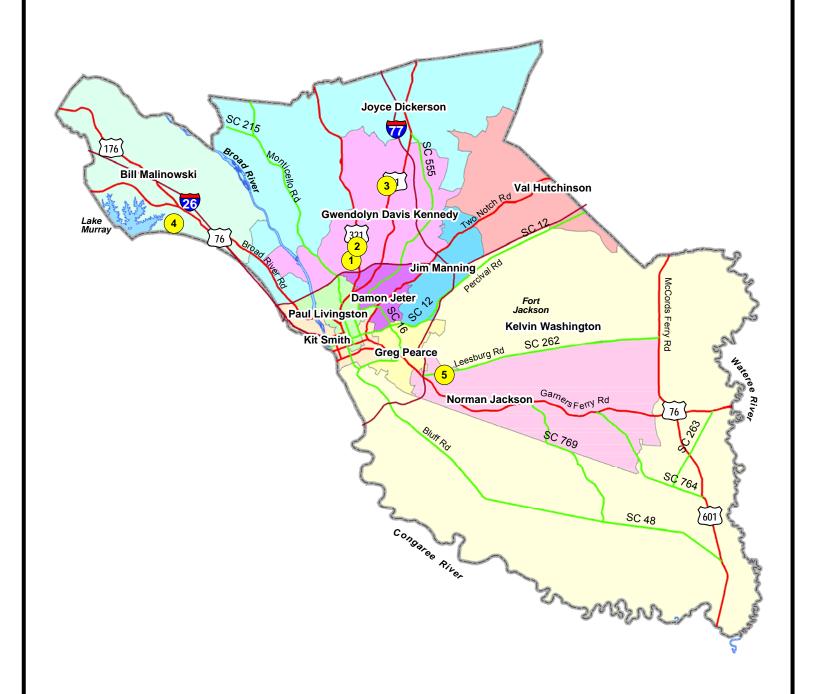
RICHLAND COUNTY BOARD OF ZONING APPEALS



Wednesday, 4 February 2009
1:00 p.m.
Council Chambers

RICHLAND COUNTY BOARD OF ZONING APPEALS FEBRUARY 4, 2009



CASE NO.	APPLICANT	TMS NO.	LOCATION	DISTRICT
1. 08-63 SE	Leroy Jenkins	11808-01-13	Old Fairfield Rd., Columbia	Kennedy
2. 08-64 SE	Leroy Jenkins	11808-01-12	Old Fairfield Rd., Columbia	Kennedy
3. 09-01 V	Identiti Resources	17400-11-03	331 Killian Rd., Columbia	Kennedy
4. 09-05 SE	Sequoia Wireless	03207-02-02	Farming Creek Rd., Irmo	Malinowski
5. 09-06 SE	Optima Towers	19203-14-11	Leesburg Rd., Columbia	Jackson



Richland County Board of Zoning Appeals Wednesday, 4 February 2009 2020 Hampton Street 2nd Floor, Council Chambers

Agenda

I.	CALL TO ORDER & RECO	GNITION OF QUORUM	Joshua McDuffie, Chairman
II.	RULES OF ORDER		Amelia Linder, Attorney
III.	APPROVAL OF MINUTES	- January 2009	
IV.	PUBLIC HEARING		Geonard Price,
<u>o</u>	PEN PUBLIC HEARING		Zoning Administrator
	08-63 SE Leroy Jenkins Old Fairfield Rd.	Requests a special exception to home on property zoned M-1. (Lig	
	Columbia, SC 11808-01-13		P. 01
	08-64 SE Leroy Jenkins Old Fairfield Rd. Columbia, SC 11808-01-12	Requests a special exception to home on property zoned M-1. (Lig	-
	09-01 V Identiti Resources 331 Killian Rd. Columbia, SC 17400-11-03	Requests a sign variance on (General Commercial)	property zoned GC.
_	09-05 SE Sequoia Wireless Farming Creek Rd. Irmo, SC 29063	Special Exception to place a c zoned GC (General Commercial).	
	03207-02-02		P. 19
	09-06 SE Optima Towers Leesburg Rd.	Special Exception to place a c zoned RU (Rural).	ell tower on property
	Columbia, SC 29209 19203-14-11		P. 41

- V. OTHER BUSINESS Reconsideration of case 09-04 V
- IV. ADJOURNMENT





REQUEST, ANALYSIS AND RECOMMENDATION

08 - 63 Special Exception

REQUEST

The applicant is requesting the Board of Zoning Appeals to establish a manufactured home on property zoned M-1 (Light Industrial).

GENERAL INFORMATION

Applicant Leroy Jenkins

Location

Tax Map Number

11808-01-12

Parcel Size

Existing Land Use

Old Fairfield Road

.45 -acre tract

vacant

Existing Status of the Property

The subject parcel is undeveloped and heavily wooded.

Proposed Status of the Property

The applicant proposes to place a manufactured home.

Character of the Area

The surrounding area is comprised of undeveloped, heavily wooded parcels.

ZONING ORDINANCE CITATION

Table 20-V-2 of the Land Development Code authorizes the Board of Zoning Appeals to authorize manufactured homes subject to the standards of section 26-152 (d) (13).

CRITERIA FOR SPECIAL EXCEPTIONS

In addition to definitive standards in this chapter, the Board shall consider the following:

- 1. Traffic impact.
- 2. Vehicle and pedestrian safety.
- 3. Potential impact of noise, lights, fumes or obstruction of airflow on adjoining property.
- 4. Adverse impact of the proposed use on the aesthetic character of the environs, to include possible need for screening from view.
- 5. Orientation and spacing of improvements or buildings.

DISCUSSION

Staff visited the site.

The applicant is requesting to establish a manufactured home.

In addition to receiving approval from the Board of Zoning appeals for the establishment of this use, the applicant may need approval for a septic tank from the South Carolina Department of Health and Environmental Control.

CONDITIONS

In granting a special exception, the board of zoning appeals may prescribe conditions and safeguards in addition to those spelled out in this chapter. The board of zoning appeals may also prescribe a time limit within which the special exception shall be begun or completed, or both. All conditions placed on the project by the board of zoning appeals shall be incorporated into such project.

OTHER RELEVANT SECTIONS

(13) Dwellings, Manufactured Homes on Individual Lots.

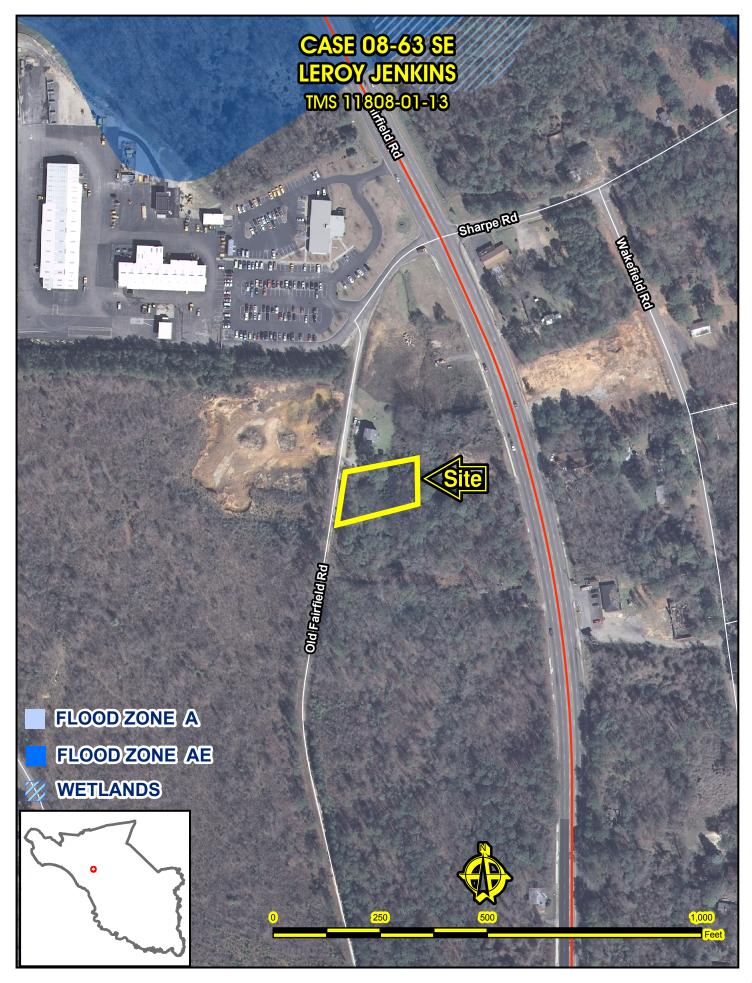
- a. Use districts: M-1 Light Industrial.
- b. Manufactured homes must meet the standards set by the Federal Manufactured Housing Construction and Safety Standards Act of 1974 (which became effective June 15, 1976), as revised and in effect on the date the application is made for a land development permit.
- c. The tongue, axles, transporting lights, and removable towing apparatus must be removed subsequent to final placement.
- d. Manufactured home skirting or a continuous, permanent masonry foundation, unpierced except for openings required by the building code for ventilation, utilities and access, shall be installed under the manufactured home.

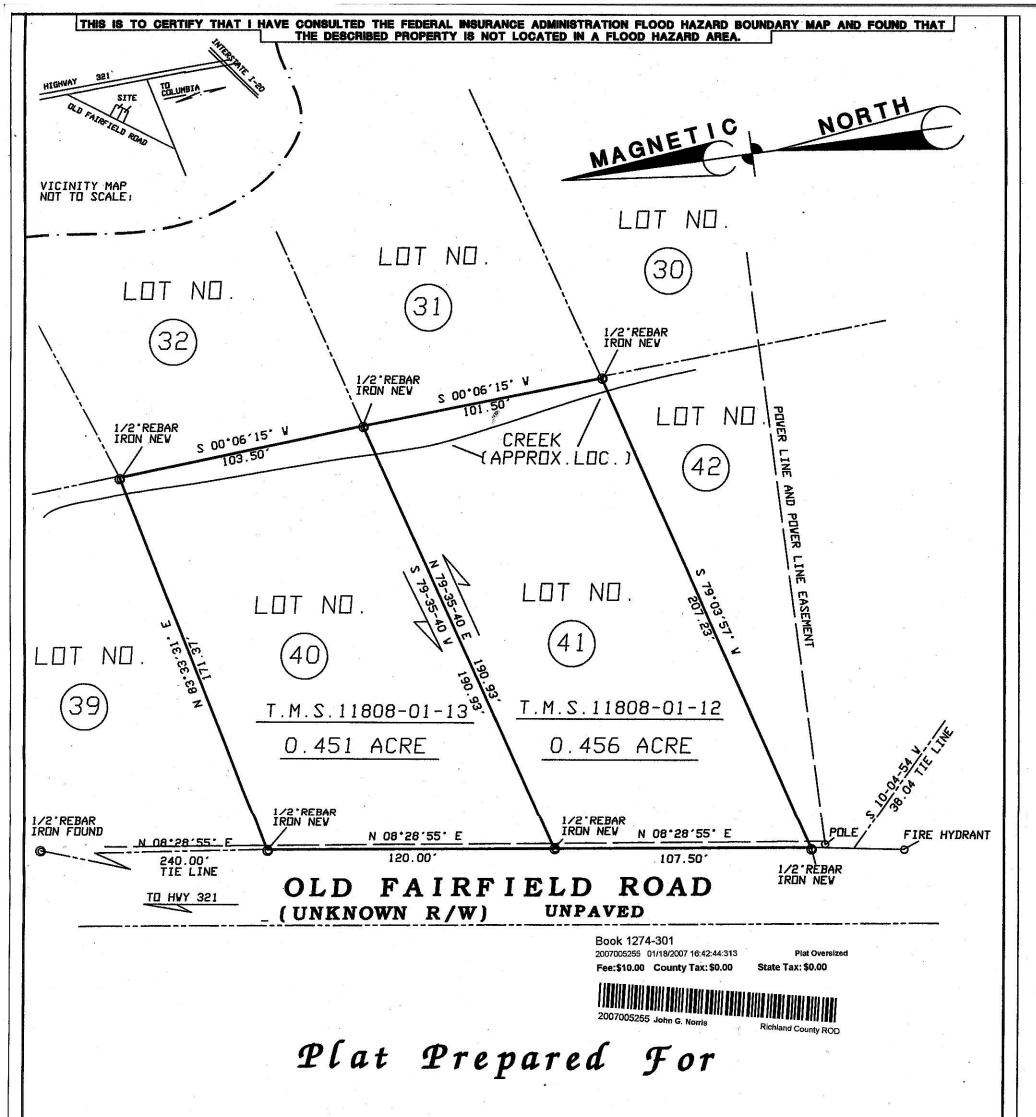
ATTACHMENTS

Plat

CASE HISTORY

No record of previous special exception or variance request.





LEROY M. JENKINS

LOCATED IN RICHLAND COUNTY, NEAR THE CITY OF COLUMBIA, S.C.

THE SAME BEING DESIGNATED AS LOT NO.40 AND LOT NO.41 ON A PLAT OF CRANE CREEK LOTS SURVEYED FOR SIMON FAUST BY JAS.C.COVINGTON.C.E

DATED AUGUST 27.1942 AND RECORDED IN THE OFFICE OF THE REGISTER DEEDS FOR RICHLAND COUNTY IN PLAT BOOK J AT PAGE 53 DEED BOOK REFERENCE D213 AT PAGE 48

TAX MAP REFERENCE # RI808-0H2 AND RI808-0H3

DECEMBER 15,2006 "I HEREBY STATE THAT TO THE BEST OF MY KNOW-LEDGE. INFORMATION. AND BELIEF. THE SURVEY SHOWN HEREIN WAS MADE IN ACCORDANCE WITH THE REQUIRE-MENTS OF THE MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA. AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS (B) SURVEY AS SPECIFIED THEREIN AND THAT THERE ARE NO VISIBLE ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN." RATIO OF PRECISION BETTER THAN 1/8000.

0 20 40 80 SCALE 1" = 40'

Donald G. Platt R.L.S. No. 4778

341 GLENN ROAD -

WEST COLUMBIA, SC 29169

29169 - PHONE (803) 796-5384

1

PN833





REQUEST, ANALYSIS AND RECOMMENDATION

08 - 64 Special Exception

REQUEST

The applicant is requesting the Board of Zoning Appeals to establish a manufactured home on property zoned M-1 (Light Industrial).

GENERAL INFORMATION

Applicant Leroy Jenkins Tax Map Number

11808-01-13

Location

Parcel Size

Existing Land Use

Old Fairfield Road

.45 -acre tract

vacant

Existing Status of the Property

The subject parcel is undeveloped and heavily wooded.

Proposed Status of the Property

The applicant proposes to place a manufactured home.

Character of the Area

The surrounding area is comprised of undeveloped, heavily wooded parcels.

ZONING ORDINANCE CITATION

Table 26-V-2 of the Land Development Code authorizes the Board of Zoning Appeals to authorize manufactured homes subject to the standards of section 26-152 (d) (13).

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DISCUSSION

Staff visited the site.

The applicant is requesting to establish a manufactured home.

In addition to receiving approval from the Board of Zoning appeals for the establishment of this use, the applicant may need approval for a septic tank from the South Carolina Department of Health and Environmental Control.

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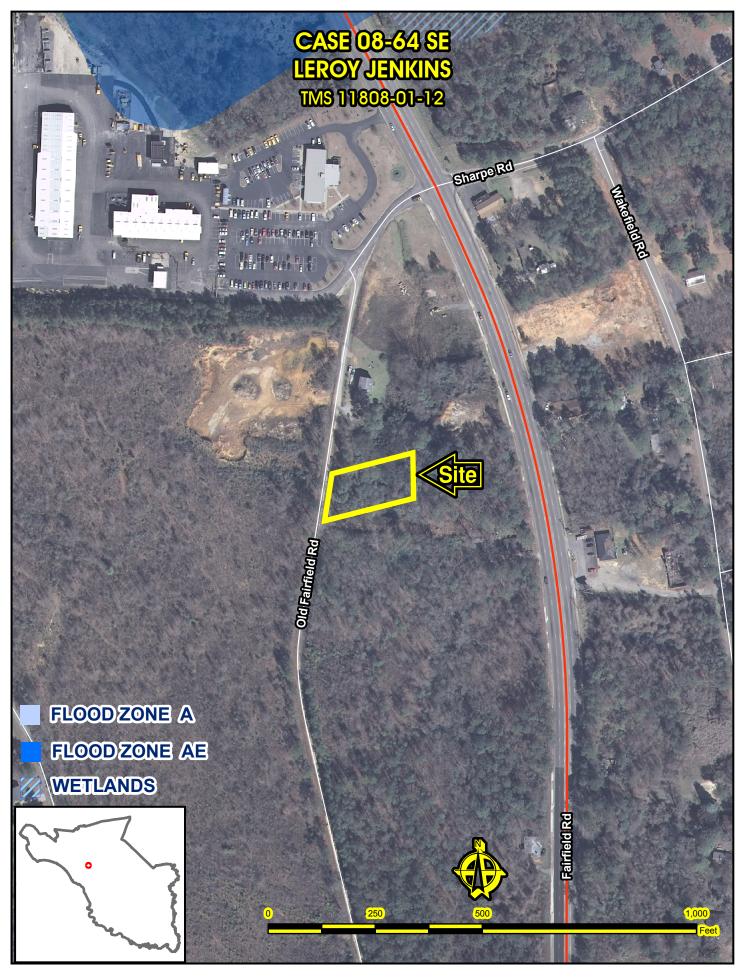
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- b. Manufactured homes must meet the standards set by the Federal Manufactured Housing Construction and Safety Standards Act of 1974 (which became effective June 15, 1976), as revised and in effect on the date the application is made for a land development permit.
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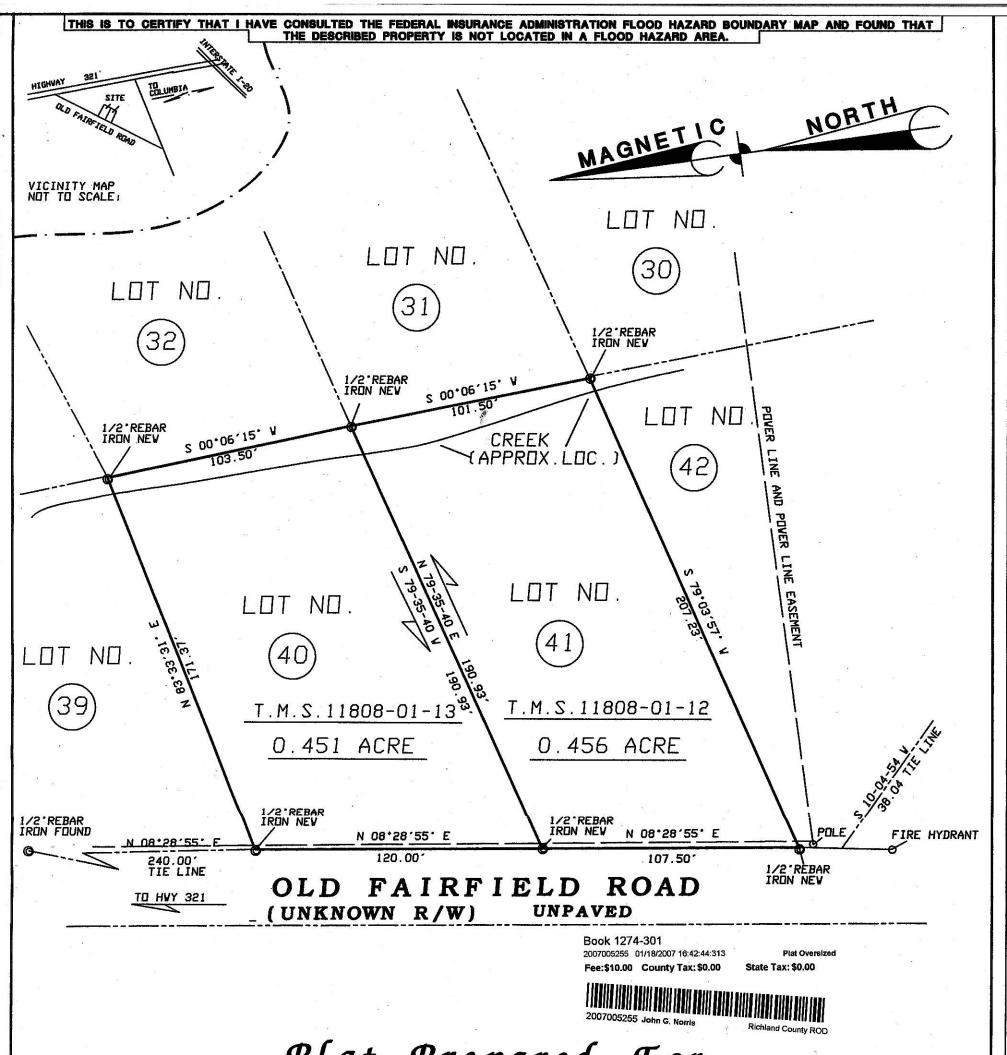
ATTACHMENTS

Plat

CASE HISTORY

No record of previous special exception or variance request.





