



**#2 Applicant:** GigaBeam Networks  
**Property Owner:** [Richard McLean](#)  
**Address:** Woodbridge Ln, Independence  
**Tax Map No.:** 54-A-6  
**Request:** Special Use Permit to construct & operate a 140' Rohn Tower for broadband expansion in Rural Farm District  
**District:** Elk Creek  
**Acreage:** 7.995

**6:15 Adjourn – Planning Commission**

**6:20 Close Session – Board of Supervisors**

To discuss a personnel matter pursuant to §2.2-3711(A)(1) of the code of Virginia, involving discussions regarding applicants for County Administrator position.

**8:15 Adjourn – Board of Supervisors**

#### **MEETING DECORUM–**

**All official meetings conducted within these chambers are to be observed by the following decorum:**

- Behavior during all official meetings shall be consistent with the behavior exercised in any court or legislative room found within the Commonwealth of Virginia; and,
- There shall be no outbursts, booing, heckling or other forms of disrespectful behavior by any individuals present within these chambers; and,
- Persons wishing to speak shall do so respectfully and in accordance with the applicable Rules of Procedures and/or at the specific direction of the presiding official; and,
- Out of respect for the official business being conducted, for those conducting the official business and for those present for same purpose, there shall be no private conversations taking place in the audience or other forms of distracting behavior or nuisance; and,
- Please turn off cell phones and other such devices before entering these chambers.



# GRAYSON COUNTY, VIRGINIA

## MEMORANDUM

**DATE:** November 2, 2022 (Joint Public Hearing 11/17)  
**TO:** Grayson County Board of Supervisors and Planning Commission  
**FROM:** Jada C. Black, Director of Planning and Zoning  
**SUBJECT:** Application Special Use Permit, Giga Beam Networks\_ Fant Site

### **REQUEST**

Application No. 20220182 is a request for a Special Use Permit pursuant to Article 4 Section 4-6.2.i of the Grayson County Zoning Ordinance to authorize the construction and operation of a communications tower for wireless internet in an unserved area of Grayson County located on one parcel containing approximately 46 acres of land located off of Park Place Drive and further identified as Tax Map No. 37-A-17. The proposed communication tower will be located on Tax Map number 37-A-17. The property is zoned Rural Farm (RF) and is not designated in the Enterprise Zone or Opportunity Zone, and no Historical Structures were identified within the proximity of the subject parcel.

### **DESCRIPTION**

- **Property Owner:** Palmer W. and Sidney S. Fant
- **Location:** Peach Bottom Road
- **Area:** Approximately 46 acres +/-
- **Frontage:** Peach Bottom Road  
Parcel access via right of way through tax parcel 37-A-12 and 37-A-14
- **Utilities:** Solar panels are proposed for energizing the tower. Permission and access granted to add electrical service to the site should it become needed.
- **Topography:** Relatively rolling and slopping approximately 3550 feet in elevation.
- **Zoning Classification:** Rural Farm
- **Existing Development:** Vacant land, mostly forested

- Surrounding Development:
  - North: Primarily agricultural operations and forestry
  - East: Subject parcel adjoins vacant parcels, and the Pine Mountain Estate Subdivision is zoned Rural Residential. This subdivision includes fourteen parcels with a total of 119.210 acres and currently hosts two single-family dwellings and two under construction.
  - South: Primarily agricultural and forestry
  - West: Primarily forestry
- Proposed Development: 140' 45G Communications Tower for wireless internet in unserved areas in Elk Creek District

### **LOCATION, SITE PLAN, AND ROAD ACCESS**

1. The subject parcel is 46 acres and is located in the Elk Creek District, bound by primarily vacant forested and agricultural farmland. The nearest direct route from Peach Bottom Road through two parcels owned by the Fant Family.
2. The property is designated Rural Farm. Research indicates the area has no historical references through the Virginia Historical Society and is not designated within the Enterprise Zone.
3. Adjacent properties surrounding the subject parcels are all designated as Rural Farm. Further southeast Pine Mountain Estate Subdivision is zoned Rural Residential.
4. Engineered design plans for the proposed tower and additional reference material include the following details: **Reference No. 1**
  - Construction Details
  - Micro Site Lease Agreement of approximately .3 acres with a term to be determined between lessor and lessee.
  - Color- Hot-Dipped Galvanized Steel Construction
  - Excavation Area is minimal pier footings as required for tower construction. Minimal tree removal will be required for tower location.
  - Tower Specs- 45G self-supporting ladder tower, overall height 140' Vegetation on site will screen any local impact view. Tower constructed less than the requirements and will meet FAA



approval. Construction will meet FCC, Building Code Requirements, and other applicable Federal and State standards.

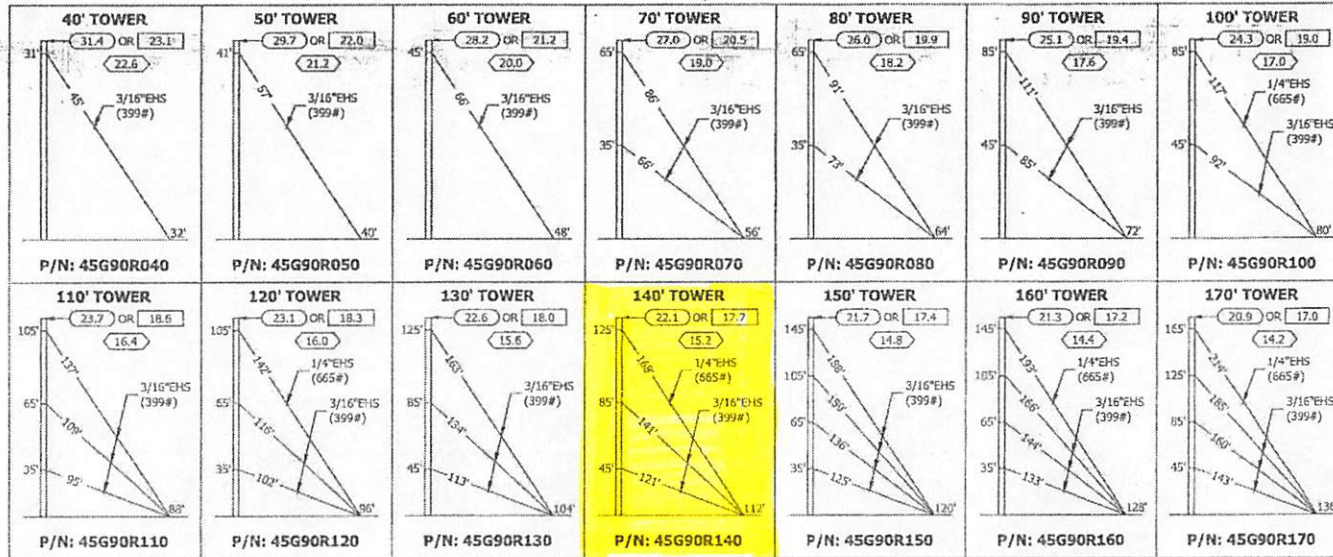
- Nearest residents property line is 1775 feet away from the wireless tower.
- Nearest adjacent property line (Bealer) is 150 ft.
- Fencing- Giga Beam has requested a variance for the fencing, a formal letter of request can be located in the reference pages attached.

