



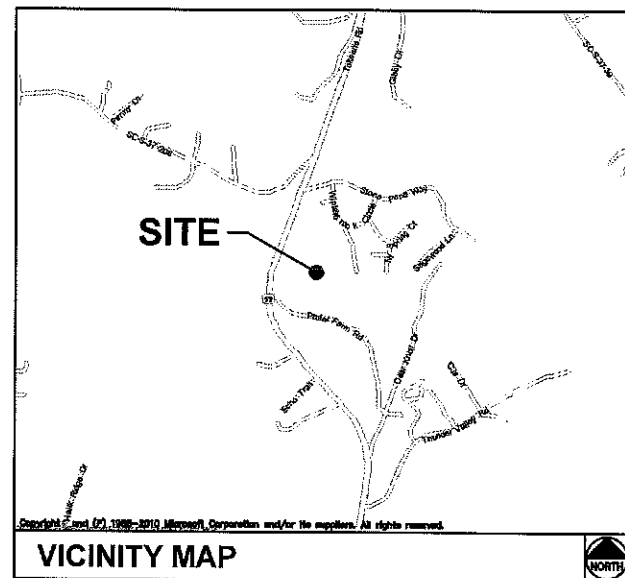
8921 RESEARCH DRIVE
CHARLOTTE, NC 28262

SITTON

SITE ADDRESS

PRATER FARM ROAD
SENECA, SC 28676
OCONEE COUNTY

LATITUDE: 34° 36' 45.442" N
LONGITUDE: 82° 58' 49.489" W
TAX/PIN #: 2910002012
ZONING: UNZONED



FROM CHARLOTTE OFFICE: START OUT GOING SOUTHWEST ON RESEARCH DRIVE TOWARDS HARRIS BLVD. FOR 0.4 MI; TURN LEFT ONTO W. WT HARRIS BLVD. / NC-24-E. FOR 0.3 MI; TURN RIGHT AND MERGE ON I-85 S. 140.3 MI; TAKE EXIT 11 AND TURN RIGHT ON SC-24 W. 10.0 MI; SLIGHT RIGHT ON CROSS ROADS DR. 0.5 MI; MERGE ON SC-59 N. 0.8 MI; TURN RIGHT ON PRATER FARM RD. 0.1 MI; DESTINATION ON THE LEFT.

DRIVING DIRECTIONS

MUNICIPALITY:
OCONEE COUNTY

STATE:
SOUTH CAROLINA

TOWER TYPE:
MONOPOLE TOWER

TOWER HEIGHT:
165' (174' TO HIGHEST APPURTENANCE)

NUMBER OF CARRIERS:
0 EXISTING, 1 PROPOSED

USE:
PROPOSED TELECOMMUNICATIONS TOWER
AND UNMANNED EQUIPMENT

CONSULTANT
KIMLEY-HORN AND ASSOCIATES, INC.
2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GEORGIA 30092
PHONE: (678) 533-3928
ATTN.: KEITH MARKLAND

PROJECT SUMMARY

DEVELOPER
VERIZON WIRELESS
8921 RESEARCH DRIVE
CHARLOTTE, NC 28262
PHONE: (704) 577-8785
ATTN: MICHAEL HAVEN

POWER COMPANY
DUKE POWER
PHONE: (800) 777-9898
ATTN.: CUSTOMER SERVICE

TELEPHONE COMPANY
AT&T
PHONE: (336) 286-6000
ATTN.: CUSTOMER SERVICE

PROPERTY OR TOWER OWNER
KENNETH EARL PRATER
8541 FREENY VALLEY ROAD
CADDO, OK 74729
PHONE: (864) 972-9377
ATTN.: DONALD PRATER

CONTACTS

SHEET	DESCRIPTION	REV.
T1	COVER SHEET	3
--	SITE SURVEY (SHEET 1 OF 3)	4
--	SITE SURVEY (SHEET 2 OF 3)	4
--	SITE SURVEY (SHEET 3 OF 3)	4
N1	GENERAL NOTES	0
C1	OVERALL SITE PLAN	2
C2	SITE PLAN	2
C3	EQUIPMENT PAD LAYOUT	1
C4	EQUIPMENT PAD FOUNDATION SECTION DETAILS	1
C5	EQUIPMENT PAD FOUNDATION SECTION DETAILS	1
C6	FENCE, GATE, AND COMPOUND DETAILS	1
C7	GRADING AND EROSION CONTROL PLAN 1 OF 2	1
C8	GRADING AND EROSION CONTROL PLAN 2 OF 2	1
C9	GRADING AND EROSION CONTROL DETAILS	1
C10	ACCESS ROAD DETAILS	1
C11	SITE SIGNAGE DETAILS	1
C12	WAVEGUIDE BRIDGE DETAILS	1
C13	ANTENNA AND TOWER ELEVATION DETAILS	2
L1	LANDSCAPING PLAN AND NOTES	0
E0	NOTES AND SPECIFICATIONS	1
E1	BASIC SERVICE ROUTING PLAN	1
E2	GROUNDING PLAN	1
E3	SINGLE-LINE DIAGRAM	1
E4	ELECTRICAL DETAILS	1
E5	ELECTRICAL DETAILS	1
E6	ELECTRICAL DETAILS	1
E7	GROUNDING DETAILS	1
E8	ELECTRICAL DETAILS	1
E9	ELECTRICAL DETAILS	1
E10	ELECTRICAL DETAILS	1

SHEET INDEX

OCONEE COUNTY COMMUNITY DEVELOPMENT DEPT.
415 PINE ST.
WALHALLA, SC 29691
PHONE: (864) 638-4218
ATTN.: ZONING

PERMIT INFORMATION



8921 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD

PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:

02/16/17

ISSUED FOR:

CONSTRUCTION

REV.: DATE: ISSUED FOR: BY:

REV.	DATE	ISSUED FOR	BY
0	11/04/14	CONSTRUCTION	WCE
1	08/01/16	CONSTRUCTION	WCE
2	10/21/16	CONSTRUCTION	WCE
3	02/16/17	CONSTRUCTION	WCE

CONSULTANT:



2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
SC License C00166

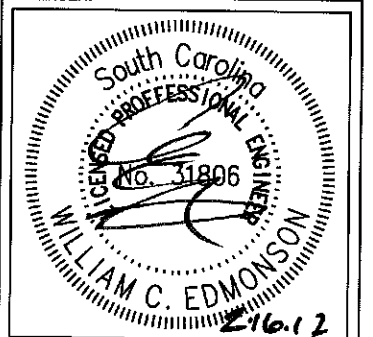
CONSULTANT:



DRAWN BY: CHK.: APV.:

KBB KRM WCE

LICENSER:



SHEET TITLE:

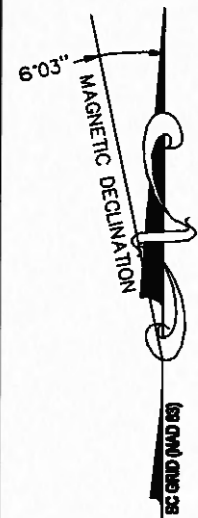
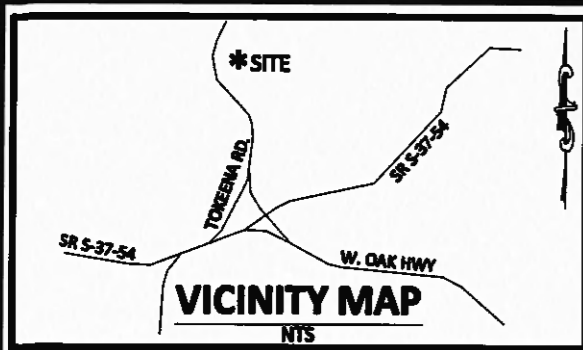
COVER SHEET

SHEET NUMBER: REVISION:

T1

2

018985125



LEGEND

- EXIST. UTILITY POLE
- EXIST. TELE PED
- IRON PIPE FOUND
- IRON PIPE SET
- COMPUTED POINT
- AXEL FOUND

GENERAL NOTES

1. THIS SURVEY WAS PREPARED BY BATEMAN CIVIL SURVEY CO., UNDER THE SUPERVISION OF JEFFREY L. BATEMAN, PLS.
2. THIS PLAN HAS BEEN PREPARED FOR LAYOUT AND PERMITTING PURPOSES ONLY.
3. THIS IS NOT A BOUNDARY SURVEY. PROPERTY LINES SHOWN WERE TAKEN FROM EXISTING FIELD EVIDENCE, EXISTING DEEDS AND PLATS OF PUBLIC RECORD, AND INFORMATION SUPPLIED TO THE SURVEYOR BY THE CLIENT
4. VERTICAL DATUM IS ASSUMED. THE LATITUDE, LONGITUDE AND STATE PLANE COORDINATES, IF SHOWN, ARE GIVEN IN NORTH AMERICAN DATUM OF 1983 (NAD83).
5. FIELD EQUIPMENT USED: TOPCON TOTAL STATION, EPOCH 3S.
6. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES AND ALL BEARINGS ARE SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM UNLESS OTHERWISE SHOWN.
7. PROPERTY OWNER: KENNETH EARL PRATER
8. THIS MAP IS NOT A CERTIFIED SURVEY AND HAS NOT BEEN REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.
9. ALL EQUIPMENT AND IMPROVEMENTS ARE LOCATED WITHIN THE LEASE AREA.
10. THE PROPERTY LIES IN ZONE "X", PER NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE PANEL 0430, RATE MAP 45073CD430C, DATED: SEPTEMBER 11, 2009.

N/F
RONNIE BURNETTE
PIN 381007694675
DB 1730, PG 690
USE: RESIDENCE

N/F
CHARLES E. & WILLIAM D.
CHILDS
PARCEL# 2910002012
DB 1070, PG 153
USE: VACANT

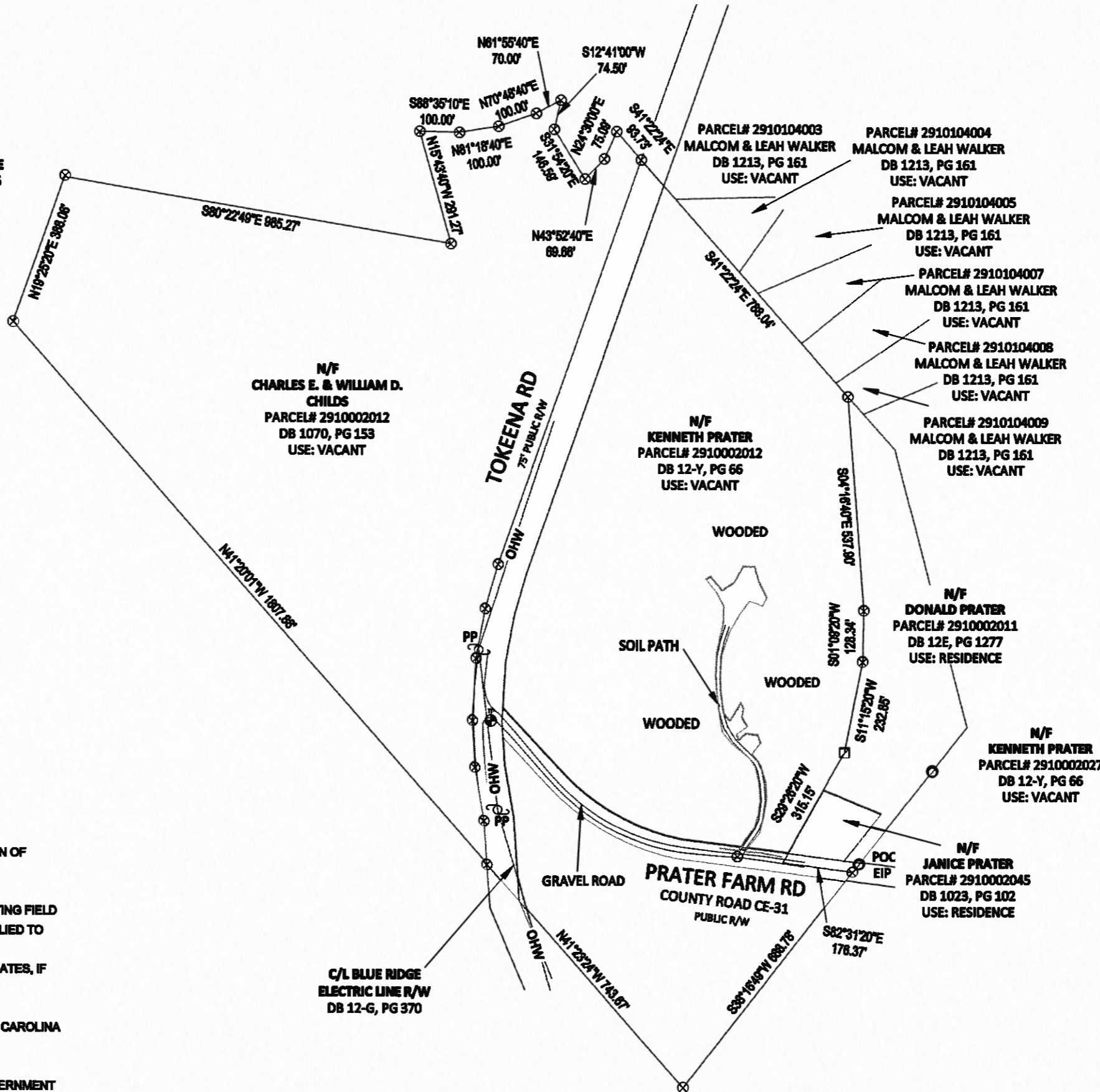
N/F
KENNETH PRATER
PARCEL# 2910002012
DB 12-Y, PG 66
USE: VACANT

N/F
DONALD PRATER
PARCEL# 2910002011
DB 12E, PG 1277
USE: RESIDENCE

N/F
KENNETH PRATER
PARCEL# 2910002027
DB 12-Y, PG 66
USE: VACANT

N/F
JANICE PRATER
PARCEL# 2910002045
DB 1023, PG 102
USE: RESIDENCE

C/L BLUE RIDGE
ELECTRIC LINE R/W
DB 12-G, PG 370



BCSC
BATEMAN CIVIL SURVEY COMPANY

Bateman Civil Survey Co, PC
200 W Main St, Holly Springs, NC 27540
Phone: 919.877.1088 Fax: 919.877.1091
NCOLS FORM 9-C-2279

erizon wireless

8821 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

Kimley-Horn and Associates, Inc.

Post Office Box 33068
Raleigh, North Carolina 27636

DRAWN BY: JCH
CHECKED BY: JLB
DRAWING DATE: 08/29/2014

JEFFREY L. BATEMAN
PLS 17216

NO.	DATE	DESCRIPTION
1.	11/04/14	Issue Final Survey
2.	11/12/14	Revise 30' lessee language
3.	11/24/14	Address Title comments
4.	12/10/14	Issue Final Survey

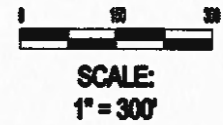
SITON
SITE# 303546
PRATER FARM ROAD
SENECA, SC, 29678
OCONEE COUNTY

DATE OF SURVEY: 08-18-2014

BCSC JOB # 140448

SHEET TITLE: SURVEY

SHEET NUMBER 1 OF 3



K:\ATL_Wireless\000_Verizon\2014_Sites\Sitton\CAD\CD\Rev1-11-16\Sitton_CD_R1.dwg August 1, 2016 9:04 AM by: kerry.pierre

1.00 GENERAL NOTES

- 1.01 ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND SPECIFICATIONS. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE, LOCAL AND NATIONAL CODES, ORDINANCES AND OR REGULATIONS APPLICABLE TO THIS PROJECT.
- 1.02 THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE PROJECT MANAGER AND/OR ENGINEER AND BE RESOLVED BEFORE PROCEEDING WITH WORK. WHERE THERE IS A CONFLICT BETWEEN DRAWING AND VERIZON SPECIFICATIONS, THE VERIZON PROJECT ENGINEER SHOULD BE CONTACTED FOR CLARIFICATION.
- 1.03 ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. WHERE ACTUAL CONDITIONS CONFLICT WITH THE DRAWINGS, THEY SHALL BE REPORTED TO THE PROJECT MANAGER AND/OR ENGINEER SO THAT PROPER REVISIONS MAY BE MADE. MODIFICATION OF DETAILS OF CONSTRUCTION SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE PROJECT MANAGER AND/OR ENGINEER.
- 1.04 CONTRACTOR SHALL REVIEW AND BE FAMILIAR WITH SITE CONDITIONS AS SHOWN ON THE ATTACHED SITE PLAN AND/OR SURVEY DRAWINGS.
- 1.05 WAVEGUIDE BRIDGE AND EQUIPMENT CABINETS ARE SHOWN FOR REFERENCE ONLY. REFER TO SEPARATE DRAWINGS FOR SPECIFIC INFORMATION.
- 1.06 ALL FINISHED GRADES SHALL SLOPE MINIMUM 1/4 IN./FT. AWAY FROM EQUIPMENT IN ALL DIRECTIONS. CONTRACTOR SHALL SLOPE SWALES AS REQUIRED ALONG EXISTING TERRAIN TO DRAIN AWAY FROM COMPOUND AND ACCESS DRIVE.
- 1.07 THE PROPOSED TOWER AND TOWER FOUNDATIONS WERE DESIGNED BY OTHERS. TOWER INFORMATION PROVIDED ON THESE PLANS ARE PROVIDED FOR REFERENCE PURPOSES ONLY. NOTIFY ENGINEER OR PROJECT MANAGER OF ANY CONFLICTS OR DISCREPANCIES. CONTRACTOR TO OBTAIN COPY OF TOWER DESIGN DRAWINGS, IF AVAILABLE, FROM VERIZON PROJECT MANAGER TO CONFIRM COAX ROUTING AND ANTENNA MOUNT INFORMATION.
- 1.08 THE CONTRACTOR SHALL PROVIDE ADEQUATE EXCAVATION SLOPING, SHORING, BRACING, AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL SAFETY ORDINANCES.
- 1.09 UPON COMPLETION OF CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES TO THE EXISTING ACCESS ROAD AND COMPOUND GRAVEL AREAS. ANY NEW FILL MATERIALS SHALL BE COMPACTED.
- 1.10 THE CONTRACTOR IS HEREBY NOTIFIED THAT PRIOR TO COMMENCING CONSTRUCTION, HE IS RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES INVOLVED AND SHALL REQUEST A VERIFICATION AT THE CONSTRUCTION SITE OF THE LOCATIONS OF THEIR UNDERGROUND UTILITIES AND WHERE THEY MAY POSSIBLY CONFLICT WITH THE PLACEMENT OF IMPROVEMENTS AS SHOWN ON THESE PLANS. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS CONTRACT WILL BE REQUIRED TO NOTIFY "SOUTH CAROLINA 811" 72 HOURS IN ADVANCE OF PERFORMING ANY WORK BY CALLING THE TOLL FREE NUMBER (888) 721-7877 (OR 811). ANY UTILITIES DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR, AT NO EXPENSE TO THE OWNER.
- 1.11 CONTRACTOR TO PROVIDE DUMPSTER AND PORTABLE TOILET FACILITY DURING CONSTRUCTION.
- 1.12 CONTRACTOR TO PROVIDE STYMIE LOCK OR EQUIVALENT AS APPROVED BY VERIZON PROJECT MANAGER.
- 1.13 CONTRACTOR TO PROVIDE ANY NECESSARY SIGNAGE PER VERIZON PROJECT MANAGER'S INSTRUCTIONS. SEE DETAIL ON SHEET C10.

2.00 EQUIPMENT FOUNDATION NOTES

- 2.01 FOUNDATIONS ARE DESIGNED FOR A PRESUMPTIVE ALLOWABLE SOIL BEARING CAPACITY OF 2,000 PSF. CONTRACTOR SHALL VERIFY SOIL CONDITIONS AND BEARING CAPACITY PRIOR TO CONSTRUCTION.
- 2.02 EXCAVATE A MINIMUM 18" BELOW PROPOSED EQUIPMENT FOUNDATIONS OF EXPANSIVE, ORGANIC, UNCONSOLIDATED OR OTHERWISE UNACCEPTABLE MATERIAL AND REPLACE WITH WELL-COMPACTED MATERIAL ACCEPTABLE TO VERIZON.
- 2.03 CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, PROTECTING, AND RELOCATING AS REQUIRED ALL SERVICE AND UTILITY LINES IN VICINITY OF THE WORK SITE. ALL EXCAVATIONS NEAR THESE LINES TO BE CARRIED OUT WITH EXTREME CAUTION. COORDINATE ALL RELOCATIONS WITH THE PROPERTY OWNER.
- 2.04 CONTRACTOR TO CUT/FILL EXISTING COMPOUND SUBSOIL TO PROVIDE AN AREA AS LEVEL AS POSSIBLE FOR THE EQUIPMENT FOUNDATIONS. ALL FILL AREAS ARE TO BE FILLED WITH SUITABLE MATERIALS. FILL MATERIALS ARE TO BE PLACED, COMPACTED, AND TESTED IN MAXIMUM LAYERS OF 8". COMPACTION OF ALL FILL MATERIAL SHALL ACHIEVE 95 PERCENT OF MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D 698. ALL TESTS MUST MEET THE MINIMUM SPECIFIED SOIL BEARING CAPACITY. COMPACTION TESTING IS BY THE GEOTECHNICAL TESTING COMPANY DESIGNATED FOR THE PROJECT. SCHEDULING AND COORDINATION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. REPORTS OF ALL TESTING ARE TO BE PROMPTLY DELIVERED OR FAXED TO THE VERIZON WIRELESS PROJECT MANAGER.
- 2.05 CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION TO ACI-318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
- 2.06 CONCRETE SHALL HAVE A SLUMP BETWEEN 3" AND 6".
- 2.07 REINFORCING BARS SHALL CONFORM TO THE LATEST REVISION OF ASTM-A615 GRADE 60 SPECIFICATIONS AND BE DETAILED IN ACCORDANCE WITH THE LATEST REVISION TO ACI-318.
- 2.08 AT THE REQUEST OF THE VERIZON WIRELESS PROJECT MANAGER, TEST CYLINDERS SHALL BE MOLDED AND LABORATORY CURED IN ACCORDANCE WITH ASTM C31. THREE CYLINDERS SHALL BE TAKEN FOR EACH DAY'S CONCRETE PLACEMENT. CYLINDERS SHALL BE TESTED IN ACCORDANCE WITH THE LATEST REVISION TO ASTM C39.
- 2.09 CHAMFER ALL EXPOSED EXTERNAL CORNERS OF CONCRETE WITH 3/4" x 45' CHAMFER, UNLESS OTHERWISE NOTED.
- 2.10 CONCRETE FORMWORK IS TO BE STRIPPED WITHIN 48 HOURS. VIBRATION OF THE CONCRETE MUST ASSURE THAT HONEYCOMBING WILL BE AT A MINIMUM. MECHANICAL VIBRATION OF ALL CONCRETE IS REQUIRED UNLESS OTHERWISE DIRECTED BY VERIZON WIRELESS' PROJECT MANAGER. ABOVE GRADE CONCRETE IS TO BE RUBBED AND PATCHED TO ASSURE SMOOTH FINISH AT TIME OF FORMS REMOVAL. CONTRACTOR SHALL PROVIDE A BROOM FINISH ON THE TOP SURFACE OF THE EQUIPMENT FOUNDATION UNLESS OTHERWISE DIRECTED BY VERIZON WIRELESS' PROJECT MANAGER.
- 2.11 TOPS OF CONCRETE FOUNDATION MUST BE WITHIN 0.02' OF ELEVATION REQUIRED.
- 2.12 TOP OF FOUNDATION FINISH TO BE LEVEL ±1/8" IN 10'.
- 2.13 TOP OF FOUNDATION TO HAVE MEDIUM BROOM FINISH.
- 2.14 CONTRACTOR SHALL REFER TO DRAWINGS OF OTHER TRADES AND VENDOR DRAWINGS FOR EMBEDDED ITEMS AND RECESSES NOT SHOWN ON THE STRUCTURAL DRAWINGS. CONTRACTOR SHALL VERIFY PLACEMENT OF EQUIPMENT AND LOCATION OF CONDUIT FOR MANUFACTURER'S AND VENDORS SPECIFICATIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL OPENINGS AND SLEEVES FOR PROPER DISTRIBUTION OF ALL UTILITIES.



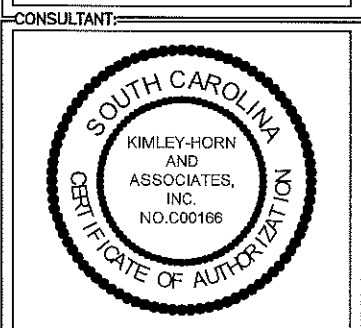
PROJECT INFORMATION:
VERIZON NAME: SITTON
VERIZON No.: TBD
PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:
08/01/16

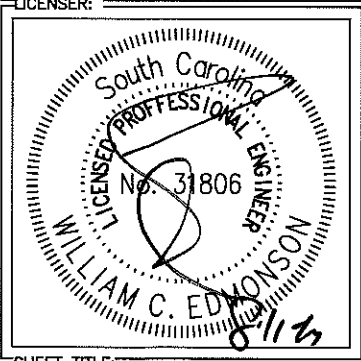
ISSUED FOR:
CONSTRUCTION

REV.:	DATE:	ISSUED FOR:	BY:
0	08/01/16	CONSTRUCTION	WCE

CONSULTANT:
Kimley»Horn
2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
SC License C00166



DRAWN BY: CHK.: APV.:
KBB KRM WCE



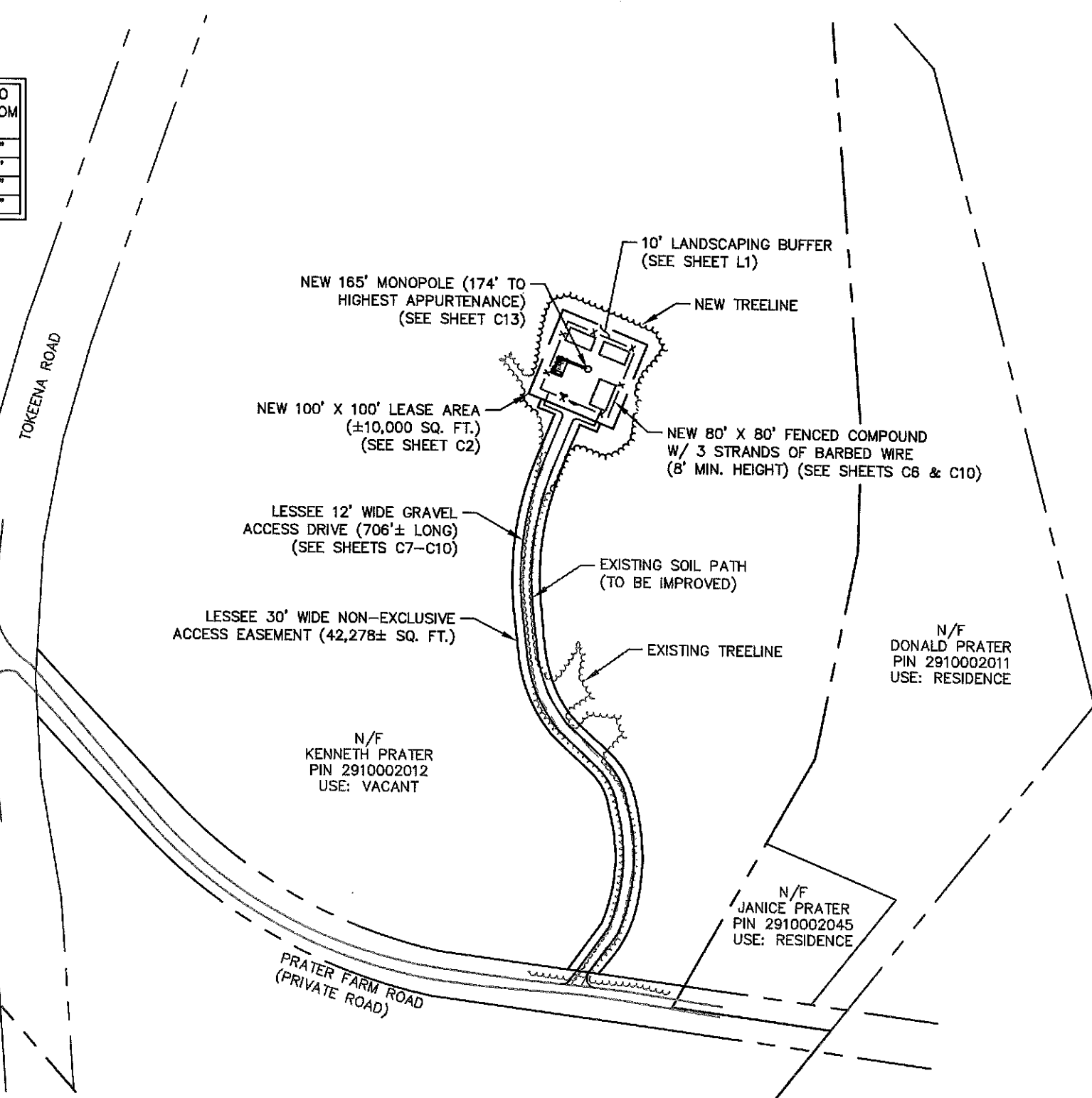
SHEET TITLE:
GENERAL NOTES

SHEET NUMBER: REVISION:
N1 0
018985125

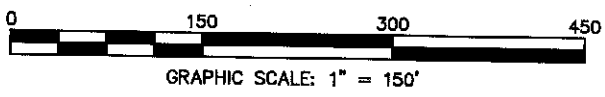
K:\ATL_Wireless\000_Verizon\2014_Sites\Sitton\CAD\Rev3-2-16-17\Sitton_CD_R3.dwg February 16, 2017 1:30 PM By: kerry.pierre



TOWER SETBACKS TO PROPERTY LINES (FROM TOWER CENTER)	
NORTH	764'-3"
SOUTH	661'-5"
EAST	295'-5"
WEST	553'-9"



1 OVERALL SITE PLAN
C1 SCALE: 1" = 150'



SURVEY NOTE:
 1. VERIZON WIRELESS STAFF SHALL COORDINATE WITH THE PROPERTY OWNER TO OBTAIN THE PROPER EASEMENT AGREEMENTS TO CONSTRUCT AND MAINTAIN EQUIPMENT IN AND AROUND THE TOWER COMPOUND.
 2. PROPOSED COMPOUND LAYOUT BASED ON SURVEY PROVIDED BY BATEMAN CIVIL SURVEY CO. DATED 09/18/14 AND SITE VISIT ON 08/25/14.