Plat Prepared For

LEROY M. JENKINS

LOCATED IN RICHLAND COUNTY, NEAR THE CITY OF COLUMBIA, S.C.

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0 20 40 80 SCALE 1" = 40'

Donald G. Platt R.L.S. No. 4778

PN833

341 GLENN ROAD - WEST COLUMBIA, SC 29169

29169 - PHONE (803) 796-5384



REQUEST, ANALYSIS AND RECOMMENDATION

09-01 Variance

REQUEST

The applicant is requesting the Board of Zoning Appeals to grant a variance to exceed the allowable square footage for a wall sign in a GC (General Commercial) district.

GENERAL INFORMATION

Applicant

Identiti Resources (Alltel)

Tax Map Number

17400-11-03

Location 331 Killian Road Parcel Size 5.05 acre tract

Existing Land Use

Retail

Existing Status of the Property

The subject property is a newly developed retail shopping strip.

Proposed Status of the Property

The applicant proposes to exceed the allowed square footage for a wall sign by 33 square feet (shown – 58, allowed 25).

Character of the Area

The surrounding area is dedicated to commercial uses.

ZONING ORDINANCE CITATION

Section 26-33 (a) (2) of the Land Development Code empowers the Board of Zoning Appeals to authorize upon appeal in specific cases such variance from the terms of this chapter as will not be contrary to the public interest where, owing to special conditions, a literal enforcement of the provisions of this chapter would result in an unnecessary hardship. Such appeals shall be made in accordance with the procedures and standards set forth in Sec. 26-57 of this chapter.

CRITERIA FOR VARIANCE

Standard of review. The board of zoning appeals shall not grant a variance unless and until it makes the following findings:

a. That there are extraordinary and exceptional conditions pertaining to the particular piece of property; and

- b. That these conditions do not generally apply to other property in the vicinity; and
- c. That because of these conditions, the application of this chapter to the particular piece of property would effectively prohibit or unreasonably restrict the utilization of the property; and
- d. That the authorization of a variance will not be of substantial detriment to adjacent property or to the public good, and the granting of the variance will not harm the character of the district.

DISCUSSION

Staff visited the site.

The applicant proposes to exceed the allowable square footage for a wall sign in order to increase advertising visibility.

The applicant states that the increase in allowed signage is necessary in order to provide visibility. The granting of the variance will allow for larger signage to be located on two (2) sides of the building. Staff's view of the request is that the visibility is designed more for vehicular traffic traveling westward on Killian Road. There is a pylon sign located along Killian Road which will advertise for Alltel, as well as the other tenants.

While staff feels that the granting of the variance will not negatively impact the adjacent properties or the character of the surrounding area, staff believes that the subject parcel does not meet all of the criteria necessary for the granting of a variance.

CONDITIONS

26-57(f)(3)

Conditions. In granting a variance, the board of zoning appeals may attach to it such conditions regarding the location, character, or other features of the proposed building, structure or use as the board of zoning appeals may consider advisable to protect established property values in the surrounding area, or to promote the public health, safety, or general welfare. The board of zoning appeals may also prescribe a time limit within which the action for which the variance was sought shall be begun or completed, or both.

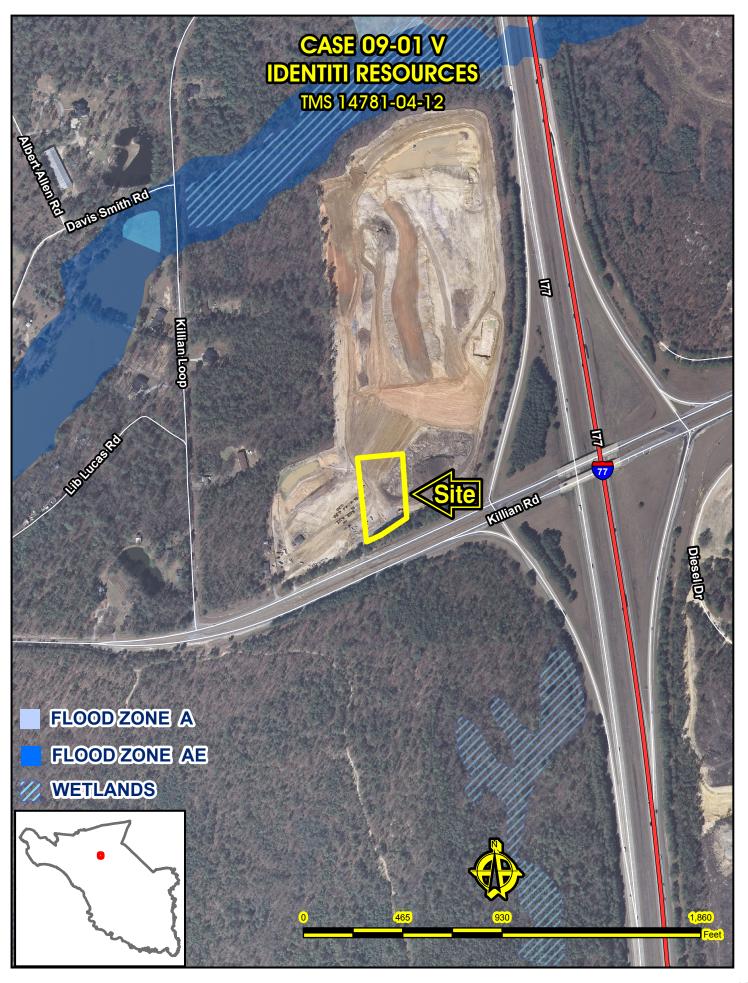
OTHER RELEVANT SECTIONS

N/A

ATTACHMENTS

- Proposed signage plans
- Application attachments

CASE HISTORY



09-01 V





RICHLAND COUNTY BOARD OF ZONING APPEALS VARIANCE APPEALS

	Rept#Application#
	Paid \$Filed
1,	Location Allk1 - 331 Killiam Road Space B6
2.	Page 14781 Block 04 Lot 12 Zoning District GC
3.	Loring District_O/O
	Applicant requests a variance to allow use of the property in a manner shown on the attached site plan, described as follows: Retail Store at Killing Market Place (Space B6) Columbia, SC.
5.	The application of the ordinance will result in unnecessary hardship, and the standards for a variance set by Sec. 26-602,3b(1) of the Richland County Zoning Code are met by the following facts.
	There are extraordinary and exceptional conditions pertaining to the particular piece of property as following: Two elevations of space for
	exterior signage with high visibility to Dublic
Ŀ	Describe how the conditions listed above were created: Architectural
	layout for retail center
Ç	These conditions do not generally apply to other property in the vicinity as shown by:
	The majority of other retail tenants have only (1) elevation
đ	Because of these conditions, the application of the ordinance to the particular piece of property would effectively prohibit or unreasonably restrict the utilization of the property as follows: Link not control to utilization of the
	Property
e)	property or to the public good, and the character of the district will not be harmed by the granting of the variance for the following reasons:
	any ofter retailer and will not take away from
6.	The following documents are submitted in support of this application [a site plan must be submitted]:
a)	0 1
b)	
c)	Allta letter design.
	(Attach additional pages if necessary)
- {)) Site Dlun

E) Application



Alltel One Allied Drive Little Rock, AR 72202 October 17, 2008

City of Columbia, SC

Re.

Alltel

331 Killian Road Space B6

Columbia, SC

To Whom It May Concern:

Alltel has made a significant investment in developing its national brand identity through a variety of media. Store signage has proven to be one of the most effective methods of promoting that brand. The ability to be able to effectively identify our stores, through maximizing signage opportunities, continues to have a direct correlation in enabling our stores to fully service the local market.

In regards to our location listed above, the existing sign criteria for the city allowed 1 square foot of signage for every 1' foot of frontage which allowed a maximum of 25 square feet. It was determined that while the front elevation was visible to the public, a signage presence on the side elevation would prove to be of great benefit. In this case we chose to split the total square footage between both signs hoping to generate more customer traffic. This decision has left us with signs that are now too small and are out of proportion with the over all size of the building.

We request that you consider allowing a variance so that we may place slightly larger signs on the front and side elevations as shown in the revised drawings. The representative of the property owner, Katie Pugh at Meyers Brothers Properties 100 Glenridge Point Parkway, Suite 530 Atlanta, GA 30342 is in agreement with our request. Please advise our national sign supplier listed below of your decision on this matter.

Sincerely

Jim Grandjean Manager, Commercial Construction Real Estate and Facility Services

Cc

Mr. Tom Vician Identiti Resources 800 W. Lunt ave. Schaumburg, IL 60193 PH. 847.301.0510

Fax 847.301.0518

tvician@identiti.net



Meyers Brothers Properties LLC

October 17, 2008

RE: Alltel, Killian Market Place, Columbia, SC Sign Variance

To whom it may concern,

The Landlord, Bright-Meyers Killian Associates, L.P., for Killian Market Place Shopping Center supports Alltel's effort to get a sign variance.

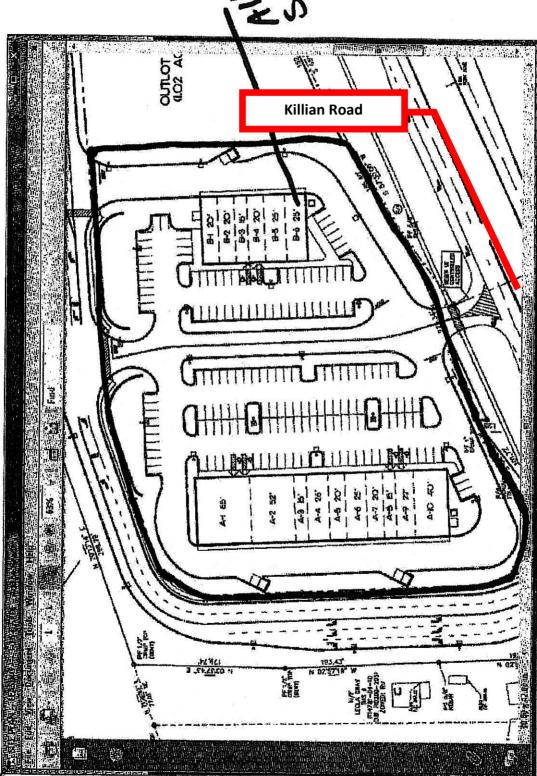
We agree that allowing Alltel to have larger signage on both the front and side of our building would be beneficial to their business, and generate more customer traffic for the shopping center as a whole.

Please feel free to contact me with any questions.

Best Regards,

atie Pugh

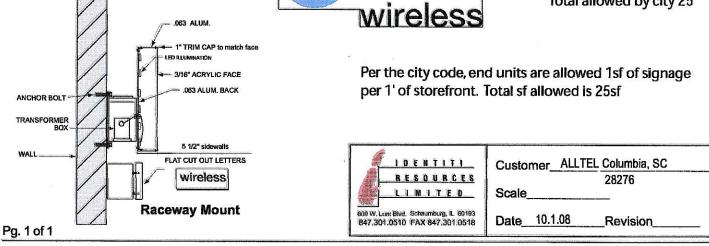
Property Manager







Sign 1 Front = 17sf Sign 2 Side = 8sf Total SF 25 Total allowed by city 25





REQUEST, ANALYSIS AND RECOMMENDATION

09-05 Special Exception

REQUEST

The applicant is requesting the Board of Zoning Appeals to grant a special exception to permit the construction of a communication tower in a RU (Rural) district.

GENERAL INFORMATION

Applicant Tax Map Number 03207-02-02

Jonathan Yates (Seguoia Wireless)

Location Parcel Size **Existing Land Use**

Farming Creek Road 5.08 -acre tract undeveloped

Existing Status of the Property

The subject parcel is heavily wooded and undeveloped.

Proposed Status of the Property

The applicant proposes to erect a 190-foot telecommunications tower, within a 6,400 (80 x 80) square foot leased area.

Character of the Area

The surrounding area consists of subdivisions, large residential tracts, and heavily wooded and undeveloped parcels.

ZONING ORDINANCE CITATION

Table 20-V-2 of the Land Development Code authorizes the Board of Zoning Appeals to authorize radio, television and all other types of communications towers subject to the provisions of section 26-152 (d) (24).

CRITERIA FOR SPECIAL EXCEPTIONS

In addition to definitive standards in this chapter, the Board shall consider the following:

- 1. Traffic impact.
- 2. Vehicle and pedestrian safety.
- 3. Potential impact of noise, lights, fumes or obstruction of airflow on adjoining property.
- 4. Adverse impact of the proposed use on the aesthetic character of the environs, to include possible need for screening from view.
- 5. Orientation and spacing of improvements or buildings.

Special exception requirements (as found in section 26-152 (d) (24)):

(24) Radio, television and telecommunications and other transmitting towers.

- a. Use districts: Rural; Office and Institutional; Neighborhood Commercial; Rural Commercial; General Commercial; LI Light Industrial; Heavy Industrial.
- b. Communication towers shall have a maximum height of three hundred (300) feet. For towers on buildings, the maximum height shall be twenty (20) feet above the roofline of buildings forty (40) feet or four stories in height or less. For buildings greater than four stories or forty-one (41) feet in height, the maximum height of communication towers shall be forty feet above the roofline.
- c. The minimum setbacks for communication towers from certain uses shall be as follows:
 - 1. In no case shall a communication tower be located within fifty (50) feet of a residential zoning district or an inhabited residential dwelling.
 - 2. For towers in excess of fifty (50) feet, the setback shall increase one (1) foot for each foot of height of the tower as measured form the base of the tower. The maximum required separation being two hundred and fifty (250) feet.
- d. The proposed user must show proof of an attempt to collocate on existing communication towers, and must be willing to allow other users to collocate on the proposed tower in the future subject to engineering capabilities of the structure. Evidence of an attempt to collocate must show that alternative towers, buildings, or other structures are not available for use within the applicant's tower site search area that are structurally capable of supporting the intended antenna or meeting the applicant's necessary height criteria, or provide a location free of interference from other communication towers.
- e. Towers shall be illuminated as required by the Federal Communications Commission, Federal Aviation Administration, or other regulatory agencies. However, no nighttime strobe lighting shall be incorporated unless required by the Federal Communications Commission, the Federal Aviation Administration, or other regulatory agency.
- f. Each communication tower and associated buildings shall be enclosed within a fence at least seven (7) feet in height.
- g. Each communication tower site shall be landscaped in accordance with the requirements of Sec. 26-176 of this chapter.
- h. No signage may be attached to any portion of a communications tower. Signs for the purpose of identification, warning, emergency function or contact or other as required by applicable state or federal rule, law, or regulation may be placed as required by standard industry practice.
- i. A communications tower which is no longer used for communications purposes must be dismantled and removed within one hundred twenty (120) days of the date the tower is taken out of service.

DISCUSSION

The applicant proposes to erect a 190-foot telecommunications tower, within a 6400 square foot leased compound.

Staff visited the site.

The tower is proposed to be located 413 feet from Farming Creek Road and approximately 110 feet from the rear property line.

Meeting the criteria for a special exception in section 26-152 (d) (24) (c) may indicate that the applicant has taken necessary measures to minimize the impact of a communication tower on the surrounding area. According to the applicant, the tower will be 200 feet from the nearest existing residential structure. Staff believes that this request will not impair the properties in the immediate or surrounding area.

The applicant must address, before the Board, the special exception requirements of section 26-152 (d) (24) (d).

CONDITIONS

Section 26-56 (f) (3)

(3) Conditions: In granting a special exception, the board of zoning appeals may prescribe conditions and safeguards in addition to those spelled out in this chapter. The board of zoning appeals may also prescribe a time limit within which the special exception shall be begun or completed, or both. All conditions placed on the project by the board of zoning appeals shall be incorporated into such project.

OTHER RELEVANT SECTIONS

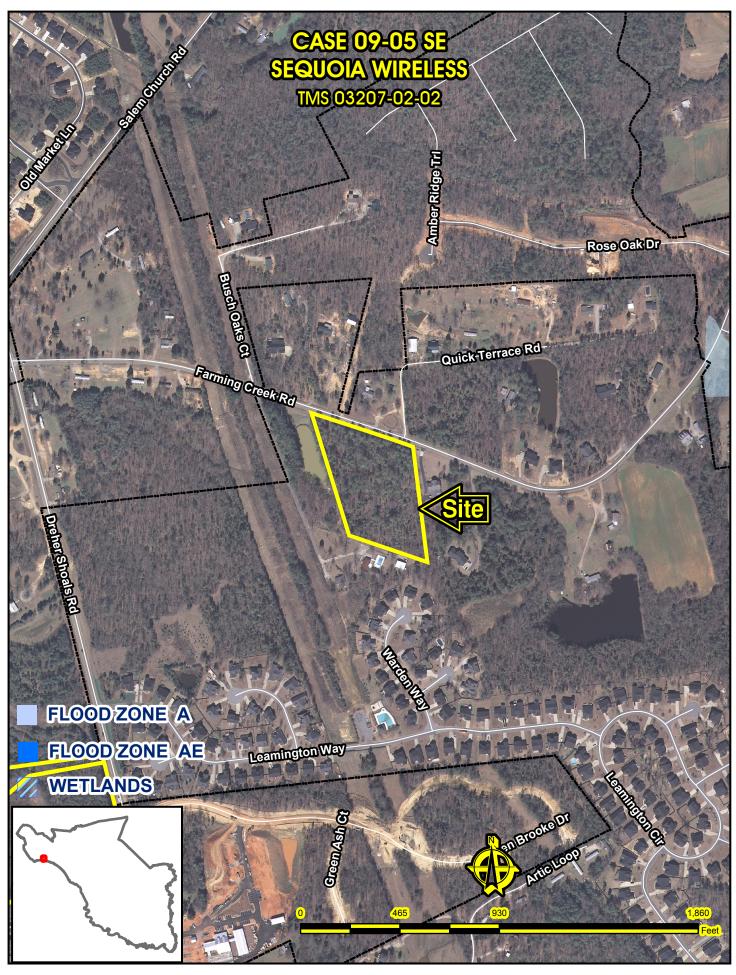
N/A

ATTACHMENTS

Site plan

CASE HISTORY

No record of previous special exception or variance request.



JONATHAN YATES (843) 720-1768 **6B** MID CAROLINA ELEC. COOP (800) 777-9898 SEQUOIA WRELESS 4840 FOREST DRIVE, S COLUMBIA, SC 29206 CAROLYN HARDWICK (770) 444-4463 RICHLAND COUNTY 34° 06' 26.48" N FARMING CREEK IRMO, SC 29063 81' 13' 12.82" 3207-02-02 SC-200 LONGITUDE (NAD 83): LATITUDE (NAD 83): APPLICATION AGENT FOR APPLICANT: APPLICANT/LESSEE: PROJECT MANAGER POWER COMPANY: SITE ADDRESS SITE NUMBER JURISDICTION: SITE NAME: AGENT:

INDEX PROJECT

AT&T (866) 620-3292

TELCO COMPANY:

PROPOSED UNMANNED TELECOMMUNICATION SITE SITE NUMBER: SC-200 Columbia, SC 29206

RICHLAND COUNTY, SOUTH CAROLINA

FARMING CREEK ROAD IRMO, SC 29063

COMPLIANCE

CODE

SITE TYPE: MONOPOLE RAWLAND



CONSTRUCTION OF AN UNMANNED TELECOMMUNICATION FACILITY CONSISTING OF A FENCED, GRAVELED COMPOUND WITH EQUIPMENT CABINETS AND PANEL ANTENNAS AND ASSOCIATED CABLES MOUNTED TO A PROPOSED MONOPOLE. DESCRIPTION **PROJECT**

engineering & surveying

2256 SEWELL MILL ROAD

SUITE 130

MARIEITA, GA 30062

TEL: 678-444-4463

FAX: 678-444-4463

CALL FOR UNDERGROUND UTILITIES PRIOR TO DIGGING: 1-800-922-0983
EMERGENCY:

CALL 911

DIG ALERT:

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: 5. ANSI/TIA/EIA—222—F
6. UNIFORM PLUMBING CODE
7. NATIONAL ELECTRIC CODE
8. LOCAL BUILDING CODE
9. CITY/COUNTY ORDINANCES 1. SC BUILDING CODE
2. UNIFORM BUILDING CODE
3. BUILDING OFFICIALS AND CODE
ADMINISTRATORS (BOCA)
4. UNIFORM MECHANICAL CODE

SHEET #	TITE	REV.#	DATE
101	TITLE SHEET	2	01/06/09
CO	NOTES	2	01/06/09
C02	NOTES AND LEGEND	2	01/06/09
C03	OVERALL SITE PLAN	2	60/90/10
C04	SITE LAYOUT & STAKING PLAN	2	60/90/10
C05	TOWER ELEVATION	2	01/06/09
900	GRADING, EROSION & SEDIMENT CONTROL PLAN	2	01/06/09
C07	GRADING, EROSION & SEDIMENT CONTROL NOTES	2	01/06/09
800	CIVIL DETAILS	2	60/90/10
600	CIVIL DETAILS	2	60/90/10
C10	SITE SIGNAGE DETAILS	2	01/06/09
E01	ELECTRICAL PLAN	2	01/06/09

FARMING CREEK

SC-200

FARMING CREEK ROAD IRMO, SC 29063

ked: CM Date: 12/29/0 PHR Date: 12/29/

ject Number

01/06/09 01/06/09 2 GROUNDING DETAILS GROUNDING DETAILS INDEX 603 602

Drawing Scale AS NOTED

Date:

Sequola Wireless
4440 Form Thire & Soline 68
Columbia, St. 29206

01/06/09

ELECTRICAL DETAILS ELECTRICAL DETAILS

01/06/09 01/06/09

7 2

GROUNDING PLAN

9

E03

2

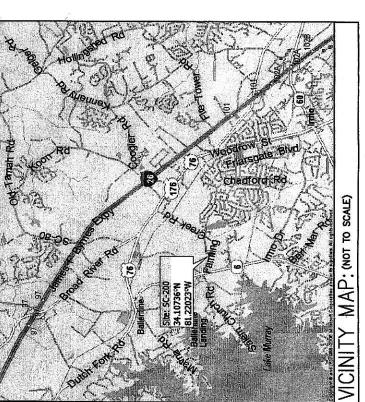
CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

DO NOT SCALE DRAWINGS

TITLE SHEET

101

NOTES CONTRACTOR GENERAL



FROM COLUMBIA, TAKE I-26 NORTHWEST TO EXIT 101. TAKE ACCESS ROAD TO BROAD RIVER ROAD AND TURN LEFT. CONTINUE ON BROAD RIVER ROAD APPROXIMATELY 2.5 MILES AND TURN LEFT ON FARMING CREEK ROAD. CONTINUE APPROXIMATELY 1.2 MILES TO THE SITE LOCATED ON THE LEFT.

