

**NOTES:**

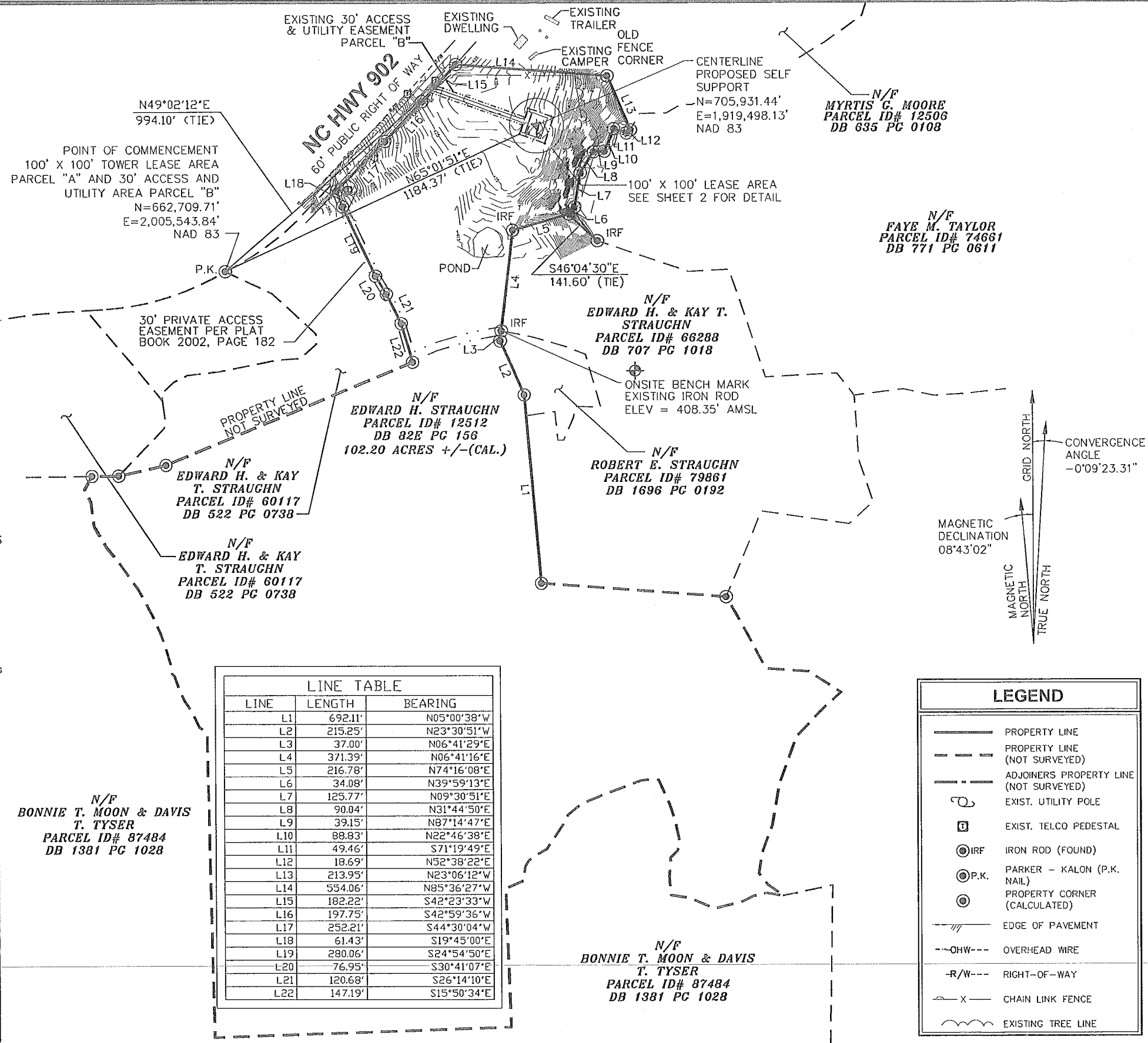
1. This plan was prepared without the benefit of a report of title.
2. This plan does not represent a title survey.
3. The basis of the bearings and coordinates for this plan is the North Carolina State Plane Coordinate System, North American Datum (NCSPCS/NAD 83) based on differential GPS observations performed on January 30, 2014 and tied to the National CORS system via the OPUS utility and expressed in US Survey Feet.
4. Vertical information shown, based on the North American Vertical Datum of 1988 (NAVD '88) in US Survey Feet.
5. Property lines are drawn from information found in Deed Book 82E, Page 156, of the Chatham County Register of Deeds records.
6. All distances are ground unless otherwise noted.
7. This property is located in flood zone "X", areas determined to be outside 0.2% chance of annual flood. (FEMA Community Panel # 3710970000J, effective February 02, 2007).
8. Lessee Information:  
American Tower LLC  
3500 Regency Parkway Suite 100  
Cory, NC 27518
9. Property Information:  
Edwin Straughn  
NC Hwy 902  
Pittsboro, NC 27312

**1A CERTIFICATE**

LATITUDE: N 35° 41' 21.142" (NAD '27)  
 LONGITUDE: W 79° 16' 16.920" (NAD '27)  
 LATITUDE: N 35° 41' 21.664" (NAD '83)  
 LONGITUDE: W 79° 16' 15.983" (NAD '83)  
 GROUND ELEV. (AMSL): 428.8± (NAVD '88)

**SITE SURVEY**

SCALE: 1" = 400'



PREPARED FOR:  
**AMERICAN TOWER**  
 AMERICAN TOWERS, LLC  
 3500 REGENCY PARKWAY SUITE 100  
 CARY, NC 27518

PROJECT INFORMATION:  
**AT&T SITE # 368-770**  
**ATC SITE # 282331**  
**PLEASANT HILL NC**  
 NC HWY 902  
 PITTSBORO, NC 27312  
 (CHATHAM COUNTY)

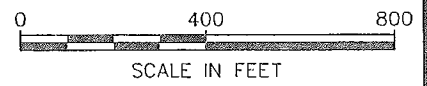
PREPARED BY:  
**TOWER ENGINEERING PROFESSIONALS**  
 3703 JUNCTION BOULEVARD  
 RALEIGH, NC 27603-5263  
 (919) 661-6351  
 NC LICENSE NO. C-1794

**SURVEYOR CERTIFICATE**  
 I, CLIFFORD BYRD, CERTIFY THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY BY ME OR UNDER MY DIRECT SUPERVISION, (DEED DESCRIPTION RECORDED IN BOOK AND PAGE AS REFERENCED HEREON); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS BROKEN LINES, DRAWN FROM INFORMATION FOUND IN BOOK AND PAGE AS REFERENCED HEREON; THAT RATIO OF PRECISION AS CALCULATED IS 1: 10,000 OR GREATER; THAT THE AREA IS COMPUTED BY COORDINATE METHOD; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S.47-30 AS AMENDED. WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL, THIS 20TH DAY OF FEBRUARY, 2014.



*Clifford C. Byrd*  
 NORTH CAROLINA PLS # L-3782  
**CLIFFORD C. BYRD**

SHEET TITLE:  
**SITE SURVEY**  
 DATE: 02/20/2014 REVISION: 0  
 SHEET #: 1 OF 2 TEP #: 52029



**LEGAL DESCRIPTION OF 100' X 100' LEASE**

**AREA PARCEL "A"**

ALL THAT CERTAIN LEASE AREA PARCEL OF LAND, SITUATE, LYING AND BEING IN CHATHAM COUNTY, NORTH CAROLINA, BEING A PORTION OF THE LANDS DESCRIBED IN DEED BOOK 82E AT PAGE 156 OF THE CHATHAM COUNTY REGISTER OF DEEDS AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

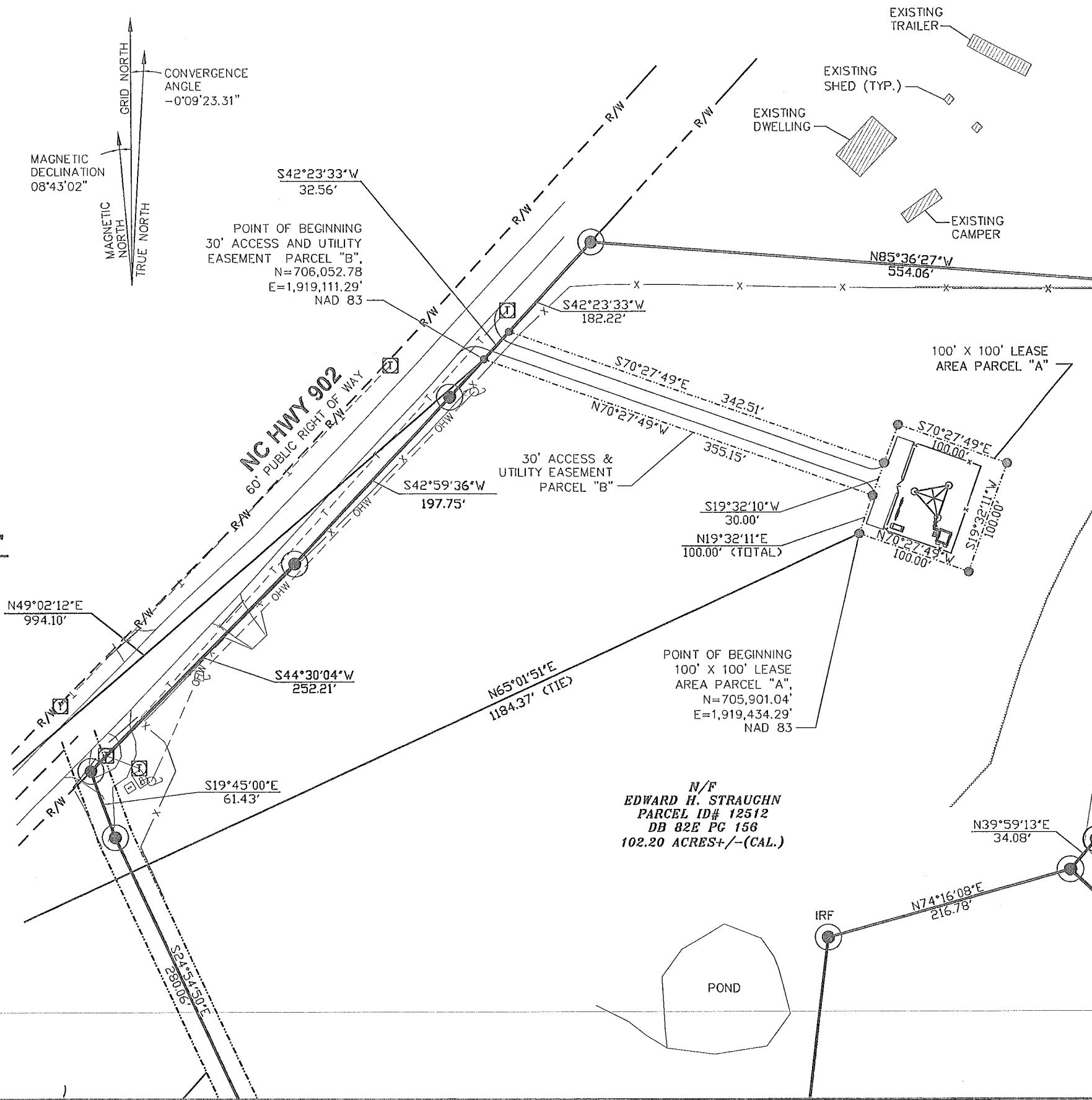
COMMENCING AT EXISTING PK NAIL IN THE CENTERLINE OF NC HWY 902, SAID PK NAIL BEING THE NORTHWEST CORNER OF THE PARCEL DESCRIBED IN DEED BOOK 522 AT PAGE 738, AND HAVING NORTH CAROLINA STATE PLANE COORDINATES OF NORTHING = 662709.71', AND EASTING = 2,005,543.84'; THENCE FROM THE POINT OF COMMENCEMENT, NORTH 65°01'51" EAST, A DISTANCE OF 1,184.37 FT. TO A POINT ON THE SOUTHWEST CORNER OF THE DESCRIBED 100' X 100' LEASE AREA, SAID POINT BEING THE TRUE POINT OF BEGINNING OF SAID LEASE AREA, AND HAVING NORTH CAROLINA STATE PLANE COORDINATES OF NORTHING = 705901.04', AND EASTING = 1,919,434.29'; THENCE FROM THE POINT OF BEGINNING NORTH 19°32'11" EAST, A DISTANCE OF 100.00 FT. TO A POINT; THENCE SOUTH 70°27'49" EAST FOR A DISTANCE OF 100.00 FT. TO A POINT; THENCE SOUTH 19°32'11" WEST FOR A DISTANCE OF 100.00 FT. TO A POINT. THENCE NORTH 70°27'49" WEST FOR A DISTANCE OF 100.00 FT. TO THE POINT OF BEGINNING. SAID LEASE AREA PARCEL CONTAINING 10,000 SQ. FT. OR 0.23 ACRES MORE OR LESS.

**LEGAL DESCRIPTION OF 30' ACCESS AND UTILITY EASEMENT AREA PARCEL "B"**

ALL THAT CERTAIN EASEMENT PARCEL OF LAND, SITUATE, LYING AND BEING IN CHATHAM COUNTY, NORTH CAROLINA, BEING A PORTION OF THE LANDS DESCRIBED IN DEED BOOK 82E AT PAGE 156 OF THE CHATHAM COUNTY REGISTER OF DEEDS AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

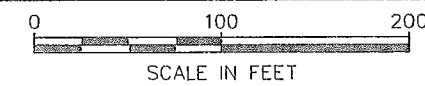
COMMENCING AT EXISTING PK NAIL IN THE CENTERLINE OF NC HWY 902, SAID PK NAIL BEING THE NORTHWEST CORNER OF THE PARCEL DESCRIBED IN DEED BOOK 522 AT PAGE 738, AND HAVING NORTH CAROLINA STATE PLANE COORDINATES OF NORTHING = 662,709.71', AND EASTING = 2,005,543.84'; THENCE FROM THE POINT OF COMMENCEMENT, NORTH 49°02'12" EAST A DISTANCE OF 994.10 FT. TO A POINT ON THE EASTERN RIGHT OF WAY OF NC HWY 902, SAID POINT BEING THE TRUE POINT OF BEGINNING OF A DESCRIBED 30' ACCESS AND UTILITY EASEMENT, AND HAVING NORTH CAROLINA STATE PLANE COORDINATES OF: NORTHING= 706,052.78'; AND EASTING = 1,919,111.29'; THENCE FROM THE POINT OF BEGINNING, ALONG SAID RIGHT OF WAY, NORTH 42°23'33" EAST A DISTANCE OF 32.56 FT. TO A POINT; THENCE LEAVING SAID RIGHT AWAY SOUTH 70°27'49" EAST A DISTANCE OF 342.51 FT. TO A POINT ON THE WESTERN LIMITS OF DESCRIBED 100' X 100' LEASE AREA PARCEL; THENCE WITH SAID WESTERN LIMITS, SOUTH 19°32'10" WEST A DISTANCE OF 30.00 FT. TO A POINT ON SAID WESTERN LIMITS; THENCE LEAVING SAID WESTERN LIMITS, NORTH 70°27'49" WEST A DISTANCE OF 355.15 FT. TO THE POINT OF BEGINNING.

SAID EASEMENT AREA CONTAINING 10,464.85 SQ. FT. OR 0.24 ACRES MORE OR LESS.



**LEGAL DESCRIPTIONS**

SCALE: 1" = 100'



PREPARED FOR:

**AMERICAN TOWER**  
AMERICAN TOWERS, LLC  
3500 REGENCY PARKWAY, SUITE 100  
CARY, NC 27518

PROJECT INFORMATION:

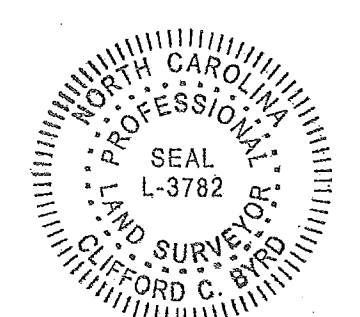
**AT&T SITE # 368-770**  
**ATC SITE # 282331**  
**PLEASANT HILL NC**  
NC HWY 902  
PITTSBORO, NC 27312  
(CHATHAM COUNTY)

PREPARED BY:

**TOWER ENGINEERING PROFESSIONALS**  
3703 JUNCTION BOULEVARD  
RALEIGH, NC 27603-5263  
(919) 661-6351  
NC LICENSE NO. C-1794

**SURVEYOR CERTIFICATE**

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*Clifford C. Byrd*  
NORTH CAROLINA PLS #L-3782  
CLIFFORD C. BYRD

SHEET-TITLE:

**LEGAL DESCRIPTIONS**

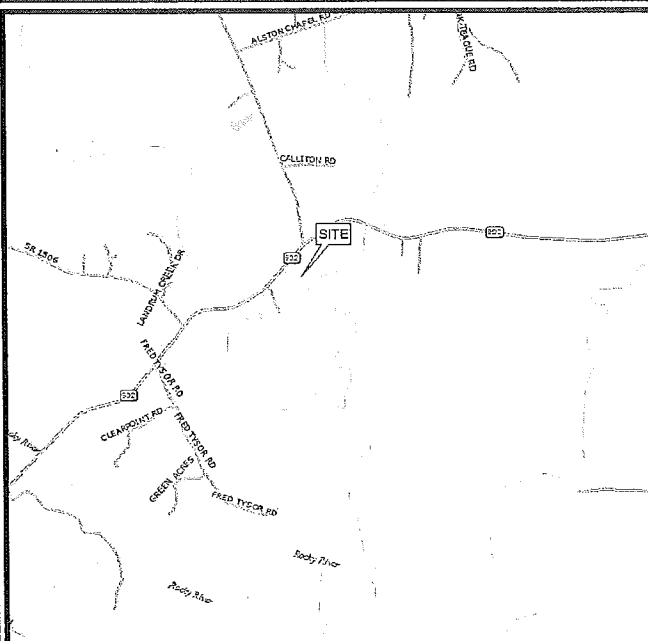
DATE: 02/20/2014	REVISION: 0
SHEET #: 2 OF 2	TEP #: 52029

ATC SITE NUMBER : 282331  
 ATC SITE NAME: PLEASANT HILL NC  
 PROJECT DESCRIPTION: PROPOSED WIRELESS TELECOMMUNICATIONS FACILITY  
 TOWER TYPE: 300' SELF SUPPORT (315' OVERALL HEIGHT)  
 SITE ADDRESS: NC HWY 902 PITTSBORO, NC 27312 (CHATHAM COUNTY)  
 JURISDICTION: CHATHAM COUNTY  
 DISTURBED AREA: 17,417 ± SQ. FT.  
 PRESENT OCCUPANCY TYPE: VACANT  
 CURRENT ZONING: UNZONED  
 PIN #: 12512

**PROJECT INFORMATION**

LATITUDE N 35° 41' 21.142" (NAD '27)  
 LONGITUDE W 79° 16' 16.920" (NAD '27)  
 LATITUDE N 35° 41' 21.664" (NAD '83)  
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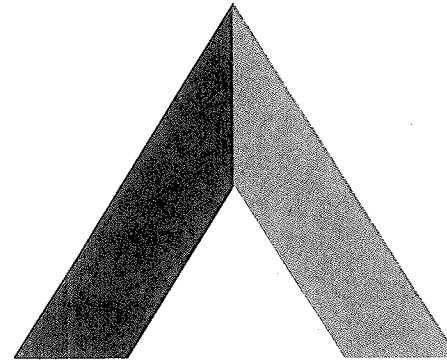
**1-A CERTIFICATION**



**LOCATION MAP**

FROM I-85 IN GREENSBORO, NC: TRAVEL TO EXIT 126. EXIT ONTO US-421 SOUTH. TRAVEL SOUTH ON US-421 FOR 34 MILES TO US-902. TURN NE ON ROUTE 902 AND TRAVEL 6.8 MILES TO GANNON RD. TURN RIGHT ON GANNON ROAD AND TRAVEL 700'. TURN LEFT AND PASS THROUGH FARM GATES. SITE IS APPROXIMATELY 900' NE ACROSS OPEN FIELD.

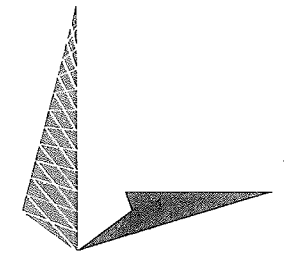
**DRIVING DIRECTIONS**



**AMERICAN TOWER CORPORATION**  
**SITE PLAN**

AT&T SITE #: 368-770  
 ATC SITE #: 282331  
 ATC SITE NAME: PLEASANT HILL NC  
 NC HWY 902  
 PITTSBORO, NC 27312

PLANS PREPARED BY:

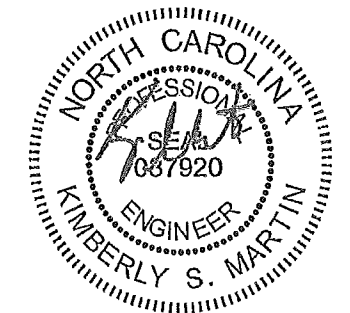


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 3703 JUNCTION BOULEVARD  
 RALEIGH, NC 27603-5263  
 OFFICE: (919) 661-6351  
 www.tepgroup.net  
 N.C. LICENSE # C-1794

REV	DATE	ISSUED FOR:
2	04-30-14	CONSTRUCTION
1	03-13-14	PRELIMINARY
0	02-24-14	PRELIMINARY

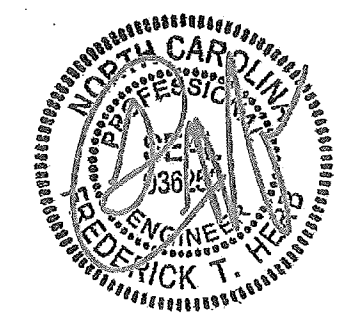
DRAWN BY: MAW CHECKED BY: JAS

SEAL:



April 30, 2014

SEAL:



April 30, 2014

**SITE PROJECT MANAGER:**

NAME: AMERICAN TOWERS LLC  
 ADDRESS: 3500 REGENCY PARKWAY, STE 100  
 CITY, STATE, ZIP: CARY, NC 27518  
 CONTACT: JILL HOUSE  
 PHONE: (919)466-5163

**SITE APPLICANT:**

NAME: AMERICAN TOWERS LLC  
 ADDRESS: 3500 REGENCY PARKWAY, STE 100  
 CITY, STATE, ZIP: CARY, NC 27518  
 CONTACT: JILL HOUSE  
 PHONE: (919)466-5163

**SURVEYOR:**

NAME: TOWER ENGINEERING PROFESSIONALS  
 ADDRESS: 3703 JUNCTION BOULEVARD  
 CITY, STATE, ZIP: RALEIGH, NC 27603  
 CONTACT: CLIFFORD C. BYRD, P.L.S.  
 PHONE: (919) 661-6351

**CIVIL ENGINEER:**

NAME: TOWER ENGINEERING PROFESSIONALS  
 ADDRESS: 3703 JUNCTION BOULEVARD  
 CITY, STATE, ZIP: RALEIGH, NC 27603  
 CONTACT: KIMBERLY S. MARTIN, P.E.  
 PHONE: (919) 661-6351

**ELECTRICAL ENGINEER:**

NAME: TOWER ENGINEERING PROFESSIONALS  
 ADDRESS: 3703 JUNCTION BOULEVARD  
 CITY, STATE, ZIP: RALEIGH, NC 27603  
 CONTACT: FREDERICK T. HERB, P.E.  
 PHONE: (919) 661-6351

**PROPERTY OWNER:**

NAME: EDWARD H. STRAUGHN  
 ADDRESS: 281 LUTTERLOH RD  
 CITY, STATE, ZIP: PITTSBORO, NC 27312  
 CONTACT: EDWARD STRAUGHN  
 PHONE: UNKNOWN

**CONTACT INFORMATION**

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

1. NORTH CAROLINA BUILDING CODE (2012 EDITION)
2. NORTH CAROLINA CODE COUNCIL
3. ANSI/TIA-222-G-2-2009
4. 2012 NCEC (NEC 2011 & ADDENDUM)
5. LOCAL BUILDING CODE
6. CITY/COUNTY ORDINANCES

**CODE COMPLIANCE**

**UTILITIES:**

POWER COMPANY: CENTRAL ELECTRIC OF SANFORD  
 CONTACT: CUSTOMER SERVICE (919)774-4900  
 PHONE: UNKNOWN  
 METER # NEAR SITE:

TELEPHONE COMPANY:

EMBARQ  
 CONTACT: CUSTOMER SERVICE (877)957-1337  
 PHONE: UNKNOWN  
 PEDESTAL # NEAR SITE:

SHEET	DESCRIPTION	REV
T1	TITLE SHEET	2
N1	GENERAL NOTES	2
C1	SITE PLAN	2
C1A	SITE LAYOUT	2
C2	COMPOUND DETAIL	2
C3	TOWER ELEVATION	2
C4	SHELTER ELEVATIONS	2
C5	SHELTER FOUNDATION DETAILS	2
C6	GENERATOR & FUEL TANK ELEVATIONS	2
C7	GENERATOR FOUNDATION DETAILS	2
C8	ICE BRIDGE DETAILS I	2
C9	ICE BRIDGE DETAILS II	2
C10	FENCE DETAILS	2
C10A	ACCESS GATE DETAILS	2
C11	SIGNAGE DETAILS	2
C12	CULVERT & DRIVEWAY DETAILS	2
C13	SOIL & EROSION CONTROL PLAN	2
C13A	SOIL & EROSION CONTROL DETAILS	2
L1	LANDSCAPING PLAN	2
L2	LANDSCAPING DETAILS	2
E1	ELECTRICAL NOTES	2
E2	SERVICE ROUTING PLAN & ONE LINE DIAGRAM	2
E3	TOWER & SHELTER GROUNDING PLAN	2
E4	PANELBOARD SCHEDULE	2
E5	SERVICE RACK DETAILS I	2
E5A	SERVICE RACK DETAILS II	2
E6	GROUNDING DETAILS I	2
E7	GROUNDING DETAILS II	2
	REFERENCE DWG (GENERAC 80KW GENERAL ASSEMBLY & INSTALLATION SUPPLEMENT)	

**INDEX OF SHEETS**

SHEET NUMBER:

**T-1**

REVISION:

**2**

TEP #: 52029

1. ALL REFERENCES MADE TO OWNER IN THESE DOCUMENTS SHALL BE CONSIDERED ATC OR IT'S DESIGNATED REPRESENTATIVE.
2. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE OF NORTH CAROLINA.
3. THE STRUCTURE SHALL BE DESIGNED IN ACCORDANCE WITH ANSI/TIA-222-G-2-2009. THIS CONFORMS TO THE REQUIREMENTS OF THE NORTH CAROLINA BUILDING CODE, 2012 EDITION.
4. WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE NORTH CAROLINA BUILDING CODE, 2012 EDITION.
5. UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.
6. ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
7. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE STRUCTURE AND IT'S COMPONENT PARTS DURING ERECTION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
8. ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATION. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND THE OWNER'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE PROCEDURES.
9. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK. RENTAL CHARGES, SAFETY, PROTECTION AND MAINTENANCE OF RENTED EQUIPMENT SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
11. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE AT&T PROJECT MANAGER.
12. BILL OF MATERIALS AND PART NUMBERS LISTED ON CONSTRUCTION DRAWINGS ARE INTENDED TO AID CONTRACTOR/OWNER. CONTRACTOR/OWNER SHALL VERIFY PARTS AND QUANTITIES WITH MANUFACTURER PRIOR TO BIDDING AND/OR ORDERING MATERIALS.
13. ALL PERMITS THAT MUST BE OBTAINED ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
14. 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY OR CITY) ENGINEER.
15. THE CONTRACTOR SHALL REWORK (DRY, SCARIFY, ETC.) ALL MATERIAL NOT SUITABLE FOR SUBGRADE IN ITS PRESENT STATE. AFTER REWORKING, IF THE MATERIAL REMAINS UNSUITABLE, THE CONTRACTOR SHALL UNDERCUT THIS MATERIAL AND REPLACE WITH APPROVED MATERIAL. ALL SUBGRADES SHALL BE PROOFROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK PRIOR TO PAVING. ANY SOFT MATERIAL SHALL BE REWORKED OR REPLACED.
16. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL PIPES, DITCHES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL WORK IS ACCEPTED BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURE IN OPERABLE CONDITION.
17. THE OWNER SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS.

18. ANY BUILDINGS ON THIS SITE ARE INTENDED TO SHELTER EQUIPMENT WHICH WILL ONLY BE PERIODICALLY MAINTAINED AND ARE NOT INTENDED FOR HUMAN OCCUPANCY.
19. TEMPORARY FACILITIES FOR PROTECTION OF TOOLS AND EQUIPMENT SHALL CONFORM TO LOCAL REGULATIONS AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
20. THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL CARRY LIABILITY INSURANCE IN THE AMOUNTS AND FORM IN ACCORDANCE WITH AT&T SPECIFICATIONS. CERTIFICATES DEMONSTRATING PROOF OF COVERAGE SHALL BE PROVIDED TO AT&T PRIOR TO THE START OF THE WORK ON THE PROJECT.
21. THE CONTRACTOR SHALL CONTACT ALL APPLICABLE UTILITY SERVICES TO VERIFY LOCATIONS OF EXISTING UTILITIES AND REQUIREMENTS FOR NEW UTILITY CONNECTIONS PRIOR TO EXCAVATING.
22. THE CONTRACTOR SHALL MAINTAIN THE JOB CLEAR OF TRASH AND DEBRIS. ALL WASTE MATERIALS SHALL BE REMOVED FROM THE SITE PRIOR TO SUBSTANTIAL COMPLETION AND PRIOR TO FINAL ACCEPTANCE. THE CONTRACTOR SHALL FURNISH ONE 55 GALLON BARREL, AND TRASH BAGS, AND SHALL REMOVE TRASH, DEBRIS, ETC., ON A DAILY BASIS.
23. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL CONDITIONS PRIOR TO SUBMITTING HIS PROPOSAL. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS WITH THOSE AT THE SITE. ANY VARIATION WHICH REQUIRES PHYSICAL CHANGE SHALL BE BROUGHT TO THE ATTENTION OF THE ATC PROJECT ENGINEER FOR FACILITIES/CONSTRUCTION.
24. THE CONTRACTOR SHALL GUARANTEE THE WORK PERFORMED ON THE PROJECT BY THE CONTRACTOR AND ANY OR ALL OF THE SUBCONTRACTORS WHO PERFORMED WORK FOR THE CONTRACTOR ON THIS PROJECT. THE GUARANTEE SHALL BE FOR A FULL YEAR FOLLOWING ISSUANCE OF THE FINAL PAYMENT OF RETAINAGE. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE YEAR FROM ACCEPTANCE DATE.

PLANS PREPARED FOR:



**AMERICAN TOWER CORPORATION**  
3500 REGENCY PARKWAY, SUITE 100  
CARY, NC 27511

PROJECT INFORMATION:

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**ATC SITE #: 282331**  
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NC HWY 902  
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(CHATHAM COUNTY)

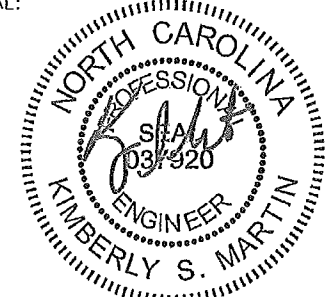
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N.C. LICENSE # C-1794

SEAL:



April 30, 2014

REV	DATE	ISSUED FOR:
2	04-30-14	CONSTRUCTION
1	03-13-14	PRELIMINARY
0	02-24-14	PRELIMINARY

DRAWN BY: SCB CHECKED BY: GMA

SHEET TITLE:

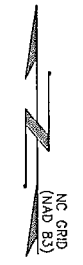
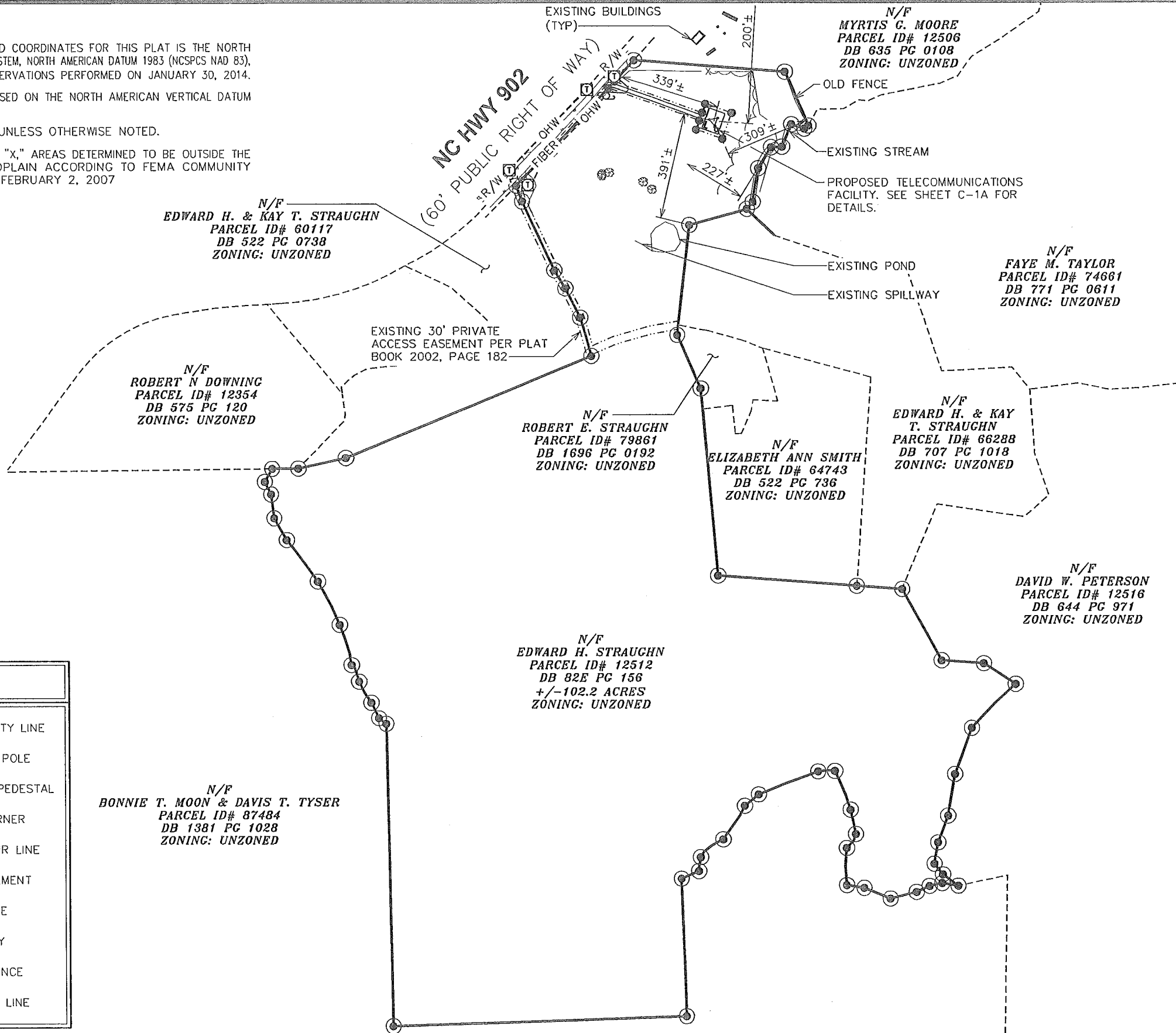
**GENERAL NOTES**


SHEET NUMBER:	REVISION:
<b>N-1</b>	<b>2</b>
	TEP #: 52029

**GENERAL NOTES**

**NOTES:**

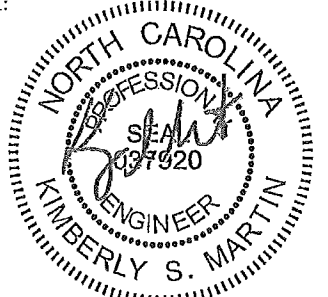
1. THE BASIS OF THE MERIDIANS AND COORDINATES FOR THIS PLAT IS THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM 1983 (NCSPCS NAD 83), BASED ON DIFFERENTIAL GPS OBSERVATIONS PERFORMED ON JANUARY 30, 2014.
2. VERTICAL INFORMATION SHOWN, BASED ON THE NORTH AMERICAN VERTICAL DATUM OF NAVD 1988 IN FEET.
3. ALL DISTANCES ARE GROUND UNLESS OTHERWISE NOTED.
4. THE TOWER IS LOCATED IN ZONE "X," AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO FEMA COMMUNITY PANEL #3710970000J, DATED FEBRUARY 2, 2007



PLANS PREPARED FOR:  
  
 AMERICAN TOWER CORPORATION  
 3500 REGENCY PARKWAY, SUITE 100  
 CARY, NC 27511

PROJECT INFORMATION:  
**AT&T SITE #: 368-770**  
**ATC SITE #: 282331**  
**PLEASANT HILL NC**  
 NC HWY 902  
 PITTSBORO, NC 27312  
 (CHATHAM COUNTY)