### **OTHER APPLICABLE REQUIREMENTS**

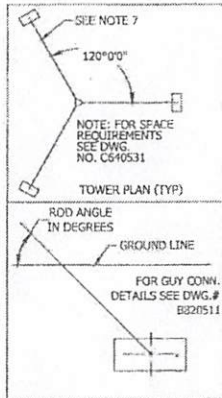
- Giga Beam Networks SUP Application **Reference Page No. 2**
- Co-location policy – the proposed tower will allow co-location of government access for emergency services free of charge. **Reference No. 3**
- **VARIANCE REQUEST- Fencing and Setbacks Reference No. 4**
- Comprehensive Plan consistency – *Section 8-1 Support and encourage the development of advanced communication infrastructure, broadband, wireless internet, and cell coverage/towers (5-11)*
- Photo simulation pictures provided **Reference No. 5**
- No hazard to air traffic determination **Reference No. 6**
  - FAA requirements for lighting do not apply per §17.7 Antenna structure requiring notification to the FAA.

### **RECOMMENDATION**

For the purpose of public necessity, convenience, general welfare, public safety, and health or good zoning practice. Staff recommends to the Planning Commission approval for a Special Use Permit for a Communications Tower on parcel tax map number 37-A-17 in the Rural Farm Zone, Elk Creek District. The site will be developed as specified in the submitted plans and application and in accordance with Article 3-15 of the Zoning Ordinance and the Uniform Statewide Building Code.



**45G TOWER GUYING DETAILS**  
**40' - 170'**  
**90MPH 3-SECOND GUST WIND SPEED**  
**NO ICE (REV G)**  
**70 MPH FASTEST MILE WIND SPEED**  
**NO ICE (REV F)**



TOWER HT.	BASE PIER (DWG: B090549)		ANCHOR DATA (DWG: B090550)	
	NO.	BLOCK NO.	ROD NO.	ROD ANGLE
40'	CB1G	AB2	GAC3455TOP	45
50'	CB1G	AB2	GAC3455TOP	46
60'	CB1G	AB2	GAC3455TOP	43
70'	CB1G	AB2	GAC3455TOP	43
80'	CB1G	AB2	GAC3455TOP	41
90'	CB1G	AB2	GAC3455TOP	42
100'	CB1G	AB2	GAC3455TOP	42
110'	CB1G	AB2	GAC3455TOP	40
120'	CB1G	AB2	GAC3455TOP	39
130'	CB1G	AB2	GAC3455TOP	40
140'	CB1G	AB2	GAC3455TOP	39
150'	CB1G	AB2	GAC3455TOP	38
160'	CB1G	AB2	GAC3455TOP	37
170'	CB1G	AB2	GAC3455TOP	38

- GENERAL NOTES:**
- TOWER DESIGNS ARE IN ACCORDANCE WITH ANSI/TIA-222-F & ANSI/TIA-222-G, CLASS I STRUCTURES.
  - ALLOWABLE PROJ. AREA (SQ. FT.) FOR EXPOSURE B - (REV G).
  - ALLOWABLE PROJ. AREA (SQ. FT.) FOR EXPOSURE C - (REV G).
  - ALLOWABLE PROJ. AREA (SQ. FT.) - (REV F).
  - EFFECTIVE PROJ. AREAS MUST NOT EXCEED THE AREAS SHOWN.
  - ANTENNAS AND MOUNTS ARE ASSUMED SYMMETRICALLY PLACED AT THE TOWER TOP.
  - DESIGNS ASSUME TWO 1/2" DIA. LINES ON EACH TOWER FACE.
  - FOR GUY HARDWARE INSTALLATION DETAILS, SEE DWG. A87138Z.
  - ANCHOR RADIUS IS FROM TOWER BASE TO INTERSECTION OF ROD WITH GROUND.
  - TOWER DESIGNS AND GUY CHORD LENGTHS SHOWN ARE BASED ON LEVEL GROUND. ADD 6% PERCENT TO CHORD LENGTHS (FOR SAG AND CONNECTIONS) FOR FINAL CUT LENGTHS. ( ) INDICATES INITIAL TENSION FOR GUY WIRES IN POUNDS AT 60 DEGREES FAHRENHEIT.
  - DO NOT INSTALL OR DISMANTLE TOWERS WITHIN FALLING DISTANCE OF ELECTRICAL AND/OR TELEPHONE LINES.
  - TOWER ERECTION AND DISMANTLING MUST BE DONE BY QUALIFIED AND EXPERIENCED PERSONNEL.
  - TEMPORARY STEEL GUYS, WHEN REQUIRED DURING ERECTION OR DISMANTLING, MUST BE SUPPLIED AND INSTALLED BY THE ERECTOR.
  - INSTALL WARNING PLATE (P/N: ACWS) IN A HIGHLY VISIBLE LOCATION.
  - ALL ANTENNA INSTALLATIONS MUST BE GROUNDED IN ACCORDANCE WITH LOCAL AND NATIONAL CODES.
  - EXTRA CABLE CLAMPS HAVE BEEN PROVIDED FOR TURNBUCKLE SAFETY REQUIREMENTS. FOR DETAILS SEE DWG. B680324 LATEST REVISION.
  - PURCHASER SHALL VERIFY THE INSTALLATION IS IN CONFORMANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS FOR OBSTRUCTION MARKING AND LIGHTING.
  - TOLERANCE ON TOWER STEEL IS EQUAL TO PLUS 1% AND MINUS 1/2%.
  - DESIGNS ASSUME THAT, AS A MINIMUM, MAINTENANCE AND INSPECTION WILL BE PERFORMED OVER THE LIFE OF THE STRUCTURE IN ACCORDANCE WITH ANSI/TIA/EIA-222-G.
  - ANCHOR RODS CORROSION PROTECTION METHODS TO BE PROVIDED BY OTHERS.

FILE NO. Standard-45G

REVISIONS:				
REV	DESCRIPTION	DWN	CHK	APP
1	REMOVED HETS #S FROM "ONE 1/2" DIA LINE" TO "TWO 1/2" DIA LINES"	JWS	KTL	HA
2	REMOVED ANCHOR BLOCK # FOR 90' TOWER FROM ALL TO ALL	JWS	KTL	HA

DATE: 04/24/2010  
DATE: 04/25/2010

DWG REFERENCE	

**RQIN**  
PRODUCTS LLC  
PO BOX 5999  
PEORIA, IL 61601-5999  
TOLL FREE 800-727-RQIN

SECTION ASSEMBLY  
45G/90MPH 3-SECOND GUST/NO ICE

DWG: JWS	CHKD: KTL	DATE: Feb/09/2010
ENGR: H/A		
DRAWING NO: DWG-0105-1		REV: 2

**FOUNDATION AND ANCHOR TOLERANCES  
ALL FOUNDATIONS**

1. CONCRETE DIMENSIONS - PLUS OR MINUS 1" (25mm).
2. DEPTH OF FOUNDATION - PLUS 3" (76mm) OR MINUS 0".
3. DRILLED FOUNDATIONS OUT OF PLUMB - 1.0 DEGREE.
4. REINFORCING STEEL PLACEMENT - PER A.C.I. 301.
5. PROJECTION OF EMBEDMENTS - PLUS OR MINUS 1/8" (3mm).
6. VERTICAL EMBEDMENTS OUT OF PLUMB - 0.5 DEGREE.