DRIVING 23

DIRECTIONS

Drawing Scale AS NOTED Date:

NOTES GENERAL PROJECT

- ENGINEER SHALL BE RESPONSIBLE FOR PROVIDING ALL FIELD LAYOUT A ONE TIME BASIS.
 - THE CONTRACTOR SHALL TOPSOIL AND SEED ALL DISTURBED AREAS.
- 3. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE-GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA, EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE SHOWN OR MAY NOT BE SHOWN; AND IT SHALL BE HIS RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK, 48 HOURS BEFORE YOU DIG, DRILL OR BLAST, CALL SOUTH CAROLINA CALL CENTER AT (800) 922-0983.
 - THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE ENGINEER.
 - THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
- THE CONTRACTOR SHALL RESTORE ALL PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO AT LEAST AS GOOD OF CONDITION AS BEFORE DISTURBED AS DETERMINED BY THE ENGINEER. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.

 - THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A NORTH CAROLINA LICENSED LAND SURVEYOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.
- TO EXAMINE ALL PLAN SHEETS AND WITH ALL CONTRACTS FOR THE SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY SPECIFICATIONS, AND COORDINATE WORK **1**0.
- ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISIONS OF NORTH CAROLINA STATE CODE AND OSHA REGULATIONS FOR CONSTRUCTION. =
 - DEWATERING AND THE MAINTENANCE OF OF WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR SURFACE DRAINAGE DURING THE COURSE 12
- ALL UTILITY WORK INVOLVING CONNECTIONS TO EXISTING SYSTEMS SHALL BE COORDINATED WITH THE ENGINEER AND THE UTILITY OWNER. NOTIFY THE ENGINEER AND THE UTILITY OWNER 24 HOURS BEFORE EACH AND EVERY CONNECTION TO EXISTING SYSTEMS IS MADE. 5
 - MAINTAIN FLOW FOR ALL EXISTING UTILITIES.
 - STANDARDS UNLESS NOTED OTHERWISE ALL SITE FILL SHALL MEET SELECTED FILL ON THE DRAWINGS. <u>4</u>, ₹.
- CONTRACTOR TO GRADE ALL AREAS ON THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE COMPOUND AND THE TOWER. 16.
- THE CONTRACTOR SHALL TAKE THES TO ALL UTILITY CONNECTIONS AND PROVIDE MARKED—UP AS—BUILT PLANS. AS—BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND HIS REPRESENTATIVES, AND THE CONTRACTOR SHALL PROVIDE ANY CORRECTION OR ADMISSIONS TO THE SATISFACTION OF THE OWNER AND HIS REPRESENTATIVES BEFORE UTILITIES WILL BE ACCEPTED. AS—BUILTS SHALL INCLUDE ALL POWER, TELEPHONE, GROUNDING, ETC. 17.
 - TOWER FOOTING DIMENSIONS SHALL BE VERIFIED WITH THE TOWER MANUFACTURER AND THE TOWER PLANS. <u>ö</u>

GENERAL

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GENERAL CONSTRUCTION NOTES

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- DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION
- CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE UNDERGROUND UTILITIES.
- INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE APPROVAL.

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EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.

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- PAINT ALL ANTENNAS, MOUNTING HARDWARE, CABLES, CABLE TRAYS, ETC. TO MATCH EXISTING STRUCTURE PER OWNER REQUIREMENTS. OWNER SHALL APPROVE COLOR. ALL DAMAGED, MARRED, SCRAPED, ABRADED, ETC. AREAS OF EXISTING PAINT SHALL BE REPAIRED PER OWNERS REQUIREMENTS. OWNER SHALL APPROVE COLOR.
- EXCAVATIONS/FOUNDATION
- FOUNDATION EXCAVATION SHALL BE HAND-TRIMMED TO REMOVE LOOSE ÷
- EXTERIOR FOUNDATION BACKFILL SHALL BE SELECTED GRANULAR FILL œi
- ALL STRUCTURAL BACKFILL AND SUBBASE UNDER SLABS-ON-GRADE AND FOOTINGS SHALL BE "SW" OR BETTER PER ASTM D-2487 COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY PER ASTM D 698. ပ
- DO NOT PLACE FOOTINGS IN WATER OR ON FROZEN GROUND.
 SOIL BEARING SURFACES, PREVIOUSLY ACCEPTED BY GEOTECHNICAL ENGINEER,
 WHICH ARE ALLOWED TO BECOME SATURATED, FROZEN OR DISTURBED SHALL BE
 REWORKED TO SATISFACTION OF GEOTECHNICAL ENGINEER.
 DO NOT ALLOW GROUND BENEATH FOOTINGS TO FREEZE.
 FOOTING EXCAVATIONS SHALL BE CUT NEAT. ن ان

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CONCRETE

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DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING APPLICABLE CODES: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"; ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"; ď

FARMING CREEK

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SC-200

FARMING CREEK ROAD IRMO, SC 29063

- MIX DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLACING CONCRETE. æ
- CONCRETE SHALL BE NORMAL WEIGHT, 6% AIR ENTRAINED (±1.5%) WITH A MAXIMUM 4" SILUMP, AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI UNLESS OTHERWISE NOTED. ပ
 - MAXIMUM AGGREGATE SIZE SHALL BE 1".

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- THE FOLLOWING MATERIALS SHALL BE USED:
- ASTM C 150, TYPE I ASTM A 615, GRADE 60 ASTM C 33 DRINKABLE NON-CHLORIDE CONTAINING PORTLAND CEMENT: REINFORCEMENT: NORMAL WEIGHT AGGREGATE:
- REINFORCING SHALL CONFORM TO ASTM A-615 WITH SUPPLEMENT. YIELD STRENGTH $F_{\rm y}=60$ KSI. REINFORCING DETAILS SHALL ACCORDANCE WITH THE LATEST EDITION OF ACI 315. ADMIXTURES:

u.

- CONCRETE COVER AROUND REINFORCING BARS (U.N.O.) SHALL BE: G
- - ALL OTHER CONCRETE. İ

GENERAL CONSTRUCTION NOTES CONT.

CIVIL LEGEND

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	STANDARD
-309.	TE ASTM
O ASTM C	APPROPRIA
NFORM T	10 개 /
SHALL CC	CONFORM
POUNDS	SHALL
CURING COMPOUNDS SHALL CONFORM TO ASTM C-309.	ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD
_	ئ

- REFERENCED IN ACI-301. DO NOT WELD OR TACKWELD REINFORCING STEEL. ¥
- ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, PIPING, WATERSTOPS, INSERTS, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
 - LOCATE ADDITIONAL CONSTRUCTION JOINTS REQUIRED TO FACILITATE CONSTRUCTION AS ACCEPTABLE TO ENGINEER. PLACE REINFORCEMENT CONTINUOUSLY THROUGH JOINT. Š
- REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
- PLACE CONCRETE IN A UNIFORM MANNER TO PREVENT THE FORMATION OF COLD JOINTS AND OTHER PLANES OF WEAKNESS. YBRATE THE CONCRETE TO FULLY EMBED REINFORCING, DO NOT USE YIBRATORS TO TRANSPORT CONCRETE THROUGH CHUTES OR FORMWORK. z o

FROZEN GROUND.

DO NOT PLACE CONCRETE IN WATER, ICE, OR ON

- DO NOT ALLOW CONCRETE SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD, OR FOR A MINIMUM OF 14 DAYS AFTER PLACEMENT. FOR COLD—WEATHER AND HOT—WEATHER CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS MINIMUM. œ م ن
 - - PROVIDE A STEEL TROWEL FINISH TO THE SLAB. κi
- DESIGN RESPONSIBILITY OF ANTENNA MOUNTING BRACKETS AND POLES AND ALL COMPONENTS THERE OF AND ATTACHMENT THERE TO SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER. MFR SHALL PROVIDE TO THE ENGINEER FOR APPROVAL, DRAWINGS DETAILING ALL COMPONENTS OF THE ASSEMBLY, INCLUDING CONNECTIONS, DESIGN LOADS, AND ALL OTHER PERTINENT DATA. ANTENNA SUPPORT BRACKET NOTES ď ល់
- BRACKETS SHALL BE DESIGNED TO SUPPORT CURRENT AND FUTURE PANEL ANTENNAS AND COAXIAL CABLES AS SHOWN. ന്
 - STRUCTURAL STEEL NOTES ö
- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS". Ą.
 - STEEL ANGLES, BASE PLATES, BEARING PLATES AND MISC. FABRICATION SHALL BE MADE FROM STEEL MEETING THE REQUIREMENTS OF ASTM-A36 WITH A MINIMUM YIELD STRESS OF 36 KSI. ALL STEEL TUBES AND PIPES SHALL BE A500 STEEL MINIMUM. ä
- ALL DINGS, SCRAPES, MARS, AND WELDS IN THE FINISHED AREAS SHALL BE REPAIRED BY FIELD TOUCH—UP PRIOR TO COMPLETION OF THE WORK. ن
- ALL EXTERIOR STRUCTURAL STEEL SHALL BE, WHEN DELIVERED, HOT-DIP CALVANIZED ACCORDING TO ASTM A123. TOUCH-UP FIELD WELDS AND ABRADED AREAS W/2 COATS OF GALVANIZED PAINT, ZRC COLD GALVANIZING COMPOUND OR APPROVED EQUAL. ဝ
- DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS. ш
 - CONNECTIONS: Ľ
- 1. WELD (SHIELDED METAL ARC) ELECTRODES SHALL BE E70XX MINIMUM AND BE IN ACCORDANCE WITH AWS D1.1 UNLESS NOTED OTHERWISE.
- MINIMUM CAPACITY OF CONNECTIONS. FOR CONNECTIONS NOT DETAILED, PROVIDE CONNECTION CAPACITY OF AT LEAST THAT REQUIRED BY PART 2 OF THE AISC MANUAL (9TH EDITION) IN THE SECTION "ALLOWABLE LOADS ON BEAMS", FOR THE GIVEN MEMBER AND STEEL SPECIFICATIONS. CONCENTRATED LOADS NEAR SUPPORTS MUST BE ADDED. ď
 - CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW AND APPROVAL. mi
- 4.
- GRATING MAY USE 5/8" DIA. GALVANIZED BOLTED CONNECTIONS SHALL USE BEARING TYPE GALVANIZED ASTM A325 BOLTS (3/4" DIA.) AND SHALL HAVE A MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. GALVANIZE ASTM A307 BOLTS UNLESS NOTED OTHERWISE. ú

PROPOSED * 120.5 OR x 8 Ø PRIMARY PROPERTY OR R.O.W. REPRESENTS DETAIL NUMBER UNDERGROUND TELEPHONE 5' OR 10' CONTOUR LINE TREES, SHRUBS, BUSHES UNDERGROUND ELECTRIC 1' OR 2' CONTOUR LINE OVERHEAD TELEPHONE REF. DRAWING NUMBER TELEPHONE PEDESTAL OVERHEAD ELECTRIC ASPHALT PAVEMENT SPOT ELEVATION UTILITY POLE LEASE LINE EASEMENT BUILDING FENCE CURB NDERGROUND TELEPHONE NDERGROUND ELECTRIC DVERHEAD WARES - --302 - --120.5 CR x EXISTING -055

ABBREVIATIONS

FARMING CREEK

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SC-200

FARMING CREEK ROAD IRMO, SC 29063

COAX ISOLATED GROUND BAR EXTERNAL MASTER ISOLATED GROUND BAR SELF SUPPORTING TOWER GLOBAL POSITIONING SYSTEM DRAWING BARE COPPER WIRE BELOW FINISH GRADE POLYVINYL CHLORIDE STAINLESS STEEL CONDUIT CABINET ¥ H H

A Sequois Wireless 4840 Forar Dave, Suite 68
Columbia, 6C 29206

GROUND
AMERICAN WIRE GAUGE
RIGID GALVANIZED STEEL
AUTHORITY HAVING JURISDICTION
TOWER TOP LOW NOISE AMPLIFIER
UNLESS NOTED OTHERWISE
ELECTRICAL METALLIC TUBING

Drawing Scale: AS NOTED

Date:

rwing Title

GROUNDING SYMBOLS

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GROUND	ACCESS	GROUND
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#2 BTCW GROUNDING WIRE U.N.O INDICATES CODED NOTE

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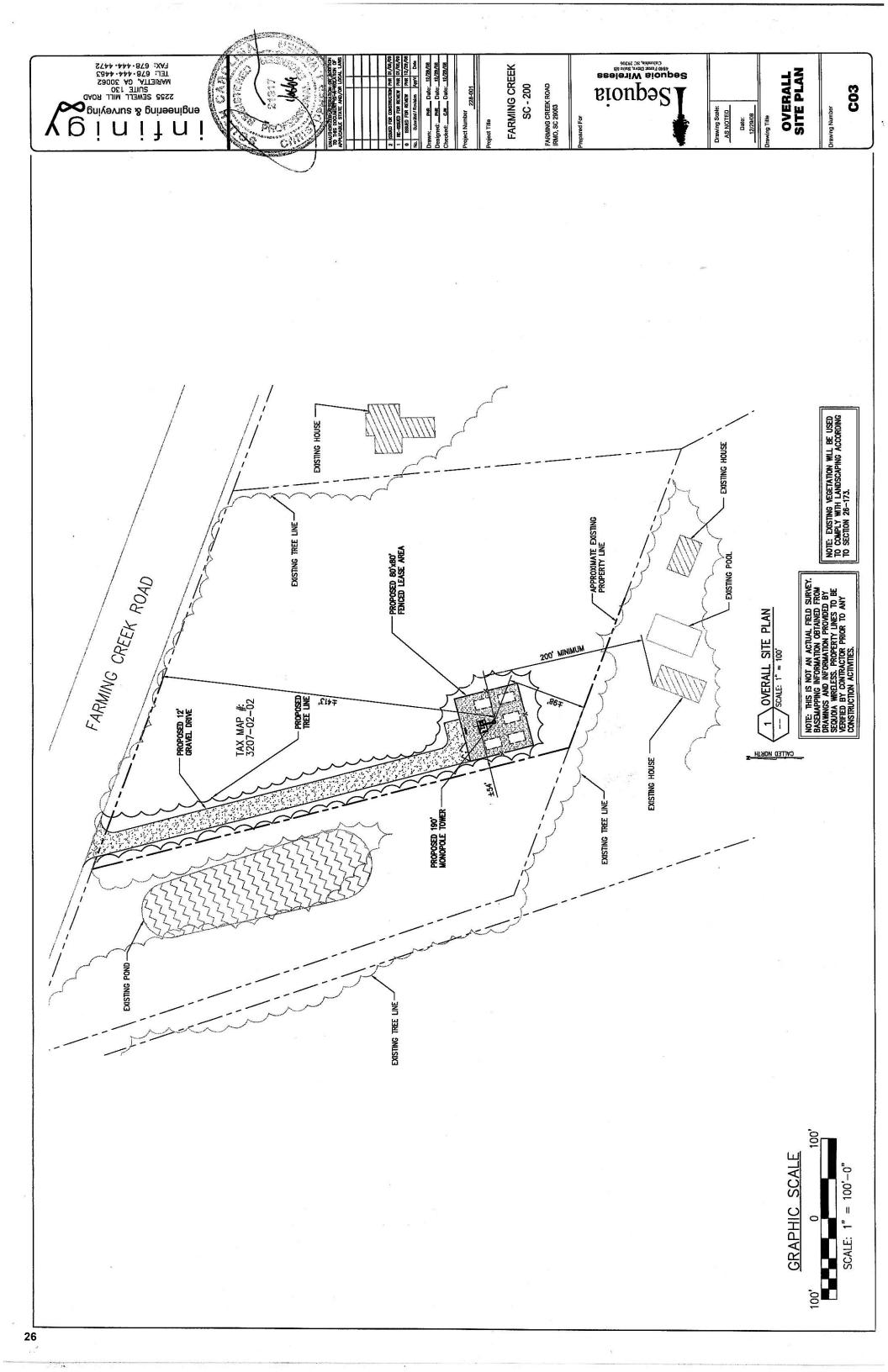
A CONTRACTOR

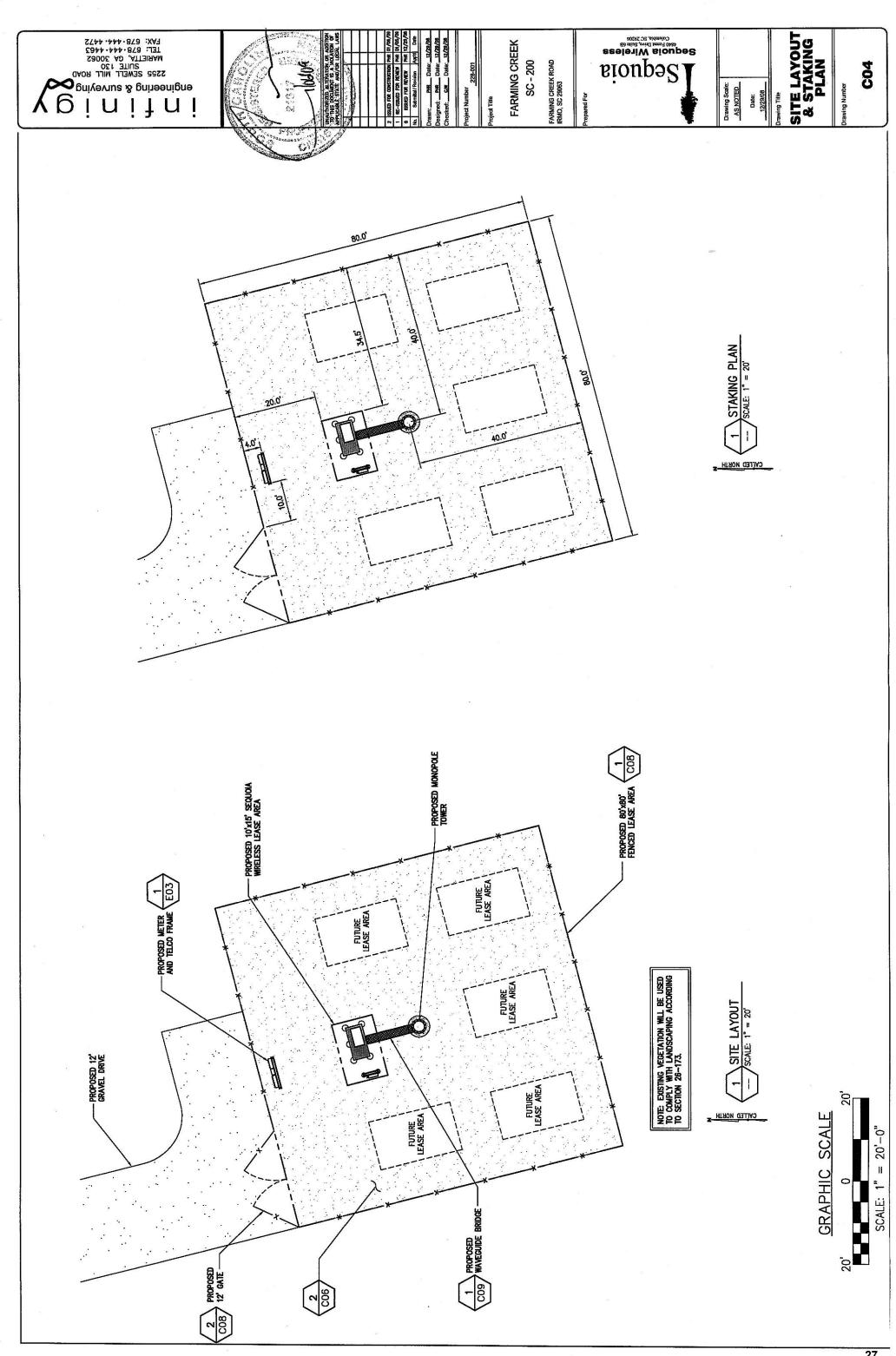
SYMBOLS ELECTRICAL

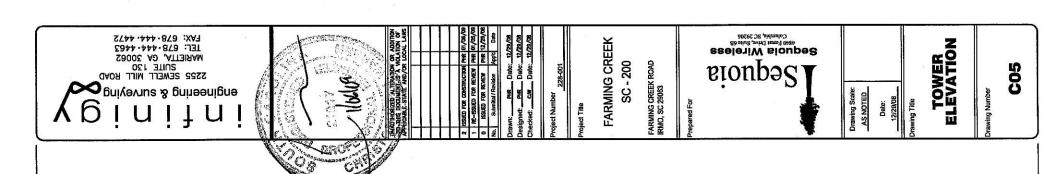
TOWER LIGHT SYSTEM BURIED RACEWAY RECEPTACLE