PROJECT INFORMATION:
VERIZON NAME: SITTON
VERIZON No.: TBD
 PRATER FARM ROAD
 SENECA, SC 28678
 OCONEE COUNTY

CURRENT ISSUE DATE:
02/16/17

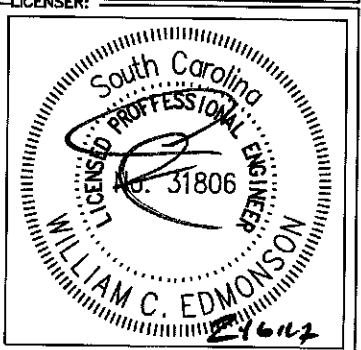
ISSUED FOR:
CONSTRUCTION

REV.	DATE	ISSUED FOR	BY
0	11/04/14	CONSTRUCTION	WCE
1	08/01/16	CONSTRUCTION	WCE
2	02/16/17	CONSTRUCTION	WCE

CONSULTANT:
Kimley»Horn
 2 SUN COURT, SUITE 450
 PEACHTREE CORNERS, GA 30092
 PHONE: 770-825-0744
 WWW.KIMLEY-HORN.COM
 SC License C00166



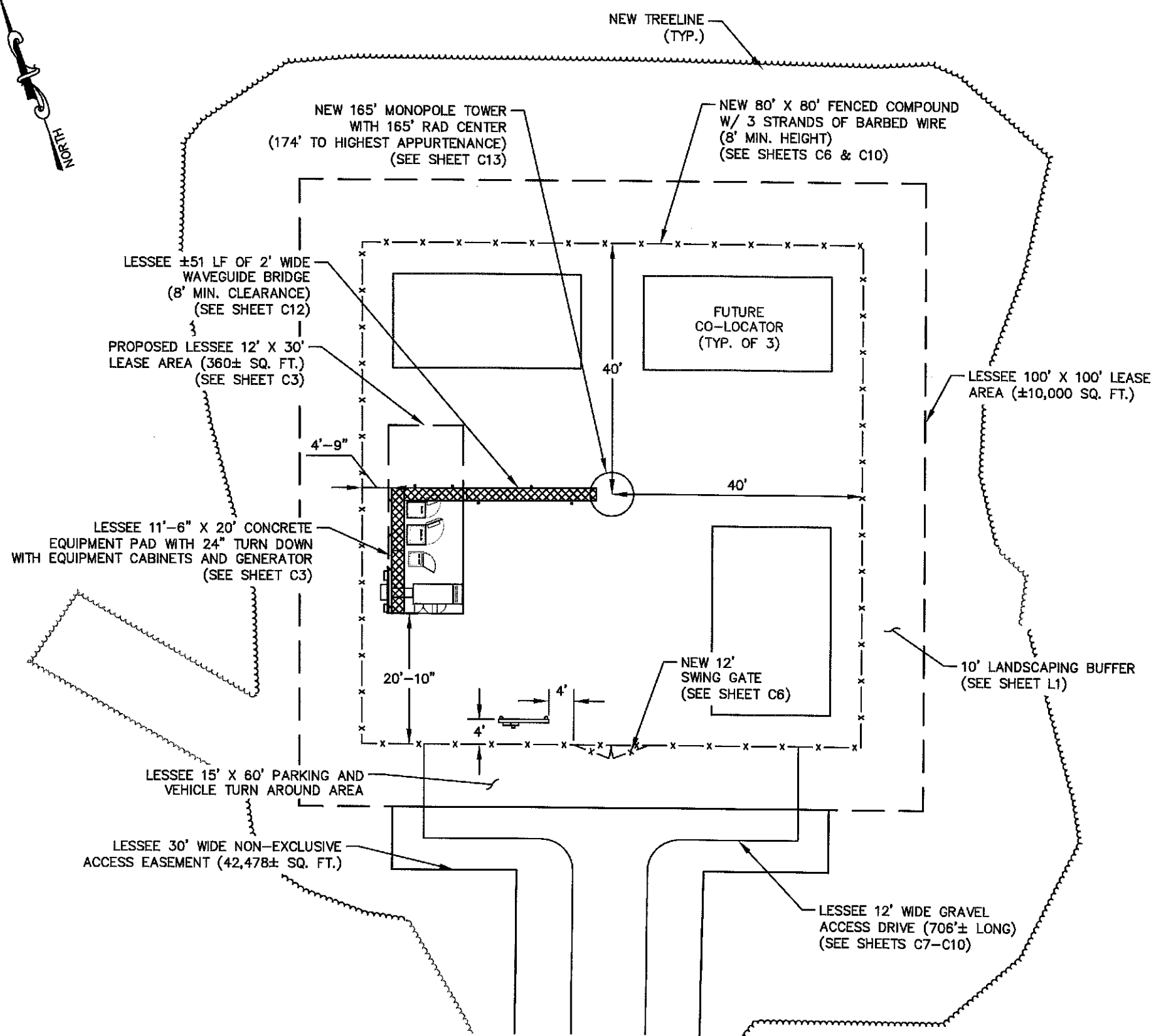
DRAWN BY: CHK.: APV.:
 KBB KRM WCE



SHEET TITLE:
OVERALL SITE PLAN

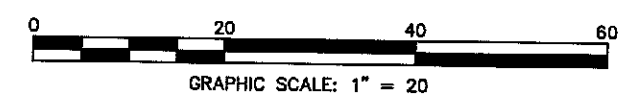
SHEET NUMBER: REVISION:
C1 **2**
 018985125


K:\ATL_Wireless\000_Verizon\2014_Sites\Sitton\CAD\Rev3-2-16-17\Sitton_CD_R3.dwg February 16, 2017 1:30 PM by: kerry.pierre



1
C2
SITE PLAN
SCALE: 1" = 20'

- SITE NOTES:**
1. VERIZON WIRELESS STAFF SHALL COORDINATE WITH THE PROPERTY OWNER AND/OR TOWER OWNER TO OBTAIN THE PROPER EASEMENT AGREEMENTS TO CONSTRUCT AND MAINTAIN EQUIPMENT IN AND AROUND THE TOWER COMPOUND.
 2. PROPOSED COMPOUND LAYOUT BASED ON SURVEY PROVIDED BY BATEMAN CIVIL SURVEY CO. DATED 07/18/14 AND SITE VISIT ON 08/25/14.
 3. CONTRACTOR TO CONFIRM WITH VERIZON CONSTRUCTION MANAGER THAT THE EQUIPMENT SHOWN HAS BEEN ORDERED/SCHEDULED FOR DELIVERY TO THIS SITE.
 4. THE BASIS OF EQUIPMENT DESIGN INCLUDES ONE (1) COMMSCOPE RBA72-36 BATTERY CABINET, ONE (1) COMMSCOPE RBA72 RF CABINET, AND ONE (1) ERICSSON RBS 6120 RF CABINET.
 5. ROUTE COAX/FIBER UP TOWER PER STRUCTURAL ANALYSIS BY TOWER OWNER.





8921 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD

PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:
02/16/17


ISSUED FOR:
CONSTRUCTION

REV.	DATE	ISSUED FOR	BY
0	11/04/14	CONSTRUCTION	WCE
1	08/01/16	CONSTRUCTION	WCE
2	02/16/17	CONSTRUCTION	WCE

CONSULTANT:
Kimley»Horn

2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
SC License C00168

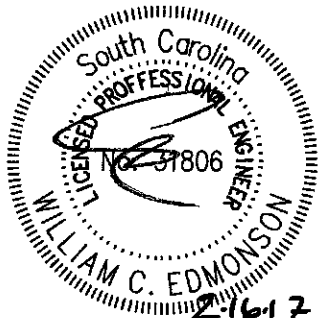
CONSULTANT:



DRAWN BY: CHK. APV.: WCE

KBB KRM WCE

LICENSER:



SHEET TITLE:
SITE PLAN

SHEET NUMBER: **C2** REVISION: **2**

018985125

verizon

8821 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD

PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:

08/01/16

ISSUED FOR:

CONSTRUCTION

REV. DATE: ISSUED FOR: BY:

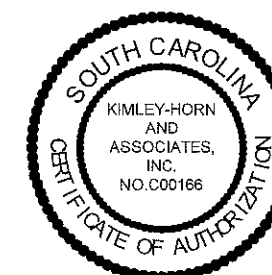
REV.	DATE	ISSUED FOR	BY
0	11/04/14	CONSTRUCTION	WCE
1	08/01/16	CONSTRUCTION	WCE

CONSULTANT:

Kimley»Horn

2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
SC License C00166

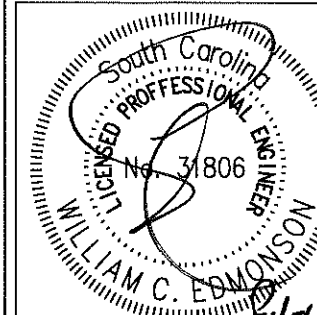
CONSULTANT:



DRAWN BY: CHK.: APV.:

KBB KRM WCE

LICENSER:



SHEET TITLE:

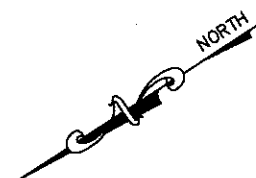
**EQUIPMENT
PAD LAYOUT**

SHEET NUMBER: REVISION:

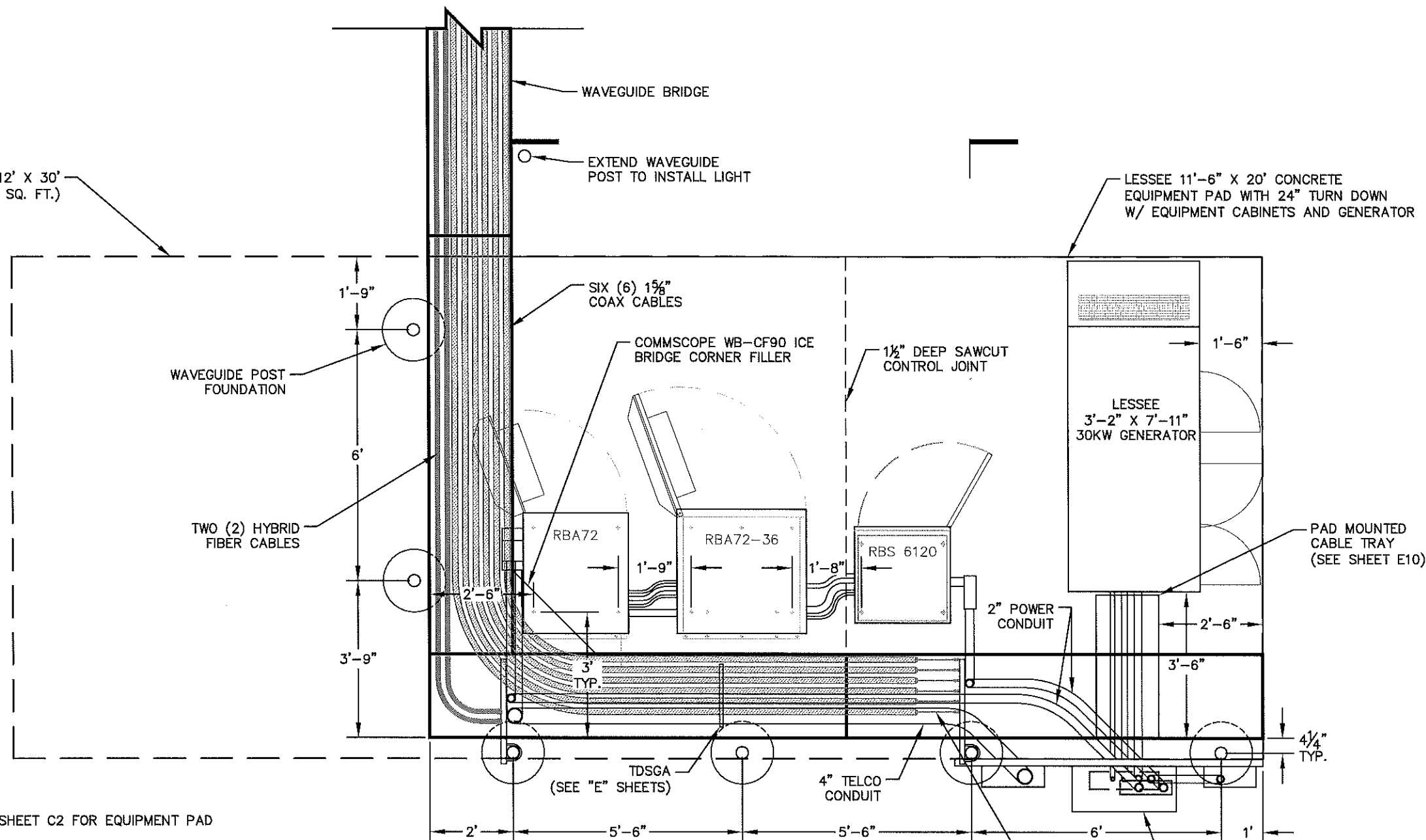
C3

1

018985125

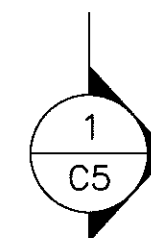
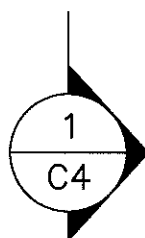


PROPOSED LESSEE 12' X 30'
LEASE AREA (360± SQ. FT.)

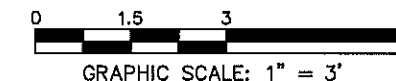


EQUIPMENT PAD NOTES:

- REFER TO THE SITE PLAN ON SHEET C2 FOR EQUIPMENT PAD LOCATION AND ORIENTATION.
- RUN 4" TELCO CONDUIT OVERHEAD ON WAVEGUIDE BRIDGE USING 16" RADIUS SWEEPS AT ALL BENDS. CONNECT TO 12X12X6 PVC NEMA BOX ON SIDE OF RBA72.
- RUN 2" POWER CONDUIT OVERHEAD ON WAVEGUIDE BRIDGE, SWEEP DOWN CABLE LADDER TO APPROX. 5' HIGH, THEN SWEEP OVER TO 6X6X6 PVC NEMA BOX ON SIDE OF RBA72.
- RUN 2" POWER CONDUIT OVERHEAD ON WAVEGUIDE BRIDGE, SWEEP DOWN CABLE LADDER TO APPROX. 6" HEIGHT, THEN ELBOW OVER TO LB FITTING ON SIDE OF PLINTH BELOW 6120 RF CABINET.
- RUN HYBRID CABLE OVERHEAD ON WAVEGUIDE BRIDGE, SWEEP DOWN CABLE LADDER TO APPROX. 18" HEIGHT, THEN SWEEP OVER TO PENETRATION IN DOGHOUSE ON BACK OF RBA72 RF CABINET.
- FASTEN CONDUITS TO UNISTRUT ON WAVEGUIDE BRIDGE AND CABLE LADDER WITH TWO PIECE HOT DIP GALVANIZED CONDUIT STRAPS.
- BOLT CABINETS AND GENERATOR TO SLAB USING FASTENERS SPECIFIED BY EQUIPMENT MANUFACTURER IN FACTORY PROVIDED MOUNTING HOLES.
- SAWCUT CONTROL JOINT TO BE TREATED WITH SIKADUR 51 SL SEALANT OR APPROVED EQUAL.



1
EQUIPMENT PAD LAYOUT
SCALE: 1" = 3'



K:\ATL_Wireless\000_Verizon\2014_Sites\Sifton\CAD\CD\Rev1-07-11-16\Sifton_CD_R1.dwg August 1, 2016 9:04 AM by: kerry.pierre



8921 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD
PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:

08/01/16

ISSUED FOR:

CONSTRUCTION

REV. DATE ISSUED FOR BY

0	11/04/14	CONSTRUCTION	WCE
1	08/01/16	CONSTRUCTION	WCE

CONSULTANT:



2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
SC License C00166

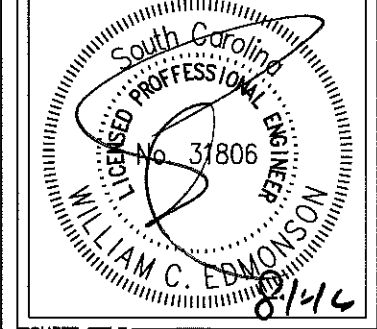
CONSULTANT:



DRAWN BY: CHK.: APV.:

KBB	KRM	WCE
-----	-----	-----

LICENSER:



SHEET TITLE:

EQUIPMENT
PAD FOUNDATION
SECTION DETAILS

SHEET NUMBER: REVISION:

C4	1
	018985125

ALL OVERHEAD CONDUITS TO BE MOUNTED TO 7/8" P3300 UNISTRUT MOUNTED TO SIDE FLANGE OF WAVEGUIDE BRIDGE USING UNISTRUT P1498 FITTINGS. SUPPORT TELCO AND ELECTRICAL CONDUIT FROM UNISTRUT USING TWO PIECE HOT DIP GALVANIZED CONDUIT CLAMPS.

WAVEGUIDE BRIDGE KIT (PART #: WB-K210-B15 WITH MF-273 BURIAL POST OR APPROVED EQUIVALENT)

WAVEGUIDE POST (SEE SHEET C12)

VALMONT/SITE PRO SITE STRUT OR APPROVED EQUAL. FASTEN TO POST USING 1/2" GALVANIZED U-BOLT OR APPROVED EQUAL. COLD GALVANIZE ANY DRILLED HOLES IN SITE STRUT AND AT ANY CUT-OFF BOLT ENDS.

8' (MINIMUM CLEARANCE)

LESSEE 11'-6" X 20' CONCRETE EQUIPMENT PAD WITH 24" TURN DOWN WITH EQUIPMENT CABINETS AND GENERATOR

#4 @ 1'-0" (MAX.) E.W.

2" CLEAR (TYP. U.O.N.)

FINISH GRADE

4"

6"

1'-10"

1'-10"

1'-10"

1'-10"

1'-10"

1'-6"

4/4"

6" OF #57 STONE-MIN.

WELL COMPACTED FILL MATERIAL (18" MINIMUM)

2'-0"

1'-0"

COMPACTED CRUSHED AGGREGATE (6" MINIMUM)

STANDARD ACI HOOK

6-#4 LONG REINF.

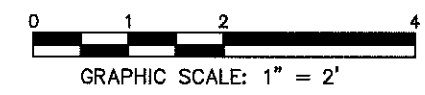
#4 CLOSED STIRRUP @ 18" O.C.

18" WAVEGUIDE BRIDGE POST FOOTING (SEE SHEET C12)

1
C4

EQUIPMENT PAD FOUNDATION SECTION

SCALE: 1" = 2'



K:\ATL_Wireless\000_Verizon\2014_Sites\Sitton\CAD\CAD Rev1-07-11-16\Sitton_CD_R1.dwg August 1, 2016 9:04 AM by: kerry.pierre

ALL OVERHEAD CONDUITS TO BE MOUNTED TO 7/8" P3300 UNISTRUT MOUNTED TO SIDE FLANGE OF WAVEGUIDE BRIDGE USING UNISTRUT P1498 FITTINGS. SUPPORT TELCO AND ELECTRICAL CONDUIT FROM UNISTRUT USING TWO PIECE HOT DIP GALVANIZED CONDUIT CLAMPS.

WAVEGUIDE BRIDGE KIT (PART #: WB-K210-B15 WITH MF-273 BURIAL POST OR APPROVED EQUIVALENT)

WAVEGUIDE POST (SEE SHEET C12)

SITE STRUTS TO SUPPORT DIPLEXERS. INSTALLED AS REQUIRED.

VALMONT/SITE PRO SITE STRUT OR APPROVED EQUAL. FASTEN TO POST USING 1/2" GALVANIZED U-BOLT OR APPROVED EQUAL. COLD GALVANIZE ANY DRILLED HOLES IN SITE STRUT AND AT ANY CUT-OFF BOLT ENDS.

8' (MINIMUM CLEARANCE)

LESSEE 11'-6" X 20' CONCRETE EQUIPMENT PAD WITH 24" TURN DOWN WITH EQUIPMENT CABINETS AND GENERATOR

#4 @ 1'-0" (MAX.) E.W.

2" CLEAR (TYP. U.O.N.)

FINISH GRADE

6" OF #57 STONE-MIN.

WELL COMPACTED FILL MATERIAL (18" MINIMUM)

COMPACTED CRUSHED AGGREGATE (6" MINIMUM)

STANDARD ACI HOOK

6-#4 LONG REINF.

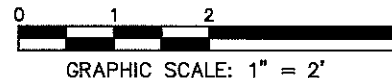
#4 CLOSED STIRRUP @ 18" O.C.

18"Ø WAVEGUIDE BRIDGE POST FOOTING (SEE SHEET C12)

1
C5

EQUIPMENT PAD FOUNDATION SECTION

SCALE: 1" = 2'



NOTE:

IF DIPLEXERS ARE NOT INSTALLED UPON INITIAL CONSTRUCTION, THE LAYOUT ON DETAIL 1/C4 SHALL BE USED.

verizon

8921 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD

PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:

08/01/16

ISSUED FOR:

CONSTRUCTION

REV. DATE: ISSUED FOR: BY:

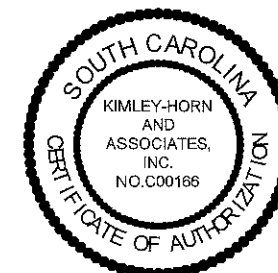
REV.	DATE	ISSUED FOR	BY
0	11/04/14	CONSTRUCTION	WCE
1	08/01/16	CONSTRUCTION	WCE

CONSULTANT:

Kimley»Horn

2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
SC License C00166

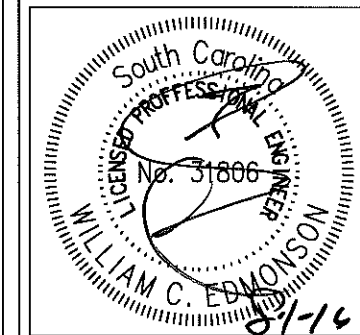
CONSULTANT:



DRAWN BY: CHK.: APV.:

KBB KRM WCE

LICENSER:



SHEET TITLE:

**EQUIPMENT
PAD FOUNDATION
SECTION DETAILS**

SHEET NUMBER: REVISION:

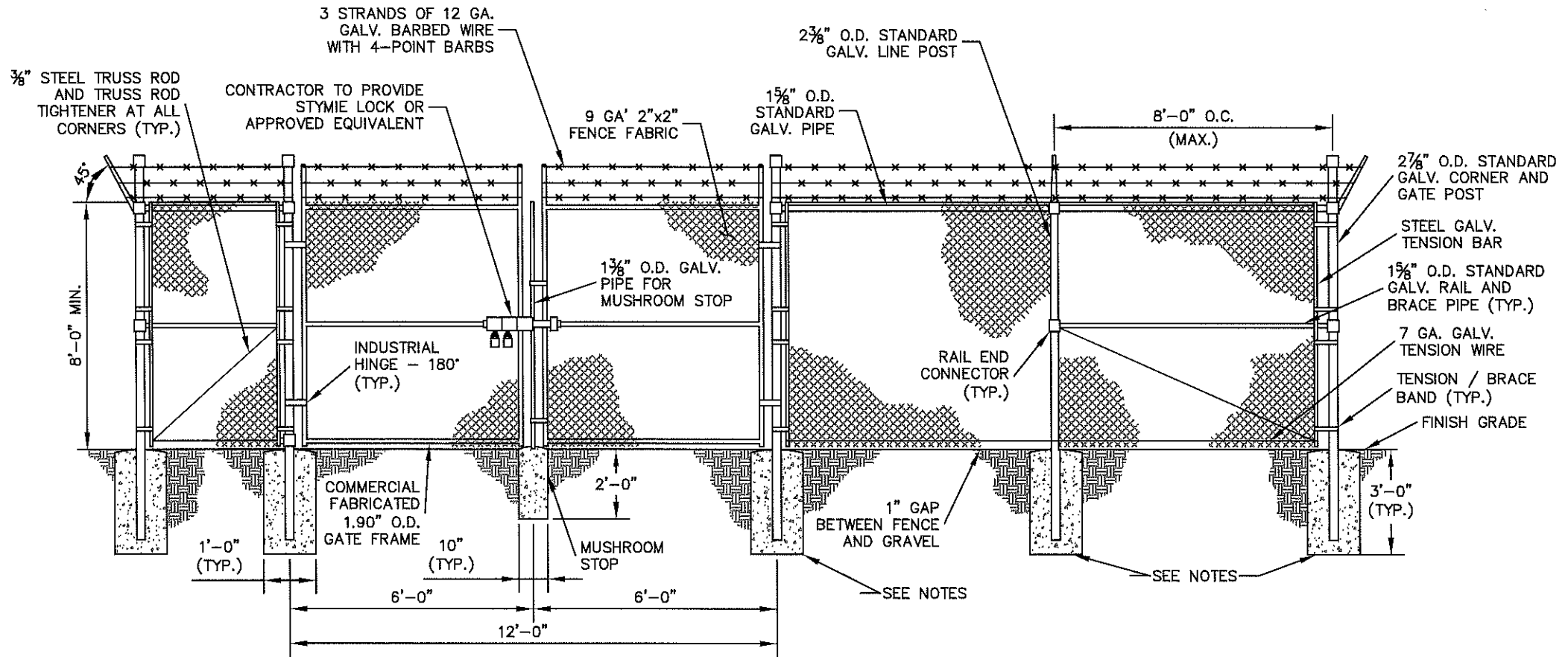
C5

1

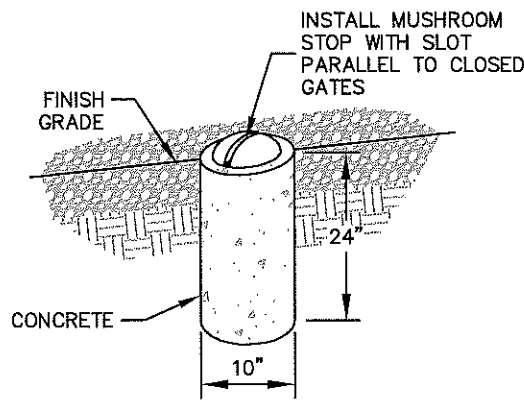
018985125

FENCE NOTES:

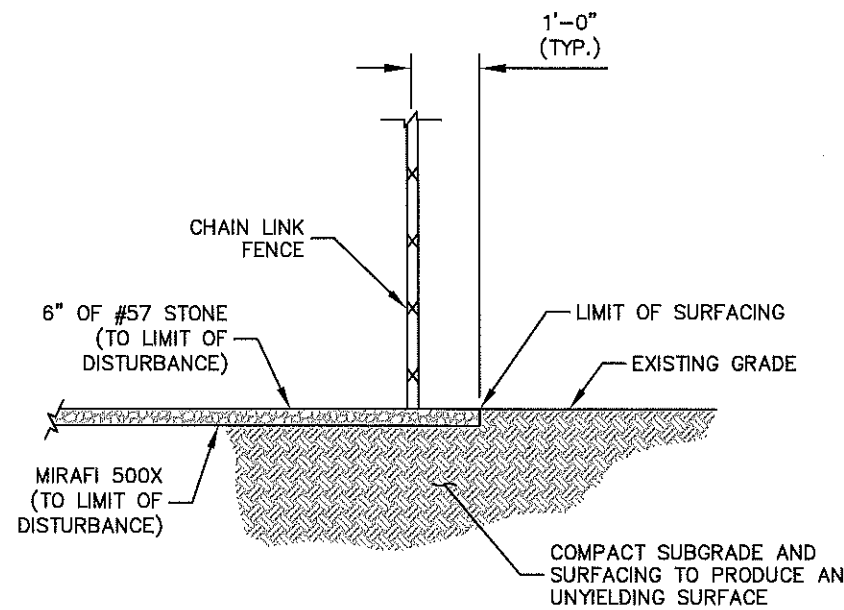
- USE 3,000-PSI CONCRETE, FULLY CONSOLIDATED AROUND THE POST.
- WHERE THE POST IS SET IN ROCK OR CONCRETE, CORE A HOLE 12" DEEP AND 1" LARGER IN DIAMETER THAN THE POST. SET THE POST AND GROUT IN PLACE USING NON-SHRINK GROUT.
- ALL POSTS MUST BE PLUMB AND ALIGNED WITH ONE ANOTHER IN BOTH HORIZONTAL AND VERTICAL PLANES.
- CORNERS AND GATEPOSTS FOR CHAIN LINK FENCES SHALL EXTEND ABOVE THE TOP STRAND OF BARBED WIRE TO PROVIDE TENSIONING FOR THE BARBED WIRE.
- PROVIDE MIDRAILS AND BRACING AT ALL CORNER POSTS WHERE THE FENCE CHANGES DIRECTION BY MORE THAN 30 DEGREES.
- THE GRADE OF THE SITE AND INSTALLATION OF THE FENCE SHALL PROVIDE FOR NO MORE THAN A 1" GAP BETWEEN THE BOTTOM OF THE FENCE MATERIAL AND FINISH GRADE.
- CONTRACTOR SHALL PROVIDE HOLD OPEN DEVICES FOR ALL GATES AT THE SPECIFIED OPEN POSITIONS, DRIVEN PIPE TYPE RECEIVERS ARE NOT AUTHORIZED.
- CONTRACTOR SHALL ALSO PROVIDE A MUSHROOM TYPE RECEIVER AT THE CLOSE POSITION.