**ANCHOR BOLTS**

7. MAXIMUM DISTANCE FROM CENTERLINE OF ANCHOR BOLTS TO CENTERLINE OF FOUNDATION - 1/24 OF PIER DIAMETER UP TO A MAXIMUM OF 2" (51mm).
8. ANCHOR BOLT SPACING - 1/16" (2mm).
9. ANCHOR BOLT CIRCLE ORIENTATION - 0.25 DEGREE.
10. ANCHOR BOLT CIRCLE DIAMETER - PLUS OR MINUS 1/16" (2mm).

**SELF-SUPPORTING TOWERS**

11. FACE SPREAD DIMENSION CENTER TO CENTER OF ANCHOR BOLT CIRCLES - PLUS OR MINUS 1/16" (2mm) OR 1/16" (2mm) PER 20 FT. (6m) OF FACE SPREAD.
12. MAXIMUM DIFFERENCE BETWEEN ANY TWO FOUNDATION ELEVATIONS - 1/2" (13mm).

**GUYED TOWERS**

13. GUY RADIUS - PLUS OR MINUS 5% OF DISTANCE SPECIFIED.
14. ANCHOR ELEVATION - PLUS OR MINUS 5% OF GUY RADIUS.
15. ANCHOR ALIGNMENT (PERPENDICULAR TO GUY RADIUS) - 1.0 DEGREE.
16. ANCHOR ROD SLOPE - PLUS OR MINUS 1.0 DEGREE.
17. ANCHOR ROD ALIGNMENT WITH GUY RADIUS PLUS OR MINUS 1.0 DEGREE.
18. ANCHOR HEAD OUT OF PLUMB - 1.0 DEGREE.
19. GUY INITIAL TENSION - PLUS OR MINUS 10% OF TENSION SPECIFIED.

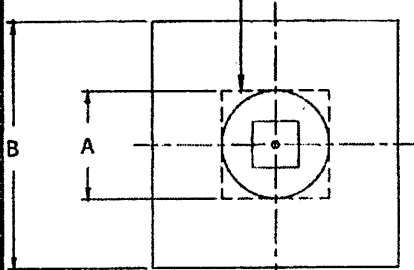
NOTE: TOLERANCES IN NOTES 13 AND 14 CAN NOT OCCUR SIMULTANEOUSLY

**WARNING!!!**

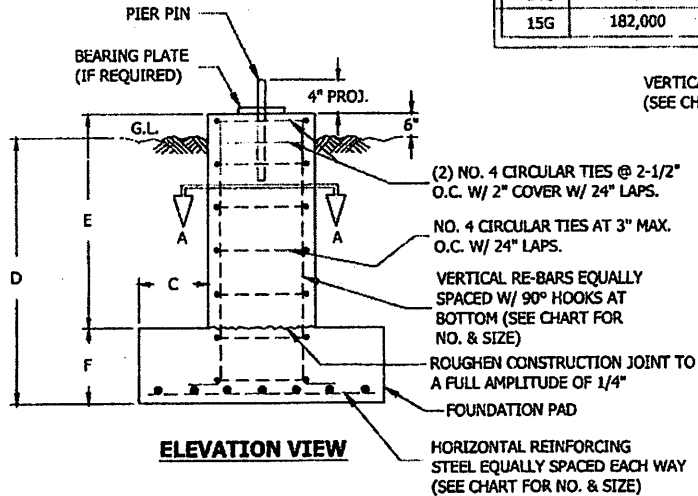
AFTER ANCHOR BOLTS ARE INSTALLED IN CONCRETE HAS TAKEN ITS INITIAL SET, ANCHOR BOLTS MUST NOT BE MOVED, BENT OR REALIGNED IN ANY MANNER. A NUT LOCKING DEVICE MUST BE INSTALLED ON ALL ANCHOR BOLTS.

FILE NO.				
<b>Standard-SSV</b>				
<b>REVISIONS</b>				
REV.	DESCRIPTION	DATE	CHK.	APP.
0	ISSUED TO AUSTAD		JM	JM
	DATE: 10/1/2008			
<b>DWG REFERENCE</b>				
<b>ROHN</b> PRODUCTS				
6716 WEST FRANK ROAD PEORIA, IL 61604 TOLL FREE 800-727-ROHN				
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<b>FOUNDATION &amp; ANCHOR TOLERANCE</b>				
OWNER:	CSA	CHKD:	NTL	DATE: Sep/25/2007
ENGR:	JK			
DRAWING NO.:	A810214			APP.:
				8

ALTERNATE SQUARE PIER  
(SEE NOTE 3)



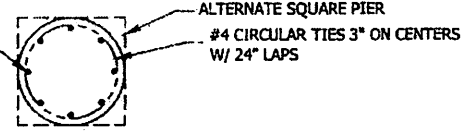
**PLAN VIEW**



**ELEVATION VIEW**

CONCRETE BASE SCHEDULE FOR ANSI/TIA-222-G PRESUMPTIVE CLAY SOIL											
CB NO.	TOWER BASE REACTION (LBS)	DIMENSIONS						BEARING PLATE	CONC. (CU. YDS. RD PIER)	VERTICAL BARS (NO. & SIZE)	HORIZ. BARS IN PAD (NO. & SIZE)
		* A	B	C	D	E	F				
1G	12,000	2'-6"	2'-6"	0	4'-0"	0	0	BP6	0.80	8 NO. 7	NONE
2G	17,000	3'-0"	3'-0"	0	4'-0"	0	0	BP6	1.20	10 NO. 7	NONE
3G	23,000	3'-6"	3'-6"	0	4'-0"	0	0	BP6	1.60	12 NO. 7	NONE
4G	30,000	4'-0"	4'-0"	0	4'-0"	0	0	BP6	2.10	12 NO. 8	NONE
5G	38,000	2'-0"	4'-0"	1'-0"	4'-0"	3'-3"	1'-3"	BP6	1.10	8 NO. 6	5 NO. 5
6G	48,000	2'-0"	4'-6"	1'-3"	4'-0"	3'-3"	1'-3"	BP6	1.30	8 NO. 6	6 NO. 5
7G	58,000	2'-0"	5'-0"	1'-6"	4'-6"	3'-9"	1'-3"	BP10	1.60	8 NO. 6	6 NO. 5
8G	71,000	2'-0"	5'-6"	1'-9"	4'-6"	3'-9"	1'-3"	BP10	1.80	8 NO. 6	7 NO. 5
9G	84,000	2'-0"	6'-0"	2'-0"	4'-6"	3'-6"	1'-6"	BP10	2.40	8 NO. 6	7 NO. 6
10G	99,000	2'-0"	6'-6"	2'-3"	4'-6"	3'-6"	1'-6"	BP10	2.80	8 NO. 6	8 NO. 5
11G	111,000	2'-6"	7'-0"	2'-3"	5'-0"	3'-9"	1'-9"	BP15	3.90	8 NO. 7	8 NO. 6
12G	127,000	2'-6"	7'-6"	2'-6"	5'-0"	3'-9"	1'-9"	BP15	4.30	8 NO. 7	9 NO. 6
13G	145,000	2'-6"	8'-0"	2'-9"	5'-0"	3'-9"	1'-9"	BP15	4.80	8 NO. 7	9 NO. 6
14G	162,000	3'-0"	8'-6"	2'-9"	5'-0"	3'-6"	2'-0"	BP15	6.30	12 NO. 7	9 NO. 7
15G	182,000	3'-0"	9'-0"	3'-0"	5'-0"	3'-6"	2'-0"	BP15	6.90	12 NO. 7	10 NO. 7

VERTICAL BARS EQUALLY SPACED  
(SEE CHART FOR NO. & SIZE)