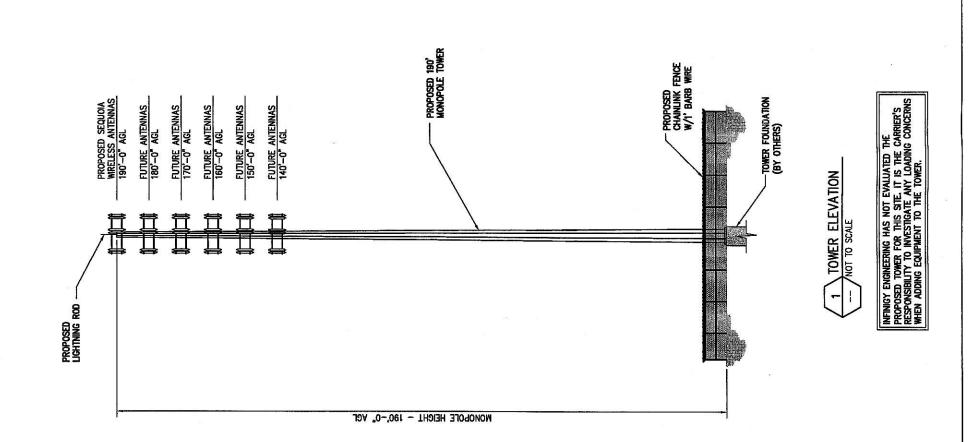
INDICATES DISCONNECT SWITCH INDICATES CODED NUMBER

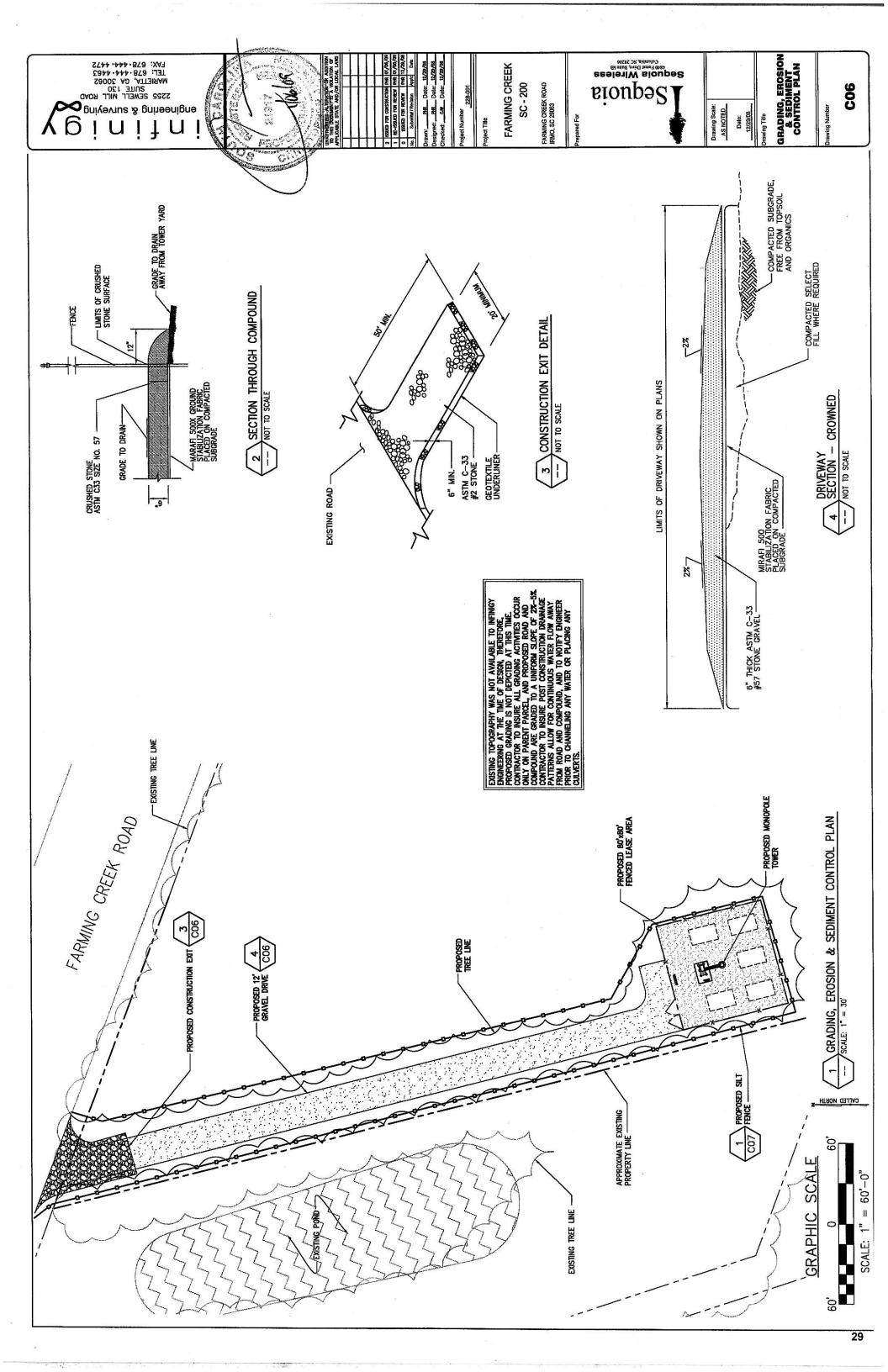
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GRADING, EROSION & SEDIMENT CONTROL NOTES

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GRADING & EXCAVATING NOTES

TANTIALLY OOSE ATER all excavations on which concrete is to be placed shall be substy horizontal on undisturbed and unfrozen soil and be free from loc material and excess groundwater. Dewatering for excess groundwas shall be provided if required.

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CONCRETE FOUNDATIONS SHALL NOT BE PLACED ON ORGANIC MATERIAL. IF SOUND SOIL IS NOT REACHED AT THE DESIGNATED EXCAVATION DEPTH, THE UNSATIFFACTORY SOIL SHALL BE EXCAVATED TO ITS FULL DEPTH AND EITHER BE REPLACED WITH MECHANICALLY COMPACTED GRANULAR MATERIAL OR THE EXCAVATION BE FILLED WITH CONCRETE OF THE SAME QUALITY SPECIFIED FOR THE FOUNDATION.

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ANY EXCAVATION OVER THE REQUIRED DEPTH SHALL BE FILLED WITH EITHER MECHANICALLY COMPACTED GRANULAR MATERIAL OR CONGRETE OF THE SAME QUALITY SPECIFIED FOR THE FOUNDATION. CRUSHED STONE MAY BE USED TO STABILIZE THE BOTTOM OF THE EXCAVATION. STONE, IF USED, SHALL NOT BE USED AS COMPILING CONCRETE THICKNESS.

AFTER COMPLETION OF THE FOUNDATION AND OTHER CONSTRUCTION BELOW GRADE, AND BEFORE BACKFILLING, ALL EXCAVATIONS SHALL BE CLEAN OF UNSUITABLE MATERIAL SUCH AS VEGETATION, TRASH, DEBRIS, AND SO FORTIFOR ANY FILLING OPERATION. 4,

RFACE TEEPER THAN ISTING SURFACE. ENSITY LESS QUIRED, REMOVE ALL VEGETATION, TOPSOIL, DEBRIS, WET AND UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURPRIOR TO PLACING FILLS. PLOW, STRIP, OR BREAK UP SLOPED SURFACES STE THAN 1 VERTICAL TO 4 HORIZONTAL SO FILL MATERIAL WILL BOND WITH EXIST WHEN SUBGRADE OR EXISTING GROUND SURFACE TO RECEIVE FILL HAS A DEN THAN THAT REQUIRED FOR FILL, BREAK UP GROUND SURFACE TO DEPTH REQUIRED, MOISTURE—CONDITION OR AERATE SOIL AND RECOMPACT TO REQUID DENSITY. ιci

-BE FREE FROM CLODS OR STONES OVER 2-1/2" MAXIMUM DIMENSIONS -BE PLACED IN 6" LAYERS AND COMPACTED TO 95% STANDARD PROCTOR EXCEPT IN GRASSED/LANDSCAPED AREAS, WHERE 90% STANDARD PROCTOR -USE APPROVED MATERIALS CONSISTING OF EARTH, LOAM, SANDY CLAY, SAI ö

REMOVED DURING CONSTRUCTION OPERATIONS. GRAVEL SURFACING SHALL BE REPLACED TO MATCH EXISTING ADJACENT GRAVEL SURFACING SHALL BE REPLACED TO MATCH EXISTING ADJACENT GRAVEL SURFACING AND SHALL BE OF THE SAME THICKNESS. SURFACES OF GRAVEL SURFACING SHALL BE FREE FROM CORRIGGATIONS AND WAVES. EXISTING GRAVEL SURFACING MAY BE EXCAVATELY AND REUSED IF INJURIOUS AMOUNTS OF EARTH, ORGANIC MATTER, OR OTHER BELETERIOUS MATERIALS ARE REMOVED PRIOR TO REUSE. FURNISH ALL ADDITIONAL GRAVEL RESURFACING MATERIALS ARE REMOVED PROPRIED SUBGRADE ELEVATIONS, AND LOOSE OR DISTURBED MATERIALS SHALL BE THOROUGHLY COMPACTED. DEPRESSIONS IN THE SUBGRADE SHALL BE FILLED AND COMPACTED WITH APPROVED SELECTED MATERIAL. GRAVEL SUBFACING MATERIAL MAY BE USED FOR FILLING DEPRESSIONS IN THE SUBGRADE, SUBJECT TO ENGINEER'S APPROVAL. FACING IS REPLACE EXISTING GRAVEL SURFACING ON AREAS FROM WHICH GRAVEL SURI 7

CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH PROPERTY OWNER SO AS TOR'S NEGLIGENCE S EXPENSE. ENSURE POSITIVE DRAINAGE DURING AND AFTER COMPLETION OF CONSTRUCTION. DAMAGE TO EXISTING STRUCTURES AND UTILITIES RESULTING FROM CONTRAC SHALL BE REPAIRED/REPLACED TO OWNER'S SATISFACTION AT CONTRACTOR'S TO AVOID INTERRUPTIONS TO PROPERTY OWNER'S OPERATIONS.

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ALL CUT AND FILL SLOPES SHALL BE MAXIMUM 3 HORIZONTAL TO 1 VERTICA 6

CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING SITE VEHICLE TRAFFIC AS TO NOT ALLOW VEHICLES LEAVING THE SITE TO TRACK MUD ONTO PUBLIC STREETS. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING PUBLIC STREETS DUE TO MUDDY VEHICLES LEAVING THE SITE.

SEDIMENT CONTROL NOTES

THE SOIL EROSION AND SEDIMENT CONTROL MEASURES AND DETAILS AS SHOWN HERIN AND STIPULATED WITHIN STATE STANDARDS
SHALL BE FOLLOWED AND INSTALLED IN A MANNER SO AS TO
MINIMIZE SEDIMENT LEAVING THE SITE.

PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS.

3. EROSION CONTROL DEVICES SHALL BE INSTALLED BEFORE GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THOSE SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DUBING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

4. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS.

ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER.

CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED. CONTRACTOR SHALL OLEAN OUT ALL SEDMENT PONDS WHEN REQUIRED BY THE ENGINEER OF THE LOCAL JURISDICTION INSPECTOR. CONTRACTOR SHALL INSPECT ER CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE SILT IS WITHIN 12" OF THE TOP OF THE SILT FENCE.

FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED.

SILT BARRIERS TO BE PLACED AT DOWNSTREAM TOE OF ALL CUT AND FILL SLOPES.

SP ALL CUT AND FILL SLOPES MUST BE SURFACED ROUGHENED A VEGETATED WITHIN SEVEN (7) DAYS OF THEIR CONSTRUCTION.

CONTRACTOR SHALL REMOVE ALL EROSION & SEDIMENT CONTROL MEASURES AFTER COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND—DISTURBING ACTIVITIES.

N, #/ACRE P2 O5, #/ACRE K2O, #/ACRE N, TOP DRESSING		50	I
K20, #/ACRE	MIN	120 - 180	120
P ₂ O ₅ , #/ACRE		120 - 180	120
N, #/ACRE		06 - 09	09
APPLICATION		1st	2nd

2255 SEWELL MILL ROAD SUITE 130 TEL: 678-444-4463 FAX: 678-444-4463

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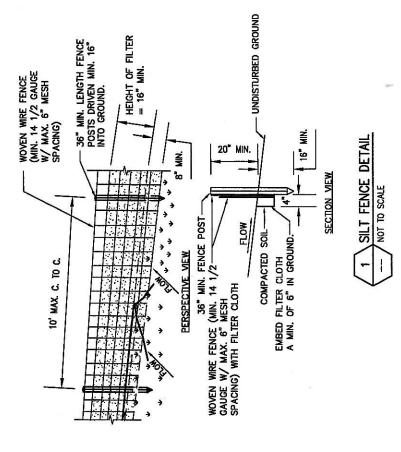
NOTE: - GRASS AND MULCH ALL DISTURBED AREAS

HYDRAULIC SEEDING EQUIPMENT

WHEN HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS USED, NO GRADING AND SHAPING OR SEEDBED PREPARATION WILL BE REQUIRED. THE FERTILIZER, SEED AND WOOD CELLULOSE FIBER MULCH WILL BE MIXED WITH WATER AND APPLIED IN A SLURRY. ALL SLURRY INGREDIENTS MUST BE COMBINED TO FORM A HOMOGENEOUS MIXTURE, AND SPREAD UNIFORMLY OVER THE AREA WITHIN ONE HOUR AFTER MIXED STARA OR HAY MULCH AND ASPHALT EMULSION WILL BE APPLIED WITH BLOWER—TYPE MULCH SPREADING EQUIPMENT WITHIN 24 HOURS AFTER SEEDING, THE MULCH WILL BE SPREAD UNIFORMLY OVER THE AREA, LEAVING ABOUT 25 PERCENT OF THE GROUND SURFACE EXPOSED.

CONVENTIONAL SEEDING EQUIPMENT

GRADE, SHAPE AND SMOOTH WHERE NEEDED TO PROVIDE FOR SAFE EQUIPMENT OPERATION AT SEEDING TIME AND FOR MAINTENANCE PURPOSES. THE LIME AND FERTILIZER IN DRY FORM WILL BE SPREAD LINFORMLY OVER THE AREA IMMEDIATELY BEFORE SEEDBED PREPARATION. A SEEDBED WILL BE PREPARED BY SCARIFYING TO A DEPTH OF 1 TO 4 INCHES AS DETERMINED ON SITE. THE SEEDBED MUST BE WELL PULYERIZED, SMOOTHED AND FIRMED. SEEDING WILL BE DONE WILL BE ONE WILL BE SPREAD UNIFORMLY OVER A FRESHLY PREPARED SEEDBED AND COVERED LIGHTLY. WITHIN 24 HOURS AFTER SEEDING, SIRAW OR HAY MULCH WILL BE SPREAD UNIFORMLY OVER THE AREA, LEADING ABOUT 25 PERCENT OF THE GROUND SURFACE EXPOSED. MULCH WILL BE SPREAD WITH BLOWER-TYPE MULCH FQUIPMENT OR BY HAND AND ANCHORED PACKER DISK MAY BE USED TO PRESS THE MULCH INTO THE SOIL.



FARMING CREEK

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FARMING CREEK ROAD IRMO, SC 29063

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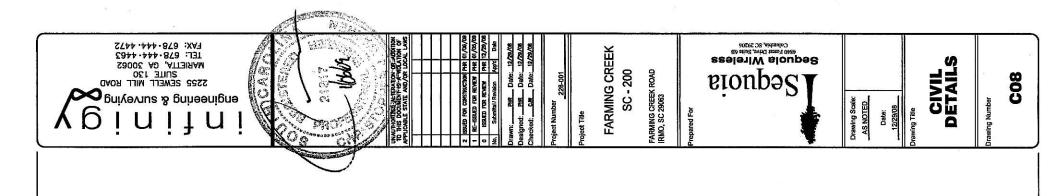
CONSTRUCTION SPECIFICATIONS

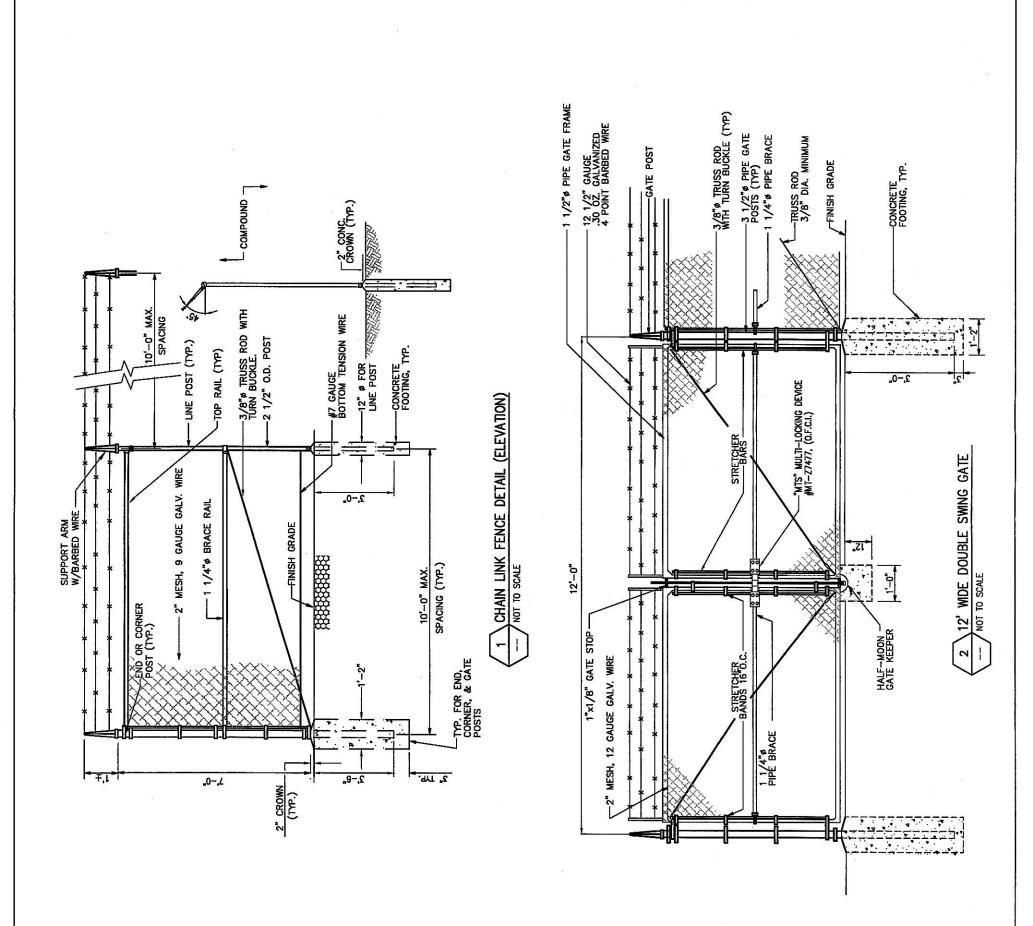
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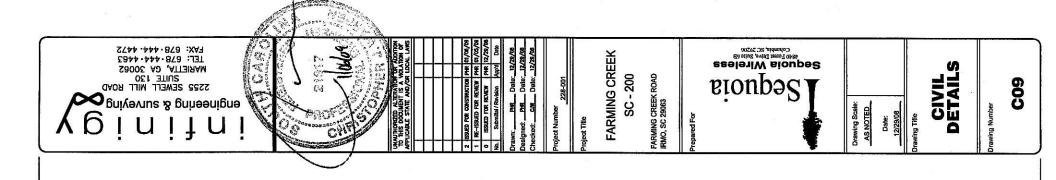
WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD. FILLER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE SHALL BE WOVEN WIRE, TO 2 1/2 GAUGE, 6" MAXIMUM MESH OPENING. WHEN TWO SECTIONS OF FILLER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-MENT TWO SECTIONS OF FILLER CLOTH SHALL BE EITHER THEY SHALL BE OVER-MIRAH 100X, STABILINKA T140N, OR APPROVED EQUIVALENT. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.