PLANS PREPARED BY:  
  
**TOWER ENGINEERING PROFESSIONALS**  
 3703 JUNCTION BOULEVARD  
 RALEIGH, NC 27603-5263  
 OFFICE: (919) 661-6351  
 www.tepgroup.net  
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






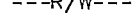
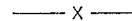
SEAL:  
  
 April 30, 2014

REV	DATE	ISSUED FOR:
2	04-30-14	CONSTRUCTION
1	03-13-14	PRELIMINARY
0	02-24-14	PRELIMINARY

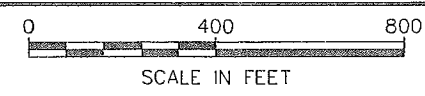
DRAWN BY: MAW CHECKED BY: SCB

SHEET TITLE:  
**SITE PLAN**

SHEET NUMBER: **C-1** REVISION: **2**  
 TEP #: 52029

LEGEND	
	EXIST. PROPERTY LINE
	EXIST. UTILITY POLE
	EXIST. TELCO PEDESTAL
	PROPERTY CORNER
	EXIST. CONTOUR LINE
	EDGE OF PAVEMENT
	OVERHEAD WIRE
	RIGHT-OF-WAY
	CHAIN LINK FENCE
	EXISTING TREE LINE

**SITE PLAN**  
 SCALE: 1" = 400'

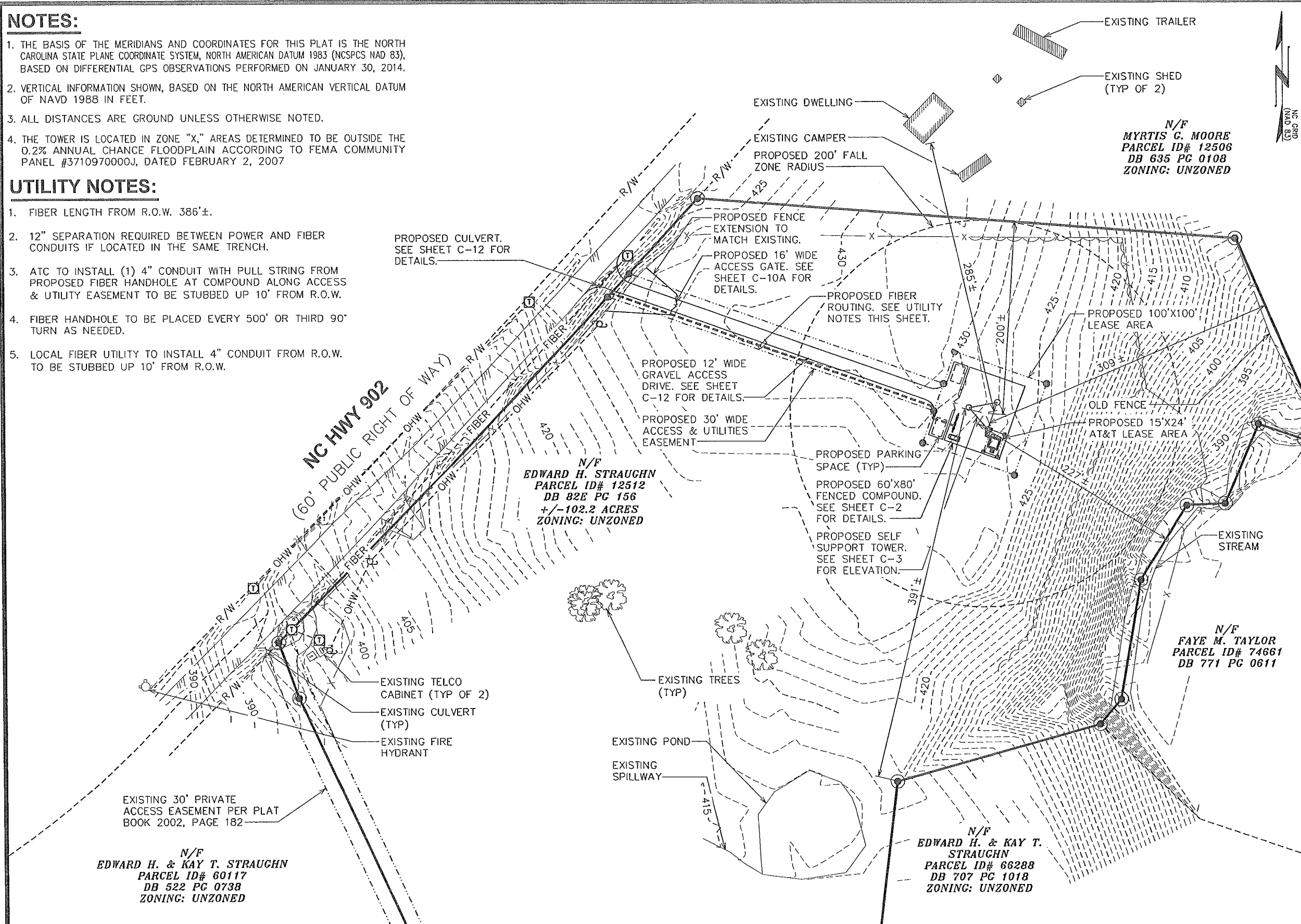


**NOTES:**

1. THE BASIS OF THE MERIDIANS AND COORDINATES FOR THIS PLAT IS THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM 1983 (NCSPCS NAD 83), BASED ON DIFFERENTIAL GPS OBSERVATIONS PERFORMED ON JANUARY 30, 2014.
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**UTILITY NOTES:**

1. FIBER LENGTH FROM R.O.W. 386'±.
2. 12" SEPARATION REQUIRED BETWEEN POWER AND FIBER CONDUITS IF LOCATED IN THE SAME TRENCH.
3. ATC TO INSTALL (1) 4" CONDUIT WITH PULL STRING FROM PROPOSED FIBER HANDHOLE AT COMPOUND ALONG ACCESS & UTILITY EASEMENT TO BE STUBBED UP 10' FROM R.O.W.
4. FIBER HANDHOLE TO BE PLACED EVERY 500' OR THIRD 90° TURN AS NEEDED.
5. LOCAL FIBER UTILITY TO INSTALL 4" CONDUIT FROM R.O.W. TO BE STUBBED UP 10' FROM R.O.W.



PLANS PREPARED FOR:

AMERICAN TOWER CORPORATION  
3500 REGENCY PARKWAY, SUITE 100  
CARY, NC 27511

PROJECT INFORMATION:

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**ATC SITE #: 282331**  
**PLEASANT HILL NC**  
NC HWY 902  
PITTSBORO, NC 27312  
(CHATHAM COUNTY)

PLANS PREPARED BY:

**TOWER ENGINEERING PROFESSIONALS**  
3703 JUNCTION BOULEVARD  
RALEIGH, NC 27603-5263  
OFFICE: (919) 661-6351  
www.tepgroup.net

N.C. LICENSE # C-1794

SEAL:

SEAL: 027829  
KIMBERLY S. MARTIN  
ENGINEER

April 30, 2014

REV	DATE	ISSUED FOR:
2	04-30-14	CONSTRUCTION
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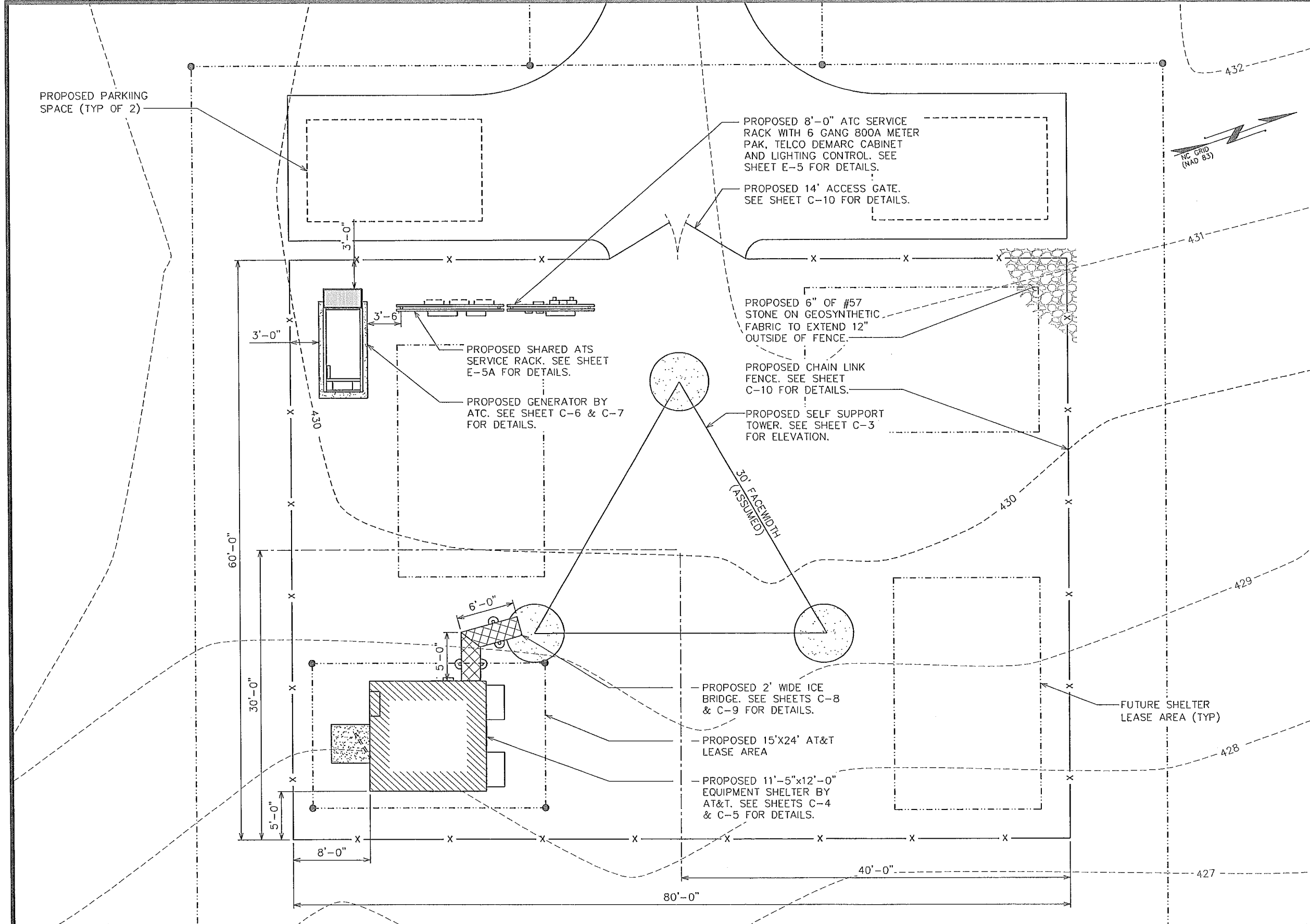
DRAWN BY: MAW CHECKED BY: SCB

SHEET TITLE:

**SITE LAYOUT**

SHEET NUMBER:	REVISION:
<b>C-1A</b>	<b>2</b>
TEP #:	52029

**SITE PLAN**  
SCALE: 1" = 100'



PLANS PREPARED FOR:

**AMERICAN TOWER CORPORATION**  
 3500 REGENCY PARKWAY, SUITE 100  
 CARY, NC 27511

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**PLEASANT HILL NC**  
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 3703 JUNCTION BOULEVARD  
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N.C. LICENSE # C-1794

SEAL:

**NORTH CAROLINA PROFESSIONAL ENGINEER**  
 SEAL  
 0317320  
 KIMBERLY S. MARTIN

April 30, 2014

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DRAWN BY: MAW CHECKED BY: SCB

SHEET TITLE:

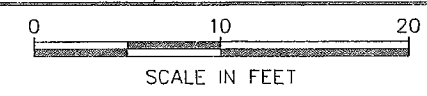
**COMPOUND DETAIL**

SHEET NUMBER: **C-2**

REVISION: **2**

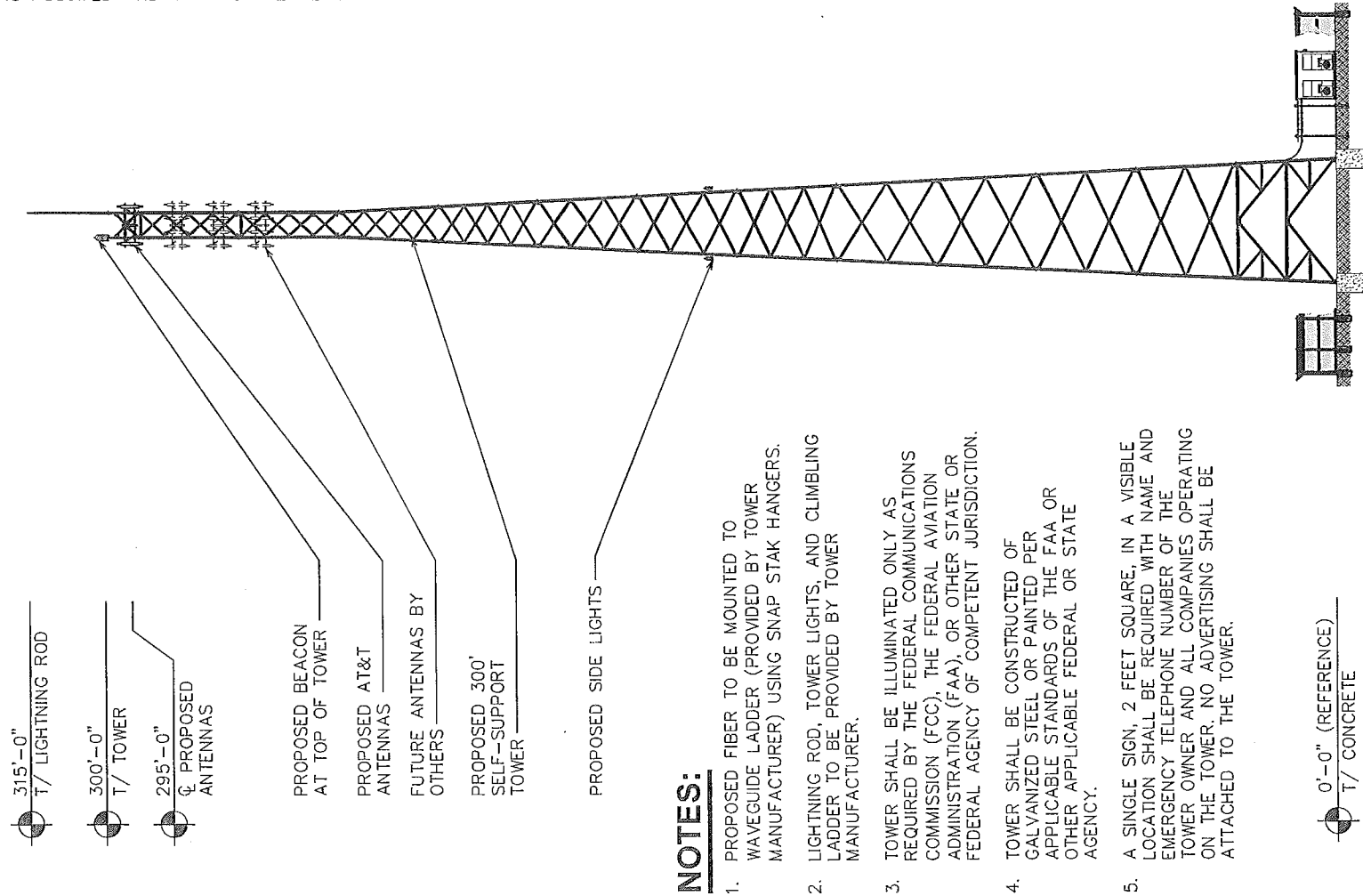
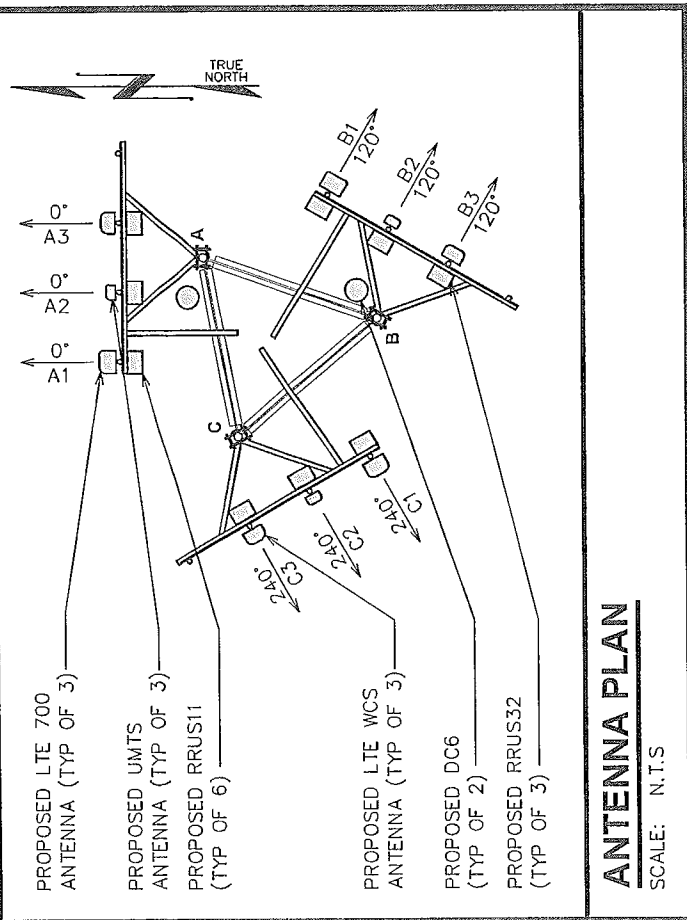
TEP #: 52029

**COMPOUND DETAIL**  
 SCALE: 1" = 10'



PROPOSED ANTENNA/CABLE SCHEDULE													
ANT.	SECTOR	TECH.	MANUFACTURER (MODEL #)	AZIMUTH*	MOUNTING HEIGHT	ELEC. D-TILT	MECH. D-TILT	RRU MODEL	JUMPER SIZE	JUMPER LENGTH (FROM RRU)	DC6 MODEL	CABLE RUN	CABLE LENGTH
A1	ALPHA	LTE 700	ERICSSON KRC118048-1	0°	℄ @ 295'-0"	3°	0°	RRUS11 (TOP)	5mm JUMPER	5'±	(2) DC6-48-60-18-8F	(2) FIBER (3) DC POWER	335'±
B1	BETA		ERICSSON KRC118048-1	120°	℄ @ 295'-0"	3°	0°	RRUS11 (TOP)	5mm JUMPER	5'±			
C1	GAMMA		ERICSSON KRC118048-1	240°	℄ @ 295'-0"	3°	0°	RRUS11 (TOP)	5mm JUMPER	5'±			
A2	ALPHA	UMTS	CELLMAX CMA_B_6521_E06_A3	0°	℄ @ 295'-0"	2°	0°	RRUS11 (TOP)	5mm JUMPER	5'±			
B2	BETA		CELLMAX CMA_B_6521_E06_A3	120°	℄ @ 295'-0"	2°	0°	RRUS11 (TOP)	5mm JUMPER	5'±			
C2	GAMMA		CELLMAX CMA_B_6521_E06_A3	240°	℄ @ 295'-0"	2°	0°	RRUS11 (TOP)	5mm JUMPER	5'±			
A3	ALPHA	LTE WCS	ANDREW SBNHH-1D65C	0°	℄ @ 295'-0"	1°	0°	RRUS32 B30 (TOP)	5mm JUMPER	5'±			
B3	BETA		ANDREW SBNHH-1D65C	120°	℄ @ 295'-0"	1°	0°	RRUS32 B30 (TOP)	5mm JUMPER	5'±			
C3	GAMMA		ANDREW SBNHH-1D65C	240°	℄ @ 295'-0"	1°	0°	RRUS32 B30 (TOP)	5mm JUMPER	5'±			

\* - AZIMUTHS BASED ON TRUE NORTH  
 \* - ANTENNA MDOEL AND AZIMUTH INFORMATION IS ASSUMED AND MAY NOT REPRESENT FINAL CONFIGURATION.



**TOWER ELEVATION**  
SCALE: 1" = 40'

SCALE IN FEET  
0 40 80

PLANS PREPARED FOR:  
  
 AMERICAN TOWER CORPORATION  
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 CARY, NC 27511

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**ATC SITE #: 282331**  
**PLEASANT HILL NC**  
 NC HWY 902  
 PITTSBORO, NC 27312  
 (CHATHAM COUNTY)

PLANS PREPARED BY:  
  
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 OFFICE: (919) 661-6351  
 www.tepgroup.net  
 N.C. LICENSE # C-1794

SEAL:  
  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 KIMBERLY S. MARTIN  
 April 30, 2014

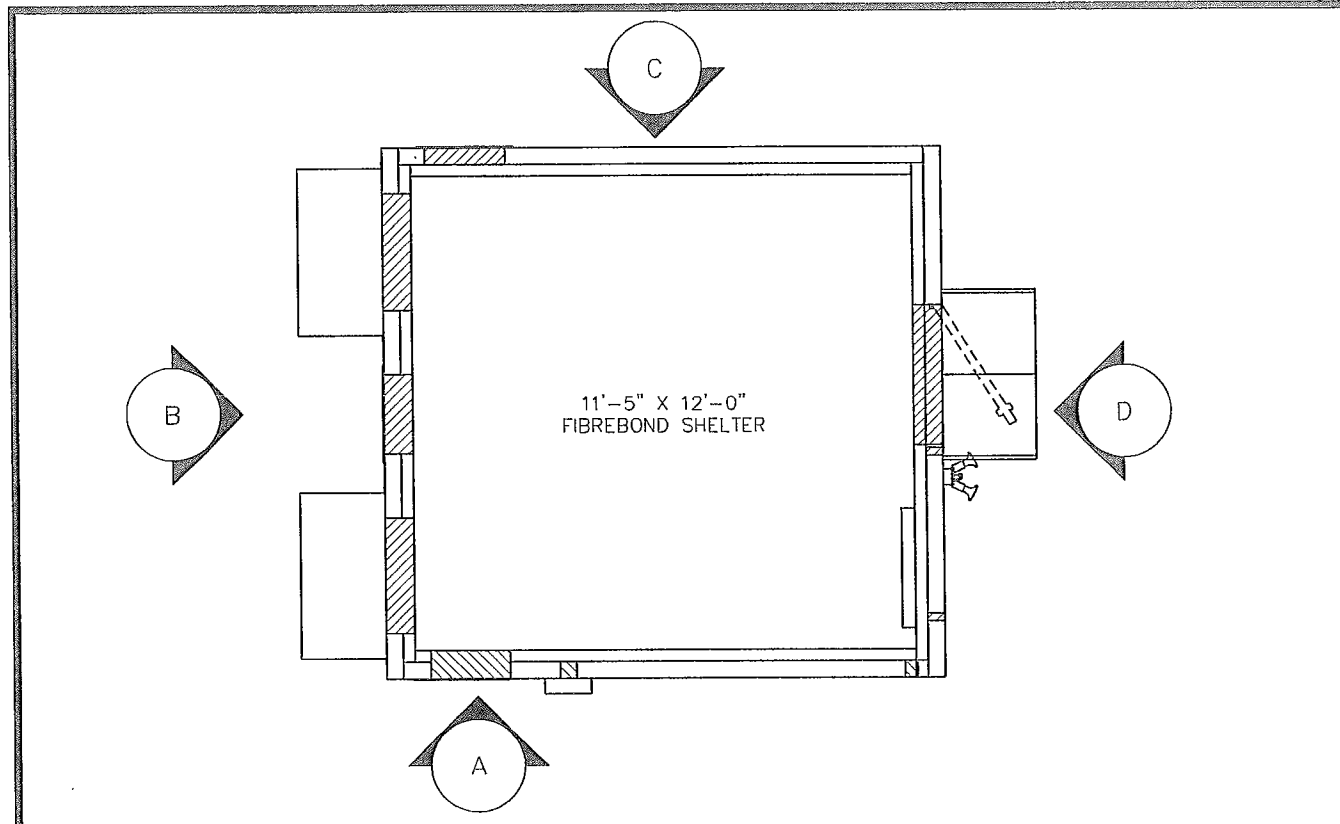
REV	DATE	ISSUED FOR:
2	04-30-14	CONSTRUCTION
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DRAWN BY: TLL CHECKED BY: GMA

SHEET TITLE:  
**TOWER ELEVATION**

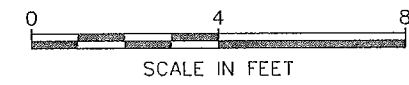
SHEET NUMBER: **C-3** REVISION: **2**  
 TEP #: 52029





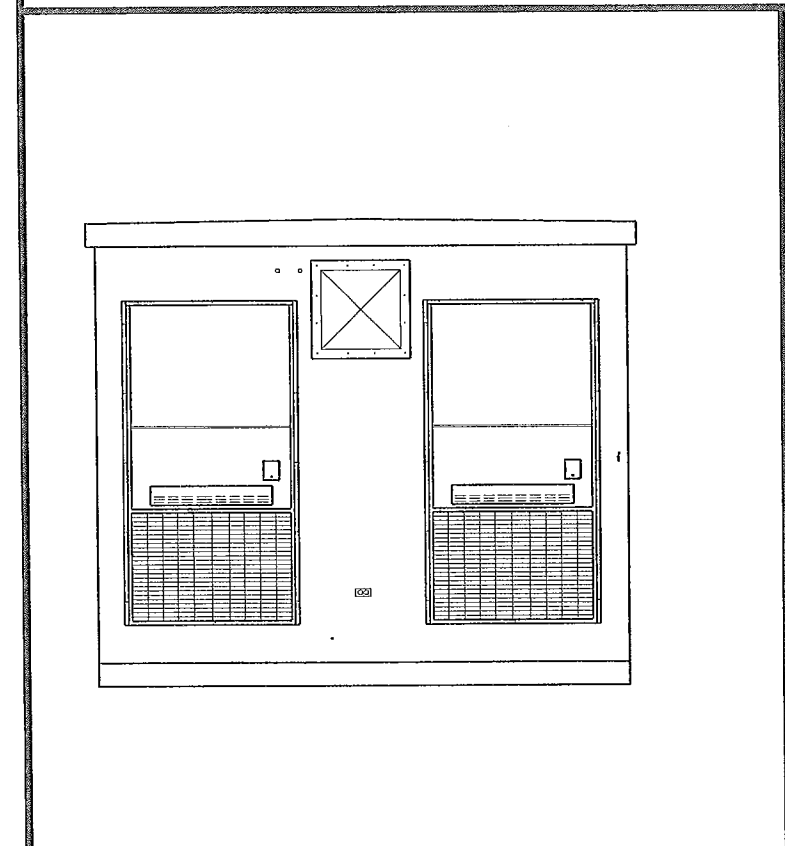
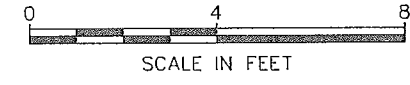
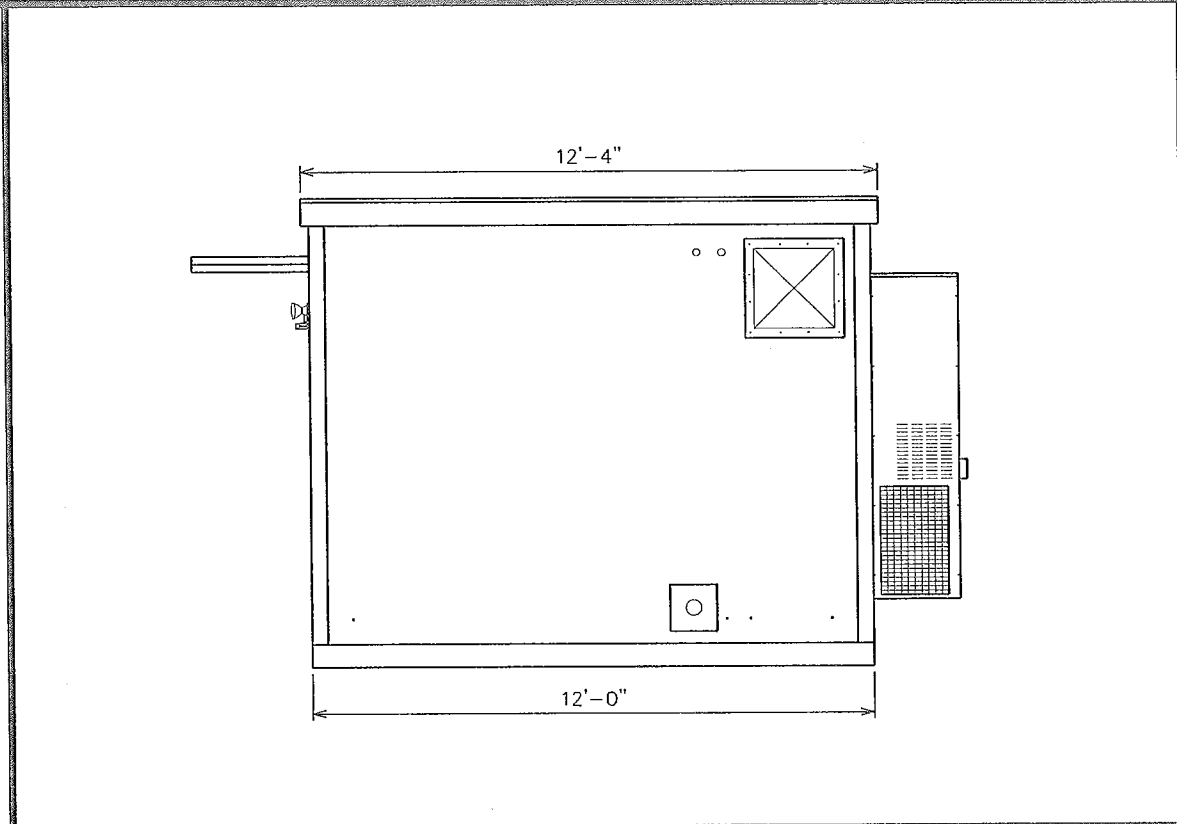
**EQUIPMENT LAYOUT**

SCALE: 1/4" = 1'-0"



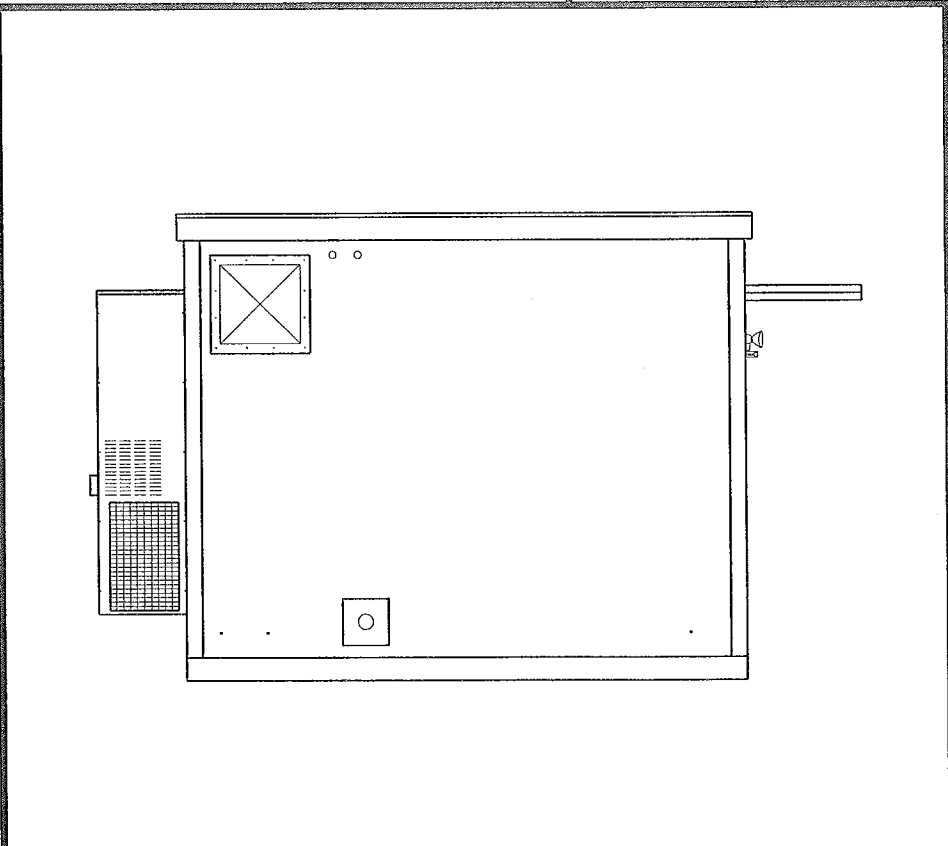
**ELEVATION A**

SCALE: 1/4" = 1'-0"



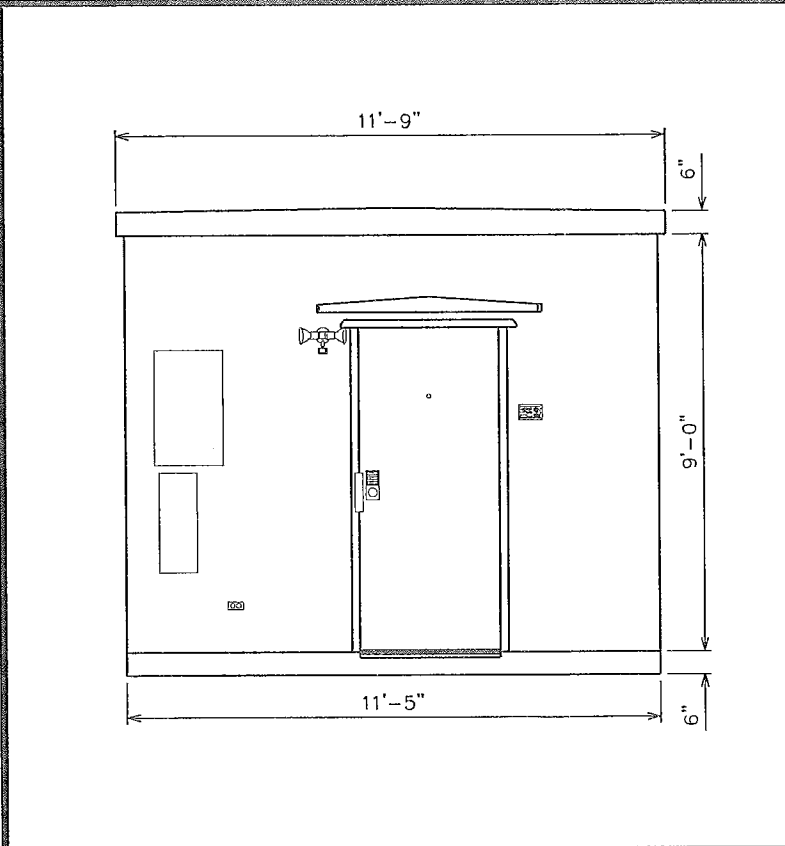
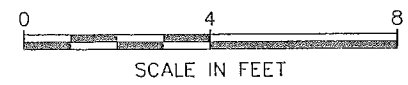
**ELEVATION B**

SCALE: 1/4" = 1'-0"



**ELEVATION C**

SCALE: 1/4" = 1'-0"



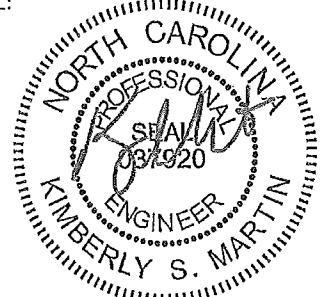
**ELEVATION D**

SCALE: 1/4" = 1'-0"

PLANS PREPARED FOR:  
  
**AMERICAN TOWER CORPORATION**  
 3500 REGENCY PARKWAY, SUITE 100  
 CARY, NC 27511

PROJECT INFORMATION:  
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**ATC SITE #: 282331**  
**PLEASANT HILL NC**  
 NC HWY 902  
 PITTSBORO, NC 27312  
 (CHATHAM COUNTY)

PLANS PREPARED BY:  
  
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 RALEIGH, NC 27603-5263  
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*April 30, 2014*


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DRAWN BY: MAW CHECKED BY: SCB

SHEET TITLE:  
**SHELTER ELEVATIONS**

SHEET NUMBER: **C-4** REVISION: **2**  
 TEP #: 52029

PLANS PREPARED FOR:



**AMERICAN TOWER CORPORATION**  
 3500 REGENCY PARKWAY, SUITE 100  
 CARY, NC 27511

PROJECT INFORMATION:

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**ATC SITE #: 282331**  
**PLEASANT HILL NC**  
 NC HWY 902  
 PITTSBORO, NC 27312  
 (CHATHAM COUNTY)

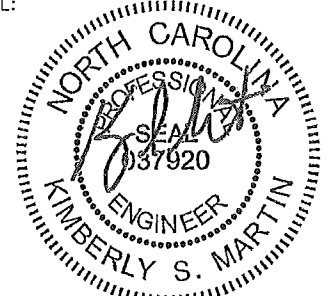
PLANS PREPARED BY:



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 3703 JUNCTION BOULEVARD  
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SEAL:



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0	02-24-14	PRELIMINARY

DRAWN BY: SCB CHECKED BY: GMA

SHEET TITLE:

**SHELTER FOUNDATION DETAILS**

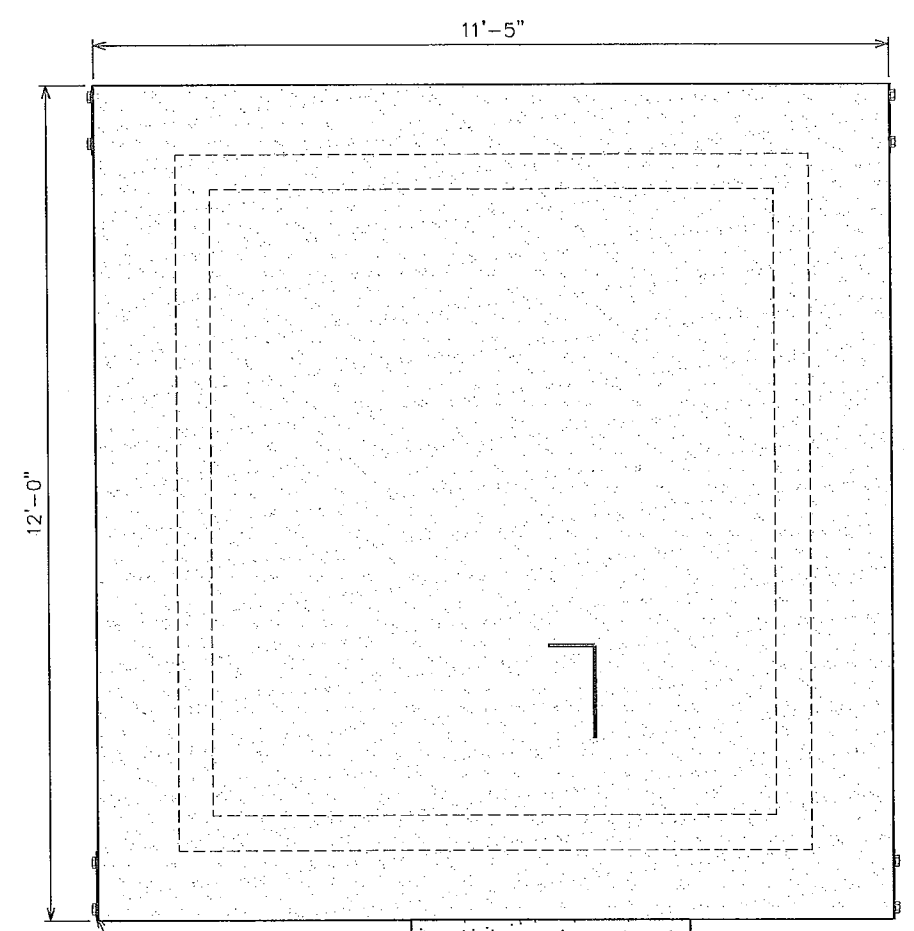
SHEET NUMBER:	REVISION:
<b>C-5</b>	<b>2</b>
TEP #:	52029

**GENERAL STRUCTURAL NOTES:**

- SPECIFICATION/CODES:
1. CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE ACI CODE.
  2. REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE".
  3. DESIGN SHALL BE PER NORTH CAROLINA STATE BUILDING CODE, 2012 EDITION.