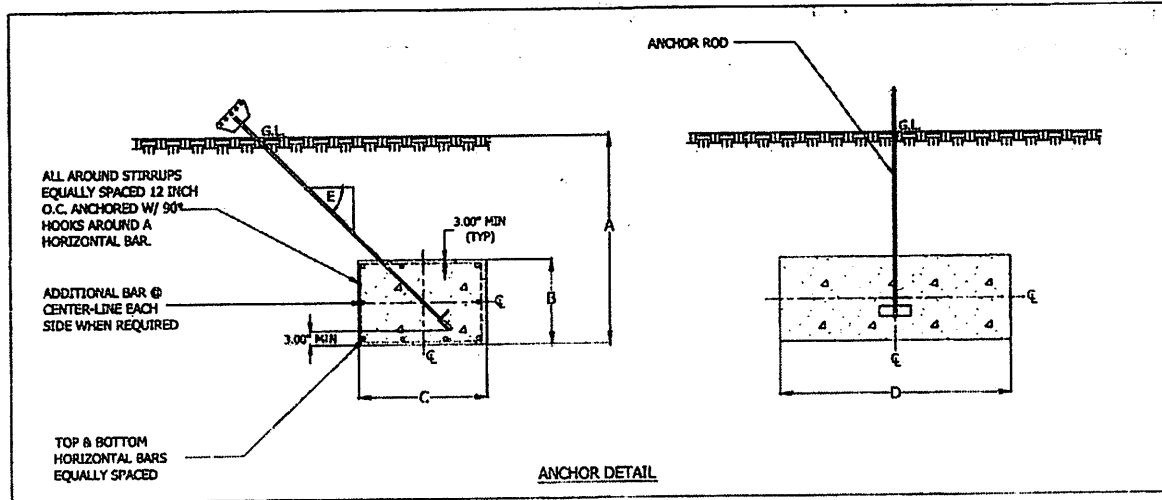


**SECTION A-A**

**NOTES:**

- SEE TOWER ASSEMBLY DRAWING FOR FOUNDATION LAYOUT AND PART NUMBERS FOR BEARING PLATE & PIER PIN.
- SEE DRAWING NUMBER B090548 FOR STANDARD FOUNDATION NOTES.
- USE MIN. 2'-6" SQ. OR 3'-0" DIA. ROUND PIER WHEN BPC45G OR BPC55G IS USED.
- VERTICAL REINFORCING STEEL SHALL BE REPLACED WITH STRAIGHT BARS WHEN NO PAD IS REQUIRED.
- HORIZ. BARS IN CHART REFER ONLY TO THE BARS IN THE FOUNDATION PAD.

FILE NO. <b>STDPUBLIC</b>			
REVISIONS			
REV	DESCRIPTION	DWN	CHK/APP
DWG REFERENCE			
<p>6718 WEST FLANK ROAD PEORIA, IL 61604 TOLL FREE 800-727-ROHN</p> <p><small>THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED OR TRACED BY WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.</small></p>			
<p align="center"><b>FOUNDATION</b> BASE PIER FOR REV. G PRESUMPTIVE CLAY</p>			
DATE:	PRD:	HA:	DATE: 12/24/2009
ENG'G:	HA		
DRAWING NO.:	B090549		REV: 0



FILE NO. STDPUBLIC				
REVISIONS				
REV	DESCRIPTION	CHKD	CHK	APP
1	AM:ACED			
2	DATE: 06/21/2009 SLOPE & NOTICE CHANGED	HA	HA	HA
3	DATE: 06/15/2009 UPGRADED LAYOUT	HA	HA	HA
4	DATE: 03/27/2009	HA	HA	HA

DWG REFERENCE	

CONCRETE ANCHOR BLOCK DATA FOR ANSI/TIA-222-G PRESUMPTIVE CLAY SOIL									
BLOCK	ANCHOR DIMENSIONS (IN.)				HORIZONTAL BARS QTY./SIZE	STIRRUPS SIZE & SPACING	CONCRETE VOL. (CU. YDS.)	LIFT CAPACITY(LBS)	LATERAL CAPACITY(LBS)
	A	B	C	D					
AB1	3'-0"	1'-0"	3'-0"	4'-0"	(8) #5 BARS TOTAL (4) #5 BARS TOP AND BOTTOM LAYERS (0) ADDITIONAL BAR EACH SIDE	#3 @ 12" O.C.	0.44 PER BLOCK 1.3 TOTAL FOR 3	4,800	2,150
AB2	4'-0"	1'-6"	4'-0"	6'-0"	(10) #6 BARS TOTAL (5) #6 BARS TOP AND BOTTOM LAYERS (0) ADDITIONAL BAR EACH SIDE	#3 @ 12" O.C.	1.33 PER BLOCK 4.0 TOTAL FOR 3	12,600	6,480
AB3	6'-0"	1'-6"	3'-0"	6'-0"	(8) #6 BARS TOTAL (4) #6 BARS TOP AND BOTTOM LAYERS (0) ADDITIONAL BAR EACH SIDE	#3 @ 12" O.C.	1.0 PER BLOCK 3.0 TOTAL FOR 3	18,700	10,500
AB4	6'-0"	1'-6"	4'-0"	9'-0"	(10) #6 BARS TOTAL (5) #6 BARS TOP AND BOTTOM LAYERS (0) ADDITIONAL BAR EACH SIDE	#4 @ 12" O.C.	2.0 PER BLOCK 6.0 TOTAL FOR 3	32,500	15,800
AB5	8'-0"	2'-0"	3'-0"	10'-0"	(10) #7 BARS TOTAL (4) #7 BARS TOP AND BOTTOM LAYERS (1) ADDITIONAL BAR EACH SIDE	#4 @ 12" O.C.	2.22 PER BLOCK 6.7 TOTAL FOR 3	43,000	21,000
AB6	8'-0"	2'-0"	4'-0"	10'-0"	(12) #7 BARS TOTAL (5) #7 BARS TOP AND BOTTOM LAYERS (1) ADDITIONAL BAR EACH SIDE	#4 @ 12" O.C.	2.96 PER BLOCK 8.9 TOTAL FOR 3	52,000	26,500

(SEE TOWER ASSEMBLY DRAWING FOR ANCHOR ROD SLOPE 'E').

**GENERAL NOTES**

- SEE DRAWING NUMBER B090548 FOR STANDARD FOUNDATION NOTES.
- ALL HORIZONTAL BARS MUST BE CONTINUOUS.
- DUE TO VARIABLES INVOLVED DURING INSTALLATION, IT SHALL BE THE CUSTOMER'S OR INSTALLER'S RESPONSIBILITY TO PROVIDE STRUCTURALLY ADEQUATE SUPPORTS FOR BASE AND ANCHOR CONNECTIONS. IT MAY ALSO BE NECESSARY FOR THE CUSTOMER OR INSTALLER TO SECURE THE SERVICE OF A LOCAL ENGINEER TO DETERMINE THAT INSTALLATION COMPLIES WITH LOCAL BUILDING CODES.
- ADDITIONAL CORROSION PROTECTION MAY BE REQUIRED FOR STEEL GUY ANCHORS IN DIRECT CONTACT WITH SOIL.