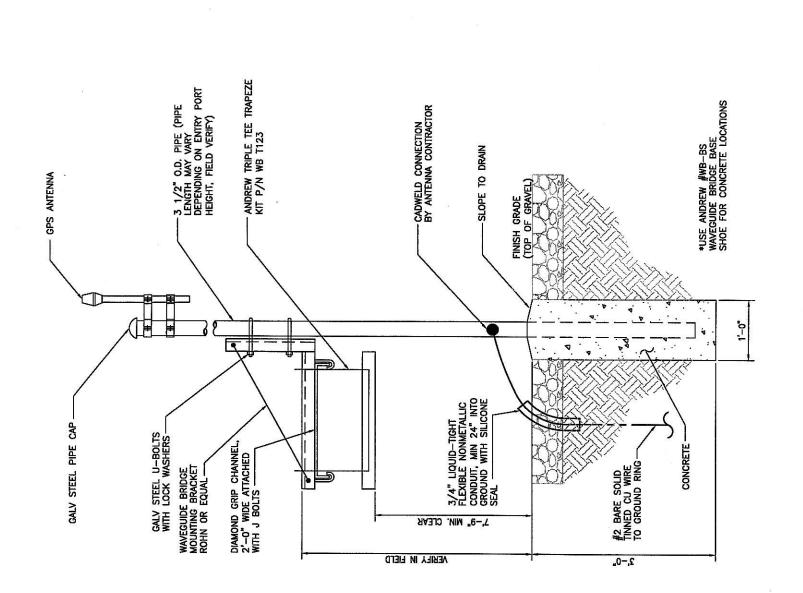
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MAINTENANCE SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT. "BULGES" DEVELOP IN THE SILT FENCE.



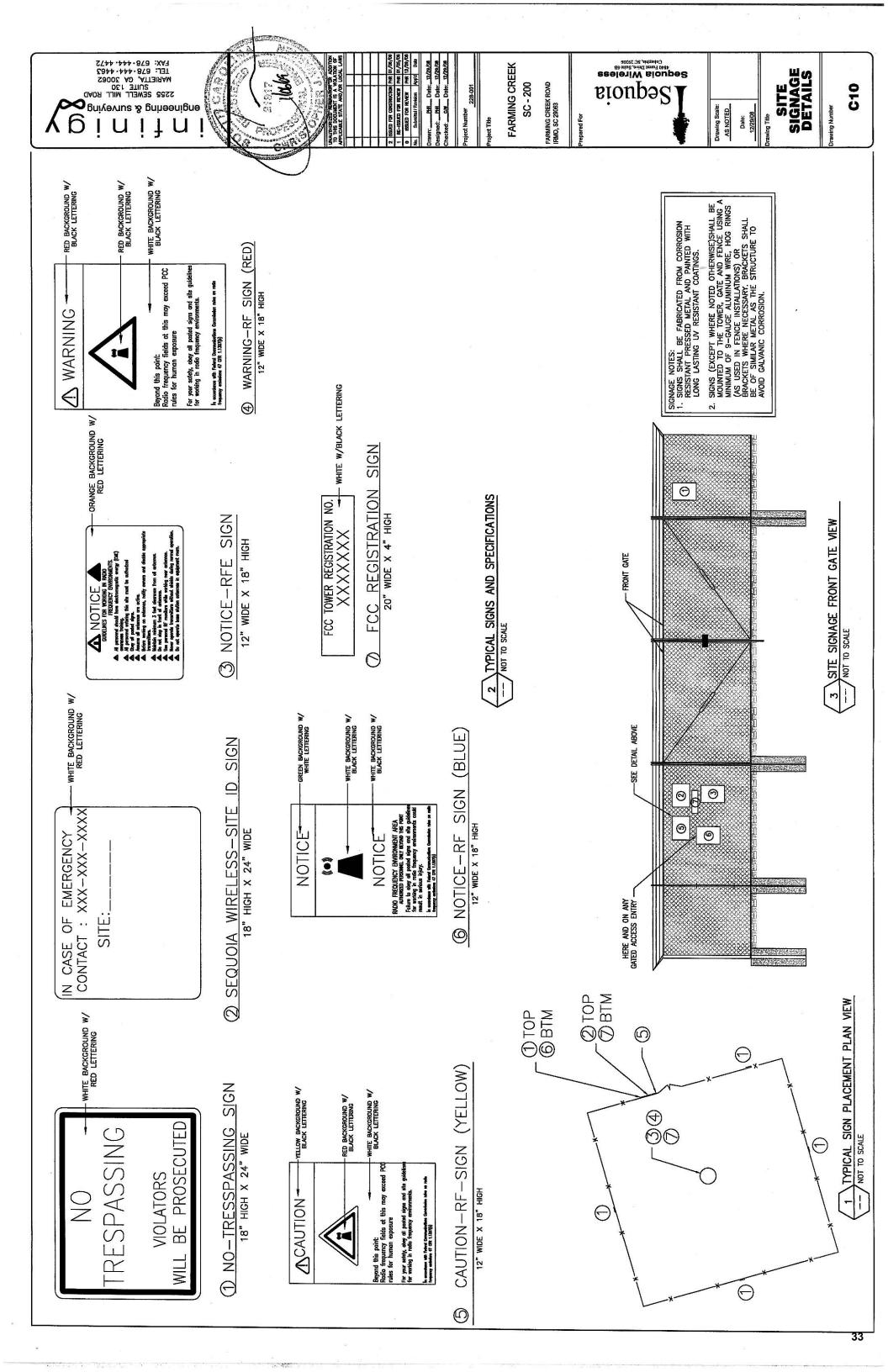


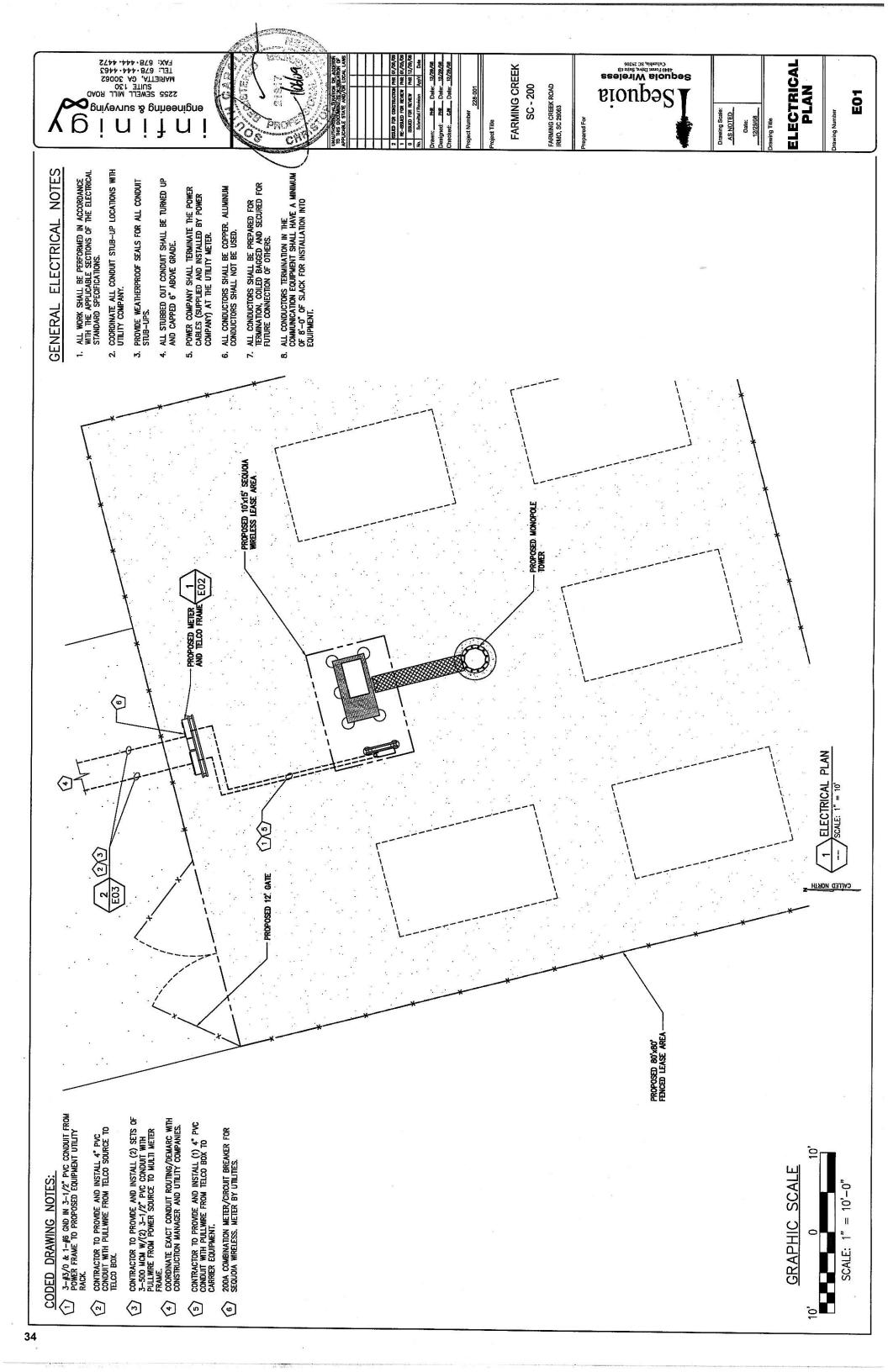




1 ICE BRIDGE SIDE VIEW ELEVATION

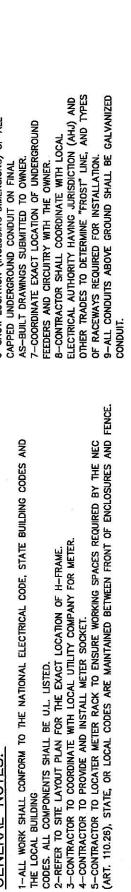
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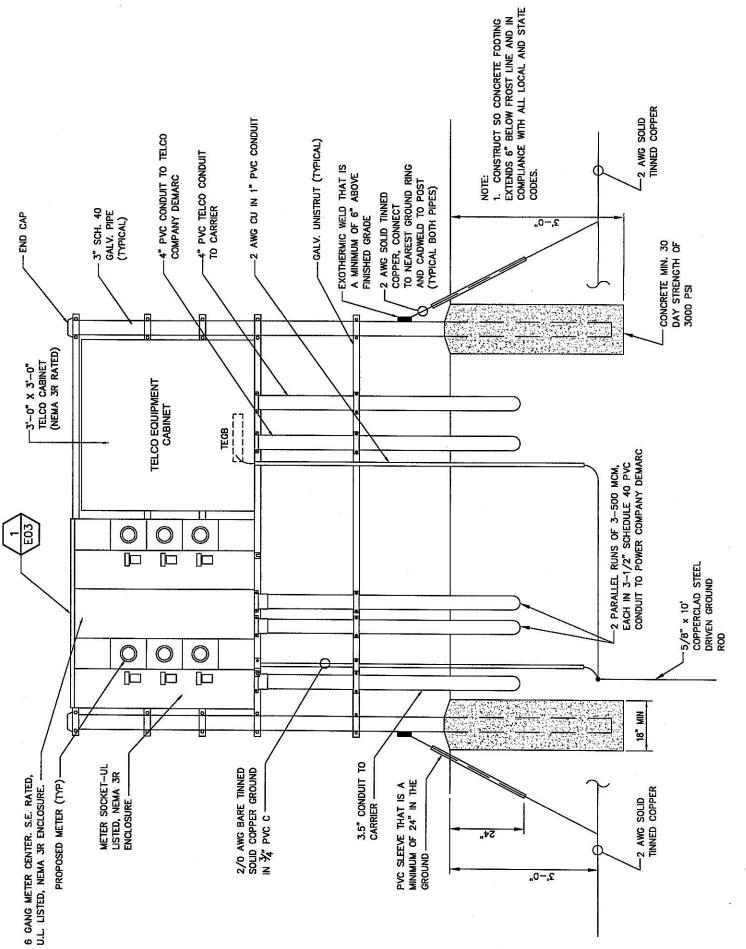


GENERAL NOTES:

6-SHOW LOCATION (INCLUDING DIMENSIONS) OF ALL







NOTES ELECTRICAL GENERAL

PROVIDE 1"x6" GROUND BAR IN TELCO BOX SUITABLE FOR CONNECTING TO #6 AWG STRANDED WIRE. PROVIDE 3'-0" SECTION OF #6 WIRE FOR USE BY TELEPHONE COMPANY.

PROVIDE 3'x3'x8" TELCO DISTRIBUTION PANEL (MINIMUM 50 PAIR TERMINAL) MOUNTED TO VERTICAL UNISTRUT ON EQUIPMENT SUPPORT FRAME OPPOSITE OF UTILITY METERS.

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'n

COORDINATE METER ENCLOSURE AND FUSED/BREAKER DISCONNECT SWITCH ACCEPTABILITY WITH LOCAL UTILITY COMPANY PRIOR TO ORDERING AND INSTALLATION. 4

METER ENCLOSURE SHALL BE SQUARE D OR APPROVED EQUINALENT, AND SHALL INCLUDE ACCESSORIES AND MOUNTING BRACKETS SUITABLE FOR OUTDOOR INSTALLATION. ENCLOSURE SHALL BE MOUNTED TO THE VERTICAL UNISTRUT ATTACHED TO THE EQUIPMENT SUPPORT FRAME.

DETAIL DEPICTS SQUARE D PRODUCTS, AS DESCRIBED ABOVE. ACTUAL DIMENSIONS MAY VARY DEPENDING ON INSTALLED EQUIPMENT. വ

CONNECT NEUTRAL TERMINAL IN DISCONNECTING DEVICE TO SERVICE ENTRANCE GROUND ROD. ø,

REFER TO ELECTRICAL SITE PLAN AND POWER & TELEPHONE DIAGRAM FOR CONDUIT AND CONDUCTOR REQUIREMENTS.

7

ALL WORK SHALL CONFORM TO NATIONAL ELECTRICAL CODE (NEC)
AND THE LOCAL BUILDING CODES. ALL COMPONENTS SHALL BE U.L.
APPROVED. 00

THE SERVICE ENTRANCE GROUND WIRE MUST GO DIRECTLY TO THE SERVICE ENTRANCE GROUND ROD WITHOUT CONNECTING TO ANYTHING ELSE. IF THE SERVICE ENTRANCE GROUND ROD IS PART OF THE GROUND RING, THEN THE GROUND RING WIRES CAN CONNECT TO THIS GROUND ROD ASSO; OTHERWISE, A #2 AWG GROUND WIRE IS TO CONNECT THIS GROUND ROD TO THE GROUND RING. o;

THESE CONDUITS WERE SHOWN FOR DESIGN CONCEPT ONLY. COORDINATE EXACT QUANTITY AND SIZE CONDUIT WITH THE ELECTRIC POWER UTILITY. 9

CONTRACTOR TO CONFIRM PVC SCHEDULE 40 CAN BE USED ON ALL RUNS.

Ξ.

2255 SEWELL MILL ROAD SUITE 130 TEL: 678-444-4463 TEL: 678-444-4463 TEL: 678-444-4463 engineering & surveying

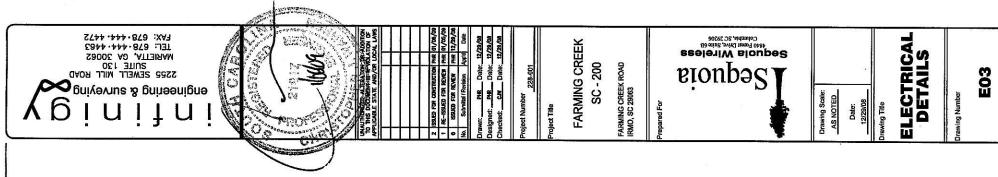
ELECTRICAL DETAILS

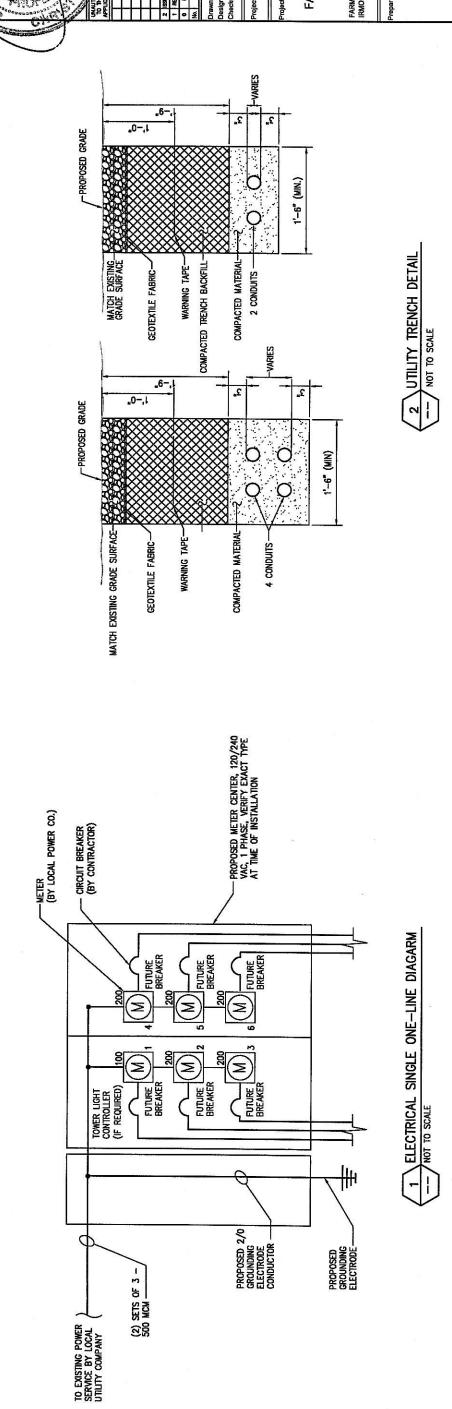
ving Title

Drawing Scale: AS NOTED

Date:

1 H-FRAME DETAIL





engineening & surveying

2255 SEWELL MILL ROAD
SUITE 130
MARIETTA, GA 50062
TEL: 678 +444 + 4463
FAX: 678 + 444 + 4463

CONNECT TOWER BASE TO GROUND ROD IN TOWER RING (TYP. FOR 3). CADWELD TO TOWER BASE PLATE OR AS PER MANUFACTURER'S SPECIFICATION

(D)

#2 Solid-tinned Cupper ground wire run with coax cable from ground bar to ground bar.

CONNECT MULTI-TENANT POWER AND TELCO FRAME TO PROPOSED COMPOUND GROUND RING.

(1)

BOND PROPOSED FENCE CORNERS AND GATES TO GROUND RING.

BOND GROUND BARS TO GROUND RING.

9909

GROUND METER PER UTILITY COMPANY REQUIREMENTS.

PROVIDE #2 COPPER GROUND RING (MIN. 1'-6" FROM OUTSIDE EDGE OF TOWER FOUNDATION AND SLAB) BURIED AT MINIMUM 36" BELOW GRADE. GROUND CARRIER EQUIPMENT PER CARRIER EQUIPMENT SPECIFICATIONS.

CODED DRAWING NOTES

THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION SO AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT. ALL GROUND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC (CADWELD).

ALL GROUND CONNECTIONS ABOVE GRADE SHALL BE FORMED USING 2—HOLE LUGS AND TWO (2) HIGH PRESS CRIMPS. ALL EXOTHERMIC MECHANICAL CONNECTIONS TO THE GROUND RODS SHALL START AT THE TOP & HAVE A VERTICAL SEPARATION OF 6" FOR EVERY ADDITIONAL CONNECTION.

all exterior ground connections shall be coated with a corrosion resistant material.

all exterior ground conductors shall be #2 solid awg plated copper unless otherwise indicated.

GROUND RODS SHALL BE STAINLESS STEEL OR COPPER CLAD STEEL, 5/8"\$ 10-FT. LONG, AND SHALL BE DRIVEN VERTICALLY WITH THEIR TOPS 36" BELOW FINAL GRADE.

Connections to the ground bars shall not be doubled up or stacked. Back to back connections on opposite sides of the ground bar are permitted.

USE OF 90° BENDS IN THE PROTECTION GROUNDING COMDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.