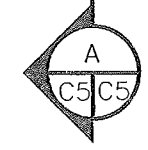
**FOUNDATION NOTES:**

1. FOUNDATION DESIGN BASED ON 2000 PSF SOIL BEARING CAPACITY. IF OTHER CONDITIONS EXIST, FOUNDATION SHALL BE REDESIGNED. CONTRACTOR SHALL HAVE SOIL BEARING CAPACITY VERIFIED BY A LICENSED PROFESSIONAL GEOTECHNICAL ENGINEER PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES.
2. ONCRETE SHALL BE 3,000 PSI.
3. REBAR Fy = 60,000 PSI.
4. ALL BACKFILL SHALL BE THOROUGHLY COMPACTED TO A MINIMUM OF 95% DENSITY USING THE MODIFIED PROCTOR METHOD.



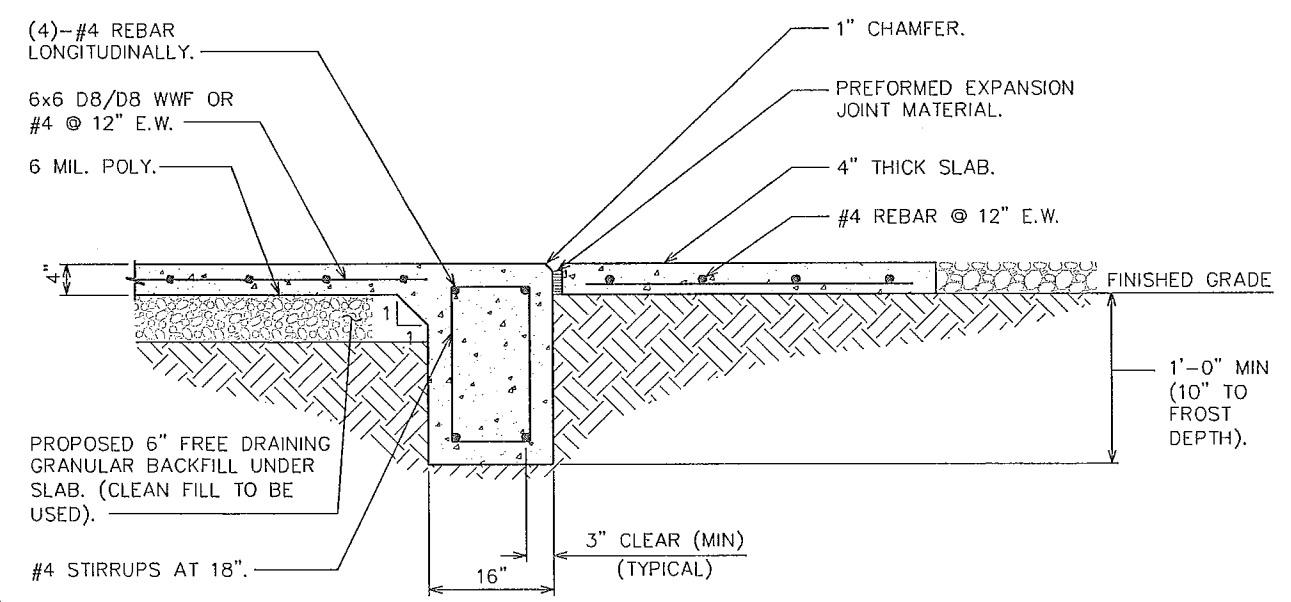
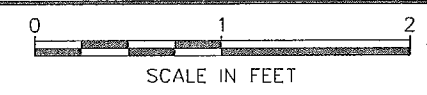
TIE DOWN PLATE (TYP OF 4) SEE CONNECTION DETAILS THIS SHEET.

PROPOSED 4'x4' STOOP.



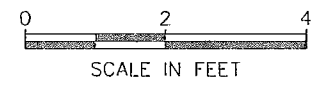
**CONNECTION DETAIL**

SCALE: 1" = 1'-0"



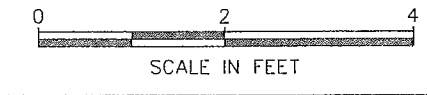
**SHELTER FOUNDATION PLAN**

SCALE: 3/8" = 1'-0"



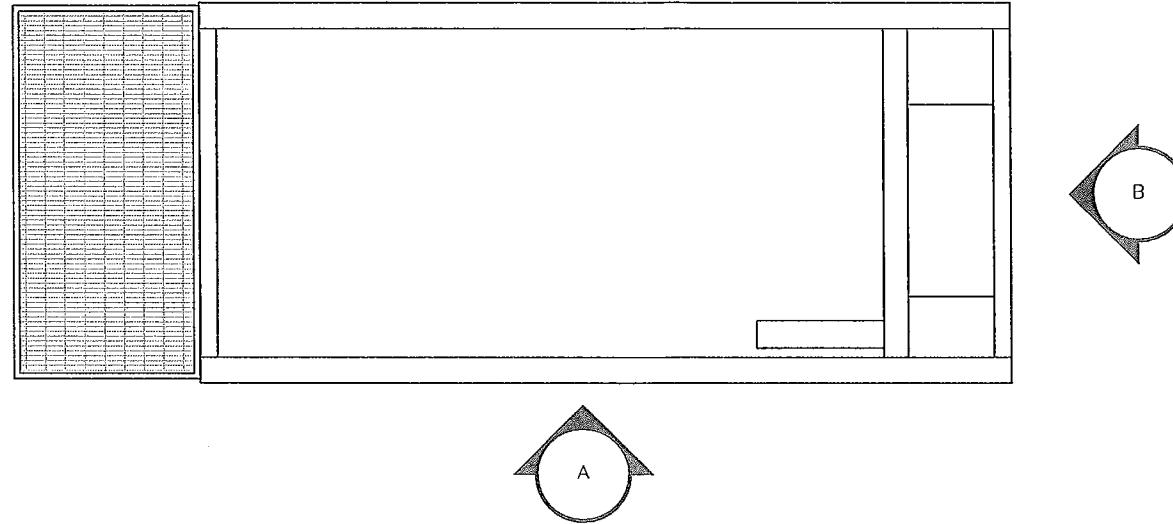
**PAD SECTION**

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



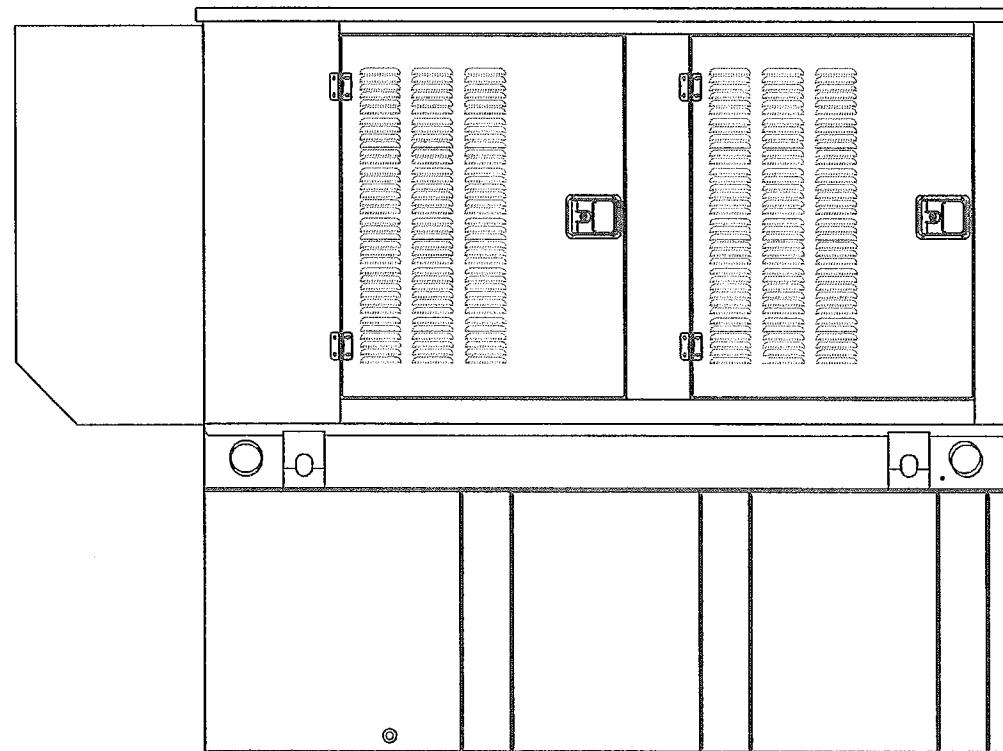
**GENERATOR NOTE:**

80KW INDUSTRIAL DIESEL GENERATOR  
 BY GENERAC. CONTRACTOR TO VERIFY  
 DIMENSIONS WITH MANUFACTURER.



**GENERATOR LAYOUT**

SCALE: N.T.S.

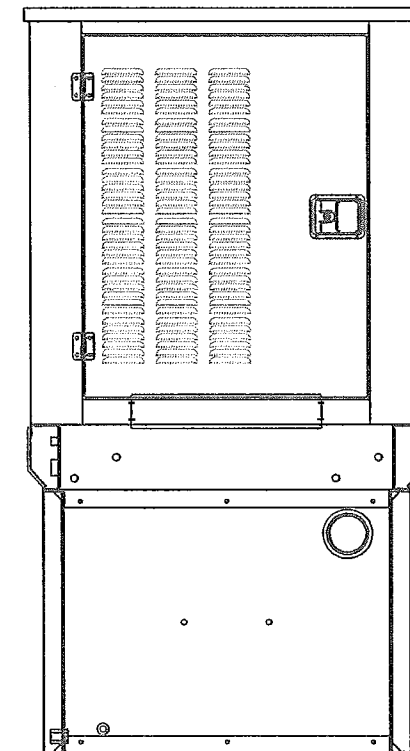


**NOTE:**

ANCHOR GENERATOR FUEL TANK TO  
 CONCRETE PAD PER GENERAC  
 DESIGN DRAWINGS.

**ELEVATION A**

SCALE: N.T.S.



**ELEVATION B**

SCALE: N.T.S.

PLANS PREPARED FOR:

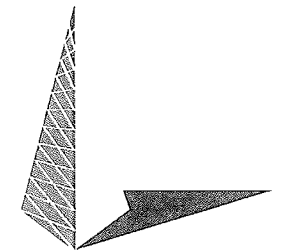


AMERICAN TOWER  
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 3500 REGENCY PARKWAY, SUITE 100  
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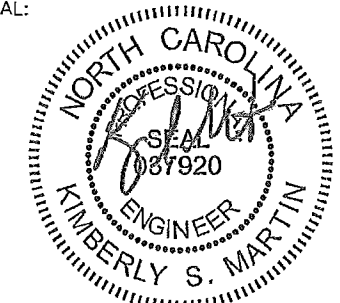
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SEAL:



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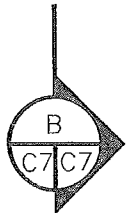
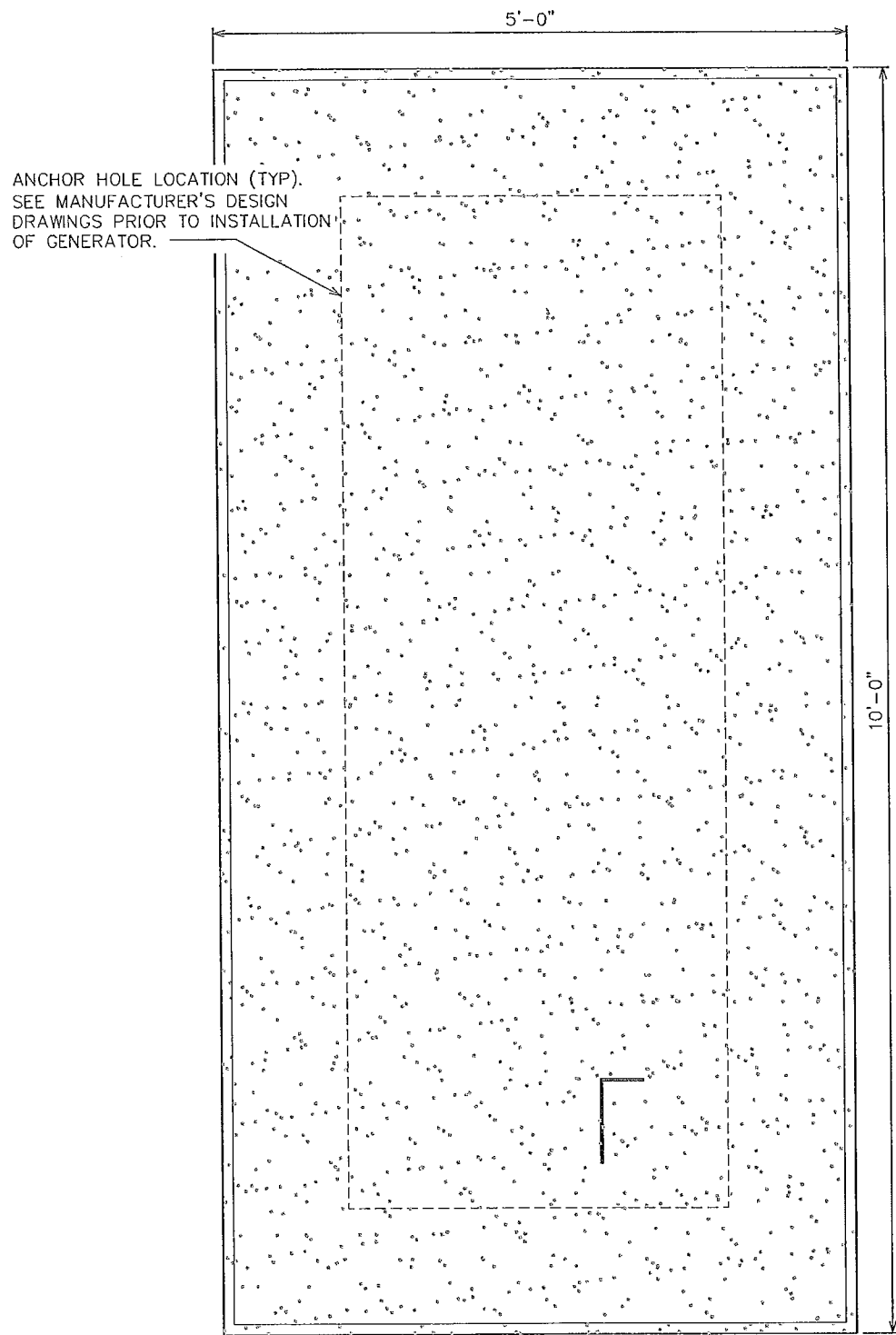
2	04-30-14	CONSTRUCTION
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REV	DATE	ISSUED FOR:

DRAWN BY: SCB CHECKED BY: GMA

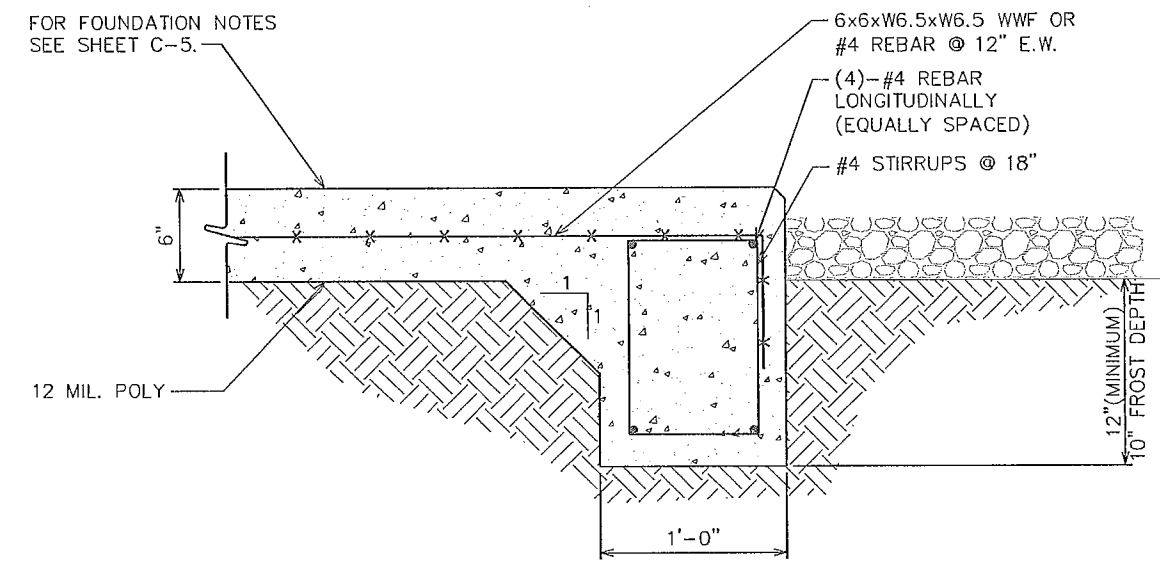
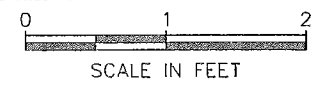
SHEET TITLE:

**GENERATOR & FUEL  
 TANK ELEVATIONS**

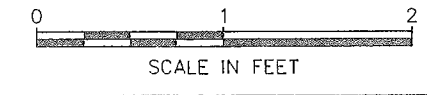
SHEET NUMBER: <b>C-6</b>	REVISION: <b>2</b>
	TEP # 52029



**GENERATOR FOUNDATION**  
SCALE: 3/4" = 1'-0"



**SECTION**  
SCALE: 1" = 1'-0"



PLANS PREPARED FOR:



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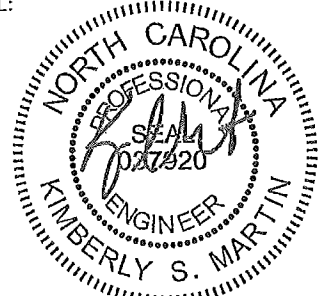
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REV	DATE	ISSUED FOR:

DRAWN BY: SCB CHECKED BY: GMA

SHEET TITLE:

**GENERATOR FOUNDATION DETAILS**

SHEET NUMBER: **C-7** REVISION: **2**  
TEP #: 52029

PLANS PREPARED FOR:



**AMERICAN TOWER CORPORATION**  
 3500 REGENCY PARKWAY, SUITE 100  
 CARY, NC 27511

PROJECT INFORMATION:

**AT&T SITE #: 368-770**  
**ATC SITE #: 282331**  
**PLEASANT HILL NC**  
 NC HWY 902  
 PITTSBORO, NC 27312  
 (CHATHAM COUNTY)

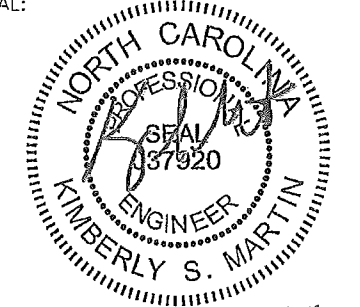
PLANS PREPARED BY:



**TOWER ENGINEERING PROFESSIONALS**  
 3703 JUNCTION BOULEVARD  
 RALEIGH, NC 27603-5263  
 OFFICE: (919) 661-6351  
 www.tepgroup.net

N.C. LICENSE # C-1794

SEAL:



April 30, 2014

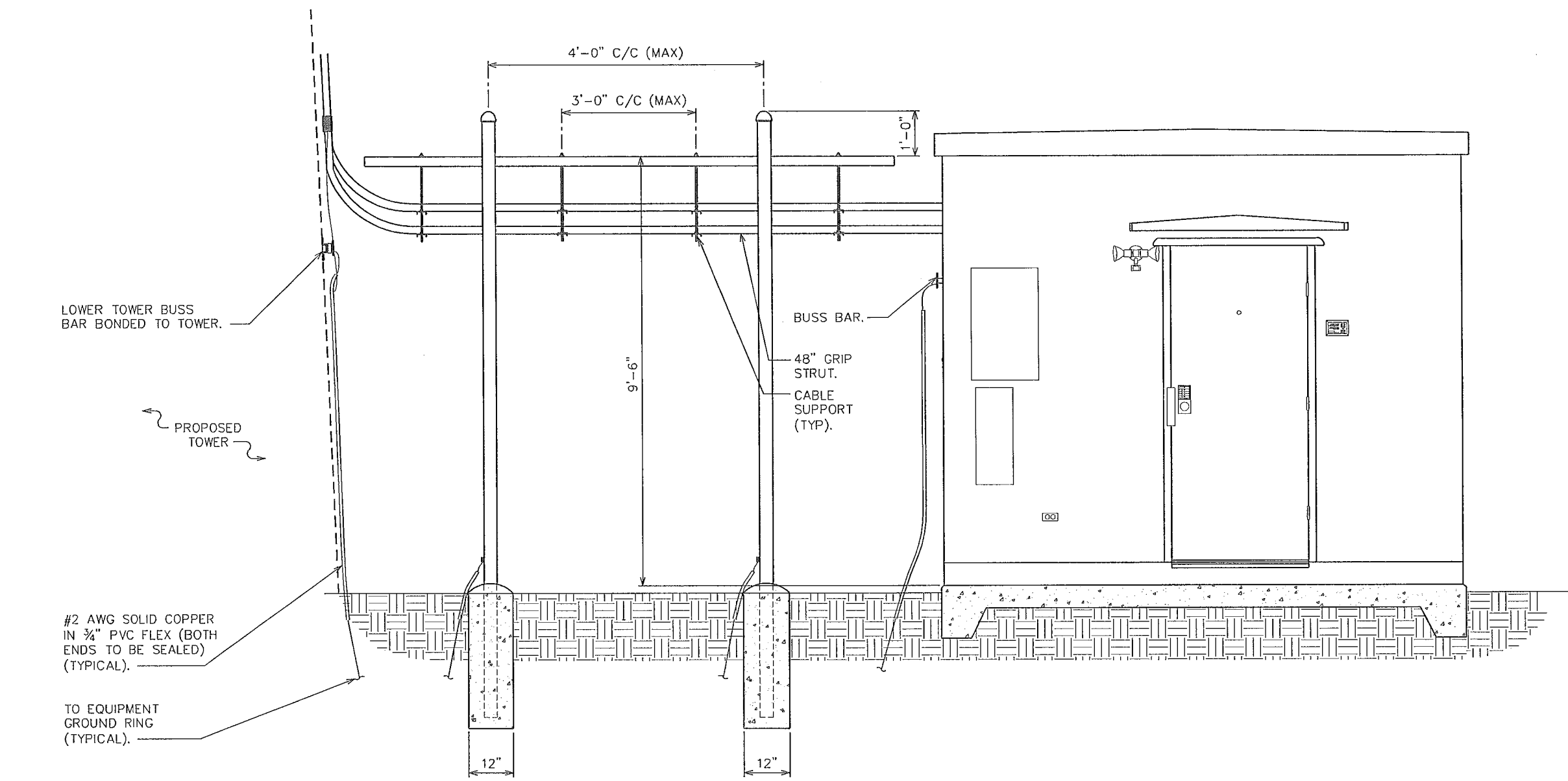
2	04-30-14	CONSTRUCTION
1	03-13-14	PRELIMINARY
0	02-24-14	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: SCB | CHECKED BY: GMA

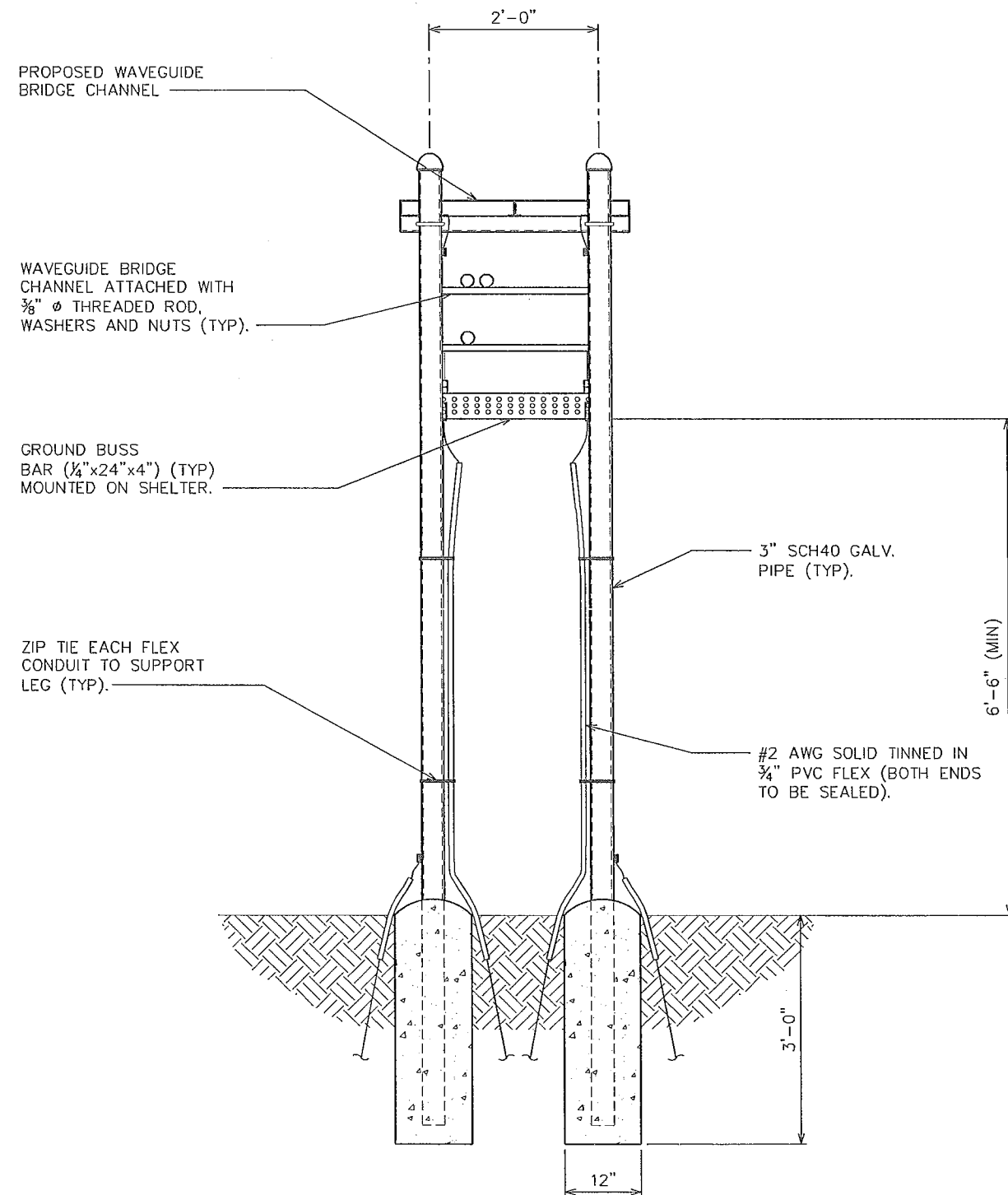
SHEET TITLE:

**ICE BRIDGE DETAILS I**

SHEET NUMBER: **C-8** | REVISION: **2**  
 TEP #: 52029



**ICE BRIDGE DETAILS**  
 SCALE: N.T.S



PLANS PREPARED FOR:



**AMERICAN TOWER CORPORATION**  
 3500 REGENCY PARKWAY, SUITE 100  
 CARY, NC 27511

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 NC HWY 902  
 PITTSBORO, NC 27312  
 (CHATHAM COUNTY)

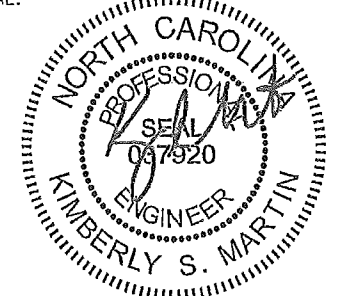
PLANS PREPARED BY:



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 3703 JUNCTION BOULEVARD  
 RALEIGH, NC 27603-5263  
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April 30, 2014

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0	02-24-14	PRELIMINARY

DRAWN BY: JJM | CHECKED BY: JAS

SHEET TITLE:

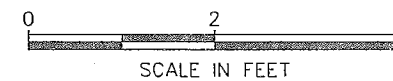
**ICE BRIDGE DETAILS II**

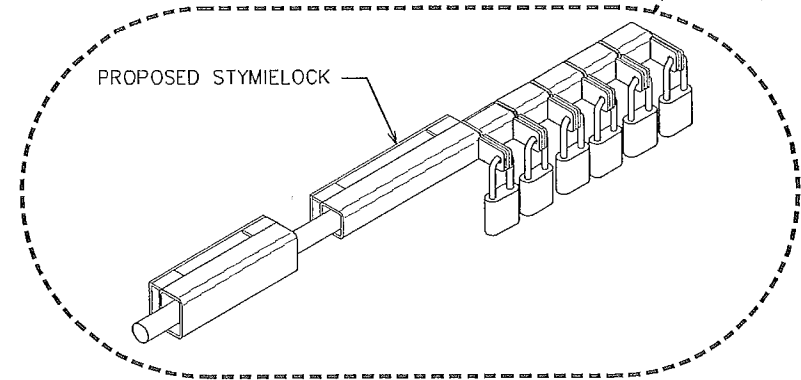
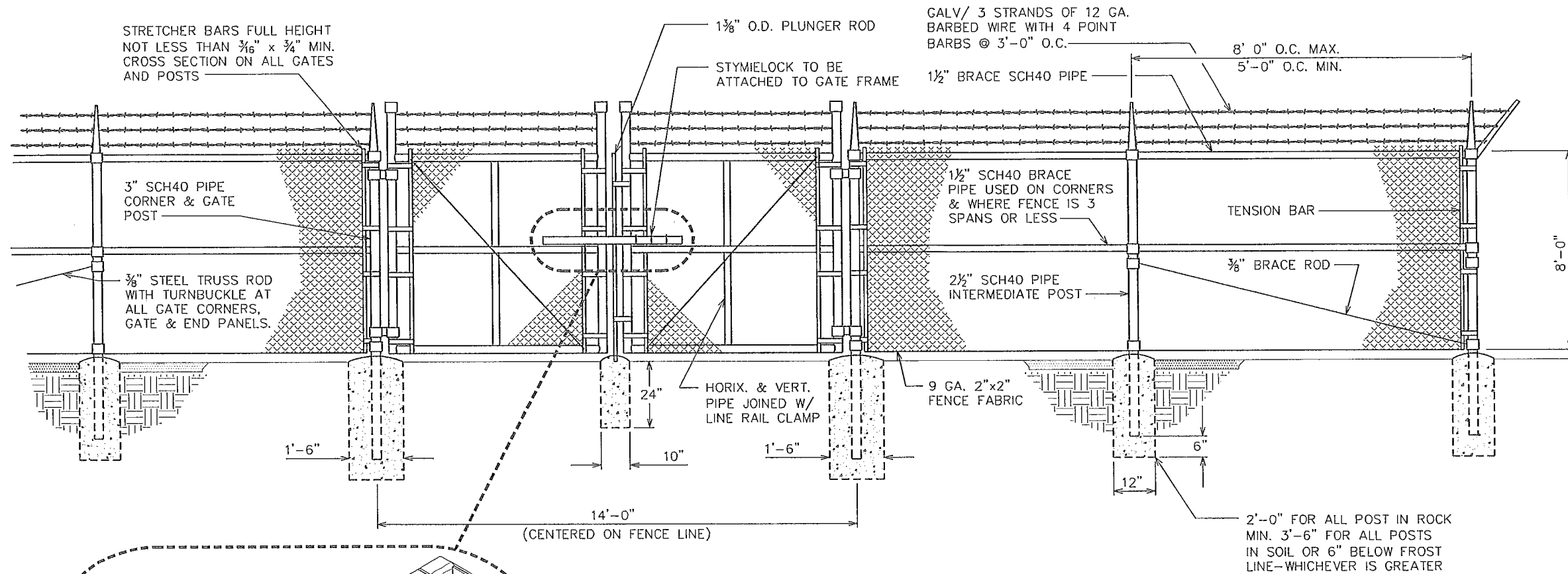
SHEET NUMBER: **C-9** | REVISION: **2**

TEP #: 52029

**ICE BRIDGE DETAILS**

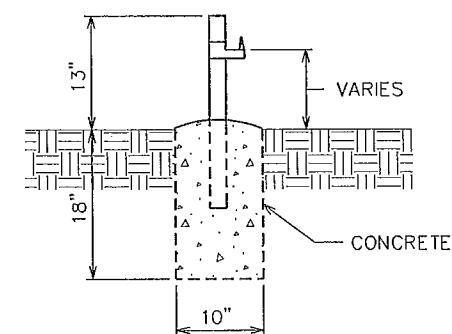
SCALE: 1/2" = 1'-0"





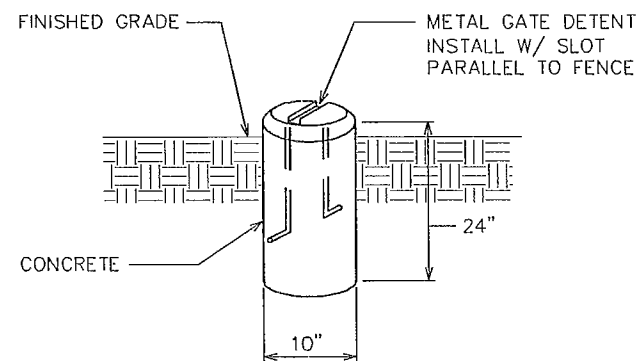
**TYPICAL FENCE ELEVATION**

SCALE: N.T.S.