**ROHN**  
PRODUCTS  
6718 WEST FLANK ROAD  
PEORIA, IL 61604  
TOLL FREE 800-777-ROHN

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FOUNDATION  
ANCHOR BLOCK REV. G PRESUMPTIVE CLAY

DWR:	FAD	CHKD:	HA	DATE:	Nov/24/2009
ENGR:	HA				
DRAWING NO:	B090550			REV:	3


**STANDARD FOUNDATION NOTES**  
**ANSI/TIA-222-G**

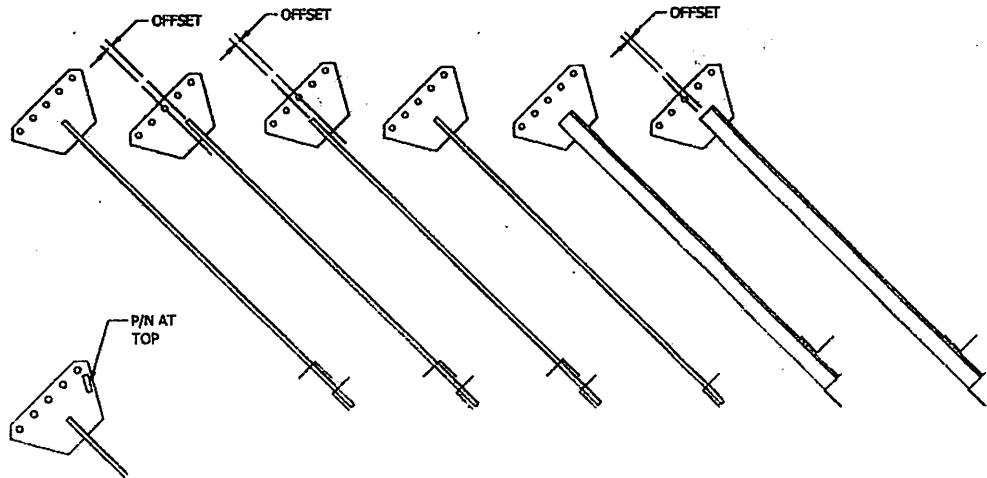
1. STANDARD FOUNDATION DESIGNS ARE IN ACCORDANCE WITH ANSI/TIA-222-G, "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES", SECTION 9 AND ANNEX F FOR THE FOLLOWING PRESUMPTIVE CLAY SOIL PARAMETERS:

N (blows/ft) (blows/m)	φ (deg)	γ (lb/ft <sup>3</sup> ) (kN/m <sup>3</sup> )	C (pcf) (kPa)	Ultimate Bearing (psf) (kPa)		Ultimate Skin Friction (pcf) (kPa)	k (psf) (kN/m <sup>3</sup> )	e <sub>v</sub>
				Shallow Fnds.	Deep Fnds.			
8 [26]	0	110 [17]	1000 [48]	5000 [240]	9000 [431]	500 [24]	150 [41,000]	0.01

- THE PURCHASER MUST VERIFY THAT ACTUAL SITE SOIL PARAMETERS MEET OR EXCEED ANSI/TIA-222-G PRESUMPTIVE CLAY SOIL DESIGN PARAMETERS AND THAT THE PENETRATION AND/OR ZONE OF SEASONAL MOISTURE VARIATION AT THE SITE. FOUNDATION DESIGN MODIFICATIONS MAY BE REQUIRED IN THE EVENT PRESUMPTIVE CLAY SOIL PARAMETERS ARE NOT APPLICABLE FOR THE ACTUAL SUBSURFACE CONDITIONS ENCOUNTERED.
- A SITE-SPECIFIC INVESTIGATION IS REQUIRED FOR CLASS III STRUCTURES IN ACCORDANCE WITH ANSI/TIA-222-G.
- FOUNDATION DESIGNS ASSUME FIELD INSPECTIONS WILL BE PERFORMED BY THE PURCHASER'S REPRESENTATIVE TO VERIFY THAT CONSTRUCTION MATERIALS, INSTALLATION METHODS AND ASSUMED DESIGN PARAMETERS ARE ACCEPTABLE BASED ON THE CONDITIONS EXISTING AT THE SITE.
- WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES, SAFETY REGULATIONS AND UNLESS OTHERWISE NOTED, THE LATEST REVISION OF ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION.
- CONCRETE MATERIALS SHALL CONFORM TO THE APPROPRIATE STATE REQUIREMENTS FOR EXPOSED STRUCTURAL CONCRETE.
- PROPORTIONS OF CONCRETE MATERIALS SHALL BE SUITABLE FOR THE INSTALLATION METHOD UTILIZED AND SHALL RESULT IN DURABLE CONCRETE FOR RESISTANCE TO LOCAL ANTICIPATED AGGRESSIVE ACTIONS. THE DURABILITY REQUIREMENT OF ACI 318 CHAPTER 4 SHALL BE SATISFIED BASED ON THE CONDITIONS EXPECTED AT THE SITE. AS A MINIMUM, CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI (27.6 MPa) IN 28 DAYS.
- MAXIMUM SIZE OF AGGREGATE SHALL NOT EXCEED SIZE SUITABLE FOR INSTALLATION METHOD UTILIZED OR 1/3 CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING. MAXIMUM SIZE MAY BE INCREASED TO 2/3 CLEAR DISTANCE PROVIDED WORKABILITY AND METHODS OF CONSOLIDATION SUCH AS VIBRATING WILL PREVENT HONEYCOMBS OR VOIDS.
- REINFORCEMENT SHALL BE DEFORMED AND CONFORM TO THE REQUIREMENTS OF ASTM A615 GRADE 60 UNLESS OTHERWISE NOTED. SPLICES IN REINFORCEMENT SHALL NOT BE ALLOWED UNLESS OTHERWISE INDICATED.
- REINFORCING CAGES SHALL BE BRACED TO RETAIN PROPER DIMENSIONS DURING HANDLING, THROUGHOUT PLACEMENT OF CONCRETE AND DURING EXTRACTION OF TEMPORARY CASING.
- WELDING IS PROHIBITED ON REINFORCING STEEL AND EMBEDMENTS.