FARMING CREEK

1 202

SC-200

FARMING CREEK ROAD IRMO, SC 29063

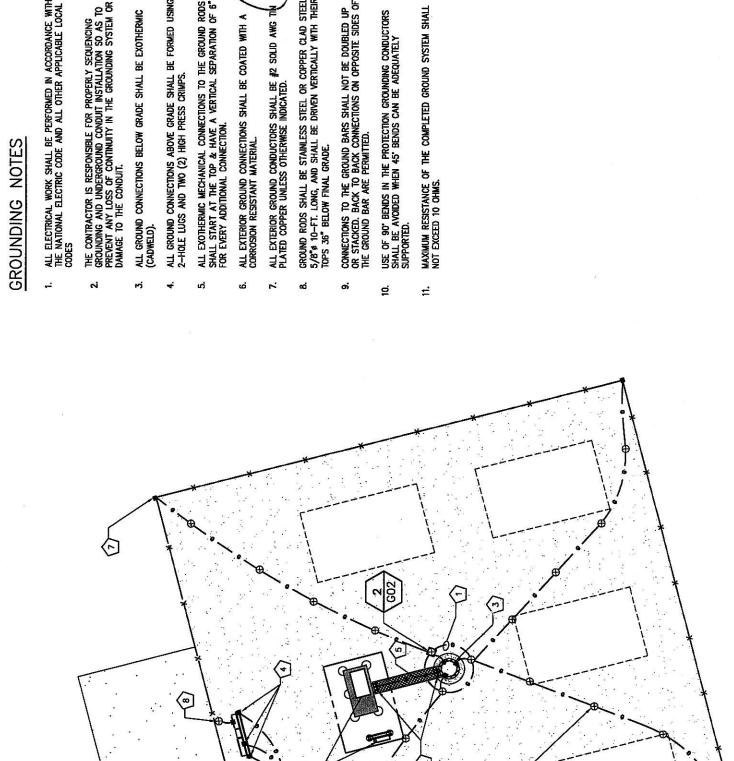
Sequois Wireless sequois Wireless (columba, 5C 29306

Drawing Scale: AS NOTED Date: GROUNDING PLAN

GROUNDING PLAN

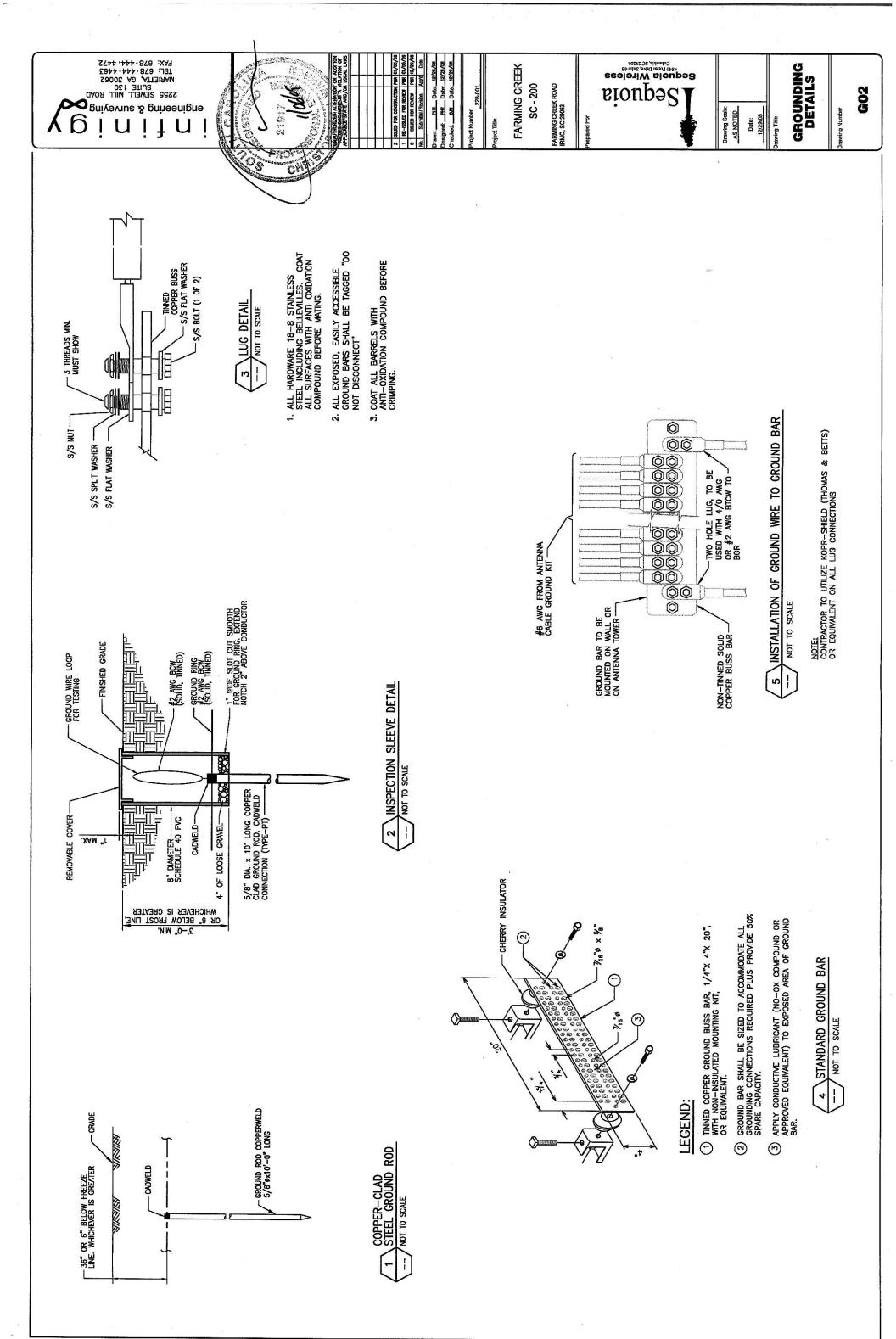
CALLED NORTH

G0-1

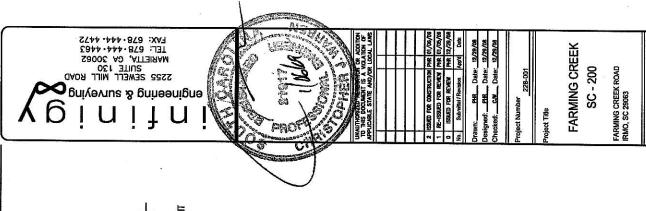


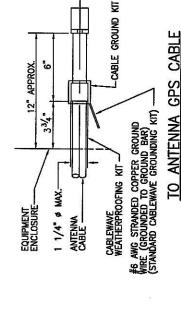
GRAPHIC SCALE SCALE: 1/16" = 1'-0" 16, 0

37









-CABLE GROUND KIT

CABLEWAVE WEATHERPROOFING KIT

12" APPROX.

2 1/2" \$ MAX.

ANTENNA

EQUIPMENT ENCLOSURE-

NOTE: DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE.

FROM ANTENNA --



#6 AWG STRANDED COPPER GROUND WIRE (GROUNDED TO GROUND BAR) (STANDARD CABLEWAVE GROUNDING KIT)

ANTENNA CABLE TO CABLE TRAY (TYP.)

APPROVED GROUND CONNECTOR KIT (TYP.)

APPROVED WEATHERPROOFING KIT (TYP.)

JUMPER REQUIRED ONLY WHEN 1 1/47
AND LARGER (TYP.)

APPROVED WEATHERPROOFING KIT (TYP.) NOTE: DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.

> #2 BTCW (TYP.) - TO BGR, MGB OR BUILDING GROUND SYSTEM

BTCW

#2 AWG

GROUND WIRES TO A ANTENNAS

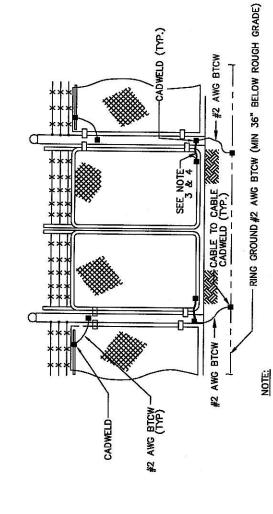
CONNECTION OF SECTOR CIGBE

-NON--TINNED, SOLID COPPER BUSS BAR

FROM ANTENNA FRAME, SUPPORT GROUND WIRE AS NEEDED

AWG





GALV. FENCE

#2 AWG BTCW (TYP.)

FENCE POST -

CADWELD GROUND WIRE TO FENCE END POSTS (TYP FOR 6)

1/2" PVC PIPE/ 6" BELOW GRADE

GRADE-

-CADWELD (TYP)

Sequoia Wireless columbia, 8C 79206

1. THE #2 AWG, BTCW, FROM THE RING GROUND SHALL BE CADWELDED TO THE POST ABOVE GRADE.

Drawing Scale AS NOTED Date:

2. BOND EACH HORIZONTAL POLE/BRACE TO EACH OTHER AND TO EACH VERTICAL POLE BONDED TO THE EXTERIOR GROUND RING

3. GATE JUMPER SHALL BE #4/0 AWG WELDING CABLE OR FLEXIBLE COPPER BRAID BURNDY TYPE B WITH SLEEVES ON EACH END DESIGNED FOR EXOTHERMIC WELDING.

1. THE #2 AWG BTCW, FROM THE GROUND RING SHALL BE CADWELDED TO THE POST ABOVE GRADE.

GROUND ROD

BURIED GROUND RING

(<u>†</u>

GROUND

36" MINIMUM

2. BOND EACH HORIZONTAL POLE/BRACE TO EACH OTHER AND TO EACH VERTICAL POLE BONDED TO THE EXTERIOR GROUND RING.

3 FENCE GROUNDING

NOT TO SCALE

4. GATE JUMPER SHALL BE INSTALLED SO THAT IT WILL NOT BE SUBJECTED TO DAMAGING STRAIN WHEN GATE IS FULLY OPEN IN EITHER DIRECTION.



9

39



REQUEST, ANALYSIS AND RECOMMENDATION

09-05 Special Exception

REQUEST

The applicant is requesting the Board of Zoning Appeals to grant a special exception to permit the construction of a communication tower in a RU (Rural) district.

GENERAL INFORMATION

<u>Applicant</u> <u>Tax Map Number</u>

Jonathan Yates (Optima Towers)

19203-14-11

<u>Location</u> <u>Parcel Size</u> <u>Existing Land Use</u>

Leesburg Road .45± -acre tract undeveloped

Existing Status of the Property

The subject parcel is vacant.

Proposed Status of the Property

The applicant proposes to erect a 150-foot telecommunications tower, within a 4,900 (70 x 70) square foot leased area.

Character of the Area

The abutting adjacent properties along Leesburg Road are primarily commercial developed. The residential neighborhood is located north of the subject parcel.

ZONING ORDINANCE CITATION

Table 20-V-2 of the Land Development Code authorizes the Board of Zoning Appeals to authorize radio, television and all other types of communications towers subject to the provisions of section 26-152 (d) (24).

CRITERIA FOR SPECIAL EXCEPTIONS

In addition to definitive standards in this chapter, the Board shall consider the following:

- 1. Traffic impact.
- 2. Vehicle and pedestrian safety.
- 3. Potential impact of noise, lights, fumes or obstruction of airflow on adjoining property.
- 4. Adverse impact of the proposed use on the aesthetic character of the environs, to include possible need for screening from view.
- 5. Orientation and spacing of improvements or buildings.

Special exception requirements (as found in section 26-152 (d) (24)):

(24) Radio, television and telecommunications and other transmitting towers.

- a. Use districts: Rural; Office and Institutional; Neighborhood Commercial; Rural Commercial; General Commercial; LI Light Industrial; Heavy Industrial.
- b. Communication towers shall have a maximum height of three hundred (300) feet. For towers on buildings, the maximum height shall be twenty (20) feet above the roofline of buildings forty (40) feet or four stories in height or less. For buildings greater than four stories or forty-one (41) feet in height, the maximum height of communication towers shall be forty feet above the roofline.
- c. The minimum setbacks for communication towers from certain uses shall be as follows:
 - 1. In no case shall a communication tower be located within fifty (50) feet of a residential zoning district or an inhabited residential dwelling.
 - 2. For towers in excess of fifty (50) feet, the setback shall increase one (1) foot for each foot of height of the tower as measured form the base of the tower. The maximum required separation being two hundred and fifty (250) feet.
- d. The proposed user must show proof of an attempt to collocate on existing communication towers, and must be willing to allow other users to collocate on the proposed tower in the future subject to engineering capabilities of the structure. Evidence of an attempt to collocate must show that alternative towers, buildings, or other structures are not available for use within the applicant's tower site search area that are structurally capable of supporting the intended antenna or meeting the applicant's necessary height criteria, or provide a location free of interference from other communication towers.
- e. Towers shall be illuminated as required by the Federal Communications Commission, Federal Aviation Administration, or other regulatory agencies. However, no nighttime strobe lighting shall be incorporated unless required by the Federal Communications Commission, the Federal Aviation Administration, or other regulatory agency.
- f. Each communication tower and associated buildings shall be enclosed within a fence at least seven (7) feet in height.
- g. Each communication tower site shall be landscaped in accordance with the requirements of Sec. 26-176 of this chapter.
- h. No signage may be attached to any portion of a communications tower. Signs for the purpose of identification, warning, emergency function or contact or other as required by applicable state or federal rule, law, or regulation may be placed as required by standard industry practice.
- i. A communications tower which is no longer used for communications purposes must be dismantled and removed within one hundred twenty (120) days of the date the tower is taken out of service.

DISCUSSION

The applicant proposes to erect a 150-foot telecommunications tower, within a 4900 square foot leased compound.

Staff visited the site.

The tower is proposed to be located 135'-11" feet from Leesburg Road and approximately 56 feet from the rear property line.

Meeting the criteria for a special exception in section 26-152 (d) (24) (c) may indicate that the applicant has taken necessary measures to minimize the impact of a communication tower on the surrounding area. According to the applicant, the tower will be 157 feet from the nearest existing residential structure. Staff believes that this request will not impair the properties in the immediate or surrounding area.

The applicant must address, before the Board, the special exception requirements of section 26-152 (d) (24) (d).

CONDITIONS

Section 26-56 (f) (3)

(3) Conditions: In granting a special exception, the board of zoning appeals may prescribe conditions and safeguards in addition to those spelled out in this chapter. The board of zoning appeals may also prescribe a time limit within which the special exception shall be begun or completed, or both. All conditions placed on the project by the board of zoning appeals shall be incorporated into such project.

OTHER RELEVANT SECTIONS

N/A

ATTACHMENTS

Site plan

CASE HISTORY

No record of previous special exception or variance request.





LOCATION MAP

SITE DIRECTIONS

DIRECTIONS: FROM COLUMBIA TAKE 1-77 N TO EXIT 9AB (LEESBURG ROAD). GO EAST ON LEESBURG ROAD FOR 1.3 MILES, SITE WILL BE ON THE LEFT AFTER PATRICIA DR.

TMS PARCEL ID# R19203-14-11

ZONING DISTRICT: GC

PROPERTY OWNERS ADDRESS:

2031 BULL STREET

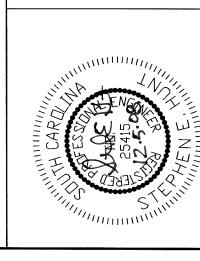
COLUMBIA, SOUTH CAROLINA 29201

LONGITUDE: 80°55' 52.34"W

ELEVATION: 312' (AMSL)

LATITUDE: 33°58' 41.5"N

2C COORDINATES:



APPLICANT RESOURCE TEAM

SITE SURVEYOR: TBD

LONGITUDE: 80°55' 52.34"W LATITUDE: 33°58' 41.5"N

TELCO CO: TBD

LANDCOM REAL ESTATE L.L.C FIELD REP.: JOHN F. MAZUR, JR LANDCOM REAL ESTATE L.L.C PROPERTY SPECIALIST: KEITH POWELL - 843-324-9745

IONATHAN YATES, NEXSEN PRUETT - 843-813-0103 APPLICANT REPRESENTATIVES

SITE ENGINEER: TELECAD WIRELESS SITE DESIGN

POWER CO: TBD

PROPERTY OWNER: STOP 'N' SAVE INC - TEL.: TBD **BUILDING DEPT: RICHLAND COUNTY** COUNTY **ZONING DEPT: RICHLAND**

WIRELESS SITE DESIGN, INC. **TeleCAD**

THEIR WORK AND VERIFY THE ACTUAL FIELD CONDITIONS RELATIVE TO THE DESIGNS SHOWN ON THE DRAWINGS. ANY DISCREPANCIES ENCOUNTERED THAT WOULD EFFECT THE PROPER INSTALLATION OF CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE REPORTED TO THE OWNER AND/OR ENGINEER IN ORDER TO ALLOW FOR THE CONTRACTOR(S). OR ANYONE USING THESE DOCUMENTS IS ADVISED TO LAYOUT NECESSARY ADJUSTMENTS IN THE PLANS.

OPTIMA TOWERS

OPTIMA TOWERS SITE NAME:

LEESBURG ROAD

OPTIMA TOWERS SITE ID:

SC-1019

COLUMBIA, SC 29209

EESBURG ROAD

SITE ADDRESS:

150' MONOPOLE

TOWER

PROJECT TYPE

THE CONTRACTOR SHALL LAYOUT IN THE FIELD ALL THE ELEMENTS OF THE IMPROVEMENTS, PRIOR TO AND WELL AHEAD OF CONSTRUCTION TO INSURE THAT NO CONFLICTS EXIST BETWEEN ANY UNDERGROUND SERVICE UTILITIES SURFACES. THE SURFACE ELEVATIONS OF ALL MANHOLES AND CATCH BASINS ENCOUNTERED SHALL BE REPORTED TO THE OWNER AND/OR ENGINEER IN ORDER TO ALLOW FOR NECESSARY ADJUSTMENTS IN THE PLANS. OR DRAIN LINES, INCLUDING THEIR MINIMUM DEPTHS BELOW FINISHED RELATIVE TO FINISHED GRADES. THE PLANNED DISCREPANCIES

THE CONTRACTOR(S) SHALL MAINTAIN ACCURATE AND LEGIBLE REDLINED DRAWNG RECORDS OF ALL INSTALLATIONS AND DELIVER THE SAME TO THE OWNER IN A FORM ADEQUATE TO READILY TRANSFER THE DATA DIRECTLY TO RECORD ("AS BUILT") DRAWINGS AS REQUIRED BY THE REVIEWING AGENCIES. THE FORM AND ADEQUACY OF THESE RECORDS ARE SUBJECT TO THE APPROVAL OF

INDEX OF ZONING DRAWINGS

- Z-0 COVER SHEET
- Z-1 OVERALL SITE LAYOUT PLAN Z-2 OVERALL SITE PLOT PLAN
- SITE LAYOUT & TOWER ELEVATION 2-2 OVERALL SITE PLOT PLAN
 Z-3 SITE LAYOUT & TOWER ELEVATION
 Z-4 LANDSCAPING PLAN
 Z-5 LANDSCAPING CERTIFICATIONS
 Z-6 SITE DETAILS
 Z-7 FENCE DETAILS
 E1 UTILITY ROUTING PLAN
 E2 SITE GROUNDING PLAN
 E3 ELECTRICAL DETAILS
 E4 ELECTRICAL DETAILS
 E5 ELECTRICAL DETAILS
 E6 UTILITY CENTER DETAILS
 E7 GROUNDING SINGLE LINE

ISSUE DATE: DECEMBER 5, 2008

RESOURCE TEAM COVER SHEET & SHEET TITLE:

DRAWING NUMBER:

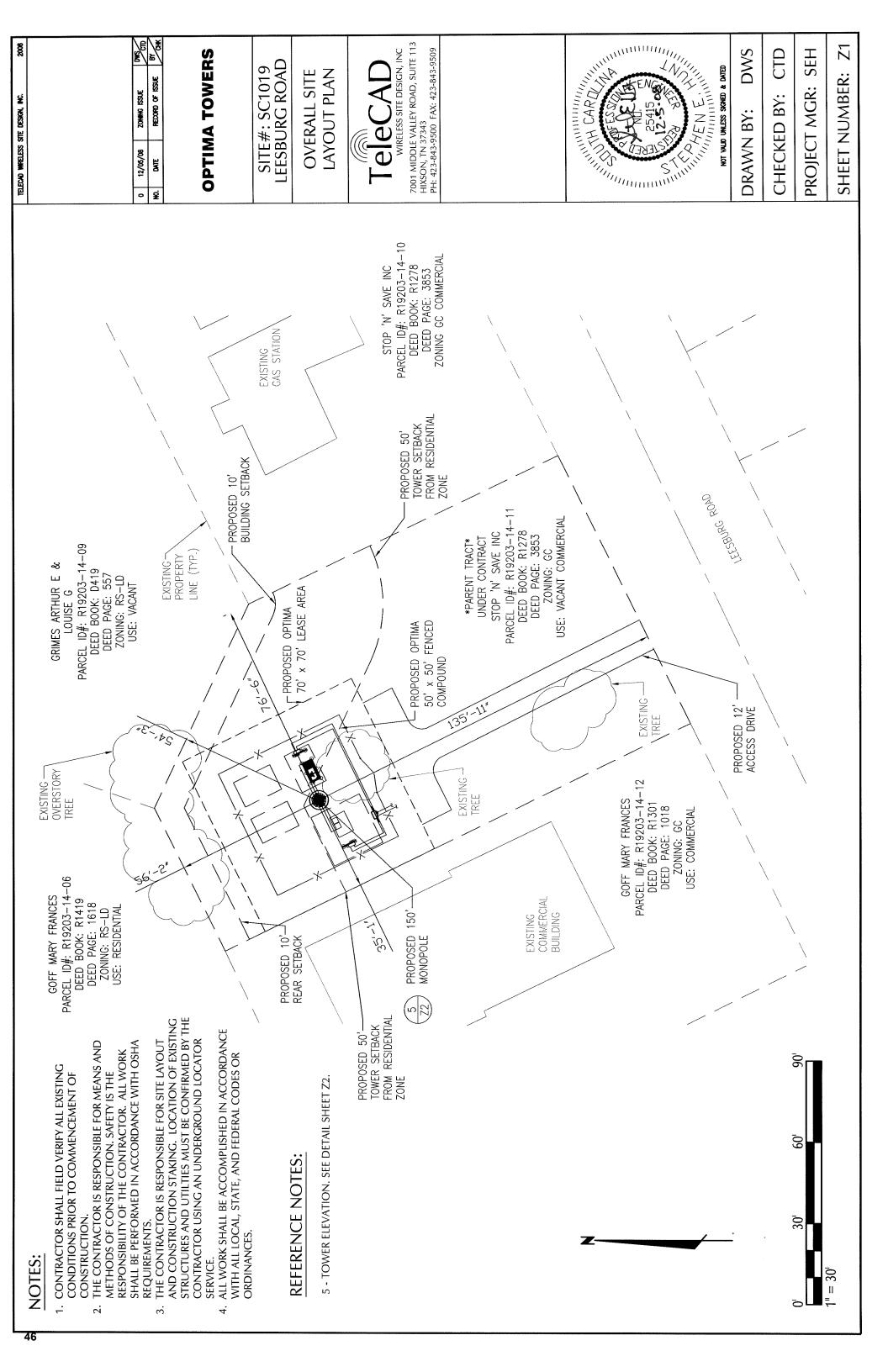
ISSUE DESCRIPTION ZONING ISSUE

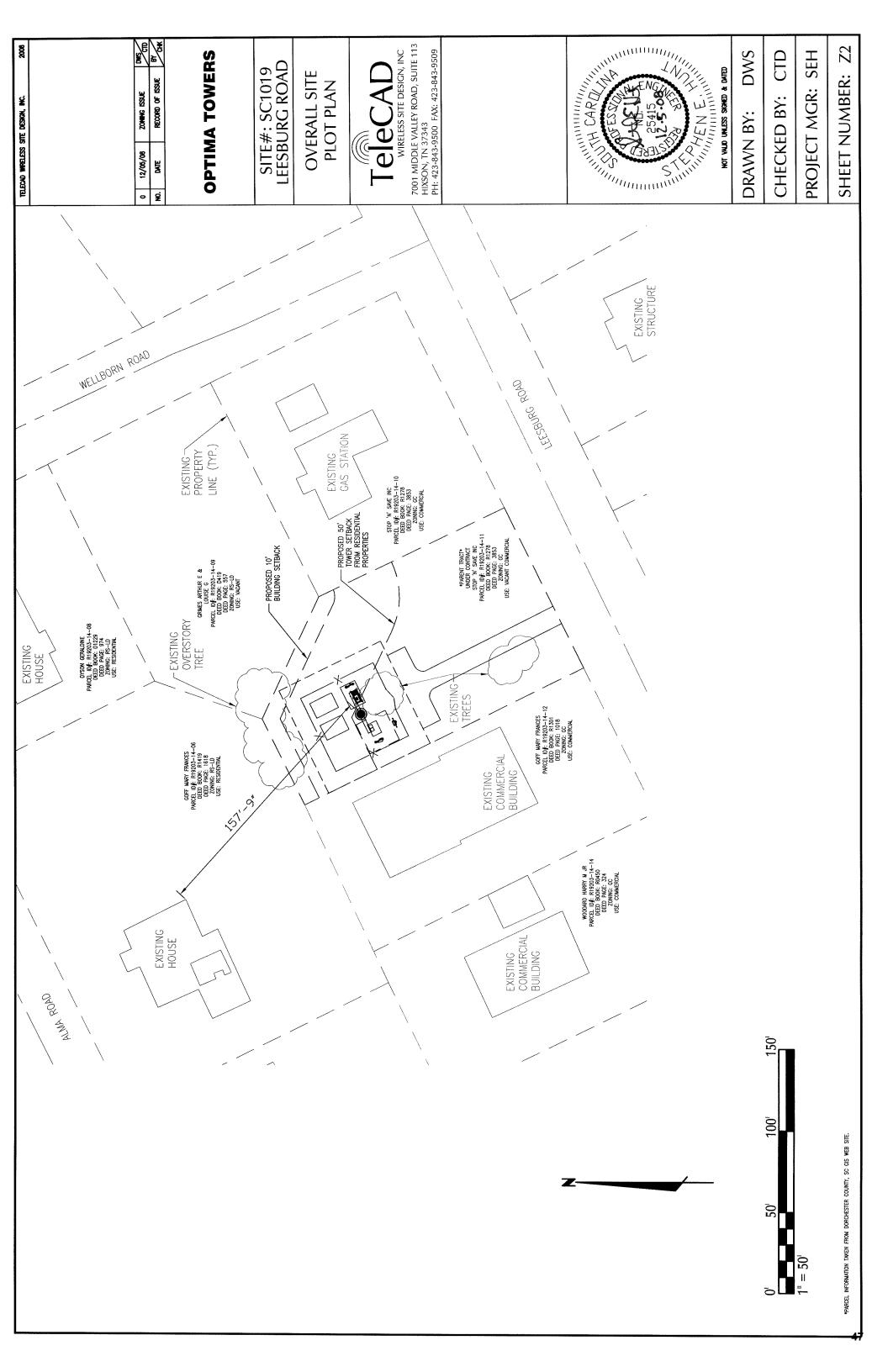
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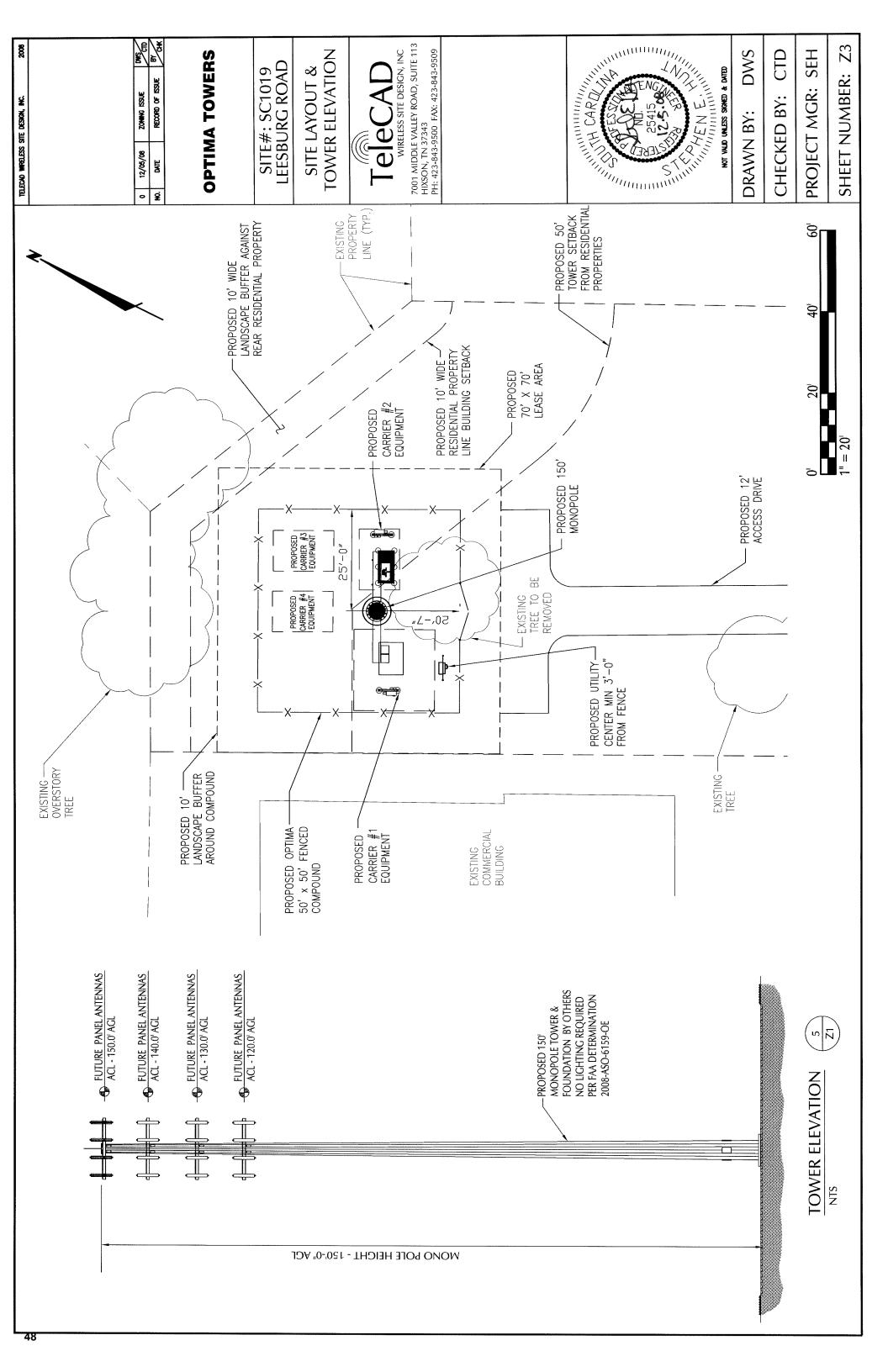
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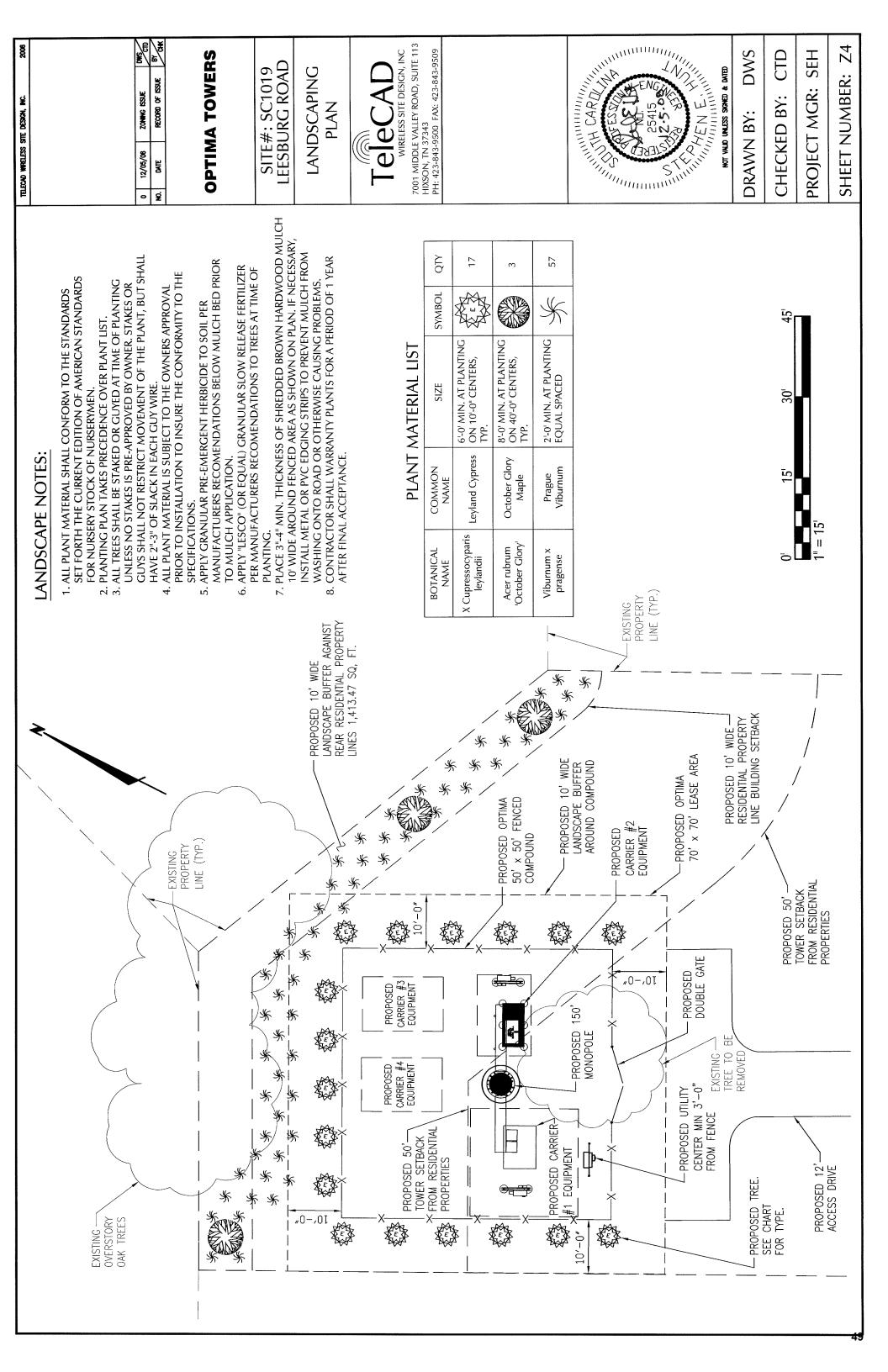
NOT VALID UNLESS SIGNED & DATED

7001 MIDDLE VALLEY ROAD SUITE 113 - HIXSON, TN 37343 (PHONE) 423-843-9500 - (FAX) 423-843-9509









HIXSON, TN 37343 PH: 423-843-9500 FAX: 423-843-9509 ġ HEREBY CERTIFY THAT ALL PINE TREES IN FAIR OR BETTER CONDITION THAT ARE TEN (10) INCHES TO TWENTY (20) INCHES IN DIAMETER LOCATED IN PROTECTED ZONES HAVE BEEN IDENTIFIED AND SHOWN ON ALL "CONTROLLED HEREBY CERTIFY THAT ALL HARDWOODS TREES IN FAIR OR BETTER CONDITION, NINE (9) INCHES IN DIAMETER OR LARGER WILL BE PRESERVED IN ALL PROTECTED ZONES (ARE PORTIONS OF THE PROPERTY REQUIRED BY PERMIT TO REMAIN IN NATURAL OPEN SPACE, BUFFER TRANSITION YARDS, STREET PROTECTIVE YARDS, OR AREAS REQUIRED BY PERMIT TO BE LANDSCAPED; AND HEREBY CERTIFY THAT ALL PINE TREES IN FAIR OR BETTER CONDITION THAT ARE TEN (10) INCHES TO TWENTY (20) INCHES IN DIAMETER LOCATED IN A PROTECTED ZONE SHALL BE PRESERVED. LARGER HAVE BEEN IDENTIFIED IN ALL PROTECTED ZONES AND SHOWN ON ALL "CONTROLLED CLEARING PLANS". PROTECTED ZONES (ARE PORTIONS OF THE PROPERTY REQUIRED BY PERMIT TO REMAIN IN NATURAL OPEN SPACE, BUFFER TRANSITION YARDS, STREET PROTECTIVE YARDS, OR AREAS REQUIRED BY PERMIT TO BE LANDSCAPED; AND HEREBY CERTIFY THAT ALL HARDWOODS TREES IN FAIR OR BETTER CONDITION, NINE (9) INCHES IN DIAMETER OR HEREBY CERTIFY THAT ALL HARDWOOD TREES IN FAIR OR BETTER CONDITION, TWENTY-NINE (29) INCHES OR GREATER IN DIAMETER HAVE BEEN IDENTIFIED ON ALL "CONTROLLED CLEARING PLANS"; AND HEREBY CERTIFY THAT ALL HARDWOOD TREES IN FAIR OR BETTER CONDITION, TWENTY-NINE (29) INCHES OR GREATER IN DIAMETER WILL BE PRESERVED.; AND IN ACCORDANCE WITH SEC. 26-176. (1) c. OF THE RICHLAND COUNTY LAND DEVELOPMENT CODE, I IN ACCORDANCE WITH SEC. 26-176. (1) a. OF THE RICHLAND COUNTY LAND DEVELOPMENT CODE, I IN ACCORDANCE WITH SEC. 26-176. (1) c. OF THE RICHLAND COUNTY LAND DEVELOPMENT CODE, I IN ACCORDANCE WITH SEC. 26-176. (1) b. OF THE RICHLAND COUNTY LAND DEVELOPMENT CODE, I IN ACCORDANCE WITH SEC. 26-176. (1) b. OF THE RICHLAND COUNTY LAND DEVELOPMENT CODE, I (TO BE AFFIXED TO SITE PLANS/SUBDIVISIONSILANDSCAPE PLANS) N ACCORDANCE WITH SEC. 26-176. (1) a. OF THE RICHLAND COUNTY LAND DEVELOPMENT CODE, CONTROLLED CLEARING CERTIFICATION ENGINEER/SURVEYOR SIGNATURE: OWNER/APPLICANT'S SIGNATURE: CLEARING PLANS". PRINT NAME: PRINT NAME: DATE: DATE: THIS PLAN ARE CAPABLE OF PROVIDING YEARS OF THEIR INITIAL PLANTING. I HEREBY CERTIFY THAT THIS PLAN MEETS OR EXCEEDS THE REQUIREMENTS OF CHAPTER 26 SECTION 176 (K) "LANDSCAPING STANDARDS" OF THE RICHLAND COUNTY LAND DEVELOPMENT CODE AND THAT ALL PLANT MATERIAL SHALL BE DROUGHT—TOLERANT SPECIES, LIVING AND HEALTHY AT THE TIME OF INSTALLATION AND SHALL BE MAINTAINED IN A HEALTHY STATE OR PROMPTLY REPLACED [WITHIN NINETY (90) DAYS OF NOTIFICATION)] WITH HEALTHY PLANTS. I HEREBY CERTIFY THAT THE PLANT MATERIALS AS SHOWN ON THE REQUIRED VISUAL OPACITY AND HEIGHT WITHIN THREE (3) DATE DATE DEVELOPER-OWNER CERTIFICATION LANDSCAPE CERTIFICATION PRINT LANDSCAPE AUTHORITY SIGNATURE PRINT DEVELOPER-OWNER SIGNATURE LANDSCAPE AUTHORITY SIGNATURE DEVELOPER-OWNER SIGNATURE 50

88 TELECAD WIRELESS SITE DESIGN, INC.

RECORD OF ISSUE ZONING ISSUE 12/05/08 R

OPTIMA TOWERS

LEESBURG ROAD SITE#: SC1019

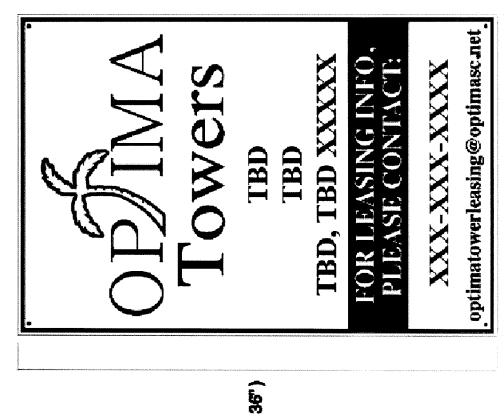
CERTIFICATIONS LANDSCAPING

7001 MIDDLE VALLEY ROAD, SUITE 113 WIRELESS SITE DESIGN, INC

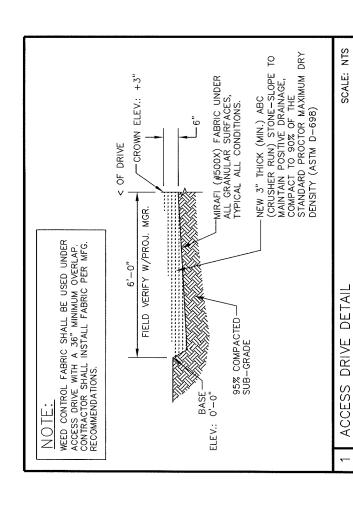
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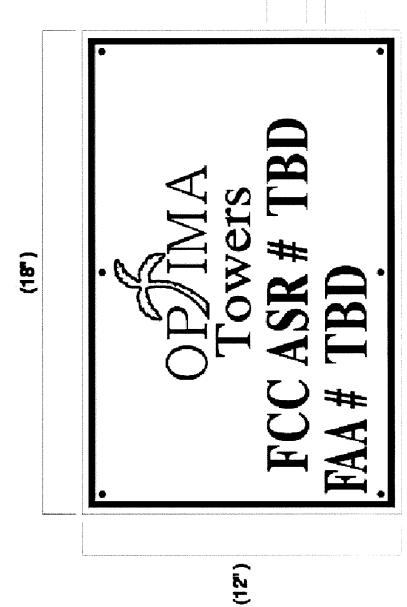
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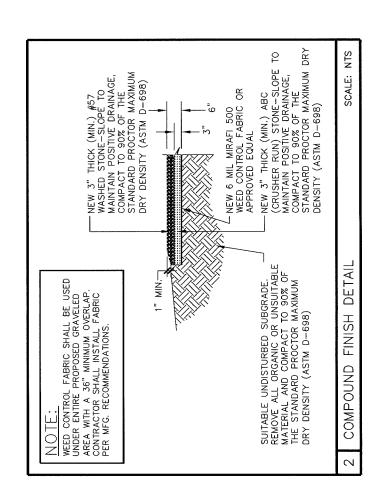
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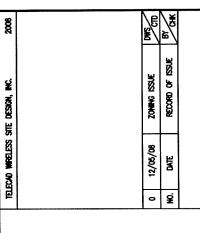