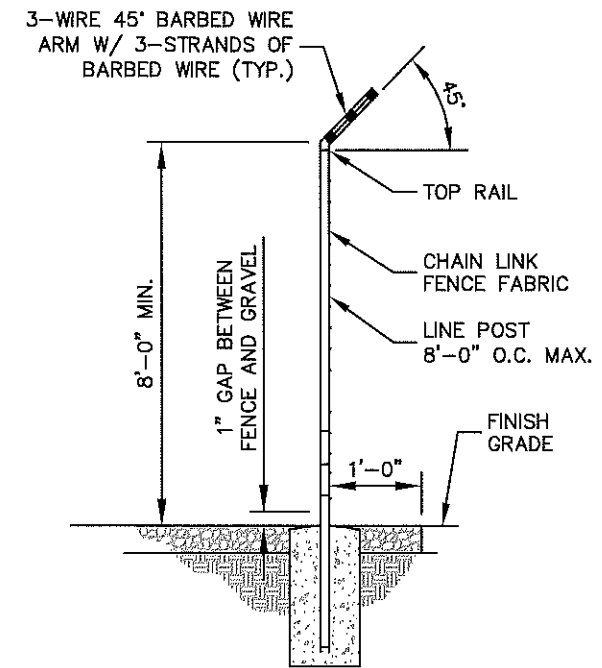
1 CHAIN LINK FENCE AND GATE ELEVATION
NOT TO SCALE



2 MUSHROOM STOP
C6



3 SITE COMPOUND SURFACE DETAIL
C6



4 SECTION @ FENCE
C6

verizon

8921 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD

PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:

08/01/16

ISSUED FOR:

CONSTRUCTION

REV. DATE: ISSUED FOR: BY:

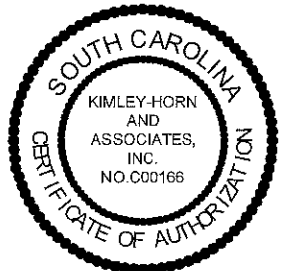
REV.	DATE	ISSUED FOR	BY
0	11/04/14	CONSTRUCTION	WCE
1	08/01/16	CONSTRUCTION	WCE

CONSULTANT:

Kimley»Horn

2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE 770-825-0744
WWW.KIMLEY-HORN.COM
SC License C00166

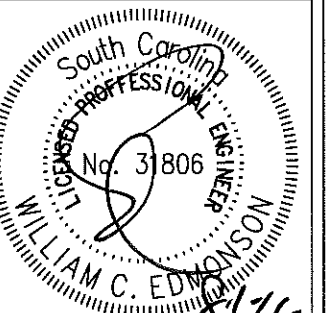
CONSULTANT:



DRAWN BY: CHK.: APV.:

KBB KRM WCE

LICENSER:



SHEET TITLE:

**FENCE, GATE,
AND COMPOUND
DETAILS**

SHEET NUMBER: REVISION:

C6

1

018985125

K:\ATL_Wireless\000_Verizon\Verizon\CAD\CD\Sifton\Rev1-07-11-16\Sifton_CD_R1.dwg August 1, 2016 9:04 AM by: kerry.pierre

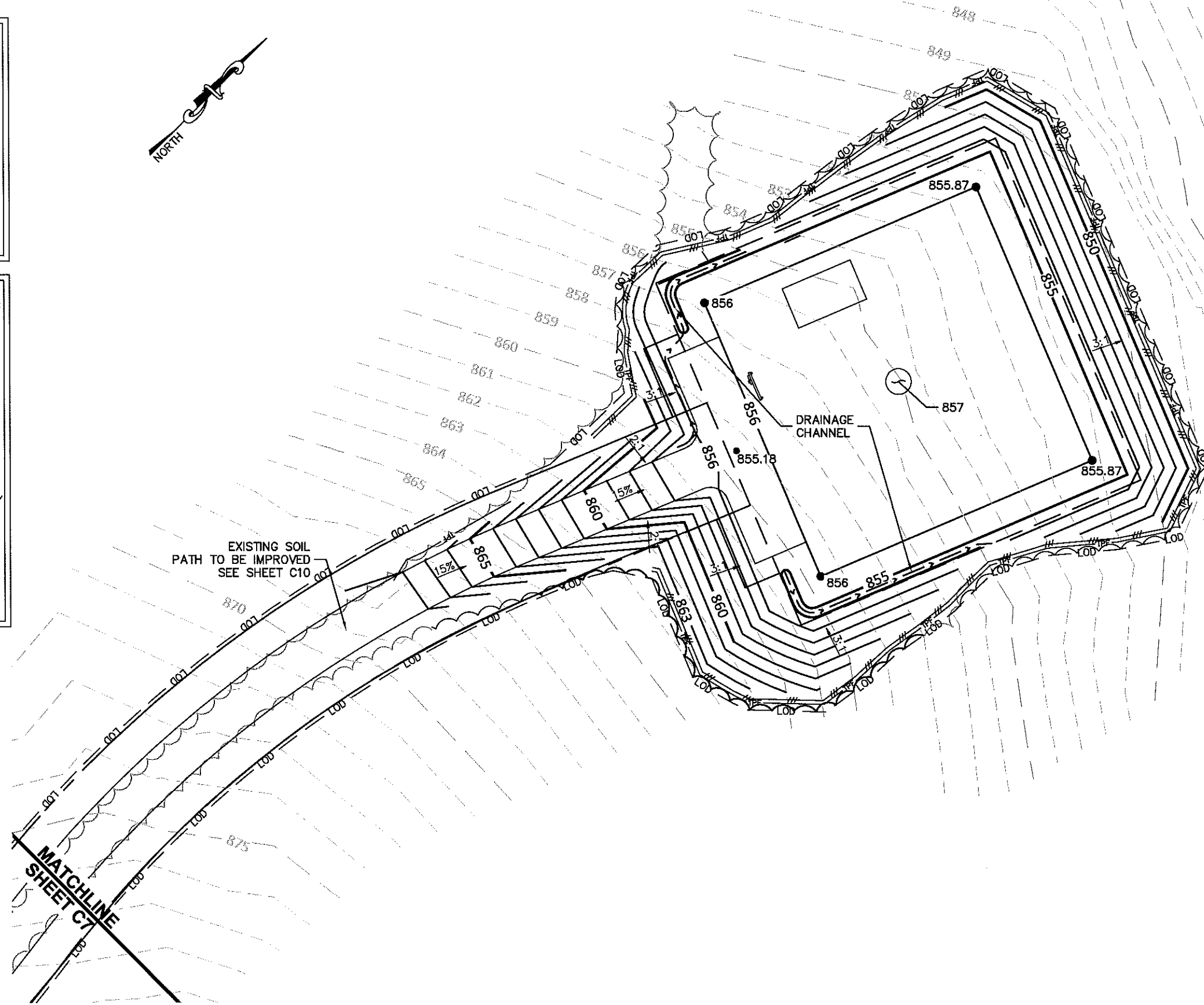
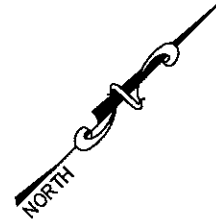
NOTE:
 CURRENT DESIGN ANTICIPATES APPROXIMATELY 39,272± SQ. FT. (0.90 ACRES) OF CLEARING AND GRADING FOR THE PROPOSED PROJECT. IF ADDITIONAL CLEARING IS REQUIRED BEYOND WHAT IS SHOWN IN THE PLANS THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND/OR PROJECT MANAGER. IF DURING THE BID WALK OR CONSTRUCTION IT IS DETERMINED THAT MORE THAN (1) ACRE OF LAND IS TO BE DISTURBED FOR CONSTRUCTION AN EROSION AND SEDIMENTATION CONTROL PLAN MUST BE FILED 30 DAYS PRIOR TO CONSTRUCTION.

GRADING NOTES:

1. THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOISTURE CONDITION ALL FILL PER THE PROJECT GEOTECHNICAL ENGINEERS SPECIFICATIONS. FILL MATERIAL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.
2. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS REFLECT FINISHED GRADES.
3. CONTRACTOR SHALL BLEND EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
4. PORTIONS OF THE SITE NOT SPECIFICALLY MENTIONED WITHIN THE GEOTECHNICAL REPORT SHALL BE COMPACTED TO 95 PERCENT OF THE MATERIALS MAXIMUM DRY DENSITY WITHIN 3 PERCENT OF OPTIMUM MOISTURE CONTENT.
5. FILL SHALL BE PLACED IN MAXIMUM 8 INCH LOOSE LIFTS.
6. UNDISTURBED AREAS WITHIN 30' INGRESS/EGRESS EASEMENT NOT NEEDED FOR UTILITY ROUTING TO BE LEFT UNDISTURBED.

LEGEND

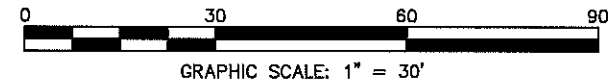
- EXISTING CONTOURS — — — — —
- PROPOSED CONTOURS —————
- SILT FENCE ———— # # # ————
- LOD ———— LOD ———— LOD ————
- TPF ———— TPF ———— TPF ————
- EXISTING SPOT ELEVATION x XXX
- PROPOSED SPOT ELEVATION • XXX



1
C7

GRADING & EROSION CONTROL PLAN

SCALE : 1" = 30'



verizon

8921 RESEARCH DRIVE
 CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD

PRATER FARM ROAD
 SENECA, SC 28678
 OCONEE COUNTY

CURRENT ISSUE DATE:

08/01/16

ISSUED FOR:

CONSTRUCTION

REV. DATE ISSUED FOR BY:

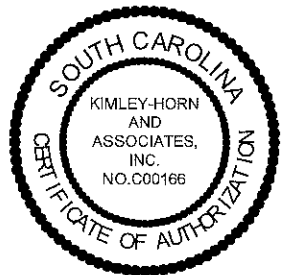
REV.	DATE	ISSUED FOR	BY
0	11/04/14	CONSTRUCTION	WCE
1	08/01/16	CONSTRUCTION	WCE

CONSULTANT:

Kimley»Horn

2 SUN COURT, SUITE 450
 PEACHTREE CORNERS, GA 30092
 PHONE: 770-825-0744
 WWW.KIMLEY-HORN.COM
 SC License C00166

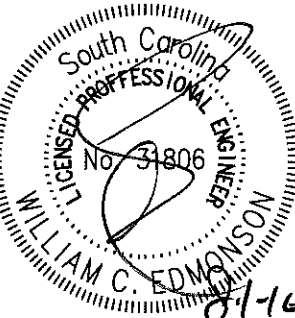
CONSULTANT:



DRAWN BY: CHK.: APV.:

KBB KRM WCE

LICENSER:



SHEET TITLE:

GRADING & EROSION CONTROL PLAN 1 OF 2

SHEET NUMBER: REVISION:

C7

1

018985125

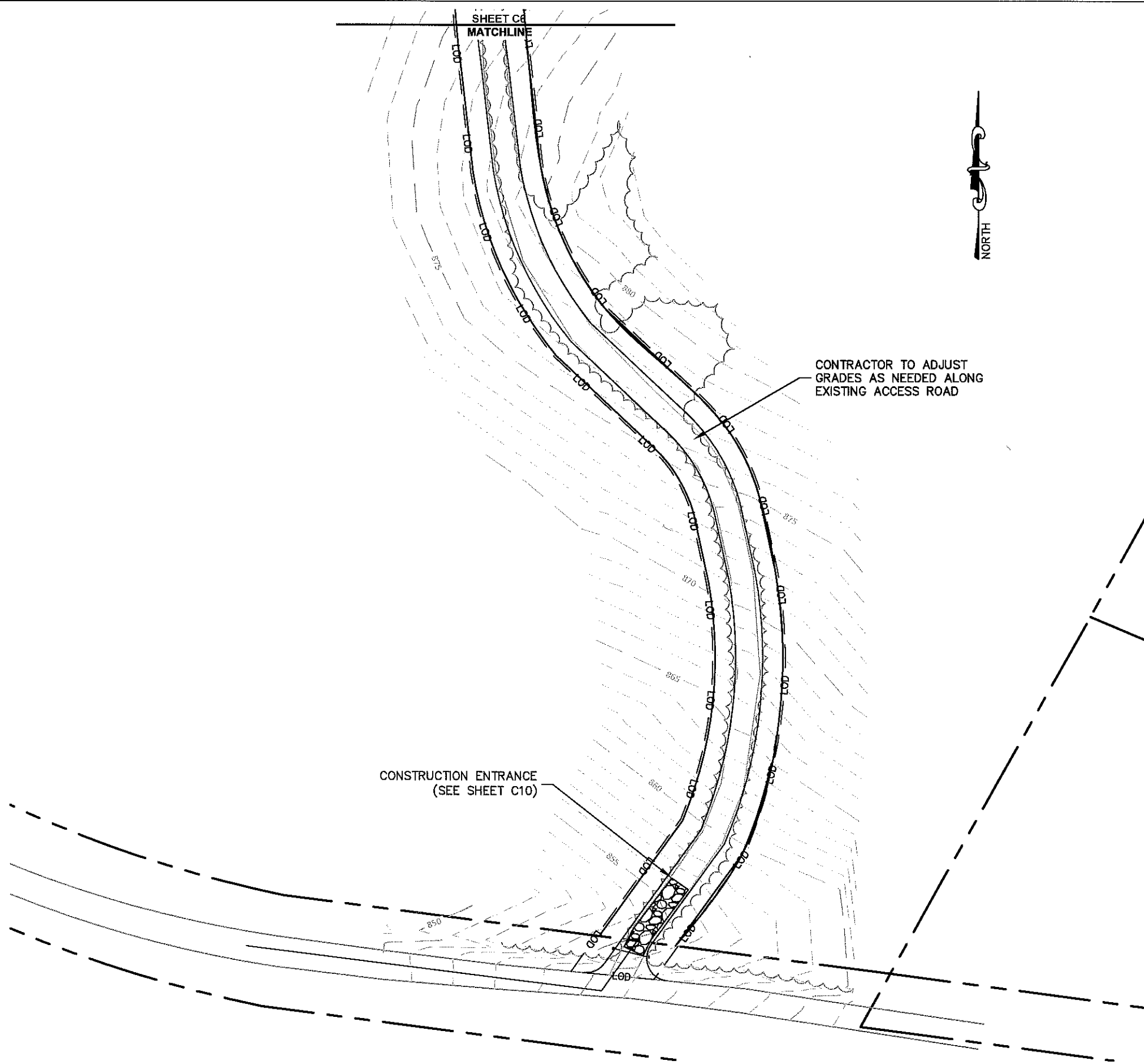
K:\ATL_Wireless\000_Verizon\Verizon\CAD\CD\Rev1-07-11-16\Sifton_CD_R1.dwg August 1, 2016 9:04 AM by: kerry.pierre

NOTE:
 CURRENT DESIGN ANTICIPATES APPROXIMATELY 39,272± SQ. FT. (0.90 ACRES) OF CLEARING AND GRADING FOR THE PROPOSED PROJECT. IF ADDITIONAL CLEARING IS REQUIRED BEYOND WHAT IS SHOWN IN THE PLANS THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND/OR PROJECT MANAGER. IF DURING THE BID WALK OR CONSTRUCTION IT IS DETERMINED THAT MORE THAN (1) ACRE OF LAND IS TO BE DISTURBED FOR CONSTRUCTION AN EROSION AND SEDIMENTATION CONTROL PLAN MUST BE FILED WITH NCDENR 30 DAYS PRIOR TO CONSTRUCTION.

- GRADING NOTES:**
1. THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOISTURE CONDITION ALL FILL PER THE PROJECT GEOTECHNICAL ENGINEERS SPECIFICATIONS. FILL MATERIAL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.
 2. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS REFLECT FINISHED GRADES.
 3. CONTRACTOR SHALL BLEND EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
 4. PORTIONS OF THE SITE NOT SPECIFICALLY MENTIONED WITHIN THE GEOTECHNICAL REPORT SHALL BE COMPACTED TO 95 PERCENT OF THE MATERIALS MAXIMUM DRY DENSITY WITHIN 3 PERCENT OF OPTIMUM MOISTURE CONTENT.
 5. FILL SHALL BE PLACED IN MAXIMUM 8 INCH LOOSE LIFTS.
 6. UNDISTURBED AREAS WITHIN 30' INGRESS/EGRESS EASEMENT NOT NEEDED FOR UTILITY ROUTING TO BE LEFT UNDISTURBED.

LEGEND

EXISTING CONTOURS	---
PROPOSED CONTOURS	—
SILT FENCE	— / / /
LOD	— LOD — LOD
TPF	— TPF — TPF
EXISTING SPOT ELEVATION	x XXX
PROPOSED SPOT ELEVATION	● XXX



1 GRADING & EROSION CONTROL PLAN
 C8 SCALE : 1" = 50'

0 50 100 150
 GRAPHIC SCALE: 1" = 50'



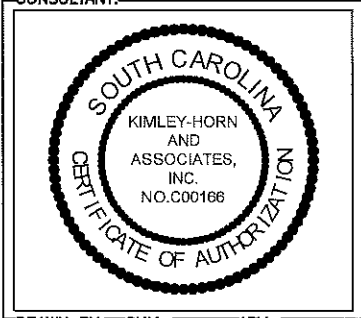
PROJECT INFORMATION:
VERIZON NAME: SITTON
VERIZON No.: TBD
 PRATER FARM ROAD
 SENECA, SC 28678
 OCONEE COUNTY

CURRENT ISSUE DATE:
08/01/16

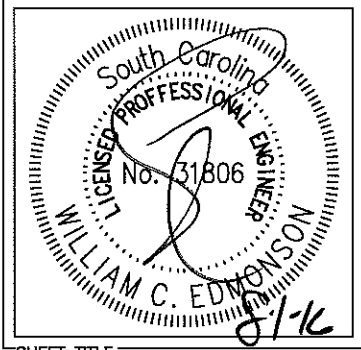
ISSUED FOR:
CONSTRUCTION

REV.	DATE	ISSUED FOR	BY
0	11/04/14	CONSTRUCTION	WCE
1	08/01/16	CONSTRUCTION	WCE

CONSULTANT:
Kimley»Horn
 2 SUN COURT, SUITE 450
 PEACHTREE CORNERS, GA 30092
 PHONE: 770-825-0744
 WWW.KIMLEY-HORN.COM
 SC License C00166



DRAWN BY: KBB
 CHK.: KRM
 APV.: WCE



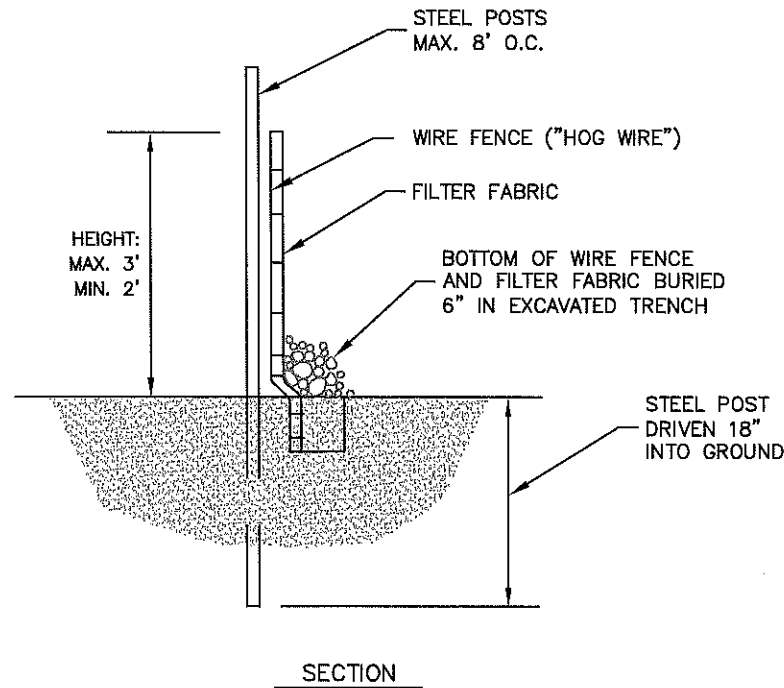
SHEET TITLE:
GRADING & EROSION CONTROL PLAN 2 OF 2

SHEET NUMBER: **C8**
 REVISION: **1**
 018985125

K:\ATL_Wireless\000_Verizon\2014_Sites\Sifton\CAD\C9_Rev1-07-11-15\Sifton_CD_R1.dwg August 1, 2016 9:04 AM by: kerry.pierre

EROSION CONTROL NOTES:

1. EROSION CONTROLS SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL BE ADEQUATE TO MAINTAIN SEDIMENT ON SITE.
2. ALL EXCAVATED SOILS NOT NEEDED ON SITE FOR BACKFILL OPERATIONS SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE TAKEN OFF SITE AND LEGALLY DISPOSED OF.
3. SOIL REMAINING ON SITE SHALL HAVE SILT FENCE TIGHTLY PLACED AROUND THE ENTIRE CIRCUMFERENCE OF THE PILE.
4. PROVIDE EROSION CONTROLS AS NECESSARY TO PREVENT EXISTING SOILS FROM DRAINING OFF SITE OR INTO EXISTING DRAINAGE STRUCTURES.
5. ERECTION OF EROSION CONTROLS SHALL BE IN ACCORDANCE WITH STATE AND LOCAL EROSION CONTROL REGULATIONS.



1
C9
SEDIMENT FENCE (SILT FENCE)
NOT TO SCALE

SEEDING SCHEDULE FOR WINTER / SPRING CONSTRUCTION ACTIVITIES

SEEDING MIXTURE

Species	Rate (lb/acre)
Rye (grain)	120
Annual lespedeza (Kobe in Piedmont and Coastal Plain, Korean in Mountains)	50

Omit annual lespedeza when duration of temporary cover is not to extend beyond June.

SEEDING DATES

Mountains-- Above 2500 ft: Feb 15 - May 15
Below 2500 ft.: feb. 1 - May 1
Piedmont--Jan. 1 - May 1
Coastal Plain--Dec. 1 - Apr. 15

SOIL AMENDMENTS

Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.

MULCH

Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

MAINTENANCE

Refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

SEEDING SCHEDULE FOR SUMMER CONSTRUCTION ACTIVITIES

SEEDING MIXTURE

Species	Rate (lb/acre)
Common Bermudagrass	40-80 (1-2 lb/1,000 sq. ft.)

SEEDING DATES

Coastal Plain--Apr. 1 - July
Piedmont--Apr. 15 - June 30

SOIL AMENDMENTS

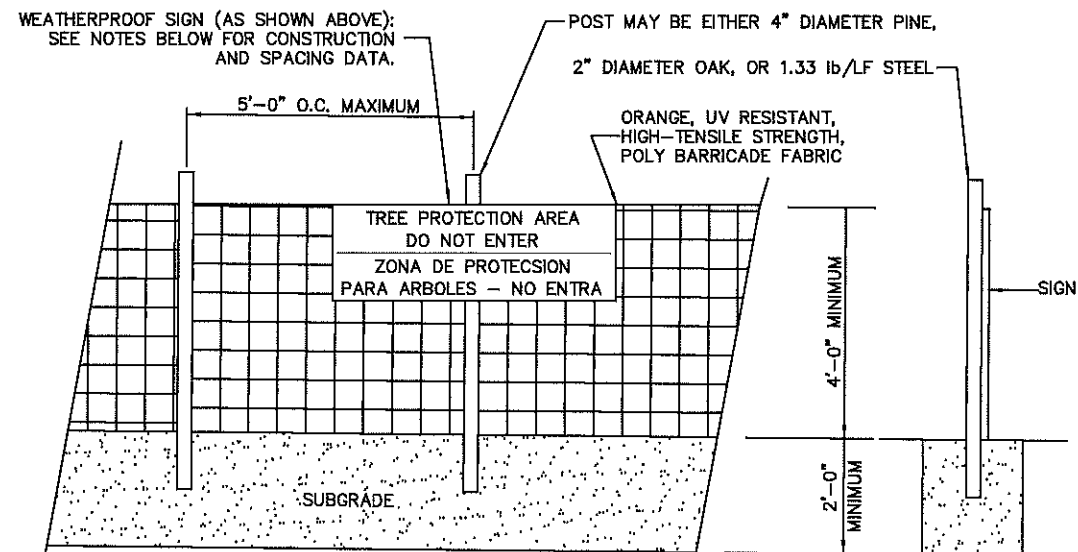
Apply lime and fertilizer according to soil tests, or apply 3,000 lb/acre ground agricultural limestone and 500 lb/acre 10-10-10 fertilizer.

MULCH

Use jute, excelsior matting, or other effective channel lining material to cover the bottom of channels and ditches. The lining should extend above the highest calculated depth of flow. On channel side slopes above this height, and in drainages not requiring temporary lining, apply 4,000 lb/acre grain straw and anchor straw by stapling netting over the top.

MAINTENANCE

A minimum of 3 weeks is required for establishment. Inspect and repair mulch frequently. Refertilize the following Apr. with 50 lb/acre nitrogen.



NOTES

INSTALL TREE PROTECTION FENCE AND SIGNAGE PRIOR TO CALLING FOR SITE INSPECTION. MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT. ADDITIONAL SIGNS MAY BE REQUIRED BASED ON ACTUAL FIELD CONDITIONS.

3
C9
TREE PROTECTION FENCE
NOT TO SCALE



8921 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD

PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:

08/01/16

ISSUED FOR:

CONSTRUCTION

REV.-DATE: ISSUED FOR: BY:

REV.	DATE	ISSUED FOR	BY
0	11/04/14	CONSTRUCTION	WCE
1	08/01/16	CONSTRUCTION	WCE

CONSULTANT:



2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-525-0744
WWW.KIMLEY-HORN.COM
SC License C00166

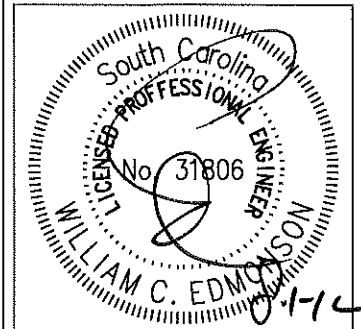
CONSULTANT:



DRAWN BY: CHK.: APV.:

KBB KRM WCE

LICENSER:



SHEET TITLE:

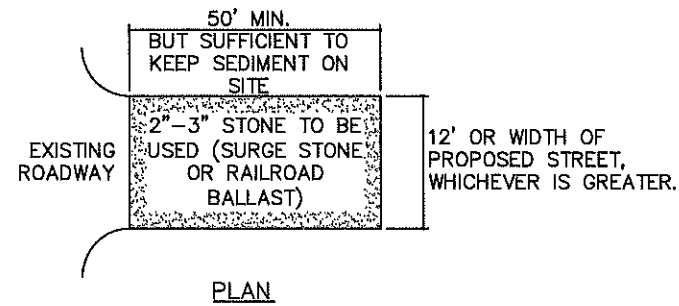
GRADING & EROSION CONTROL DETAILS

SHEET NUMBER: REVISION:

C9 **1**

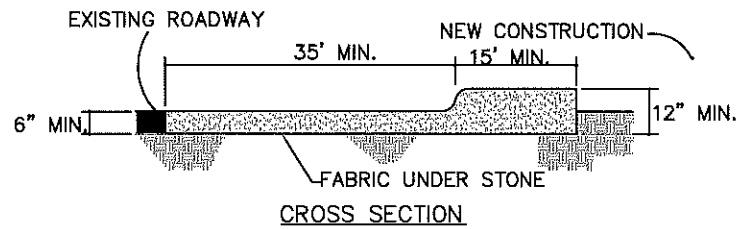
018985125

K:\ATL_Wireless\000_Verizon\2014_Sites\Sitton\CAD\CD\Rev1-07-11-16\Sitton_CD_R1.dwg August 1, 2016 9:04 AM By: kerry.pierre

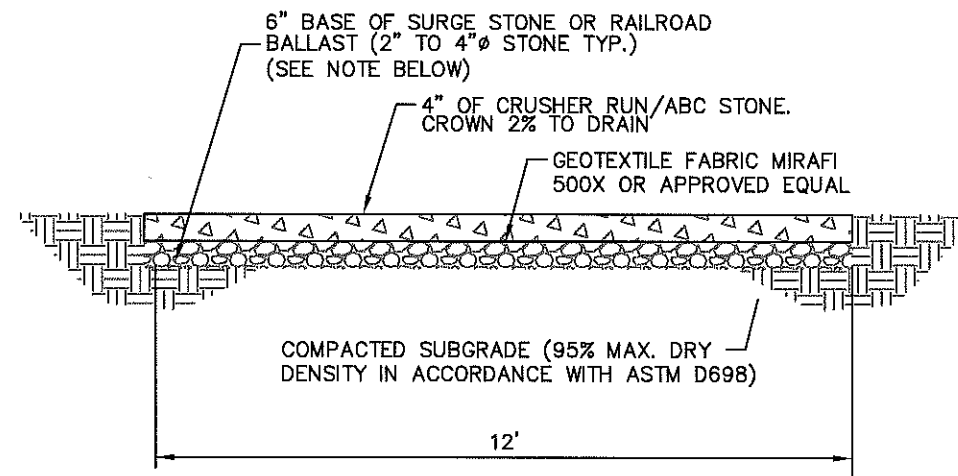


NOTES:

1. PUT SILT FENCE OR TREE PROTECTION FENCE UP TO ENSURE CONSTRUCTION ENTRANCE IS USED.
2. IF CONSTRUCTION ON THE SITES ARE SUCH THAT THE MUD IS NOT REMOVED BY THE VEHICLE TRAVEL-ING OVER THE STONE, THEN THE TIRES OF THE VEHICLES MUST BE WASHED BEFORE ENTERING THE PUBLIC ROAD.
3. IF A PROJECT CONTINUES TO PULL MUD AND DEBRIS ON TO THE PUBLIC ROAD, THE GOVERNING AUTHORITY WILL CLEAN THE AREA AND INVOICE THE FINANCIALLY RESPONSIBLE PERSON AS INDICATED ON THE FINANCIAL RESPONSIBILITY FORM.



1 CONSTRUCTION ENTRANCE
C10 NOT TO SCALE



NOTE:
IF DETERMINED NECESSARY DURING GRADING AND CONSTRUCTION OF THE ACCESS ROAD BY THE VERIZON WIRELESS PROJECT MANAGER, THE CONTRACTOR SHALL INSTALL 6" BASE OF SURGE STONE OR RAILROAD BALLAST (2" TO 4" ϕ STONE TYP.)

2 STANDARD ACCESS ROAD DETAIL
C10 NOT TO SCALE



8921 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD

PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:

08/01/16

ISSUED FOR:

CONSTRUCTION

REV. DATE ISSUED FOR BY:

REV.	DATE	ISSUED FOR	BY
0	11/04/14	CONSTRUCTION	WCE
1	08/01/16	CONSTRUCTION	WCE

CONSULTANT:



2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
SC License C00166

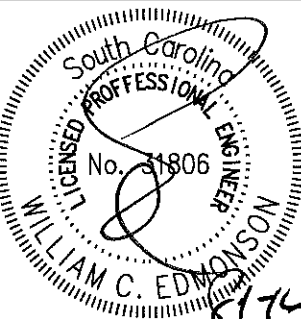
CONSULTANT:



DRAWN BY: CHK.: APV.:

KBB KRM WCE

LICENSER:



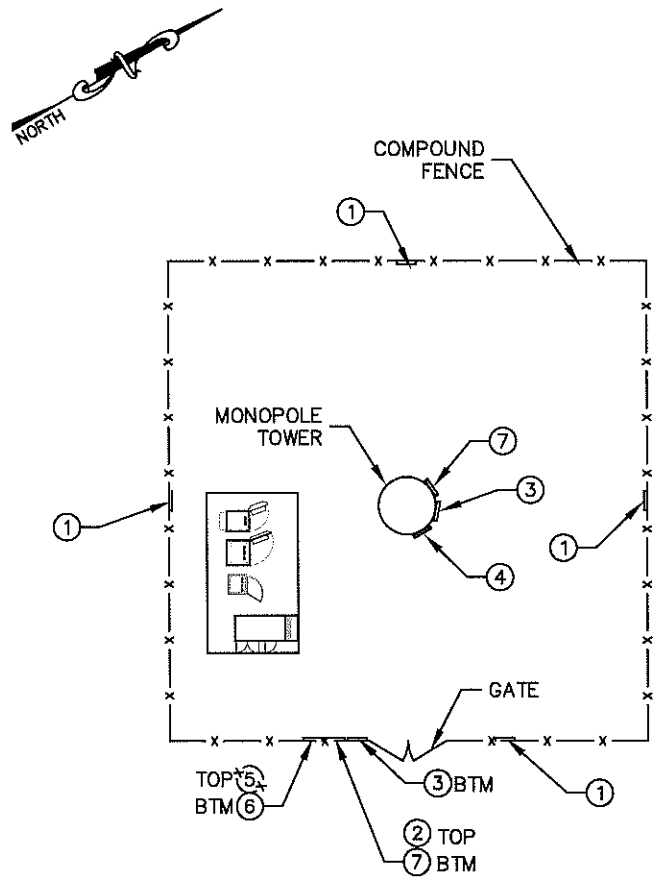
SHEET TITLE:

ACCESS ROAD
DETAILS

SHEET NUMBER: REVISION:

C10 1
018985125

K:\ATL_Wireless\000_Verizon\2014_Sites\Sifton\CAD\CD\Rev1-07-11-16\Sifton_CD_R1.dwg August 1, 2016 9:04 AM by: kerry.pierre

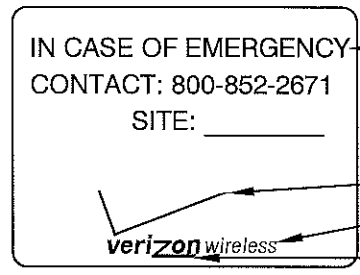


NOTE: SEE TYPICAL SIGNS AND SPECIFICATIONS DETAIL ON THIS SHEET FOR SIGN DESIGNATIONS.