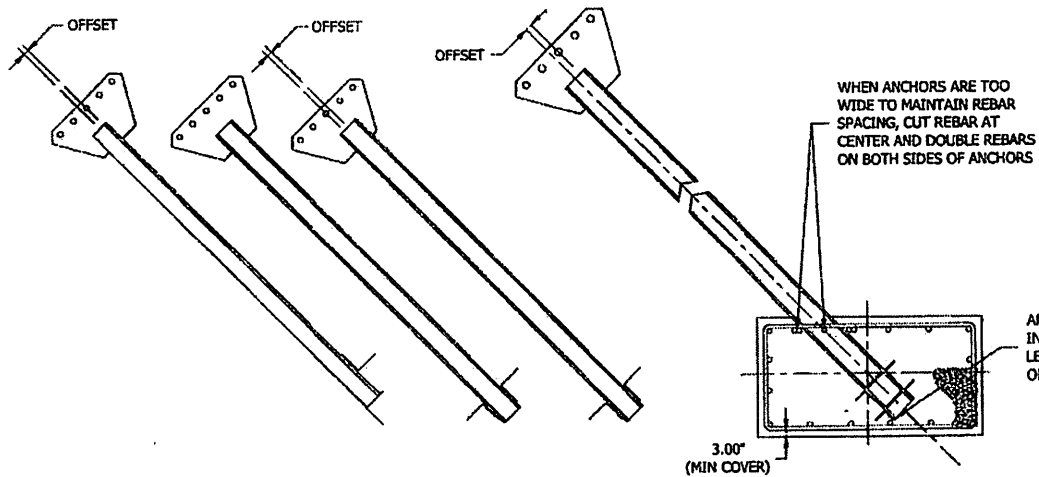
- MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE 3 INCHES (76 mm) UNLESS OTHERWISE NOTED. APPROVED SPACERS SHALL BE USED TO INSURE A 3 INCH (76 mm) MINIMUM COVER ON REINFORCEMENT. CONCRETE COVER FROM TOP OF FOUNDATION TO ENDS OF VERTICAL REINFORCEMENT SHALL NOT EXCEED 3 INCHES (76 mm) NOR BE LESS THAN 2 INCHES (51 mm).
- SPACERS SHALL BE ATTACHED INTERMITTENTLY THROUGHOUT THE ENTIRE LENGTH OF VERTICAL REINFORCING CAGES TO INSURE CONCENTRIC PLACEMENT OF CAGES IN EXCAVATIONS.
- FOUNDATION DESIGNS ASSUME STRUCTURAL BACKFILL TO BE COMPACTED IN 8 INCH (200 mm) MAXIMUM LAYERS TO 95% OF MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16 kN/m<sup>3</sup>).
- FOUNDATION DESIGNS ASSUME LEVEL GRADE AT THE SITE.
- FOUNDATION INSTALLATION SHALL BE SUPERVISED BY PERSONNEL KNOWLEDGEABLE AND EXPERIENCED WITH THE PROPOSED FOUNDATION TYPE. CONSTRUCTION SHALL BE IN ACCORDANCE WITH GENERALLY ACCEPTED INSTALLATION PRACTICES.
- FOR FOUNDATION AND ANCHOR TOLERANCES SEE DRAWING AB10214.
- LOOSE MATERIAL SHALL BE REMOVED FROM BOTTOM OF EXCAVATION PRIOR TO CONCRETE PLACEMENT. SIDES OF EXCAVATION SHALL BE ROUGH AND FREE OF LOOSE CUTTINGS.
- CONCRETE SHALL BE PLACED IN A MANNER THAT WILL PREVENT SEGREGATION OF CONCRETE MATERIALS, INFILTRATION OF WATER OR SOIL AND OTHER OCCURRENCES WHICH MAY DECREASE THE STRENGTH OR DURABILITY OF THE FOUNDATION.
- FREE FALL CONCRETE MAY BE USED PROVIDED FALL IS VERTICAL DOWN WITHOUT HITTING SIDES OF EXCAVATION, FORMWORK, REINFORCING BARS, FORM TIES, CAGE BRACING OR OTHER OBSTRUCTIONS. UNDER NO CIRCUMSTANCES SHALL CONCRETE FALL THROUGH WATER.
- CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL EXCEPT FOR PIERS OR PIER AND PAD FOUNDATIONS. FORMS FOR PIERS SHALL BE REMOVED PRIOR TO PLACING STRUCTURAL BACKFILL.
- CONSTRUCTION JOINTS, IF REQUIRED IN PIER MUST BE AT LEAST 12 INCHES (305 mm) BELOW BOTTOM OF EMBEDMENTS AND MUST BE INTENTIONALLY ROUGHENED TO A FULL AMPLITUDE OF 1/4 INCH (6 mm). FOUNDATION DESIGN ASSUMES NO OTHER CONSTRUCTION JOINTS.
- CASING, IF USED, SHALL NOT BE LEFT IN PLACE. EQUIPMENT, PROCEDURES, AND PROPORTIONS OF CONCRETE MATERIALS SHALL INSURE CONCRETE WILL NOT BE ADVERSELY DISTURBED UPON CASING REMOVAL. DRILLING FLUID, IF USED, SHALL BE FULLY DISPLACED BY CONCRETE AND SHALL NOT BE DETRIMENTAL TO CONCRETE OR SURROUNDING SOIL. CONTAMINATED CONCRETE SHALL BE REMOVED FROM TOP OF FOUNDATION AND REPLACED WITH FRESH CONCRETE.
- TOP OF FOUNDATION SHALL BE SLOPED TO DRAIN WITH A FLOATED FINISHED. EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" X 3/4" (19 mm X 19 mm) MINIMUM.
- FOR ANCHOR BLOCK TYPE FOUNDATIONS, FOR GUYED TOWERS, ADDITIONAL CORROSION PROTECTION MAY BE REQUIRED FOR STEEL GUY ANCHORS IN DIRECT CONTACT WITH SOIL. DESIGN ASSUMES PERIODIC INSPECTIONS WILL BE PERFORMED OVER THE LIFE OF THE STRUCTURE TO DETERMINE IF ADDITIONAL ANCHOR CORROSION PROTECTION MEASURES MUST BE IMPLEMENTED BASED ON OBSERVED SITE-SPECIFIC CONDITIONS.

FILE NO.					
REVISIONS					
REV	DESCRIPTION	OWN	CHK	APP	
1	REVISED NOTES AND DESCRIPTION	HA	JCH	HA	
DATE: 04/23/13					
 PO BOX 5903 PEORIA, IL 61601-5909 TOLL FREE 800-727-8009					
THE DRAWING IS THE PROPERTY OF ROIN. IT IS NOT TO BE REPRODUCED, COPIED OR TRANSMITTED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF ROIN.					
ANSI/TIA-222-G STANDARD FOUNDATION NOTES					
OWN:	FAD	OWN:	HA	DATE: Nov/22/2009	
ENGR:	HA	SHEET #:	1 OF 1		
FULL ENGR:	FULL NAME:				
DRAWING NO:	8090548			REV:	1



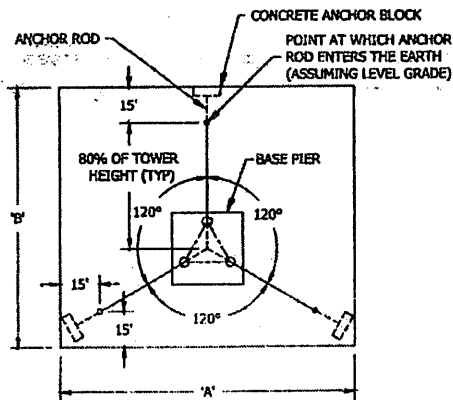
TYPICAL DETAIL

NOTE:  
INSTALL ANCHORS IN BLOCKS WITH EMBEDMENT  
ANGLES ORIENTED AS SHOWN AND WITH P/N AT  
TOP AS SHOWN.



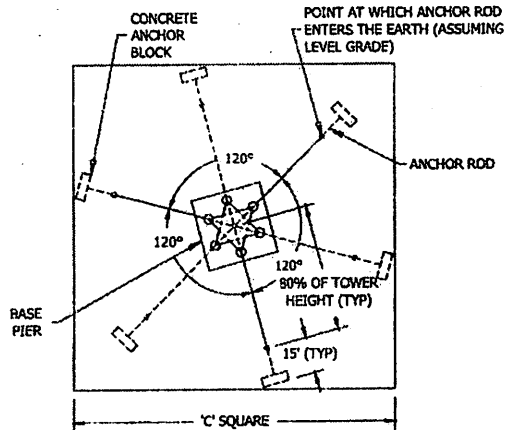
FILE NO.				
Standard-80				
REVISES				
REV	DESCRIPTION	DRW	CHK	APP
2	REVISION BLANKS/OLD	WLF	JDM	HLA
	DATE: 09/02/99			
3	ADDED ANCHOR INSTALLATION INFO TO BLOCK DETAIL	TWS	HLA	HLA
	DATE: 02/22/2000			
DWG REFERENCE				
6718 WEST PLANK ROAD PEORIA, IL 61604 TOLL FREE 800-777-ROHN				
<small>THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED OR SEALED BY WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.</small>				
<b>ANCHOR INSTALLATION DETAIL</b> <b>ANCHOR INSTALLATION DETAIL</b>				
DWR:	B. H.	CHKD:	WCU	DATE: Mar/22/1995
ENGR:	TWS			
DRAWING NO:	A951409			REV: 3





LAYOUT A

THIS IS THE MINIMUM AREA OF LAND REQUIRED. HOWEVER, THIS AREA WILL NOT ALWAYS PERMIT ORIENTING TOWER INTO THE BEST POSITION FOR ANTENNA PATH DIRECTION.



LAYOUT B

THIS IS THE MINIMUM AREA OF LAND REQUIRED TO PERMIT ORIENTING THE TOWER IN ANY POSITION FOR ANTENNA PATH DIRECTION.

TOWER HEIGHT	LAYOUT A		LAYOUT B		
	ACRES	A	B	C	
20'	0.08	60'	55'	0.10	65'
30'	0.12	75'	70'	0.15	80'
40'	0.17	90'	80'	0.21	95'
50'	0.21	100'	90'	0.28	110'
60'	0.28	115'	105'	0.39	130'
70'	0.35	130'	115'	0.48	145'
80'	0.43	145'	130'	0.59	160'
90'	0.50	155'	140'	0.70	175'
100'	0.59	170'	150'	0.83	190'
110'	0.70	185'	165'	1.01	210'
120'	0.80	200'	175'	1.16	225'
130'	0.94	215'	190'	1.32	240'
140'	1.04	225'	200'	1.49	255'
150'	1.16	240'	210'	1.67	270'
160'	1.32	255'	225'	1.93	290'
170'	1.46	270'	235'	2.14	305'
180'	1.64	285'	250'	2.35	320'
190'	1.76	295'	260'	2.58	335'
200'	1.92	310'	270'	2.81	350'
210'	2.13	325'	285'	3.14	370'
220'	2.31	340'	295'	3.40	385'
230'	2.50	350'	310'	3.67	400'
240'	2.68	365'	320'	3.95	415'
250'	2.88	380'	330'	4.24	430'
260'	3.13	395'	345'	4.65	450'
270'	3.34	410'	355'	4.96	465'
280'	3.57	420'	370'	5.29	480'
290'	3.80	435'	380'	5.63	495'
300'	4.03	450'	390'	5.97	510'
310'	4.33	465'	405'	6.45	530'
320'	4.53	475'	415'	6.82	545'
330'	4.84	490'	430'	7.20	560'
340'	5.10	505'	440'	7.59	575'
350'	5.37	520'	450'	8.00	590'
360'	5.71	535'	465'	8.54	610'
370'	5.94	545'	475'	8.97	625'
380'	6.30	560'	490'	9.40	640'
390'	6.60	575'	500'	9.85	655'
400'	6.91	590'	510'	10.31	670'
410'	7.23	600'	525'	10.93	690'
420'	7.55	615'	535'	11.41	705'
430'	7.96	630'	550'	11.90	720'
440'	8.29	645'	560'	12.40	735'
450'	8.64	660'	570'	12.91	750'
460'	9.00	670'	585'	13.61	770'
470'	9.36	685'	595'	14.15	785'
480'	9.80	700'	610'	14.69	800'
490'	10.18	715'	620'	15.25	815'
500'	10.49	725'	630'	15.81	830'

TOWER HEIGHT	LAYOUT A		LAYOUT B		
	ACRES	A	B	ACRES	C
550'	12.59	795'	690'	19.01	910'
600'	14.89	865'	750'	22.50	990'
650'	17.39	935'	810'	26.28	1070'
700'	19.97	1000'	870'	30.36	1150'
750'	22.85	1070'	930'	34.73	1230'
800'	25.91	1140'	990'	39.40	1310'
850'	29.17	1210'	1050'	44.35	1390'
900'	32.62	1280'	1110'	49.61	1470'
950'	36.26	1350'	1170'	55.15	1550'
1000'	40.10	1420'	1230'	61.00	1630'
1050'	43.98	1485'	1290'	67.13	1710'
1100'	48.19	1555'	1350'	73.56	1790'
1150'	52.60	1625'	1410'	80.28	1870'
1200'	57.20	1695'	1470'	87.30	1950'

GENERAL NOTES

1. DUE TO VARIABLES INVOLVED IN ROOF AND OTHER INSTALLATIONS, IT SHALL BE THE RESPONSIBILITY OF THE CUSTOMER OR INSTALLER TO PROVIDE STRUCTURALLY ADEQUATE SUPPORTS FOR PIER AND ANCHOR CONNECTIONS. IT MAY ALSO BE NECESSARY FOR THE CUSTOMER OR INSTALLER TO SECURE THE SERVICE OF A LOCAL ENGINEER TO DETERMINE THAT THE INSTALLATION COMPLIES WITH LOCAL BUILDING CODES.

2. FOR RESTRICTED SITES, CUSTOM DESIGNS WITH STRONGER MASTS AND LARGER GUYS MAY BE PROVIDED BY REDUCING THE GUY RADIUS FROM 80% TO 40% OF THE TOWER HEIGHT.

FILE NO. Standard-80

REVISIONS

REV	DESCRIPTION	DWS	CHK	APP
4	ISSUING INFO ACCORD TO RECORD NOTE #1	JDA	JDA	NA
	DATE: 02/02/88			

DWG REFERENCE

**ROIN**  
PRODUCTS  
6718 WEST PLANK ROAD  
PEORIA, IL 61604  
TOLL FREE 800-727-6249

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GYL ANCHOR  
LAND REQUIREMENT DETAIL