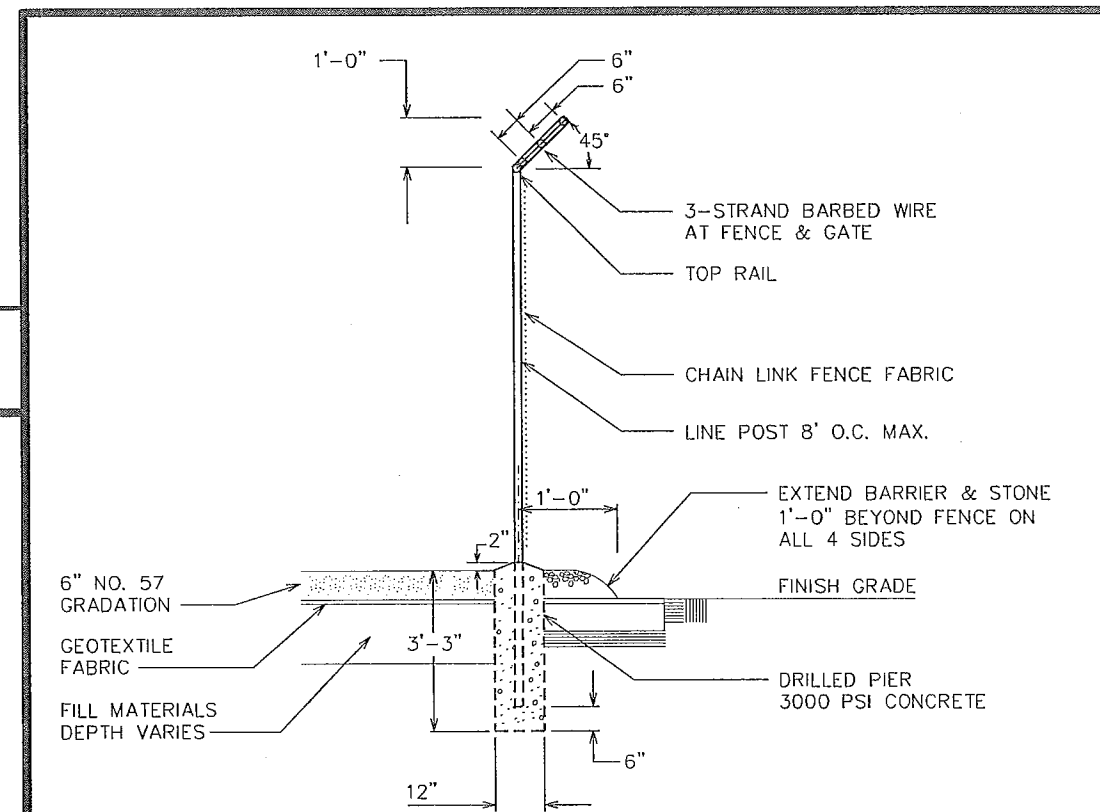
**GATE STOP / KEEPER DETAIL**

SCALE: N.T.S.



**GATE DETENT DETAIL**

SCALE: N.T.S.



**FENCE / BARBED WIRE ARM DETAIL**

SCALE: N.T.S.

PLANS PREPARED FOR:

AMERICAN TOWER CORPORATION  
3500 REGENCY PARKWAY, SUITE 100  
CARY, NC 27511

PROJECT INFORMATION:

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**ATC SITE #: 282331**  
**PLEASANT HILL NC**  
NC HWY 902  
PITTSBORO, NC 27312  
(CHATHAM COUNTY)

PLANS PREPARED BY:

**TOWER ENGINEERING PROFESSIONALS**  
3703 JUNCTION BOULEVARD  
RALEIGH, NC 27603-5263  
OFFICE: (919) 661-6351  
www.tepgroup.net

N.C. LICENSE # C-1794

SEAL:

Kimberly S. Martin  
Professional Engineer  
April 30, 2014

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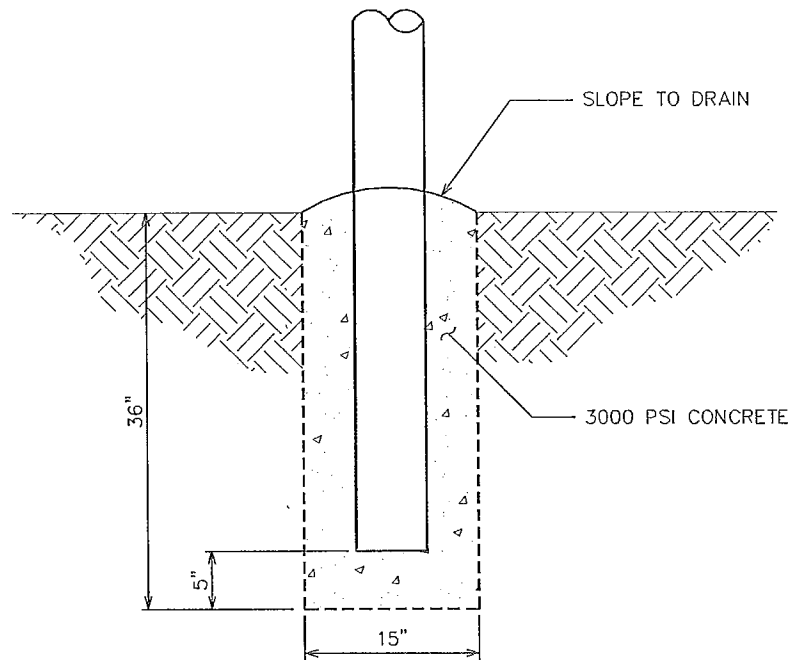
DRAWN BY: SCB CHECKED BY: GMA

SHEET TITLE:

**FENCE DETAILS**

SHEET NUMBER: **C-10** REVISION: **2**

TEP #: 52029



**NOTES:**

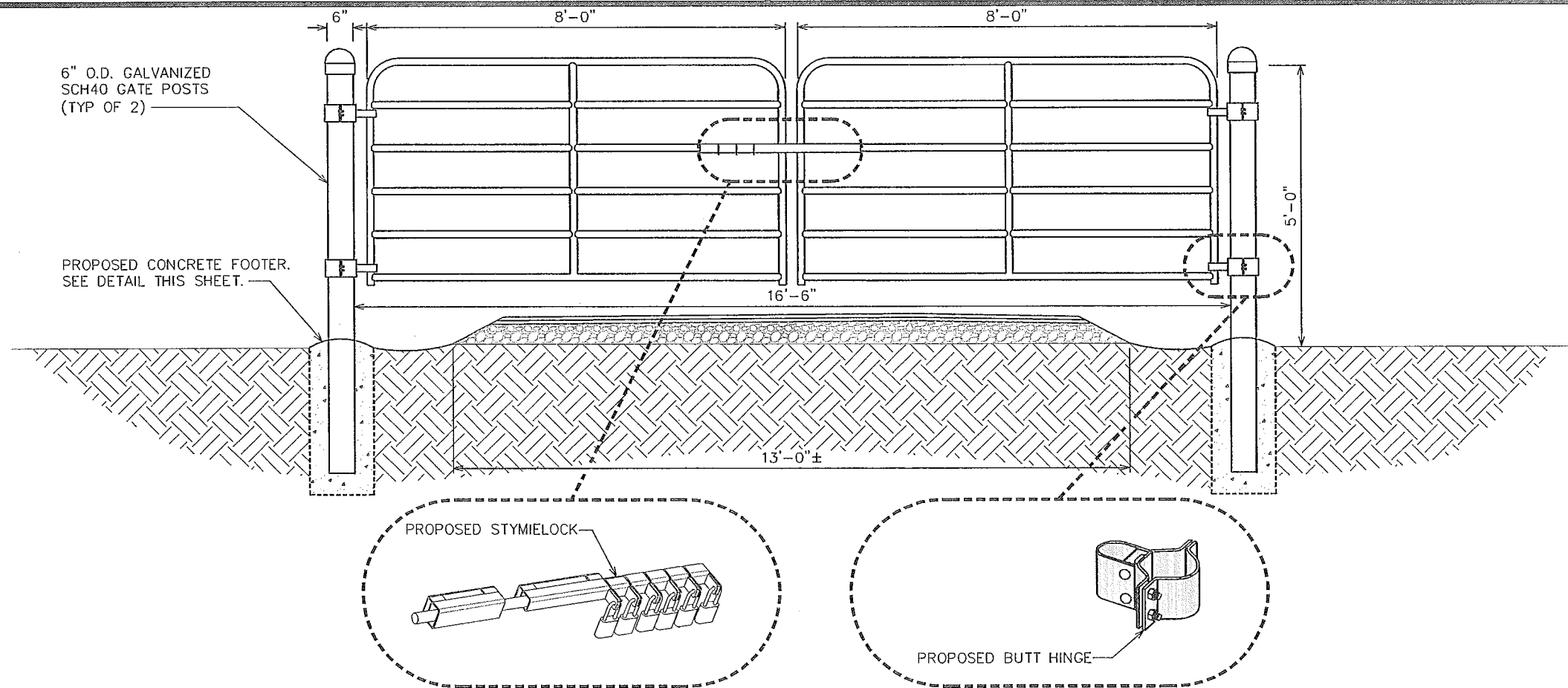
1. PANELS TO BE 4'x8' GALVANIZED TUBULAR STEEL 2" ODx16 GAUGE HIGH TENSILE WELDED STEEL. HEAVY DUTY MOUNT HARDWARE TO BE WELDED TO THE SUPPORT POSTS.
2. 6"ODx8' SCHEDULE 40 STEEL INSTALLED 36" BELOW EXISTING GRADE CONCRETE TO 1" ABOVE EXISTING GRADE AT THE POST BASE AND TAPER. FILL POST COMPLETELY WITH CONCRETE CAP.
3. CONTRACTOR TO INSTALL ATC SIGNAGE TO THE NEWLY INSTALLED ACCESS GATE. SIGNAGE TO BE INSTALLED USING GALVANIZED METAL SCREWS IN 4 PLACES. NO PLASTIC WIRE TIES WILL BE USED.
4. STYME SECURITY LOCK: STANDARD GALVANIZED 2" LOCK SYSTEM WELDED TO GATE CROSS SUPPORTS 4-2" SLEEVES WITH SLOTTED HASPS.

**CONCRETE FOOTER DETAIL**

SCALE: NTS

**ACCESS GATE NOTES**

SCALE: NTS



**CATTLE GATE DETAIL**

SCALE: NTS

PLANS PREPARED FOR:

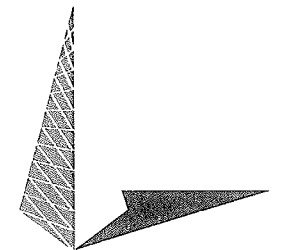


3500 REGENCY PARKWAY, SUITE 100  
CARY, NC 27511

PROJECT INFORMATION:

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**ATC SITE #: 282331**  
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NC HWY 902  
PITTSBORO, NC 27312  
(CHATHAM COUNTY)

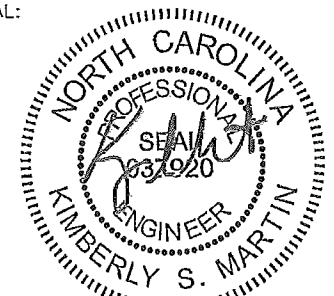
PLANS PREPARED BY:



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RALEIGH, NC 27603-5263  
OFFICE: (919) 661-6351  
www.tepgroup.net

N.C. LICENSE # C-1794

SEAL:



April 30, 2014

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DRAWN BY: MAW CHECKED BY: SCB


SHEET TITLE:

**ACCESS GATE  
DETAILS**

SHEET NUMBER:	REVISION:
<b>C-10A</b>	<b>2</b>
TEP #:	52029



property of




**AUTHORIZED  
PERSONNEL  
ONLY!**

In case of emergency or prior to performing maintenance on this site, call 1-800-638-2822 and reference cell site number:

- ① WHITE/BLUE BACKGROUND W/ BLACK LETTERING  
 QUANTITY: (1)  
 SIZE: 9"x12"  
 (TO BE MOUNTED ON UNIVERSAL POWER CABINET DOOR ADJACENT TO COMPOUND ENTRY - SEE NOTE 3)

**NO TRESPASSING  
 VIOLATORS WILL BE PROSECUTED**

property of




In case of emergency or prior to performing maintenance on this site, call 1-800-830-3365 and reference cell site number:

- ③ WHITE/RED BACKGROUND W/ BLACK LETTERING  
 QUANTITY: (4)  
 SIZE: 12"x12"  
 (ONE TO BE MOUNTED ON EACH SIDE OF COMPOUND FENCE)

**DO NOT CLIMB  
 TOWER WITHOUT  
 OWNER'S WRITTEN  
 PERMISSION**

- ④ WHITE BACKGROUND W/ RED LETTERING  
 QUANTITY: (1)  
 (TO BE MOUNTED AT EYE LEVEL ON TOWER NEAR SAFETY CLIMB)

**NOTICE**



Radio Frequency fields beyond this point may exceed the FCC general public exposure limit.

OBEDIENCE TO ALL POSTED SIGNS AND SITE GUIDELINES FOR WORKING IN RADIO FREQUENCY ENVIRONMENTS.

In accordance with Federal Communications Commission rules on radio frequency exposure 47 CFR 1.1307(b)

- ② WHITE/BLUE BACKGROUND W/ BLACK LETTERING  
 QUANTITY: (1)  
 (TO BE MOUNTED AT EYE LEVEL ON TOWER NEAR SAFETY CLIMB)

**000**

- ⑤ WHITE BACKGROUND W/ BLACK LETTERING  
 E911 STREET #  
 QUANTITY: (1 TYP)  
 LETTERS MUST BE A MINIMUM 6" TALL  
 (TO BE MOUNTED ON THE GATE OF COMPOUND)

- ① SITE IDENTIFICATION SIGN  
 ② FCC/RF EXPOSURE SIGN  
 ③ AUTHORIZED ENTRY SIGN  
 ④ TOWER CLIMBING SIGN  
 ⑤ STREET ADDRESS SIGN  
 ⑥ INFORMATION RF EXPOSURE SIGN  
 ⑦ TOWER REGISTRATION SIGN

**INFORMATION**

AMERICAN TOWER operates telecommunications equipment at this location.

Stay back a minimum of 3 feet from any antenna.

Obey all posted signs and guidelines.

Do not cross into areas restricted by striping and/or barriers.

Contact the owner(s) of the antenna(s) and follow their instructions prior to performing any repairs or maintenance within a restricted area of closer than 3 feet from the antenna.

Contact AMERICAN TOWER at 1-800-830-3365 prior to doing any work near AMERICAN TOWER structures. This is site #-----.

Contact the management office if this door/hatch/gate is found unlocked.

- ⑥ WHITE BACKGROUND W/ BLACK LETTERING  
 QUANTITY: (1) PER ACCESS GATE  
 (TO BE MOUNTED ON COMPOUND ACCESS GATE)

**FCC TOWER REGISTRATION NO.:**  
**0123456789**

- ⑦ WHITE BACKGROUND W/ BLACK LETTERING  
 QUANTITY: (1)  
 (TO BE MOUNTED ON COMPOUND ACCESS GATE - SEE NOTE 5)  
 NOTE: NUMBER SHOWN IS GENERIC, CONTACT CONSTRUCTION MANAGER FOR ACTUAL FCC TOWER REG. #.

**NOTES:**

- SIGNS SHALL MEASURE 8"x12", BE FABRICATED FROM CORROSION RESISTANT PRESSED METAL, AND PAINTED WITH LONG LASTING UV RESISTANT COATINGS.
- 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.
- AMERICAN TOWER SITE # AND EMERGENCY CONTACT # SHALL BE MOUNTED ON THE UNIVERSAL POWER CABINET DOOR ADJACENT TO THE COMPOUND ENTRY WITH PERMANENT SET ADHESIVE. TWO-SIDED TAPE SHALL BE UTILIZED AT EACH CORNER ON THE BACKSIDE TO AID PLACEMENT UNTIL ADHESIVE SETS.
- ADDITIONAL E911 ADDRESS SIGNS ARE REQUIRED AT EACH ACCESS ROAD GATE LEADING TO THE COMPOUND AS WELL AS ON THE COMPOUND GATE ITSELF. LETTERING ON 911 ADDRESS SIGNS MUST BE A MINIMUM OF 6" TALL.
- ADDITIONAL FCC REGISTRATION # SIGNS ARE REQUIRED AT EACH ACCESS ROAD GATE LEADING TO THE COMPOUND AS WELL AS ON THE COMPOUND GATE ITSELF.
- RECOMMENDED SOURCE FOR OBTAINING SIGNAGE:

ST. CLAIR SIGNS  
 3184 WADE HAMPTON BLVD.  
 TAYLORS, SC 29687  
 (864) 244-0040

RF EXPOSURE SIGNS  
 RICHARD TELL ASSOCIATES  
 3433 RINGSTAR ROAD, SUITE 3  
 NORTH LAS VEGAS, NV 89030  
 (702) 645-3338

PLANS PREPARED FOR:



3500 REGENCY PARKWAY, SUITE 100  
 CARY, NC 27511

PROJECT INFORMATION:

**AT&T SITE #: 368-770**  
**ATC SITE #: 282331**  
**PLEASANT HILL NC**  
 NC HWY 902  
 PITTSBORO, NC 27312  
 (CHATHAM COUNTY)

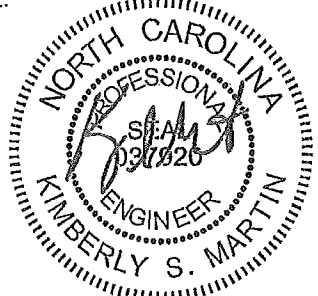
PLANS PREPARED BY:



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 OFFICE: (919) 661-6351  
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SEAL:



April 30, 2014

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DRAWN BY: JHJ CHECKED BY: GMA

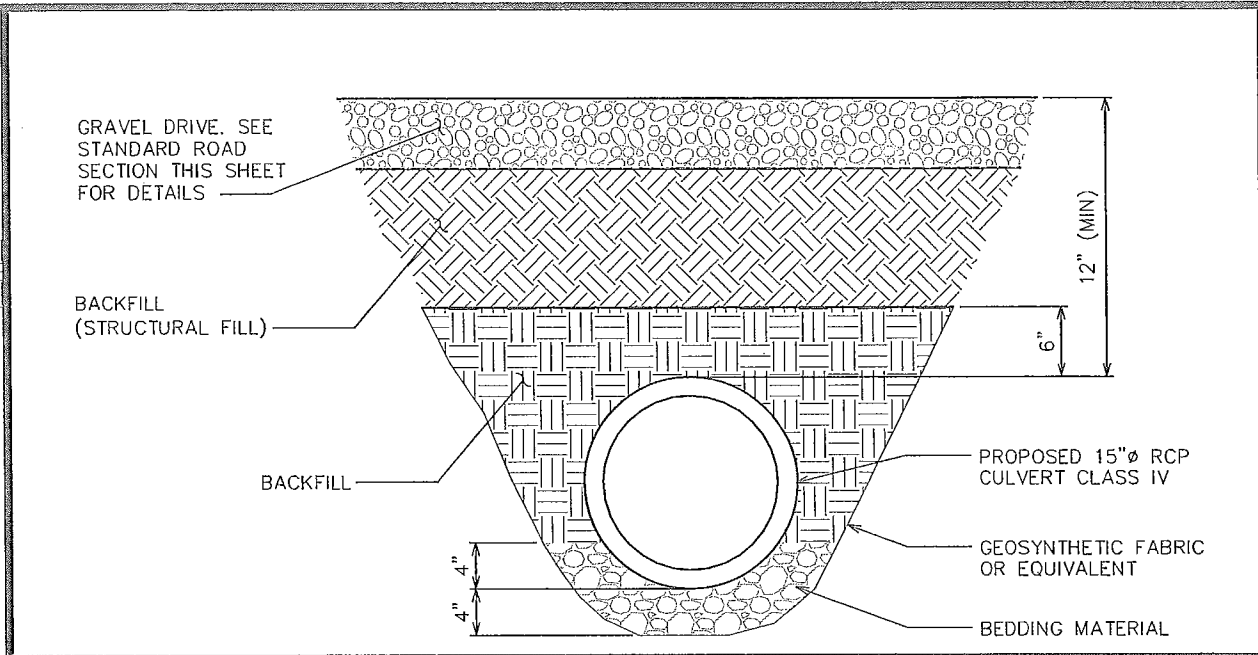
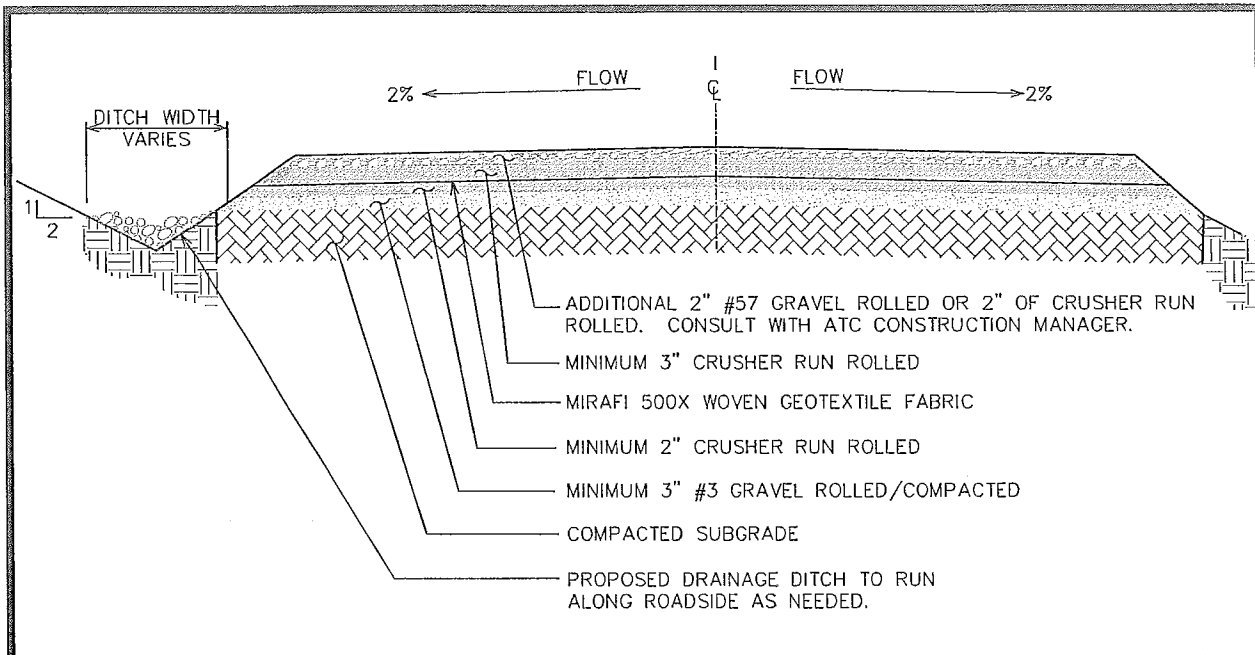
SHEET TITLE:

**SIGNAGE  
 DETAILS**

SHEET NUMBER:	REVISION:
<b>C-11</b>	<b>2</b>
TEP #:	52029

**TYPICAL SIGNS AND SPECIFICATIONS**

SCALE: N.T.S.



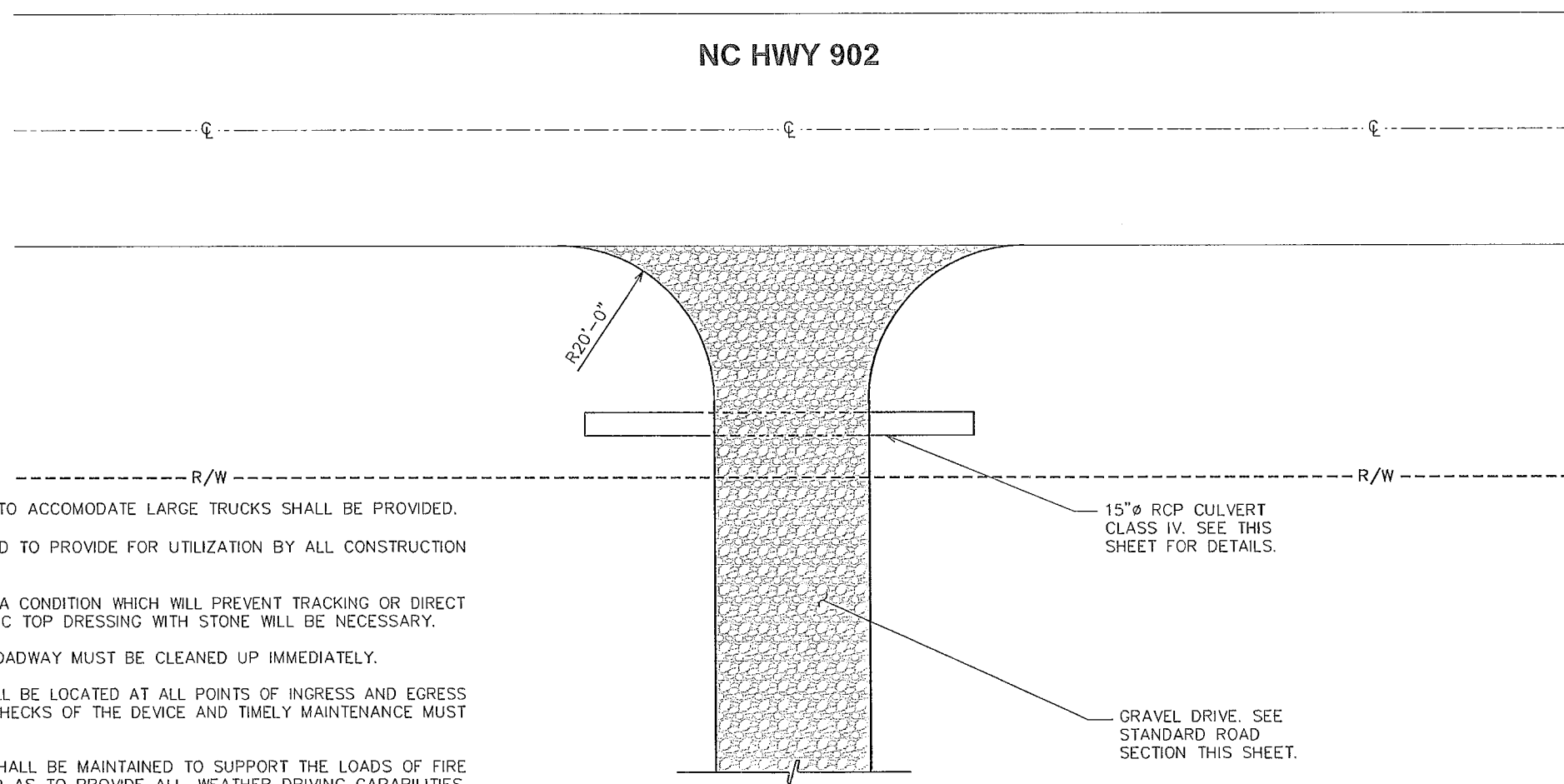
**STANDARD ROAD SECTION (GOOD SUBGRADE)**

SCALE: 3/8" = 1'-0"

**CULVERT DETAIL**

SCALE: 3/4" = 1'-0"

**NC HWY 902**



**NOTES:**

- TURNING RADIUS THAT IS SUFFICIENT TO ACCOMODATE LARGE TRUCKS SHALL BE PROVIDED.
- THE ENTRANCE(S) SHOULD BE LOCATED TO PROVIDE FOR UTILIZATION BY ALL CONSTRUCTION VEHICLES.
- ENTRANCE(S) MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS. PERIODIC TOP DRESSING WITH STONE WILL BE NECESSARY.
- ANY MATERIAL TRACKED ONTO THE ROADWAY MUST BE CLEANED UP IMMEDIATELY.
- GRAVEL CONSTRUCTION ENTRANCE SHALL BE LOCATED AT ALL POINTS OF INGRESS AND EGRESS UNTIL SITE IS STABILIZED. FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE MUST BE PROVIDED.
- ACCESS ROADS ARE DESIGNED AND SHALL BE MAINTAINED TO SUPPORT THE LOADS OF FIRE APPARATUS AND SHALL BE SURFACED AS TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES.
- ACCESS ROAD DETAILS PER CHATHAM COUNTY. CONTACT: JUSTIN RICHARDSON (336)318-4000 NCDOT

**STABILIZED CONSTRUCTION ENTRANCE**

SCALE: N.T.S.

PLANS PREPARED FOR:

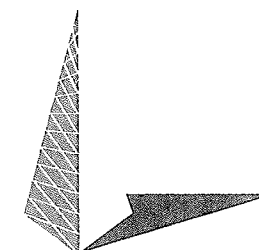


3500 REGENCY PARKWAY, SUITE 100  
CARY, NC 27511

PROJECT INFORMATION:

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**ATC SITE #: 282331**  
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PITTSBORO, NC 27312  
(CHATHAM COUNTY)

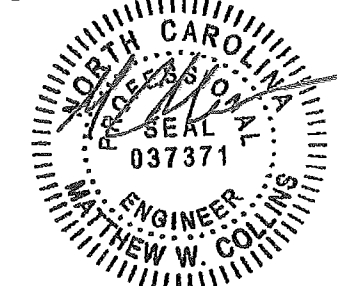
PLANS PREPARED BY:



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DRAWN BY: MAW CHECKED BY: SCB

SHEET TITLE:

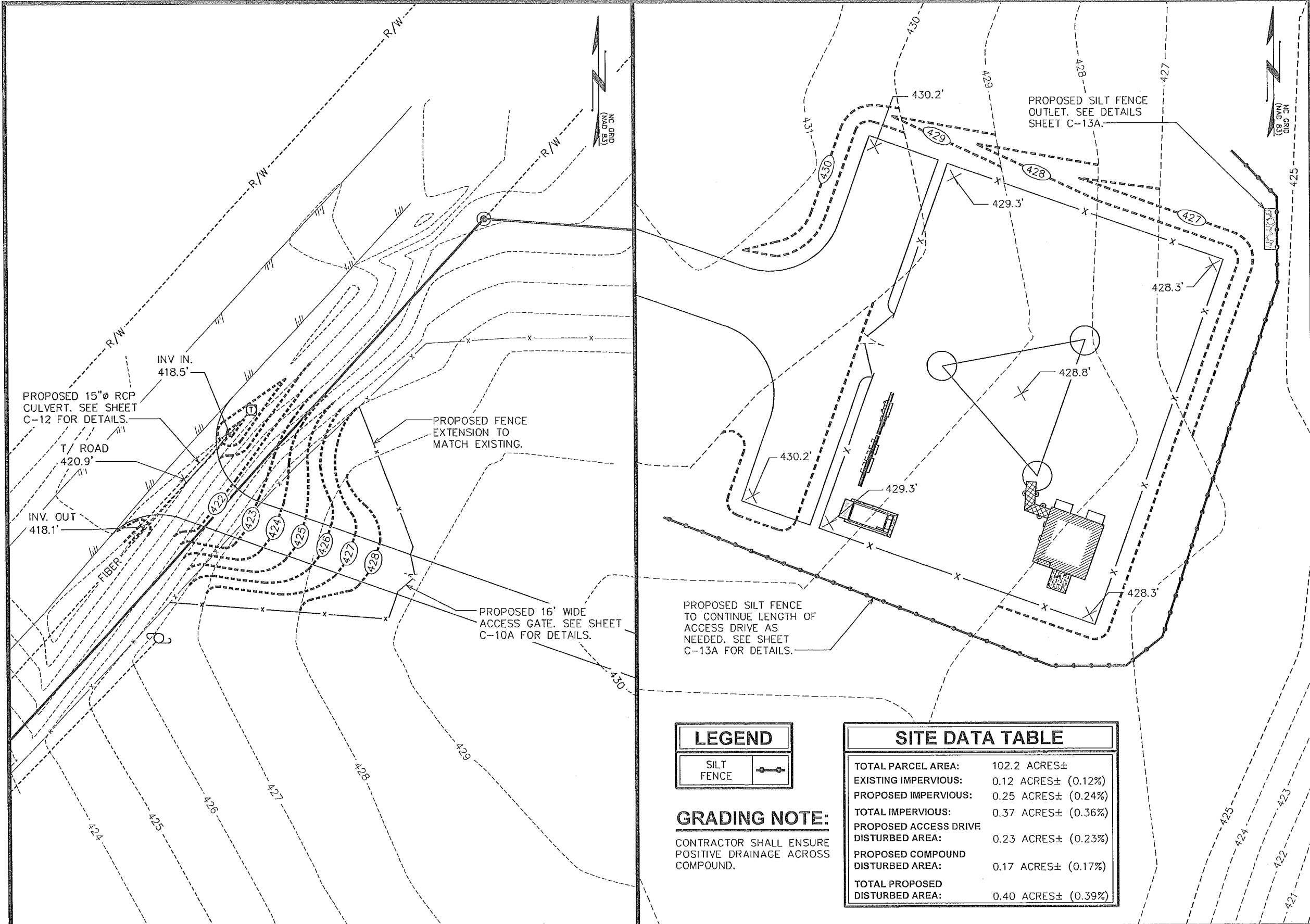
**CULVERT & DRIVEWAY DETAILS**

SHEET NUMBER: REVISION:

**C-12**

**2**

TEP #: 52029



PLANS PREPARED FOR:

**AMERICAN TOWER CORPORATION**  
 3500 REGENCY PARKWAY, SUITE 100  
 CARY, NC 27511

PROJECT INFORMATION:

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DRAWN BY: MAW CHECKED BY: SCB

SHEET TITLE:

**SOIL & EROSION CONTROL PLAN**

SHEET NUMBER: **C-13** REVISION: **2**

TEP #: 52029

**LEGEND**

SILT FENCE	
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**GRADING NOTE:**

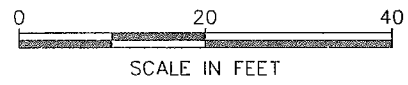
CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE ACROSS COMPOUND.

**SITE DATA TABLE**

TOTAL PARCEL AREA:	102.2 ACRES±
EXISTING IMPERVIOUS:	0.12 ACRES± (0.12%)
PROPOSED IMPERVIOUS:	0.25 ACRES± (0.24%)
TOTAL IMPERVIOUS:	0.37 ACRES± (0.36%)
PROPOSED ACCESS DRIVE DISTURBED AREA:	0.23 ACRES± (0.23%)
PROPOSED COMPOUND DISTURBED AREA:	0.17 ACRES± (0.17%)
TOTAL PROPOSED DISTURBED AREA:	0.40 ACRES± (0.39%)

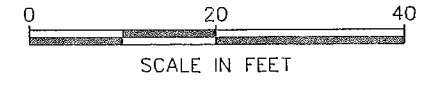
**GRADING AT ACCESS ROAD**

SCALE: 1" = 20'



**SOIL & EROSION CONTROL PLAN**

SCALE: 1" = 20'



PLANS PREPARED FOR:



**AMERICAN TOWER CORPORATION**  
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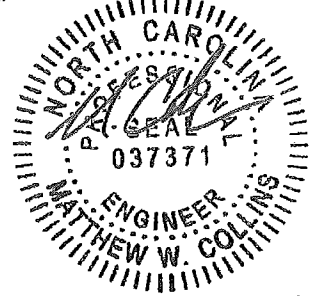
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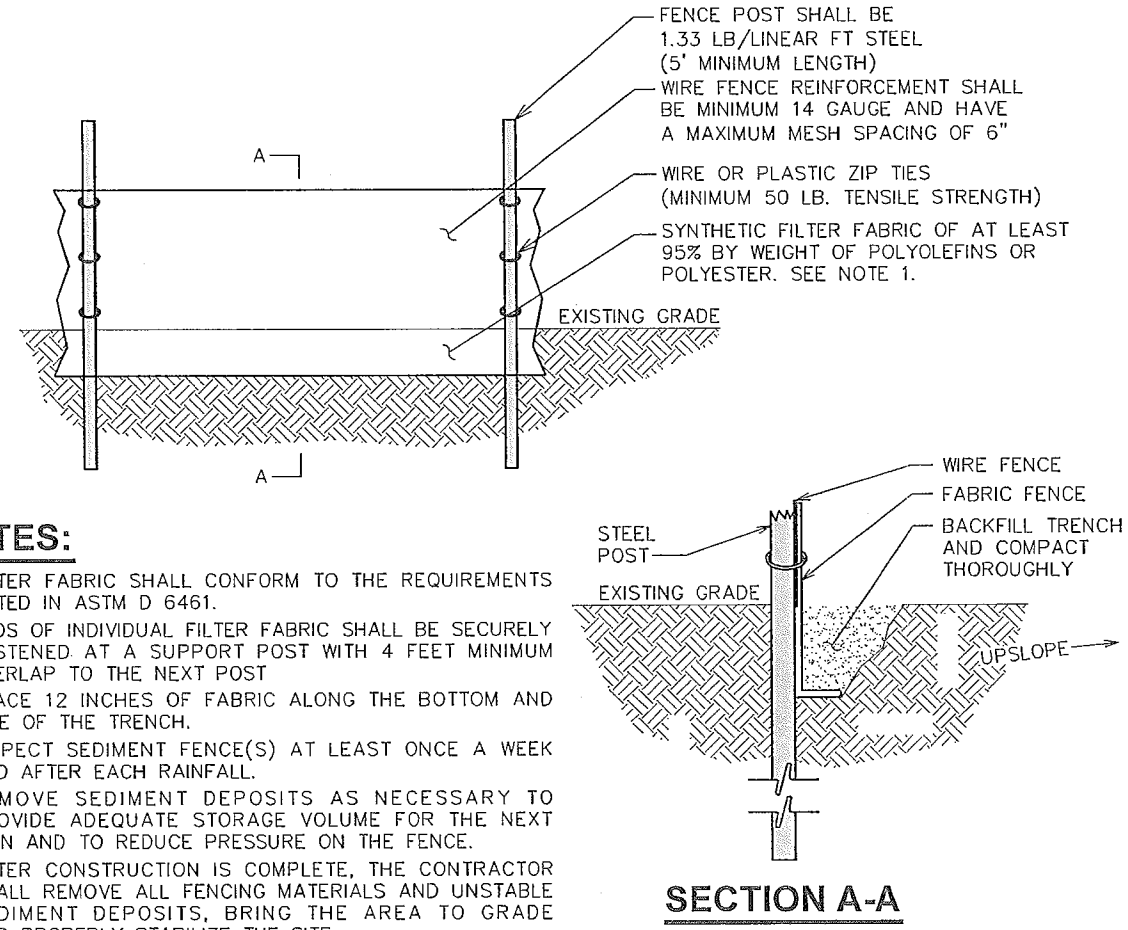
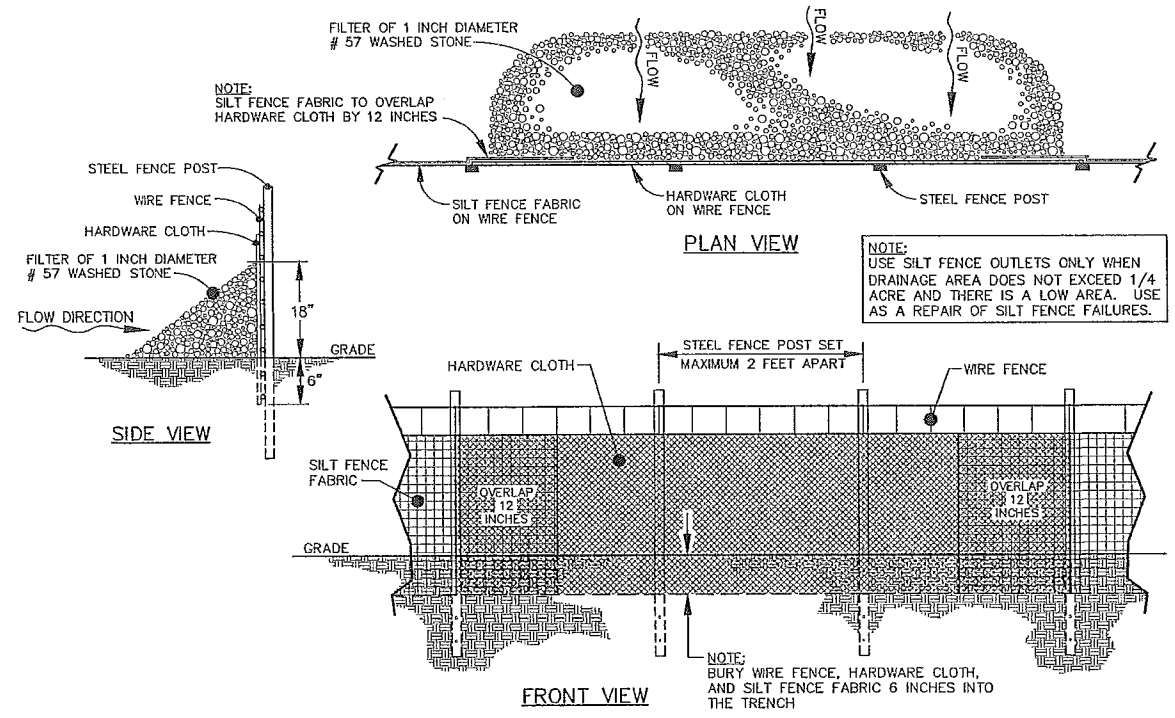
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DRAWN BY: MAW | CHECKED BY: SCB

SHEET TITLE:

**SOIL & EROSION CONTROL DETAILS**

SHEET NUMBER: **C-13A** | REVISION: **2**  
 TEP #: 52029



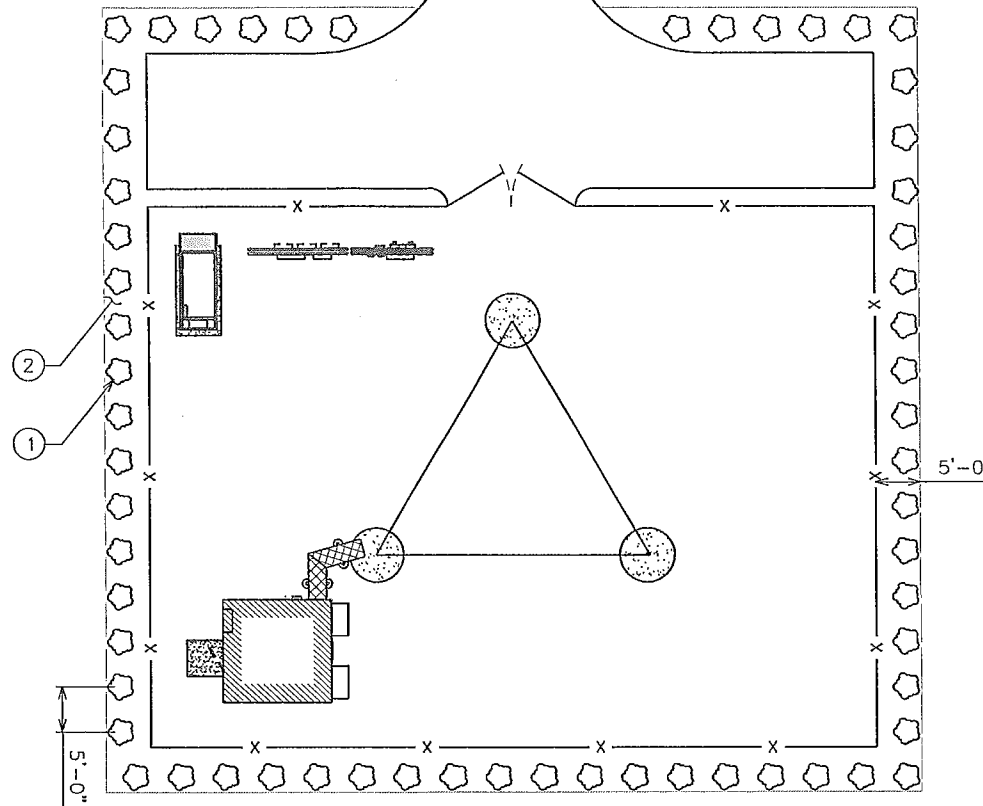
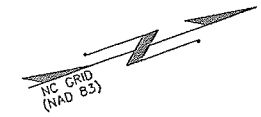
- NOTES:**
1. FILTER FABRIC SHALL CONFORM TO THE REQUIREMENTS LISTED IN ASTM D 6461.
  2. ENDS OF INDIVIDUAL FILTER FABRIC SHALL BE SECURELY FASTENED AT A SUPPORT POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST
  3. PLACE 12 INCHES OF FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.
  4. INSPECT SEDIMENT FENCE(S) AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL.
  5. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE.
  6. AFTER CONSTRUCTION IS COMPLETE, THE CONTRACTOR SHALL REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE AND PROPERLY STABILIZE THE SITE.

**STANDARD SILT FENCE OUTLET DETAIL**  
 SCALE: N.T.S.

**STANDARD SILT FENCE DETAIL**  
 SCALE: N.T.S.

**LANDSCAPE NOTES:**

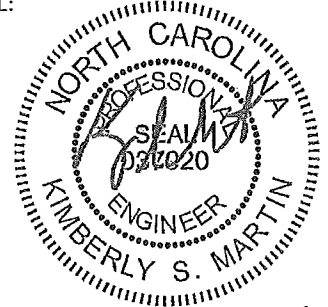
1. TOPSOIL TO BE PROVIDED BY SITE CONTRACTOR IN ROUGH GRADE TO WITHIN 1" OF FINISH GRADE.
2. EACH PLANT TO BE FREE FROM DISEASE, INSECT INFESTATION, AND MECHANICAL INJURIES, AND IN ALL RESPECTS BE SUITABLE FOR FIELD PLANTING.
3. ALL PLANTS TO BE FULLY GUARANTEED (LABOR AND MATERIALS) FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF INSTALLATION.
4. ALL PLANTS SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1-1973 IN REGARD TO SIZING, GROWING, AND B&B SPECIFICATIONS.
5. THE CONTRACTOR SHALL PROTECT ALL EXISTING TREES AND SHRUBS WITHIN THE CONSTRUCTION AREA IDENTIFIED AS "TO REMAIN" FROM DAMAGE BY EQUIPMENT AND CONSTRUCTION ACTIVITIES.



PLANS PREPARED FOR:  
  
**AMERICAN TOWER CORPORATION**  
 3500 REGENCY PARKWAY, SUITE 100  
 CARY, NC 27511

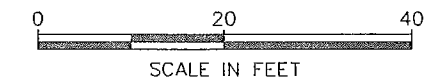
PROJECT INFORMATION:  
**AT&T SITE #: 368-770**  
**ATC SITE #: 282331**  
**PLEASANT HILL NC**  
 NC HWY 902  
 PITTSBORO, NC 27312  
 (CHATHAM COUNTY)

PLANS PREPARED BY:  
  
**TOWER ENGINEERING PROFESSIONALS**  
 3703 JUNCTION BOULEVARD  
 RALEIGH, NC 27603-5263  
 OFFICE: (919) 661-6351  
 www.tepgroup.net  
 N.C. LICENSE # C-1794


SEAL:  
  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 KIMBERLY S. MARTIN  
 April 30, 2014

**LANDSCAPING PLAN**

SCALE: 1" = 20'



**PLANTING SCHEDULE**

ITEM	QTY.	BOTANICAL NAME	COMMON NAME	HEIGHT @ PLANTING	HEIGHT @ 4 YRS.	SPREAD/ CALIPER	SPACING	REMARKS
<b>SHRUBS</b>								
①	60	( <i>MORELLA CERIFERA</i> )	WAX MYRTLE	2'-0" (MIN)	6'-0" (MIN)	N/A	5' (MIN)	SHOWN AS 
<b>MULCH</b>								
②	-	-	MULCH	-	-	-	-	APPLY 3"-4" DEEP WITHIN BUFFERYARD FOR GROUND COVER

2	04-30-14	CONSTRUCTION
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0	02-24-14	PRELIMINARY
REV	DATE	ISSUED FOR:

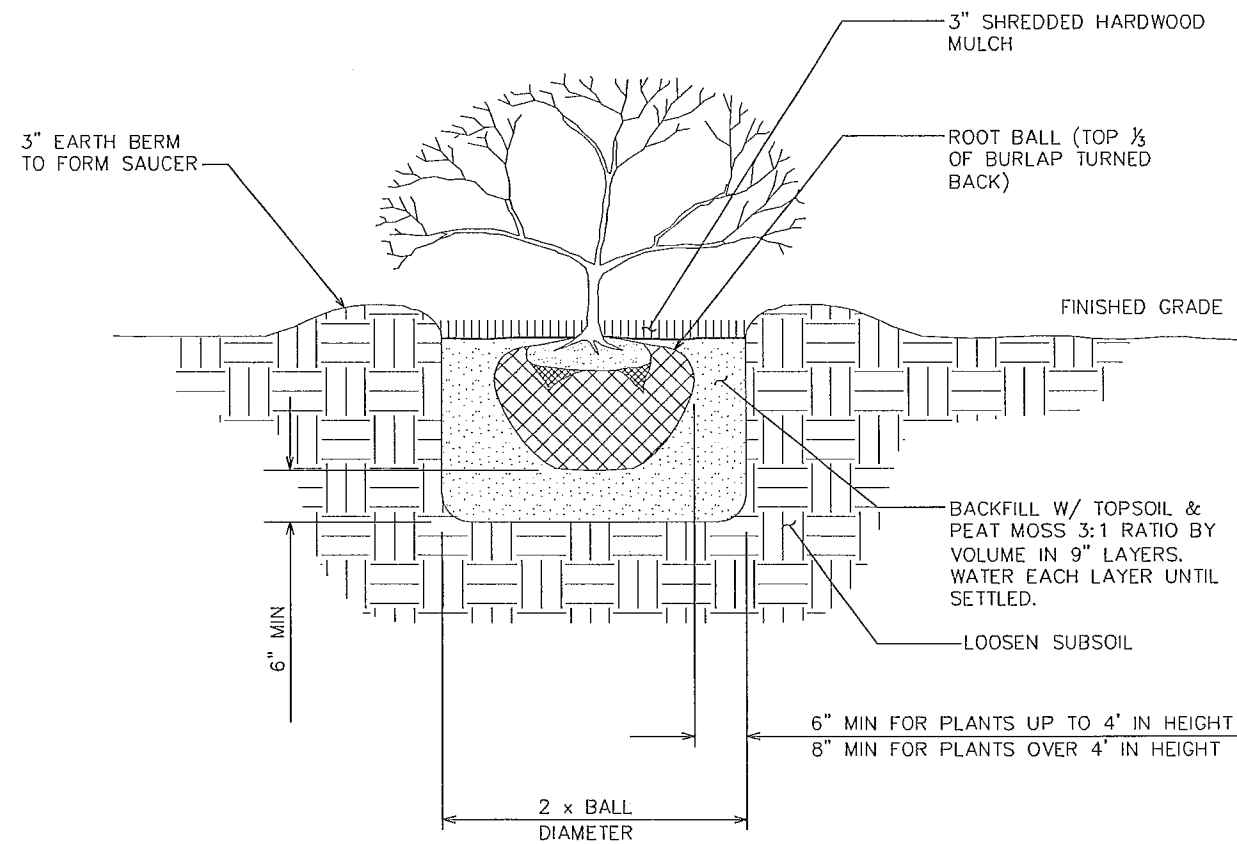
DRAWN BY: MAW CHECKED BY: SCB

SHEET TITLE:  
**LANDSCAPING PLAN**

SHEET NUMBER: **L-1** REVISION: **2**  
 TEP #: 52029

**NOTE:**

SEE LANDSCAPING NOTES ON L-1



PLANS PREPARED FOR:

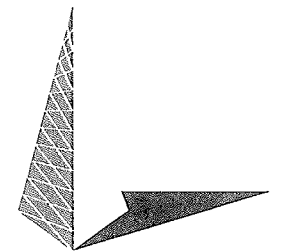


**AMERICAN TOWER CORPORATION**  
3500 REGENCY PARKWAY, SUITE 100  
CARY, NC 27511

PROJECT INFORMATION:

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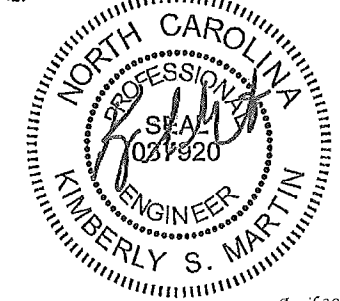
PLANS PREPARED BY:



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SEAL:



REV	DATE	ISSUED FOR:
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0	02-24-14	PRELIMINARY

DRAWN BY: JHJ | CHECKED BY: GMA

SHEET TITLE:

**LANDSCAPING DETAILS**

SHEET NUMBER:	REVISION:
<b>L-2</b>	<b>2</b>
TEP #:	52029

**LANDSCAPING DETAILS**

SCALE: N.T.S.

# ELECTRICAL NOTES:

## SCOPE:

1. SHALL INCLUDE ALL LABOR, MATERIALS AND APPLIANCES REQUIRED FOR THE FURNISHING, INSTALLING AND TESTING, COMPLETE AND READY FOR OPERATION OF ALL WORK SHOWN ON THE DRAWING AS SPECIFIED HEREIN:

- |                        |                               |
|------------------------|-------------------------------|
| 1. ELECTRIC SERVICE    | 4. MISCELLANEOUS MATERIALS    |
| 2. CONDUIT AND RACEWAY | 5. TELEPHONE CONDUITS         |
| 3. CONDUCTORS          | 6. LIGHTNING ARRESTING SYSTEM |

## CODES

1. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE LAWS AND CODES. THESE INCLUDE BUT ARE NOT LIMITED TO THE LATEST EDITIONS OF:

- |  |   |
|--|---|
| A. THE NATIONAL ELECTRICAL SAFETY CODE   | D. LOCAL AND STATE AMENDMENTS                 |
| B. THE NATIONAL ELECTRIC CODE - NFPA-70  | E. REGULATIONS OF THE SERVING UTILITY COMPANY |
| C. THE INTERNATIONAL ELECTRIC CODE - IEC | F. NCEC                                       |

2. ALL PERMITS REQUIRED SHALL BE OBTAINED BY THE CONTRACTOR.

3. AFTER COMPLETION AND FINAL INSPECTION OF THE WORK, THE OWNER SHALL BE FURNISHED A CERTIFICATE OF COMPLETION AND APPROVAL.

## TESTING

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

## GUARANTEE

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

## CO-ORDINATION:

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

## EXAMINATION OF SITE

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

## CUTTING, PATCHING AND EXCAVATION:

1. COORDINATION OF ALL SLEEVES, CHASES, ETC., WILL BE REQUIRED PRIOR TO THE CONSTRUCTION OF ANY PORTION OF THE WORK. ALL CUTTING AND PATCHING OF WALLS, PARTITIONS, FLOORS, AND CHASES IN CONCRETE, WOOD, STEEL OR MASONRY SHALL BE DONE AS PROVIDED ON THE DRAWINGS.

2. ALL NECESSARY EXCAVATIONS AND BACKFILLING INCIDENTAL TO THE WORK UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWING SHALL BE PROVIDED BY THIS CONTRACTOR.

3. SEAL ALL PENETRATION THROUGH WALL AND FLOORS WITH APPROVED GROUT.

## EXTERIOR CONDUIT:

1. ALL EXPOSED CONDUIT SHALL BE NEATLY INSTALLED AND RUN PARALLEL OR PERPENDICULAR TO STRUCTURAL ELEMENTS. SUPPORTS AND MOUNTING HARDWARE SHALL BE HOT DIPPED GALVANIZED STEEL.

## RACEWAYS

1. ALL CONDUCTORS SHALL BE INSTALLED IN CONDUIT. ALL CONDUIT SHALL BE RIGID STEEL, EMT OR SCH40 PVC AS INDICATED ON THE DRAWINGS.

2. WHERE INSTALLED ON EXTERIORS AND EXPOSED TO DAMAGE, ALL CONDUIT SHALL BE RIGID STEEL. ALUMINUM CONDUIT SHALL NOT BE ALLOWED.

3. CONCEALED CONDUIT IN WALLS OR INTERIOR SPACES ABOVE GRADE MAY BE EMT.

4. UNDERGROUND CONDUITS SHALL BE RIGID STEEL OR SCHEDULE 40 PVC AS INDICATED ON THE DRAWINGS.

5. ALL CONDUIT RUNS SHALL USE APPROVED COUPLINGS AND CONNECTORS. PROVIDE INSULATED BUSHING FOR ALL CONDUIT TERMINATIONS. ALL CONDUIT RUNS IN A WET LOCATION SHALL HAVE WATERPROOF FITTINGS.

6. PROVIDE SUPPORTS FOR ALL CONDUITS IN ACCORDANCE WITH NEC REQUIREMENTS. ALL CONDUITS SHALL BE SIZED AS REQUIRED BY NEC.

7. BURIAL DEPTH OF ALL CONDUITS SHALL BE AS REQUIRED BY CODE FOR EACH SPECIFIC CONDUIT TYPE AND APPLICATION.

8. CONDUIT ROUTES ARE SCHEMATIC. CONTRACTOR SHALL FIELD VERIFY BEFORE BID. COORDINATE ROUTE WITH WIRELESS CARRIER AND BUILDING OWNER.

## EQUIPMENT:

1. ALL DISCONNECT SWITCHES SHALL BE SERVICE ENTRANCE RATED, HEAVY DUTY TYPE.

2. NEW CIRCUIT BREAKERS SHALL BE RATED TO WITHSTAND THE MAXIMUM AVAILABLE FAULT CURRENT AS DETERMINED BY THE LOCAL UTILITY. CONTRACTOR SHALL VERIFY MAXIMUM AVAILABLE FAULT CURRENT, AND COORDINATE INSTALLATION WITH THE LOCAL UTILITY BEFORE STARTING WORK.

3. ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES AND EQUIPMENT SHALL BE LABEL/LISTED BY UL OR A NORTH CAROLINA APPROVED THIRD PARTY TESTING AGENCY.

## CONDUCTORS

1. FURNISH AND INSTALL CONDUCTORS CALLED FOR IN THE DRAWINGS. ALL CONDUCTORS SHALL HAVE TYPE THWN (MIN) (75° C) INSULATION, RATED FOR 600 VOLTS.

2. ALL CONDUCTORS SHALL BE COPPER, THE USE OF ALUMINUM CONDUCTORS SHALL NOT BE ALLOWED. ALL CONDUCTORS SHALL BE UL LISTED AND SHALL BE PROVIDED AND INSTALLED AS FOLLOWS:

- A. MINIMUM WIRE SIZE SHALL BE #12 AWG.
- B. ALL CONDUCTORS SIZE #8 AND LARGER SHALL BE STRANDED. CONDUCTORS SIZED #10 AND SMALLER MAY BE SOLID OR STRANDED.
- C. CONNECTION FOR #10 AWG AND SMALLER SHALL BE BY TWISTING TIGHT AND INSTALLING INSULATED PRESSURE OR WIRE NUT CONNECTIONS.
- D. CONNECTION FOR #8 AWG AND LARGER SHALL BE BY USE OF STEEL CRIMP-ON SLEEVES WITH NYLON INSULATOR.

3. ALL CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH NEC STANDARDS.

4. THE RACEWAY SYSTEM SHALL BE COMPLETE BEFORE INSTALLING CONDUCTORS

## PENETRATIONS:

1. CONTRACTOR SHALL COMPLY WITH UL PENETRATION DETAILS FOR PENETRATIONS OF ALL RATED WALLS, ROOF, ETC.

## GROUNDING

1. ALL ELECTRICAL NEUTRALS, RACEWAYS AND NON-CURRENT CARRYING PARTS OF ELECTRICAL EQUIPMENT AND ASSOCIATED ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH NEC ARTICLE 250. THIS SHALL INCLUDE NEUTRAL CONDUCTORS, CONDUITS, SUPPORTS, CABINETS, BOXES, GROUND BUSSES, ETC. THE NEUTRAL CONDUCTOR FOR EACH SYSTEM SHALL BE GROUNDED BY ONE POINT ONLY.





2. PROVIDE GROUND CONDUCTOR IN ALL RACEWAYS.

3. PROVIDE BONDING AND GROUND TO MEET NFPA 780 - LIGHTNING PROTECTION AS A MINIMUM.

4. PROVIDE GROUNDING SYSTEM AS INDICATED ON THE DRAWINGS, AS REQUIRED BY THE NATIONAL ELECTRIC CODE AND RADIO EQUIPMENT MANUFACTURER.

## ABBREVIATIONS AND LEGEND

A	-- AMPERE	PVC	-- SCH40 RIGID NON-METALLIC CONDUIT
AFG	-- ABOVE FINISHED GRADE	RGS	-- RIGID GALVANIZED STEEL CONDUIT
ATS	-- AUTOMATIC TRANSFER SWITCH	SW	-- SWITCH
AWG	-- AMERICAN WIRE GAUGE	TGB	-- TOWER GROUND BAR
BCW	-- BARE COPPER WIRE	UL	-- UNDERWRITERS LABORATORIES
BFG	-- BELOW FINISHED GRADE	V	-- VOLTAGE
BKR	-- BREAKER	W	-- WATTS
C	-- CONDUIT	XFMR	-- TRANSFORMER
CKT	-- CIRCUIT	XMTR	-- TRANSMITTER
DISC	-- DISCONNECT		
EGR	-- EXTERNAL GROUND RING		
EMT	-- ELECTRIC METALLIC TUBING		
FSC	-- FLEXIBLE STEEL CONDUIT		
GEN	-- GENERATOR		
GPS	-- GLOBAL POSITIONING SYSTEM		
GRD	-- GROUND		
IGB	-- ISOLATED GROUND BAR		
IGR	-- INTERIOR GROUND RING (HALO)		
KW	-- KILOWATTS		
NEC	-- NATIONAL ELECTRIC CODE		
PCS	-- PERSONAL COMMUNICATION SYSTEM		
PH	-- PHASE		
PNL	-- PANEL		
PNLBD	-- PANELBOARD		

----	E	----	UNDERGROUND ELECTRICAL CONDUIT
----	T	----	UNDERGROUND TELEPHONE CONDUIT
			KILOWATT-HOUR METER
----		----	UNDERGROUND BONDING AND GROUNDING CONDUCTOR.
			GROUND ROD
			CADWELD
			GROUND ROD WITH INSPECTION WELL

PLANS PREPARED FOR:



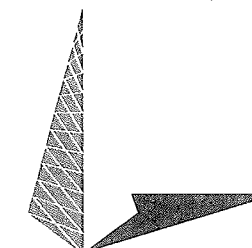
3500 REGENCY PARKWAY, SUITE 100  
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PROJECT INFORMATION:

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**PLEASANT HILL NC**

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PITTSBORO, NC 27312  
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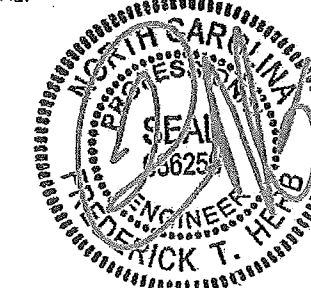
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SEAL:



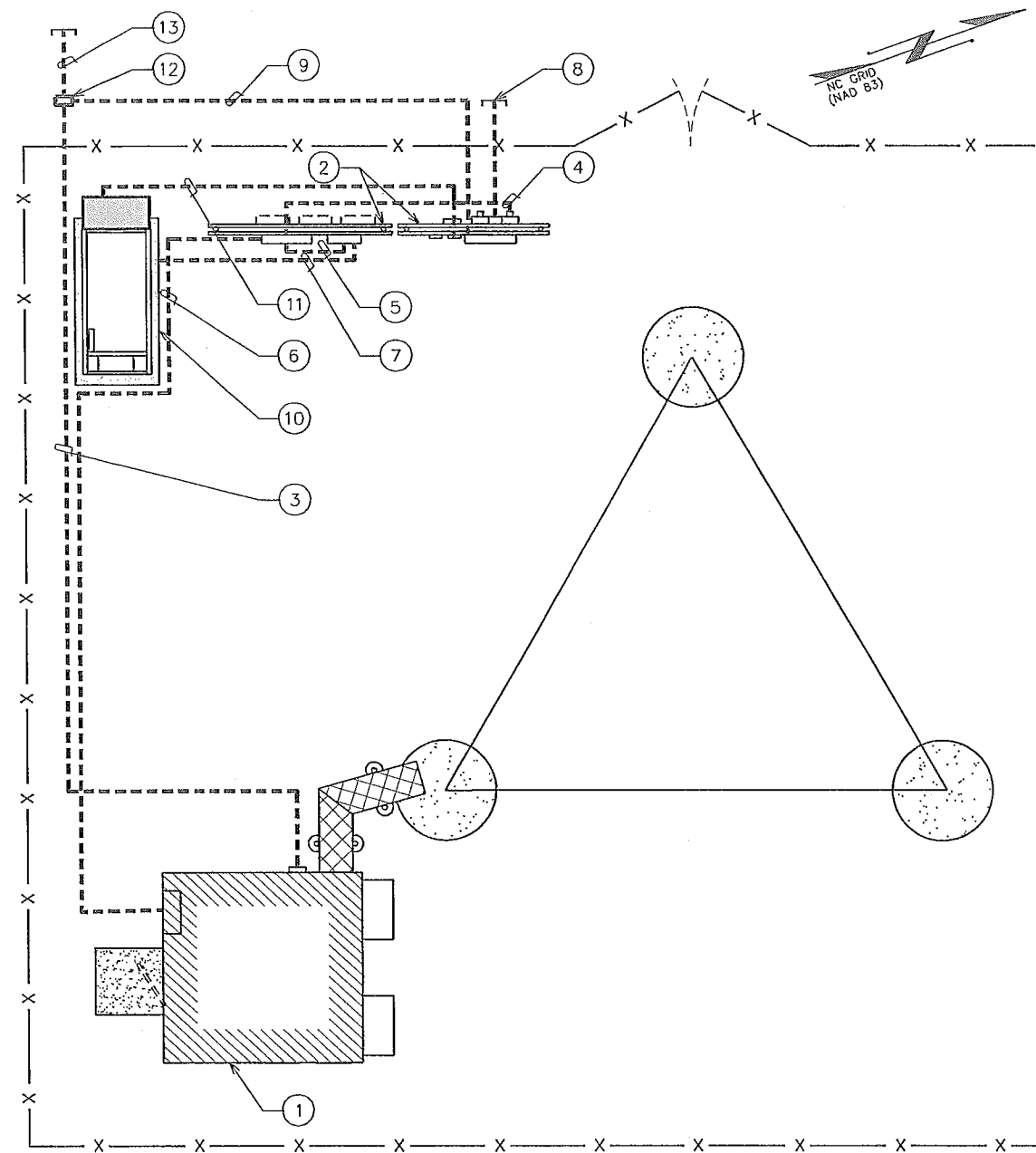
2	04-30-14	CONSTRUCTION
1	03-13-14	PRELIMINARY
0	02-24-14	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: SCB CHECKED BY: FTH

SHEET TITLE:

**ELECTRICAL**  
**NOTES**

SHEET NUMBER:	REVISION:
<b>E-1</b>	<b>2</b>
	TEP #: 52029

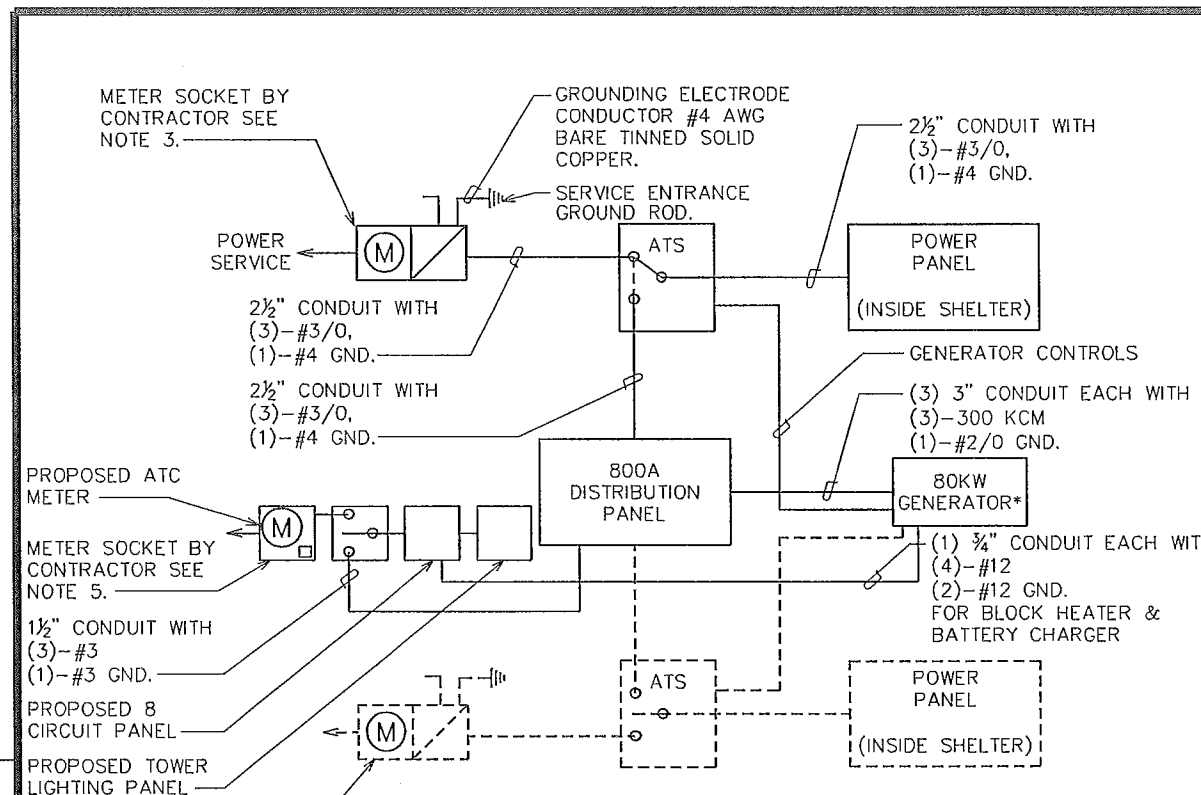


**PLAN NOTES:**

- ① PROPOSED AT&T EQUIPMENT SHELTER.
- ② PROPOSED H-FRAMES SEE SHEETS E-5 & E-5A FOR DETAILS
- ③ (1) 4" TELCO CONDUIT W/ (3) 1/4" FLEX INTERDUCT & PULL STRING FOR FIBER POWER LEADS.
- ④ (1) 2 1/2" POWER CONDUIT FROM PROPOSED METER TO 200A AUTOMATIC TRANSFER SWITCH.
- ⑤ (1) 2 1/2" POWER CONDUIT FROM 800A DISTRIBUTION PANEL TO 200A AUTOMATIC TRANSFER SWITCH.
- ⑥ (1) 2 1/2" POWER CONDUIT FROM 200A AUTOMATIC TRANSFER SWITCH TO TENANT SHELTER DISTRIBUTION PANEL.
- ⑦ (3) 3" POWER CONDUIT FROM THE PROPOSED GENERATOR TO THE 800A DISTRIBUTION PANEL
- ⑧ PROPOSED (2) 4" POWER CONDUIT STUBBED UP 3' OUTSIDE FENCE. CONTRACTOR TO COORDINATE SERVICE WITH LOCAL POWER COMPANY.
- ⑨ PROPOSED (1) 4" TELCO/FIBER CONDUIT FROM TELCO EQUIPMENT CABINET TO FIBER HANDHOLE.
- ⑩ PROPOSED GENERATOR. SEE DETAILS SHEETS C-6 AND C-7
- ⑪ AUTOMATIC START-UP AND INTER CARRIER CONTROL BY GENERATOR COMPANY.
- ⑫ PROPOSED FIBER HANDHOLE BY AT&T.
- ⑬ PROPOSED 4" CONDUIT W/ PULL STRING FROM FIBER HANDHOLE TO BE STUBBED UP 10' FROM R.O.W. ROUTE TO FOLLOW ACCESS & UTILITY EASEMENT.

**TRENCHING NOTE:**

PRIOR TO ANY DIGGING, THE CONTRACTOR SHALL IDENTIFY ALL EXISTING UTILITIES ON SITE.



**ONE LINE DIAGRAM NOTES:**

- 1. ELECTRICAL SERVICE SHALL BE 120/240V, 1Ø, 3W, 200A.
- 2. PROVIDE SERVICE ENTRANCE RATED CIRCUIT BREAKER TYPE DISCONNECT SWITCH.
- 3. INSTALL A 200 AMP METER BASE AS DIRECTED BY THE UTILITY COMPANY.
- 4. CONTRACTOR TO VERIFY BATTERY CHARGER AND BLOCK HEATER LOADING.
- 5. INSTALL A 100 AMP METER BASE AS DIRECTED BY THE UTILITY COMPANY.

\*80KW GENERATOR TO BE SUPPLIED WITH MAIN LINE CIRCUIT BREAKER NOT TO EXCEED THE MAXIMUM STANDBY OUTPUT OR 400A.

PLANS PREPARED FOR:



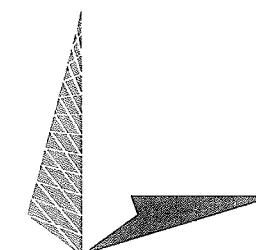
3500 REGENCY PARKWAY, SUITE 100  
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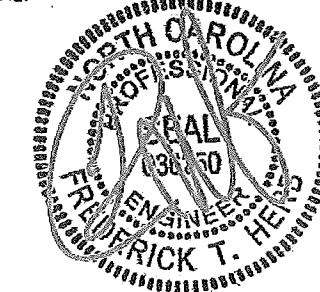
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SEAL:



April 30, 2014

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DRAWN BY: SCB CHECKED BY: FTH

SHEET TITLE:

**SERVICE ROUTING  
PLAN & ONE-LINE  
DIAGRAM**

SHEET NUMBER:	REVISION:
<b>E-2</b>	<b>2</b>
	TEP #: 52029

**SERVICE ROUTING PLAN**

SCALE: N.T.S.

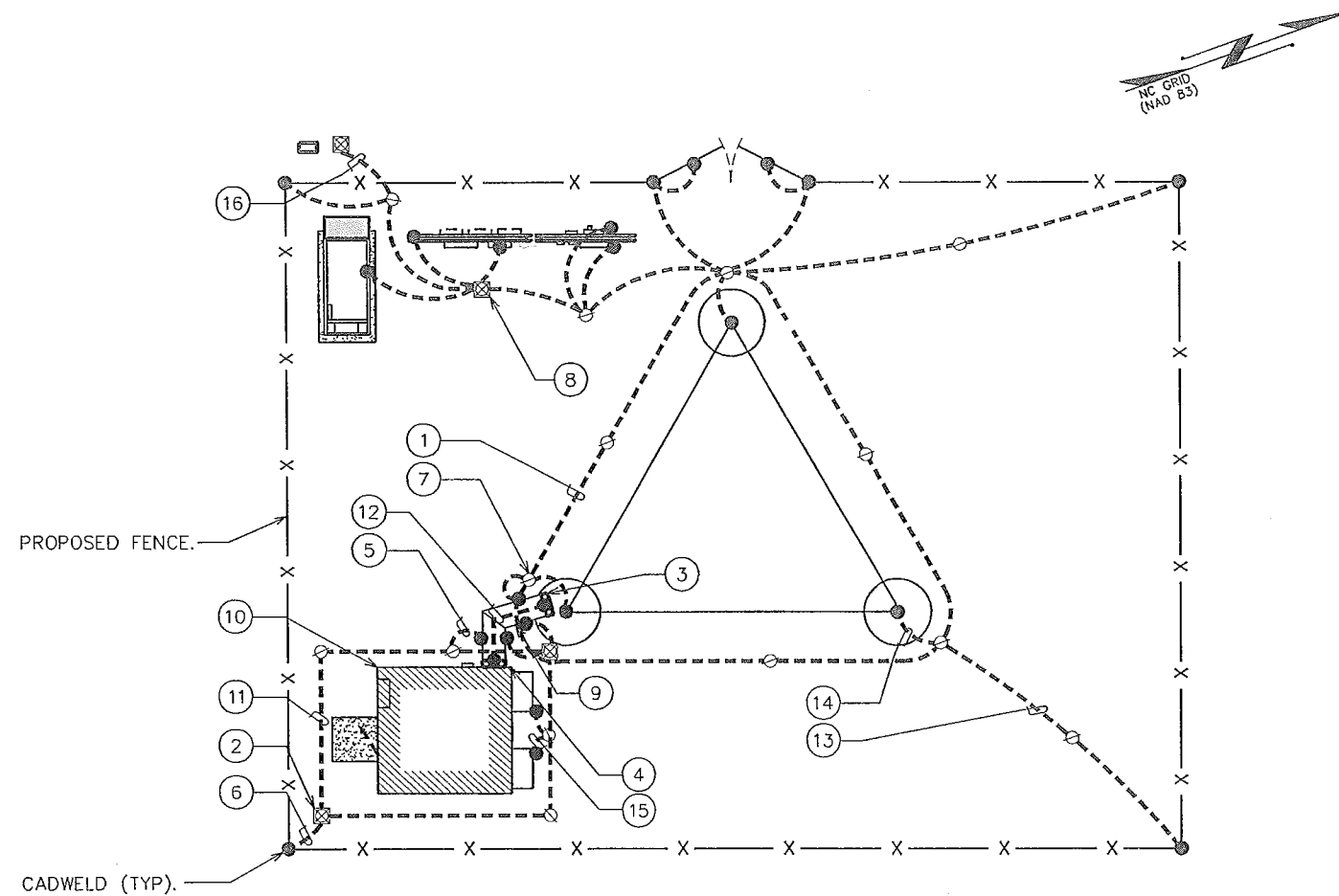
**ONE LINE DIAGRAM**

SCALE: N.T.S.



**DRAWING NOTES:**

- ① PROPOSED TOWER GROUND RING
- ② INSPECTION WELL AT CONNECTION TO PROPOSED GROUND RING (TYP OF 2)
- ③ TOWER BUS BAR
- ④ ICE BRIDGE BUS BAR
- ⑤ #2 AWG ICE BRIDGE BOND BURIED 30" BFG (TYP)
- ⑥ #2 AWG BOND TO PROPOSED GROUND RING
- ⑦ 5/8" x 10' COPPER GROUND ROD (TYP)
- ⑧ SERVICE ENTRANCE GROUND ROD W/ INSPECTION WELL. SEE E-6 FOR DETAIL.
- ⑨ ICE BRIDGE
- ⑩ EQUIPMENT SHELTER
- ⑪ #2 AWG GROUND RING BURIED 30" BFG
- ⑫ #2 AWG BARE SOLID TINNED COPPER WIRE BETWEEN BUS BARS
- ⑬ TOWER BONDING TO FENCE POST (TYP OF 4)
- ⑭ TOWER BONDING TO TOWER GROUND RING (TYP OF 3)
- ⑮ HVAC GROUNDING (TYP OF 2) (MECHANICAL FASTENERS AT ABOVE GROUND CONNECTIONS AS ALLOWED BY CODE.)
- ⑯ PROPOSED #2 GROUND TO BE STUBBED UP WITH FIBER CONDUIT.

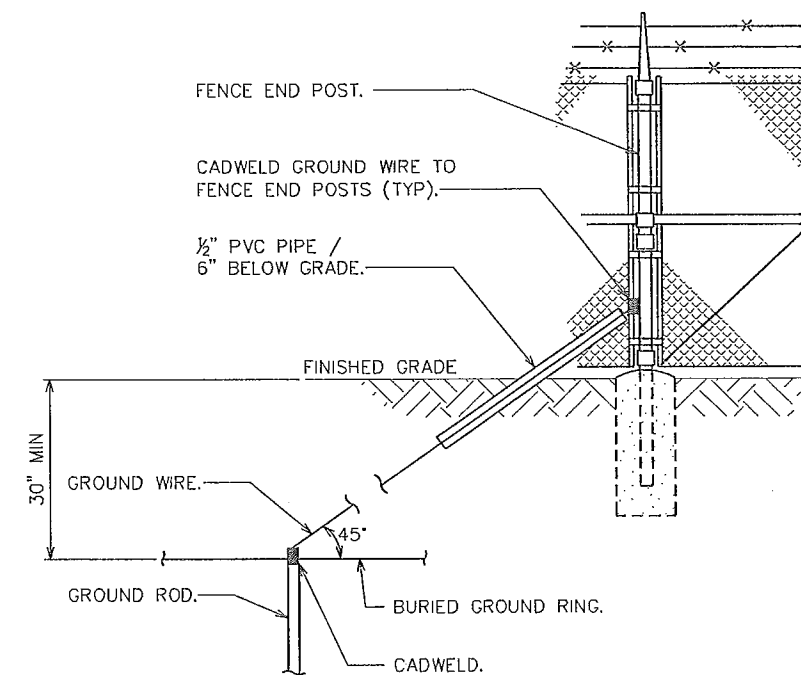


**GROUNDING NOTES**

1. GROUNDING ELECTRODES SHALL BE CONNECTED IN A RING USING #2 AWG BARE TINNED COPPER WIRE. THE TOP OF THE GROUND RODS AND THE RING CONDUCTOR SHALL BE 2 FEET BELOW FINISHED GRADE. GROUNDING ELECTRODES SHALL BE DRIVEN ON 10'-0" CENTERS. (MIN. 15'-0" MAX)
2. BONDING OF THE GROUNDED CONDUCTOR (NEUTRAL) AND THE GROUNDING CONDUCTOR SHALL BE AT THE SERVICE DISCONNECTING MEANS. BONDING JUMPER SHALL BE INSTALLED PER N.E.C. ARTICLE 250.30.
3. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER WHEN THE GROUNDING SYSTEM IS COMPLETE. THE CONSTRUCTION MANAGER SHALL INSPECT THE GROUNDING SYSTEM PRIOR TO BACKFILLING.

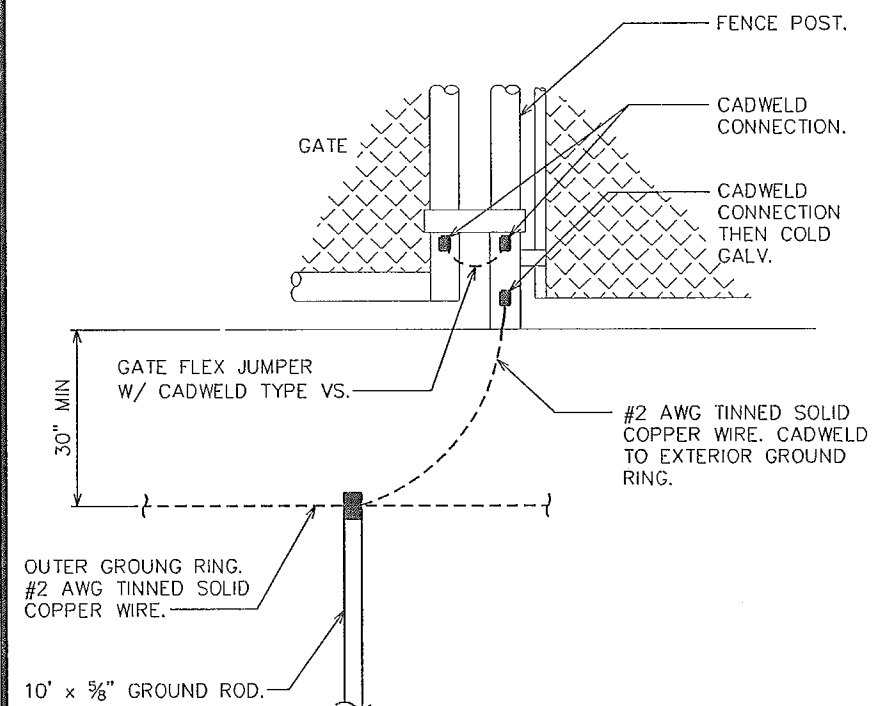
**TOWER GROUNDING PLAN**

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



**FENCE GROUNDING**

SCALE: N.T.S.



**TYPICAL GATE POST GROUNDING DETAIL**

SCALE: N.T.S.

PLANS PREPARED FOR:

AMERICAN TOWER CORPORATION  
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DRAWN BY: SCB CHECKED BY: FTH

SHEET TITLE:

**TOWER & SHELTER GROUNDING PLAN**

SHEET NUMBER:	REVISION:
<b>E-3</b>	<b>2</b>
	TEP #: 52029

**PANELBOARD SCHEDULE**

SCALE: N.T.S.

**800A ATC DISTRIBUTION PANEL SCHEDULE**

LOAD SERVED	VOLT AMPERES (WATTS)		WIRE	BREAKER		CKT #	PHASE	CKT #	BREAKER		WIRE	VOLT AMPERES (WATTS)		LOAD SERVED	
	L1	L2		P	TRIP				L1	L2					
AT&T ATIS	10695	11230	3/0	2	200	1	A	2	-	-	-	-	-	FUTURE CARRIER SERVICE T.B.D.	
FUTURE CARRIER SERVICE T.B.D.	-	-	-	-	-	3	B	4	-	-	-	-	-	FUTURE CARRIER SERVICE T.B.D.	
FUTURE CARRIER SERVICE T.B.D.	-	-	-	-	-	5	A	6	-	-	-	-	-	FUTURE CARRIER SERVICE T.B.D.	
FUTURE CARRIER SERVICE T.B.D.	-	-	-	-	-	7	B	8	-	-	-	-	-	FUTURE CARRIER SERVICE T.B.D.	
SPARE	-	-	-	-	-	9	A	10	-	-	-	-	-	SPARE	
SPARE	-	-	-	-	-	11	B	12	-	-	-	-	-	SPARE	
SPARE	-	-	-	-	-	13	A	14	-	-	-	-	-	SPARE	
SPARE	-	-	-	-	-	15	B	16	-	-	-	-	-	SPARE	
VOLT AMPS	10695	11230												VOLT AMPS	
						L1 VOLT AMPERES		10695	L2 VOLT AMPERES		11230				
						TOTAL VOLT AMPERES		21925	TOTAL VOLT AMPERES						
						TOTAL AMPS		91.35	TOTAL AMPS						

**AT&T POWER PANEL SCHEDULE**

LOAD SERVED	VOLT AMPERES (WATTS)		WIRE	BREAKER		CKT #	PHASE	CKT #	BREAKER		WIRE	VOLT AMPERES (WATTS)		LOAD SERVED	
	L1	L2		P	TRIP				L1	L2					
3 TON HVAC #1	3400	3400	8	2	50	1	A	2	-	-	8	3400	3400	3 TON HVAC #2	
INTERIOR LIGHTS	335	-	12	1	15	3	B	4	-	-	10	800	800	RECTIFIER #2	
INTERIOR RECEPTACLES	360	-	12	1	20	5	A	6	-	-	10	800	800	RECTIFIER #3	
EXTERIOR RECEPTACLES	360	-	12	1	20	7	B	8	-	-	10	800	800	RECTIFIER #4	
EXTERIOR LIGHTS	150	-	12	1	15	9	A	10	-	-	10	800	800		
RECTIFIER #1	800	-	10	2	30	11	B	12	-	-	10	800	800		
						13	A	14	-	-	10	800	800		
						15	B	16	-	-	10	800	800		
						17	A	18	-	-					
						19	B	20	-	-					
						21	A	22	-	-					
						23	B	24	-	-					
						25	A	26	-	-					
						27	B	28	-	-					
						29	A	30	-	-					
VOLT AMPS	4895	5430												VOLT AMPS	
						L1 VOLT AMPERES		10695	L2 VOLT AMPERES		11230				
						TOTAL VOLT AMPERES		21925	TOTAL VOLT AMPERES						
						TOTAL AMPS		91.35	TOTAL AMPS						
						AMPS X 125%		114.19	AMPS X 125%						
						X 110% FOR MAIN		125.61	X 110% FOR MAIN						

**100A ATC SERVICE PANEL SCHEDULE**

LOAD SERVED	VOLT AMPERES (WATTS)		WIRE	BREAKER		CKT #	PHASE	CKT #	BREAKER		WIRE	VOLT AMPERES (WATTS)		LOAD SERVED	
	L1	L2		P	TRIP				L1	L2					
TOWER LIGHTS	2880	-	10	1	30	1	A	2	-	-	-	-	-	SPARE	
SPARE	-	-	-	-	-	3	B	4	20	1	12	1440	1440	BLOCK HEATER	
SPARE	-	-	-	-	-	5	A	6	-	-	-	-	-	SPARE	
SPARE	-	-	-	-	-	7	B	8	20	1	12	1440	1440	BATTERY CHARGER	
VOLT AMPS	2880	-												VOLT AMPS	
						L1 VOLT AMPERES		2880	L2 VOLT AMPERES		2880				
						TOTAL VOLT AMPERES		5760	TOTAL VOLT AMPERES						
						TOTAL AMPS		24	TOTAL AMPS						
						AMPS X 125%		30	AMPS X 125%						
						X 110% FOR MAIN		33	X 110% FOR MAIN						

PLANS PREPARED FOR:



**AMERICAN TOWER CORPORATION**  
3500 REGENCY PARKWAY, SUITE 100  
CARY, NC 27511

PROJECT INFORMATION:

**AT&T SITE #: 368-770**  
**ATC SITE #: 282331**  
**PLEASANT HILL NC**  
NC HWY 902  
PITTSBORO, NC 27312  
(CHATHAM COUNTY)

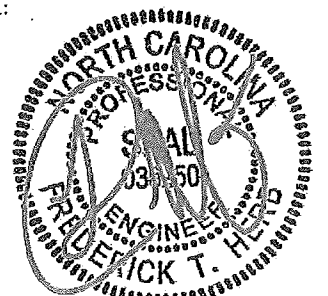
PLANS PREPARED BY:



**TOWER ENGINEERING PROFESSIONALS**  
3703 JUNCTION BOULEVARD  
RALEIGH, NC 27603-5263  
OFFICE: (919) 661-6351  
www.tepgroup.net

N.C. LICENSE # C-1794

SEAL:



APRIL 30, 2014

2	04-30-14	CONSTRUCTION
1	03-13-14	PRELIMINARY
0	02-24-14	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: SCB CHECKED BY: FTH

SHEET TITLE:

**PANELBOARD SCHEDULE**

SHEET NUMBER: **E-4** REVISION: **2**

TEP #: 52029

**NOTES:**

1. ELECTRIC SERVICE: 240/120V, 1 $\phi$ , 3W, 800A UNDERGROUND SERVICE TO POLE RISER.
2. USE COPPER STRANDED, 600V, TYPE THW/THWN, WITH CROSS-LINKED POLYETHYLENE INSULATION FOR #8 AWG AND LARGER WIRE.

3. UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC (MEET UL STANDARDS G51 AND NEMA TC2-1990). EXPOSED CONDUITS SHALL BE PVC UV RESISTANT OR RIGID GALVANIZED STEEL. ALL CONDUIT BENDS SHALL BE A MINIMUM OF 36" RADIUS.

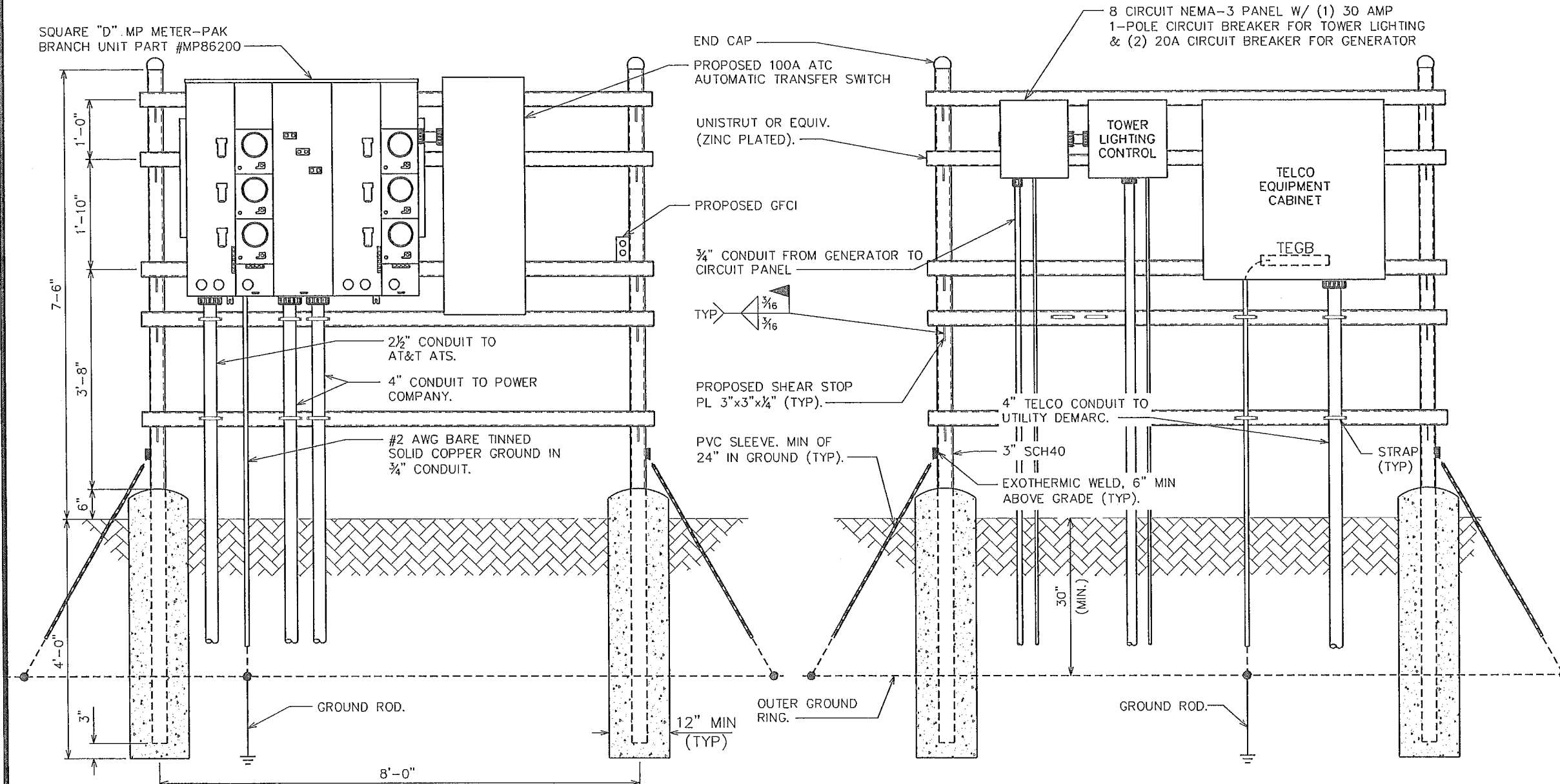
4. GROUNDING CONDUCTOR SHALL BE 2 AWG SOLID BARE TINNED COPPER UNLESS OTHERWISE NOTED.

5. 4" PVC CONDUIT INSTALLED 30' (MINIMUM) BELOW GRADE FOR INCOMING SERVICE BY TELEPHONE COMPANY. PROVIDE PULL STRING - 200 LB. TEST POLYETHYLENE CORD.

6. METER CENTER PART NUMBER SHOWN INCLUDES 4-JAW RINGED METER SOCKETS. CONTRACTOR TO VERIFY METER CONNECTION SPECIFICATIONS WITH LOCAL UTILITY PRIOR TO ORDERING.

**FRONT VIEW**

**REAR VIEW**



PLANS PREPARED FOR:

**AMERICAN TOWER CORPORATION**  
 3500 REGENCY PARKWAY, SUITE 100  
 CARY, NC 27511

PROJECT INFORMATION:

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**ATC SITE #: 282331**  
**PLEASANT HILL NC**  
 NC HWY 902  
 PITTSBORO, NC 27312  
 (CHATHAM COUNTY)

PLANS PREPARED BY:

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 3703 JUNCTION BOULEVARD  
 RALEIGH, NC 27603-5263  
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REV	DATE	ISSUED FOR:

DRAWN BY: SCB | CHECKED BY: FTH

SHEET TITLE:

**SERVICE RACK DETAILS I**

SHEET NUMBER:	REVISION:
<b>E-5</b>	<b>2</b>
TEP #:	52029

**SERVICE RACK DETAILS**  
 SCALE: N.T.S.

**NOTE:**

SEE SHEET E-5 FOR SERVICE RACK NOTES.

PLANS PREPARED FOR:



**AMERICAN TOWER CORPORATION**  
3500 REGENCY PARKWAY, SUITE 100  
CARY, NC 27511

PROJECT INFORMATION:

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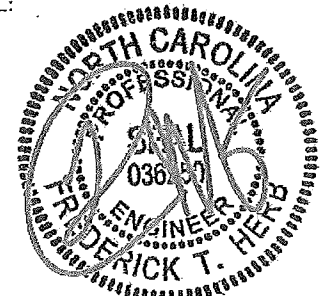
PLANS PREPARED BY:



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April 30, 2014

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DRAWN BY: CSN CHECKED BY: FTH

SHEET TITLE:

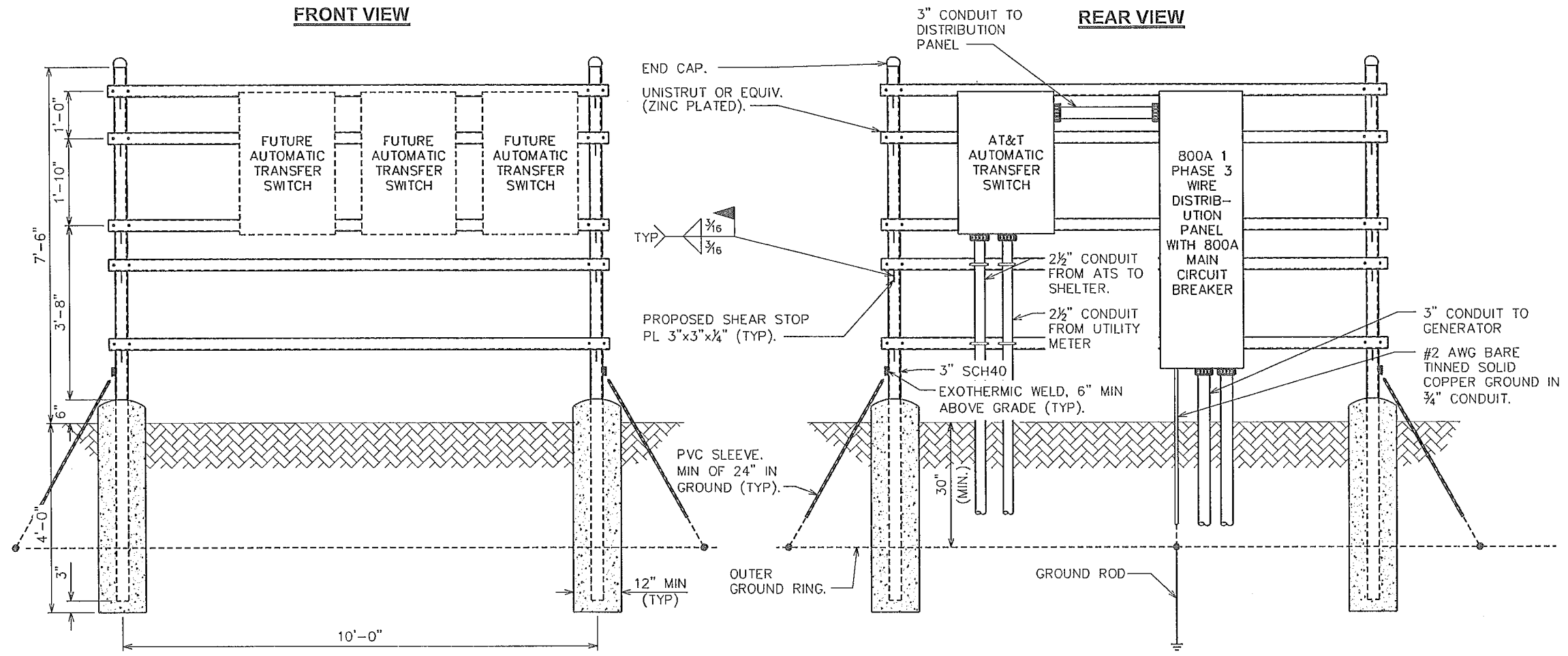
**SERVICE RACK DETAILS II**

SHEET NUMBER: **E-5A** REVISION: **2**

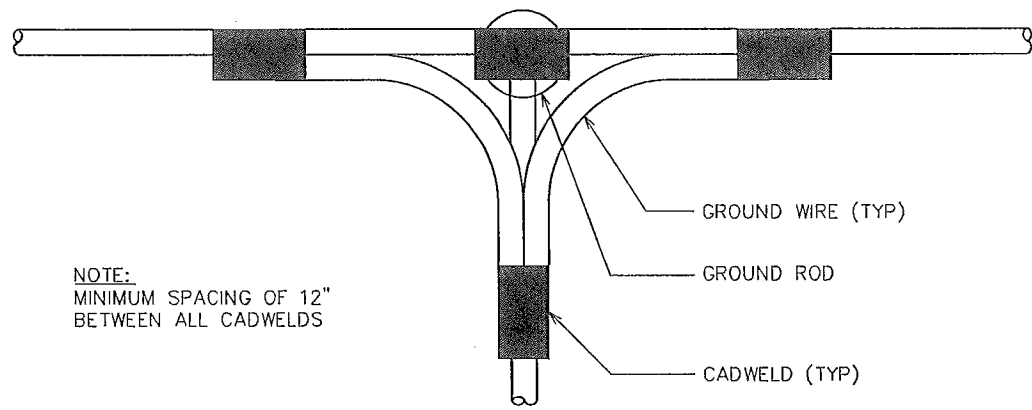
TEP #: 52029

**FRONT VIEW**

**REAR VIEW**

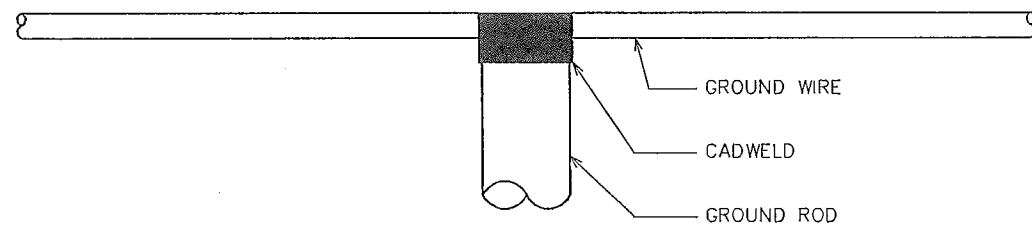


**SERVICE RACK DETAILS**  
SCALE: N.T.S.

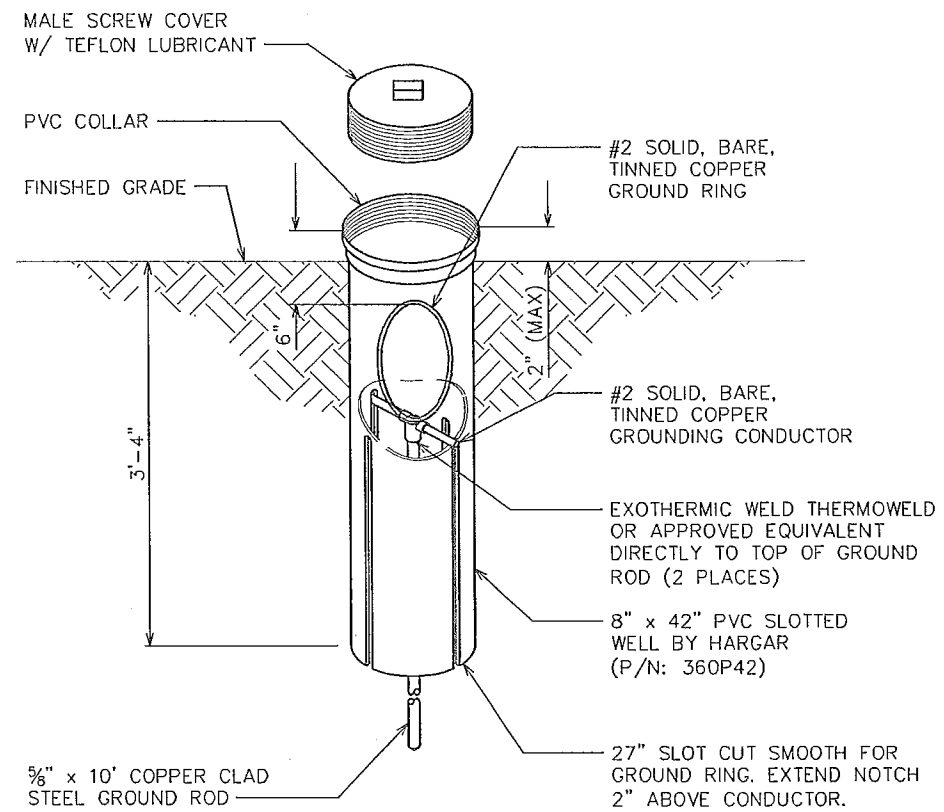


NOTE:  
MINIMUM SPACING OF 12"  
BETWEEN ALL CADWELDS

**TOP VIEW**



**SIDE VIEW**

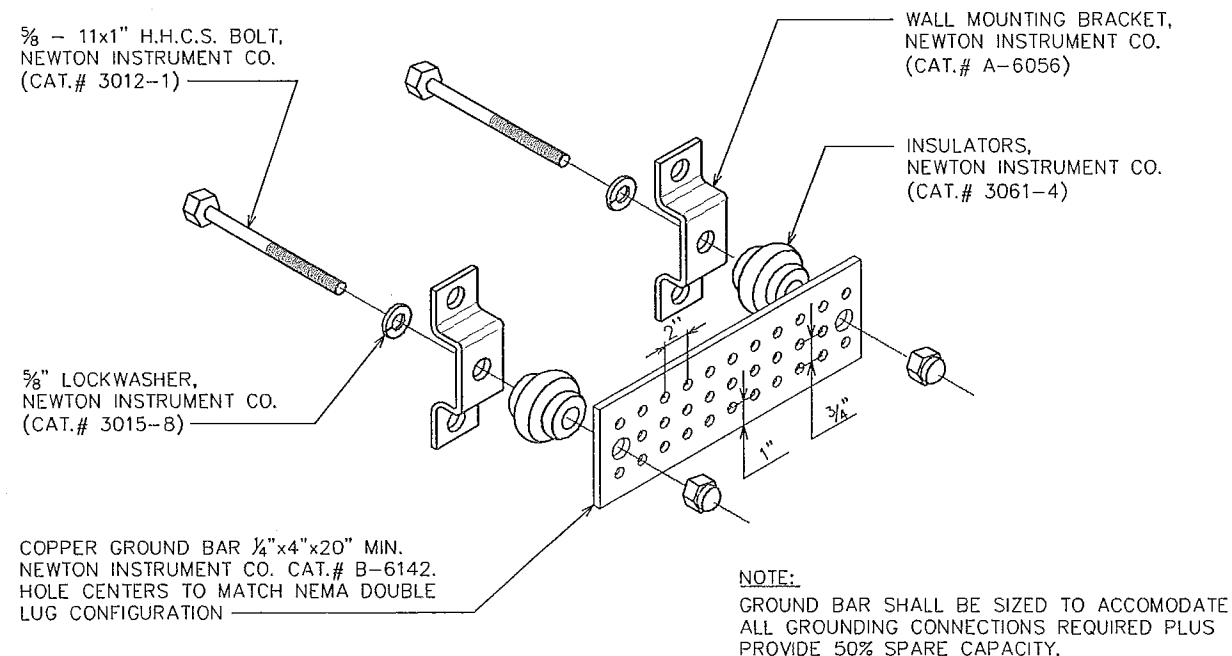


**GROUND ROD WITH INSPECTION WELL**

SCALE: N.T.S.

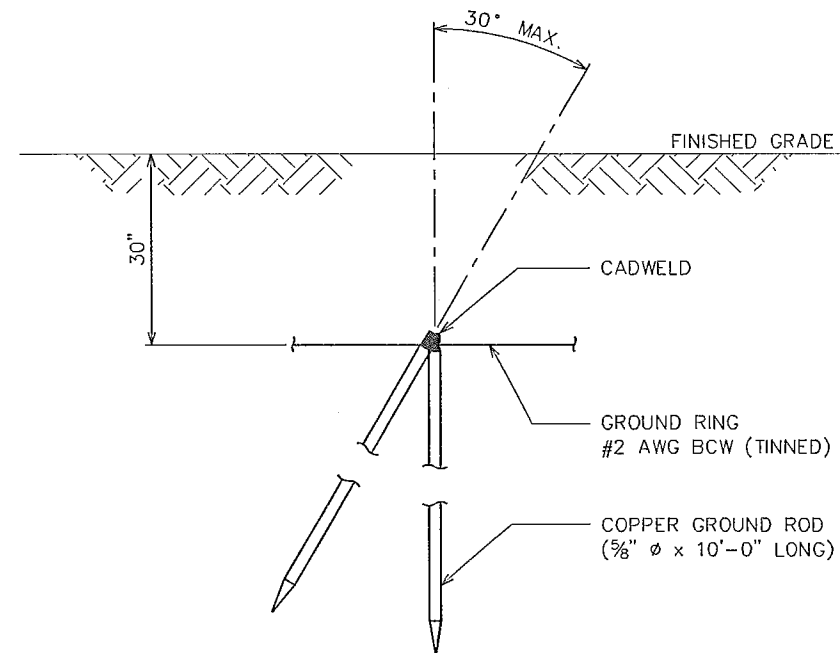
**CADWELD GROUNDING DETAIL**

SCALE: N.T.S.



**STANDARD GROUND BAR DETAIL**

SCALE: N.T.S.



**COPPER-CLAD STEEL GROUND ROD**

SCALE: N.T.S.

PLANS PREPARED FOR:

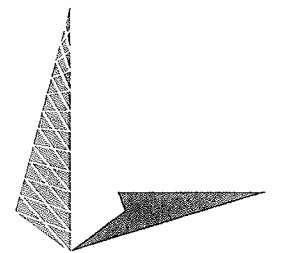


AMERICAN TOWER CORPORATION  
3500 REGENCY PARKWAY, SUITE 100  
CARY, NC 27511

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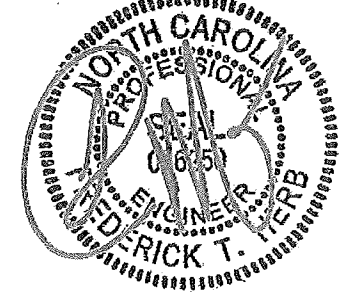
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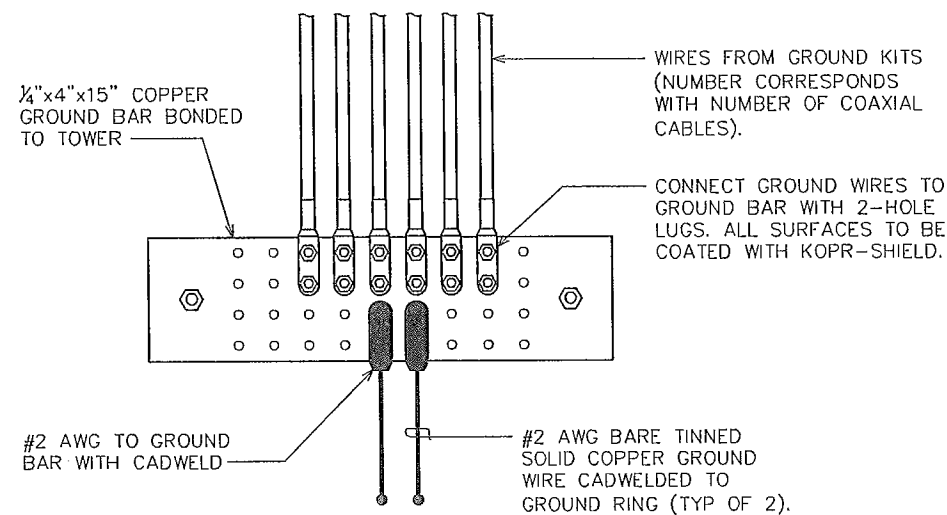
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DRAWN BY: SCB | CHECKED BY: FTH

SHEET TITLE:

**GROUNDING  
DETAILS I**

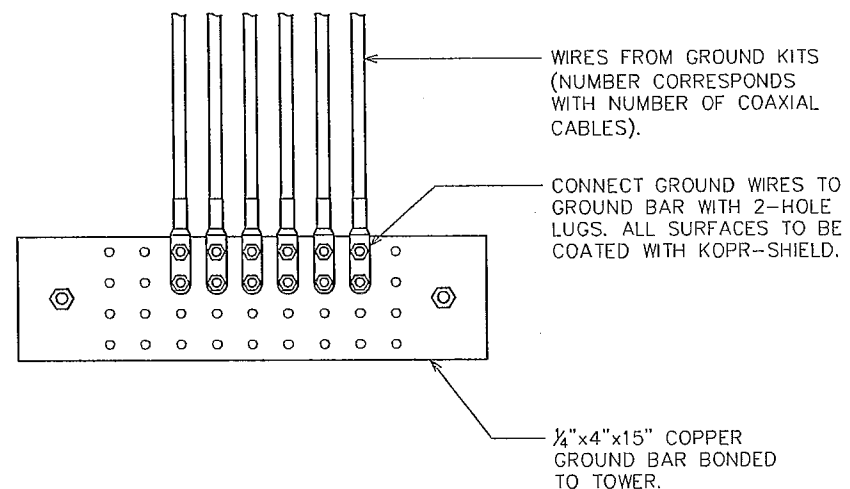
SHEET NUMBER:	REVISION:
<b>E-6</b>	<b>2</b>
TEP #:	52029



END VIEW

**NOTE:**

THE CONTRACTOR SHALL UTILIZE AN INTERMEDIATE GROUND BAR FOR ANTENNA RAD CENTERS OVER 200'.

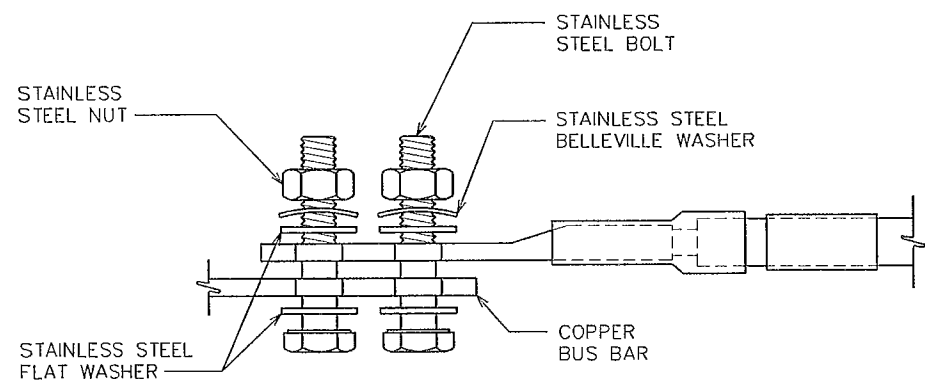


**LOWER GROUND BAR**

SCALE: N.T.S.

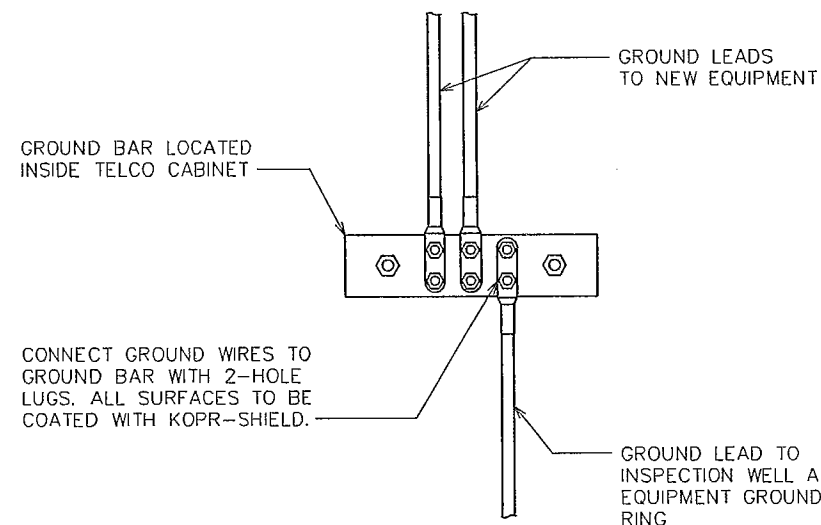
**UPPER / INTERMEDIATE GROUND BAR**

SCALE: N.T.S.



**NOTES:**

1. ALL HARDWARE SHALL BE 18-8 STAINLESS STEEL, INCLUDING THE BELLEVILLE WASHERS. COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY; INSERT A DRAGON TOOTH WASHER BETWEEN THE LUG AND STEEL. COAT ALL SURFACES WITH KOPR-SHIELD.



**LUG DETAIL**

SCALE: N.T.S.

**GROUND BAR IN TELCO CABINET**

SCALE: N.T.S.

PLANS PREPARED FOR:



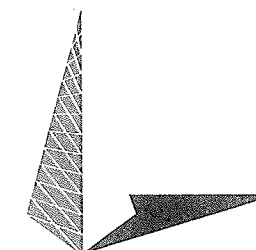
3500 REGENCY PARKWAY, SUITE 100  
CARY, NC 27511

PROJECT INFORMATION:

**AT&T SITE #: 368-770**  
**ATC SITE #: 282331**  
**PLEASANT HILL NC**

NC HWY 902  
PITTSBORO, NC 27312  
(CHATHAM COUNTY)

PLANS PREPARED BY:

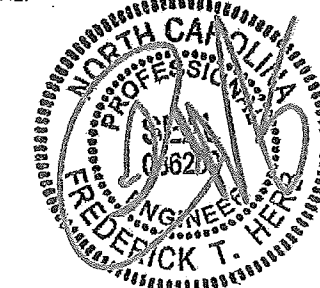


**TOWER ENGINEERING PROFESSIONALS**

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DRAWN BY: SCB CHECKED BY: FTH

SHEET TITLE:

**GROUNDING  
DETAILS II**

SHEET NUMBER: REVISION:

**E-7**

**2**

TEP #: 52029

GENERAC 80KW

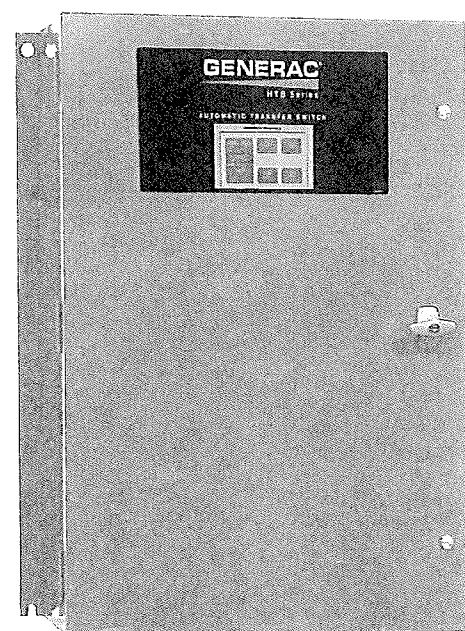
GENERAL ASSEMBLY AND INSTALLATION SUPPLEMENT

100 - 400 Amps,  
600 VAC HTS

**Automatic Transfer Switches**

1 of 2

2 of 2



200 Amp HTS NEMA 1

**Description**

- The Generac HTS Transfer Switch is a "State of the Art" Smart Switch designed to operate in conjunction with the Generac H100 Series generator controller.
- The HTS Transfer Switch has a 2 wire RS485 communication link to the generator controller.
- The utility voltage is monitored by the HTS along with signal before transfer timing, time delay neutral and inphase transfer.
- Switch operation is instigated by the generator controller.
- All timers and voltage setpoints are programmable through GenLink® Communications Software.
- Time delay neutral and inphase monitor are included.

**Standard Features**

- Single coil design, electrically operated and mechanically held
- Programmable exercise time
- SPDT aux contacts
- Main contacts are silver alloy
- Conformal coating protects the printed circuit board
- UL1008 Listed
- Indicating LED's for switch position, standby operating, utility available

- 3 position test switch: Fast Test, Auto, Normal Test
- Arc shutes on main contacts
- Signal before transfer contacts
- Rated to all classes of loads
- Remote start, stop and transfer through GenLink® Communications Software
- Up to four transfer switches per generator
- 50/60 hertz operation

**Optional Accessories**

- NEMA 12 enclosure (100-400 Amps)
- NEMA 3R enclosure (All)

- NEMA 4 and 4x enclosure
- 4 pole for separately derived systems

**Interconnections**

Switches and Indicators:

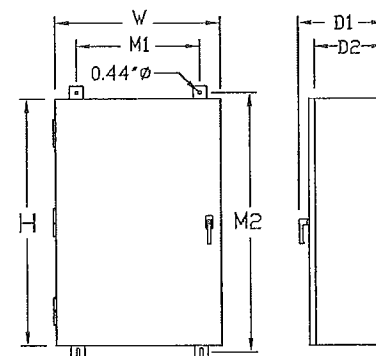
- System Ready LED
- Switch Position LED's
- Test Switch
- Return to Normal Switch
- Standby Operating LED
- Utility Available LED
- Fast Test Switch
- Safety Disconnect Switch

Standby Accept Voltage .....	85-95%
Standby Accept Frequency .....	85-95%
Nominal Voltage .....	1 Volt Increments
Allowable Deviation of Utility .....	1-100%
Line Interruption Delay .....	1-10 Seconds
Engine Warmup Time .....	1-300 Seconds
Minimum Run Time .....	5-60 Minutes
Return to Utility Timer .....	1-30 Minutes
Engine Cooldown Timer .....	1-30 Minutes
Signal Before Transfer Timer .....	1-30 Seconds
Transfer Type .....	Inphase Time Delay Neutral
Phase Difference for Inphase Transfer .....	-7 +0 Degrees

**Withstand Current - 600 Volt HTS Series**

HTS RATED AMPS	100	150	200	300	400
FUZE PROTECTED					
Maximum RMS Symmetrical Fault Current - Amps	200,000	200,000	200,000	200,000	200,000
Maximum Fuse Size - Amps	200	400	400	600	600
Fuse Class	J,T	J,T	J,T	J,T	J,T
CIRCUIT BREAKER PROTECTED					
Maximum RMS Symmetrical Fault Current - Amps	14,000	25,000	25,000	35,000	35,000
Protective Device Continuous Rating (Max.) - Amps	150	300	300	600	600

- Tested in accordance with the withstand and closing requirements of UL 1008 and CSA Standards.
- Current ratings are listed @ 480 VAC.



**Unit Dimensions**

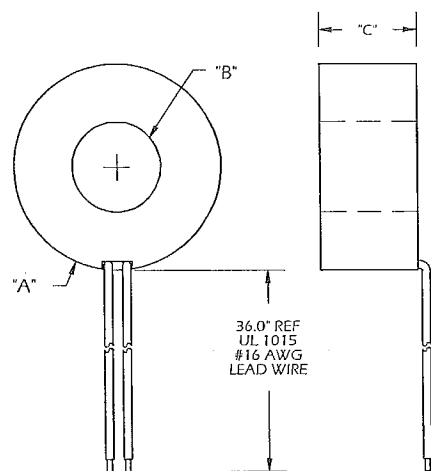
HTS RATED AMPS	VOLTAGE	ENCLOSURE HEIGHT H	ENCLOSURE WIDTH W	WALL MOUNT BOLT PATTERN		ENCLOSURE DEPTH		WEIGHT (lbs.)
				M1	M2	D1	D2	
100	ALL	36	24	18	37.5	12.7	10	180
150-200	120/240	36	24	18	37.5	12.7	10	185
150-200	120/208	36	24	18	37.5	12.7	10	185
150-200	277/480	48*	30*	24	49.5	14.8	12	265
300-400	120/240	36	24	18	37.5	12.7	10	245
300-400	120/208	36	24	18	37.5	12.7	10	245
300-400	277/480	48*	30*	24	49.5	14.8	12	325

**Terminal Lug Wire Ranges**

HTS RATED AMPS	CONTACTOR TERMINALS (1 LUG PER POLE) LUG WIRE RANGE	NEUTRAL BAR*		GROUND LUG (1 PROVIDED) LUG WIRE RANGE
		# LUGS	LUG WIRE RANGE	
100	2/0 - 14 AWG	4	2/0 - 14 AWG	2/0 - 14 AWG
150	400MCM - 4 AWG	4	350MCM - 6 AWG	350MCM - 6 AWG
200	400MCM - 4 AWG	4	350MCM - 6 AWG	350MCM - 6 AWG
300	600MCM - 4 AWG or 2 - [250MCM - 1/0 AWG]	4	600MCM - 4 AWG [250MCM - 1/0 AWG]**	350MCM - 6 AWG 350MCM - 6 AWG
400	600MCM - 4 AWG or 2 - [250MCM - 1/0 AWG]	4	600MCM - 4 AWG [250MCM - 1/0 AWG]**	350MCM - 6 AWG

\* Not included in HTS with switched neutral. \*\* Allowable wire range in brackets is for 2 wires per lug.

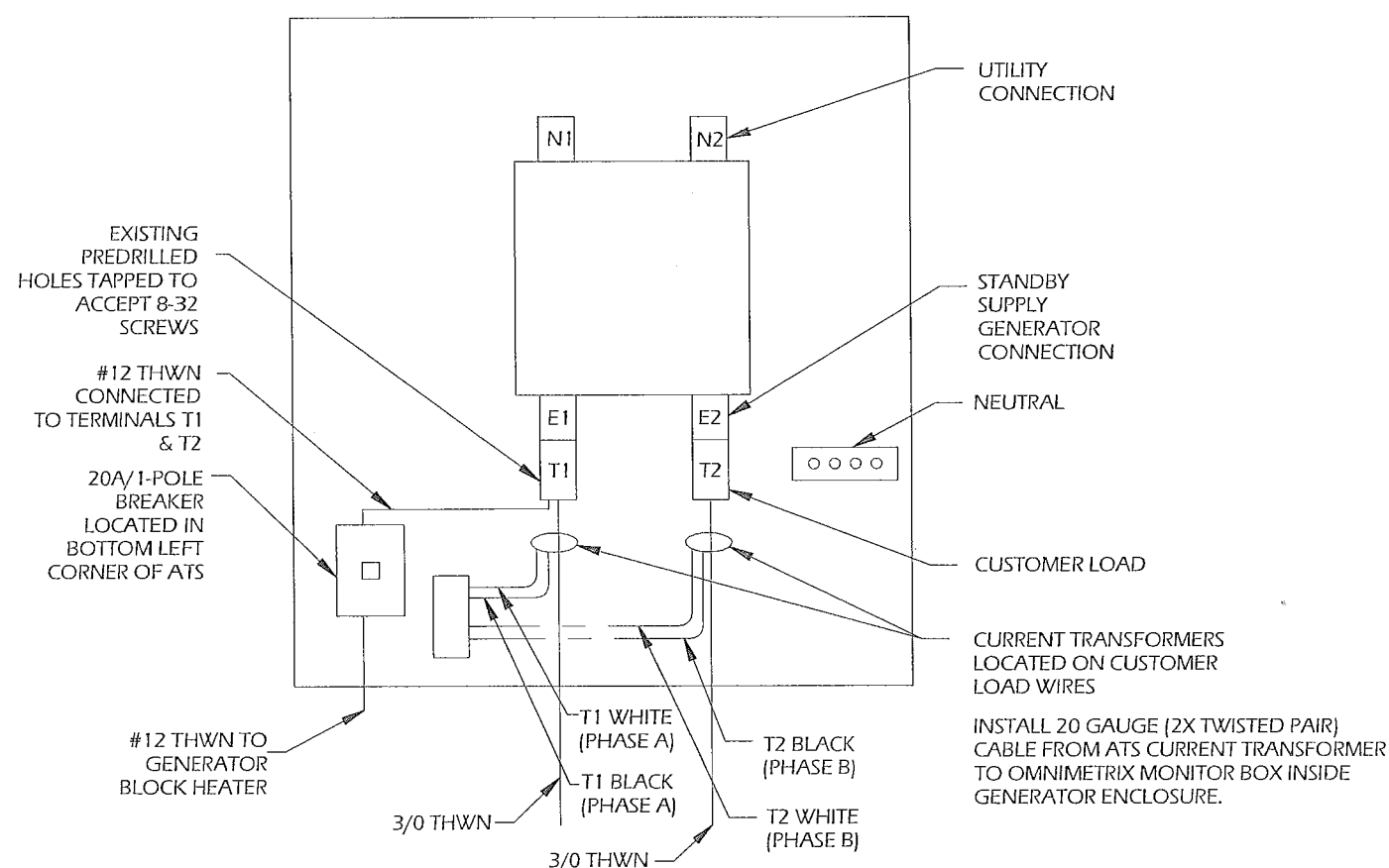




PART NO.	RATIO	MODEL NO.	±%	VA	OHMS	"A"	"B"	"C"
0F7784A	100:1A	635-100-01-L36	1	1	.31	65	28	30.5
0F7784B	200:1A	635-200-01-L36	1	5	.95	65	28	30.5
0F7784C	300:1A	A-300-01-L36	1	4.5	.06	112	57.1	27.4
0F7784D	400:1A	A-400-01-L36	1	4	.11	112	57.1	27.4
0F7784E	500:1A	A-500-01-L36	1	6.5	.13	112	57.1	27.4
0F7784F	600:1A	A-600-01-L36	1	7.5	.15	112	57.1	27.4
0F7784G	800:1A	MW-800-01-L36	1	10	.20	143.5	89	29.2
0F7784H	1000:1A	MW-1000-01-L36	1	12	.22	143.5	89	29.2
0F7784J	1500:1A	MW-1500-01-L36	1	15	.50	143.5	89	29.2
0F7784K	2000:1A	MW-2000-01-L36	1	12	.67	143.5	89	29.2
0F7784L	3000:1A	MW-3000-01-L36	1	25	1.0	143.5	89	29.2

NOTE:  
1. ORIGINAL CURRENT TRANSDUCCERS.

2 CURRENT FLOW METER IN ATS



NOTES:  
1. CONNECT TO TENANT BREAKER AT METER.  
2. CONNECT TO DISTRIBUTION CENTER BRANCH BREAKER

1 ATS

\*SINGLE PHASE

Ref: All Generac Power Systems fuel tank bases supplied from the factory are manufactured and labeled per U.L.142 and are warranted through Generac Power Systems.

UL registration number: MH18459

**U.L. 142 DOUBLE WALL FUEL TANK BASE SPECIFICATION**

**Fuel tank base construction:**

- Be constructed in accordance with Underwriters Laboratories Standard UL-142. Be constructed in accordance with Flammable and Combustible Liquids Code, NFPA 30; The Standard for Installation and use of Stationary Combustible Engine and Gas Turbines, NFPA 37; and The Standard for Emergency and Standby Power Systems, NFPA 110. Include reinforced steel box channel for generator support, with load rating of 5,000 lbs. per gen-set mounting hole location. Full height gussets shall be provided at gen-set mounting holes. Be shipped with a certificate of Structural/Mechanical Integrity, certifying that it has met standards through rigorous testing and has demonstrated specified capabilities.

**Sub Base Tank Testing:**

Primary tank and secondary containment basin sections shall be pressurized at 3-5 psi and leak-checked to ensure integrity of sub base weld seams per UL-142 standards

**Sub Base Tank Fittings:**

The sub base tank shall include the following fittings:

- Appropriately sized NPT
- Fuel supply Fuel return fitting
- NPT for normal vent, sized as appropriate NPT for emergency vent, sized as appropriate
- 2" NPT for manual fill
- NPT for level gauge, sized as appropriate.
- 2" NPT for electronic fuel level; includes Low fuel alarm. High fuel level alarm
- NPT fitting for leak detection alarm

**Fuel Level Gauge**

The sub base tank shall include a direct-reading fuel level gauge.

**Low Fuel Level**

Factory Pre-set at 40% remaining for Alarm

Factory Pre-set at 20% remaining for Shut-down

**High Fuel Level**

Factory Pre-set at 90% full for Alarm

**Fuel Containment Basin**

Sub base tank shall include a welded steel containment basin, sized at a minimum of 110% of the tank capacity to prevent escape of fuel into the environment in the event of a tank rupture. A fuel containment basin leak detector switch shall be provided.

**Sub Base Tank Venting**

**Normal and Emergency Venting:**

Normal and Emergency venting shall be sized per U.L. 142 specifications for wetted surface area of tank.

NOTE: BONDING JUMPER/  
GROUNDING ELECTRODE  
CONDUCTOR SHALL BE #4 CU  
FOR 200A, PER NEC TABLE  
250.66.

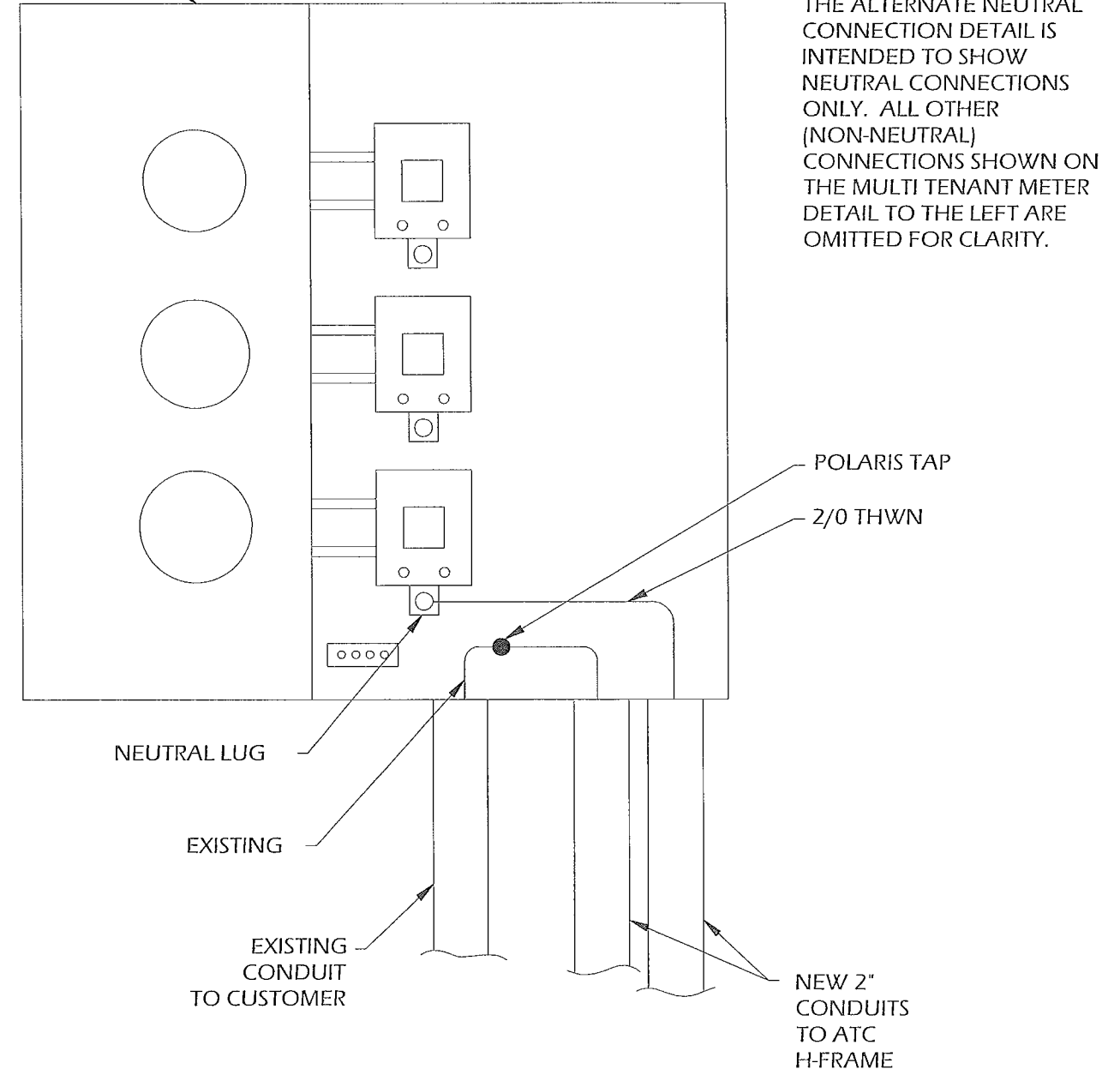
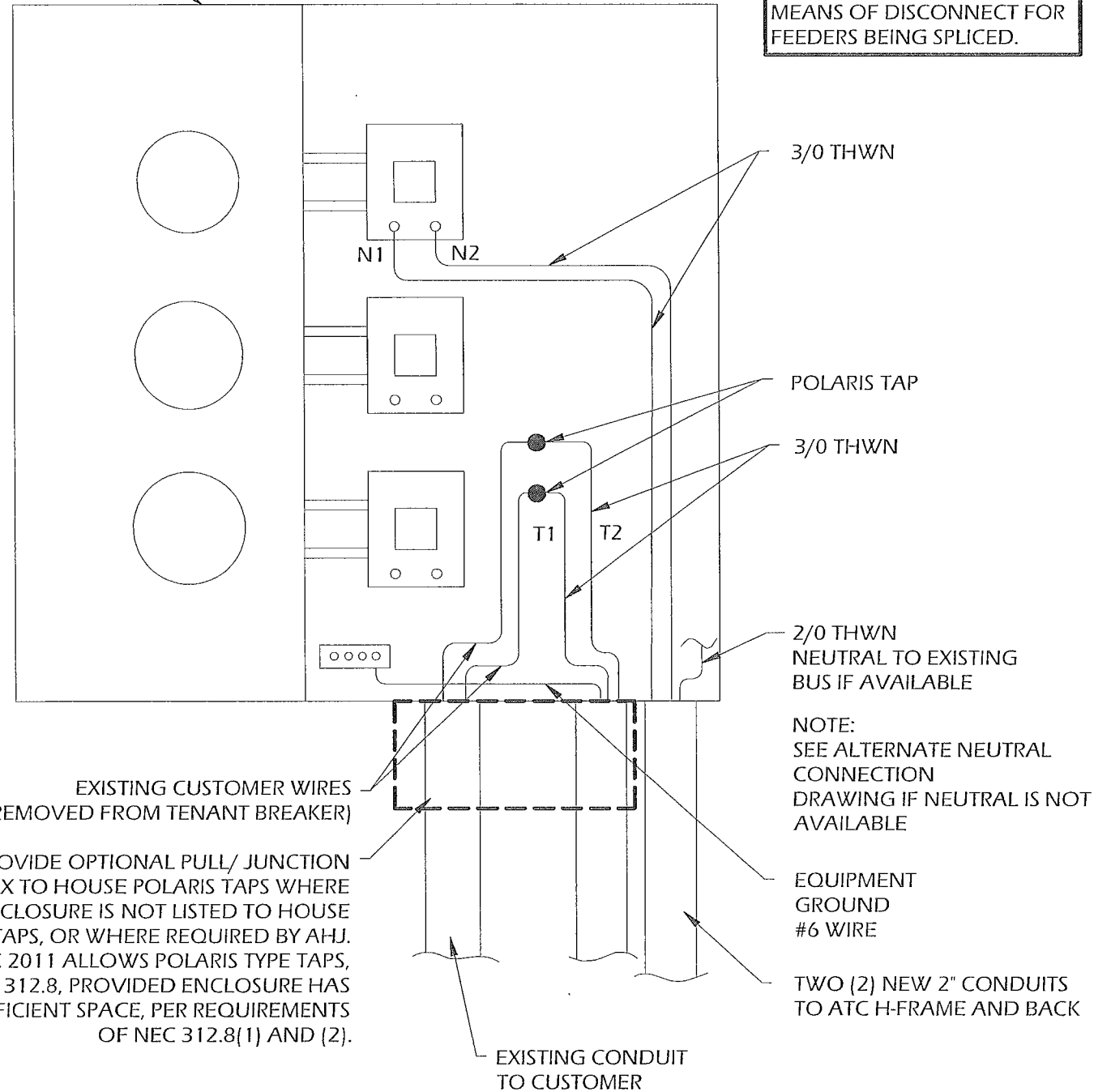
PER NEC 312.8(3), PROVIDE  
WARNING LABEL (PHENOLIC  
PLATE) ON ENCLOSURE  
CONTAINING POLARIS TAP  
SPECIFYING LOCATION OF  
MEANS OF DISCONNECT FOR  
FEEDERS BEING SPLICED.

NOTE: POLARIS TAP MUST BE  
SECURELY WRAPPED WITH  
COMMERCIAL GRADE NYLON  
ELECTRICAL TAPE AFTER  
INSTALLATION IS COMPLETE

NOTE: POLARIS TAP MUST BE  
SECURELY WRAPPED WITH  
COMMERCIAL GRADE NYLON  
ELECTRICAL TAPE AFTER  
INSTALLATION IS COMPLETE

METERING/  
DISCONNECT  
ENCLOSURE

METERING/  
DISCONNECT  
ENCLOSURE



THE ALTERNATE NEUTRAL  
CONNECTION DETAIL IS  
INTENDED TO SHOW  
NEUTRAL CONNECTIONS  
ONLY. ALL OTHER  
(NON-NEUTRAL)  
CONNECTIONS SHOWN ON  
THE MULTI TENANT METER  
DETAIL TO THE LEFT ARE  
OMITTED FOR CLARITY.

EXISTING CUSTOMER WIRES  
(REMOVED FROM TENANT BREAKER)

PROVIDE OPTIONAL PULL/ JUNCTION  
BOX TO HOUSE POLARIS TAPS WHERE  
ENCLOSURE IS NOT LISTED TO HOUSE  
TAPS, OR WHERE REQUIRED BY AHJ.  
NEC 2011 ALLOWS POLARIS TYPE TAPS,  
PER 312.8, PROVIDED ENCLOSURE HAS  
SUFFICIENT SPACE, PER REQUIREMENTS  
OF NEC 312.8(1) AND (2).

NOTE:  
SEE ALTERNATE NEUTRAL  
CONNECTION  
DRAWING IF NEUTRAL IS NOT  
AVAILABLE

1 MULTI TENANT METER OPTION  
SCALE: NOT TO SCALE

2 ALTERNATE NEUTRAL CONNECTION  
FOR MULTI-TENANT METER OPTION  
SCALE: NOT TO SCALE

\*SINGLE PHASE, 200A

**GENERAL INFORMATION** (SECTION 1 OF 1)

SERVICE VOLTAGE: 120/240V 1PH 3W    ENCLOSURE: TYPE 3R  
 BUS RATING & TYPE: 800A ALUMINUM    NEUTRAL RATING: 800A  
 GROUND BAR: SLD. BOLTED ALUMINUM, Al OR Cu CABLE  
 S.C. RATING: 22K A.I.C. FULLY RATED

MAIN DEVICE TYPE: MAIN LUGS ONLY - BOTTOM CABLE ENTRY  
 MAIN TERMINALS: MECHANICAL - (3) #2-500 kcmil (Cu/Al)  
 NEUTRAL TERMINALS: MECHANICAL - (3) #2-500 kcmil (Cu/Al)  
 BOOK CATALOG NO: RPG2457  
 TRIM: COMPLETE ENCLOSURE (INCLUDES TRIM)

BOX DIMENSIONS: 57" (1447.8mm)H X 24" (609.6mm)W X 12.65" (326.4mm)D  
 MIN. GUTTER SIZE: TOP=10.625" (269.9mm) BOTTOM=10.625" (269.9mm)  
 LEFT=5" (127.0mm) RIGHT=5" (127.0mm)

FINAL ID NAMEPLATE: (1) 800A  
 TYPE: PLASTIC ADHESIVE-BACKED (2) 120/240V 1PH 3W  
 COLOR: WHITE WITH BLACK LETTERS (3)

UL SERVICE ENTRANCE LABEL

TRIM LOOK T-HANDLE LOCK ASSEMBLY  
 CIRCUIT DIRECTORY PLASTIC SLEEVE WITH CARD  
 PAINTED BOX ANSI 61

**PLANT INFORMATION**

	PART NUMBER	QTY	PART NUMBER	QTY
UL LABEL:	7494A06H01	1	EOB2200	4
BUS CUTTING:	6563C06H01	2		
NEUTRAL:	6672C66G03	1		
GROUND BAR, AL/CU:	6572C78G03	1		
CHASSIS ASSEMBLY:	6572C25G06	1		
LUG ASSEMBLY:	6572C52G06	1		
BREAKER ASSY:	6572C87G04	2		
DEAD FRONT COVER:	5554C11801	2		
COVER PACKAGING:	4177B06G02	1		
DEAD FRONT COVER ASSEMBLY:	6574C74G02	1		
PACKAGING:	50C5330G01	1		

Spot \_\_\_\_\_ Final Inspection \_\_\_\_\_

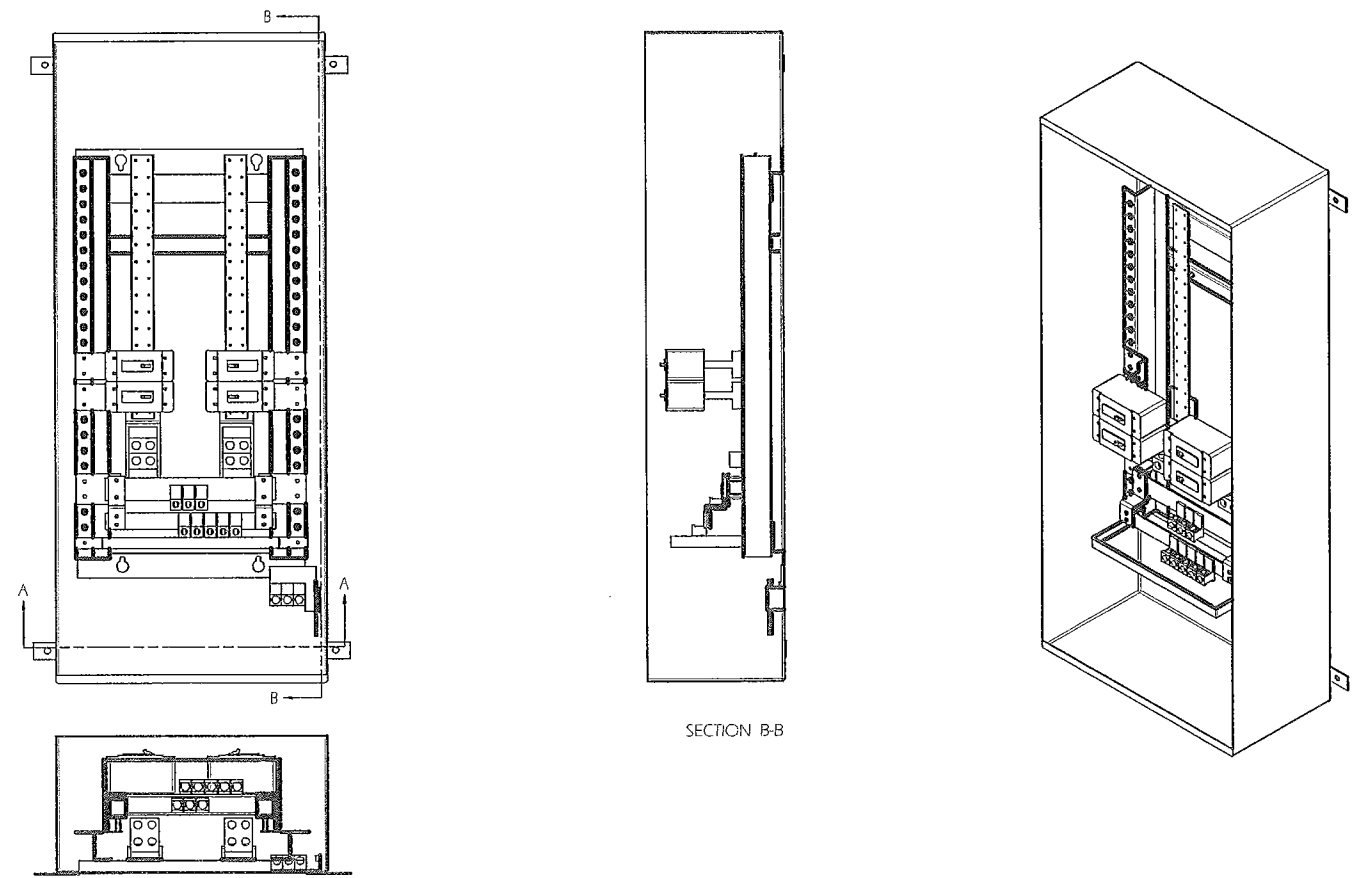
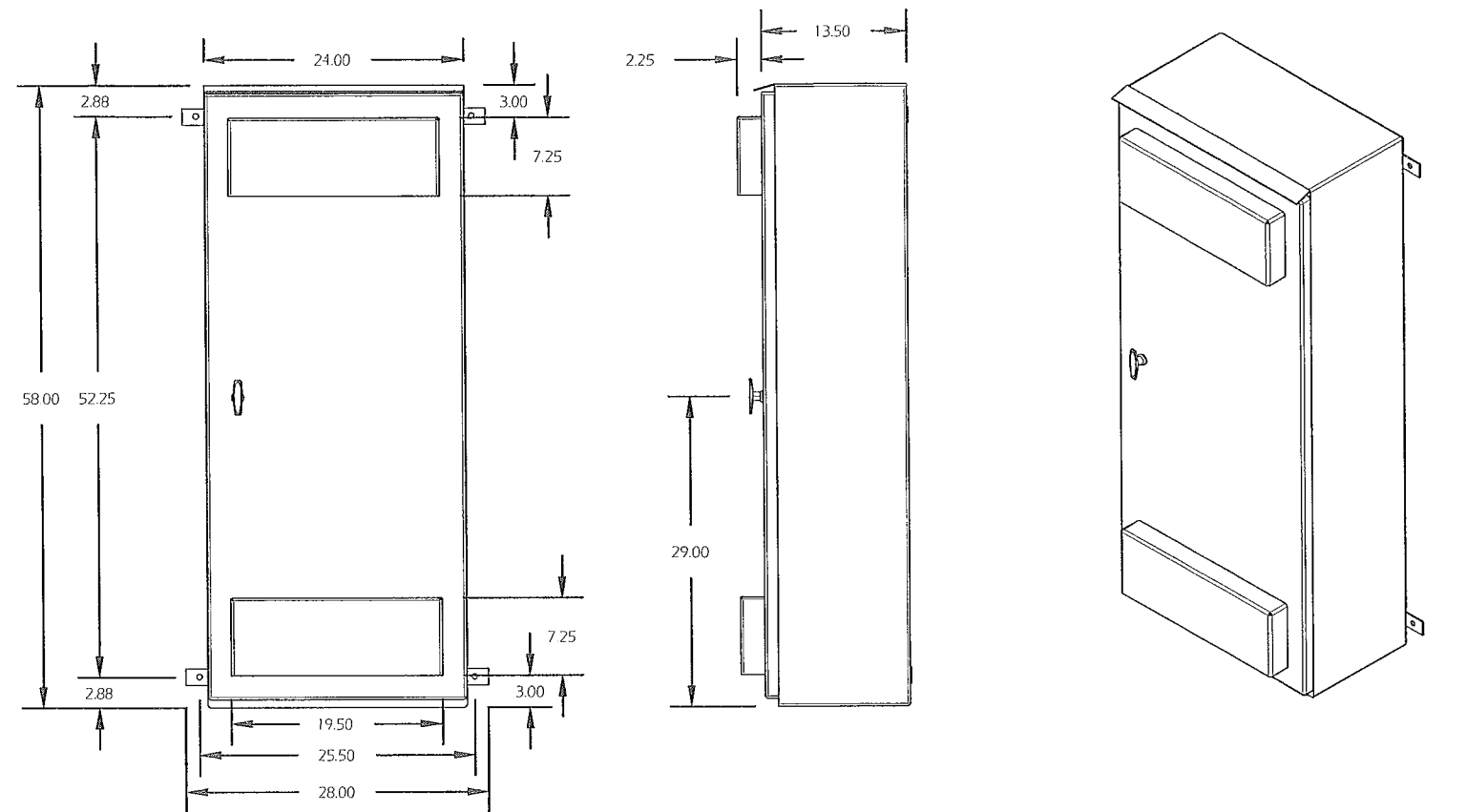
DEVICE MODIFICATIONS:  
 REF #    DESCRIPTION:

BELL TEST \_\_\_\_\_  
 HI-POT \_\_\_\_\_  
 S/T \_\_\_\_\_

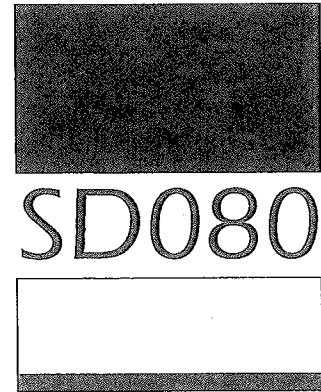
Notes:

NOTE:  
 PANEL SHOWN IS FOR SINGLE PHASE. FOR 3-PHASE SITES, USE CORRESPONDING 3-POLE VERSION OF THIS PANEL.

1 DISTRIBUTION PANEL  
 SCALE: NOT TO SCALE



2 DISTRIBUTION PANEL DETAILS  
 SCALE: NOT TO SCALE



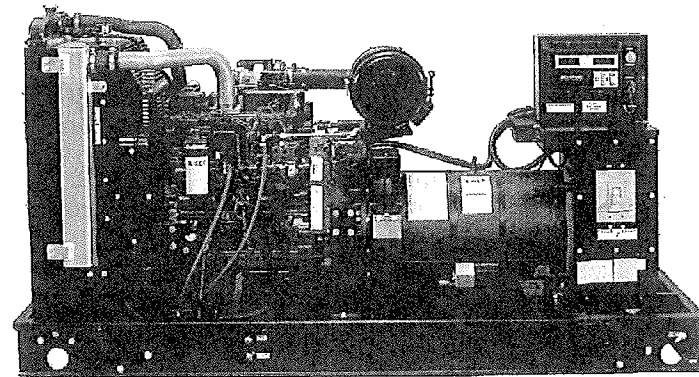
**GENERAC** INDUSTRIAL POWER

Industrial Diesel Generator Set  
EPA Emissions Certification: Tier III

80 kW Diesel

Standby Power Rating  
100 kVA 80 kW 60 Hz

Prime Power Rating  
90 kVA 72 kW 60 Hz



**GENERAC** INDUSTRIAL POWER

application and engineering data

80 kW Diesel

SD080

ENGINE SPECIFICATIONS

<b>General</b>	
Make	Iveco / FPT
EPA Emissions Compliance	Tier III
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	4
Type	Diesel
Displacement - L (cu. in.)	4.5 (274)
Bore - mm (in.)	105 (4.1)
Stroke - mm (in.)	132 (5.2)
Compression Ratio	17.5:1
Intake Air Method	Turbocharged
Cylinder Head Type	2 Valve
Piston Type	Aluminum
Crankshaft Type	Forged Steel
Engine Block Type	Cast Iron / Wet Sleeve

<b>Engine Governing</b>	
Governor	Electronic
Frequency Regulation (Steady State)	+/-0.25%

<b>Lubrication System</b>	
Oil Pump Type	Gear
Oil Filter Type	Full Flow
Crankcase Capacity - L (gal)(qts)	13.6 (3.6) (14.4)

<b>Cooling System</b>	
Cooling System Type	Closed
Water Pump	Belt Driven Centrifugal
Fan Type	Pusher
Fan Blade Number	2538 (10)
Fan Diameter (in.)	26
Coolant Heater Wattage	1500
Coolant Heater Standard Voltage	120

<b>Fuel System</b>	
Fuel Type*	Ultra Low Sulfur Diesel Fuel
Fuel Specifications	ASTM
Fuel Filtering (microns)	5
Fuel Inject Pump Make	Standyne
Fuel Pump Type	Engine Driven Gear
Injector Type	Mechanical
Engine Type	Direct Injection
Fuel Supply Line - mm (in.)	1/4 inch Npt
Fuel Return Line - mm (in.)	1/4 inch Npt

<b>Engine Electrical System</b>	
System Voltage	12VDC
Battery Charging Alternator	90 Amp
Battery Size (at 0°C)	995 CCA
Battery Group	31
Battery Voltage	12 Volt DC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Model	390 mm Generac
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50
Alternator Type	Synchronous Brushless, Opt PMG
Bearings	One - Pre Lubed & Sealed
Coupling	Direct, Flexible Disc
Load Capacity - Standby	80
Load Capacity - Prime	72
Prototype Short Circuit Test	Y

Voltage Regulator Type	Digital
Number of Sensed Phases	3
Regulation Accuracy (Steady State)	+/-0.25%

CODES AND STANDARDS COMPLIANCE (WHERE APPLICABLE)

NFPA 99  
NFPA 110  
ISO 8528-5  
ISO 1708A.5  
ISO 3046  
BS5514  
SAE J1349  
DIN 6271  
IEEE C62.41 TESTING  
NEMA ICS 1

Rating Definitions:  
Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability. (Max. load factor = 70%)  
Prime - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. (Max. load factor = 80%) A 10% overload capacity is available for 1 out of every 12 hours

features

benefits

Generator Set

- PROTOTYPE & TORSIONALLY TESTED ▶ PROVIDES A PROVEN UNIT
- UL2200 TESTED ▶ ENSURES A QUALITY PRODUCT
- RHINOCOAT PAINT SYSTEM ▶ IMPROVES RESISTANCE TO ELEMENTS
- WIDE RANGE OF ENCLOSURES AND TANKS ▶ PROVIDES A SINGLE SOURCE SOLUTION

Engine

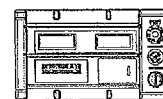
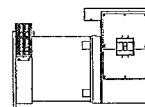
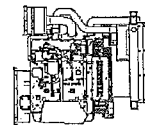
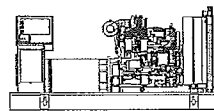
- EPA TIER COMPLIANT ▶ ENVIRONMENTALLY FRIENDLY
- INDUSTRIAL TESTED, GENERAC APPROVED ▶ ENSURES INDUSTRIAL STANDARDS
- POWER-MATCHED OUTPUT ▶ ENGINEERED FOR PERFORMANCE
- INDUSTRIAL GRADE ▶ IMPROVES LONGEVITY AND RELIABILITY

Alternator

- TWO-THIRDS PITCH ▶ ELIMINATES HARMFUL 3RD HARMONIC
- LAYER WOUND ROTOR & STATOR ▶ IMPROVES COOLING
- CLASS H MATERIALS ▶ HEAT TOLERANT DESIGN
- DIGITAL 3-PHASE VOLTAGE CONTROL ▶ FAST AND ACCURATE RESPONSE

Controls

- ENCAPSULATED BOARD W/ SEALED HARNESS ▶ EASY, AFFORDABLE REPLACEMENT
- 4-20mA VOLTAGE-TO-CURRENT SENSORS ▶ NOISE RESISTANT 24/7 MONITORING
- SURFACE MOUNT TECHNOLOGY ▶ PROVIDES VIBRATION RESISTANCE
- ADVANCED DIAGNOSTICS & COMMUNICATIONS ▶ HARDENED RELIABILITY



primary codes and standards



SD080

operating data (60Hz)

POWER RATINGS (kW)

	STANDBY		PRIME	
	80 Amps	333	72 Amps	300
Single-Phase 120/240VAC @1.0pf	80 Amps	278	72 Amps	250
Three-Phase 120/208VAC @0.8pf	80 Amps	241	72 Amps	217
Three-Phase 120/240VAC @0.8pf	80 Amps	120	72 Amps	108
Three-Phase 277/480VAC @0.8pf	80 Amps	96	72 Amps	87

STARTING CAPABILITIES (skVA)

Alternator	kW	skVA v. Voltage Dip											
		480VAC						208/240VAC					
		10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard*	80	59	88	117	147	176	205	44	59	88	110	132	154
Upsize 1	100	79	118	157	197	236	275	59	79	118	148	177	206
Upsize 2	125	116	174	232	290	348	406	87	116	174	218	261	305

\*All Generac industrial alternators utilize Class H materials. Standard alternator provides less than or equal to Class F temperature rise. Upsize 1 provides less than or equal to Class A temperature rise.

Fuel

Fuel Consumption Rates\*\*

Fuel Pump Lift - in (m)	STANDBY				PRIME							
	Percent Load	gph	lph	Percent Load	gph	lph	Percent Load	gph	lph			
36(.9)	25%	2.1	7.9	25%	1.9	7.2	50%	3.7	14.0	50%	3.4	12.9
Total Fuel Pump Flow (Combustion + Return)	75%	5.2	19.7	75%	4.7	17.8	100%	6.3	23.8	100%	5.8	22.0
13.6 gph	100%	6.3	23.8	100%	5.8	22.0						

\*\*Refer to "Emissions Data Sheets" for maximum fuel flow for EPA and SCAQMD permitting purposes.

COOLING

Coolant System Capacity - Gal (L)	STANDBY		PRIME	
	gpm (lpm)	BTU/hr	gpm (lpm)	BTU/hr
4.5 (17.44)	32.7(123.8)	137,140	32.7(123.8)	137,140
Maximum Radiator Backpressure	STANDBY		PRIME	
	cfm (m3/min)	F° (C°)	cfm (m3/min)	F° (C°)
1.5" H <sub>2</sub> O Column	6360(180.0)	122(50)	6360(180.0)	122(50)
	Max. Operating Radiator Air Temp	122(50)	Max. Operating Ambient Temperature	122(50)

COMBUSTION AIR REQUIREMENTS

Intake Flow at Rated Power	STANDBY		PRIME	
	cfm (m3/min)	(8.67)	275	(7.80)

EXHAUST

Exhaust Outlet Size (Open Set)	STANDBY		PRIME	
	cfm (m3/hr)	inHg (Kpa)	cfm (m3/hr)	inHg (Kpa)
3.0"	790(134.4)	1.5(5.1)	790(134.4)	1.5(5.1)
Maximum Backpressure (Post-Silencer)	STANDBY		PRIME	
	Exhaust Flow (Rated Output)	Exhaust Temp (Rated Output)	Exhaust Flow (Rated Output)	Exhaust Temp (Rated Output)
1.5"	887(475)	887(475)	887(475)	887(475)

ENGINE

	STANDBY		PRIME	
	rpm	hp	rpm	hp
Rated Engine Speed	1,800	131	1800	127
Horsepower at Rated kW***				
Piston Speed	1559(44.1)	1559(44.1)		
BMEP	210	194		

\*\*\* Refer to "Emissions Data Sheets" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration - Operational characteristics consider maximum ambient conditions. Derte factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performing ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

SD080

standard features and options

GENERATOR SET

- Genset Vibration Isolation
- IBC Seismic Certified/Seismic Rated Vibration Isolators
- Extended warranty
- Export boxing
- Gen-Link Communications Software
- Steel Enclosure
- Aluminum Enclosure

- Std
- Opt
- Opt
- Opt
- Opt
- Opt
- Opt

ENGINE SYSTEM

General

- Oil Drain Extension
- Oil Make-Up System
- Oil Heater

- Std
- Opt
- Opt

Fuel System

- Fuel lockoff solenoid
- Secondary fuel filter
- Stainless steel flexible exhaust connection
- Industrial Exhaust Silencer
- Critical Exhaust Silencer
- Flexible fuel lines
- Primary fuel filter
- Single Wall Tank (Export Only)
- UL 142 Fuel Tank

- Std
- Std
- Std
- Std
- Opt
- Opt
- Opt
- Opt
- Opt

Cooling System

- 120VAC Coolant Heater
- 208VAC Coolant Heater
- 240VAC Coolant Heater
- Other Coolant Heater
- Closed Coolant Recovery System
- UV/Ozone resistant hoses
- Factory-Installed Radiator
- Radiator Drain Extension

- Opt
- Opt
- Opt
- 
- Std
- Std
- Std
- Std

Engine Electrical System

- Battery charging alternator
- Battery cables
- Battery tray
- Battery box
- Battery heater
- Solenoid activated starter motor
- Air cleaner
- Fan guard
- Radiator duct adapter
- 2A battery charger
- 10A UL float/equalize battery charger
- Rubber-booted engine electrical connections

- Std
- Std
- Std
- Opt
- Opt
- Std
- Std
- Std
- Std
- Opt
- Opt
- Std

ALTERNATOR SYSTEM

- UL2200 GENprotect
- Main Line Circuit Breaker
- 2nd Circuit Breaker
- 3rd Circuit Breaker
- Alternator Upsizing
- Anti-Condensation Heater
- Tropical coating
- Permanent Magnet Excitation

- Std
- Opt
- Opt
- 
- Opt
- Opt
- Opt
- Opt

CONTROL SYSTEM

General

- Digital H Control Panel - Dual 4x20 Display
- Digital G-100 Control Panel - Touchscreen
- Digital G-200 Paralleling Control Panel - Touchscreen
- Programmable Crank Limiter
- 21-Light Remote Annunciator
- Remote relay Panel (8 or 16)
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232
- RS-485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring (Req. H-Transfer Switch)
- 2-Wire Start Compatible
- Power Output (kW)
- Power Factor
- Reactive Power
- All phase AC Voltage
- All phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Oil Temperature
- Fuel Pressure
- Engine Speed
- Battery Voltage
- Frequency
- Date/Time Fault History (Event Log)
- UL2200 GENprotect
- Low-Speed Exercise
- Isochronous Governor Control
- 40deg C - 70deg C Operation
- Waterproof Plug-In Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- On/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- NFFPA 110 Level I and II (Programmable)
- Remote Communication - RS232
- Remote Communication - Modem
- Remote Communication - Ethernet
- 10A Run Relay

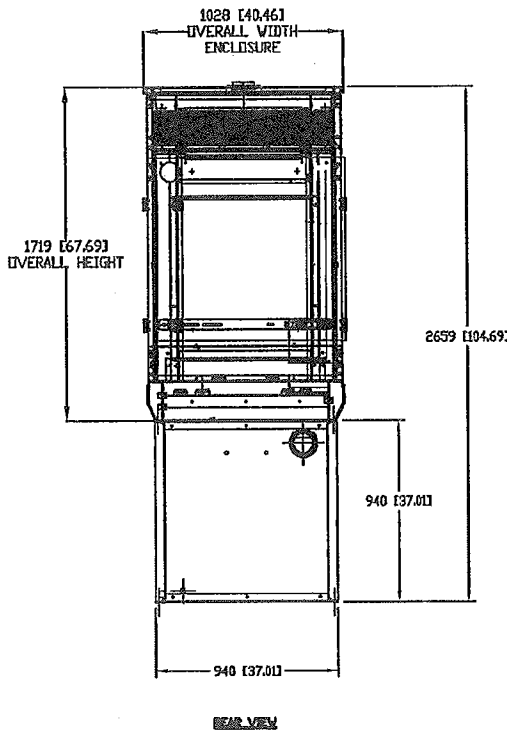
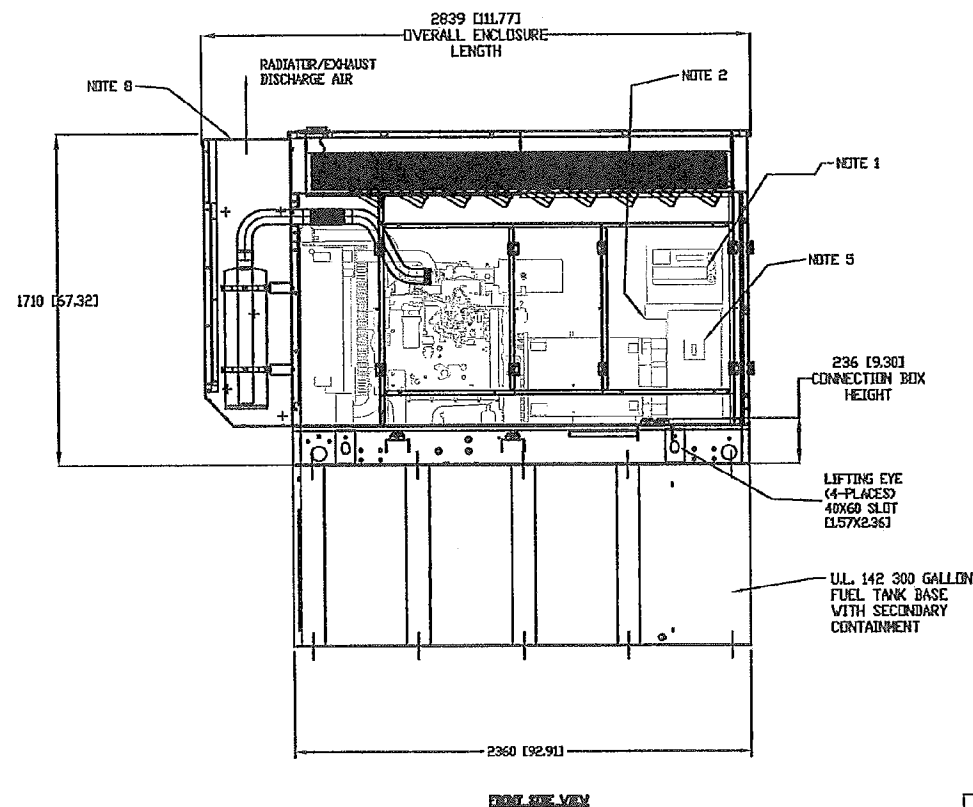
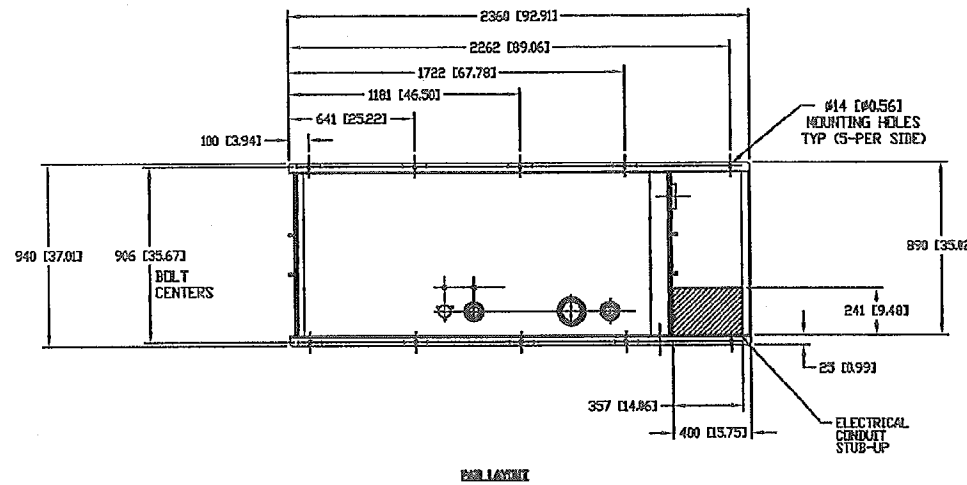
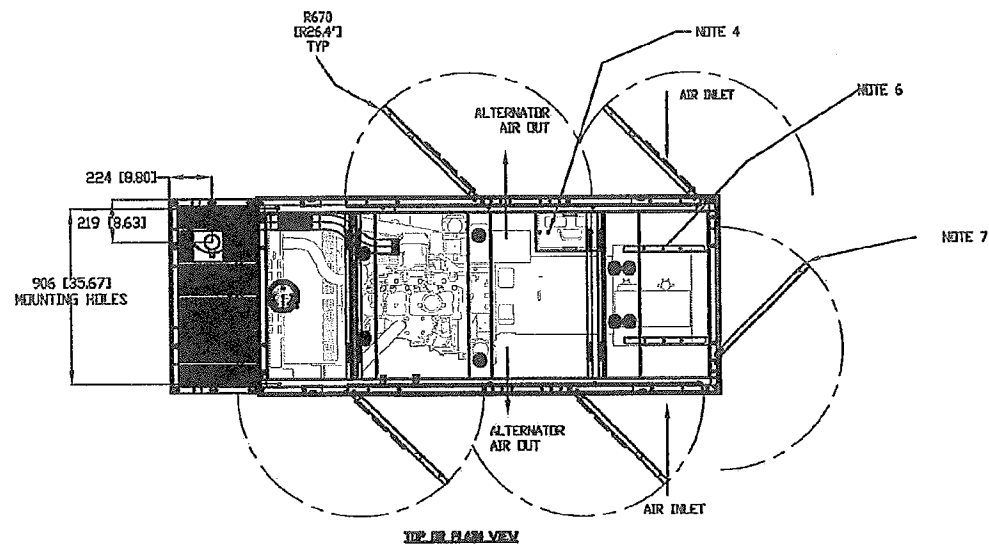
Alarms (Programmable Tolerances, Pre-Alarms and Shutdowns)

- Low Fuel
- Oil Pressure (Pre-programmed Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Alternator Overload
- Fuel Pressure
- Engine Speed (Pre-programmed Overspeed Shutdown)
- Voltage (Pre-programmed Overvoltage Shutdown)
- Battery Voltage

Other Options

- 
- 
- 
-

0H5302C-ATC



RECOMMENDED ELECTRICAL STUB-UPS (SEE DETAILED VIEW & TOP VIEW)	
AC LOAD LEAD CONDUIT SEE NOTES 5 & 6 FOR CB LOCATION NOTE-A (SEE STUB UP AREA 1 & 1D)	A
STUB-UP ID GLAND PLATE AC LOAD LEAD CONDUIT FOR PERMANENT MAGNET EXCITATION CONNECTION BOX	B
STUB-UP ID GLAND PLATE AC LOAD LEAD CONDUIT FOR DIRECT AND BRUSHLESS EXCITATION CONNECTION BOX	C
OVERALL STUB-UP AREA 120/240V AC TO OUTLET (SEE NOTE 2) FOR OPTIONS	D

- NOTES
- CONTROL PANEL MAY BE ROTATED 180DEG IN EITHER DIRECTION
  - 1- 20A GFCI DUPLEX OUTLET 120V BY CUSTOMER
  - CONNECTION POINTS FOR CONTROL WIRES PROVIDED IN AC CONNECTION PANEL
  - BATTERY GND VOLT NEGATIVE GROUND SYSTEM
  - MAIN LINE CIRCUIT BREAKER (M.C.B.), (AC LOAD LEADS CONNECT DIRECTLY TO M.C.B.)
  - REMOVABLE BLANK PANEL FOR OPTIONAL 2nd MAIN LINE CIRCUIT BREAKER
  - DOORS MUST BE ABLE TO OPEN TO AT LEAST 90DEG. TO BE REMOVED
  - SEE DRAWING 063850 FOR DUCT REMOVAL, REPAIR, OR FRONT DUCT WILL PROVIDE ACCESS TO HUFFLER FOR SERVICING
  - STANDARD BLOWER HEATER
  - FUEL LINES ARE PLUMBED TO FRAME FOR UNITS WITH NO BASE TANK. FUEL LINES ARE PLUMBED DIRECTLY TO BASE TANK WHEN SO EQUIPPED
  - CENTER OF GRAVITY & WEIGHT MAY SHIFT SLIGHTLY DUE TO UNIT OPTIONS
  - IF GENSET IS TO BE INSTALLED ON A BASETANK REFER TO BASETANK INSTALL DRAWING
- ENGINE SERVICE CONNECTIONS:
- FUEL INLET = 1/2" NPT COUPLING
  - FUEL RETURN = 1/2" NPT COUPLING
  - OIL DRAIN = 1/2" NPT COUPLING
  - EXHAUST OUTLET - 30" I.D. HUFFLER

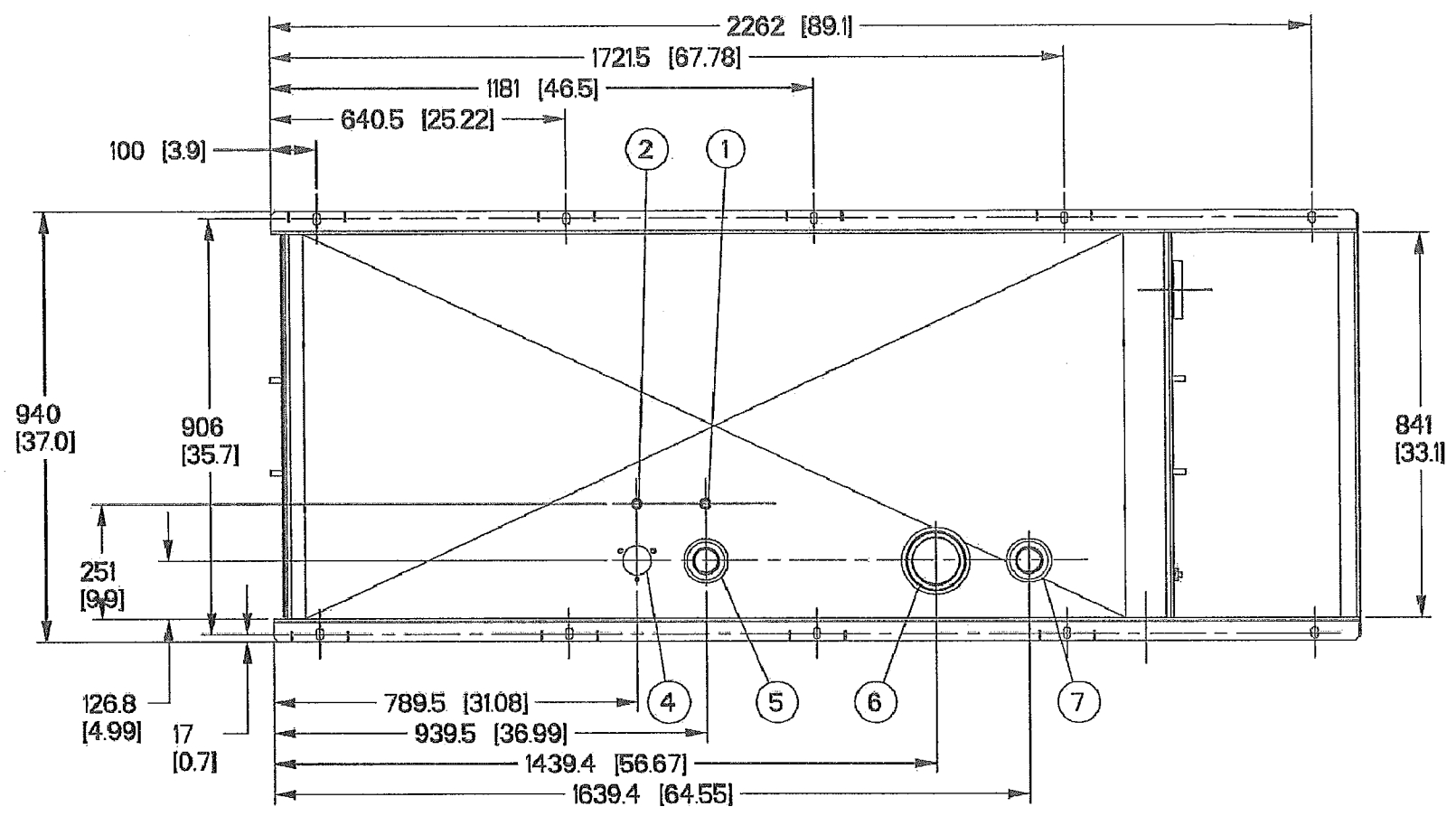
WEIGHT DATA  
APPROX. DRY WEIGHT WITHOUT FUEL, GENSET PACKAGE 4032 lbs.

REFERENCE DRAWING 0H5302C FOR INSTALLATION  
FUEL TANK DRAWING 0H4610A

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INSTALLATION DRAWING

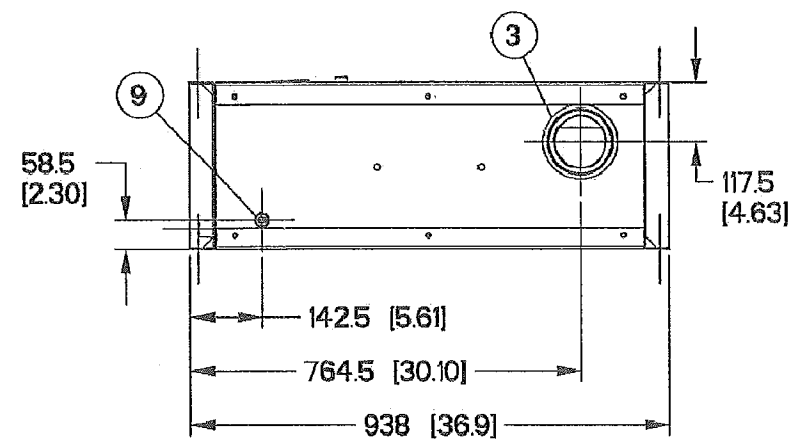
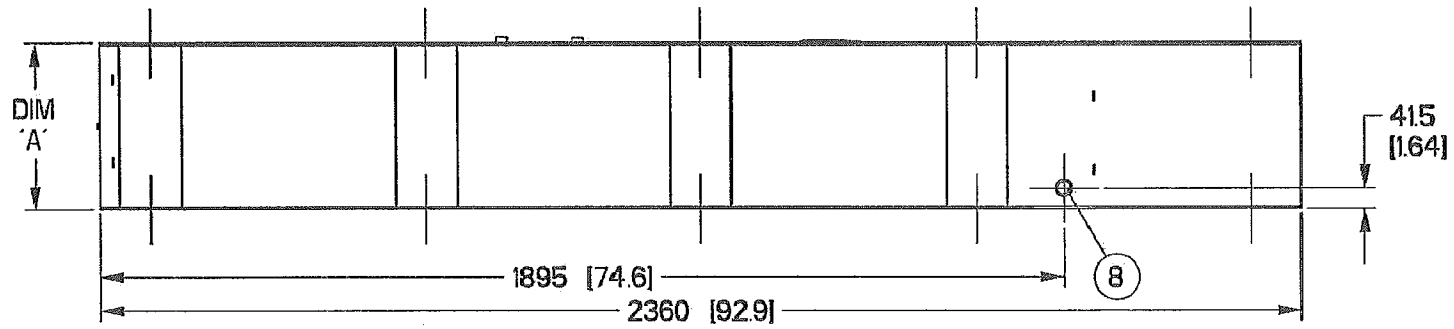
SD80		<b>GENERAC POWER SYSTEMS</b> Waukesha P.O. BOX 8 WAUKESHA, WIS. 53187	
DIESEL 4.5L IVECO		FILE NAME	0H5302C-B ATC.DWG
TURBOCHARGED & AFTERCOOLED		SCALE	N/A
SOUND ATTENUATED ENSL., LVL 2		FIRST USE	D4.5L IVECO
W/ 300 GALLON FTB		DWG NO.	0H5302C-ATC
			REV B



ITEM #	TANK FITTING	FUNCTION
1	3/8" NPT COUPLING	FUEL SUPPLY
2	3/8" NPT COUPLING	FUEL RETURN
3	4" NPT WELD FLANGE	EMERGENCY VENT (OUTER)
4		FUEL LEVEL
5	2" NPT WELD FLANGE	FUEL FILL
6	4" NPT WELD FLANGE	EMERGENCY VENT (INNER)
7	2" NPT WELD FLANGE	VENT
8	3/4" NPT COUPLING	DRAIN
9	Ø22 HOLE	LEAK DETECTOR

TANK P/N	OH48080ST03	OH48090ST03	OH48100ST03
DIM "A"	330 [13]	635 [25]	940 [37]
TOTAL TANK CAPACITY	318 [84]	734 [194]	1154 [305]
USABLE TANK CAPACITY	299 [79]	716 [189]	1134 [300]
DRY WEIGHT (EST)	237 [522]	344 [758]	445 [982]

NOTES:  
 1) ALL DIMENSIONS ARE:  
 LENGTH: mm [inch]  
 WEIGHT: kg [lbs]  
 CAPACITY: L [gal]  
 2) UL #142 LISTED



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**GENERAC**

TITLE  
**B-GROUP, DW TYPE 2 TANKS**

# INSTALLATION DRAWING

ISSUE DATE:	10/02/09		
SIZE	CAGE NO	DWG NO	REV
B		0H4610A	D
SCALE	0.075	WT-KG	SHEET 1 of 1