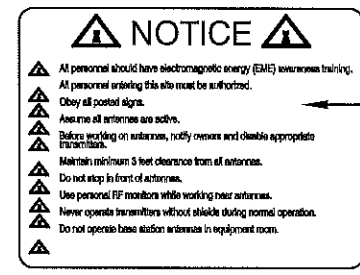
1
C11
OVERALL SIGN PLACEMENT PLAN VIEW
NOT TO SCALE



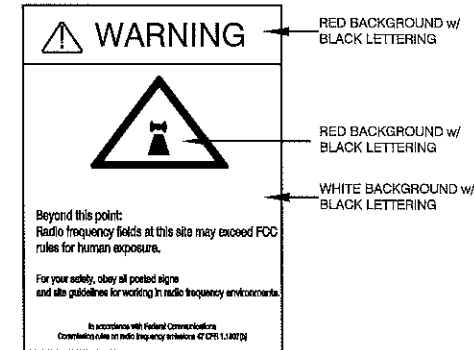
1 NO-TRESPASSING SIGN
18" HIGH X 24" WIDE
(OPERATIONS PROVIDED)



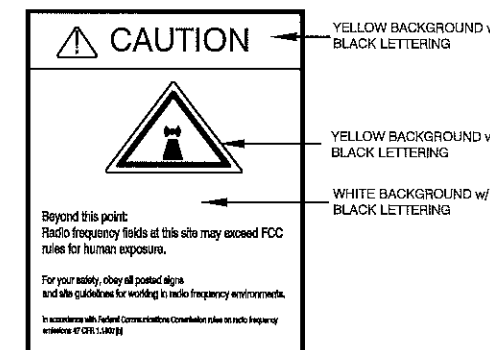
2 VERIZON WIRELESS-SITE ID SIGN
18" HIGH X 24" WIDE
(OPERATIONS PROVIDED)



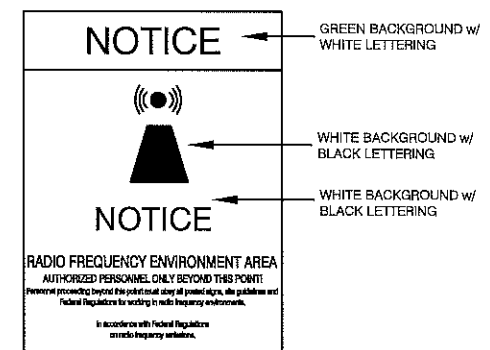
3 NOTICE-RFE SIGN
12" WIDE X 18" HIGH
(OPERATIONS PROVIDED)



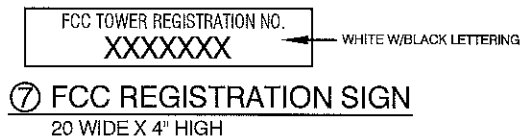
4 WARNING-RF SIGN (RED)
12" WIDE X 18" HIGH



5 CAUTION-RF SIGN (YELLOW)
12" WIDE X 18" HIGH

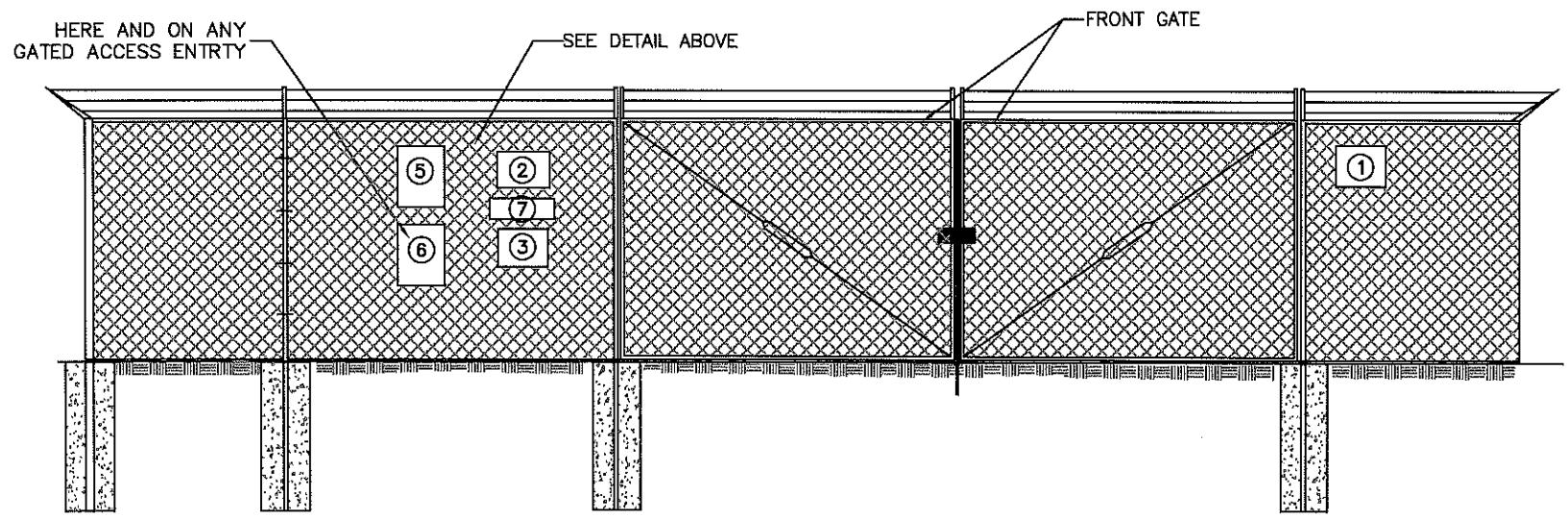


6 NOTICE-RF SIGN (BLUE)
12" WIDE X 18" HIGH



7 FCC REGISTRATION SIGN
20 WIDE X 4" HIGH

2
C11
TYPICAL SIGNS AND SPECIFICATIONS
NOT TO SCALE



3
C11
SITE SIGNAGE FRONT GATE VIEW
NOT TO SCALE

SIGNAGE NOTES:
1. SIGNS SHALL BE FABRICATED FROM CORROSION RESISTANT PRESSED METAL, AND PAINTED WITH LONG LASTING UV RESISTANT COATINGS.
2. SIGNS (EXCEPT WHERE NOTED OTHERWISE) SHALL BE MOUNTED TO THE TOWER, GATE, AND FENCE USING A MINIMUM OF 9 GAUGE ALUMINUM WIRE, HOG RINGS (AS UTILIZED IN FENCE INSTALLATIONS) OR BRACKETS WHERE NECESSARY. BRACKETS SHALL BE OF SIMILAR METAL AS THE STRUCTURE TO AVOID GALVANIC CORROSION.
3. ONE VERIZON SITE ID SIGN SHALL BE MOUNTED ON RIGHT DOOR OF THE SHELTER. TWO-SIDED TAPE SHALL BE UTILIZED AT EACH CORNER ON THE BACKSIDE TO AID PLACEMENT UNTIL ADHESIVE SETS.

verizon
8821 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:
VERIZON NAME: SITTON
VERIZON No.: TBD
PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:
08/01/16

ISSUED FOR:
CONSTRUCTION

REV.	DATE	ISSUED FOR	BY
0	11/04/14	CONSTRUCTION	WCE
1	08/01/16	CONSTRUCTION	WCE

CONSULTANT:
Kimley»Horn
2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
SC License C00166

CONSULTANT:
SOUTH CAROLINA
KIMLEY-HORN
AND
ASSOCIATES,
INC.
NO. C00166
CERTIFICATE OF AUTHORIZATION

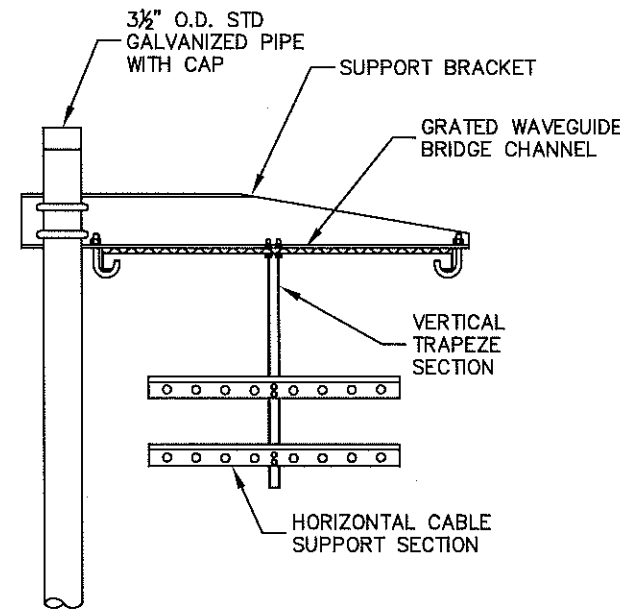
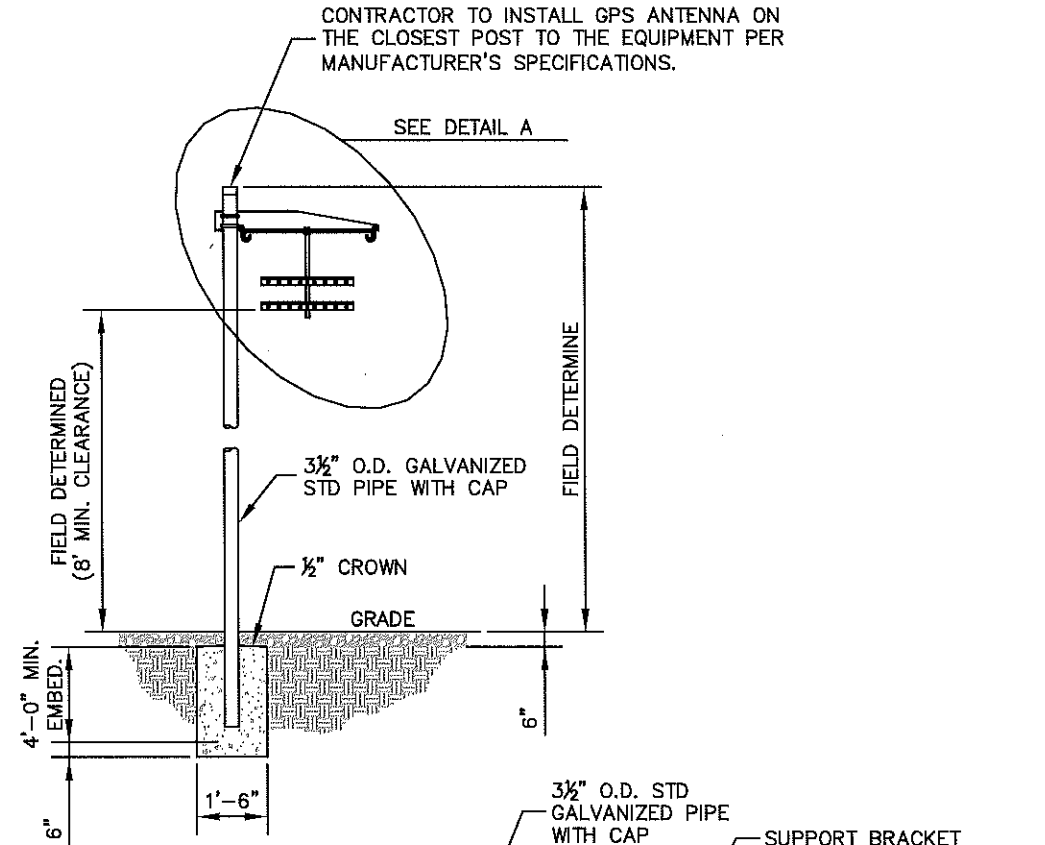
DRAWN BY: CHK.: APV.:
KBB KRM WCE

LICENSER:
South Carolina
LICENSED PROFESSIONAL ENGINEER
No. 31806
WILLIAM C. EDWARDS
8/1/16

SHEET TITLE:
SITE SIGNAGE DETAILS

SHEET NUMBER: REVISION:
C11 **1**
018985125

K:\ATL_Wireless\000_Verizon\2014 Sites\Sifton\CAD\Rev1-11-16\Sifton_CD_R1.dwg August 1, 2016 9:04 AM By: kerry.pierre

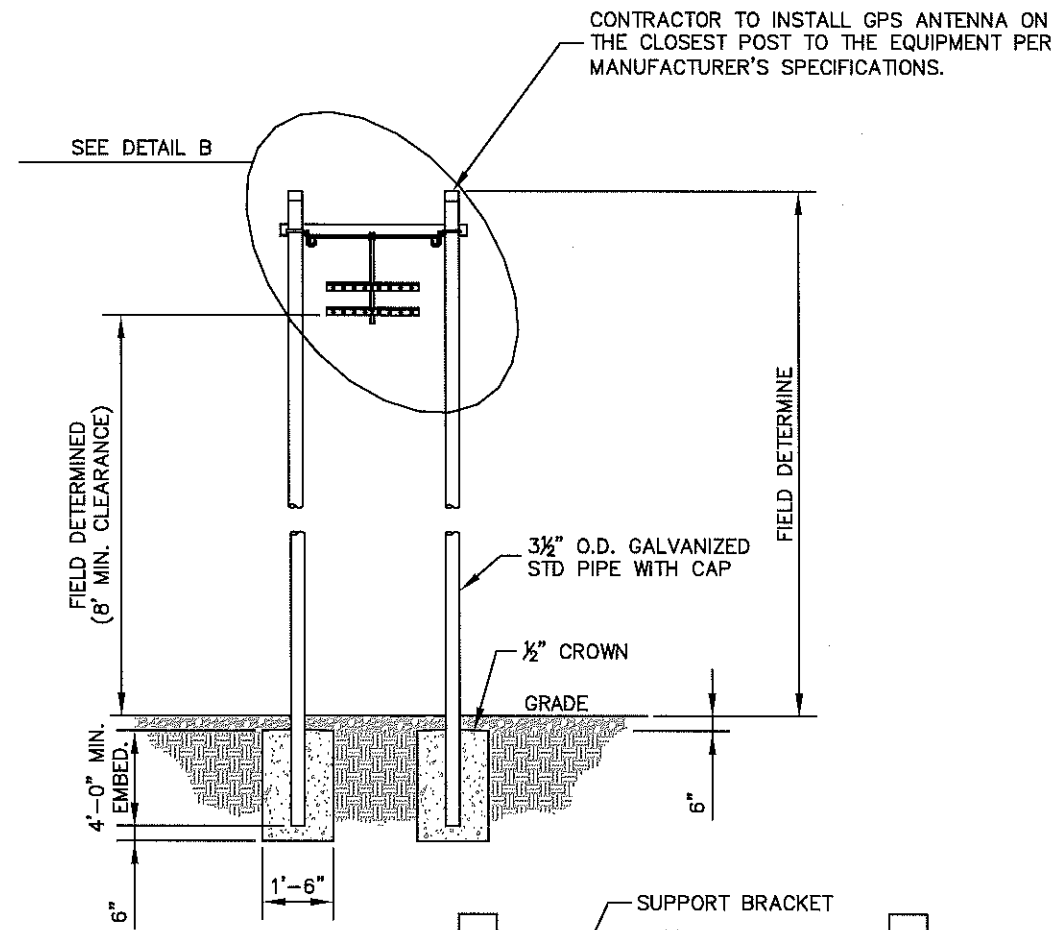


DETAIL A

ANDREW 1 POST WAVEGUIDE BRIDGE KIT (PART # WB-K210-B15, OR APPROVED EQUIVALENT)

NOTE:
1. ALL MATERIALS FURNISHED BY CONTRACTOR UNLESS OTHERWISE NOTED.

1 WAVEGUIDE BRIDGE DETAIL
C12 NOT TO SCALE



DETAIL B

ANDREW 2 POST WAVEGUIDE BRIDGE KIT (PART # WB-K410-B15, OR APPROVED EQUIVALENT)

NOTE:
1. ALL MATERIALS FURNISHED BY CONTRACTOR UNLESS OTHERWISE NOTED.

2 WAVEGUIDE BRIDGE DETAIL
C12 (ALTERNATIVE DESIGN WITH 2 PIPE COLUMNS) NOT TO SCALE



8821 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD
PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:

08/01/16

ISSUED FOR:

CONSTRUCTION

REV.-DATE: ISSUED FOR: BY:

0	11/04/14	CONSTRUCTION	WCE
1	08/01/16	CONSTRUCTION	WCE

CONSULTANT:



2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
SC License C00166

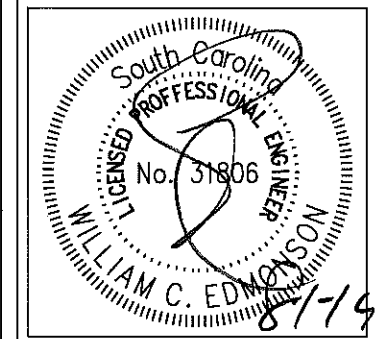
CONSULTANT:



DRAWN BY: CHK.: APV.:

KBB KRM WCE

LICENSER:



SHEET TITLE:

WAVEGUIDE BRIDGE DETAILS

SHEET NUMBER: REVISION:

C12 1
018985125

verizon

8921 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD

PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:

10/21/16

ISSUED FOR:

CONSTRUCTION

REV.: DATE: ISSUED FOR: BY:

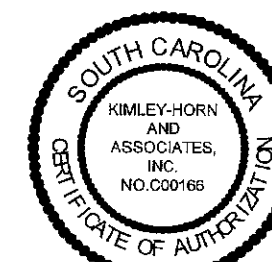
0	11/04/14	CONSTRUCTION	WCE
1	08/01/16	CONSTRUCTION	WCE
2	10/21/16	CONSTRUCTION	WCE

CONSULTANT:

Kimley»Horn

2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
SC License C00165

CONSULTANT:



DRAWN BY: CHK.: APV.:

KBB KRM WCE

LICENSER:

FOR ILLUSTRATIVE PURPOSES ONLY - NO SIGNATURE REQUIRED

SHEET TITLE:

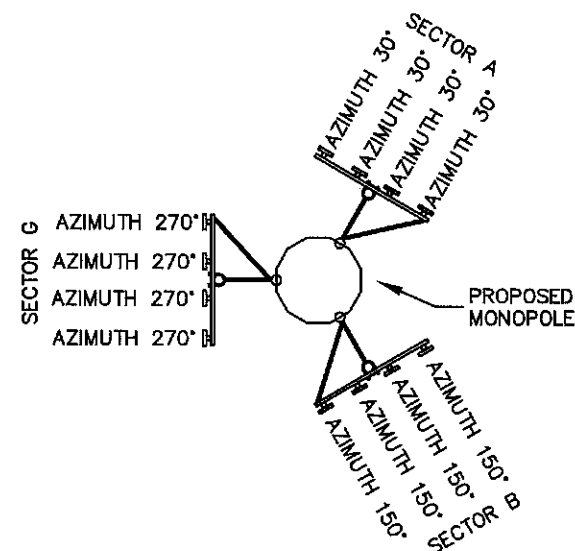
ANTENNA AND TOWER ELEVATION DETAILS

SHEET NUMBER: REVISION:

C13

2

018985125



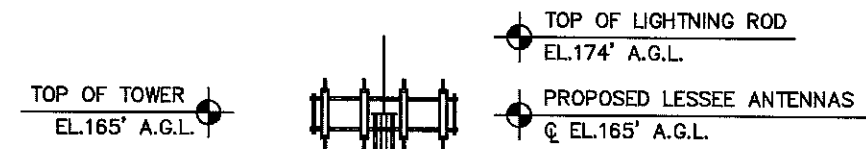
1 ANTENNA ORIENTATION PLAN

(NOT TO SCALE, FOR ILLUSTRATIVE PURPOSES ONLY, SEE STRUCTURAL ANALYSIS BY OTHERS TO CONFIRM ANTENNA MOUNT TYPE)

ANTENNA SECTOR	AZIMUTH IN DEGREES	MECHANICAL DOWN TILT	LICENSED FREQUENCY	ANTENNA* (QTY) MAKE/MODEL	REMOTE RADIO UNIT	COMPOSITION CABLES		
						LENGTH	COAX QTY	COAX SIZE
SECTOR A	30°	0°	850	-	-	404'±	-	-
	30°	0°	1900	(0) ANDREW/SBNHH-1D65C	RRUS32	404'±	-	-
	30°	0°	2100	(0) ANDREW/SBNHH-1D65C	RRUS32	404'±	-	-
	30°	0°	700	(2) ANDREW/SBNHH-1D65C	RRUSB13/A2	404'±	2	1-5/8"φ
SECTOR B	150°	0°	850	-	-	404'±	-	-
	150°	0°	1900	(0) ANDREW/SBNHH-1D65C	RRUS32	404'±	-	-
	150°	0°	2100	(0) ANDREW/SBNHH-1D65C	RRUS32	404'±	-	-
	150°	0°	700	(2) ANDREW/SBNHH-1D65C	RRUSB13/A2	404'±	2	1-5/8"φ
SECTOR G	270°	0°	850	-	-	404'±	-	-
	270°	0°	1900	(0) ANDREW/SBNHH-1D65C	RRUS32	404'±	-	-
	270°	0°	2100	(0) ANDREW/SBNHH-1D65C	RRUS32	404'±	-	-
	270°	0°	700	(2) ANDREW/SBNHH-1D65C	RRUSB13/A2	404'±	2	1-5/8"φ

* CONTRACTOR TO INSTALL ANY RAYCAP BOXES AS NECESSARY. FOR TOWER DESIGN, ANALYSIS, OR LEASING PURPOSES, SIX (6) FUTURE 1 5/8" COAX CABLES SHALL BE CONSIDERED. VERIFY WITH VERIZON WIRELESS PROJECT MANAGER PRIOR TO CONSTRUCTION.

NOTES:
 1. ALL INFORMATION ON THIS PAGE IS PROVIDED BY VERIZON WIRELESS AND/OR OTHERS AND IS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. CONTRACTOR SHALL CONTACT THE VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION FOR ALL DETAILED ANTENNA, AND COAX CABLE INFORMATION.
 2. REFER TO STRUCTURAL ANALYSIS BY TOWER OWNER FOR ANALYSIS OF PROPOSED TOWER.
 3. IT IS UNDERSTOOD THAT KIMLEY-HORN MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, FINDINGS, DESIGNS, RECOMMENDATIONS, SPECIFICATIONS, OPINION, OR PROFESSIONAL ADVICE RELATING TO THE STRUCTURAL ADEQUACY OF THE PROPOSED TOWER OR ATTACHMENT OF ANTENNAS OR OTHER APPURTENANCES.



2 MONOPOLE TOWER ELEVATION - NORTHEAST VIEW

(FACING SOUTHWEST) NOT TO SCALE

- NOTES:**
1. ALL PROPOSED ATTACHMENTS TO TOWER BASED ON TOWER DESIGN DRAWINGS BY OTHERS (SEE GENERAL NOTE 1.07, SHEET N1).
 2. THE TOWER ELEVATION SHOWN IS FOR REFERENCE ONLY.
 3. COAX CABLE LENGTHS ARE APPROXIMATE. CONTRACTOR TO VERIFY CORRECT LENGTH IN FIELD AT TIME OF CONSTRUCTION.
 4. PROPOSED TOWER WILL BE GALVANIZED STEEL-GRAY IN COLOR.
 5. PROPOSED ANTENNAS WILL BE LIGHT GRAY IN COLOR.

K:\ATL_Wireless\000_Verizon\2014_Sites\Sitton\CAD\Rev2-10-21-16\Sitton_CD_R2.dwg October 21, 2016 10:09 AM by: william.hooks

WILLIAM C. EDMONSON
 ER
 NOS
 21612

SHEET TITLE:

LANDSCAPING PLAN AND NOTES

SHEET NUMBER:

REVISION:

C2

0

018985125

PECIFICATION

DOT	CALIPER/ SIZE	SPACING
&B	5/8"	5' O.C.
&B	1 3/4"	SEE PLAN

BASIC SERVICE ROUTING NOTES AND SPECIFICATIONS:

- ALL ELECTRICAL WORK SHALL COMPLY WITH NEC, STATE, AND LOCAL CODES. ALL ELECTRICAL DEVICES, MATERIALS, AND SERVICE EQUIPMENT SHALL BE LABEL-LISTED BY AN APPROVED THIRD PARTY TESTING AGENCY.
- CONTRACTOR SHALL OBTAIN OWNER/TENANT SPECIFICATIONS AND REVIEW FOR ADDITIONAL DETAILS AND REQUIREMENTS THAT MAY NOT BE SHOWN IN THESE DRAWINGS. CONTRACTOR SHALL COMPLY WITH ANY ADDITIONAL OWNER/TENANT SPECIFICATIONS AND REQUIREMENTS.
- CONTRACTOR SHALL COORDINATE WITH THE ELECTRIC UTILITY FOR THE EXACT TRANSFORMER LOCATION, METERING REQUIREMENTS, AND SERVICE ROUTING. CONTRACTOR SHALL COORDINATE WITH THE TELEPHONE UTILITY FOR THE EXACT TELEPHONE REQUIREMENTS AND SERVICE ROUTING.
- PRIOR TO PURCHASING EQUIPMENT, THE CONTRACTOR SHALL CONTACT THE ELECTRIC UTILITY AND OBTAIN IN WRITING THE MAXIMUM AVAILABLE FAULT CURRENT AT THE UTILITY SERVICE POINT. PROVIDE MAX AFC SIGNAGE AS REQUIRED PER NEC 110.24. THE CONTRACTOR SHALL ENSURE ALL ELECTRICAL EQUIPMENT, CIRCUIT BREAKERS, DISCONNECTS, FUSES, AND PANELBOARDS HAVE A FAULT CURRENT INTERRUPTING RATING GREATER THAN THE AVAILABLE FAULT CURRENT. IN NO CASE SHALL THE FAULT CURRENT INTERRUPTING RATING BE LESS THAN 10,000 AMPS.
- CONTRACTOR TO PROVIDE 200 LB TEST POLYETHYLENE PULL CORDS SECURELY FASTENED AT EACH END OF POWER AND TELCO CONDUIT INCLUDING INNERDUCTS PROVIDE CAPS ON ENDS OF UNUSED CONDUIT.
- CONTRACTOR TO PROVIDE A REBAR MARKER WITH AT LEAST 2 FEET EXPOSED ABOVE GRADE AND PAINTED BRIGHT ORANGE TO INDICATE LOCATION OF CONDUIT CAPPED BELOW GRADE.
- PRIOR TO TRENCHING CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL REPAIR AT CONTRACTOR'S EXPENSE ANY DAMAGE TO EXISTING UTILITIES.
- CONTRACTOR TO VERIFY EXACT ROUTING OF POWER AND TELCO CONDUIT WITH LOCAL UTILITIES AND OWNER/TENANT. ENSURE ALL CONDUIT STUB-UPS ACCOMMODATE EQUIPMENT REQUIREMENTS.
- UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC UNLESS NOTED OTHERWISE. USE SCHEDULE 80 PVC CONDUIT UNDER ROADS AND IN AREAS ABOVE GRADE THAT EXPOSED AND SUBJECT TO DAMAGE. MANUFACTURED BENDS SHALL HAVE A MINIMUM RADIUS OF 24 INCHES.
- CONDUIT RUNS SHALL HAVE A CONTINUOUS SLOPE DOWNWARD AND AWAY FROM THE EQUIPMENT TO ALLOW WATER TO FLOW AWAY FROM THE EQUIPMENT AND SHELTER. EXCAVATE TRENCHES ALONG STRAIGHT LINES PRIOR TO INSTALLING CONDUIT TO ACCOMMODATE ADJUSTING THE ELEVATION, AS NEEDED.
- CONDUIT ENTERING EQUIPMENT SHALL BE SEALED WITH A SEALANT THAT IS IDENTIFIED FOR USE WITH THE CABLE/CONDUCTOR INSULATION, SHIELDING, ETC.
- THE OWNER SHALL FURNISH AND THE CONTRACTOR SHALL INSTALL ADDITIONAL SIGNAGE TO BE LOCATED AT THE COMPOUND FENCE. CONTRACTOR SHALL COORDINATE WITH OWNER/TENANT CONSTRUCTION MANAGER FOR PLACEMENT OF SIGNAGE.
- UPON COMPLETION OF CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES TO THE LANDSCAPING AREA.
- CONTRACTOR ENSURE A MINIMUM 3' WORKING CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT PER NEC.
- THE CONTRACTOR SHALL ADD ENGRAVED PHENOLIC LABEL TO THE FRONT OF PANEL 'PP1' THAT READS, MAXIMUM DRAW OF ALL RECTIFIERS PLUS ALL ANCILLARY EQUIPMENT SHALL NOT EXCEED 30KW. IF MORE THAN 30KW OF POWER IS REQUIRED, THE EXISTING 30KW GENERATOR WILL NEED TO BE UPGRADED.
- CONTRACTOR TO PROVIDE PULL BOXES AS NEEDED TO ENSURE NO GREATER THAN 360 DEGREES OF BENDS BETWEEN PULL POINTS IN CONDUIT RUNS.
- CONTRACTOR COORDINATE WITH LOCAL UTILITY COMPANY FOR SERVICE TO THIS POINT.
- COORDINATE EXACT ROUTING, INSIDE OR OUTSIDE FENCE, WITH OWNER/TENANT CONSTRUCTION MANAGER. ROUTE CONDUIT WITHIN 3' OF FENCE.
- CONDUITS SHOULD BE ROUTED OVERHEAD ON ICE BRIDGE EXCEPT GENERATOR CONDUITS RUN ON CABLE TRAY MOUNTED TO CONCRETE PAD.