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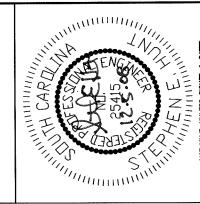
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OPTIMA TOWERS

DETAILS

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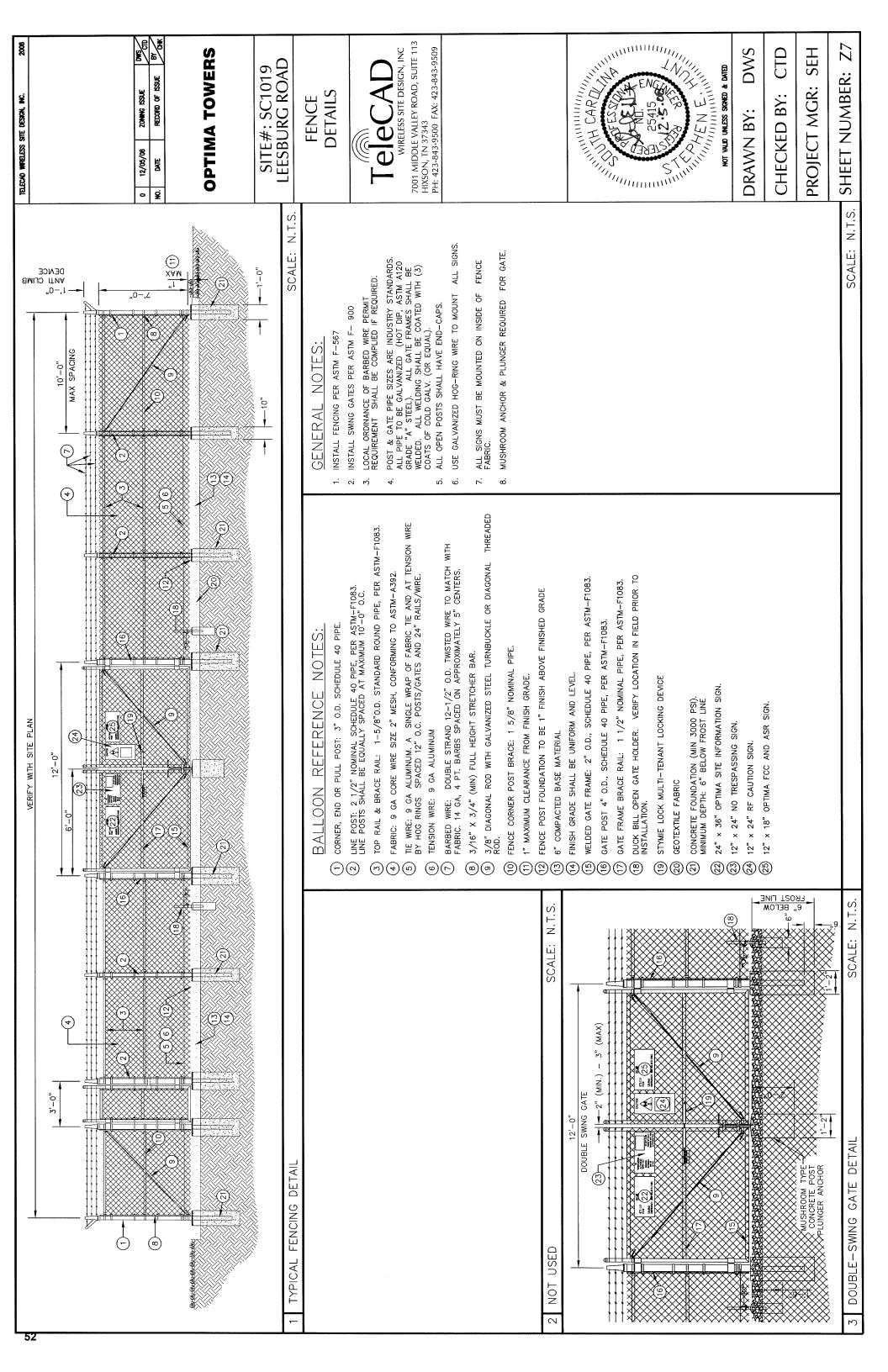
7001 MIDDLE VALLEY ROAD, SUITE 113 HIXSON, TN 37343 PH: 423-843-9500 FAX: 423-843-9509 WIRELESS SITE DESIGN, INC

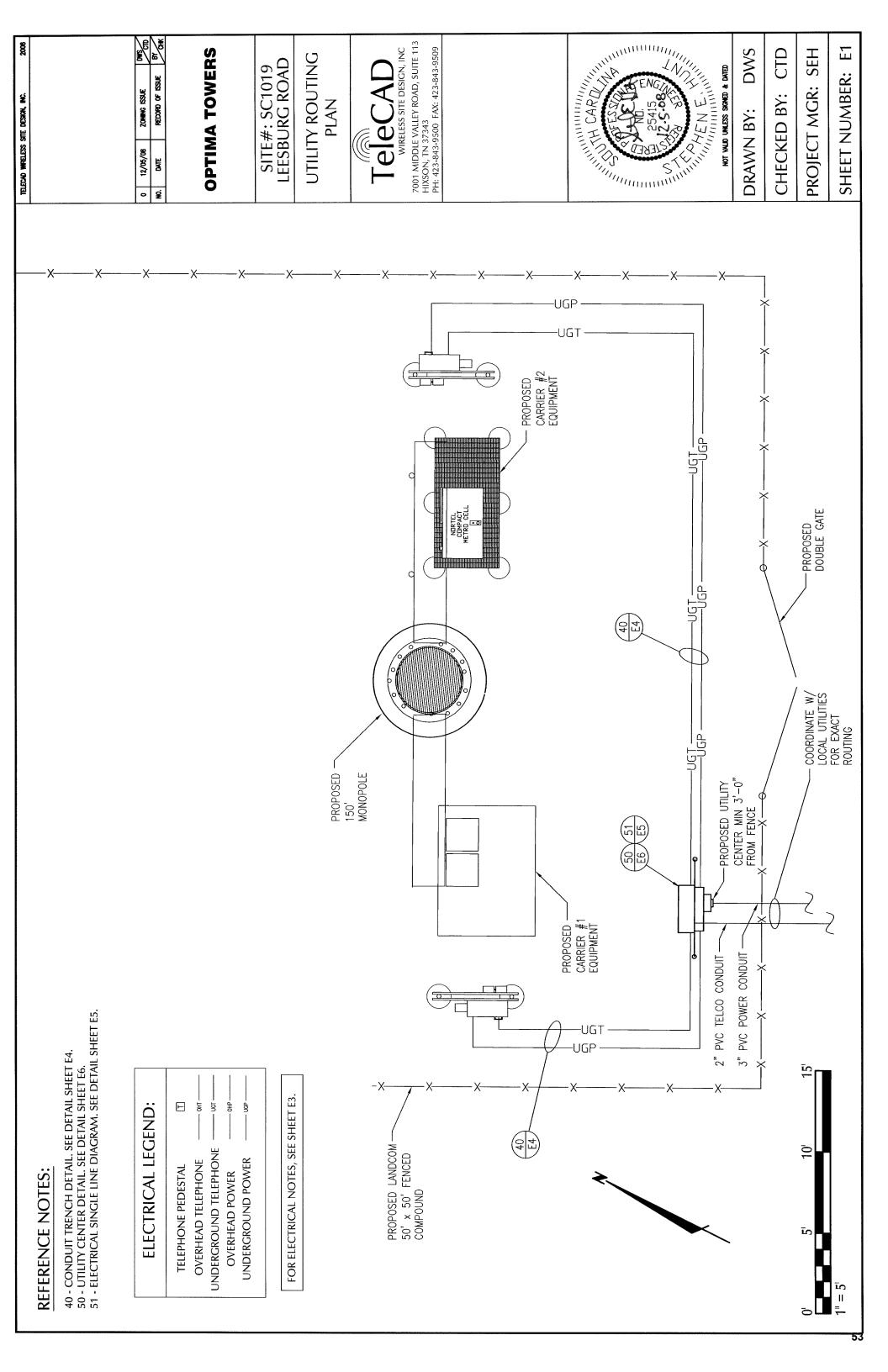


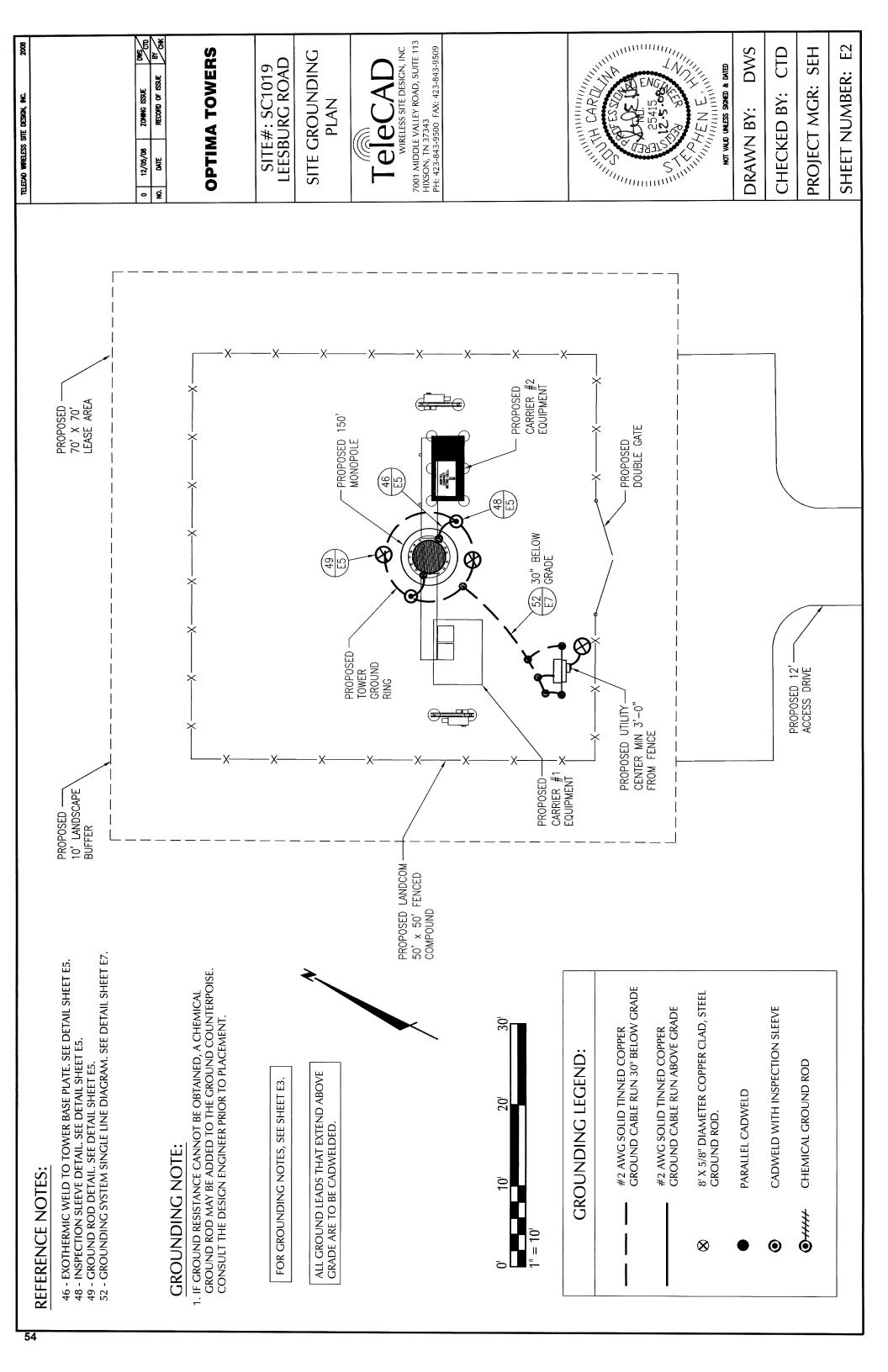
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CTD CHECKED BY: PROJECT MGR: SEH

9**Z** SHEET NUMBER:





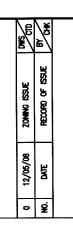


ELECTRICAL NOTES:

- COORDINATE WITH ELECTRIC UTILITY COMPANY FOR EXACT TRANSFORMER COPIES OF RECEIPTS VERIFYING APPLICATION FOR ELECTRICAL SERVICE AND LOCATION, METERING REOUIREMENTS, AND SERVICE ROUTING, PROVIDE THAN THE NEXT BUSINESS DAY FOLLOWING AWARD OF CONTRACT CONFIRM FROM UTILITY AS TO WHEN SERVICE WILL BE AVAILABLE. APPLY FOR UTILITY SERVICE (TELEPHONE AND ELECTRIC) NO LATER
- TELCO JUNCTION BOX/CELLPAK AFTER CONFIRMING THAT THIS IS ACCEPTABLE WITH TELCO UTILITY FOR INSTALLATION REQUIREMENTS. INSTALL RACK FOR RUN 1-4" RGS TELCO CONDUIT TO THE NEW UTILTY POLE. COORDINATE TO TELCO UTILITY. 2.
- (4") UP 6" OUTSIDE RIGHT LEG OF H-FRAME FOR BELLSOUTH PEDESTAL PLACEMENT. IF CELLPAK IS REQUIRED, GENERAL CONTRACTOR TO PROVIDE RACK, CONDUITS AND CELL-PAK, IF SITE IS "NEW CONSTRUCTION" AND TELCO IS BEING BROUGHT AND EQUIPMENT PER BELLSOUTH. 3/4"FLEX CONDUIT BETWEEN TELCO STUB-UP DIRECTLY INTO H-FRAME, GENERAL CONTRACTOR IS TO STUB TELCO CONDUIT 3
- 40 PVC AND EXTEND TO A WEATHERHEAD. VERIFY EXACT HEIGHT OF WEATHERHEAD AT THE NEW UTILITY POLE, TURN 2-3" POWER CONDUITS UP POLE WITH SCHEDULE **.** VRE 3" CONDUITS AT POLE. WITH POWER COMPANY. STUB UP AND CAP SPA 4.
 - INSULATION, SHIELD, OR OTHER ALL CONDUITS ENTERING THE UTILITY CENTER SHALL BE SEALED WITH SEALANTS PLACED AROUND ALL CONDUIT THAT ARE IDENTIFIED FOR USE WITH THE CABLE COMPONENTS. A BEAD OF SILICONE SHALL BE PENETRATIONS INTO THE UTILITY CENTER. 5
 - national electric code, nfPa 70 and Standard for the installation of ALL ELECTRICAL AND GROUNDING AT THE SITE SHALL COMPLY WITH THE LIGHTING PROTECTIONSYSTEMS (LATEST EDITION) NFPA 780. 6.
- PROVIDE 2 PULL STRINGS SECURELY FASTENED AT EACH END OF THE CONDUIT. PULL STRING TO BE 200LB TEST POLYETHENE CORD, PROVIDE CAP ON END DOLLING. OF THE CONDUITS WITH IDENTIFICATION OF RO Κ.
- IN ORDER TO SECURE CONDITIONAL PERMIT IS PULLED OR AT A TIME THAT BEST FACILITATES GETTING A METER PLACED THE SAME TIME THE BUILDING STEPS INCLUDING BUT NOT CONTRACTOR TO COORDINATE ALL NECESSARY LIMITED TO SCHEDULING OF INSPECTION, ETC.. POWER, THIS PROCESS SHOULD BE INITIATED A' ON SITE AND IN SERVICE. φ.
- O THE SATISFACTION OF SKYLINK PROPERTIES AND PROPERTY OWNER, REGARDLESS OF THE PARTY PROVIDING INSTALLATION OF UTILITIES. GENERAL CONTRACTOR IS RESPONSIBLE FOR ENSURING THE COMPLETE COMPACTION and restoration of all utility trenches t 6
 - TION ON SHEET E4. TRIC SERVICE 10. PROVIDE AND INSTALL WARNING TAPE FOR ELEC CONDUIT 12" BELOW GRADE. SEE CONDUIT SEC
 - 11. ENCASE CONDUITS IN CONCRETE WHERE THEY CROSS ROADS.

GROUNDING NOTES:

- PROVIDE A LOW IMPEDANCE PATH TO EARTH FOR LIGHTNING AND FAULT CURRENT SURGES. THE GROUNDING RESISTANCE IS REQUIRED TO BE 5 TO PROTECT PERSONNEL FROM ELECTRICAL SHOCK AND ENSURE SAFE, RELIABLE OPERATION OF EQUIPMENT, THE GROUNDING SYSTEM SHALL OHMS OR LESS.
- INSTALL GROUND RING 2 FEET MAX OUTSIDE OF FUTURE EQUIPMENT PAD FOUNDATION BEFORE BACKFILLING OR GENERAL CONTRACTOR WILL TAKE DIGITAL PHOTOS PRIOR TO AND 30 INCHES BELOW GRADE, GROUND RING CONSISTS OF #2 AWG SOLID BARE TINNED COPPER, SKYLINK PROPERTIES REPRESENTATIVE TO INSPECT GROUNDING BACKFILLING.
- CADWELD ALL CONNECTIONS TO BURIED GROUND RING WITH PARALLEL WELDS. EXCEPTION; USE TEE WELDS FOR CONNECTIONS TO GROUND RODS. 33
- STAINLESS STEEL HARDWARE AND LOCKWASHERS ON ALL MECHANICAL CONNECTIONS. GROUND ALL EXTERIOR EXPOSED METAL OBJECTS. USE TWO HOLE MECHANICAL CONNECTORS (T & B 32007) FOR CONNECTION TO FLAT METAL SURFACES. PROVIDE APPLY ANTI-OXIDE COMPOUND TO CONNECTIONS.
- ALL ATTACHMENTS TO GROUND LOOP AND SUPPLEMENTAL GROUND CABLE ARE TO BE 90° BEND RADIUS IN 8" AND BE IN A COUNTERCLOCKWISE DIRECTION WITH PARALLEL CADWELDS, MAKE ALL GROUNDING CONNECTIONS AS SHORT AS POSSIBLE.
 - CLEAN ALL SURFACES AND BRUSH WITH BRONZE BRUSH PRIOR TO MAKING GROUND CONNECTIONS. PAINT ALL EXOTHERMIC WELDS TO GALVANIZED OBJECTS WITH GALVANIZED PAINT. 6.
- INSTALL 5/8" x 10" COPPER CLAD GROUND RODS IN LOCATIONS SHOWN ON GROUNDING
- THE TOP OF THE UTILITY METER GROUND ROD IS TO BE 6 " ABOVE THE SUB-GRADE, FOR INSPECTION BY LOCAL AUTHORITY, THE GROUND ROD IS NOT TO BE TIED INTO THE COUNTERPOISE.
- PROVIDE GROUNDING FOR ALL OWNER FURNISHED EQUIPMENT PER THE EQUIPMENT MANUFACTURER'S INSTRUCTIONS AND BOND TO THE EQUIPMENT GROUND RING.
 - IF INSTALLING CHEMICAL GROUND RODS, GENERAL CONTRACTOR SHALL REMOVE AND PRESENT TO CONSTRUCTION MANAGER THE TAPE USED TO SEAL THE TOP AND BOTTOM OF CHEMICAL GROUND ROD. 10.



8

TELECAD WIRELESS SITE DESIGN, INC.

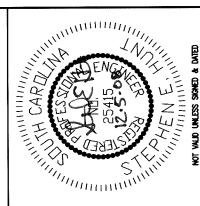
OPTIMA TOWERS

LEESBURG ROAD SITE#: SC1019

ELECTRICAL **NOTES**



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DWS DRAWN BY: CHECKED BY:

PROJECT MGR: SEH

SHEET NUMBER:

