOR SUBGRADE IN ITS PRESENT STATE. AFTER REWORKING, IF THE MATERIAL REMAINS UNSUITABLE, THE CONTRACTOR SHALL UNDERCUT THIS MATERIAL AND REPLACE WITH APPROVED MATERIAL. ALL SUBGRADES SHALL BE PROOFROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK PRIOR TO PAVING. ANY SOFTER MATERIAL SHALL BE REWORKED OR REPLACED.
16. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL PIPES, DITCHES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL WORK IS ACCEPTED BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURE IN OPERABLE CONDITION.
17. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE YEAR FROM ACCEPTANCE DATE.
18. ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH THE PLANS (LATEST REVISION) PRIOR TO COMMENCING CONSTRUCTION. NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES ARE DISCOVERED. THE OWNER SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS.

STRUCTURAL STEEL NOTES:

1. THE FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS AND MANUAL OF STEEL CONSTRUCTION, LOAD AND RESISTANCE FACTOR DESIGN, 13TH EDITION.
2. UNLESS OTHERWISE NOTED, ALL STRUCTURAL ELEMENTS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - A. STRUCTURAL STEEL, ASTM DESIGNATION A36 OR A992.
 - B. ALL BOLTS, ASTM A325 TYPE I GALVANIZED HIGH STRENGTH BOLTS.
 - C. ALL NUTS, ASTM A563 CARBON AND ALLOY STEEL NUTS.
 - D. ALL WASHERS, ASTM F436 HARDENED STEEL WASHERS.
3. ALL CONNECTIONS NOT FULLY DETAILED ON THESE PLANS SHALL BE DETAILED BY THE STEEL FABRICATOR IN ACCORDANCE WITH AISC SPECIFICATIONS AND MANUAL OF STEEL CONSTRUCTION, LOAD AND, RESISTANCE FACTOR DESIGN, 13TH EDITION.
4. HOLES SHALL NOT BE FLAME CUT THRU STEEL UNLESS APPROVED BY THE ENGINEER.
5. HOT-DIP GALVANIZE ALL ITEMS UNLESS OTHERWISE NOTED, AFTER FABRICATION WHERE PRACTICABLE. GALVANIZING: ASTM A123, ASTM, A153/A153M OR ASTM A653/A653M, G90, AS APPLICABLE.
6. REPAIR DAMAGED SURFACES WITH GALVANIZING REPAIR METHOD AND PAINT CONFORMING TO ASTM A780 OR BY APPLICATION OF STICK OR THICK PASTED MATERIAL SPECIFICALLY DESIGNED FOR REPAIR OF GALVANIZING. CLEAN AREAS TO BE REPAIRED AND REMOVE SLAG FROM WELDS. HEAT SURFACES TO WHICH STICK OR PASTE MATERIAL IS APPLIED, WITH A TORCH TO A TEMPERATURE SUFFICIENT TO MELT THE METALLICS IN STICK OR PASTE; SPREAD MOLTEN MATERIAL UNIFORMLY OVER SURFACES TO BE COATED AND WIPE OFF ANY EXCESS.
7. A NUT LOCKING DEVICE SHALL BE INSTALLED ON ALL PROPOSED AND/OR REPLACED BOLTS.
8. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH TO EXCLUDE THE THREADS FROM THE SHEAR PLANE.
9. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
10. ALL ASSEMBLY AND ANCHOR BOLTS ARE TO BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED IN SECTION 8.1 OF THE AISC, "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", DATED JUNE 30, 2004.
11. FLAT WASHERS ARE TO BE INSTALLED WITH BOLTS OVER SLOTTED HOLES.
12. DO NOT OVER TORQUE ASSEMBLY BOLTS. GALVANIZING ON BOLTS, NUTS, AND STEEL PARTS MAY ACT AS A LUBRICANT, THUS OVER TIGHTENING MAY OCCUR AND MAY CAUSE BOLTS TO CRACK AND SNAP OFF.
13. PAL NUTS ARE TO BE INSTALLED AFTER NUTS ARE TIGHT AND WITH EDGE LIP OUT. PAL NUTS ARE NOT REQUIRED WHEN SELF-LOCKING NUTS ARE PROVIDED.
14. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
15. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1-2010 STRUCTURAL WELDING CODE - STEEL.

PLANS PREPARED FOR:



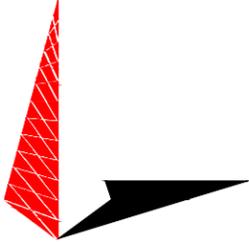
401 SOUTH WILMINGTON STREET
RALEIGH, NC 27601
OFFICE: (800) 452-2777

PROJECT INFORMATION:

**SOUTHERN PINES
115 SUB**

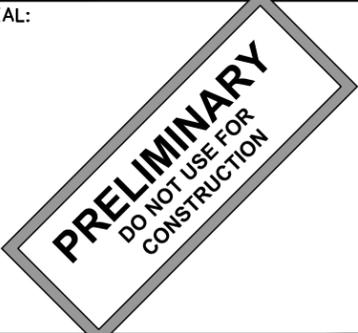
184 WOOSTER RD.
SOUTHERN PINES, NC 28387
(MOORE COUNTY)

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603
OFFICE: (919) 661-6351
www.tepgroup.net

SEAL:



0	01-20-21	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: RJW | CHECKED BY: JBG

SHEET TITLE:

PROJECT NOTES

SHEET NUMBER:	REVISION:
N-1	0
	TEP#:248931.417993

SITE PLAN

1. TOWER ENGINEERING PROFESSIONALS DID NOT SURVEY, AND DOES NOT CERTIFY THE PROPERTY INFORMATION. ALL INFORMATION IS TAKE FROM GIS AND COUNTY PUBLIC INFORMATION. LOT DIMENSIONS ARE FOR REFERENCE AND PER CONDITIONAL USE PERMIT REQUIREMENTS ONLY.
2. TEP DOES NOT GUARANTEE, OR ENSURE THE PRECISION, ACCURACY, OR CORRECTNESS AND ASSUMES NO RESPONSIBILITY OR LIABILITY FOR DAMAGES, LOSS OF REVENUE, OR INJURY THAT MIGHT OCCUR.

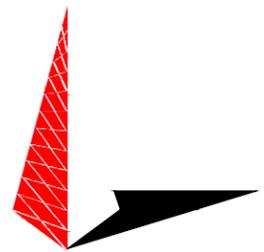
ADJACENT PARCEL INFORMATION

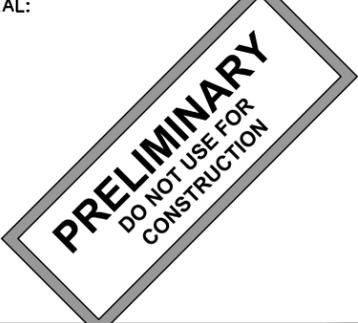
SITE #	PARCEL ID	OWNER	DEED BK/PG	ZONING
1	32240	NANCY CHAMBERS & RUBY VERBAL	293/337	PD
2	33262	PRESTON & GLENN EVANS	2008E/752	RR
3	34630	DOROTHY M HODGES & ADELE HODGES	2004E/498	RR
4	36501	MCNAIR, C LEIGH	960/048	PD
5	37113	JESSICA RAY MARCH TRUSTEE	5414/456	PD
6	41586	MITCHELL, LONNIE J HRS	2003E/728	RR
7	20071167	HODGES, RONALD G SR. & HODGES, FRANKIE A & OTHERS	3369/526	RR
8	20071168	HODGES, DOROTHY M HRS	2004E/498	RR
9	20150305	MOREDOCK, ROSE A	4870/562	RR

PLANS PREPARED FOR:

 401 SOUTH WILMINGTON STREET
 RALEIGH, NC 27601
 OFFICE: (800) 452-2777

PROJECT INFORMATION:
SOUTHERN PINES 115 SUB
 184 WOOSTER RD.
 SOUTHERN PINES, NC 28387
 (MOORE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
 326 TRYON ROAD
 RALEIGH, NC 27603
 OFFICE: (919) 661-6351
 www.tepgroup.net

SEAL:

PRELIMINARY
 DO NOT USE FOR CONSTRUCTION

0	01-20-21	PRELIMINARY
REV	DATE	ISSUED FOR:

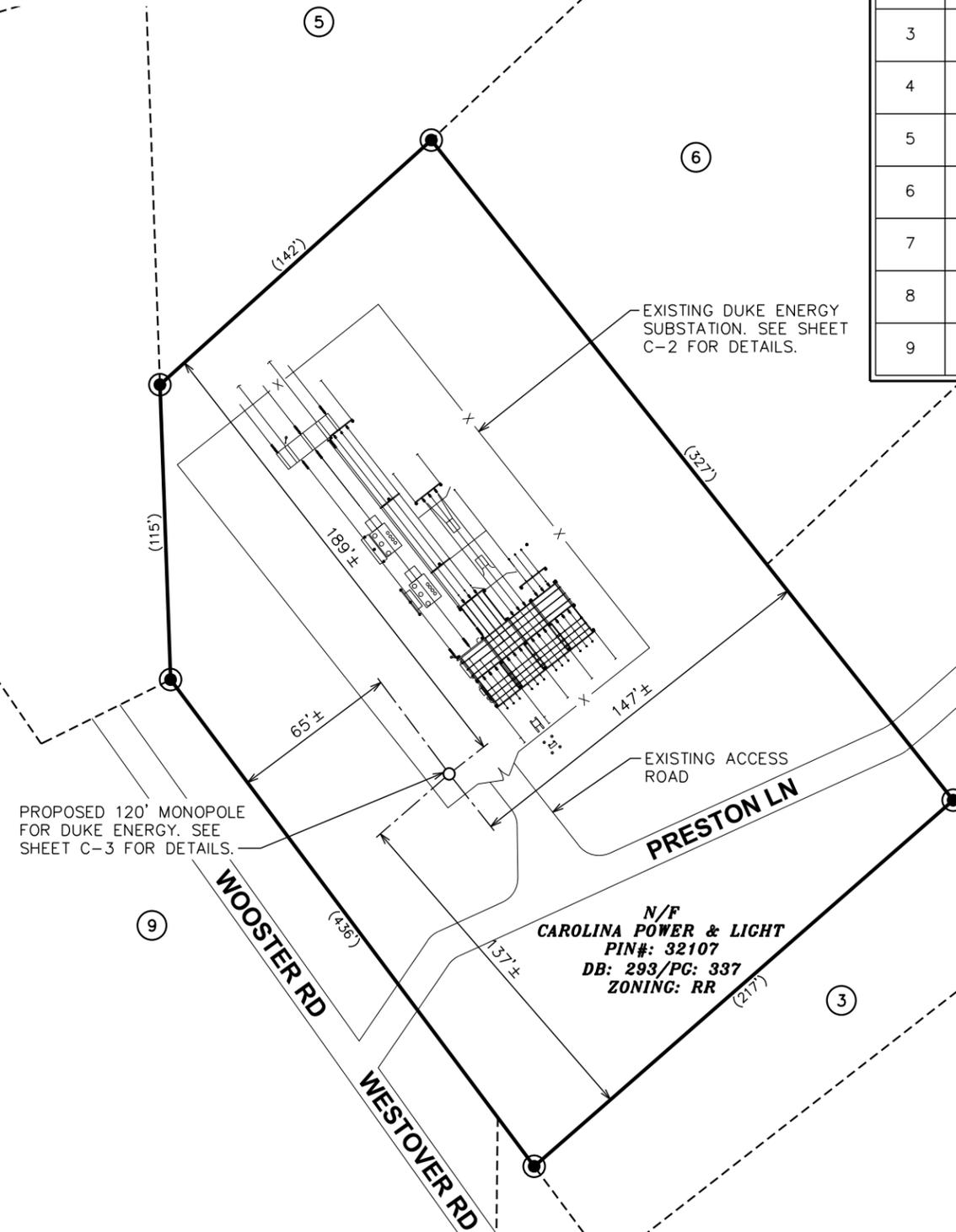
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SHEET TITLE:
SITE PLAN

SHEET NUMBER: **C-1** REVISION: **0**
 TEP#: 248931.417993

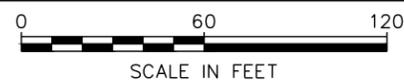
LEGEND

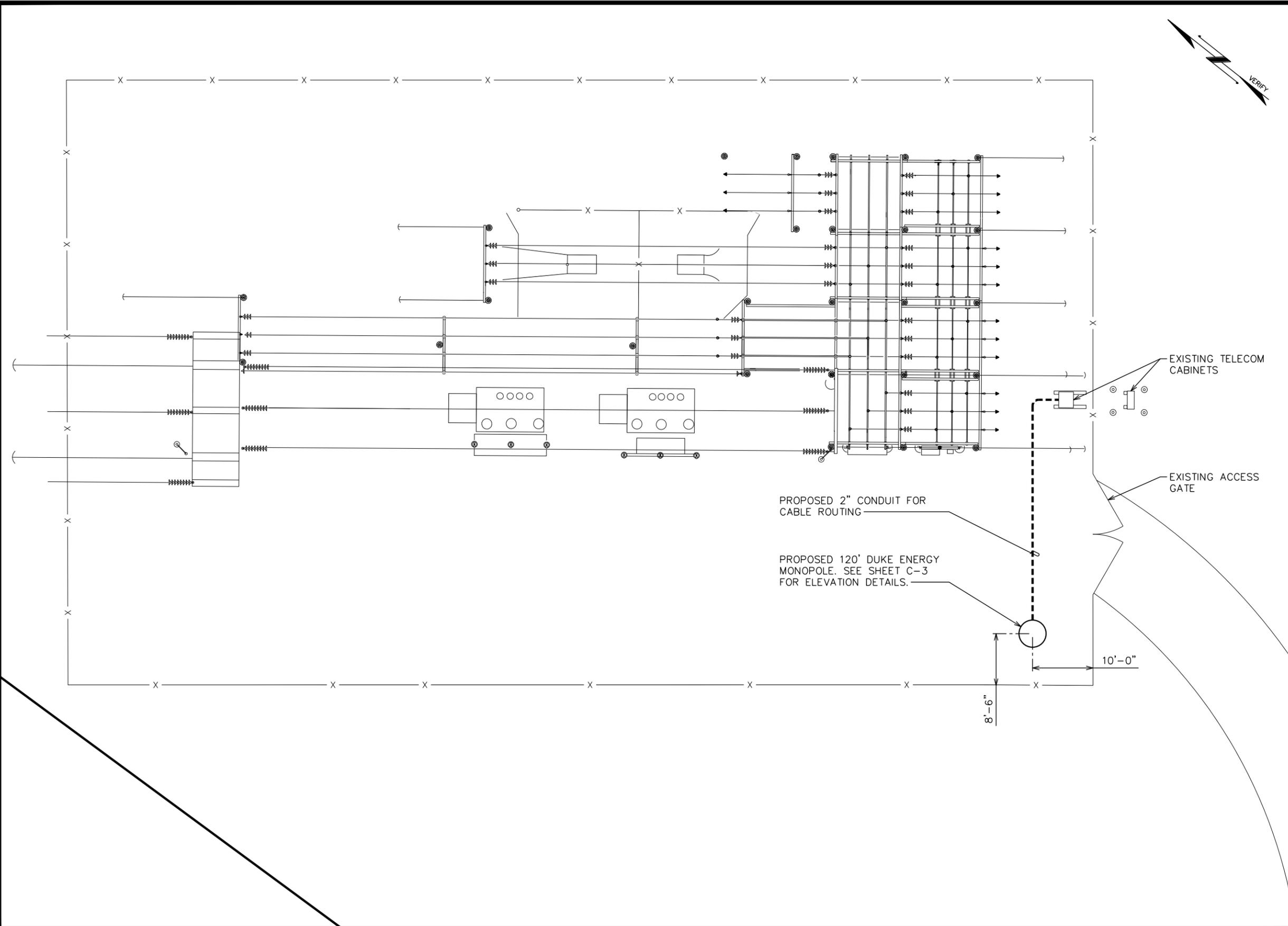
	EXIST. PROPERTY LINE
	EXIST. UTILITY POLE
	EXIST. LIGHT POLE
	EXIST. HYDRANT
	EXIST. TELCO PEDESTAL
	PROPERTY CORNER
	---200--- EXIST. CONTOUR LINE
	EDGE OF PAVEMENT
	---OHW--- OVERHEAD WIRE
	---R/W--- RIGHT-OF-WAY
	CHAIN LINK FENCE
	EXISTING TREE LINE
(XXX')	LENGTH OF PROPERTY LINE PER GIS MAP



SITE PLAN

SCALE: 1" = 60'

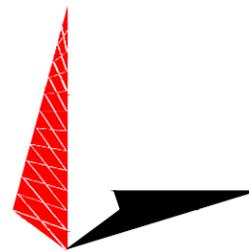


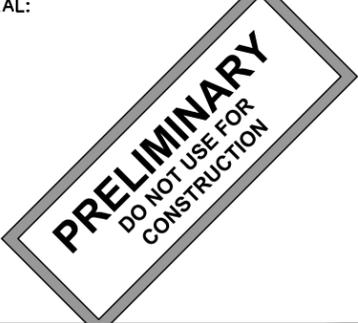


PLANS PREPARED FOR:

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 115 SUB**
 184 WOOSTER RD.
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SEAL:


0	01-20-21	PRELIMINARY
REV	DATE	ISSUED FOR:

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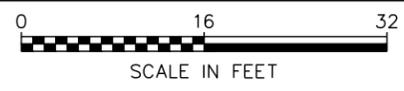
SHEET TITLE:
COMPOUND DETAIL