GROUNDING NOTES AND SPECIFICATIONS:

- THE GROUND RING SHALL CONSIST OF #2 AWG BARE SOLID TINNED COPPER (STC) CONDUCTOR, UNLESS NOTED OTHERWISE, BURIED AT 30" BELOW FINISHED GRADE (OR BELOW FROST LINE). LOCATE 24" MINIMUM AND 36" MAXIMUM FROM EQUIPMENT PAD AND FROM TOWER FOUNDATION. ALL CONNECTIONS SHALL BE MADE USING A PARALLEL TYPE EXOTHERMIC WELD, UNLESS NOTED OTHERWISE.
- INSTALL GROUND RODS AS SHOWN AND AS REQUIRED. GROUND RODS TO BE COPPER CLAD STEEL, 5/8" DIAMETER AND 10FT IN LENGTH. SPACING BETWEEN GROUND RODS SHALL BE 10FT MINIMUM AND 15FT MAXIMUM. TOP OF GROUND ROD TO BE 30" MINIMUM BELOW GRADE (OR BELOW FROST LINE). BOND TOP OF GROUND ROD TO GROUND WIRE WITH EXOTHERMIC WELD. DO NOT EXOTHERMICALLY WELD ANYTHING TO GROUND ROD EXCEPT GROUND WIRE WHICH PASSES OVER TOP OF GROUND ROD (CLAMPED CONNECTIONS TO GROUND ROD PER TOWER MANUFACTURERS DETAILS ARE ACCEPTABLE).
- EQUIPMENT GROUND RING SHALL HAVE A MINIMUM OF 4 GROUND RODS, INSTALLED AT THE CORNERS OF THE GROUND RING PLUS ADDITIONAL RODS AS REQUIRED TO COMPLY WITH THE SPACING REQUIREMENTS. TOWER GROUND RING SHALL HAVE A MINIMUM OF 3 GROUND RODS, EXCEPT USE 4 RODS AT A MONOPOLE TOWER.
- EQUIPMENT GROUND RING AND TOWER GROUND RING SHALL BE BONDED TOGETHER WITH TWO #2 STC GROUND LEADS, TYPICALLY ONE ON EACH SIDE OF ICE BRIDGE.
- BOND TOWER TO TOWER GROUND RING AT THREE LOCATIONS WITH #2 STC GROUND LEAD. SELF SUPPORT TOWERS SHALL HAVE EACH LEG BONDED TO GROUND RING, MONOPOLES AND GUYED TOWERS SHALL HAVE GROUND LEADS EQUALLY SPACED AROUND TOWER. EXOTHERMICALLY WELD GROUND LEADS TO TOP OF BASE PLATES, OR ATTACH TO TOWER USING TOWER MANUFACTURER PROVIDED DETAIL.
- PROVIDE #2 STC RADIALS FROM THE TOWER GROUND RING TO EACH FENCE CORNER POST. RADIALS SHALL HAVE GROUND RODS AS PER THE REQUIRED SPACING. THE GROUND ROD AT THE END OF EACH RADIAL SHALL BE 24" MAXIMUM FROM FENCE CORNER POST.
- MINIMUM BEND RADIUS FOR #2 AWG GROUND WIRE IS 12", EXCEPT USE 24" FOR TOWER GROUND RINGS AND EQUIPMENT PAD GROUND RINGS.
- GROUND ALL EXTERIOR EXPOSED METAL OBJECTS. USE TWO HOLE LUGS FOR CONNECTION TO FLAT METAL SURFACES. USE ONLY STAINLESS STEEL HARDWARE ON ALL MECHANICAL CONNECTIONS. CLEAN ALL SURFACES (AND STRIP PAINTED SURFACES) TO BARE BRIGHT METAL PRIOR TO MAKING GROUND CONNECTIONS. APPLY ANTI-OXIDE COMPOUND TO ALL CONNECTIONS. APPLY ZINC RICH PAINT (COLD GALV.) TO ALL EXOTHERMIC WELDS, AND TO ANY METAL EXPOSED BY CLEANING, STRIPPING, GRINDING, CUTTING OR DRILLING.
- ALL GROUNDING CONDUCTORS ABOVE GRADE SHALL BE RUN IN 3/4" FLEXIBLE PVC CONDUIT. CONDUIT SHALL BEGIN WITHIN 3/4" OF ABOVE GROUND CONNECTION POINT, SHALL EXTEND 24" BELOW GRADE MINIMUM, AND SHALL BE FILLED WITH SEALANT AT ABOVE GROUND CONNECTION POINT. SECURE CONDUIT EVERY 24" ON VERTICAL RUNS AND EVERY 36" ELSEWHERE WITH NON-METALLIC TIES.
- WHERE POSSIBLE, MOUNT TDSGA-PA14 TOWER BOTTOM GROUND BAR ON DEDICATED POST BELOW COAX CABLES COMING OFF TOWER. WHERE INSTALLATION OF POST WOULD PUT TOWER BOTTOM GROUND BAR TOO FAR FROM COAX GROUND KITS, CLAMP TDSGA-BC14 TOWER BOTTOM GROUND BAR DIRECTLY TO TOWER STEEL (USUALLY OCCURS ON MONOPOLE TOWERS) AND BOND TO TOWER GROUND RING WITH TWO #2 STC LEADS LUGGED TO GROUND BAR AND EXOTHERMICALLY WELDED TO GROUND RING.
- AT EQUIPMENT PAD, SUSPEND TDSGA-WB17 EXTERIOR GROUND BAR FROM ICE BRIDGE AND ISOLATE FROM ICE BRIDGE. BOND GROUND BAR TO EQUIPMENT GROUND RING WITH TWO #2 STC LEADS LUGGED TO GROUND BAR AND EXOTHERMICALLY WELDED TO GROUND RING. RUN LEADS DOWN NEAREST ICE BRIDGE POST AND SECURE TO POST WITH NON-METALLIC TIES EVERY 24 INCHES.
- ALL ICE BRIDGE SECTIONS ARE TO BE JUMPERED TOGETHER WITH #2 WIRE, EITHER BARE TINNED COPPER OR GREEN INSULATED STRANDED. ICE BRIDGE SHALL BE GROUNDED AT EACH END WITH #2 STC WIRE LUGGED TO ICE BRIDGE AND EXOTHERMICALLY WELDED TO UPPER PORTION OF NEAREST ICE BRIDGE POST.
- BOND EACH ICE BRIDGE POST TO GROUND RING WITH #2 STC LEAD. EXOTHERMICALLY WELD #2 TO ICE BRIDGE POST BELOW TOP OF GRAVEL. EACH POST TO HAVE SEPARATE GROUND LEAD - DO NOT DAISY CHAIN POSTS TOGETHER.
- BOND EACH H-FRAME POST TO NEAREST PORTION OF GROUND SYSTEM WITH #2 STC LEAD. EXOTHERMICALLY WELD #2 TO H-FRAME POST BELOW TOP OF GRAVEL.
- BOND SURFACE MOUNTED CABLE TRAY TO GROUND RING WITH #2 STC LEAD LUGGED TO SIDE OF GRIP STRUT CABLE TRAY COVER AND EXOTHERMICALLY WELDED TO GROUND RING.
- BOND EACH COMMSCOPE RBA72 CABINET AND EACH ERICSSON 6120 CABINET TO GROUND RING WITH #2 AWG TINNED SOLID BARE COPPER CONDUCTOR LUGGED TO CABINET GROUND BAR AND EXOTHERMICALLY WELDED TO GROUND RING. RUN GROUND LEAD IN FLEX CONDUIT ACROSS CONCRETE PAD BELOW CABLE LADDER, THEN DOWN INTO GRAVEL AREA. CONNECT FLEX CONDUIT TO CABINET AT FACTORY KNOCKOUT (RBA72) OR PLINTH COVER PLATE (6120) WITH POSITIVE MECHANICAL FLEXIBLE CONDUIT FITTING.
- BOND EACH COMMSCOPE RBA72-36 BATTERY CABINET TO GROUND RING WITH #2 AWG TINNED SOLID BARE COPPER CONDUCTOR LUGGED TO CABINET BODY AND EXOTHERMICALLY WELDED TO GROUND RING. RUN GROUND LEAD IN FLEX CONDUIT ALONG BACK OF RBA72 CABINET, ACROSS CONCRETE PAD BELOW CABLE LADDER, THEN DOWN INTO GRAVEL AREA. CONNECT TWO HOLE LUG TO BACK OF CABINET AT FACTORY PROVIDED GROUNDING STUDS.
- BOND GENERATOR TO GROUND RING WITH #2 STC AT TWO DIAGONALLY OPPOSITE LOCATIONS BY DRILLING AND BOLTING TWO HOLE LUG TO FINS ON GENERATOR BASE STRUCTURE. GROUND LEADS SHOULD RUN ALONG BASE OF GENERATOR AND TAKE SHORTEST PATH ACROSS CONCRETE PAD TO GRAVEL AREA, THEN CONTINUE TO GROUND RING.
- BOND GPS ANTENNA and GPS ANTENNA MOUNT TO TSDGA GROUND BAR ON ICE BRIDGE WITH #2 GREEN INSULATED STRANDED GROUND WIRE.
- PROVIDE TWO GROUND RODS OUTSIDE GATES OF COMPOUND. DISTANCE BETWEEN GROUND RODS SHALL MATCH WIDTH OF GATE OPENING, AND DISTANCE FROM FENCE SHALL MATCH LENGTH OF LONGEST INDIVIDUAL GATE LEAF. BOND GATE POSTS TOGETHER WITH #2 STC LEAD WHICH RUNS PAST AND CONNECTS TO GROUND RODS OUTSIDE GATES.
- BOND EACH GATE POST WITH #2 STC TO NEAREST PORTION OF GROUNDING SYSTEM INSIDE COMPOUND.
- BOND EACH GATE TO GATE POST WITH FLEXIBLE INSULATED OR BRAIDED #4/0 COPPER STRAP. EXOTHERMICALLY WELD STRAP TO BOTH GATE AND GATE POST.
- ANY FENCE POST WITHIN 6FT OF A GROUNDED METAL OBJECT SHALL BE BONDED TO THE NEAREST GROUND RING. ANY FENCE WITHIN 6FT OF A GROUND RING SHALL HAVE THE LINE POSTS BONDED TO THE GROUND RING AT 20FT MAXIMUM INTERVALS AS MEASURED ALONG THE LENGTH OF THE FENCE.
- NOTIFY VZW CM TO INSPECT GROUND RING BEFORE BACKFILLING. CONTRACTOR SHALL HIRE A 3RD PARTY TO PERFORM AN IEEE81 FALL OF POTENTIAL METHOD GROUND TEST. MAXIMUM ALLOWABLE RESISTANCE TO GROUND IS 5 OHMS. PROVIDE ADDITIONAL GROUND SYSTEM COMPONENTS AS REQUIRED TO ACHIEVE THIS VALUE.
- REFER TO TOWER GROUNDING DIAGRAM AND NOTES FOR GROUND SYSTEM REQUIREMENTS ON THE TOWER.
- GROUNDING OF ALL ELECTRICAL EQUIPMENT SHALL BE AS PER NEC, MUNICIPAL AND UTILITY COMPANY REQUIREMENTS.



8921 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD

PRATER FARM ROAD
SENECA, SC 29678
OCONEE COUNTY

CURRENT ISSUE DATE:

7/29/16

ISSUED FOR:

CONSTRUCTION

REV. DATE ISSUED FOR BY

REV.	DATE	ISSUED FOR	BY
0	11/6/14	CONSTRUCTION	JKM
1	7/29/16	CONSTRUCTION	CCH

CONSULTANT:



2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
NC License F-0102

CONSULTANT:

APOGEE
Consulting Group
Engineers | Architects

Raleigh, NC
Indianapolis, IN
Philadelphia, PA
Pittsburgh, PA
Virginia Beach, VA
Fort Collins, CO
(919) 858-7420

ACG PROJECT NO.: 2014 477

DRAWN BY: CHK: APV:

CAR	NAC	CCH
-----	-----	-----

LICENSER:

SHEET TITLE:

NOTES AND SPECIFICATIONS

SHEET NUMBER: REVISION:

EO

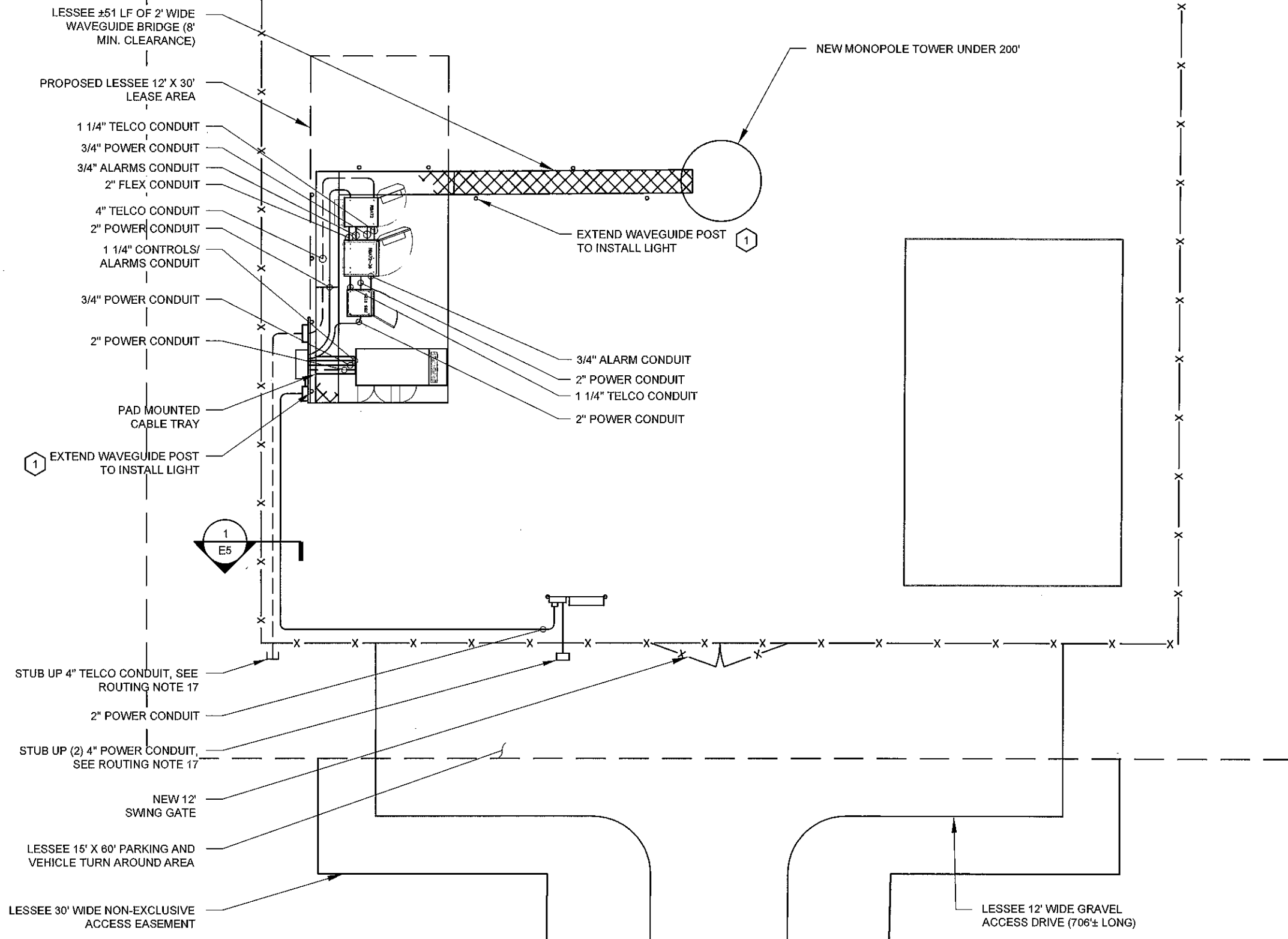
1

018985125



L:\Projects - Eng\2014 Projects\2014\7-16-14\K4-VZM-Sitton_SC_New_Site\DWG July 28, 2016 2:50 PM by: ccmrby

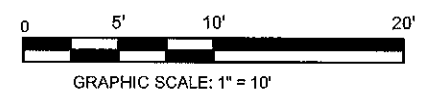
L:\Projects - Eng\2014 Projects\2014\477-KHA-VZV Sitton SC New Site.dwg July 29, 2016 2:51 PM by: amason



KEY NOTES

- AREA LIGHT LITHONIA HFR 250M SCWA DNA LP1. CONTROL VIA CONTRACTOR PROVIDED MANUAL TIMER SWITCH (WEATHERPROOF).

1 E1 BASIC SERVICE ROUTING PLAN
SCALE: 1" = 10'



verizon
8921 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:
VERIZON NAME: SITTON
VERIZON No.: TBD
PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:
7/29/16

ISSUED FOR:
CONSTRUCTION

REV.	DATE	ISSUED FOR:	BY:
0	11/6/14	CONSTRUCTION	JKM
1	7/29/16	CONSTRUCTION	CCH

CONSULTANT:
Kimley»Horn
2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
NC License F-0102

CONSULTANT:
APOGEE Consulting Group
Engineers | Architects
Raleigh, NC
Indianapolis, IN
Philadelphia, PA
Pittsburgh, PA
Virginia Beach, VA
Fort Collins, CO
(919) 858-7420
ACG PROJECT NO.: 2014 477

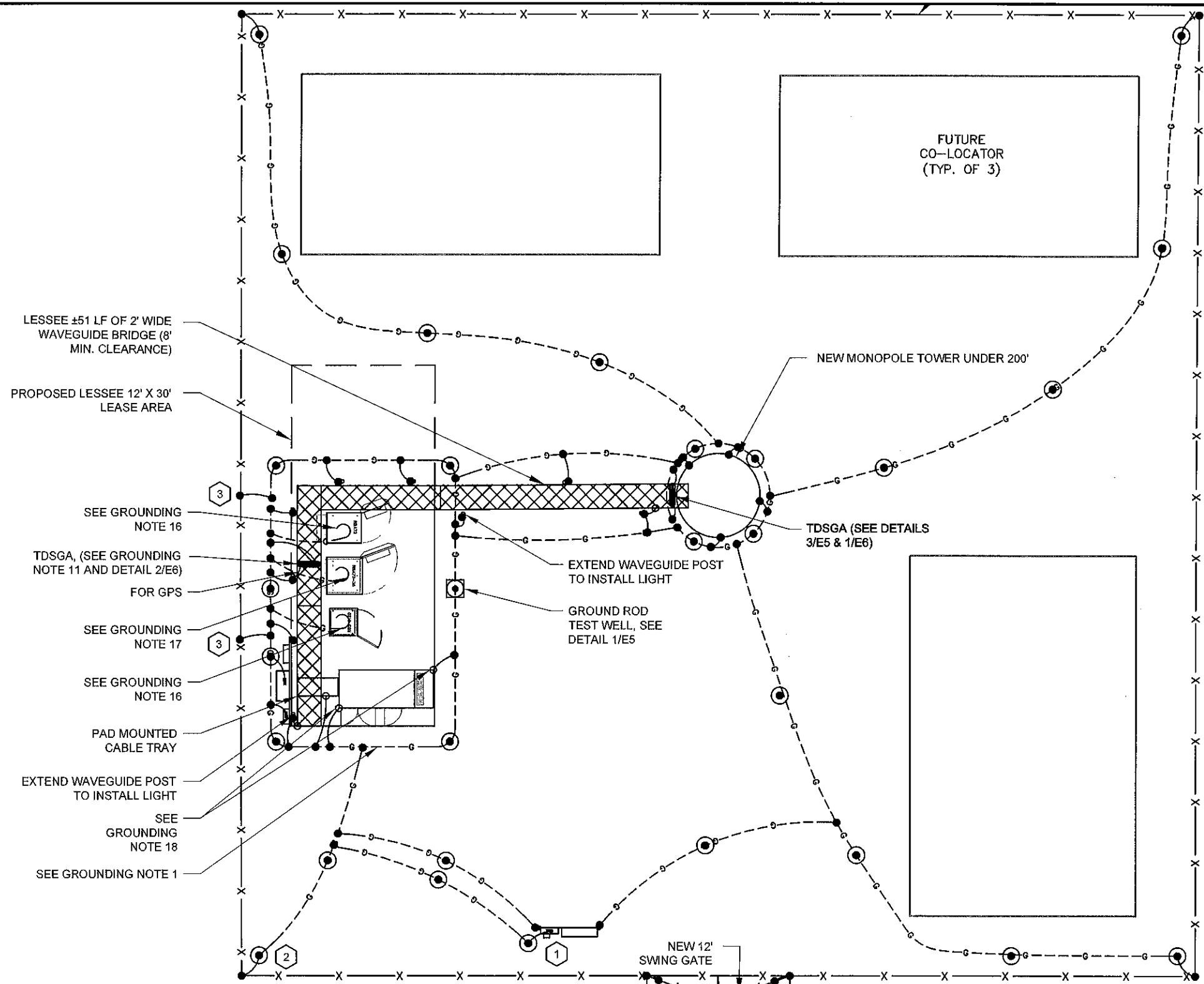
DRAWN BY:	CHK:	APV.:
CAR	NAC	CCH

LICENSER:
SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 31981
CORBIN C. HARDY

SHEET TITLE:
BASIC SERVICE ROUTING PLAN

SHEET NUMBER: **E1** REVISION: **1**
018985125

L:\Projects - E:\02014 Projects\2014477-KHA-VZW-Sitton-SC-New-Site\DWG\2014477-KHA-VZW-Sitton-SC-New-Site.dwg July 29, 2016 3:25 PM by: amason



KEY NOTES

1. DEDICATED GROUND ROD PLACEMENT FOR ELECTRICAL EQUIPMENT AT METER STATION SHOULD BE AS PER NEC, MUNICIPAL AND UTILITY CO. REQUIREMENTS.
2. GROUND ROD TO BE WITHIN 24" OF FENCE POST (TYPICAL OF 4.)
3. BOND EACH FENCE POST ADJACENT TO EQUIPMENT PAD TO GROUND RING.

1
E2

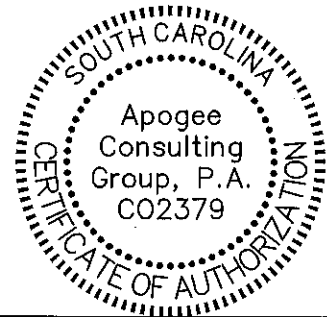
GROUNDING PLAN

SCALE: 1" = 10'

GRAPHIC SCALE: 1" = 10'

LEGEND:

- G — GROUND ROD EXOTHERMICALLY WELDED TO GROUND RING (SEE DETAIL 4/E5)
- G — GROUND RING
- EXOTHERMIC WELD
- GROUND ROD TEST WELL (SEE DETAIL 1/E5)
- MECHANICAL CONNECTION



verizon

8921 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD

PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:

7/29/16

ISSUED FOR:

CONSTRUCTION

REV.	DATE	ISSUED FOR:	BY:
0	11/6/14	CONSTRUCTION	JKM
1	7/29/16	CONSTRUCTION	CCH

CONSULTANT:

Kimley»Horn

2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-925-0744
WWW.KIMLEY-HORN.COM
NC License F-0102

CONSULTANT:

APOGEE
Consulting Group

Engineers | Architects

Raleigh, NC
Indianapolis, IN
Philadelphia, PA
Pittsburgh, PA
Virginia Beach, VA
Fort Collins, CO
(919) 858-7420

ACG PROJECT NO.: 2014 477

DRAWN BY: CAR CHK.: NAC APV.: CCH

LICENSER:

SHEET TITLE:

GROUNDING PLAN

SHEET NUMBER: **E2** REVISION: **1**

018985125

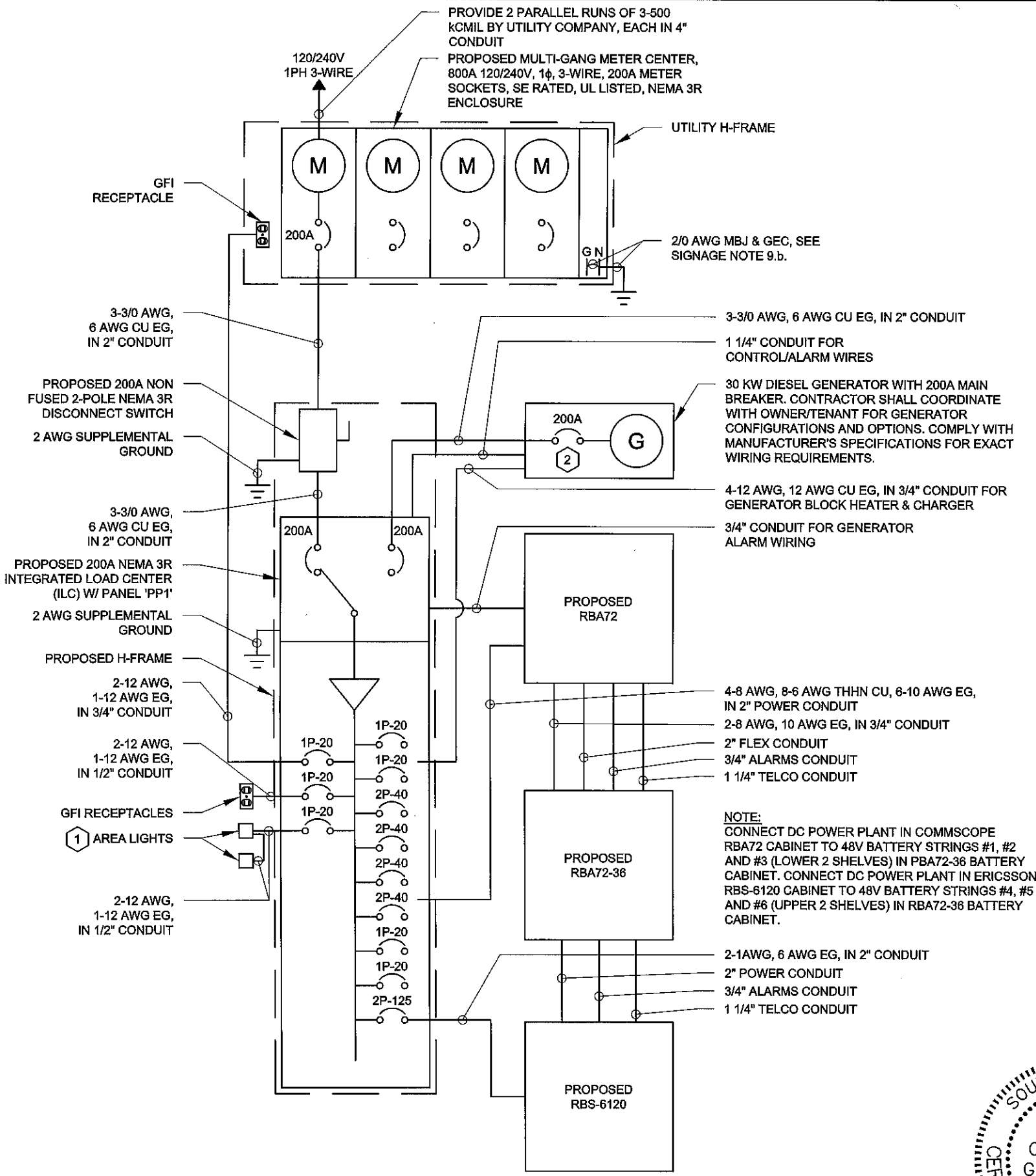
SINGLE-LINE NOTES AND SPECIFICATIONS:

- ELECTRIC UTILITY WILL PROVIDE METER AND INCOMING SERVICE LATERAL CONDUCTORS.
- ALL ELECTRICAL WORK SHALL COMPLY WITH NEC, STATE, AND LOCAL CODES.
- CONTRACTOR SHALL OBTAIN OWNER/TENANT EQUIPMENT DRAWINGS AND REVIEW FOR ADDITIONAL DETAILS AND REQUIREMENTS THAT MAY NOT BE SHOWN IN THESE DRAWINGS. CONTRACTOR SHALL COMPLY WITH ANY ADDITIONAL OWNER/TENANT SPECIFICATIONS AND REQUIREMENTS THAT MAY BE ADDRESSED IN THE EQUIPMENT DRAWINGS.
- PRIOR TO PURCHASING EQUIPMENT, THE CONTRACTOR SHALL CONTACT THE ELECTRIC UTILITY AND OBTAIN IN WRITING THE MAXIMUM AVAILABLE FAULT CURRENT AT THE UTILITY SERVICE POINT. PROVIDE MAX AFC SIGNAGE AS REQUIRED PER NEC 110.24. THE CONTRACTOR SHALL ENSURE ALL ELECTRICAL EQUIPMENT, CIRCUIT BREAKERS, DISCONNECTS, FUSES, AND PANELBOARDS HAVE A FAULT CURRENT INTERRUPTING RATING GREATER THAN THE AVAILABLE FAULT CURRENT. IN NO CASE SHALL THE FAULT CURRENT INTERRUPTING RATING BE LESS THAN 10,000 AMPS.
- THE GROUNDED SERVICE CONDUCTOR (NEUTRAL CONDUCTOR) SHALL BE GROUNDED AT THE SERVICE DISCONNECT ONLY.
- ALL POWER CIRCUITS SHALL USE COPPER CONDUCTORS WITH THHN/THWN INSULATION. ALL TERMINATIONS SHALL BE RATED FOR AT LEAST 75 DEGREES C.
- CONTRACTOR SHALL PROVIDE GROUND FAULT CIRCUIT INTERRUPTER (GFI) TYPE RECEPTACLES.
- CONTRACTOR SHALL ENSURE ALL NEUTRAL CONDUCTORS HAVE WHITE INSULATION AND EQUIPMENT GROUND CONDUCTORS HAVE GREEN INSULATION. COLOR TAPE IDENTIFICATION OF THESE CONDUCTORS IS NOT ALLOWED.
- PER NEC ART. 702 PROVIDE SIGNAGE AS FOLLOWS:
 - AT PANEL PP1 AND DISCONNECT: "EMERGENCY POWER IS SUPPLIED BY STAND-BY GENERATOR LOCATED ON OTHER SIDE OF PAD."
 - AT SERVICE DISCONNECT:

WARNING - SHOCK HAZARD EXISTS IF GROUNDING ELECTRODE CONDUCTOR OR BONDING JUMPER CONNECTION IN THIS EQUIPMENT IS REMOVED WHILE ALTERNATE SOURCE(S) IS ENERGIZED. OPENING THE EQUIPMENT DISCONNECT WILL CAUSE THE EMERGENCY GENERATOR TO START. TO REMOVE POWER ENTIRELY FROM THE EQUIPMENT, THE GENERATOR MUST BE TURNED OFF AND THE GENERATOR BREAKER MUST BE OPEN

KEY NOTES

- AREA LIGHT LITHONIA HFR 250M SCWA DNA LP1. CONTROL VIA CONTRACTOR PROVIDED MANUAL TIMER SWITCH (WEATHERPROOF)
- THE GENERATOR USED IN CONJUNCTION WITH A 2-POLE AUTOMATIC TRANSFER SWITCH WITH A SOLD NEUTRAL IS NOT A SEPARATELY DERIVED SYSTEM. AS SUCH, **DO NOT** BOND THE NEUTRAL TO GROUND AT THE GENERATOR.



1 SINGLE-LINE DIAGRAM
SCALE: NTS



PROJECT INFORMATION:
VERIZON NAME: SITTON
VERIZON No.: TBD
 PRATER FARM ROAD
 SENECA, SC 28678
 OCONEE COUNTY

CURRENT ISSUE DATE:
7/29/16

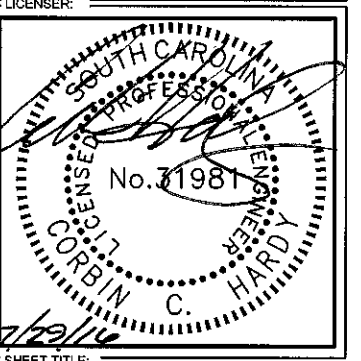
ISSUED FOR:
CONSTRUCTION

REV.	DATE	ISSUED FOR:	BY:
0	11/6/14	CONSTRUCTION	JKM
1	7/29/16	CONSTRUCTION	CCH

CONSULTANT:
Kimley»Horn
 2 SUN COURT, SUITE 450
 PEACHTREE CORNERS, GA 30092
 PHONE: 770-825-0744
 WWW.KIMLEY-HORN.COM
 NC License F-0102

CONSULTANT:
APOGEE Consulting Group
 Engineers | Architects
 Raleigh, NC
 Indianapolis, IN
 Philadelphia, PA
 Pittsburgh, PA
 Virginia Beach, VA
 Fort Collins, CO
 (919) 658-7420
 ACG PROJECT NO.: 2014 477

DRAWN BY: CAR CHK: NAC APV.: CCH



SHEET TITLE:
SINGLE-LINE DIAGRAM

SHEET NUMBER: **1** REVISION:
E3
 018985125

L:\Projects - Eng\2014 Projects\2014477-KH-VZV-Sitton SC New Site\DWG\1-2014477-KH-VZV-Sitton SC New Site.dwg July 29, 2016 10:10 AM br cransney

L:\Projects - Eng\2014 Projects\2014-477-KPA-V2N-Sitton SC New Site.dwg July 29, 2016 10:10 AM by: cransley

LOAD SERVED	KVA / Phase		CKT BRKR	CKT NO	NEUTRAL A B	CKT NO	CKT BRKR	KVA / Phase		LOAD SERVED
	A	B						A	A	
GEN BLOCK HEATER	0.50	---	1P-20	1		2	2P-40	2.84	---	RBA 72
AREA LIGHTS	---	0.60	1P-20	3		4		---	2.84	
GFCI RECEPTACLE	0.18	---	1P-20	5		6	2P-40	2.84	---	RBA 72
GFCI RECEPTACLE	---	0.18	1P-20	7		8		---	2.84	
GEN CHARGER	0.10	---	1P-20	9		10	2P-40	2.84	---	RBA 72
SPARE	---	0.00	1P-20	11		12		---	2.84	
SPARE	0.00	---	1P-20	13		14	2P-40	0.00	---	RBA 72 (FUTURE)
SPARE	---	0.00	1P-20	15		16		---	0.00	
SPARE	0.00	---	1P-20	17		18	1P-20	0.18	---	GFCI RECEPTACLE
SPARE	---	0.00	1P-20	19		20	1P-20	---	0.18	GFCI RECEPTACLE
SPARE	0.00	---	1P-20	21		22	2P-125	3.95	---	RBS 6120 (3 PSU's)
SPARE	---	0.00	1P-20	23		24		---	3.95	
SPARE	0.00	---	1P-20	25		26	1P-20	0.00	---	SPARE
SPARE	---	0.00	1P-20	27		28	1P-20	---	0.00	SPARE
SPARE	0.00	---	1P-20	29		30	1P-20	0.00	---	SPARE
SPARE	---	0.00	1P-20	31		32	1P-20	---	0.00	SPARE
SPARE	0.00	---	1P-20	33		34	1P-20	0.00	---	SPARE
SPARE	---	0.00	1P-20	35		36	1P-20	---	0.00	SPARE
SPARE	0.00	---	1P-20	37		38	1P-20	0.00	---	SPARE
TVSS	---	0.00	2P-30	39		40	1P-20	---	0.00	SPARE
	0.00	---		41		42	1P-20	0.00	---	SPARE
SUB TOTAL	0.78	0.78						12.65	12.65	SUB TOTAL
								13.43	13.43	TOTAL

C/B TEMP. 75 C. MOUNTING SURFACE, NEMA 3R ISOLATED GROUND BUS MAIN CIRCUIT BREAKER SERVICE ENTR. RATED MINIMUM AIC (K AMPS) 22 MCB RATING MLO BUS RATING 200A NEUTRAL RATING 100%	RATING 120	240 V_1 PH_3 W	LOAD TYPE	CONNECTED KVA		NEC DEM FACTOR	DEMAND KVA	
				A	B		A	B
			GENERAL LIGHTING	0.00	0.60	125%	0.00	0.75
			GENERAL USE RECEPT	0.36	0.36	≤10 KVA@100%	0.36	0.36
			MOTORS AND EQUIPMENT	3.95	3.95	>10KVA@50%	0.00	0.00
			LARGEST	3.95	3.95	125%	4.94	4.94
			ALL OTHERS	9.12	8.52	100%	9.12	8.52
			EXTERIOR LIGHTING	0.00	0.00	125%	0.00	0.00
			DEDICATED RECEPT	0.00	0.00	100%	0.00	0.00
			SIGN	0.00	0.00	125%	0.00	0.00
			FIX ELEC. SPACE HEAT	0.00	0.00	100%	0.00	0.00
			TOTAL KVA PER PHASE	13.43	13.43		14.42	14.57
			TOTAL DEMAND AMPERES PER PHASE				120	121
			PANEL / FEEDER (TOTAL KVA)					28.99
			(TOTAL KVA) X 1000 = TOTAL AMPS					
			VOLTS					121

1
E4 **PANEL SCHEDULE**
SCALE: NTS



8921 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD

PRATER FARM ROAD
SENECA, SC 29678
OCONEE COUNTY

CURRENT ISSUE DATE:

7/29/16

ISSUED FOR:

CONSTRUCTION

REV. DATE ISSUED FOR BY:

0	11/6/14	CONSTRUCTION	JKM
1	7/29/16	CONSTRUCTION	CCH

CONSULTANT:

Kimley»Horn

2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
NC License F-0102

CONSULTANT:

APOGEE

Consulting Group

Engineers | Architects

ACG PROJECT NO.: 2014 477

DRAWN BY: _____ CHK: _____ APV: _____

CAR	NAC	CCH
-----	-----	-----

LICENSER:

SOUTH CAROLINA
PROFESSIONAL ENGINEER
No. 31981
CORBIN C. HARDY
7/29/16

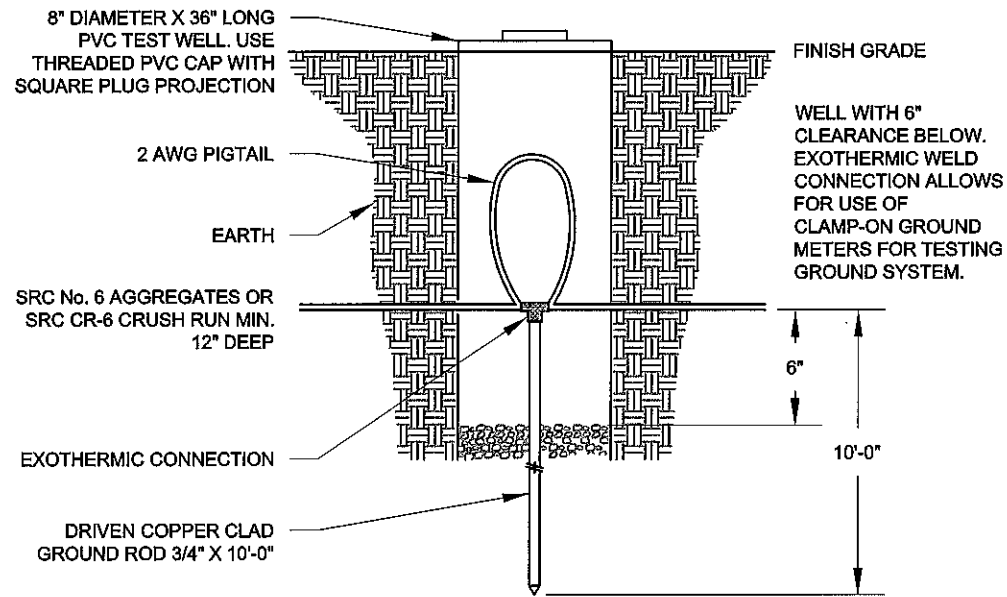
SHEET TITLE:

ELECTRICAL
DETAILS

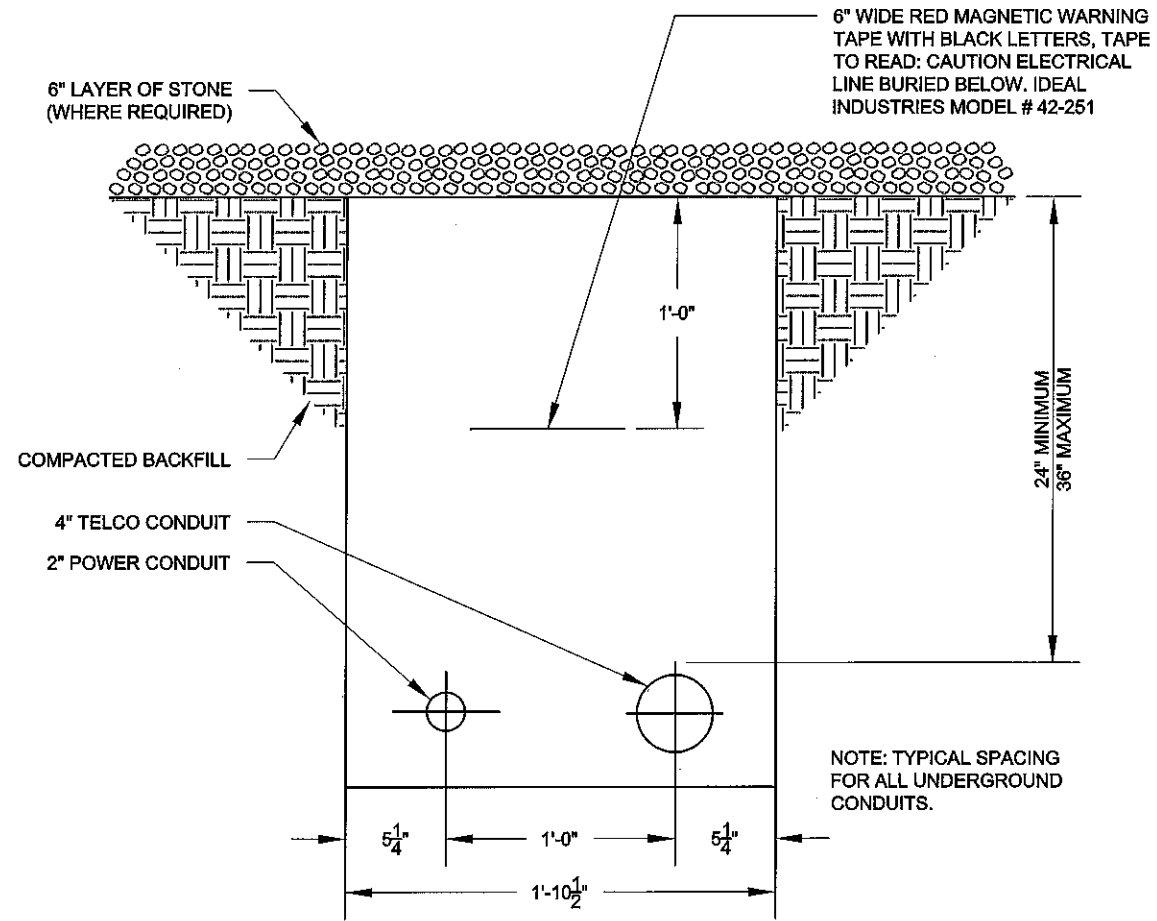
SHEET NUMBER: _____ REVISION: _____

E4	1
1	018985125

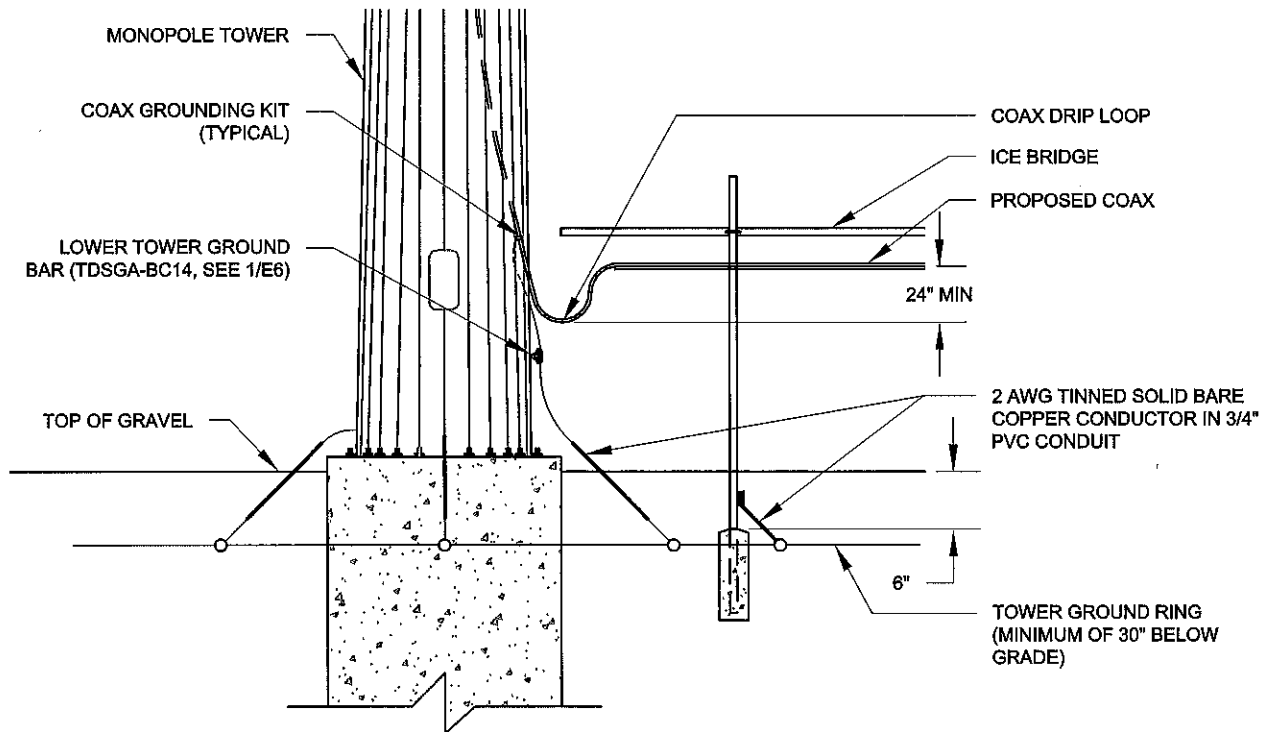
L:\Projects - Eng\2014\Projects\2014477-R4A-VZTV-Sitton-SC-New-Site\DWG\2014477-R4A-VZTV-Sitton-SC-New-Site.dwg July 29, 2016 10:10 AM by cramey



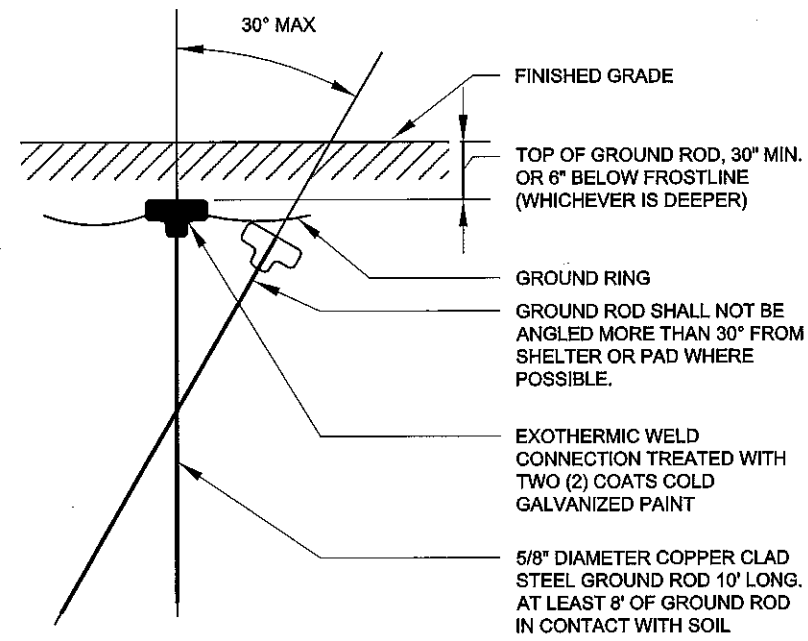
1
E5 **GROUND ROD TEST WELL**
SCALE: NOT TO SCALE



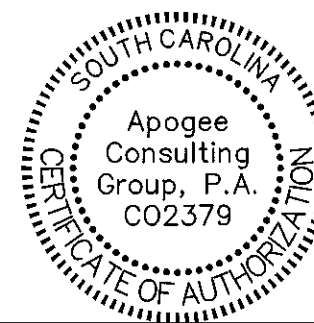
2
E5 **UTILITY TRENCH DETAIL (TYP.)**
SCALE: NOT TO SCALE



3
E5 **DRIP LOOP DETAIL**
SCALE: NOT TO SCALE



4
E5 **GROUND ROD DETAIL**
SCALE: NOT TO SCALE



verizon
8921 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:
VERIZON NAME: SITTON
VERIZON No.: TBD
PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:
7/29/16

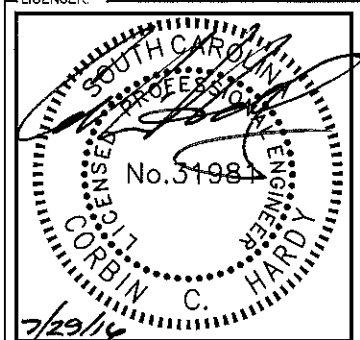
ISSUED FOR:
CONSTRUCTION

REV.	DATE	ISSUED FOR:	BY:
0	11/6/14	CONSTRUCTION	JKM
1	7/29/16	CONSTRUCTION	CCH

CONSULTANT:
Kimley»Horn
2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
NC License F-0102

CONSULTANT:
APOGEE Consulting Group
Engineers | Architects
Raleigh, NC
Indianapolis, IN
Philadelphia, PA
Pittsburgh, PA
Virginia Beach, VA
Fort Collins, CO
(919) 858-7420
ACG PROJECT NO.: 2014 477

DRAWN BY: CAR
CHK.: NAC
APV.: CCH



SHEET TITLE:
ELECTRICAL DETAILS

SHEET NUMBER: 1
REVISION: 1
E5
018985125

verizon

8821 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD

PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:

7/29/16

ISSUED FOR:

CONSTRUCTION

REV.: DATE ISSUED FOR: BY:

0	11/6/14	CONSTRUCTION	JKM
1	7/29/16	CONSTRUCTION	CCH

CONSULTANT:

Kimley»Horn

2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
NC License F-0102

CONSULTANT:

APOGEE
Consulting Group
Engineers | Architects

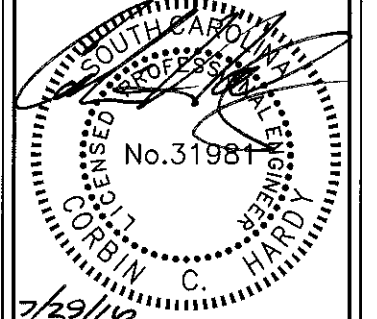
Raleigh, NC
Indianapolis, IN
Philadelphia, PA
Pittsburgh, PA
Virginia Beach, VA
Fort Collins, CO
(919) 858-7420

ACG PROJECT NO.: 2014 477

DRAWN BY: CHK: APV.:

CAR	NAC	CCH
-----	-----	-----

LICENSER:

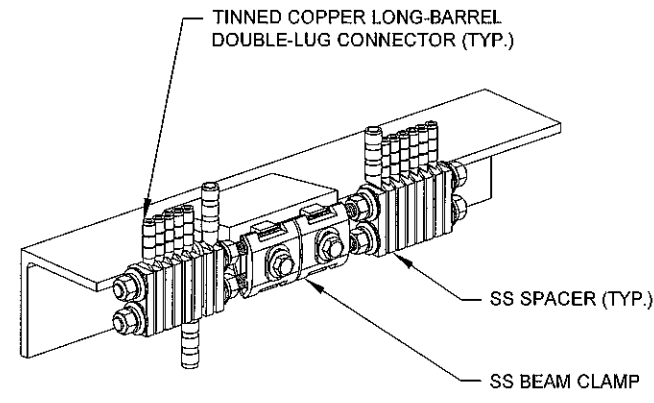


SHEET TITLE:

ELECTRICAL
DETAILS

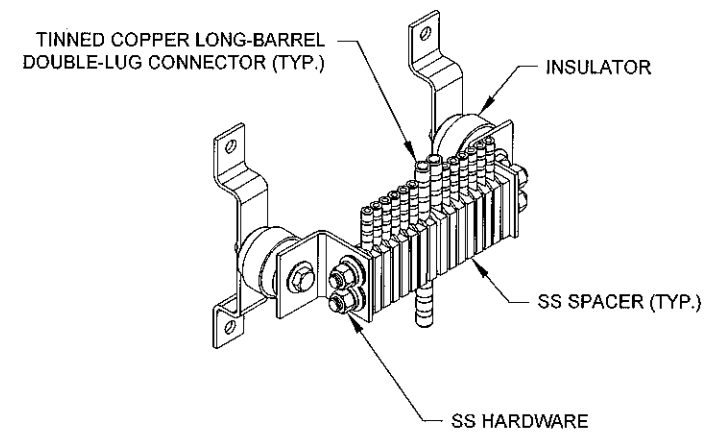
SHEET NUMBER: REVISION:

1	E6	1
		018985125



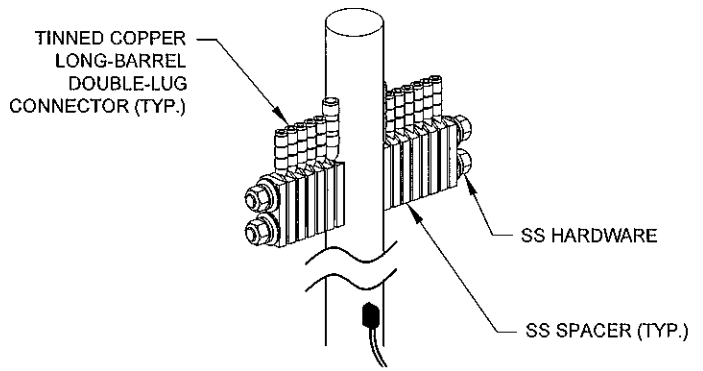
BAR NONE GROUNDED
BEAM CLAMP

1
E6 **TDSGA-BC14 GROUND BAR**
SCALE: NTS



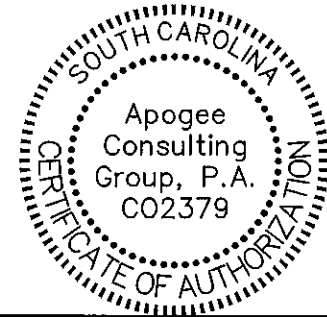
BAR NONE INSULATED

2
E6 **TDSGA-WB17 GROUND BAR**
SCALE: NTS



BAR NONE
POST MOUNTED

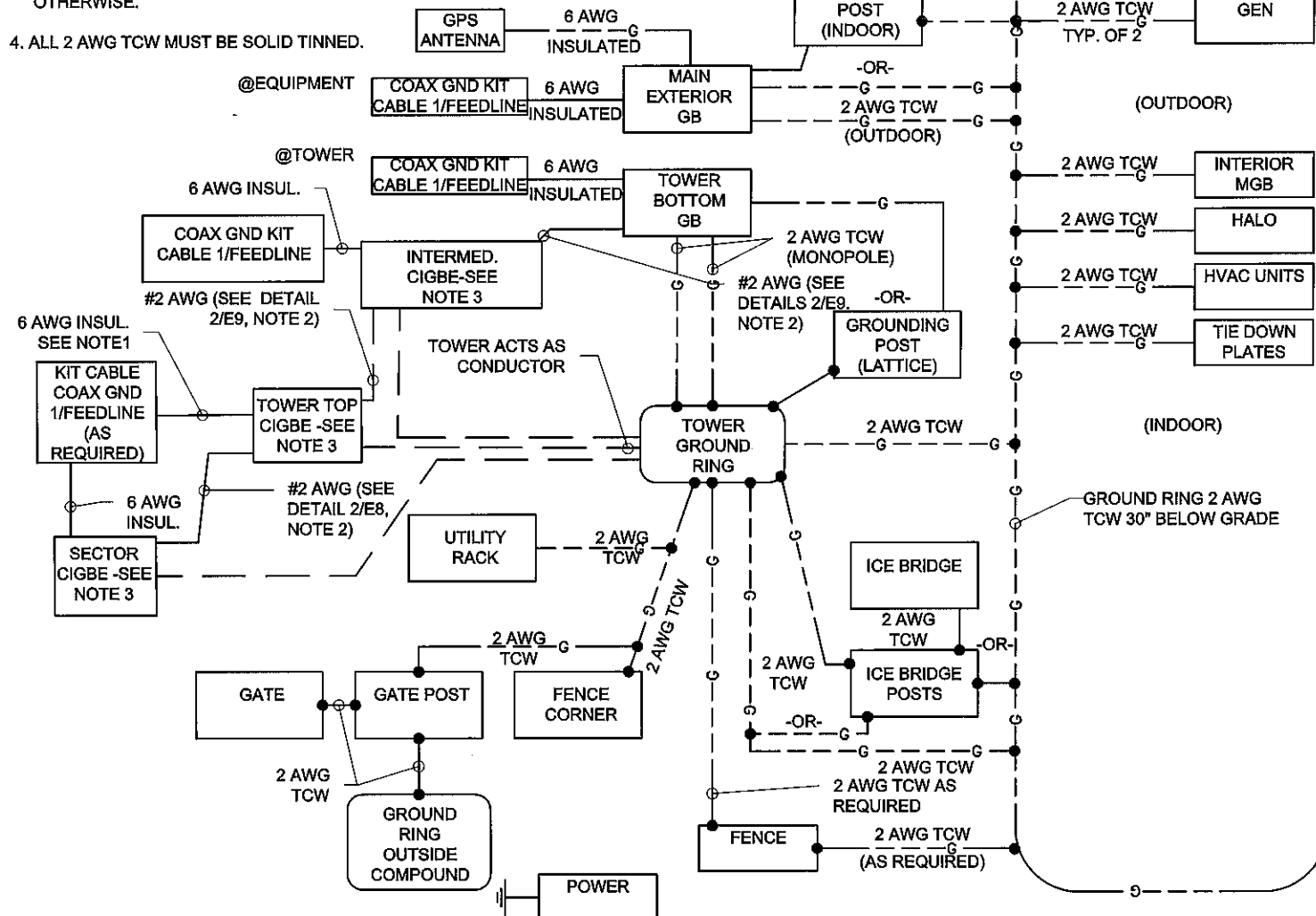
3
E6 **TDSGA-PA14 GROUND BAR**
SCALE: NTS



L:\Projects - Eim\2014 Projects\2014477-KHA-VZM-Sitton SC New Site\Drawings July 29, 2016 10:10 AM by cemsy

NOTES:

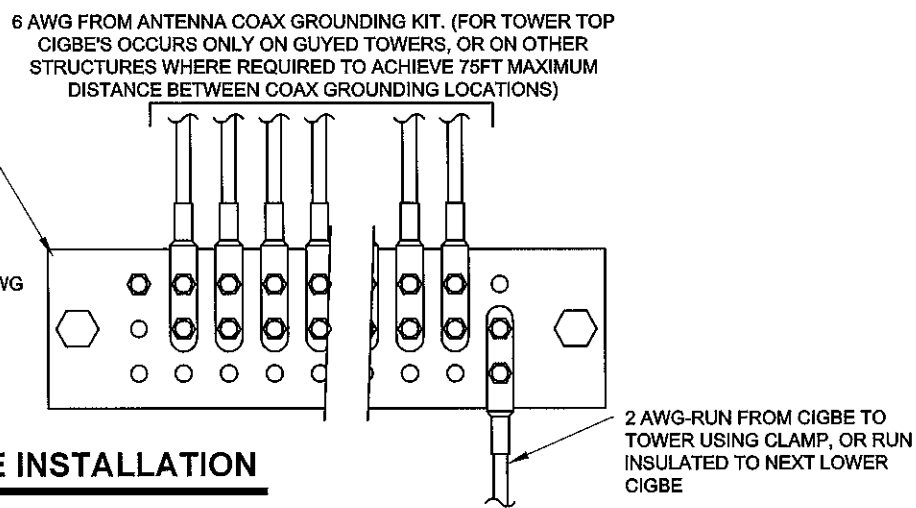
- CONNECT COAX GROUND KITS DIRECTLY TO TOWER TOP CIGBE ONLY AS NOTED ON DETAIL 3/E7.
- FOR GROUNDING CONNECTIONS AND DETAILS, SEE SITE GROUNDING PLAN.
- TOWER GROUND BARS WILL BE ISOLATED FROM TOWER BUT BONDED TO TOWER WITH 2 AWG STC AND CLAMP (OR CADWELD) UNLESS NOTED OTHERWISE.
- ALL 2 AWG TCW MUST BE SOLID TINNED.



1
E7 **GROUNDING SYSTEM SINGLE LINE DIAGRAM**
SCALE: NTS

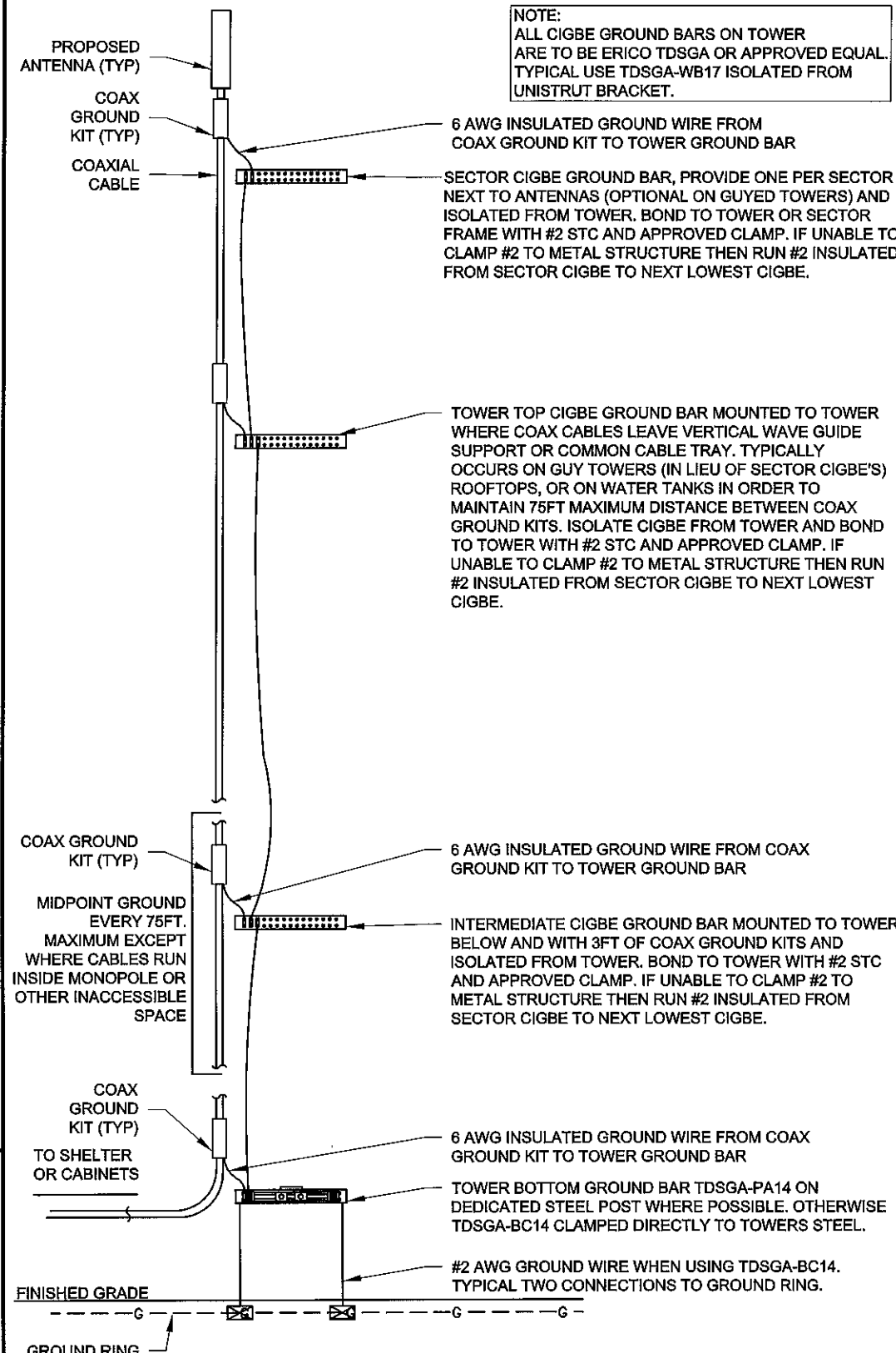
NOTES:

- ALL CIGBE GROUND BARS ON TOWER ARE TO BE ERICO TDSGA. TYPICALLY USE TDSGA-WB17 ISOLATED FROM UNISTRUT BRACKET.
- IF CIGBE CANNOT BE CONNECTED TO TOWER WITH #2 AWG AND CLAMP (OR CADWELD), THEN RUN #2 BLACK INSULATED GROUND LEAD FROM CIGBE DOWN TO NEXT LOWER CIGBE. SECURE GROUND LEAD WITH NON-METALLIC TIES AT SAME SPACING AS COAX SUPPORTS.

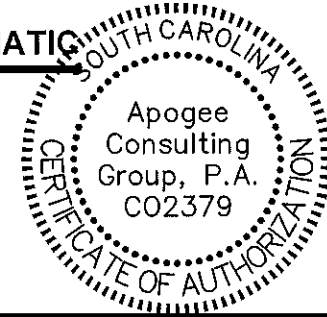


3
E7 **ANTENNA GROUND WIRE INSTALLATION**
SCALE: NTS

NOTE:
ALL CIGBE GROUND BARS ON TOWER ARE TO BE ERICO TDSGA OR APPROVED EQUAL. TYPICAL USE TDSGA-WB17 ISOLATED FROM UNISTRUT BRACKET.



2
E7 **COAX/TOWER GROUNDING SCHEMATIC**
SCALE: NTS



verizon
8921 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:

VERIZON NAME: SITTON
VERIZON No.: TBD

PRATER FARM ROAD
SENECA, SC 28676
OCONEE COUNTY

CURRENT ISSUE DATE:
7/29/16

ISSUED FOR:
CONSTRUCTION

REV.:	DATE:	ISSUED FOR:	BY:
0	11/6/14	CONSTRUCTION	JKM
1	7/29/16	CONSTRUCTION	CCH

CONSULTANT:
Kimley»Horn
2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
NC License F-0102

CONSULTANT:
APOGEE
Consulting Group
Engineers | Architects
Raleigh, NC
Indianapolis, IN
Philadelphia, PA
Pittsburgh, PA
Virginia Beach, VA
Fort Collins, CO
(919) 858-7420
ACG PROJECT NO.: 2014 477

DRAWN BY: _____ CHK: _____ APV: _____
CAR NAC CCH

LICENSER:
7/29/16

SHEET TITLE:
GROUNDING DETAILS

SHEET NUMBER: _____ REVISION: _____
E7 **1**
018985125

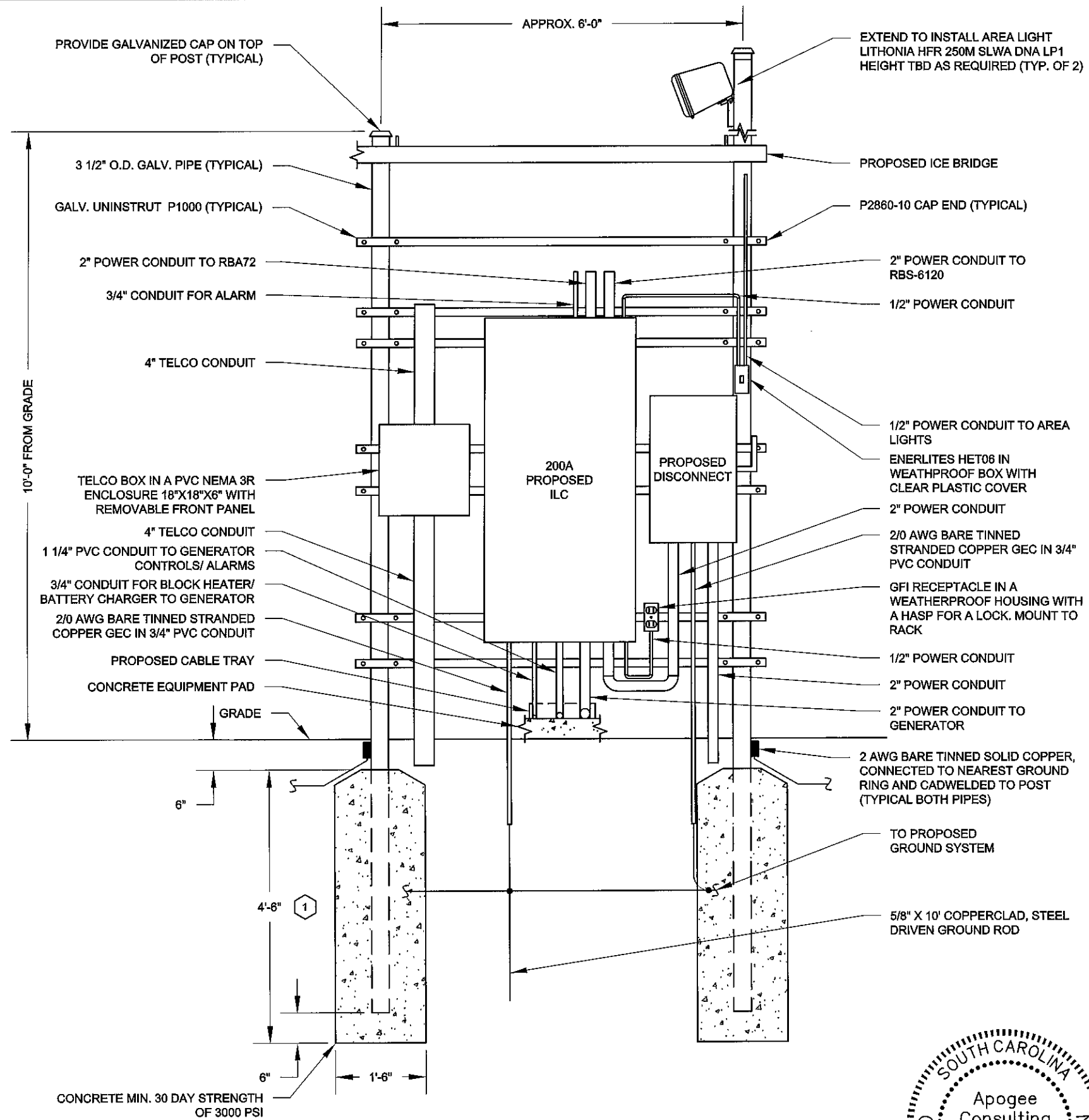
L:\Projects - Eng\2014\Projects\2014\7-16-16\1477-1616-V2W\Sitton SC New Site.dwg July 29, 2016 10:10 AM br cranshaw

H-FRAME NOTES AND SPECIFICATIONS:

- ALL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE, STATE BUILDING CODES AND THE LOCAL BUILDING CODES. ALL COMPONENTS SHALL BE U.L. LISTED.
- REFER TO SITE LAYOUT PLAN FOR THE EXACT LOCATION OF H-FRAME.
- CONTRACTOR TO ENSURE WORKING SPACES REQUIRED BY THE NEC (ART. 110.26), STATE, OR LOCAL CODES ARE MAINTAINED BOTH ON THE FRONT SIDE AND THE BACK SIDE OF THE H-FRAME.
- SHOW LOCATION (INCLUDING DIMENSIONS) OF ALL CAPPED UNDERGROUND CONDUIT ON FINAL AS-BUILT DRAWINGS SUBMITTED TO OWNER.
- COORDINATE EXACT LOCATION OF UNDERGROUND FEEDERS AND CIRCUITRY WITH THE OWNER.
- CONTRACTOR SHALL COORDINATE EFFORTS WITH (LOCAL, ELECTRICAL) AUTHORITY HAVING JURISDICTION (AHJ) AND OTHER TRADES TO DETERMINE "FROST" LINE, AND TYPE(S) OF RACEWAYS REQUIRED FOR INSTALLATION.
- BOND ALL ELECTRICAL EQUIPMENT TO RACK.
- DIMENSIONS SHOWN ARE APPROXIMATE AND MAY BE ALTERED IN THE FIELD AS APPROVED BY OWNER TO BETTER SUIT ACTUAL CONDITIONS OR EQUIPMENT RECEIVED.
- FOR ANY METAL CONDUIT ENTERING AN ENCLOSURE WHERE A PRE-PUNCHED CONCENTRIC OR ECCENTRIC KNOCKOUT IS USED, THE CONTRACTOR SHALL ENSURE ADEQUATE BONDING BETWEEN THE METAL CONDUIT AND ENCLOSURE BY INSTALLING A BONDING JUMPER AROUND THE CONCENTRIC OR ECCENTRIC KNOCKOUT.
- CONTRACTOR SHALL INSURE THAT NO OPERABLE DEVICE SHALL EXCEED 6"6" TO CENTER LINE OF DEVICE.

KEY NOTES

- CONSTRUCT SO CONCRETE FOOTING EXTENDS 6" BELOW FROST LINE AND IN COMPLIANCE WITH ALL LOCAL AND STATE CODES.



1 H-FRAME DETAIL
SCALE: NTS



verizon
8821 RESEARCH DRIVE
CHARLOTTE, NORTH CAROLINA 28262

PROJECT INFORMATION:
VERIZON NAME: SITTON
VERIZON No.: TBD
PRATER FARM ROAD
SENECA, SC 28678
OCONEE COUNTY

CURRENT ISSUE DATE:
7/29/16

ISSUED FOR:
CONSTRUCTION

REV.	DATE	ISSUED FOR	BY
0	11/6/14	CONSTRUCTION	JKM
1	7/29/16	CONSTRUCTION	CCH

CONSULTANT:
Kimley»Horn
2 SUN COURT, SUITE 450
PEACHTREE CORNERS, GA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM
NC License F-0102

CONSULTANT:
APOGEE Consulting Group
Engineers | Architects
Raleigh, NC
Indianapolis, IN
Philadelphia, PA
Pittsburgh, PA
Virginia Beach, VA
Fort Collins, CO
(919) 858-7420
ACG PROJECT NO.: 2014 477

DRAWN BY: CAR
CHK: NAC
APV: CCH

LICENSER:
SOUTH CAROLINA ENGINEER
No. 31981
CORBIN C. HARDY
7/29/16

SHEET TITLE:
ELECTRICAL DETAILS

SHEET NUMBER: **E8**
REVISION: **1**
018985125

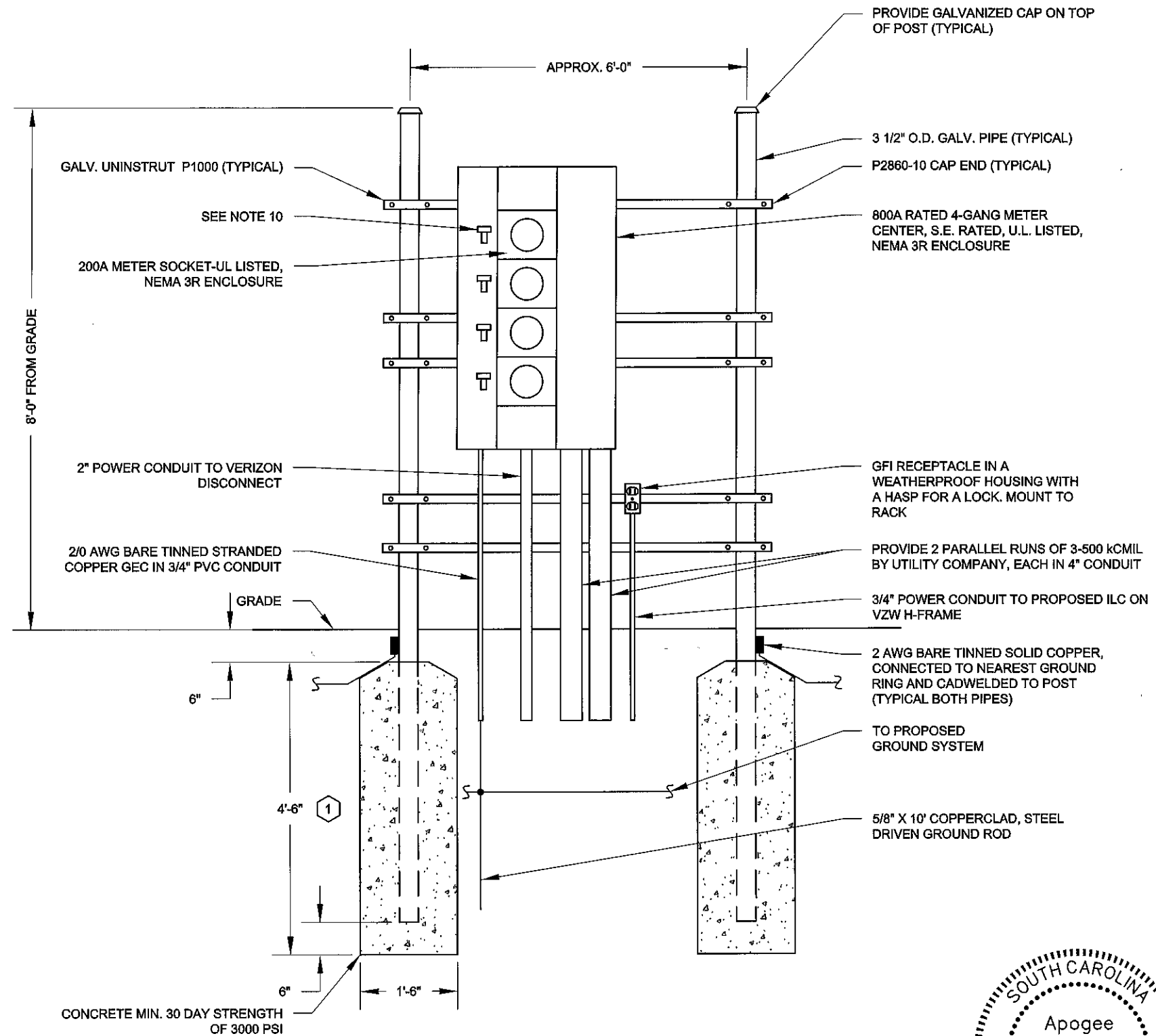
L:\Projects - Eng\2014 Projects\2014477-KHA-VZW-Sitton-SC-New Site.dwg July 29, 2016 10:10 AM by cranscy

H-FRAME NOTES AND SPECIFICATIONS:

- ALL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE, STATE BUILDING CODES AND THE LOCAL BUILDING CODES. ALL COMPONENTS SHALL BE U.L. LISTED.
- REFER TO SITE LAYOUT PLAN FOR THE EXACT LOCATION OF H-FRAME.
- CONTRACTOR TO ENSURE WORKING SPACES REQUIRED BY THE NEC (ART. 110.26), STATE, OR LOCAL CODES ARE MAINTAINED BOTH ON THE FRONT SIDE AND THE BACK SIDE OF THE H-FRAME.
- SHOW LOCATION (INCLUDING DIMENSIONS) OF ALL CAPPED UNDERGROUND CONDUIT ON FINAL AS-BUILT DRAWINGS SUBMITTED TO OWNER.
- COORDINATE EXACT LOCATION OF UNDERGROUND FEEDERS AND CIRCUITRY WITH THE OWNER.
- CONTRACTOR SHALL COORDINATE EFFORTS WITH (LOCAL, ELECTRICAL) AUTHORITY HAVING JURISDICTION (A.H.) AND OTHER TRADES TO DETERMINE "FROST" LINE, AND TYPE(S) OF RACEWAYS REQUIRED FOR INSTALLATION.
- BOND ALL ELECTRICAL EQUIPMENT TO RACK.
- DIMENSIONS SHOWN ARE APPROXIMATE AND MAY BE ALTERED IN THE FIELD AS APPROVED BY OWNER TO BETTER SUIT ACTUAL CONDITIONS OR EQUIPMENT RECEIVED.
- FOR ANY METAL CONDUIT ENTERING AN ENCLOSURE WHERE A PRE-PUNCHED CONCENTRIC OR ECCENTRIC KNOCKOUT IS USED, THE CONTRACTOR SHALL ENSURE ADEQUATE BONDING BETWEEN THE METAL CONDUIT AND ENCLOSURE BY INSTALLING A BONDING JUMP PER AROUND THE CONCENTRIC OR ECCENTRIC KNOCKOUT.
- CONTRACTOR SHALL INSURE THAT NO OPERABLE DEVICE SHALL EXCEED 6" TO CENTER LINE OF DEVICE.

KEY NOTES

- CONSTRUCT SO CONCRETE FOOTING EXTENDS 6" BELOW FROST LINE AND IN COMPLIANCE WITH ALL LOCAL AND STATE CODES.



1 H-FRAME DETAIL
E9 SCALE: NTS



PROJECT INFORMATION:
VERIZON NAME: SITTON
VERIZON No.: TBD
 PRATER FARM ROAD
 SENECA, SC 28678
 OCONEE COUNTY

CURRENT ISSUE DATE:
7/29/16

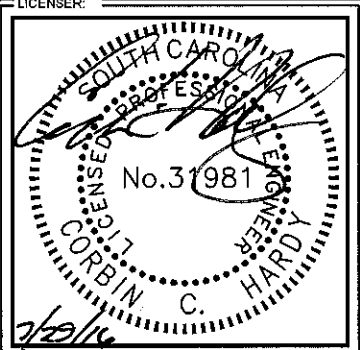
ISSUED FOR:
CONSTRUCTION

REV.	DATE	ISSUED FOR:	BY:
0	11/6/14	CONSTRUCTION	JKM
1	7/29/16	CONSTRUCTION	CCH

CONSULTANT:
Kimley»Horn
 2 SUN COURT, SUITE 450
 PEACHTREE CORNERS, GA 30092
 PHONE: 770-825-0744
 WWW.KIMLEY-HORN.COM
 NC License F-0102

CONSULTANT:
APOGEE Consulting Group
 Engineers | Architects
 Raleigh, NC
 Indianapolis, IN
 Philadelphia, PA
 Pittsburgh, PA
 Virginia Beach, VA
 Fort Collins, CO
 (919) 858-7420
 ACG PROJECT NO.: 2014 477

DRAWN BY: **CAR** CHK: **NAC** APV: **CCH**



SHEET TITLE:
ELECTRICAL DETAILS

SHEET NUMBER: **E9** REVISION: **1**
 018985125

L:\Projects - Eng\2014 Projects\2014477-CHA-VZW-Sitton-SC-New-Site.dwg July 29, 2016 10:10 AM by: cransley



Network Operations

Verizon Wireless
8921 Research Drive
Charlotte, North Carolina 28262
Phone 704 510-8500

February 3, 2017

Greg Gordos, Senior Planner
Oconee County Community Development Department
Planning and Zoning Division
415 South Pine Street
Walhalla, SC 29691

Re: Proposed Verizon Wireless Telecommunications Tower on Prater Farm
Road

Tax/Pin R2910002012

Verizon Site Name: **SITTON**

To whom it may concern:

I am providing this Letter to comply with Zoning Code Section 32-133 (b). Verizon Wireless engineers have determined that the Verizon Wireless network requires that the tower that we are referring as "SITTON." be located within a certain portion of Oconee County.

Verizon Wireless had done a review of said area to locate any existing sites that could serve as an alternative to constructing a new tower. After doing a thorough review of the search area, Verizon Wireless was not able to locate any existing cell towers or buildings that are of adequate height to provide a co-location option for these antennas (165'). Verizon's evaluation included reviewing the possibility of co-locating on existing towers or structures, including electric utility company transmission line towers; and/or reconstruction of, or new construction within the footprints of existing electric utility company transmission line towers;

Also, we inquired and were informed by Oconee County that there were no sites near this proposed site that were preselected in the county-wide communication tower site study.

Very truly yours,

Michael Haven
Verizon Wireless Manager
RE/ Regulatory



9221 Lyndon B. Johnson Freeway, #204, Dallas, TX 75243 ★ PHONE 972-231-8893 ★ FAX 1-866-364-8375
www.allprocgi.com ★ e-mail: info@allprocgi.com

February 3, 2017

Oconee County Community Development
415 S Pine St.
Walhalla, South Carolina 29691

Ref: *Site Name –Sitton– 165’ Monopole Tower*
ACGI# 17-0670
Jurisdiction: Oconee County, SC
Site Address: Prater Farm Road, Seneca, SC 28676
Scope of Work: Engineering Specification Letter
Applicable Code:
IBC 2015 & ASCE 7-10, ANSI/TIA-222-G, Risk Category II, International Fire Code, 2015 edition
Wind Speed: IBC2015(115 mph ultimate wind speed), ANSI/TIA-222-G (Equivalent 89 mph
nominal wind speed), Exposure “C”

This letter is provided in reference to the above mentioned site for the following specifications:

1. The purpose of this tower is to support telecommunication antenna equipment for cellular coverage of the affected area.
2. Above reference tower to be designed to meet or exceed industry standards defined by ANSI/TIA-222-G, “Structural Standard for Antenna Supporting Structures and Antennas” (ANSI/TIA-222-G Standard).
3. The total height of tower is 165’ with highest appurtenance to 174’. All site location data to be re-verified by survey.
4. Above reference tower shall be constructed and contain only equipment meeting standards of the Federal Communication Commission (FCC) regulations; and comply with all other applicable federal, state, and local regulations.
5. The power density of the above reference site shall not exceed federally approved levels, or American National Standards Institute (ANSI) standards, whichever provides for stricter requirements. The tower shall be designed and constructed meeting the requirements of International Fire Code, 2015 edition.
6. The tower must be designed and certified by an Engineer to be structurally sound and as a minimum in conformance with the adopted Building code. This tower to be designed using the following minimum wind speed criteria as defined by ANSI/TIA-222-G for Oconee County, SC:
 - i) 89 mph 3-second-gust nominal wind speed with no ice.
 - ii) 30 mph 3-second-gust wind speed with 0.75” ice.

The “3-second-gust wind speed refers to a wind measured at 33 ft. above the ground. Equations in ANSI/TIA-222-G Standard take into account that the wind speed escalates with the increasing height of the tower.

If you have any other questions or concerns regarding our recommendations, please contact us.

Sincerely,
Jingcheng Li, EIT
02/03/2017



Approved by:
Joji M. George, P.E
SC PE # 26840

REFERENCE COPY

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign WPUD533	File Number
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003290673

Grant Date 02-06-2008	Effective Date 11-01-2016	Expiration Date 12-29-2017	Print Date
Market Number BTA016	Channel Block C	Sub-Market Designator 6	
Market Name Anderson, SC			
1st Build-out Date 12-29-2002	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

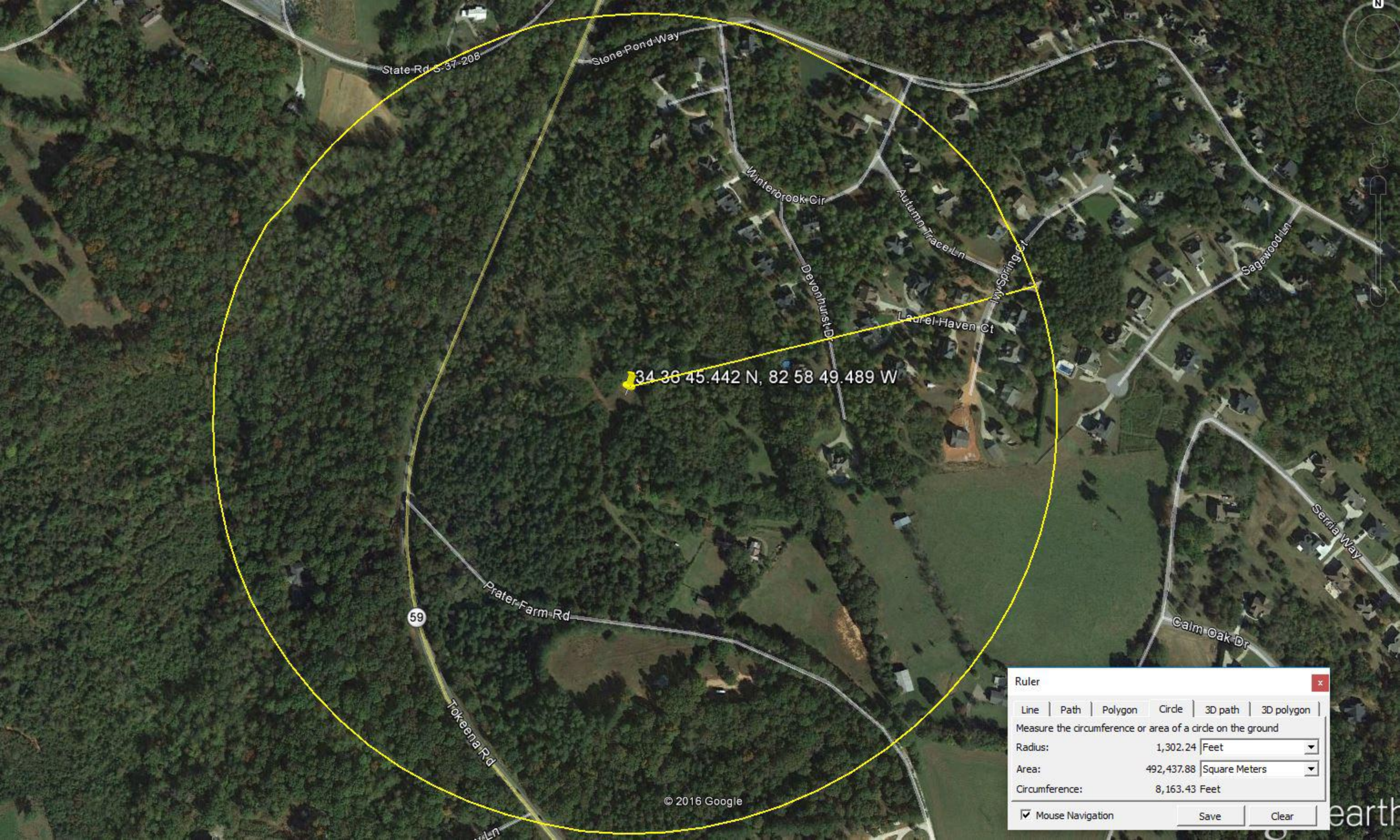
Waivers/Conditions:

NONE

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at <http://wireless.fcc.gov/uls/index.htm?job=home> and select "License Search". Follow the instructions on how to search for license information.



34 36 45.442 N, 82 58 49.489 W

Ruler [Close]

Line | Path | Polygon | **Circle** | 3D path | 3D polygon

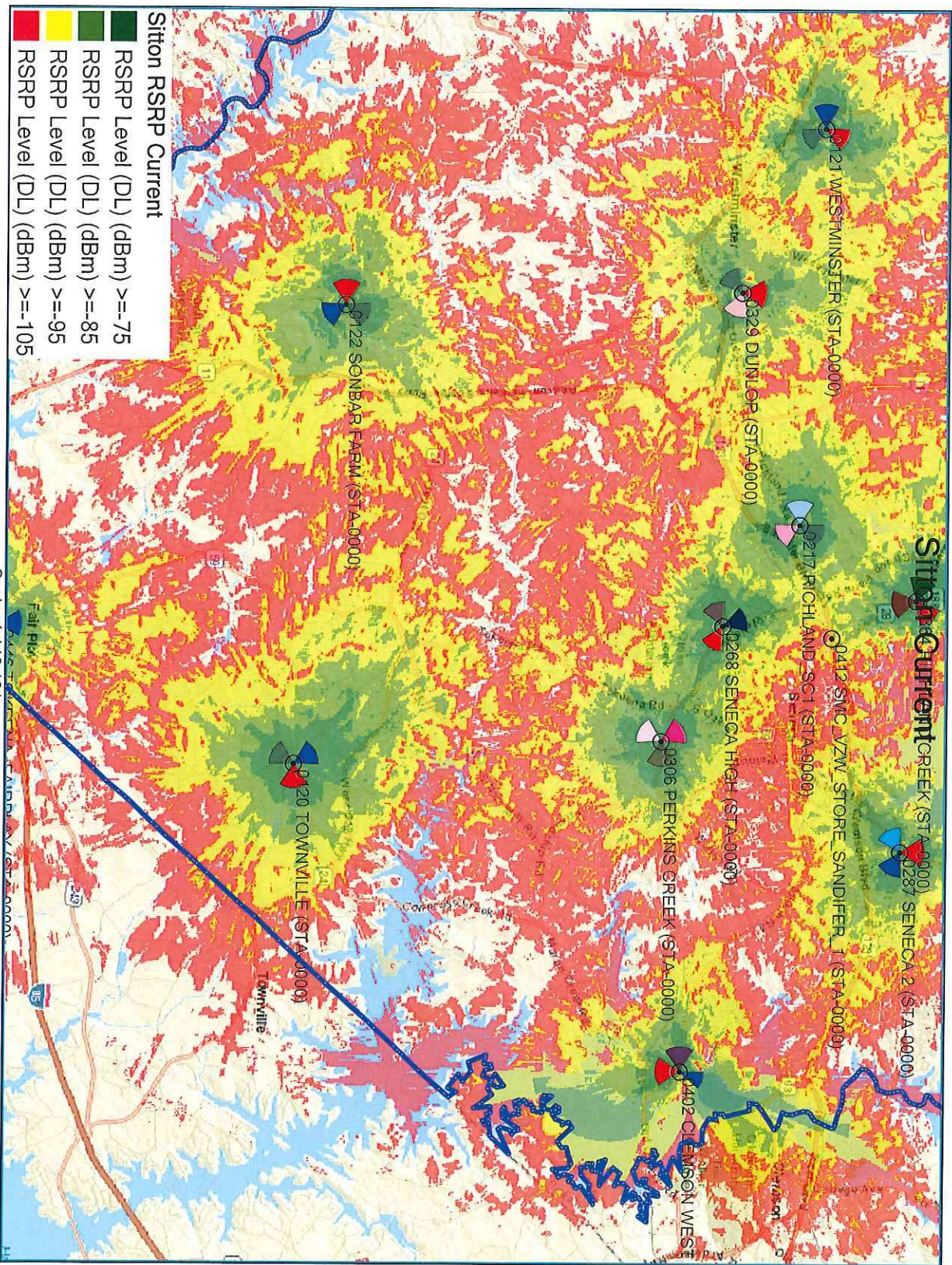
Measure the circumference or area of a circle on the ground

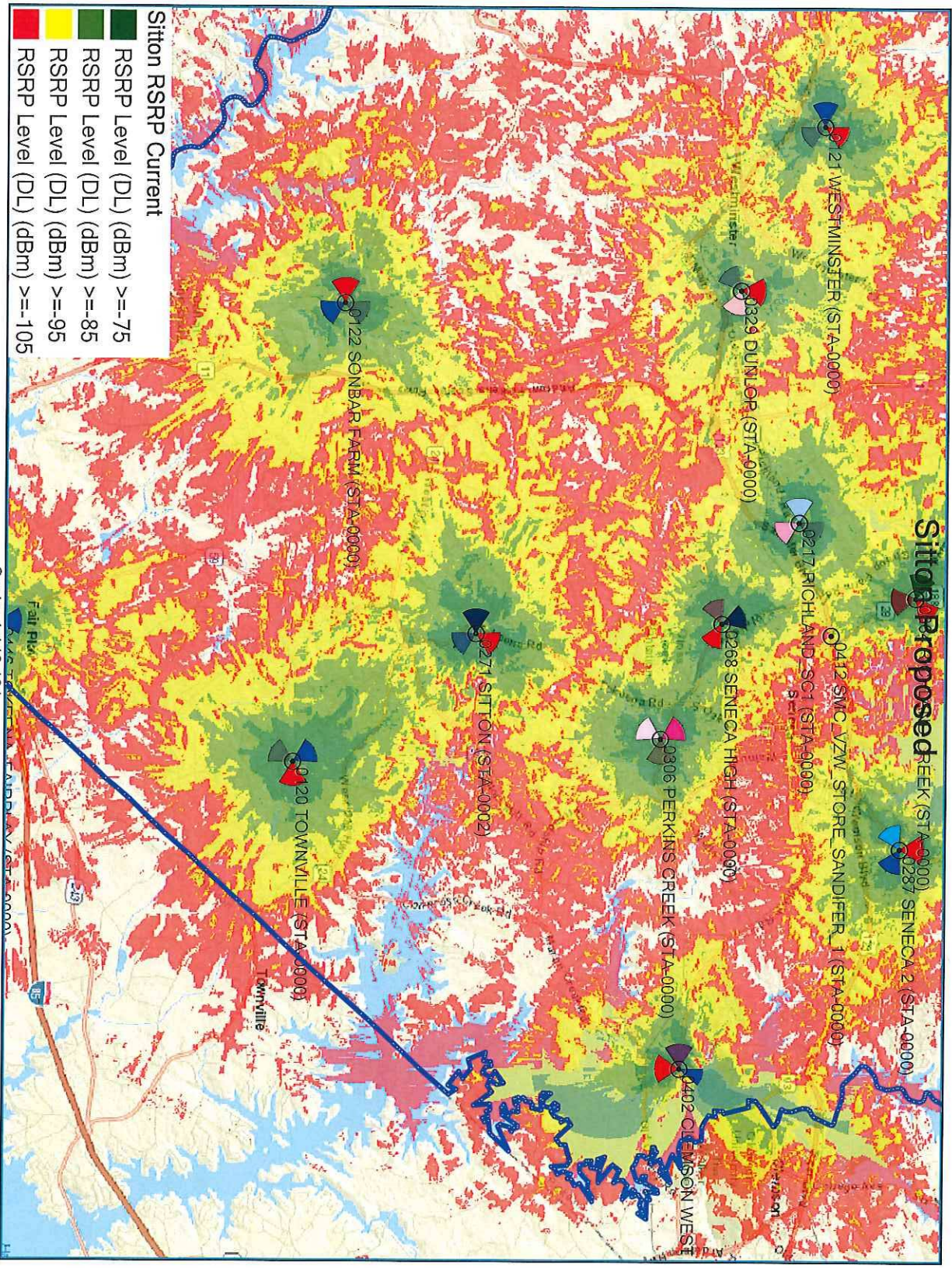
Radius: 1,302.24 Feet

Area: 492,437.88 Square Meters

Circumference: 8,163.43 Feet

Mouse Navigation [Save] [Clear]





Design Scale 1 : 100,000

Digital Imaging

Gould Digital Imaging

February 20, 2017

Mr. Keith Markland
Kimley-Horn and Associates, Inc.
10 Roswell Street #210
Alpharetta, GA 30009

Re: Sitton Site
Gould Digital Imaging 165' Balloon Test Report

My name is Michael Gould, and I am owner and operator of Gould Digital Imaging. Kimley-Horn and Associates hired Gould Digital Imaging to perform various aspects of photographic imaging work in connection with the development of Verizon Wireless' telecommunications services network in the Seneca, SC metropolitan area.

I have over eighteen years' experience working specifically with telecommunications companies including T-Mobile, Inc., AT&T Wireless, Verizon Wireless, Nextel, Alltel, Cricket, Sprint PCS, COMPASS Technology Services, Inc., Crown Castle International, Vertical Bridge, and American Tower Corporation in preparing photographic simulations of telecommunications towers. I have a Bachelors Degree in Art from St. Mary's College of Maryland; over twenty years of professional experience in the field of digital photographic enhancement and I have produced approximately 6,000 photographic simulations for Verizon Wireless, AT&T, T-Mobile, Inc., American Tower Corp., and other telecommunications services companies.

Kimley-Horn and Associates hired Gould Digital Imaging to perform a "165 foot Balloon Test" at Verizon Wireless' Sitton site on Prater Farm Road, in Seneca, SC. A balloon test is a visual reference of how tall a proposed structure would appear if constructed. A ten foot long red blimp shaped helium balloon is filled and raised above the proposed site on a measured line to the height of the proposed structure and anchored to the ground at the proposed site.

At approximately 10:45am on Tuesday, February 13th, 2017, the balloon was raised to a height of 165 feet to the bottom of the blimp and anchored at the center of the leased area. The wind was relatively calm and the balloon was flying directly above its anchor throughout the entire test. The balloon was left aloft until 11:30am.

I drove around the surrounding "area of affect" and took photographs from several adjoining properties and other points of potential visual impact. I deployed the use of a hand held GPS unit that indicated the bearing and distance I was from the balloon as I canvassed the area for any possible views of the balloon.

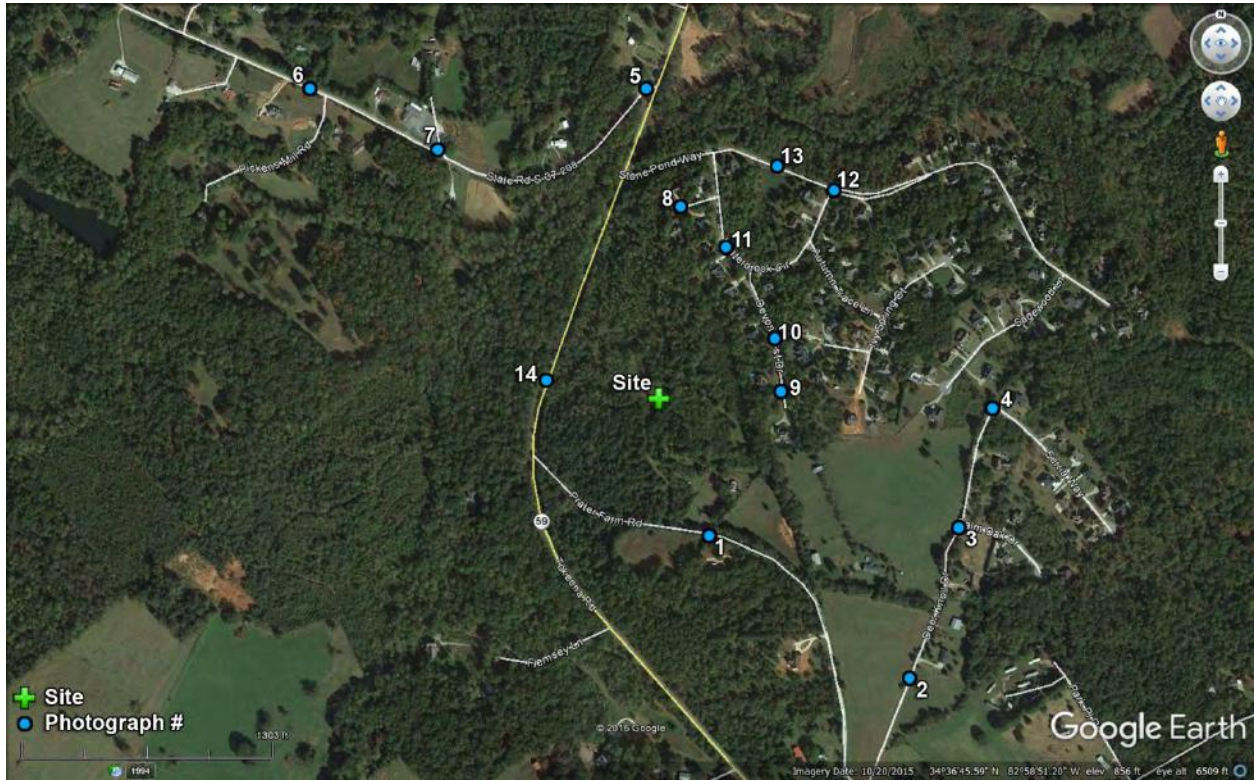
This report includes a site photography map denoting the location of the proposed tower and the locations of all photographs that were taken of the site as well as copies of the photographs.

In my professional opinion, these photographs reflect to a reasonable certainty the anticipated projection of the height of the tower if constructed at the Sitton site. If you need any additional information, please do not hesitate to call me at (770) 617-2958 or e-mail at michael@goulddigitalimaging.com.

Sincerely,



Gould Digital Imaging
Michael D. Gould/Owner





3



4



5



6





9



10



11



12



13



14



Existing View



verizon[✓]
SITTON

Prater Farm Rd, Seneca, SC 28676

**165ft. MONOPOLE
SIMULATION**

View from Prater Farm Road
approx. 765ft. south-southeast of site



Existing View



verizon[✓]
SITTON

Prater Farm Rd, Seneca, SC 28676

**165ft. MONOPOLE
SIMULATION**

View from Summer Walk Court
approximately 1,000ft. north of site

Existing View



verizon[✓]
SITTON

Prater Farm Rd, Seneca, SC 28676

**165ft. MONOPOLE
SIMULATION**

View from Devonhurst Drive
approx. 680ft. east-northeast of site



verizon✓
SITTON
Prater Farm Rd, Seneca, SC 28676
**165ft. MONOPOLE
SIMULATION**
View from Tokeena Road
approximately 600ft. west of site



CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)
02/01/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Aon Risk Services Northeast, Inc. New York NY Office 199 Water Street New York NY 10038-3551 USA	CONTACT NAME: PHONE (A/C. No. Ext): (866) 283-7122 FAX (A/C. No.): (800) 363-0105 E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	
INSURED Verizon Wireless, LLC 1095 Avenue of the Americas New York NY 10036 USA	INSURER A: National Union Fire Ins Co of Pittsburgh 19445	
	INSURER B:	
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	

Holder Identifier :

COVERAGES **CERTIFICATE NUMBER:** 570065432201 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. **Limits shown are as requested**

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> XCU Included GENL AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			GL3796651	06/30/2016	06/30/2017	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$1,000,000 PRODUCTS - COMP/OP AGG \$1,000,000
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION						EACH OCCURRENCE AGGREGATE
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below			N/A			<input type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT E.L. DISEASE-EA EMPLOYEE E.L. DISEASE-POLICY LIMIT

Certificate No : 570065432201

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RE: Verizon New Build Site "Sitton", PS Location #303546. Oconee County is included as an Additional Insured with respect to the General Liability policy.

CERTIFICATE HOLDER**CANCELLATION**

Oconee County Community Development Planning & Zoning Division 415 S. Pine St. Walhalla SC 29691 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE <i>Aon Risk Services Northeast, Inc.</i>

April 4, 2017

Board of Zoning Appeals
Oconee County Community Development
415 S. Pine Street
Walhalla, SC 29691

RE: Hartwell Village / Requested Variance for Internal Side Setbacks

Hartwell Village is a proposed commercial/mixed use project at the intersection of Highway 123 (Clemson Boulevard) and SC 93 (Pendleton Road). The property has a zoning classification of Control Free District (CFD) and has been subdivided into 8 lots and may be further subdivided as necessary to complete the development of the project. Commercial developments, specifically shopping centers are typically subdivided to allow for separate ownerships, phasing of the development and/or to meet financing conditions. In many cases a shopping center appears as one property but is actually subdivided into several parcels with private agreements addressing the common development and operation of the center creating a center with a unified appearance and operation.


We are requesting a variance from the 5 foot side setbacks contained within the CFD to allow a zero setback for internal lot lines. The zero setback on the internal lot lines will allow for the shopping center to be developed as a unified project without separation between buildings due solely to side setbacks. A zero side setback is fairly common within a shopping center or Unified Commercial Development. The requirement for a setback between buildings within the center would create a condition that will restrict the ability to develop the shopping center appropriately and utilize the property by requiring a 10 foot separation between buildings on separate lots. We believe the approval of the variance is consistent with other shopping centers within Oconee County and does not create a detriment to the public good or damage adjacent properties within the area. Lastly, the approval of this variance request will not change any of the allowed uses on the property.

I have attached the current subdivision of the property and the approved site plan for reference. In order to phase the project, lot 2 will be further subdivided to allow the phasing of the project. The areas in red and yellow on the attached site plan will be constructed as the first phase of the center (including all necessary parking and access roads). The granting of the variance will allow for the future construction of buildings

adjacent to the initial phase and to meet the requirements for financing the project in phases.

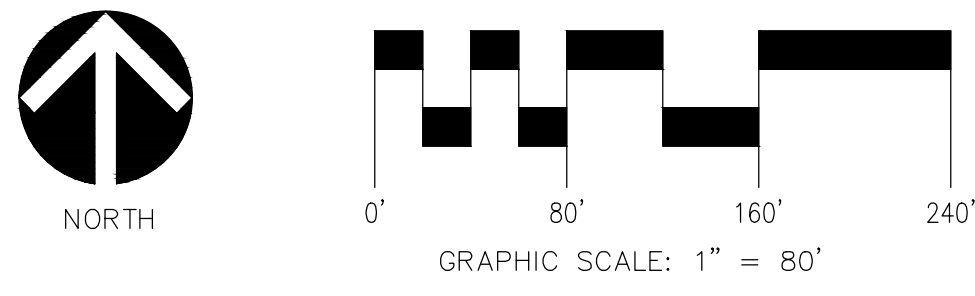
We respectfully request your approval of the requested variance to allow zero setback for internal lot lines at Hartwell Village.

Sincerely,



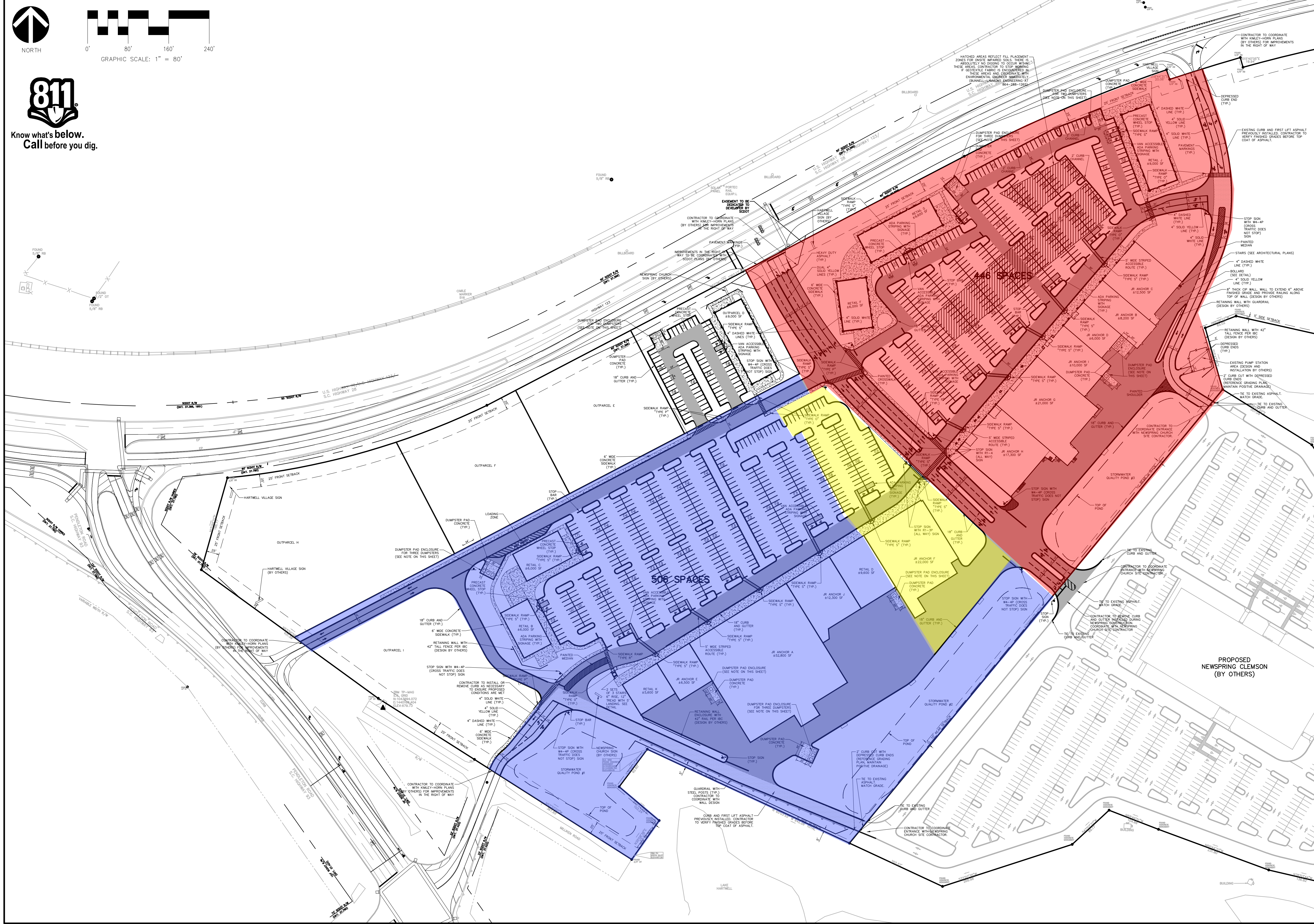
Thomas Lowell
Vice President of Construction and Development
CASTO

THIS DRAWING SHALL NOT BE REPRODUCED IN ANY MANNER OR USED FOR ANY PURPOSE WITHOUT WRITTEN PERMISSION

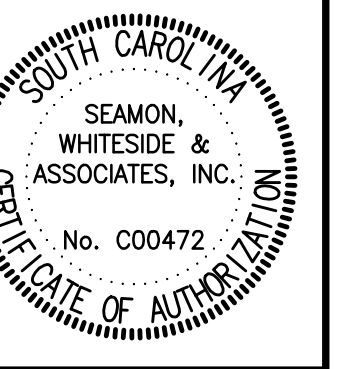


Know what's below. Call before you dig.

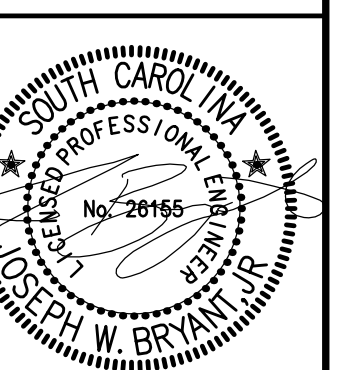
COPYRIGHT © SEAMON, WHITESIDE & ASSOCIATES, INC.



SEAMON WHITESIDE & ASSOCIATES, INC.
508 Phett St., Suite 101
Greenville, SC 29601-2436
864.298.0534 (F) 864.298.8018



HARTWELL VILLAGE
CASTO O'CONNEL, LLC
OCONEE COUNTY, SOUTH CAROLINA



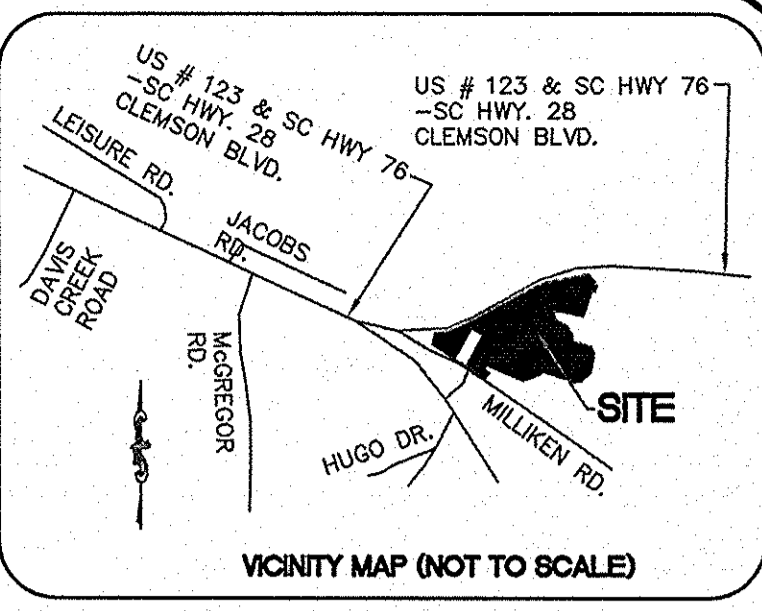
DRAWN BY: MD
CHECKED BY: DB
PROJECT: GR2173
DATE: 2/9/16

NO.	DATE	REVISION NOTES	BY	DB	JB
0	2/9/2016	ISSUED FOR CONSTRUCTION			
1	10/13/2016	REVISED OWNER PRICING SET			
2	10/17/2016	OWNER PRICING SET			

OVERALL SITE PLAN
SHEET XX

LINE	LENGTH	BEARING
L1	63.67'	N 62°24'56" E
L2	20.00'	S 18°42'04" E
L3	20.00'	S 15°42'04" E
L4	50.05'	S 19°41'13" W
L5	49.62'	S 70°41'48" E
L6	100.60'	S 19°26'44" W
L7	50.23'	N 70°20'44" W
L8	65.05'	S 69°09'42" W
L9	126.26'	S 15°46'37" E
L10	143.58'	S 33°30'51" E
L11	125.72'	S 12°20'37" E
L12	113.82'	S 22°25'24" E
L13	40.59'	N 09°53'14" W
L14	104.74'	N 68°45'33" W
L15	99.22'	S 46°57'05" W
L16	92.62'	S 36°51'00" W
L17	103.24'	S 49°46'14" E
L18 TOT.	93.95'	S 35°17'05" W
L19	40.76'	N 54°01'29" W
L20	264.22'	N 62°24'00" E
L21	132.50'	S 27°29'24" E
L22	54.87'	S 65°24'47" E
L23	88.63'	S 39°24'00" W
L24	9.91'	S 23°37'23" W
L25	42.15'	S 27°36'00" E
L26	35.40'	N 62°24'00" E
L27	100.09'	S 40°49'58" E
L28	60.95'	S 40°38'58" E
L29	70.80'	S 47°21'42" E
L30	35.87'	S 50°48'36" E
L31	167.30'	S 17°09'45" E
L32	94.99'	S 07°34'09" E
L33	106.58'	S 09°09'07" W
L34	159.48'	S 18°00'57" W

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	1487.19'	340.99'	171.24'	340.24'	N 78°07'24" E	13°08'13"
C2	1487.19'	193.34'	96.80'	193.20'	N 67°49'50" E	7°26'55"
C3	2804.73'	434.80'	217.83'	434.36'	S 66°51'58" W	8°52'56"
C4	2784.73'	72.42'	36.21'	72.42'	S 72°02'38" W	1°29'24"
C5	2784.73'	73.38'	36.69'	73.38'	S 73°32'38" W	1°30'36"
C6	2784.73'	513.06'	257.27'	512.33'	S 79°36'56" W	10°37'57"
C7	35.00'	55.04'	35.07'	49.54'	S 72°32'42" E	90°06'36"
C8	100.00'	66.19'	34.36'	64.99'	S 46°27'05" E	37°55'23"
C9	25.00'	45.73'	32.47'	39.62'	S 13°00'23" E	104°48'47"
C10	100.00'	20.34'	10.21'	20.31'	N 45°13'41" E	11°39'21"
C11	74.00'	35.43'	18.06'	35.09'	S 37°20'22" W	27°25'58"



SURVEYOR'S NOTES:

- I HEREBY STATE THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND SURVEYING IN THE STATE OF SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS "A" SURVEY AS SPECIFIED THEREIN. THIS PROPERTY IS NOT LOCATED WITHIN A DESIGNATED FLOOD HAZARD AREA.
- ZONING PROVIDED BY THE APPROPRIATE GOVERNMENTAL AGENCY: TO BE USED FOR INFORMATIONAL PURPOSES ONLY.
- THE WORDS "CERTIFY", "CERTIFIES" OR "CERTIFICATION" AS USED HEREIN ARE UNDERSTOOD TO BE AN EXPRESSION OF PROFESSIONAL OPINION BY THE SURVEYOR, BASED UPON HIS BEST KNOWLEDGE, INFORMATION AND BELIEF, AS SUCH, DO NOT CONSTITUTE A GUARANTEE NOR A WARRANTY, EXPRESSED OR IMPLIED.
- THE UNDERGROUND UTILITIES SHOWN HEREON WERE TAKEN FROM PLANS PROVIDED BY THE UTILITY COMPANIES AND FIELD MARKED BY LOCATOR SERVICES AND VISUAL APPARATUS SUCH AS VALVES AND METERS, CONTRACTOR SHALL CALL LOCATOR SERVICE FOR VERIFICATION PRIOR TO ANY CONSTRUCTION OR EXCAVATION.
- ALL CORNERS ARE 5/8" REBAR UNLESS OTHERWISE NOTED.
- ALL LOTS SHALL HAVE ACCESS RIGHTS ALONG CONSTRUCTED ROADS WITHIN THE HARTWELL VILLAGE DEVELOPMENT.

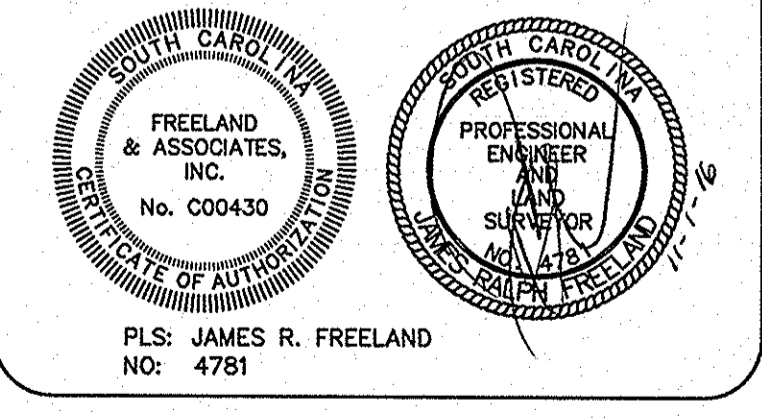
LAND AREA:
1,977,110 SQ.FT.
45.388 ACRES

BASIS OF BEARINGS:
BASIS OF BEARINGS PER GPS "RTK" OBSERVATION OF USGS MONUMENT "CLEMSON" "JACOBS" "AMTRAK" "JERVEY" AND "39 67" NAD 83

FREELAND
SURVEYORS • ENGINEERS

FREELAND & ASSOCIATES, INC.
323 WEST STONE AVE.
GREENVILLE S.C. 29609
TEL. (864) 271-4924 FAX: (864) 233-0315
EMAIL: info@freeland-associates.com

DRAWN:	CF	PARTY CHIEF:	CJ	CHECKED:	MVA
REF. PLAT BOOK:	B449-6/7 & B494-1/2				
REF. DEED BOOK:	2086-12				
TAX MAP:	227-00-01-001 & 227-00-02-004				
DATE OF SURVEY:	5-23-2013				
DATE DRAWN:	5-28-2013				
DRAWING NO:	64558-HV SUB				
DATE OF LAST REVISION:	9-1-2016				



STATE OF SOUTH CAROLINA
OCONEE COUNTY
SENECA TOWNSHIP

SUBDIVISION PLAT FOR HARTWELL VILLAGE

SITE ADDRESS:
U.S. HWY. # 123 AND # 76
SENECA, SC 29678

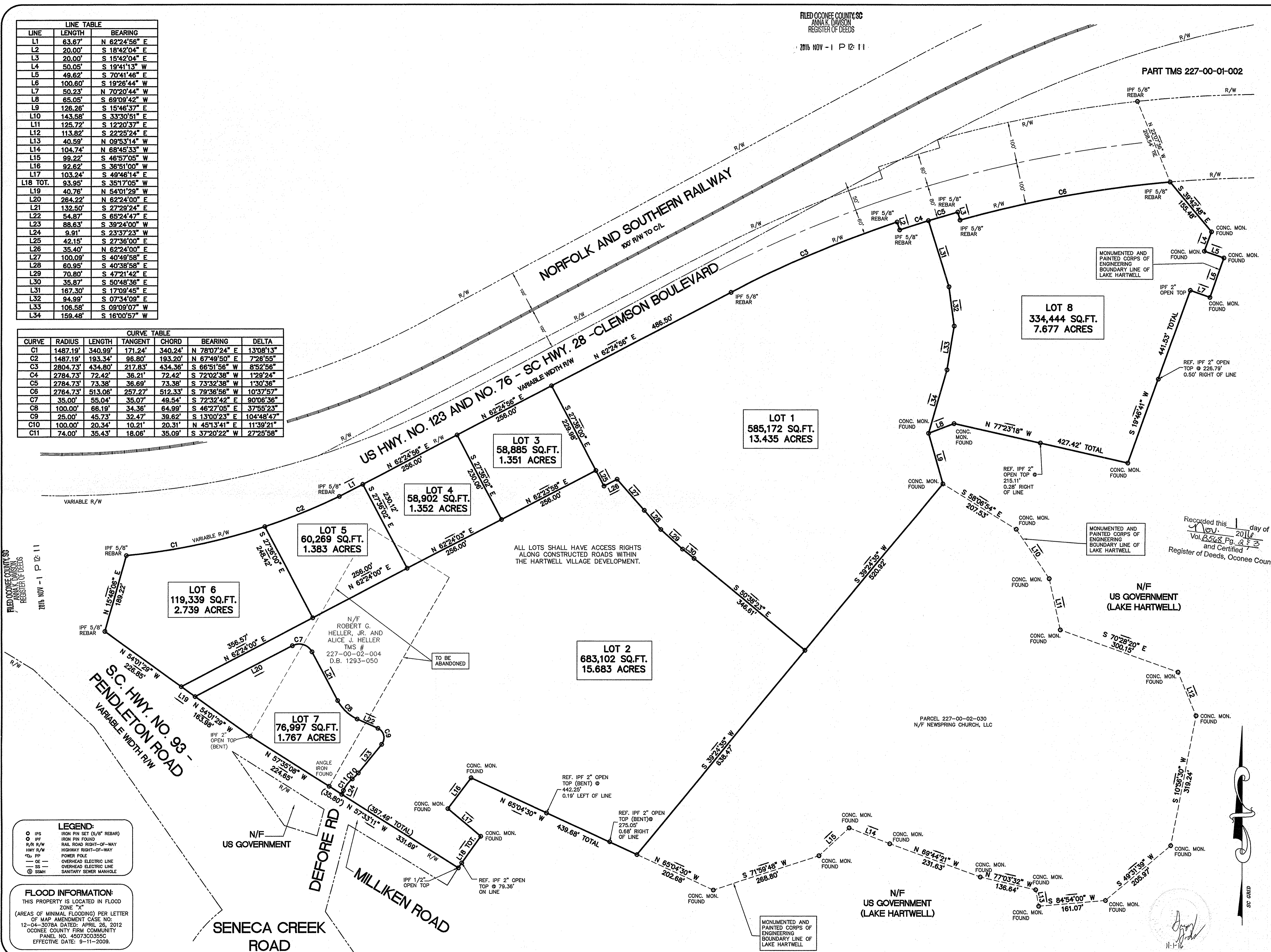
FILED OCONEE COUNTY, SC
ANNA K. DAVISON
REGISTER OF DEEDS
2016 NOV - 1 P 12 11

FILED OCONEE COUNTY, SC
ANNA K. DAVISON
REGISTER OF DEEDS
2016 NOV - 1 P 12 11

LEGEND:

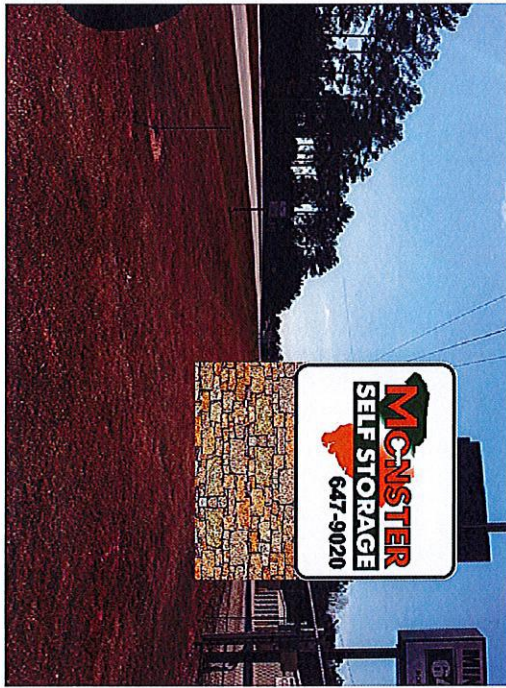
- IPS IRON PIN SET (5/8" REBAR)
- IFF IRON PIN FOUND
- R/W RAIL ROAD RIGHT-OF-WAY
- H/WY R/W HIGHWAY RIGHT-OF-WAY
- P POWER POLE
- E OVERHEAD ELECTRIC LINE
- S OVERHEAD ELECTRIC LINE
- SMH SANITARY SEWER MANHOLE

FLOOD INFORMATION:
THIS PROPERTY IS LOCATED IN FLOOD ZONE "X"
(AREAS OF MINIMAL FLOODING) PER LETTER OF MAP AMENDMENT CASE NO. 12-04-3078A DATED: APRIL 25, 2012
OCONEE COUNTY FIRM COMMUNITY PANEL NO. 45073C0355C
EFFECTIVE DATE: 9-11-2009.



144"

24"



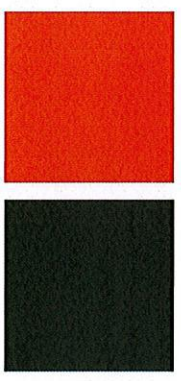
NOT TO SCALE

A QUANTITY (2) 108"H x 144"W double sided internally illuminated cabinet with painted and embossed pan formed faces and 3" retainers mounted to 66"H x 144"W x 24" deep stone base by others.

***LOGO COLORS NEED VERIFIED.**

MONSTER ORANGE
PANTONE 7578C
C 77.77
M 71.07
Y 96.73
K 0.43

MONSTER ORANGE
CLOSEST MATCH PANTONE 557C
C 84.54
M 46.56
Y 82.83
K 55.35



3184 Wade Hampton Blvd, Taylors, SC 29887
 FAX: 864-244-9827 PHONE: 864-244-0040
 WWW.SICLAIRSIGNS.COM

ST. CLAIR SIGNS

CLIENT: Monster Self Storage
 EMAIL: _____
 PHONE: _____
 SALESMAN: BRYAN
 DESIGNER: BRIANNA
 DATE: 4.6.17

Production will proceed upon receipt of your signed and dated approval

It is your responsibility to verify quantities, sizes, colors, spelling, and overall concept(s) contained in your layout. Any corrections made after production begins will be your responsibility and additional charges will apply.

PLEASE NOTE

St. Clair Signs is happy to provide one complimentary sign layout and one complimentary sign layout revision. Any revisions thereafter are subject to graphic design fees at a rate of \$85.00 per hour.

NOTES:

COLOR:

PMS 7578 C
 PMS 567 C - CLOSEST MATCH
 BLACK

VECTOR NEEDED?

YES: NO:

= SQFT

CLIENT APPROVAL:

DATE: _____

By signing this form, the customer is authorizing the manufacturer to produce the sign as shown. The customer agrees to pay for any materials and labor not shown on this form. The customer agrees to pay for any materials and labor not shown on this form. The customer agrees to pay for any materials and labor not shown on this form.

SALES APPROVAL:

DATE: _____

By signing this form, the manufacturer agrees to produce the sign as shown. The manufacturer agrees to pay for any materials and labor not shown on this form. The manufacturer agrees to pay for any materials and labor not shown on this form.