SHEET NUMBER:
C-2

REVISION:
0

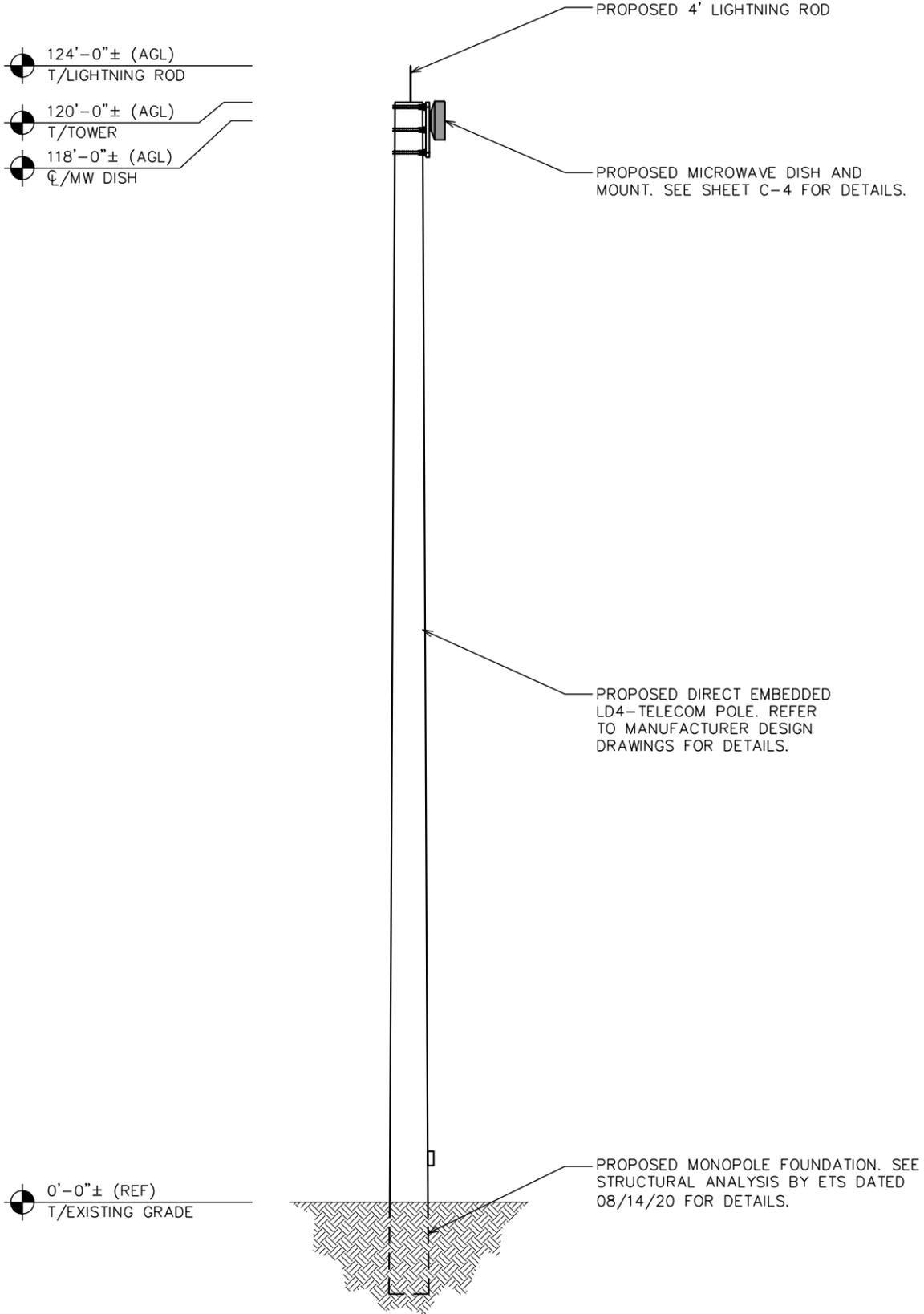
TEP#: 248931.417993

COMPOUND DETAIL
 SCALE: 1/8" = 1'-0"



NOTES:

1. TOWER TO REMAIN A GALVANIZED COLOR.
2. TOWER SHALL NOT BE LIT UNLESS REQUIRED BY THE FAA

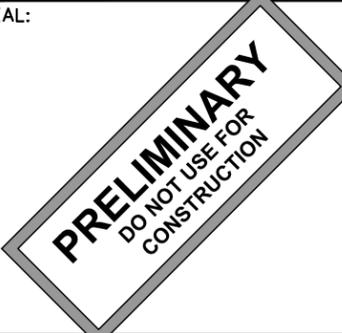


TOWER ELEVATION

SCALE: 1/16" = 1'-0"



<p>SHEET NUMBER: C-3</p> <p>REVISION: 0</p> <p>TEP#: 240931.417993</p>	<p>SHEET TITLE: TOWER ELEVATION</p>	<p>DRAWN BY: RJW CHECKED BY: JBG</p>	<p>REV: 0 DATE: 01-20-21 PRELIMINARY</p>	<p>SEAL:</p> <p>PRELIMINARY DO NOT USE FOR CONSTRUCTION</p>	<p>TOWER ENGINEERING PROFESSIONALS 326 TRYON ROAD RALEIGH, NC 27603 OFFICE: (919) 661-6351 www.tepgroup.net</p>	<p>PLANS PREPARED BY:</p>	<p>PROJECT INFORMATION: SOUTHERN PINES 115 SUB 184 WOOSTER RD. SOUTHERN PINES, NC 28387 (MOORE COUNTY)</p>	<p>PLANS PREPARED FOR: DUKE ENERGY. 401 SOUTH WILMINGTON STREET RALEIGH, NC 27601 OFFICE: (800) 452-2777</p>
			<p>ISSUED FOR:</p>					

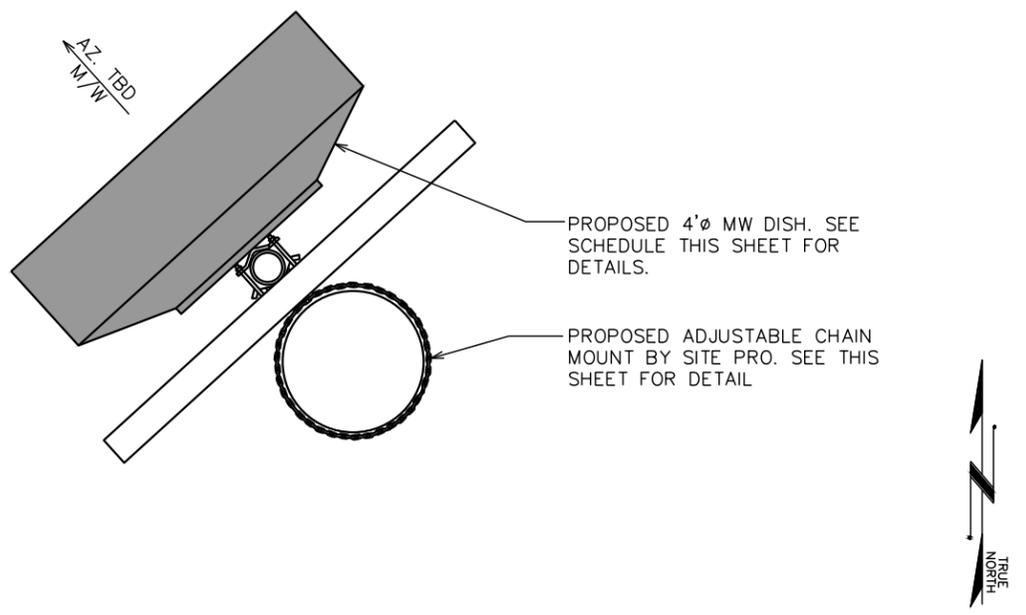
SEAL:


0	01-20-21	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: RJW CHECKED BY: JBG

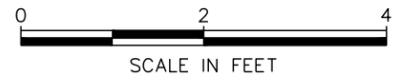
SHEET TITLE:
**MICROWAVE
 MOUNTING DETAILS**

SHEET NUMBER: **C-4** REVISION: **0**
 TEP#: 248931.417993



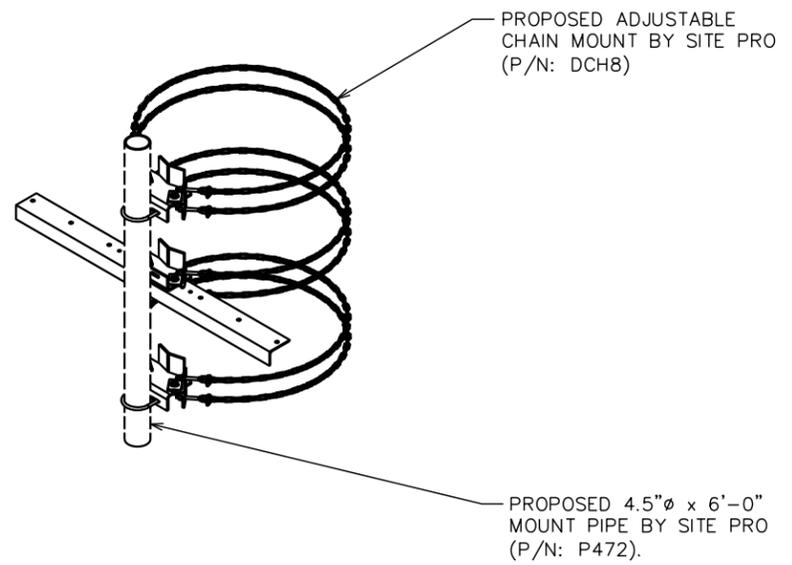
PROPOSED MICROWAVE @ 118'-0"

SCALE: 1/2" = 1'-0"



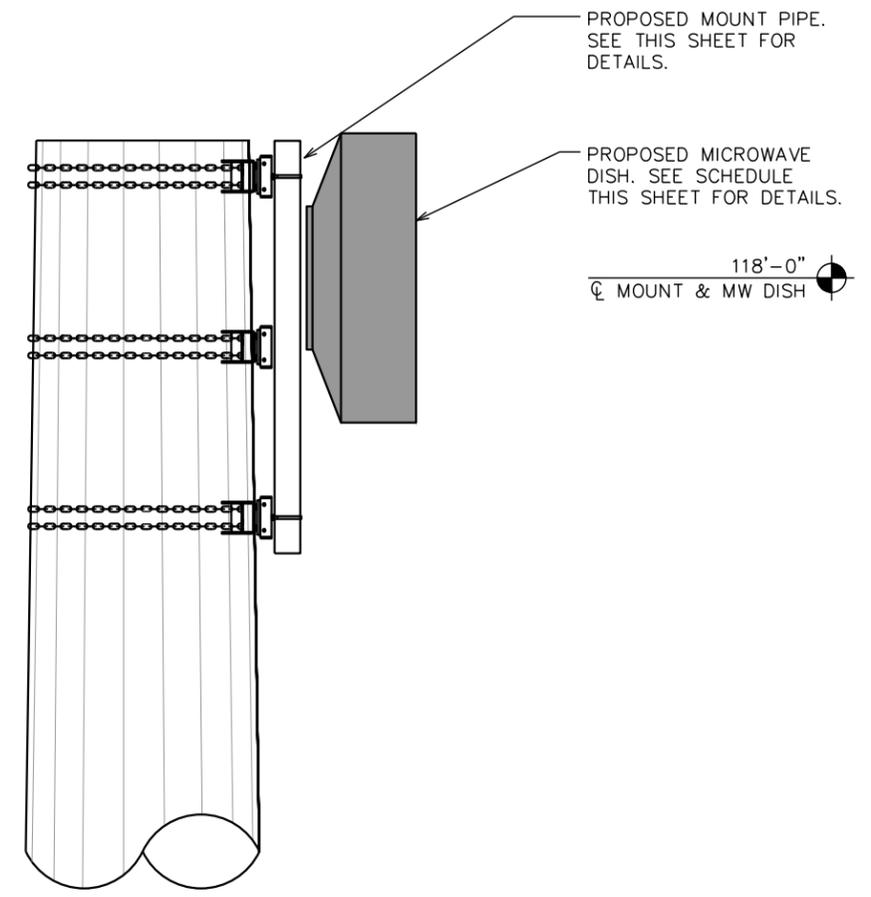
NOTE:

POLE DIAMETER AT 118': REFER TO POLE MANUFACTURER DRAWINGS



PROPOSED PIPE MOUNT

SCALE: N.T.S.



PROPOSED PIPE MOUNT PROFILE

SCALE: N.T.S.

PROPOSED MICROWAVE ANTENNA/COAX SCHEDULE

TECHNOLOGY	MANUFACTURER (MODEL #)	MOUNTING HEIGHT	AZIMUTH	COAX SIZE	COAX LENGTH
MICROWAVE	RADIOWAVES (HPD4-5.2)	Ø @ 118'-0"	T.B.D	(1) CAT5e	*165'±
-	CAMBIUM (PMP450i)(INTEGRATED)				

*CONTRACTOR SHALL FIELD VERIFY COAX LENGTH PRIOR TO CONSTRUCTION.

PROPOSED MICROWAVE ANTENNA/COAX SCHEDULE

SCALE: N.T.S.

SCOPE:

1. PROVIDE LABOR, MATERIALS, INSPECTION, AND TESTING TO PROVIDE CODE COMPLIANCE FOR ELECTRIC, TELEPHONE, AND GROUNDING/LIGHTNING SYSTEMS.

CODES:

1. THE INSTALLATION SHALL COMPLY WITH APPLICABLE LAWS AND CODES. THESE INCLUDE BUT ARE NOT LIMITED TO THE LATEST ADOPTED EDITIONS OF:
 - A. THE NATIONAL ELECTRICAL SAFETY CODE
 - B. THE NATIONAL ELECTRIC CODE – NFPA-70
 - C. REGULATIONS OF THE SERVING UTILITY COMPANY
 - D. LOCAL AND STATE AMENDMENTS
 - E. THE INTERNATIONAL ELECTRIC CODE – IEC (WHERE APPLICABLE)
2. PERMITS REQUIRED SHALL BE OBTAINED BY THE CONTRACTOR.
3. AFTER COMPLETION AND FINAL INSPECTION OF THE WORK, THE OWNER SHALL BE FURNISHED A CERTIFICATE OF COMPLETION AND APPROVAL.

TESTING:

1. UPON COMPLETION OF THE INSTALLATION, OPERATE AND ADJUST THE EQUIPMENT AND SYSTEMS TO MEET SPECIFIED PERFORMANCE REQUIREMENTS. THE TESTING SHALL BE DONE BY QUALIFIED PERSONNEL.

GUARANTEE:

1. IN ADDITION TO THE GUARANTEE OF THE EQUIPMENT BY THE MANUFACTURER, EACH PIECE OF EQUIPMENT SPECIFIED HEREIN SHALL ALSO BE GUARANTEED FOR DEFECTS OF MATERIAL OR WORKMANSHIP OCCURRING DURING A PERIOD OF ONE (1) YEAR FROM FINAL ACCEPTANCE OF THE WORK BY THE OWNER AND WITHOUT EXPENSE TO THE OWNER.
2. THE WARRANTEE CERTIFICATES & GUARANTEES FURNISHED BY THE MANUFACTURERS SHALL BE TURNED OVER TO THE OWNER.

UTILITY CO-ORDINATION:

1. CONTRACTOR SHALL COORDINATE WORK WITH THE POWER AND TELEPHONE COMPANIES AND SHALL COMPLY WITH THE SERVICE REQUIREMENTS OF EACH UTILITY COMPANY.

EXAMINATION OF SITE:

1. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL VISIT THE SITE OF THE JOB AND SHALL FAMILIARIZE HIMSELF WITH THE CONDITIONS AFFECTING THE PROPOSED ELECTRICAL INSTALLATION AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. FAILURE TO COMPLY WITH THE INTENT OF THIS SECTION WILL IN NO WAY RELIEVE THE CONTRACTOR OF PERFORMING THE WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM OR SYSTEMS.

CUTTING, PATCHING AND EXCAVATION:

1. COORDINATION OF SLEEVES, CHASES, ETC., BETWEEN SUBCONTRACTORS WILL BE REQUIRED PRIOR TO THE CONSTRUCTION OF ANY PORTION OF THE WORK. CUTTING AND PATCHING OF WALLS, PARTITIONS, FLOORS, AND CHASES IN CONCRETE, WOOD, STEEL OR MASONRY SHALL BE DONE AS PROVIDED ON THE DRAWINGS.
2. NECESSARY EXCAVATIONS AND BACKFILLING INCIDENTAL TO THE ELECTRICAL WORK SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWING.
3. SEAL PENETRATIONS THROUGH RATED WALLS, FLOORS, ETC., WITH APPROVED METHOD AS LISTED BY UL.

RACEWAYS / CONDUITS GENERAL:

1. CONDUCTORS SHALL BE INSTALLED IN LISTED RACEWAYS. CONDUIT SHALL BE RIGID STEEL, EMT, SCH40 PVC, OR SCH80PVC AS INDICATED ON THE DRAWINGS. THE RACEWAY SYSTEM SHALL BE COMPLETE BEFORE INSTALLING CONDUCTORS.
2. EXTERIOR RACEWAYS AND GROUNDING SLEEVES SHALL BE SEALED AT POINTS OF ENTRANCE AND EXIT. THE RACEWAY SYSTEM SHALL BE BONDED PER NEC.

EXTERIOR CONDUIT:

1. EXPOSED CONDUIT SHALL BE NEATLY INSTALLED AND RUN PARALLEL OR PERPENDICULAR TO STRUCTURAL ELEMENTS. SUPPORTS AND MOUNTING HARDWARE SHALL BE HOT DIPPED GALVANIZED STEEL.
2. WHERE INSTALLED ON EXTERIOR STRUCTURES OR EXPOSED TO DAMAGE, THE CONDUIT SHALL BE RIGID STEEL.
3. UNDERGROUND CONDUITS SHALL BE RIGID STEEL, SCH40 PVC, OR SCH80 PVC AS INDICATED ON THE DRAWINGS.
4. BURIAL DEPTH OF CONDUITS SHALL BE AS REQUIRED BY CODE FOR EACH SPECIFIC CONDUIT TYPE AND APPLICATION, BUT SHALL NOT BE LESS THAN THE FROST DEPTH AT THE SITE.
5. CONDUIT ROUTES ARE SCHEMATIC. CONTRACTOR SHALL FIELD VERIFY ROUTES BEFORE BID. COORDINATE ROUTE WITH WIRELESS CARRIER AND/OR BUILDING OWNER.

INTERIOR CONDUIT:

1. CONCEALED CONDUIT IN WALLS OR INTERIOR SPACES ABOVE GRADE MAY BE EMT.
2. CONDUIT RUNS SHALL USE APPROVED COUPLINGS AND CONNECTORS. PROVIDE INSULATED BUSHING FOR ALL CONDUIT TERMINATIONS. CONDUIT RUNS IN A WET LOCATION SHALL HAVE WATERPROOF FITTINGS.
3. PROVIDE SUPPORTS FOR CONDUITS IN ACCORDANCE WITH NEC REQUIREMENTS. CONDUITS SHALL BE SIZED AS REQUIRED BY NEC.

EQUIPMENT:

1. DISCONNECT SWITCHES SHALL BE SERVICE ENTRANCE RATED, HEAVY DUTY TYPE.
2. CONTRACTOR SHALL VERIFY MAXIMUM AVAILABLE FAULT CURRENT AND COORDINATE INSTALLATION WITH THE LOCAL UTILITY BEFORE STARTING WORK. CONTRACTOR WILL VERIFY THAT EXISTING CIRCUIT BREAKERS ARE RATED FOR MORE THAN AVAILABLE FAULT CURRENT AND REPLACE AS NECESSARY.
3. NEW CIRCUIT BREAKERS SHALL BE RATED TO WITHSTAND THE MAXIMUM AVAILABLE FAULT CURRENT AS DETERMINED BY THE LOCAL UTILITY.

CONDUCTORS:

1. FURNISH AND INSTALL CONDUCTORS SPECIFIED IN THE DRAWINGS. CONDUCTORS SHALL BE COPPER AND SHALL HAVE TYPE THWN (MIN) (75° C) INSULATION, RATED FOR 600 VOLTS.
2. THE USE OF ALUMINUM CONDUCTORS SHALL BE LIMITED TO THE SERVICE FEEDERS INSTALLED BY THE UTILITY.
3. CONDUCTORS SHALL BE PROVIDED AND INSTALLED AS FOLLOWS:
 - A. MINIMUM WIRE SIZE SHALL BE #12 AWG.
 - B. CONDUCTORS SIZE #8 AND LARGER SHALL BE STRANDED. CONDUCTORS SIZED #10 AND #12 MAY BE SOLID OR STRANDED.
 - C. CONNECTION FOR #10 AWG #12 AWG SHALL BE BY TWISTING TIGHT AND INSTALLING INSULATED PRESSURE OR WIRE NUT CONNECTIONS.
 - D. CONNECTION FOR #8 AWG AND LARGER SHALL BE BY USE OF STEEL CRIMP-ON SLEEVES WITH NYLON INSULATOR.
3. CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH NEC STANDARDS.

UL COMPLIANCE:

1. ELECTRICAL MATERIALS, DEVICES, CONDUCTORS, APPLIANCES, AND EQUIPMENT SHALL BE LABELED/LISTED BY UL OR ACCEPTED BY JURISDICTION (I.E., LOCAL COUNTY OR STATE) APPROVED THIRD PARTY TESTING AGENCY.

GROUNDING:

1. ELECTRICAL NEUTRALS, RACEWAYS AND NON-CURRENT CARRYING PARTS OF ELECTRICAL EQUIPMENT AND ASSOCIATED ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH NEC ARTICLE 250. THIS SHALL INCLUDE NEUTRAL CONDUCTORS, CONDUITS, SUPPORTS, CABINETS, BOXES, GROUND BUSSES, ETC. THE NEUTRAL CONDUCTOR FOR EACH SYSTEM SHALL BE GROUNDED AT A SINGLE POINT.
2. PROVIDE GROUND CONDUCTOR IN RACEWAYS PER NEC.
3. PROVIDE BONDING AND GROUND TO MEET NFPA 780 – "LIGHTNING PROTECTION" AS A MINIMUM.
4. PROVIDE GROUNDING SYSTEM AS INDICATED ON THE DRAWINGS, AS REQUIRED BY THE NATIONAL ELECTRIC CODE, RADIO EQUIPMENT MANUFACTURERS, AND MOTOROLA R56 (AS APPLICABLE).

ABBREVIATIONS AND LEGEND																																																																																															
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PLANS PREPARED FOR:



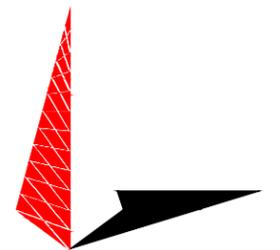
401 SOUTH WILMINGTON STREET
RALEIGH, NC 27601
OFFICE: (800) 452-2777

PROJECT INFORMATION:

**SOUTHERN PINES
115 SUB**

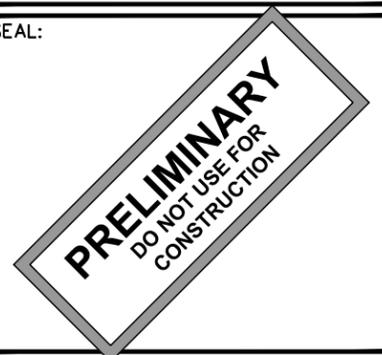
184 WOOSTER RD.
SOUTHERN PINES, NC 28387
(MOORE COUNTY)

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603
OFFICE: (919) 661-6351
www.tepgroup.net

SEAL:



0	01-20-21						PRELIMINARY
REV	DATE						ISSUED FOR:

DRAWN BY: RJW CHECKED BY: JBG

SHEET TITLE:
**ELECTRICAL
NOTES**

SHEET NUMBER: E-1	REVISION: 0
TEP#: 248931.417993	

DRAWING NOTES:

- ① ½" x 10' COPPER GROUND ROD (TYP)
- ② CADWELD (TYP)
- ③ TOWER BUSS BAR
- ④ TOWER BUSS BAR BONDING CONDUCTOR (TYP OF 2)
- ⑤ PROPOSED TOWER
- ⑥ EXISTING SUBSTATION GROUND SYSTEM
- ⑦ EXISTING FENCE GROUND CONNECTION
- ⑧ 9 AWG GROUND LEAD FROM TOWER STEEL TO EXISTING GROUND SYSTEM (CONTRACTOR TO VERIFY LOCATION) (TYP OF 2).

GROUNDING NOTES

- 1. CONTRACTOR SHALL VERIFY THAT GROUNDING ELECTRODES SHALL BE CONNECTED IN A RING USING 4/0 AWG BARE TINNED COPPER WIRE, THE TOP OF THE GROUND RODS AND THE RING CONDUCTOR SHALL BE 30" BELOW FINISHED GRADE. GROUNDING ELECTRODES SHALL BE DRIVEN ON 10'-0" CENTERS. (MINIMUM; 15'-0" MAX, PROVIDE AND INSTALL AS REQUIRED PER PLAN BELOW).
- 2. GROUND RING CONNECTION CONDUCTORS SHALL BE OF EQUAL LENGTH, MATERIAL, AND BONDING TECHNIQUE.
- 3. PROVIDE AND INSTALL GROUNDING CONNECTIONS SHOWN BELOW AS NEEDED PER EXISTING SITE GROUNDING SYSTEM. CONTRACTOR SHALL VERIFY ALL EXISTING SITE GROUNDING CONDITIONS BEFORE STARTING WORK OR PURCHASING EQUIPMENT.
- 4. BOND TOWER GROUND BAR TO EXTERNAL GROUND RING WITH 2 RUNS OF 4/0 BARE, TINNED, SOLID COPPER CONDUCTOR IN PVC. CONNECT BAR END WITH 2 HOLE LUG, AND "CADWELD" THE OTHER END TO THE EXTERNAL GROUND ROD.
- 5. BONDING CONDUCTORS SHALL BE ROUTED THROUGH A ¾" PVC CONDUIT SLEEVE RUN UNDER THE FOUNDATION. REFER TO THE GROUNDING PLAN BELOW.
- 6. ALL CONDUIT, GROUND GRID CONDUCTOR AND UNDERGROUND FEEDER CIRCUIT LOCATIONS ARE APPROXIMATE. HAND DIG TO A MINIMUM OF 36" PRIOR TO MACHINERY EXCAVATIONS WHERE THERE IS A POTENTIAL FOR IMPACTING EXISTING UNDERGROUND COMPONENTS.

PLANS PREPARED FOR:



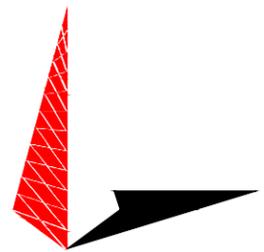
401 SOUTH WILMINGTON STREET
RALEIGH, NC 27601
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PROJECT INFORMATION:

**SOUTHERN PINES
115 SUB**

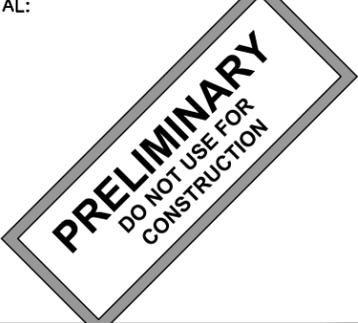
184 WOOSTER RD.
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PLANS PREPARED BY:



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www.tepgroup.net

SEAL:



0	01-20-21	PRELIMINARY
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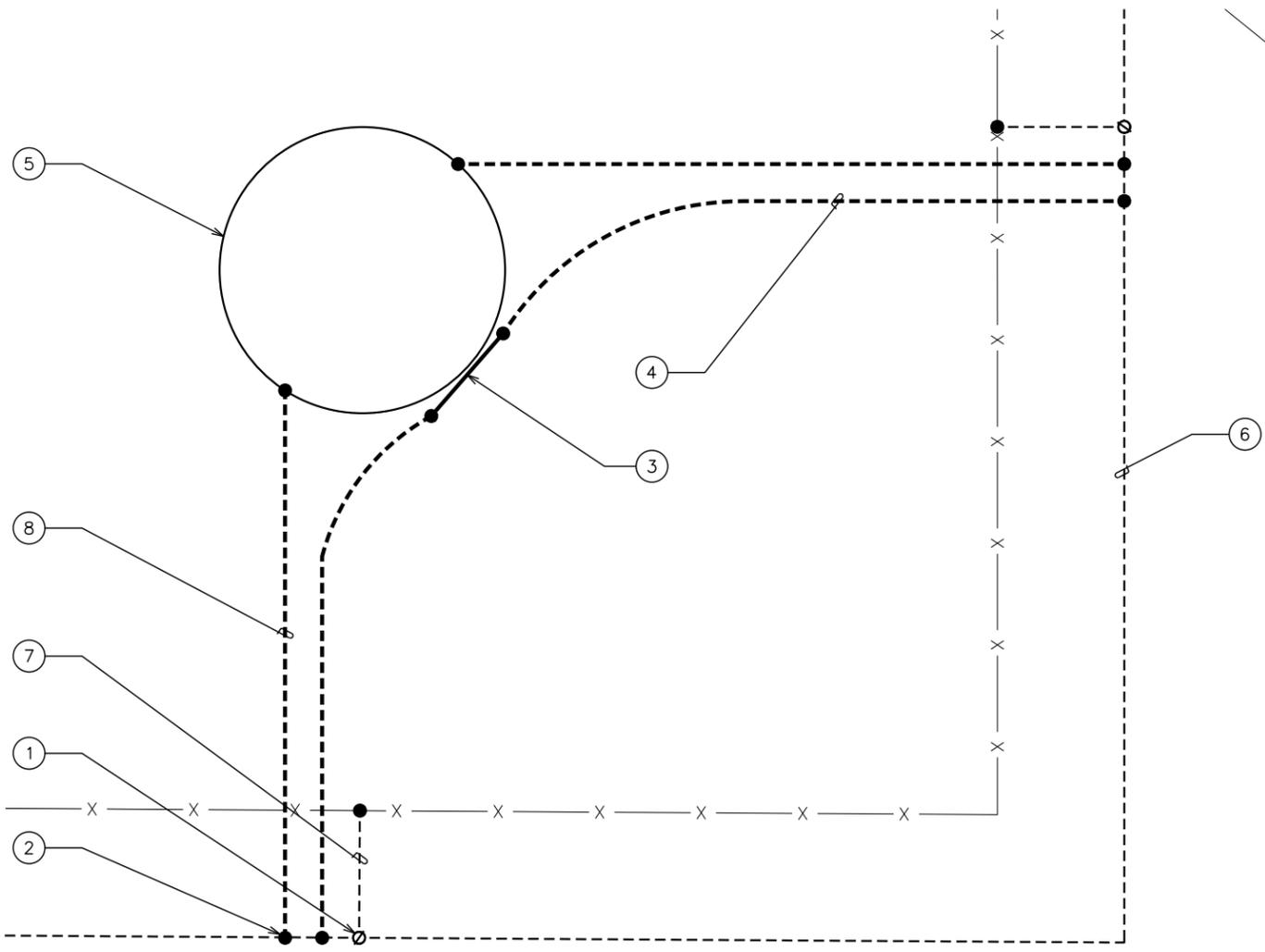
DRAWN BY: RJW | CHECKED BY: JBG

SHEET TITLE:

**TOWER GROUNDING
AND ROUTING PLAN**

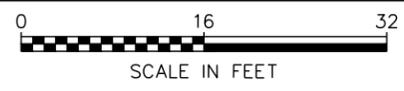
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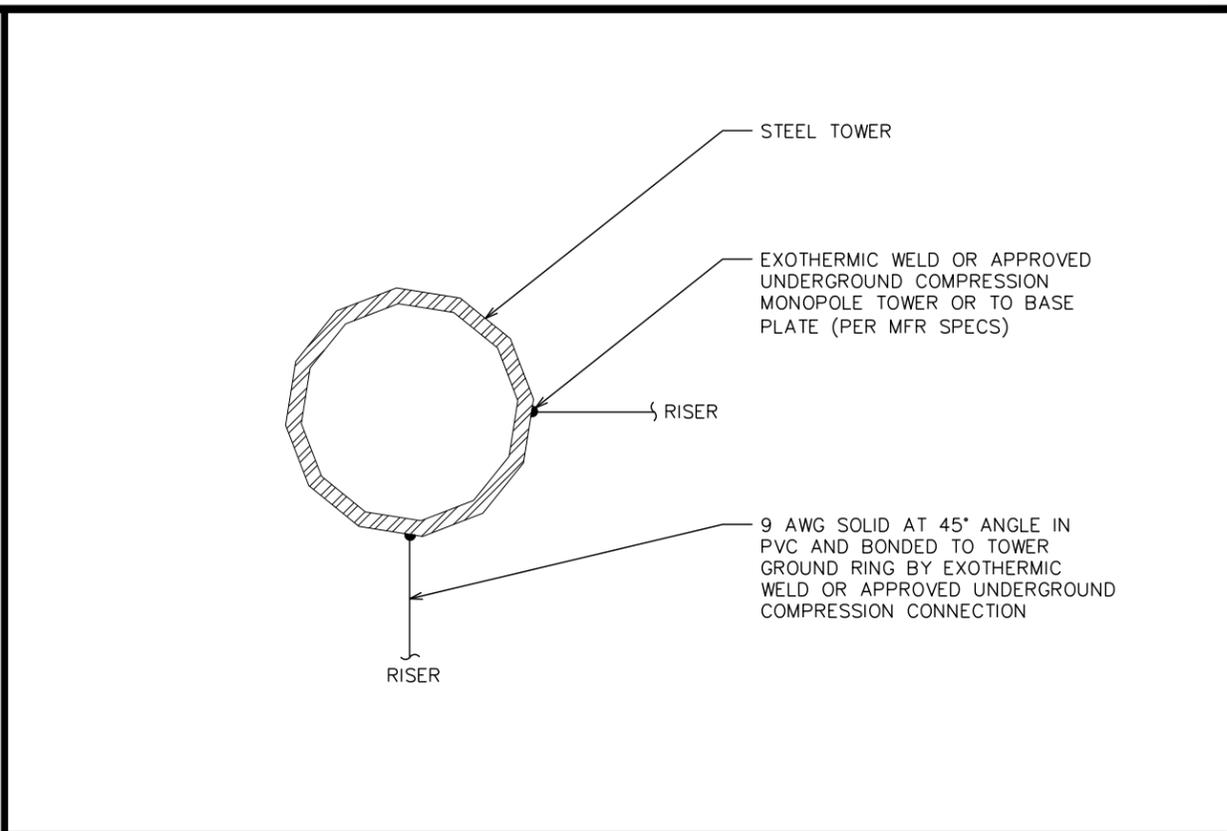
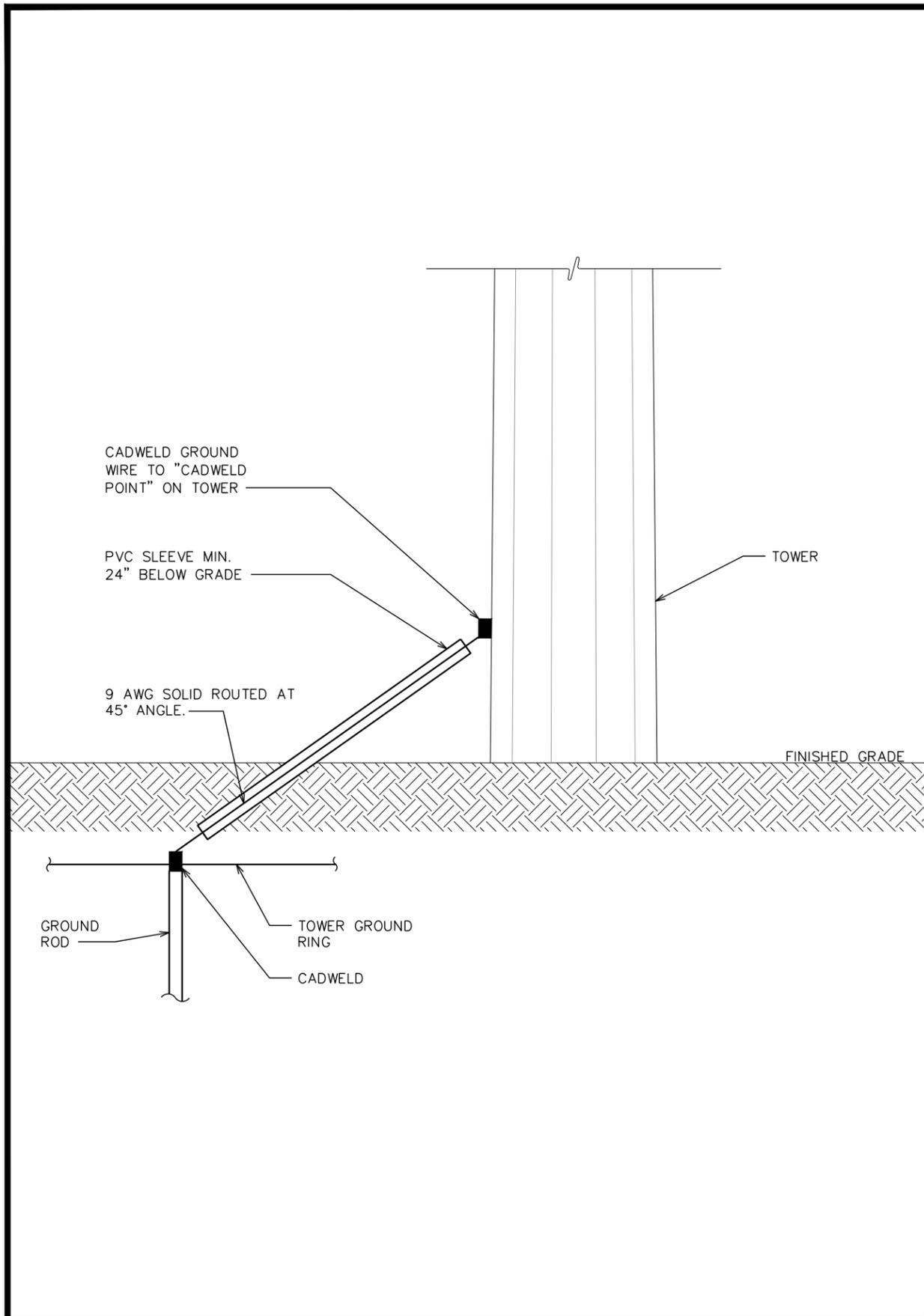
TEP#: 248931.417993



TOWER GROUNDING PLAN

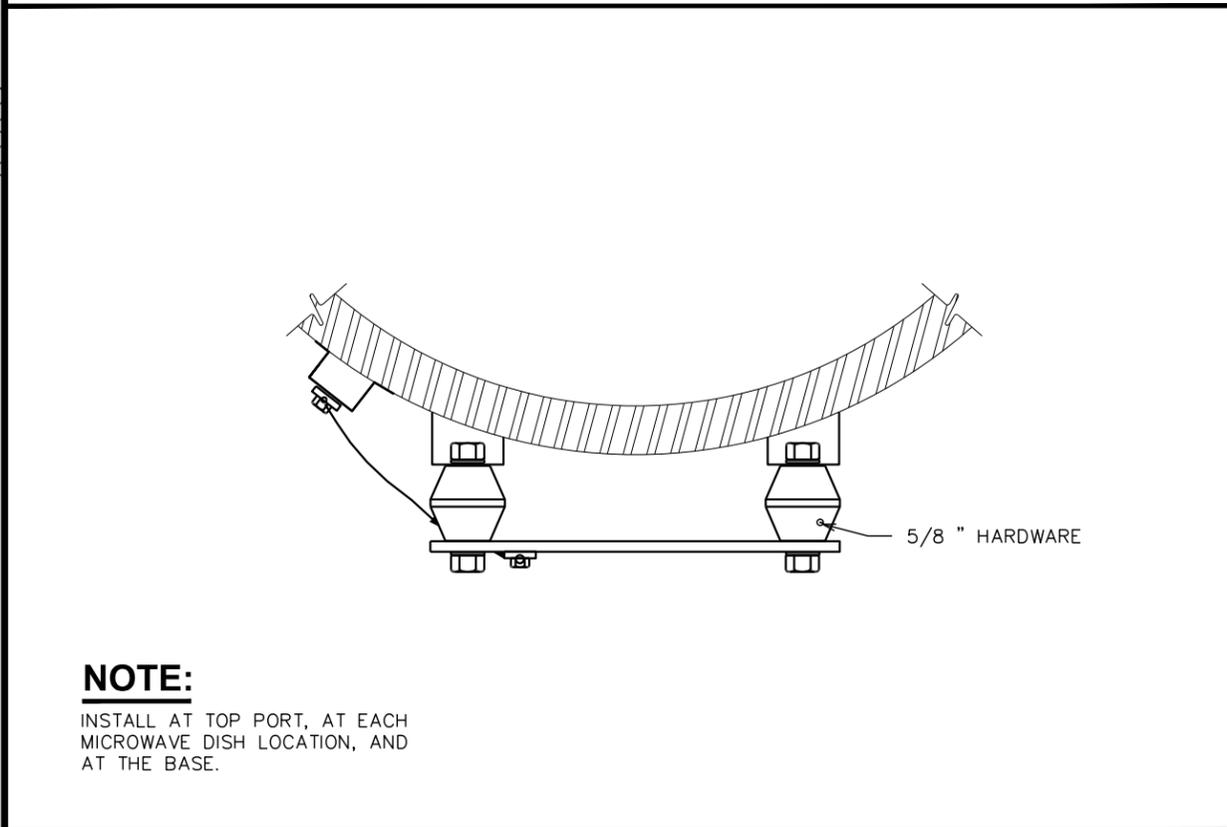
SCALE: 1/8" = 1'-0"





MONOPOLE BASE GROUNDING DETAIL

SCALE: N.T.S.



NOTE:

INSTALL AT TOP PORT, AT EACH MICROWAVE DISH LOCATION, AND AT THE BASE.

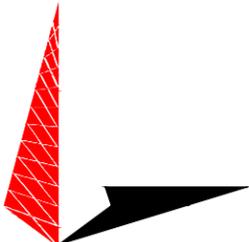
MONOPOLE GROUND BAR MOUNTING DETAIL

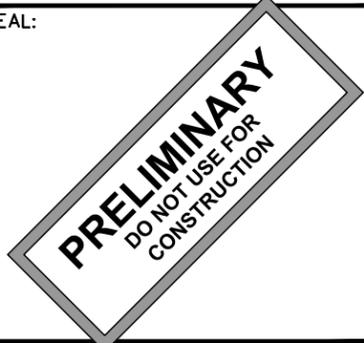
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PLANS PREPARED FOR:

 401 SOUTH WILMINGTON STREET
 RALEIGH, NC 27601
 OFFICE: (800) 452-2777

PROJECT INFORMATION:
**SOUTHERN PINES
 115 SUB**
 184 WOOSTER RD.
 SOUTHERN PINES, NC 28387
 (MOORE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
 326 TRYON ROAD
 RALEIGH, NC 27603
 OFFICE: (919) 661-6351
 www.tepgroup.net

SEAL:


0	01-20-21	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: RJW | CHECKED BY: JBG

SHEET TITLE:
**GROUNDING
 DETAILS I**

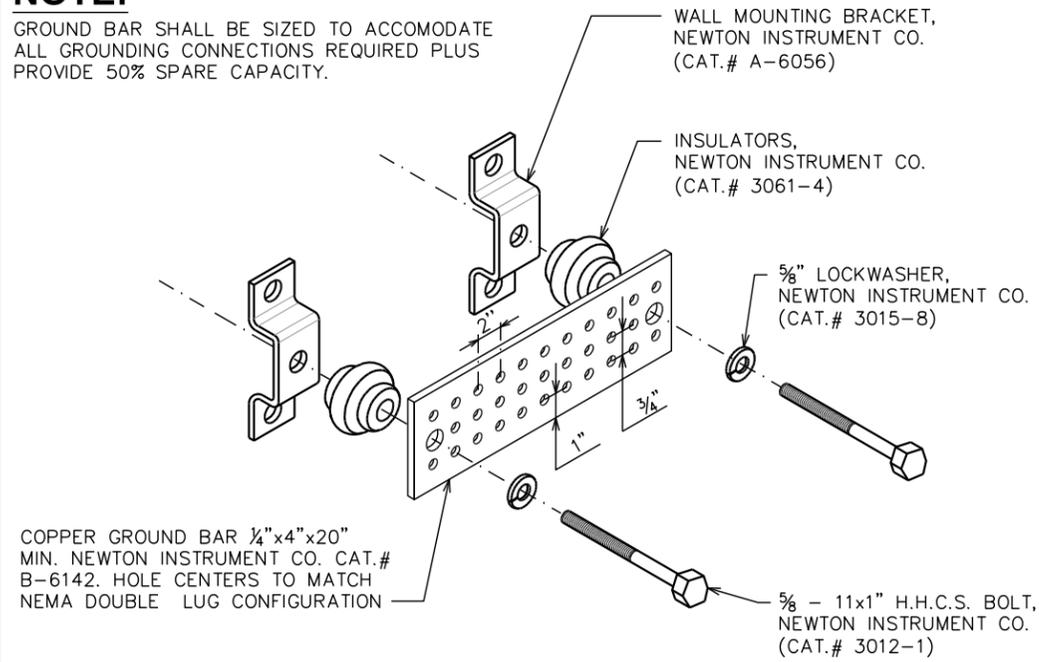
SHEET NUMBER: **E-3** | REVISION: **0**
 TEP#: 248931.417993

TOWER GROUNDING

SCALE: N.T.S.

NOTE:

GROUND BAR SHALL BE SIZED TO ACCOMODATE ALL GROUNDING CONNECTIONS REQUIRED PLUS PROVIDE 50% SPARE CAPACITY.

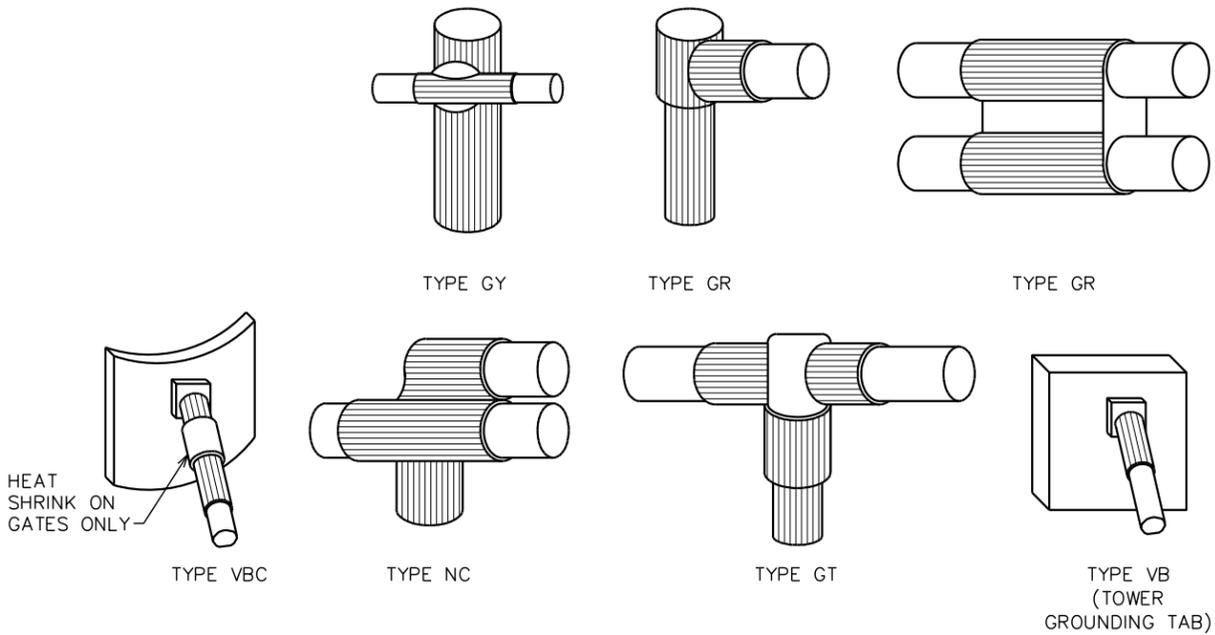


STANDARD GROUND BAR DETAIL

SCALE: N.T.S.

NOTE:

CADWELD "TYPES" SHOWN ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC TYPES OF CADWELDS TO BE USED FOR THIS PROJECT.

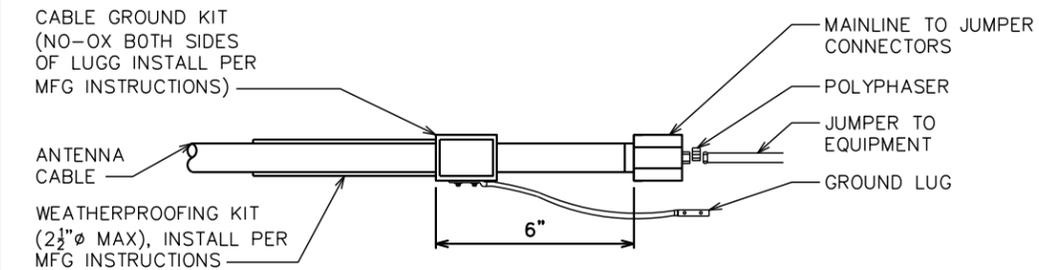


CADWELD DETAILS

SCALE: N.T.S.

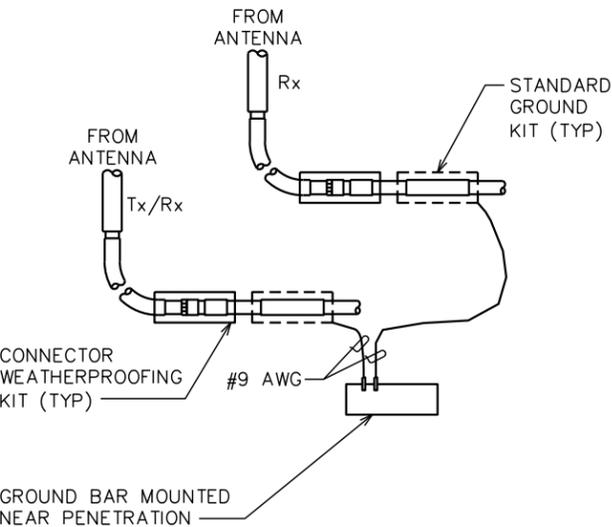
NOTE:

DO NOT INSTALL CABLE GROUND KIT AT A BEND.



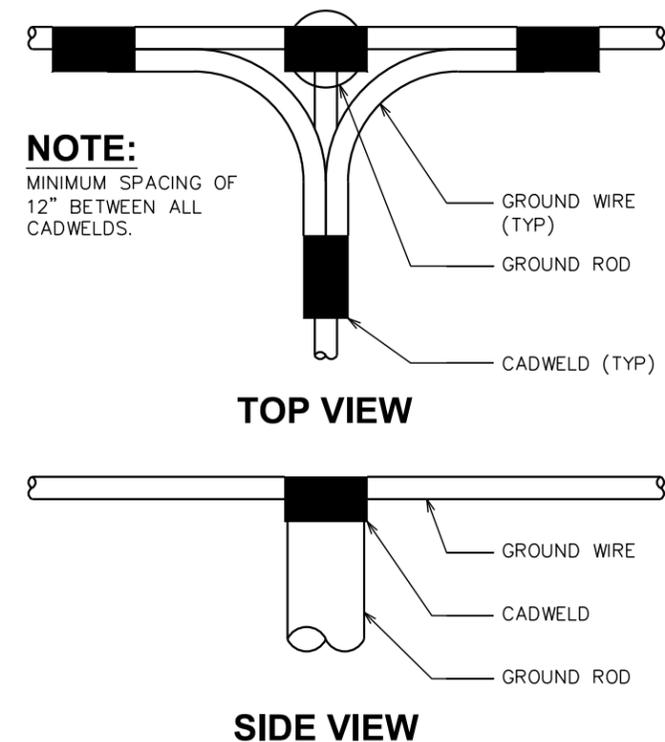
CABLE GROUNDING DETAIL

SCALE: N.T.S.



GROUND WIRE TO GROUND BAR CONNECTION AT ANTENNA

SCALE: N.T.S.



CADWELD GROUNDING DETAIL

SCALE: N.T.S.

PLANS PREPARED FOR:



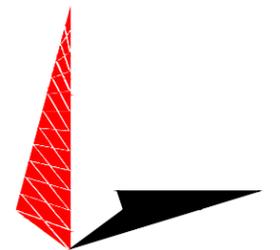
401 SOUTH WILMINGTON STREET
RALEIGH, NC 27601
OFFICE: (800) 452-2777

PROJECT INFORMATION:

**SOUTHERN PINES
115 SUB**

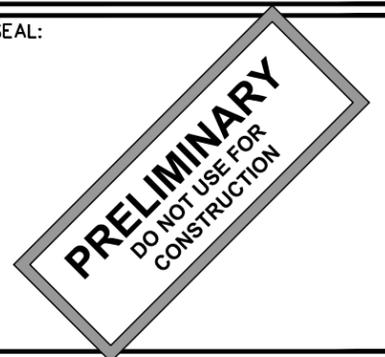
184 WOOSTER RD.
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SEAL:



0	01-20-21	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: RJW CHECKED BY: JBG

SHEET TITLE:
**GROUNDING
DETAILS II**

SHEET NUMBER: E-4	REVISION: 0
TEP#: 248931.417993	

MEMORANDUM

To: Reagan Parsons, Town Manager
From: James Michel, PE, MBA, Town Engineer/Assistant Public Works Director
Re: Title V: Public Works Chapter 50, Water and Sewer Use Ordinance Revisions
Date: June 30, 2021

BACKGROUND

A number of revisions to Chapter 50, Water and Sewer Use Ordinance were brought before Council for review and input at the June 28, 2021 work session. Many of the changes are simply grammatical or clerical in nature and have no real impact on the Town's prior policies. Examples of these changes are the clarification of the Operator in Responsible Charge's responsibilities, references to Appendix A in lieu of stating fees in specific sections, etc. This memo will focus on the significant changes. The draft changes to the Backflow Ordinance have been removed as discussions with the surrounding communities continue in an effort to provide some consistency.

§ 50.008 WORK TO BE DONE BY TOWN OR LICENSED UTILITY CONTRACTOR.

This section originally stated that the Town will perform all work to make connections to the water or sewer system. With the pace of construction in Moore County, the lead time for the Town to make a tap has grown to over 30 days and the Town has allowed builders to contract with a licensed utility contractor to make the connections for their project. The new language clarifies this and removes restricting language from the previous ordinance. The new language also clarifies that on projects which require a utility contractor for other parts of the work, for example installation of a fire line or new mains in a subdivision, that the Town may require that the utility contractor also complete the domestic water and sewer taps.

§ 50.035 MANDATORY CONNECTIONS.

This section has been revised to clarify that only Town Council may waive the requirement to connect to the water system. This is in keeping with a recent Council decision to waive the requirement for several lots on McNeil Road.

§ 50.040 WATER SYSTEM DEVELOPMENT FEE and § 50.066 SEWER SYSTEM DEVELOPMENT FEE

This language change clarifies that the Town will collect the any System Development Fees (SDF) owed at the time of payment for the tap fee or a certificate of occupancy. The new language brings the Code into alignment with current practices and General Statute. The original language stated that SDF would be collected at the time of plat which historically has proven to be impractical and a challenge to properly track.

§ 50.059 MANDATORY CONNECTIONS (Sewer)

This change reduces the minimum distance from an existing sewer that triggers a mandatory connection from 300 feet to 200 feet, in line with Council's recent decision. This only applies to single lots and does not change the requirement for new subdivisions. Since the initial review at June 28, 2021 work session, additional language was added to allow for a general waiver by Town Council from mandatory sewer connections providing flexibility for council to review unique situations.



§ 50.060 TOWN MAINTENANCE OF SEPTIC SYSTEMS

This section is being deleted as the Town no longer provides this service to properties with septic tanks. All known accounts that were on septic and still being charged for sewer service have been changed to water only customers.

§ 50.083, § 50.084, 50.087, § 50.101, § 50.102, § 50.103

All of these sections deal with different aspects of the Town's water and sewer extension policies. The changes are intended to clarify current Town policies for determining when extensions are required, how the extensions are made, and who is responsible for the cost. The only item that may be considered a change in policy is for individual single-family residential lots that request Town water will be required to annex into Town when the annexation would be contiguous.

Next Steps

Staff is requesting adoption of the proposed revisions to Chapter 50 by Council at the July 13th, 2021 Regular Business Meeting.

**AMENDMENT TO THE
TOWN CODE OF ORDINANCES
FOR THE TOWN OF SOUTHERN PINES**

BE IT ORDAINED by the Town Council of the Town of Southern Pines, North Carolina, in regular session assembled this 13th day of July, 2021 that Chapter 50, Water and Sewer Use of the Code of Ordinances be amended as follows:

1. Revise TITLE V: PUBLIC WORKS § 50.001 DEFINITIONS. by adding the with the following:

OPERATOR IN RESPONSIBLE CHARGE (ORC). The individual designated as the certified operator of record of the system who has primary responsibility for the operation of water distribution, cross-connection control, and wastewater collection systems.

2. Revise TITLE V: PUBLIC WORKS § 50.003 APPLICATION FOR SERVICE by replacing the current Section (B)(7) with the following:

(7) When there is any potential, however remote, for a cross connection to the water system from any source which may be pressurized, hazardous materials, or toxic substances, the ORC may require visual confirmation that the cross-connection potential has been eliminated, or that cross-connection control devices, as specified by the Town, are in place and functional before the water can be turned on. Lawn irrigation systems shall be protected against backflow by a reduced pressure principle backflow prevention device (RPZ), which shall conform to ASSE 1013, AWWA C511, or CSA CAN/CSA 864.3, with a relief opening that discharges by air gap above grade; (see § 50.039, Cross-Connection Control) and/or

3. Revise TITLE V: PUBLIC WORKS § 50.005 RATES, FEES, AND CHARGES by replacing the current Section (B) with the following:

(B) All bills are due and payable upon receipt and are delinquent after the tenth of each month, and the service will be cut off after the twenty-fifth of each month, in accordance with § 50.013. There will be a late charge for all bills delinquent and an additional service charge for reconnection service during normal business hours, or a service charge for reconnection at other than normal business hours (see Appendix). If a customer's history shows no previous cut-offs in the last 12 months, the cut-off fee will be waived and the water not turned off. A customer will not be cut-off for a late fee balance of \$6 or less. A customer who will be out-of-Town may request in writing that his or her water be turned off. When the meter is turned back on, an administrative fee as shown in Appendix A of this Chapter will be charged to the account.

4. Revise TITLE V: PUBLIC WORKS § 50.006 LINES TO BE DEDICATED TO THE TOWN PRIOR TO CONNECTION by replacing the current Section with the following:

§ 50.006 LINES TO BE DEDICATED TO THE TOWN PRIOR TO CONNECTION.

No water or sewer lines connected to the Town system will be accepted and maintained by the Town until the lines are dedicated to and become the property of the Town along with a recorded exclusive easement for inspection, maintenance and repair. No connection or extension may be made to the Town water or sewer system except with proper notice to, and approval of, the Town. No connection or extension shall be accepted by the Town unless the connection or extension meets Town standards and the property tied on complies with the Town's subdivision ordinance.

5. Revise TITLE V: PUBLIC WORKS § 50.008 WORK TO BE DONE BY TOWN OR LICENSED UTILITY CONTRACTOR by replacing the current Section with the following:

§ 50.008 WORK TO BE DONE BY TOWN OR LICENSED UTILITY CONTRACTOR.

(A) Upon approval of any application for a sewer or water connection, the Town shall do the excavating, lay the pipe, install a meter where necessary, make the connection to the main, fill the excavation and replace the surface of the street. The construction of the lateral for the connection of sewers or water pipes on any lot with sewer or water pipes in any street, and the necessary excavation therefor shall be done only by the Town.

(B) An exception to this provision may be approved by the Town Engineer and/or ORC where the installation of lines and laterals is done by a developer or his or her agent and where detailed plans and specifications have been approved by the Town Engineer and/or ORC. The connection work will be subject to inspection by the Town Engineer or his or her agents and shall not be accepted by the Town unless approved by the Town Engineer. All cost of inspection shall be borne by the developer. No work shall commence without prior notification being given to the Town Engineer and/or ORC. All work not done by the Town shall be done by a licensed utility contractor.

(C) In cases where a project requires a licensed utility contractor for work other than making the water or sewer connections, the Town Engineer and/or ORC may require that the water and/or sewer connections be completed by the developer or his or her agent. Detailed plans and specifications shall be approved by the Town Engineer and/or ORC. The connection work will be subject to inspection by the Town Engineer or his or her agents and shall not be accepted by the Town unless approved by the Town Engineer. All cost of inspection shall be borne by the developer. No work shall commence without prior notification being given to the Town Engineer and/or ORC. All work shall be done by a licensed utility contractor.

6. Revise TITLE V: PUBLIC WORKS § 50.009 METER, PIPES, AND OTHER CONNECTION EQUIPMENT TO REMAIN PROPERTY OF TOWN by replacing the current Section with the following:

§ 50.009 METER, PIPES, AND OTHER CONNECTION EQUIPMENT TO BE PROPERTY OF TOWN

All meters, meter boxes, pipes and other equipment furnished and used in installing any water or sewer connection shall be and remain the property of the Town.

7. Revise TITLE V: PUBLIC WORKS § 50.013 COMPLAINTS; ADJUSTMENT by replacing the current Section (A)(3) with the following:

(A)(3) When it becomes necessary for the Town to discontinue utility service to a customer for nonpayment of bills, service will be reinstated only after all bills for service then due have been paid, along with a turn-on charge as listed in Appendix A of this Chapter. All provisions of this division, including the turn-on charge, shall apply to any past due bill not paid by 5:00 p.m. of the last business day before the cut-off day.

8. Revise TITLE V: PUBLIC WORKS § 50.016 WATER SHORTAGE CONSERVATION MEASURES by replacing the current Section (B)(2) with the following:

(B)(2) Class 2: Socially or economically important uses of water.

9. Revise TITLE V: PUBLIC WORKS § 50.035 MANDATORY CONNECTIONS by replacing the current Section with the following:

§ 50.035 MANDATORY CONNECTIONS.

Any new house, lot, or subdivision in the Town limits or extraterritorial jurisdictional limits, whether developed or not, shall be required to provide water to the lot and/or each lot, unless the closest Town distribution pipe to any point on the property, without regard to dwelling location, is further than 300 feet for first dwelling, plus 100 feet, multiplied by the number of additional dwellings, residential, or commercial units planned or future. Only Town Council may waive this requirement.

10. Revise TITLE V: PUBLIC WORKS § 50.038 LIMITS OR PROHIBITIONS FOR POLICE PURPOSES by replacing the current Section with the following:

§ 50.038 LIMITS OR PROHIBITIONS FOR POLICE PURPOSES.

During any period in which an ordinance is in effect limiting or prohibiting certain types of water usage, the limitations shall apply to all users connected to the Town water system. Whoever is found to be violating the limits or prohibitions in effect shall have the water service to the property where the violation took place turned off. The water service shall not be reinstated until payment in full of the reconnection charge listed in Appendix A of this Chapter has been made. The Town Manager is hereby authorized to terminate service completely to any property whose owner repeatedly violates the limits or prohibitions of this section.

11. Revise TITLE V: PUBLIC WORKS § 50.040 WATER SYSTEM DEVELOPMENT FEE by replacing the current Section (D) with the following:

(D)(1) One hundred percent of the water system development fee shall be paid at the earliest or next occurrence of any one of the following:

- (a) Payment of tap fee; and
- (b) Certificate of occupancy.

(2) Customers requesting to change from a smaller to a larger meter size shall pay the difference between the then current system development fees for the two meter sizes. The current fees shall be as listed in Appendix A of this Chapter at the time of payment for the new meter. Payment of the system development fee shall be made at the same time as payment for the new meter.

12. Revise TITLE V: PUBLIC WORKS § 50.059 MANDATORY CONNECTIONS by replacing the current Section (C)(1) with the following:

(C)(1) It is not in a subdivision and no point on its lot is within 200 feet of a gravity connection pipe;

13. Revise TITLE V: PUBLIC WORKS § 50.059 MANDATORY CONNECTIONS by replacing the current Section (C)(6) with the following and adding (C)(7):

(C)(6) County approved septic system is available and connection to the town's sewer system would require both 200 feet or more of the sewer connection be in wetlands and that installation of a privately owned and operated sewer grinder pump would be required.

(C)(7) Only Town Council may waive the mandatory connection requirements of Section (C).

14. Delete TITLE V: PUBLIC WORKS § 50.060 TOWN MAINTENANCE OF SEPTIC SYSTEMS

15. Revise TITLE V: PUBLIC WORKS § 50.066 SEWER SYSTEM DEVELOPMENT FEE by replacing the current Section (C) with the following:

(C)(1) One hundred percent of the water system development fee shall be paid at the earliest or next occurrence of any one of the following:

- (a) Payment of tap fee; and
- (b) Certificate of occupancy.

(2) Customers requesting to change from a smaller to a larger meter size shall pay the difference between the then current system development fees for the two meter sizes. The current fees shall be as listed in Appendix A of this Chapter at the time of payment for the new meter. Payment of the system development fee shall be made at the same time as payment for the new meter.

16. Revise TITLE V: PUBLIC WORKS § 50.083 IN TOWN by replacing the current Section with the following:

§ 50.083 IN TOWN.

(A) Extensions of the water system shall be required when a mandatory connection is required by § 50.036 and water is not available to the property. The cost of the extension shall be at the developer's expense.

(B) Previous agreements for paychecks under the previous ordinance of 1977 Section 20-15 will be honored. No new agreements will be made from the date of this chapter.

(C) The Town will also make water extensions under authority of G.S. Ch. 160A, Art. 10. The extensions may be made following receipt of a petition from abutting property owners, or by action of the Town Council. Assessments levied under this authority may be payable over a period of up to 10 years.

(D) Failing all of the above, extensions may be made upon request to the Town at the applicant's expense.

(E) The Town may require that lines larger than 6 inch diameter or larger than otherwise required to serve the applicant be installed. In such a case, the Town will pay the difference in costs.

17. Revise TITLE V: PUBLIC § 50.084 EXTENSIONS IN EXTRATERRITORIAL ZONING AREA by replacing the current Section (A) with the following:

(A) The Town Manager is authorized to approve extensions to the Town water system in the Town's extraterritorial zoning jurisdictional area. All costs will be borne by the applicant. Any line extension or subdivision will meet all applicable provisions of this chapter and the Town Subdivision Ordinance including separate meters. When required by the Town Manager, the systems will be dedicated to the Town and the Town will maintain the systems. The Town personnel will be given unrestricted access whether the roads are public or private in such cases.

18. Revise TITLE V: PUBLIC § 50.087 EXTENSIONS BEYOND MUNICIPAL LIMITS by replacing the current Section (C)(1) with the following:

(C) Exceptions to these requirements are as follows:

- (1) Individual single-family residential lots would require a non-contiguous or satellite annexation;

19. Delete TITLE V: PUBLIC WORKS § 50.101 AVAILABILITY Section (D)

20. Revise TITLE V: PUBLIC § 50.102 EXTENSION BEYOND MUNICIPAL LIMITS by renumbering to § 50.103 EXTENSION BEYOND MUNICIPAL LIMITS:

21. Revise TITLE V: PUBLIC § 50.102 EXTENSION BEYOND MUNICIPAL LIMITS with the following:

§ 50.102 IN TOWN.

(A) Extensions of the sewer system shall be required when a mandatory connection is required by § 50.059 and sewer is not available to the property. The cost of the extension shall be at the developer's expense.

(B) The Town will also make sewer extensions under authority of G.S. Ch. 160A, Art. 10. The extensions may be made following receipt of a petition from abutting property owners, or by

action of the Town Council. Assessments levied under this authority may be payable over a period of up to 10 years.

(C) Failing all of the above, extensions may be made upon request to the Town at the applicant's expense.

(D) The Town may require that lines larger than 8 inch diameter or larger than otherwise required to serve the applicant be installed. In such a case, the Town will pay the difference in costs.

22. Revise TITLE V: PUBLIC § 50.999 PENALTY by replacing the current Section with the following:

§ 50.999 PENALTY.

(A) It shall be unlawful for any person, firm, or corporation to violate any provision of § 50.016 or § 50.011. Any person may be charged with violation of this section, or policy adopted hereunder, and prosecuted in District Court. Any person so charged and found guilty of violating § 50.016 or § 50.011 shall be guilty of a misdemeanor. The penalty for violation shall be a maximum fine of \$50 per occurrence, or imprisonment for not more than 30 days. Each day's violation shall constitute a separate offense. The imposition of 1 or more penalties for any violation shall not excuse any violation or permit it to continue.

(B) In addition to or in lieu of criminal prosecution in division (A) above, violation of § 50.016 or § 50.011 may subject the violator or customer to a civil penalty of up to \$500 per violation per day for so long as the violation exists. Each day on which a violation occurs or continues shall constitute a separate and distinct violation. In determining the amount of the civil penalty, the Manager shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration of the violation, efforts to correct the violation, the compliance history of the person against whom the violation is assessed, the cost of enforcement to the Town, whether the violation was willful or intentional and any other factor as justice requires. The Town shall serve a written citation on the violator, and the customer, if different, by personal delivery or by certified or registered mail, return receipt requested. The citation shall describe the violation and shall specify the amount of the civil penalty levied. The civil penalty is collectible in a civil action in the nature of debt. The imposition of 1 or more penalties for a violation shall not excuse any violation or permit it to continue.

23. Revise TITLE V: PUBLIC WORKS APPENDIX A: RATES, FEES, AND CHARGES § 1. SCHEDULE OF RATES, FEES AND CHARGES by replacing the current Section (C) with the following:

(C) Connection Charges (Tap Fees and Meter Only Fees). These fees are subject to increase automatically on October 1 each year, proportional to the annual average increase in the United States Bureau of Labor Statistics, Consumer Price Index for all urban consumers (CPI-U), U.S. city average, detailed expenditure category, for water and sewerage maintenance for the time period between July of the previous calendar year to July of the current calendar year. In all cases, the town will furnish the meter.

TAP AND METER ONLY FEES**SEWER**

	<i>In Town</i>	<i>Out of Town</i>
4" Connection	\$1,605	\$1,978
6" Connection	\$1,977	\$2,472
Mats/Labor Furnished	\$122	\$309

WATER

	<i>In Town</i>	<i>Out of Town</i>
3/4" Water Tap	\$1,605	\$1,978
3/4" Split Service	\$740	\$927
3/4" Meter Only (preset)	\$345	\$432
1" Water Tap	\$1,854	\$2,349
1" Meter Only (preset)	\$589	\$686
1½" Water Tap	\$2,779	\$3,521
1½" Meter Only (preset)	\$889	\$1,037
2" Water Tap	\$3,151	\$3,831
2" Meter Only (preset)	\$1,119	\$1,304

These amendments shall become effective on August 1, 2021.

Adopted this 13th day of July, 2021.

I certify that this ordinance was adopted by the Town Council of the Town of Southern Pines at its meeting of July 13, 2021 as shown in the minutes of the Town Council for that date.

Carol R. Haney, Mayor

Elizabeth Robertson, Deputy Town Clerk

APPROVED AS TO FORM:

Douglas R. Gill, Town Attorney

**CERTIFICATE OF SUFFICIENCY
AX-03-21: 260 SAUNDERS BOULEVARD**

To the Town Council of the Town of Southern Pines, North Carolina;

I, Elizabeth Robertson, Deputy Town Clerk, do hereby certify that I have investigated the attached petition and hereby make the following findings:

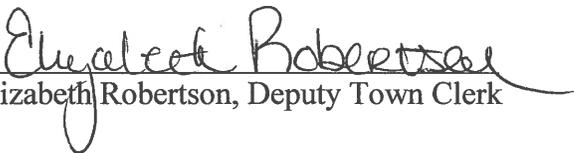
The petition contains an adequate property description of the area proposed for annexation, which is identified as follows: PIN: 857116830984 (PARID: 00052214)

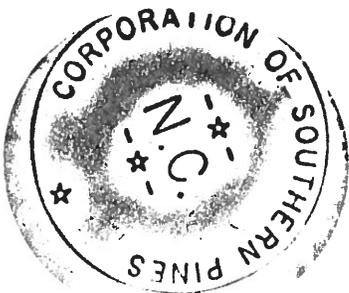
The area described in the petition is contiguous to the Town of Southern Pines primary corporate limits, as defined by N.C.G.S. 160A-31.

The petition is signed by and includes addresses of all owners of real property lying in the area described herein. Per the Moore County Tax Department and Register of Deeds, the property owners are listed as Robert Currie and Tracy Currie.

In witness whereof, I have hereunto set my hand and affixed the seal of the Town of Southern Pines, North Carolina, this 30th day of June, 2021.

(SEAL)


Elizabeth Robertson, Deputy Town Clerk



**RESOLUTION SETTING DATE OF PUBLIC HEARING
FOR ANNEXATION APPLICATION AX-03-21**

WHEREAS, a petition requesting annexation of an area described herein has been received; and

WHEREAS, the Town Council has by resolution directed the Town Clerk to investigate the sufficiency thereof; and

WHEREAS, certification by the Town Clerk as to the sufficiency of said petition has been made;

NOW, THEREFORE BE IT RESOLVED by the Town Council of the Town of Southern Pines, North Carolina:

Section 1. That a public hearing on the question of annexation of the area described herein will be held at the Douglass Community Center at 6:00 pm on August 10, 2021.

Section 2. The area proposed for annexation is described as follows:

Physical Addresses:

260 Saunders Boulevard
Southern Pines, NC 28387

Property Owners/Applicants:

Robert Currie and Tracy Currie
260 Saunders Boulevard
Southern Pines, NC 28387

Property Identification Number (PIN) and Parcel Identification:

PIN: 857116830984; PARID: 00052214

Size of Property:

Total Current Acreage: ±.459 acres

Meets & Bounds Description:

Being Lot No. 12, Block H, according to a map of Pine Ridge, Southern Pines, N.C., recorded in Book of Maps 2A, page 59, Moore County Registry, and BEGINNING at a point in the southwestern line of Magnolia Drive, said point being the southeast corner of Lot No. 13; runs thence along the common dividing line of Lots 12, 13, 2 and 3; thence along the common dividing line between Lots 3 and 12, 100 feet; thence along the common dividing line between Lots 11 and 12, 210 feet in a northeasterly direction to a point in the southwestern boundary of Magnolia Drive; thence in a northwestern direction along said boundary 100 feet to the point beginning

Section 3. Notice of said public hearing shall be published in The Pilot, a newspaper having general circulation in the Town of Southern Pines, at least ten (10) days prior to the date of said public hearing.

I certify that this resolution was adopted by the Town Council of the Town of Southern Pines at its meeting of July 13, 2021 as shown in the minutes of the Town Council for that date.

ATTEST:

TOWN OF SOUTHERN PINES

Elizabeth Robertson, Deputy Town Clerk

Carol R. Haney, Mayor

Agenda Item

To: Reagan Parsons, Town Manager

From: Cindy Williams, Planning Technician

Subject: AX-03-21: Set Public Hearing for a Request for Voluntary Annexation of Property Contiguous to the Corporate Limits of the Town of Southern Pines; ±.459 Acres; Petitioners: Robert Currie and Tracy Currie

Date: July 13, 2021

I. SUMMARY OF APPLICATION REQUEST:

Robert Currie and Tracy Currie are requesting voluntary annexation of a contiguous parcel that is currently outside of the corporate limits of the Town of Southern Pines. The subject parcel is identified PIN 857116830984 (PARID 00052214). Per the Moore County tax records, the property owners are listed as Robert Allen Currie and Tracy Wyatte Currie.

II. TOWN COUNCIL ACTION (June 28, 2021 Town Council Work Session):

During the June 28, 2021 Town Council work session, the Town Council approved a *Resolution Directing the Clerk to Investigate a Petition Received Under G.S. 160A-31*.

III. PROJECT INFORMATION:

A. Physical Addresses:

260 Saunders Boulevard
Southern Pines, NC 28387

B. Property Owners/Applicants:

Robert Currie and Tracy Currie
260 Saunders Boulevard
Southern Pines, NC 28387

C. Property Identification Number (PIN) & Parcel Identification:

PIN: 857116830984; PARID: 00052214

D. Size of Property:

Total Current Acreage: ±.459 acres

IV. STAFF COMMENTS:

- The applicants have submitted an annexation petition accompanied by a map and a written metes and bounds description of the subject property.
- The request is a voluntary request for a contiguous annexation as the adjacent property to the South is within the corporate limits of the Town of Southern Pines (see Figure 1).
- The subject property is presently zoned RS-1 (Residential Single-Family) and the adjacent properties to the northwest and southeast are also presently zoned RS-1. The property adjoining to the southwest is zoned RM-2.
- At the June 28, 2021 work session, the Town Clerk was directed to investigate the sufficiency of the petition for voluntary annexation of the subject property.
- The purpose of this agenda item is for the Town Council to adopt a *Resolution Fixing Date of Public Hearing on Question of Annexation Pursuant to G.S. 160A-31, As Amended*.
- **Comprehensive Long Range Plan Analysis:**
 - The subject property is identified as “Residential” on the Comprehensive Long Range Plan (CLRP) Future Land Use Map (see Figure 3). Per the CLRP 2015-2016 update:

“Residential. This designation encompasses the majority of Southern Pines’ residential land, providing for single-family and attached housing at development densities ranging from one unit per acre in areas that are less intensively developed to up to twelve units per acre that are clearly more urban. Elementary schools, civic uses, parks and neighborhood scale commercial services may be authorized through the rezoning process without amending the future land use map.”

Figure 1: Adjacent Property (Area to be Annexed Outlined in Red)



 Town of Southern Pines Corporate Limits

 Town of Southern Pines ETJ

Figure 2: Zoning Map (Area to be Annexed Outlined in Black)

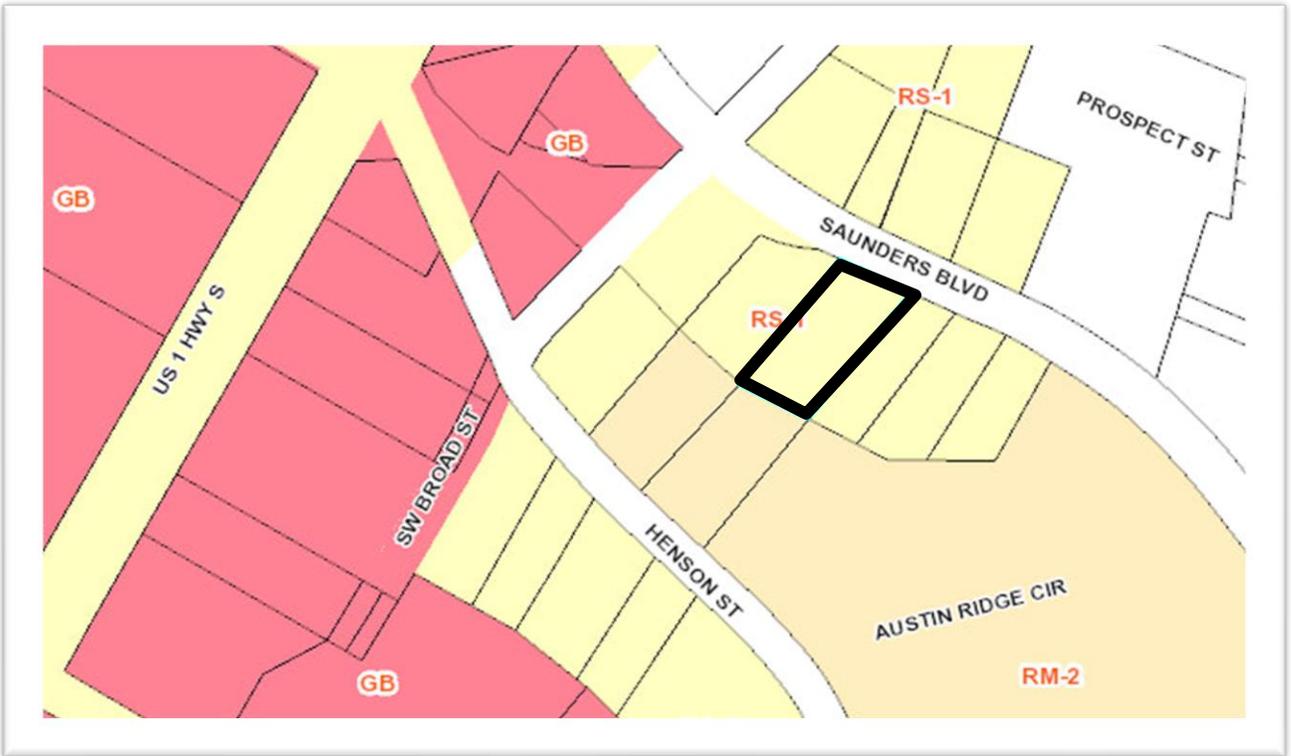


Figure 3: CLRP Future Land Use Map (Area to be Annexed Outlined in Blue)



Commercial
Traditional Mixed Use
Industrial

Urban Reserve
Low Density Residential
Residential

Future Land Use 2016
Parks / Open Space
Residential / Golf
Rural Equestrian

V. ATTACHMENTS:

1. Petition
2. Written metes and bounds description
3. Survey of subject property

VI. TOWN COUNCIL ACTION:

Upon receiving a Certificate of Sufficiency from the Town Clerk, the Town Council may fix a date for the public hearing to consider the annexation request. The Town Council may choose one of the following motions, or any alternative they wish:

- 1) Per the Town Clerk's Certificate of Sufficiency, I move to adopt a resolution establishing **August 10, 2021** as the date of the public hearing for the voluntary annexation of property as defined in the submitted written metes and bounds description under application AX-03-21.

-or-

- 2) I move to not adopt a resolution establishing **August 10, 2021** as the date of the public hearing for the voluntary annexation of property as defined in the submitted written metes and bounds description under application AX-03-21.

Metes & Bounds Description of Property Petitioning for Annexation:

Being Lot No. 12, Block H, according to a map of Pine Ridge, Southern Pines, N.C., recorded in Book of Maps 2A, page 59, Moore County Registry, and BEGINNING at a point in the southwestern line of Magnolia Drive, said point being the southeast corner of Lot No. 13; runs thence along the common dividing line of Lots 12, 13, 2 and 3; thence along the common dividing line between Lots 3 and 12, 100 feet; thence along the common dividing line between Lots 11 and 12, 210 feet in a northeasterly direction to a point in the southwestern boundary of Magnolia Drive; thence in a northwestern direction along said boundary 100 feet to the point of beginning.

**PETITION FOR VOLUNTARY ANNEXATION OF REAL
PROPERTY CONTIGUOUS TO THE
TOWN OF SOUTHERN PINES, NORTH CAROLINA**

_____ May 24 _____, 2021 _____

TO THE TOWN COUNCIL OF THE TOWN OF SOUTHERN PINES, NORTH CAROLINA:

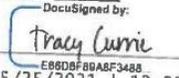
1. We the undersigned owners of real property respectfully request that the area described in Paragraph 2 below be annexed to the Town of Southern Pines, North Carolina, pursuant to G. S. 160A-31.

2. The area requested to be annexed is contiguous to the Town of Southern Pines, and the boundary of such territory is described by metes and bounds as follows:

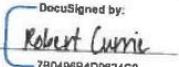
A legal metes and bounds description of boundaries of annexation, or a legal metes and bounds description of boundaries must be included.

Name & Signature of Owner

Address of Owner

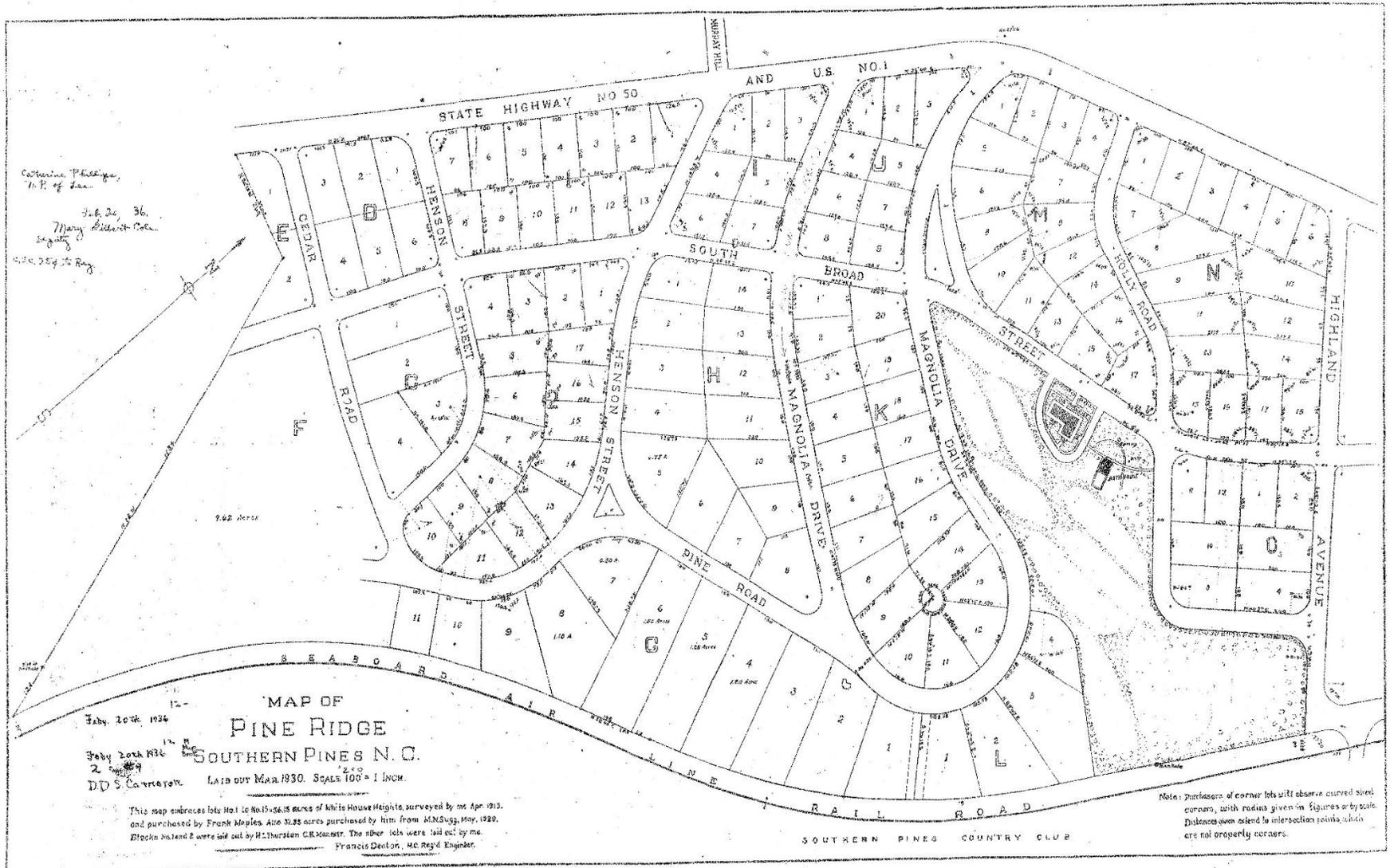
Tracy Currie 
DocuSigned by:
E86D0F8B8AF3488
5/25/2021 | 12:29 PM EDT

92 Gibbs Road, Hendersonville, NC 28792

Robert Currie 
DocuSigned by:
7B049684D9824C9
5/25/2021 | 12:44 PM PDT

5518 Cyrus Lee Lane, Monroe, NC 28110

Two copies of the petition, an 11" x 17" map showing location and boundaries of the area requested to be annexed, a legal metes and bounds description and physical address for the property (new projects or properties that are being subdivided are to obtain address numbers from the Southern Pines Planning office while properties with existing structures are to obtain/confirm those addresses through the Southern Pines Fire Department) are to be filed with the Town Clerk, 125 S. E. Broad Street, Southern Pines, NC 28387.



**A RESOLUTION BY THE TOWN OF SOUTHERN PINES TOWN COUNCIL
TO VACATE A SECTION OF RIGHT-OF-WAY FOR
WEST MICHIGAN AVENUE**

THAT WHEREAS, The Town of Southern Pines intends to vacate a section of an eighty-foot unimproved right-of-way for West Michigan Avenue bounded by the eighty-foot unimproved right-of-way for Pine Street to the south and the Mid-South residential subdivision to the north,

WHEREAS, The Town of Southern Pines asserts control over the aforementioned section of right-of-way; and

WHEREAS, the section of right-of-way to be vacated is not shown on any Town transportation maps, there is no infrastructure maintained by the Town located within this section of right-of-way, the Town has no current or future plans to improve this section of right-of-way; and

WHEREAS, pursuant to § 2.29.2 of the Unified Development Ordinance, in order for a street or alley to be vacated, the Town Council must adopt a resolution of intent and hold a public hearing; and

NOW, THEREFORE, BE IT RESOLVED by the Town Council of the Town of Southern Pines that the Town of Southern Pines will hold a Public Hearing considering the vacation of a portion of West Michigan Avenue at its regular meeting on August 10, 2021.

Adopted this, the 13th day of July, 2021.

ATTEST:

TOWN OF SOUTHERN PINES

Elizabeth Robertson, Deputy Town Clerk

Carol Haney, Mayor

Agenda Item

To: Reagan Parsons, Town Manager

From: Lauren Long, Planner I

Subject: RA-02-21: Request for abandonment of Town right-of-way to vacate a section of West Michigan Avenue

Date: July 13, 2021

I. SUMMARY:

A request to abandon 175 linear feet of an 80' right-of-way for West Michigan Avenue has been initiated by the Town in partnership with the Mid-South East-End residential development. The section of right-of-way for which the petitioner is requesting abandonment is located northwest of the intersection with Pine Street and West Michigan Avenue adjacent to PARID 00033301 and 00033300 (see Figure 1). Pursuant to NCGS §160A-299 as well as Unified Development Ordinance (UDO) §2.29, in order for a public right-of-way to be abandoned, a resolution setting a public hearing regarding the request must be approved and an order to vacate a section of town right of way must be adopted by the Town Council. Town staff have prepared a draft resolution to call for a public hearing at the Town Council's August 10, 2021 regular meeting and it has been attached to this report for the Town Council's consideration.

Figure 1: Vicinity Map



ATTACHMENTS:

1. DRAFT: Resolution to Call a Public Hearing at the August 10th, 2021 Regular Meeting of the Town Council

II. TOWN COUNCIL ACTION:

Town Council is being asked to approve a resolution to call for a public hearing for the request to abandon a section of right of way for West Michigan Avenue based upon the provisions outlined in UDO §2.29. To either approve or deny the draft resolution the Town Council may choose one of the following motions or any alternative they wish:

I move to:

1. Approve the draft resolution calling for a public hearing to abandon a section of right-of-way on West Michigan Avenue.
2. Deny the draft resolution calling for a public hearing to abandon a section of right-of-way on West Michigan Avenue.
3. Approve the draft resolution calling for a public hearing to abandon a section of right-of-way on West Michigan Avenue with the following modifications...



MINUTES

Wednesday, April 7, 2021
Town Council Budget Retreat: Virtual Meeting
8:30 am

Councilmembers present: Mayor Carol Haney; Mayor Pro-Tem Paul Murphy; Mitch Lancaster; Bill Pate; and Mike Saulnier

Staff present: Town Manager Reagan Parsons; Assistant Town Manager Jessica Roth; and Director of Finance Tess Brubaker-Speis

Town Manager Parsons presented the proposed budget for FY 2021-2022 in the following order. There was general discussion between Council and staff. The retreat recessed for lunch from 12:00 to 12:30 pm. No action was taken during the retreat.

- I. ENTERPRISE FUND
 - A. Utilities
 1. Revenues and Expenditures
 2. Capital Planning
 3. System Development Fees
 4. General Rates Discussion

- II. CAPITAL PROJECT FUNDS
 - A. Open Space/Whitehall
 - B. Parking Fund Discussion
 - C. Streambank Stabilization
 - D. Reservoir Dam

- III. GENERAL FUND BUDGET
 - A. Staffing
 1. Review of New Position Requests included
 - a. Long Range Planner/Community Development Specialist
 - b. Engineering Tech
 2. Requests not part of the Draft Budget
 - a. Police
 - b. Fire
 - c. PW

3. Compensation
 - a. Retirement
 - b. Major Medical
 - c. COLA/Market Adjustment

- B. Tax Rate/User Fees
 1. County Valuation Projection
 2. Draft Revenue Projections 20-21
 3. Draft Expense Projections 20-21
 4. Discussion of bottom line and process moving forward

- C. Capital Expenditures/Plans
 1. Review of Departmental Requests included
 2. Review of Capital Project Fund transfers from GF
 3. Non-budgeted Requests

The retreat adjourned at 1:58 pm.

As so incorporated to these minutes of April 7, 2021, are exact copies as so recorded in the ordinance and resolution books of the Town of Southern Pines as fully set out in the minutes.

Elizabeth Robertson
Deputy Town Clerk



MINUTES

April 26, 2021

Town Council Work Session: Virtual Meeting

3:00 PM

1. CALL TO ORDER

Mayor Haney called the work session to order at 3:00 pm. The following Town personnel were present:

Councilmembers: Mayor Carol Haney; Mayor Pro-Tem Paul Murphy; Mitch Lancaster; Bill Pate; and Mike Saulnier

Staff: Town Manager Reagan Parsons; Assistant Town Manager Jessica Roth; and Planning Director BJ Grieve

2. TOWN MANAGER'S COMMENTS

Town Manager Parsons reviewed the agenda for the work session.

3. ACTION ITEMS

a. **Consider RA-01-21: Request for the Town of Southern Pines to vacate a section of right-of-way for W. Massachusetts Avenue and S. Glover Street**

Mr. John Birath, on behalf of Moore County Schools Board of Education, is requesting abandonment of a section of an eighty-foot unimproved right-of-way, 1,270-linear-feet, for West Massachusetts Avenue and South Glover Street bounded by West Indiana Avenue, West New York Avenue, and South Carlisle Street. Per GS §166A-19.24(e), a virtual hearing was held on April 13, 2021 and written comments were accepted after the hearing.

Councilmember Saulnier motioned that the proposed vacation of a section of West Massachusetts Avenue and South Glover Street does not deny any adjacent property owners their rights or means of reasonable access and that the closure is in the public interest. The motion was seconded by Mayor Pro-Tem Murphy and the vote was 5-0 in favor.

Councilmember Saulnier motioned to approve the resolution as drafted for the vacation of a section of West Massachusetts Avenue and South Glover Street as depicted in the attached existing conditions plat while maintaining an access and maintenance easement for the Town to service the existing public sewer line located within the R/W of West Massachusetts Avenue. The motion was seconded by Mayor Pro-Tem Murphy and the vote was 5-0 in favor.

b. **Consider Motion to Set May 5, 2021 Public Hearing Related to an Installment Financing Contract for the Whitehall Tract**

The Town purchased a 157-acre piece of land in December 2020, known as the “Whitehall tract.” The Town made a partial payment when it was acquired. Staff recommends using an installment financing contract authorized under N.C.G.S. 160A, Article 3, Section 20, for the remaining payment. A public hearing will be scheduled for May 5 on this contract, followed by a vote on May 11.

Councilmember Saulnier motioned to set the public hearing for May 5, 2021. The motion was seconded by Mayor Pro-Tem Murphy and the vote was 5-0 in favor.

4. COUNCIL UPDATES AND DISCUSSION

Note: The Council updates and discussion began with all Councilmembers in attendance. Mayor Haney and Councilmember Pate exited the work session prior to the conclusion of these updates and discussion. Mayor Pro-Tem Murphy presided over the work session following the Mayor’s exit. No action was taken during this time.

a. DFI Phase 2 Update

The Town is under contract with the Development Finance Initiative (DFI) to perform pre-development services for four parcels on W. Morganton Road. Sarah Odio from DFI updated Council on the status of this project.

b. FY 22 Budget Update & Continued Discussion

The Town Council held its annual budget retreat on April 7. Per Council’s request, staff shared more information on the following topics:

- i. Whitehall Financing Update*
- ii. Balance Sheet Update*
- iii. Police Chief Nick Polidori*
- iv. Fire Chief Mike Cameron*
- v. Parking projects and updated cost estimates*

c. Status Update Regarding Resolution #930

Town Council adopted Resolution #930 in June 2020 with the intent to waive certain zoning standards related to food trucks, temporary signage, curbside take-away and outdoor dining, and business operating as Home Occupations. The overall goal of this resolution, which remains in effect, was to waive zoning standards during the declared emergency in order to help local businesses that were facing challenges from mandated COVID-19 restrictions and prohibitions. As the state is currently lifting restrictions “in a targeted and phased manner,” Council and staff had general discussion relative to the ongoing need and enforcement of this resolution.

d. Sandhills Sandsharks Lease Renewal

The Sandhills Sandsharks, a local 501(c)3 non-profit, offers competitive swimming and training for the Southern Pines community. Since 2018, the Sandsharks have leased the Town’s pool on S. Stephens Street for year-round operations. The Town currently has two separate leases with the Sandsharks; the first was executed in 2018 for the off-season and the second in 2019 for the summer months. Both leases expire this summer. Staff has met with members of the Sandsharks’ board to negotiate a single lease and operating agreement and recommends adopting this for an

additional three years. Staff proposes to submit this for approval on the Council's May 11th agenda, unless Council prefers otherwise.

5. PUBLIC COMMENTS

- a. Lynn Thompson spoke and requested that in advancing the DFI Phase 2 work, the Council consider opportunities to address low income housing for all age brackets, not just seniors.

Councilmember Saulnier motioned to adjourn the meeting, which was seconded by Councilmember Lancaster. The motion was approved 3-0 by Mayor Pro-Tem Murphy and Councilmembers Lancaster and Saulnier. The work session adjourned at 5:29 pm.

Respectfully Submitted,

Elizabeth Robertson, Deputy Town Clerk

**A RESOLUTION BY THE TOWN OF SOUTHERN PINES TOWN COUNCIL
TO VACATE A SECTION OF RIGHT-OF-WAY FOR SOUTH GLOVER STREET
AND WEST MASSACHUSETTS AVENUE**

THAT WHEREAS, The Moore County Board of Education is requesting the vacation of a section of an eighty-foot unimproved right-of-way for West Massachusetts Avenue and South Glover Street bounded by the right-of-way for West Indiana Avenue, West New York Avenue, and South Carlisle Street; and

WHEREAS, The Town of Southern Pines owns the aforementioned section of right-of-way; and

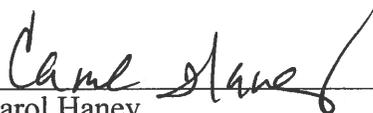
WHEREAS, the section of right-of-way that the petitioner has requested vacation of is not shown on any Town street listings or transportation maps and the Town has no current or future plans to improve this section of right-of-way; and

WHEREAS, pursuant to § 2.29.2 of the Unified Development Ordinance, in order for a street or alley to be vacated, the Town Council must adopt a resolution of intent and hold a public hearing; and

WHEREAS, approximately one-hundred and fifty-one feet of Town sewer being located in the section of right-of-way for West Massachusetts Avenue that the Moore County Board of Education has asked the Town to abandon, the Town continues to maintain all rights and access to in a twenty-foot access easement centered on the utility;

NOW, THEREFORE, BE IT RESOLVED by the Town Council of the Town of Southern Pines that the Town of Southern Pines hereby vacates the section of right-of-way for West Massachusetts Avenue and South Glover Street bounded by the right-of-way for West Indiana Avenue, West New York Avenue, and South Carlisle Street as shown in the existing conditions survey attached as "Exhibit A".

Adopted this, the 5th day of May, 2021.



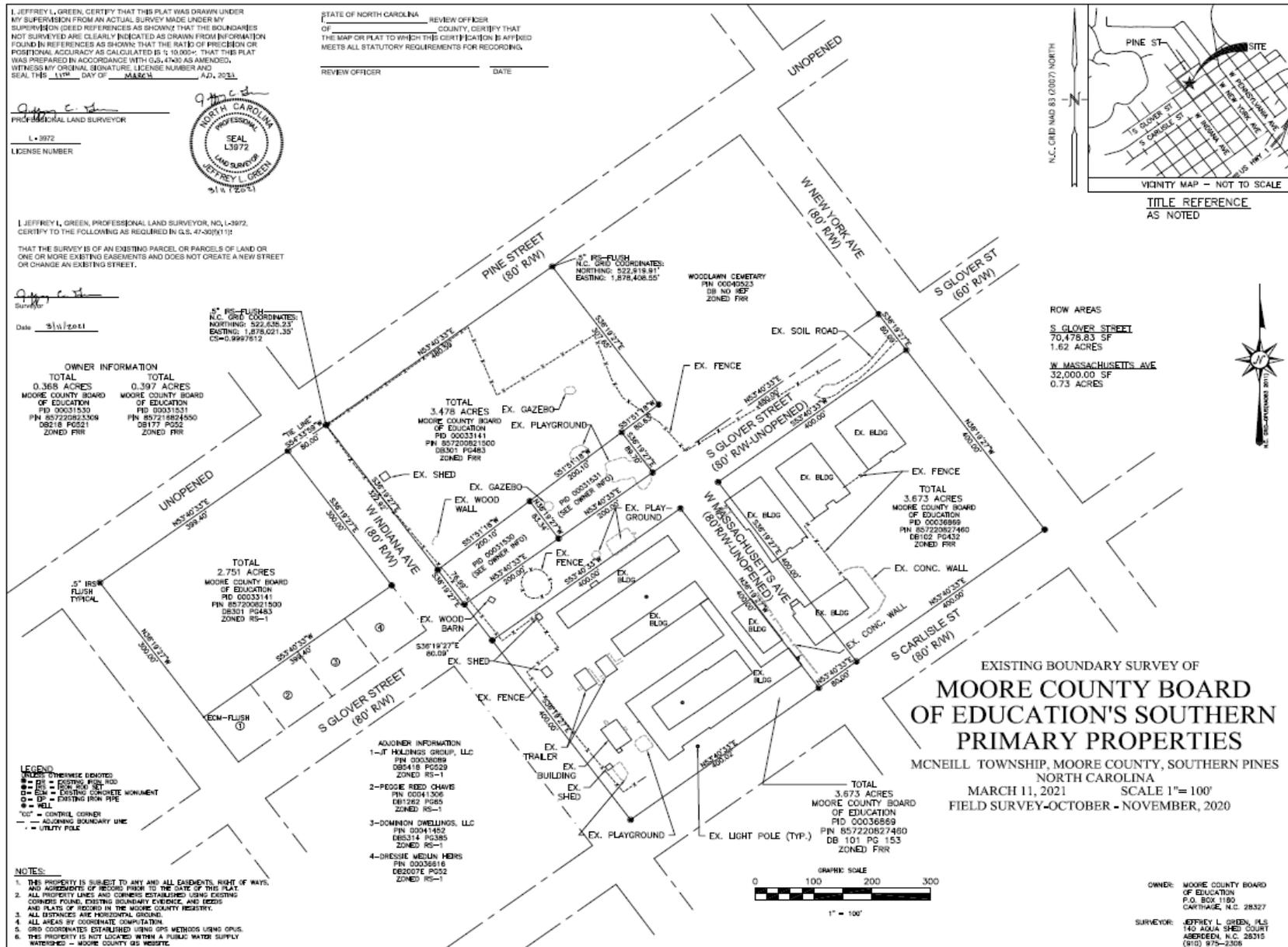
Carol Haney
Mayor of the Town of Southern Pines



Elizabeth Robertson
Deputy Town Clerk



Figure 3: Existing Conditions Plat





MINUTES

Monday, May 24, 2021

Town Council Work Session: Virtual Meeting

3:00 PM

1. CALL TO ORDER

Mayor Haney called the work session to order at 3:00 pm. She welcomed everyone to the meeting and announced a return to in person meetings as of the June 2, 2021 Town Council Agenda Meeting. All Councilmembers were present.

2. TOWN MANAGER'S COMMENTS

Town Manager Reagan Parsons reviewed the pending agenda.

3. ACTION ITEMS

- a. **Z-01-21: Request to rezone 0.79 of an acre on West Pennsylvania Avenue from FRR to CB; Applicant: RAB Investments, LLC**

The applicant requests to rezone a 0.79-acre parcel from Facilities Resource and Recreation Conditional District (FRR-CD) to Central Business (CB) to allow a preschool, which is a by-right use in the CB District. Per GS §166A-19.24(e), a virtual hearing was held on May 11 and written comments were accepted after the hearing.

Councilmember Saulnier moved that after considering the consistency of the proposed map amendment with the Comprehensive Long-Range Plan and Criteria A for a zoning map amendment found in UDO §2.17.9 that the requested Zoning Map Amendment for 387 West Pennsylvania Avenue from FRR-CD to CB is found to be consistent with the Comprehensive Long-Range Plan and the Town Council adopts the resolution of plan consistency, as drafted by staff, that is included as Attachment "A" in the staff memorandum for Z-01-21, Mayor Pro Tem Murphy seconded the motion and it was carried unanimously 5-0.

Councilmember Saulnier made the motion that after considering Criteria B-H for a zoning map amendment found in UDO §2.17.9 the requested Zoning Map Amendment for 387 West Pennsylvania Avenue from FRR-CD to CB complies with the criteria and is a reasonable request. The motion was seconded by Mayor Pro Tem Murphy and carried unanimously 5-0.

Councilmember Saulnier motioned to approve Z-01-21, which was seconded by Mayor Pro Tem Murphy and carried unanimously 5-0.

4. COUNCIL UPDATES AND DISCUSSION

a. 206 Ridgeview Road Sewer Extension

Town Manager Reagan Parsons provided an overview of the request.

Property owner, David Furie, reviewed his request of a waiver from the Code of Ordinances Section § 50.059 requiring a mandatory connection to the Town's sewer system.

Town Engineer James Michel provided an overview of his memo on the request and explained the concern of future bacterial spread and or contamination.

Councilmember Mike Saulnier questioned the nearby homes that are on septic. Town Manager Parsons referred to Engineer Michels' memo stating that those predate the ordinance as well as installation of the sewer lines. Should the septic system fail in the future, current codes would require the lots to connect to Town sewer lines.

Councilmember Bill Pate questioned the cost of the extension to the Town and Engineer Michel gave an approximate cost of \$50,000 - \$60,000.

Upon motion by Councilmember Pate, seconded by Mayor Pro Tem Murphy the request for the waiver was approved 3-2 as follows: Aye (Lancaster, Murphy, Pate); Nay (Haney, Saulnier).

b. N.C.G.S. Chapter 160D Revisions to UDO

Planning Director B.J. Grieve presented an overview of the amendments that are proposed for the UDO. The North Carolina legislature adopted Chapter 160D of the general statutes in 2019, which consolidated statutes for local government development regulations into a single chapter. Local governments are mandated to adopt necessary amendments to conform local ordinances to this new law by July 1. A public hearing is scheduled for June 8.

c. FY 22 Budget Update

Town Manager Parsons provided an overview of the proposed budget and Finance Tess Brubaker-Speis was available to answer any questions. The first public hearing was held on May 11, with the final public hearing and vote scheduled for June 8.

d. The Carolina Water System

Engineer Michel provided an overview of the request. Staff recommends that Council analyze the merits of consolidating the water systems for The Carolina, currently served by both Moore County and the Town of Southern Pines, to a single system served by the Town.

e. Warrior Woods Lake

Town Manager Parsons reported on remediation efforts that are needed for the lake in Warrior Woods following a discharge from the Town's sewer lift station.

f. Proposed Right-of-Way Abandonment

Town Manager Parsons will provide details on a proposed right-of-way abandonment that staff recommends Council consider. A public hearing will be need to be scheduled.

g. American Rescue Plan Update

Town Manager Parsons provided a report that highlights the rules recently released by the U.S. Treasury pertaining to the funding the Town will receive. With the exception of a resolution which will be voted on at the June 8th meeting the town has already met all the conditions and requirments to receive funds.

Town Manager Parsons presented some proposed projects that would meet ARPA requirements and therefore qualify for funding:

- *One proposal is a program that would provide some of the housing rehabilitation that was intended to be done with the denied CDBG Grant funds. The program would include the DFI's Housing Rehabilitation Program and Habitat for Humanity to provide some relief for the West Southern Pines Community.*
- *The next proposal is to use some funds for a streambank stabilization program that is needed in the area by the fire station #1. There are also plans to apply for some state funds to use for this project.*
- *Another proposal is to use some of the funds as part of a rebate or incentive program in an effort to get backflow devices installed in commercial entities throughout the town.*

5. PUBLIC HEARINGS: JUNE 8, 2021

The following items are currently proceeding through the Planning Board for future consideration by Council.

- a. **N.C.G.S. Chapter 160D Revisions to UDO**
- b. **PD-03-21 American Whiskey Co. PDP**

6. PUBLIC COMMENTS

Mr. Rich of Mechanic Street asked for clarification on quasi judicial hearings and was provided such from Mayor Haney, Town Manager Parsons, and Planner Grieve.

Upon motion by Councilman Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the meeting was adjourned at 5:36 pm.

Respectfully Submitted,

Elizabeth Robertson, Deputy Town Clerk



MINUTES

Wednesday, June 2, 2021 — 6:00 PM

Town Council Agenda Meeting

C. Michael Haney Community Room: Southern Pines Police Department
450 W. Pennsylvania Ave

1. CALL TO ORDER

Mayor Haney called the meeting to order at 6:00 pm and welcomed everyone back to “in person” meetings and thanked IT Nedra Norton and her staff for their hard work on the virtual council meetings during the pandemic. All Councilmembers were present.

2. TOWN MANAGER’S COMMENTS

Town Manager Reagan Parsons reviewed the agenda.

3. ACTION ITEMS FOR JUNE 2, 2021

a. Review AR-01-21 Southern Pines Crossfit

Lauren Long provided an overview of the request. Dean King, on behalf of T & S Developers LLC, is requesting approval of an Architectural Compliance Permit for an 8,910 square foot commercial gym located at 1042 SW Broad Street.

Dean King provided the council with additional detail and answered questions regarding the design choices and any non-compliant issues such as roof pitch and building materials.

b. Consider Resolution to Direct the Clerk to Investigate an Annexation Petition Received Under N.C.G.S. 160A-31

Gareth and Lorraine Williams have petitioned the Town for a voluntary annexation of a contiguous +.353-acre parcel, located at 465 Petty Street, PIN 858220802013 (PARID 00991745). State law requires that Council direct the Town Clerk to investigate the sufficiency of the petition before proceeding further.

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, AX-02-21 – Resolution to Direct the Clerk to Investigate an Annexation Petition Received Under N.C.G.S. 106A-31 was approved.

4. PUBLIC HEARINGS FOR JUNE 8, 2021 COUNCIL MEETING

- a. PD-02-21: Planned Development – Preliminary Development Plan for expansion of the Multi-family Legends Apartment Community; Applicant: Morganton Park II, LLC**

Town Manager Reagan Parsons provided an overview of the request. The applicant requests approval of a Preliminary Development Plan in order to expand the existing multi-family development, Legends Apartments, at 500 Legends Drive. The two parcels included in this application total 8.56 acres. If approved, the overall development would total 432 units on 27.03 acres.

- b. PD-03-21: Planned Development – Preliminary Development Plan for a new four-phased development of Brad Halling American Whiskey; Owner/Applicant: Brad Halling and Jessica Halling dba Rickhouse Properties, LLC**

Town Manager Reagan Parsons provided an overview of the request. The applicant requests approval of a Preliminary Development Plan (PDP) in order to construct Planned Development - Preliminary Development Plan a whiskey distillery. The subject parcel is a 15.04-acre parcel located on the North side of Yadkin Road between Trimble Plant Road and US HWY #1.

- c. OA-01-21: Text Amendments to the Unified Development Ordinance (UDO)**

Town Manager Reagan Parsons provided an overview of the request. The North Carolina legislature adopted Chapter 160D of the general statutes in 2019, which consolidated statutes for local government development regulations into a single chapter. Local governments are mandated to adopt necessary amendments to conform local ordinances to this new law by July 1. Staff presented the more substantive updates to the Town's ordinances at the May 24 work session.

- d. Public Hearing on FY 22 Budget**

Town Manager Reagan Parsons provided an overview of the request. This is the final public hearing on the proposed FY 22 budget, which begins July 1, 2021.

5. PROPOSED ACTION ITEMS FOR JUNE 8, 2021 COUNCIL MEETING

- a. Adoption of the FY 2021-2022 Budget and Setting the Tax Rate**

Town Manager Reagan Parsons provided an overview of the request.

- b. Approve AR-01-21: Architectural Compliance Permit for Southern Pines Crossfit**

Town Manager Reagan Parsons provided an overview of the request.

- c. Resolution Awarding the Badge and Service Weapon Carried by Lieutenant Rodney Allred to Him on His Retirement**

Town Manager Reagan Parsons provided an overview of the request. G.S. 20-187.2 allows the Town to award the badge and service sidearm to a retiring law enforcement officer. Lieutenant Rodney Allred is retiring after serving as a sworn law enforcement officer for 28 years.

d. Consent Agenda

All items listed below are considered routine and are proposed to be approved by one motion and without discussion during the June 8, 2021 business meeting. Town Manager Parsons provided an overview of each item and answered questions from Council.

i. Approve a Resolution to Set Public Hearing for AX-02-21 Voluntary Annexation Petition at 465 Petty Street

Upon receipt of a Certificate of Sufficiency from the Town Clerk concerning this petition, the next step in the process is for Council to adopt a resolution setting a date for a public hearing. The hearing is proposed for July 13.

ii. Approve a Resolution authorizing Town Manager to enter into agreement with the Owners of Warrior Woods Lake regarding funding for cleanup efforts

Staff recommends entering into an agreement with the owners of Warrior Woods Lake. The Town will provide \$16,100 toward remediation efforts following a discharge from the Town's sewer lift station.

iii. Approve a Resolution Adopting Local Water Supply Plan

NCGS §143-355(1) requires a local government that provides public water services to prepare and submit a Local Water Supply Plan (LWSP) to the Division of Water Resources for the North Carolina Department of Environmental Quality.

iv. Approve Ordinances Amending the FY 20-21 Budget

- 1. \$150,000 increase for contractual services for sewer (monies collected through water and sewer bills to paid to Moore County to treat our collection system)*
- 2. \$8,500 increase for planning contractual services (DFI –needed to commission a Phase II environmental study on land at Henley & Morganton due to the site being a former dump)*
- 3. \$1,421 for fire department supplies (money received from NC Dept of Insurance – to compensate for any state owned facilities within our area)*

v. Approve Capital Reserve Fund Ordinances

- 1. Capital Reserve Fund Resolution*
- 2. Amending Fund 64: CRF – Water Ordinance \$726,504*
- 3. Amending Fund 65: CRF – Sewer Ordinance \$256,135*

vi. Approve Amendments to Code of Ordinances

- 1. Chapter 32, Public Works, Section 32.076*
- 2. Chapter 50, Water and Sewer Use*

vii. Approve Capital Project Fund Ordinances

- 1. Fund 50: Amending the Streambank Stabilization Budget - \$110,000*
- 2. Fund 57: Amending the Sidewalk Phase II Budget - \$200,000*
- 3. Fund 58: Amending the Recreation Fund – \$92,000*

4. *Fund 61: Amending the Warrior Woods Lift Station Budget - \$175,049*
5. *Fund 63: Amending the Sanitary Sewer Modernization Budget – \$508,590*
6. *Fund 66: Amending the Water Treatment Process Modernization Budget - \$415,966*
7. *Fund 67: Amending the Water and Sewer Improvements Budget - \$185,000*
8. *Fund 74: Amending the Pennsylvania/PeeDee Waterline Budget - \$425,474*
9. *Fund 53: Creating the Reservoir Park Dam CPF - \$75,000*

viii. Approve Resolution to Close Water and Sewer Impact Fees

Staff requests authorization to close these funds, which were established in 1990 to cover the cost of expanding the water and sewer systems. All funds have been transferred to appropriate projects leaving a zero balance and the Town no longer applies these fees.

ix. Approve Project Budget Ordinance and Create the American Rescue Plan Act Special Revenue Fund

In accordance with the terms of the ARPA documents and the rules and regulations of the U. S. Treasury, the Town must create a special revenue fund to account for revenues and expenditures associated with the ARPA.

x. Approve Council Minutes

xi. FY 20-21 Nixon Hughes Audit Contract

Town Manager Parsons requested to add this to agenda for the June 8th meeting. The Finance Director recently received the contract and requests approval prior to the end of the fiscal year..

6. CLOSED SESSION UNDER NC GENERAL STATUTE 143-318.11(a) (4) TO DISCUS POTENTIAL INCENTIVES REALATED TO AN ECONOMIC DEVELOPMENT PROJECT

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, Council adjourned to closed session at 6:39 pm.

No action was taken during the closed session.

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, Council returned to Regular Session and adjourned at 7:53 pm.

Respectfully Submitted,

Elizabeth Robertson, Deputy Town Clerk



MINUTES

Tuesday, June 8, 2021 — 6:00 PM

Town Council Business Meeting

Douglass Community Center: 1185 W. Pennsylvania Ave

1. CALL TO ORDER

Mayor Haney called the meeting to order at 6:00 pm and welcomed everyone to the meeting. All Councilmembers were present.

2. PLEDGE OF ALLEGIANCE

3. TOWN MANAGER'S COMMENTS

Town Manager Reagan Parsons welcomed the community back in person to a meeting after 15 months due to the COVID-19 pandemic. He reviewed the pending agenda items with Council.

4. PUBLIC HEARINGS

Mayor Haney explained the Quasi-Judicial Hearing process for PD-02-21 and PD-03-21.

a. PD-02-21: Planned Development – Preliminary Development Plan for expansion of the Multi-family Legends Apartment Community; Applicant: Morganton Park II, LLC

The applicant requests approval of a Preliminary Development Plan in order to expand the existing multi-family development, Legends Apartments, at 500 Legends Drive. The two parcels included in this application total 8.56 acres. If approved, the overall development would total 432 units on 27.03 acres.

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the public hearing for PD-02-21 was opened.

Mayor Haney swore in participants who planned to speak during the hearing. She then asked if any members of Council needed to make any disclosures.

Town Planner II Suzy Russell provided an overview of the project and staff report.

Bob Koontz of Koontz Design provided additional detail and answered questions.

- *Councilmember Saulnier inquired about traffic impacts. Mr. Koontz referred to a Traffic Impact Analysis provided with the application package, which stated that no detrimental effects to the current traffic pattern were predicted.*
- *Councilmember Murphy and Mr. Koontz discussed the proposed locations of right turn lanes entering and exiting the project.*

- *Mr. Koontz requested that all of the application materials be entered into exhibit for the record*

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the public hearing for PD-02-21 was closed.

Councilmember Saulnier made a motion to adopt Attachment “A” of the staff report as Findings of Fact regarding the proposed Preliminary Development Plan for PD-02-21, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0.

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the Preliminary Development Plan for PD-02-21 was approved.

- b. PD-03-21: Planned Development – Preliminary Development Plan for a new four-phased development of Brad Halling American Whiskey; Owner/Applicant: Brad Halling and Jessica Halling dba Rickhouse Properties, LLC**

The applicant requests approval of a Preliminary Development Plan (PDP) in order to construct a whiskey distillery. The subject parcel is a 15.04-acre parcel located on the North side of Yadkin Road between Trimble Plant Road and US HWY #1.

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the public hearing for PD-03-21 was opened.

Mayor Haney swore in participants who planned to speak during the hearing. She then asked if any members of Council needed to make any disclosures.

Town Planner II Suzy Russell provided an overview of the project and staff report.

Jessica and Brad Halling, Owner/Applicant, provided more detail and background on the project and answered questions.

Neil Smith, Engineer, provided an overview of the project from an engineering perspective.

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the public hearing for PD-03-21 was closed.

Councilmember Saulnier moved to adopt Attachment “A” of the staff report as Findings of Fact regarding the proposed Preliminary Development Plan PD-03-21, seconded by Mayor Pro Tem Murphy and carried unanimously.

Councilmember Saulnier moved to approve the Preliminary Development for PD-03-21, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0.

- c. OA-01-21: Text Amendments to the Unified Development Ordinance (UDO)**

The North Carolina legislature adopted Chapter 160D of the general statutes in 2019, which

consolidated statutes for local government development regulations into a single chapter. Local governments are mandated to adopt necessary amendments to conform local ordinances to this new law by July 1.

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the public hearing for OA-01-21 was opened.

Town Planner B.J. Grieve provided an overview of the text amendments included in the request.

Marsh Smith of 568 Santee Road asked the council to take into consideration the wisdom of planning ahead to keep the green space that the Town is known for rather than encouraging future growth corridors.

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the public hearing for OA-01-21 was closed.

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the OA-01-21: Text Amendments to the Unified Development Ordinance was approved.

d. Public Hearing on FY 22 Budget

This is the final public hearing on the proposed FY 22 budget, which begins July 1, 2021.

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the public hearing for the FY 2021-2022 Budget was opened.

Town Manager Parsons provided an overview of the proposed FY 21-22 budget.

Mr. Donald Rich of Mechanic Street stated that the poorer residents of West Southern Pines cannot afford any increases in their utility bills and hopes Council will take that into consideration before approving future fee increases. He also appreciates that the tax rate will be staying the same.

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the public hearing for the FY 2021-2022 Budget was closed.

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the FY 2021-2022 Budget was approved.

5. ACTION ITEMS

a. Adoption of the FY 2021-2022 Budget and Setting the Tax Rate

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the Adoption of the FY 2021-2022 Budget and Setting the Tax Rate was approved.

b. Approve AR-01-21: Architectural Compliance Permit for Southern Pines Crossfit

Town Manager Parsons provided an overview of the project. Dean King, on behalf of T & S Developers LLC, is requesting approval of an Architectural Compliance Permit for an 8,910 square foot commercial gym located at 1042 SW Broad Street. Council reviewed this application on June 2.

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the AR-01-21: Architectural Compliance Permit for Southern Pines Crossfit was approved.

c. Resolution Awarding the Badge and Service Weapon Carried by Lieutenant Rodney Allred to Him on His Retirement

Town Manager Parsons provided an overview of the project. G.S. 20-187.2 allows the Town to award the badge and service sidearm to a retiring law enforcement officer. Lieutenant Rodney Allred is retiring after serving as a sworn law enforcement officer for 28 years.

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the Resolution was approved.

d. Consent Agenda

All items listed below are considered routine and will be enacted by one motion and without discussion.

i. Approve Resolution to Set Public Hearing for AX-02-21 Voluntary Annexation Petition at 465 Petty Street

Gareth and Lorraine Williams have petitioned the Town for a voluntary annexation of a contiguous +.353-acre parcel, located at 465 Petty Street, PIN 858220802013 (PARID 00991745). Upon receipt of a Certificate of Sufficiency from the Town Clerk concerning this petition, the next step in the process is for Council to adopt a resolution setting a date for a public hearing. The hearing is proposed for July 13.

ii. Approve Resolution Authorizing Town Manager to Enter into Agreement with the Owners of Warrior Woods Lake Regarding Funding for Cleanup Efforts

Staff recommends entering into an agreement with the owners of Warrior Woods Lake. The Town will provide \$16,100 toward remediation efforts following a discharge from the Town's sewer lift station.

iii. Approve Resolution Adopting Local Water Supply Plan

NCGS §143-355(1) requires a local government that provides public water services to prepare and submit a Local Water Supply Plan (LWSP) to the Division of Water

Resources for the North Carolina Department of Environmental Quality.

iv. Approve Ordinances Amending the FY 20-21 Budget

1. *\$150,000 increase for contractual services for sewer*
2. *\$8,500 increase for planning contractual services*
3. *\$1,421 for fire department supplies*

v. Approve Capital Reserve Fund Ordinances

1. *Capital Reserve Fund Resolution*
2. *Amending Fund 64: CRF – Water Ordinance \$726,504*
3. *Amending Fund 65: CRF – Sewer Ordinance \$256,135*

vi. Approve Amendments to Code of Ordinances

1. *Chapter 32, Public Works, Section 32.076*
2. *Chapter 50, Water and Sewer Use*

vii. Approve Capital Project Fund Ordinances

1. *Fund 50: Amending the Streambank Stabilization Budget - \$110,000*
2. *Fund 57: Amending the Sidewalk Phase II Budget - \$200,000*
3. *Fund 58: Amending the Recreation Fund – \$92,000*
4. *Fund 61: Amending the Warrior Woods Lift Station Budget - \$175,049*
5. *Fund 63: Amending the Sanitary Sewer Modernization Budget – \$508,590*
6. *Fund 66: Amending the Water Treatment Process Modernization Budget - \$415,966*
7. *Fund 67: Amending the Water and Sewer Improvements Budget - \$185,000*
8. *Fund 74: Amending the Pennsylvania/PeeDee Waterline Budget - \$425,474*
9. *Fund 53: Creating the Reservoir Park Dam CPF - \$75,000*

viii. Approve Resolution to Close Water and Sewer Impact Fees

Staff requests authorization to close these funds, which were established in 1990 to cover the cost of expanding the water and sewer systems. All funds have been transferred to appropriate projects leaving a zero balance and the Town no longer applies these fees.

ix. Approve Project Budget Ordinance and Create the American Rescue Plan Act Special Revenue Fund

In accordance with the terms of the ARPA documents and the rules and regulations of the U. S. Treasury, the Town must create a special revenue fund to account for revenues and expenditures associated with the ARPA.

x. Approve Resolution Authorizing the Execution of Contracts for Legal and Consulting Services

The Town seeks legal and consulting services for infrastructure projects located in the

Central City area of Morganton Park.

xi. Award Contract to Dixon Hughes Goodman, LLP to Audit the Town's Financial Statements

Dixon Hughes Goodman, LLP will audit the Town's basic financial statements for the fiscal year ending June 30, 2021 and deliver a final report by October 30.

xii. Approve Council Minutes

1. *May 5, 2021 Agenda Meeting Minutes*
2. *May 11, 2021 Business Meeting Minutes*

Upon motion by Councilmember Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the Consent Agenda was approved.

6. PUBLIC COMMENTS

Mr. Marsh Smith addressed Council again and thanked them for the Warrior Woods sewer lift station.

Upon motion by Councilman Saulnier, seconded by Mayor Pro Tem Murphy and carried unanimously 5-0, the meeting was adjourned at 7:38 pm.

Respectfully Submitted,

Elizabeth Robertson, Deputy Town Clerk



MINUTES

Monday, June 28, 2021: 3:00 PM

Town Council Work Session

C. Michael Haney Community Room: Southern Pines Police Department
450 W. Pennsylvania Ave

1. CALL TO ORDER

Mayor Haney called the work session to order at 3:00 pm. She welcomed everyone to the meeting. Both Mayor Pro-Tem Murphy and Councilmember Lancaster were absent from today's meeting.

2. TOWN MANAGER'S COMMENTS

Town Manager Reagan Parsons reviewed the pending agenda.

3. ACTION ITEMS

a. Written Decision for PD-02-21: Planned Development – Preliminary Development Plan for expansion of the Multi-family Legends Apartment Community

Council conducted a quasi-judicial hearing and approved this application on June 8, 2021. Staff has prepared a written decision summarizing the findings of fact and Council decision.

Mayor Haney asked if there were any questions regarding the application or decision for PD-02-21. There were none voiced.

Councilmember Saulnier motioned to approve the prepared written decision on PD-02-21, which was seconded by Councilmember Pate and carried unanimously 3-0.

b. Written Decision for PD-03-21: Planned Development – Preliminary Development Plan for a new four-phased development of Brad Halling American Whiskey

Council conducted a quasi-judicial hearing and approved this application on June 8, 2021. Staff has prepared a written decision summarizing the findings of fact and Council decision.

Mayor Haney asked if there were any questions regarding the application or decision for PD-02-21. There were none voiced.

Councilmember Saulnier motioned to approve the prepared written decision on PD-02-21, which was seconded by Councilmember Pate and carried unanimously 3-0.

c. CU-04-21: Minor Amendment to CU-07-20 to Deviate from the Local Street Standards

Town Council approved CU-07-20 in January 2021 for the Camp Easter Cottages project located at Niagara-Carthage Road and Camp Easter Road. The project is currently proceeding through development review and the applicant proposes to install asphalt wedge curbing. This deviation

from the UDO standards requires Council approval as a minor amendment to the original approval.

Town Planner Long provided an overview of the amendment.

Mr. Tim King spoke for the applicant as to the design and reasoning behind the request. This is a private road and no other concrete curbing is in the immediate area. They are unable to bury a drainage pipe and the asphalt wedge curbing will allow proper drainage for the area.

Councilmember Saulnier motioned to approve CU-01-21, seconded by Councilmember Pate and carried unanimously 3-0.

d. Approve Consent Agenda

All items listed below are considered routine and will be enacted by one motion and without discussion.

i. Approve Resolution to Direct the Clerk to Investigate AX 03-21 Annexation Petition

Town Manager Parsons provided an overview of the request. Robert and Tracy Currie have petitioned the Town for a voluntary annexation of a contiguous +.459-acre parcel, located at 260 Saunders Blvd. State law requires that Council direct the Town Clerk to investigate the sufficiency of the petition before proceeding further.

ii. Approve Resolution to Accept American Rescue Plan Funds

Town Manager Parsons provided an overview of the request. The Town is eligible for funding from the American Rescue Plan Act of 2021. Before receiving a payment, the Town Council is required to formally accept the funds.

iii. Approve Amendments to the FY 20-21 Budget and Fund 43

Town Manager Parsons reviewed the amendments requested. Staff recommends implementing CivicClerk, an agenda and meeting management platform that is part of the CivicPlus suite the Town uses. Staff has identified available funding in the FY 20-21 budget that can be transferred to Fund 43 EIDMS to implement this project.

Councilmember Saulnier motioned to approve the Consent Agenda, seconded by Councilmember Pate and carried unanimously 3-0.

4. COUNCIL UPDATES AND DISCUSSION

a. Recreation & Parks Update

New director, Cindi King, has been with the Town for approximately two months and will update on her department's current activities.

Some statistics discussed:

- Hired new Aquatics & Programs Coordinator Megan Threatt in May and lifeguards and camp counselors for summer.
- Opened the pool Memorial Day Weekend
- Started summer camps in June 7th and camps have been full
- 1,031 residents & 456 non-residents have come through gates at pool so far
- The Senior Center will be starting card games soon. Recent senior events have included the Mother's Day event, Bingo games, Senior Games (participants were involved in over 40 sports), and several social lunches
- The Bike to School Event included 65 kids who participated, biking from Pool Park to school and 55 kids who biked back from school to Pool Park
- The recreation ball season just finished and included 125 participants in t-ball, coach pitch and softball leagues
- The Sandsharks have been holding practices and recently started swim lessons
- Reservoir Park had 22,437 visitors in May, up slightly from April.

Mayor Haney and Town Managers Parsons both complimented Cindi on her work so far.

b. Proposed Revisions to Town Code Chapter 50, Water and Sewer Use Ordinance

Town Manager Parsons and Town Engineer James Michel presented the proposed revisions being recommended intending clean up and clarify language around taps and connecting to town sys. Staff has reviewed the current Water and Sewer Use Ordinance and would like to discuss a number of proposed revisions for Council review and input prior to adopting changes. Staff will prepare a final resolution incorporating Council recommendations to be considered at a future meeting.

Items addressed:

- Purpose is to bring code up to date with general statute and internal procedures.
- Clarify code to allow licensed utility workers to install taps or do work to connect to town system
- Clarify the ability of Town Council to provide waivers for when and where extensions for water connections must be made.
 - Staff recommends ongoing analysis regarding cross connection backflow devices, as the current code states that commercial structures must be made fully compliant or will be fined or have water shut off. Staff is trying to revise the code in order to take into account the location, age of building and physical ability to install a device.

c. Public Works Annex Update

Town Manager Parson provided an update regarding the project that is currently underway to upfit the Public Works Annex.

Staff has executed a change order to eliminate the board and batten on the rear of the facility as it was determined the necessary supporting structures did not exist. The board and batten will instead be applied to the front part of the building and the rear will be repaired and painted.

5. CLOSED SESSION UNDER NC GENERAL STATUTE 143-318.11(a) (4) TO DISCUSS POTENTIAL INCENTIVES REALATED TO AN ECONOMIC DEVELOPMENT PROJECT (if necessary)

Town Manager Parsons declared a closed session was unnecessary at this time.

6. ADJOURNMENT

Upon motion by Councilmember Saulnier, seconded by Councilmember Pate and carried unanimously 3-0, the meeting was adjourned at 4:03 pm.

Respectfully Submitted,

Elizabeth Robertson, Deputy Town Clerk