DATE: MSR    CHK: CH    DATE: Apr/15/1975

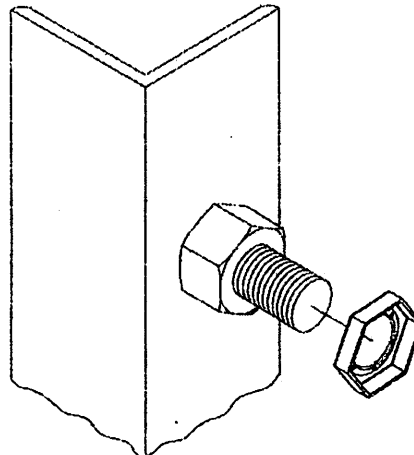
ENG: CW


DRAWING NO: CG40531    REV: 4



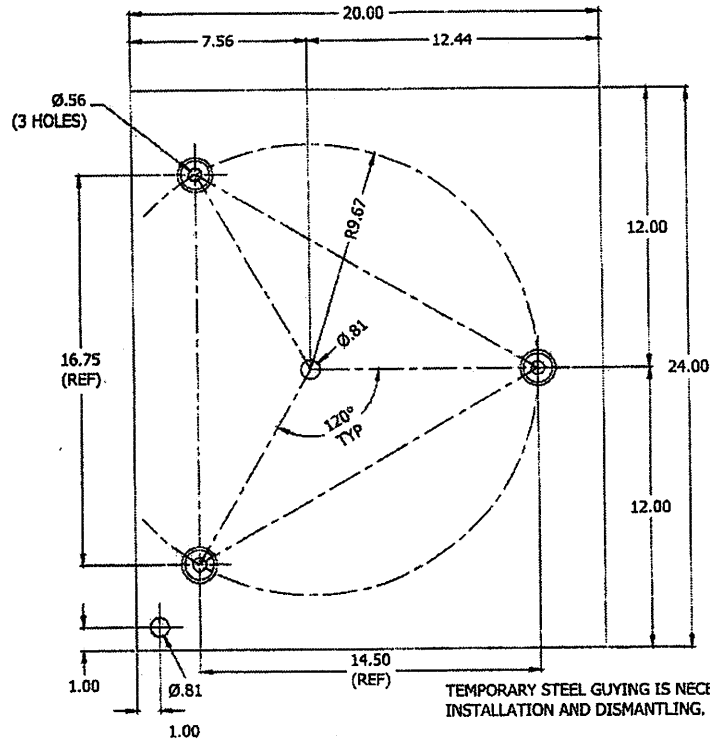
- ASSEMBLY BOLT INSTALLATION**
1. UNLESS OTHERWISE SPECIFIED, ASSEMBLY BOLTS AND ANCHOR BOLTS ARE TO BE TIGHTENED TO A SNUG TIGHT CONDITION (MEMBERS IN FIRM CONTACT) AND MUST INCLUDE A NUT LOCKING DEVICE. NO MINIMUM BOLT TENSION OR TORQUE VALUES ARE REQUIRED. WHEN LOCK WASHERS ARE PROVIDED AS A NUT LOCKING DEVICE, REPLACE ANY DAMAGED WASHERS DUE TO OVER TIGHTENING.
  2. WASHERS ARE TO BE INSTALLED OVER SLOTTED HOLES.

- PAL NUT INSTALLATION**
1. PAL NUTS ARE TO BE INSTALLED AFTER NUTS ARE TIGHT AND WITH EDGE LIP OUT (SEE PICTURE). PAL NUTS ARE NOT REQUIRED WHEN SELF-LOCKING NUTS OR LOCK WASHERS ARE PROVIDED.

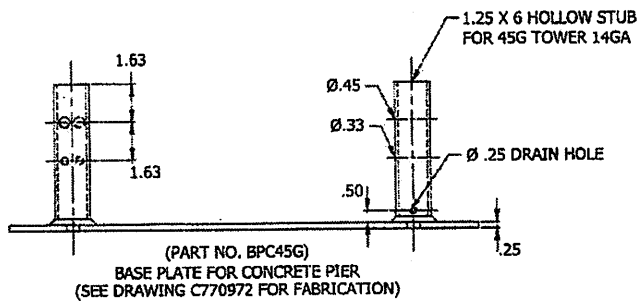


FILE NO.				
<b>REVISIONS</b>				
REV	DESCRIPTION	DWR	CHK	APP
1	CHANGE NOTATION	EC	JEM	JW
DATE: 02/12/12				
 PO BOX 5999 PEORIA, IL 61661-5999 TOLL FREE 800-727-ROHN				
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<b>BOLT ASSEMBLY INSTALLATION</b>				
DWR:	ON	CHK'D:	DATE: 07/25/79	
ENGR:	TWS		SHEET #:	1 OF 1
DRAWING NO. A790135				REV 7

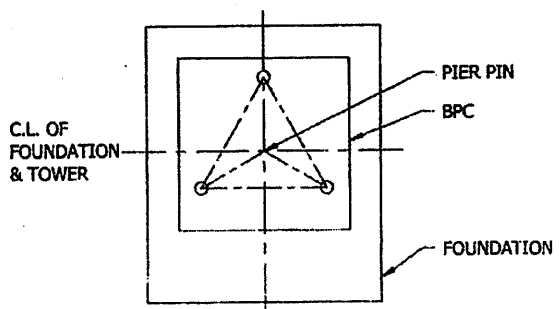
FILE NO. Standard-45G	REVISION	DWG. CHK. APP.	DATE	BY	REV.	N.A.
	DESCRIPTION					
REV.	DESCRIPTION	DATE	BY	REV.	N.A.	
0	DATE: 06/17/2025					
DWG. REFERENCE						
C770972						
B690906						
6719 WEST PLANK ROAD PENNA. 17 6104 TOLL FREE 800-774-0691 <small>THIS DRAWING IS THE PROPERTY OF ROHN PRODUCTS. IT IS TO BE USED ONLY FOR THE PROJECT AND LOCATION SPECIFICALLY IDENTIFIED HEREON.</small>						
DRAWN:	DATE:	DWG. NO.:	REV. NO.:	DATE:	REV.:	
	July 20/1964				8	
BASE SECTION		45G CONCRETE BASE PLATE ASSY				
DRAWING NO. C640645				REV. 8		



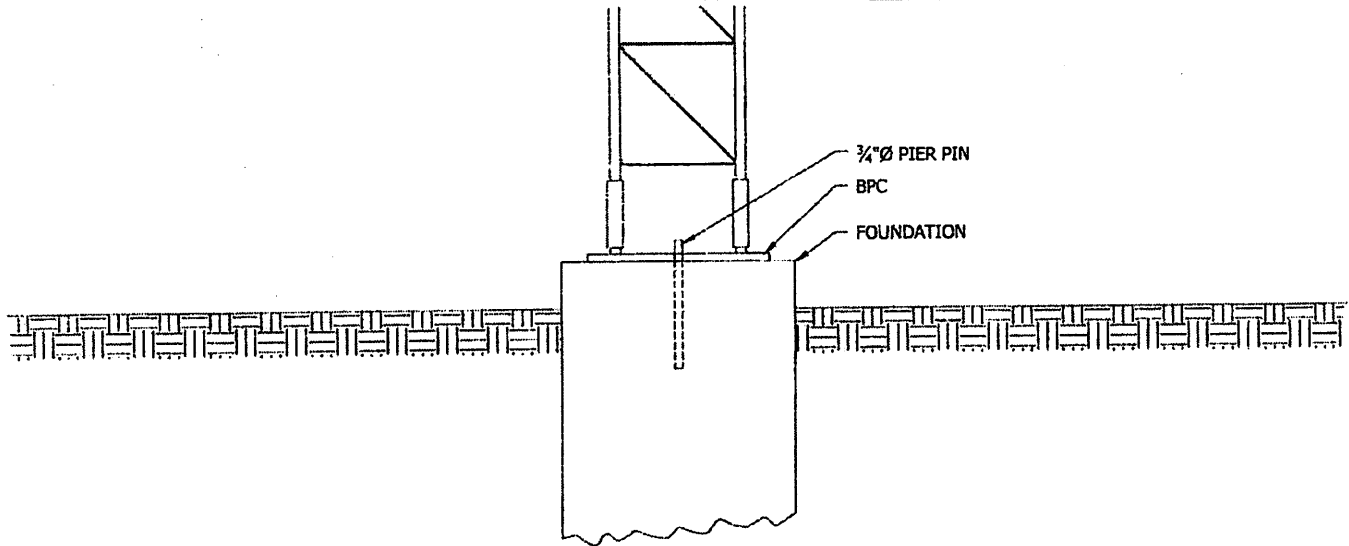
TEMPORARY STEEL GUYING IS NECESSARY DURING INSTALLATION AND DISMANTLING.



- NOTES:
1. DUE TO VARIABLES INVOLVED IN ROOF AND OTHER INSTALLATIONS, IT SHALL BE THE CUSTOMER'S OR INSTALLERS RESPONSIBILITY TO PROVIDE STRUCTURALLY ADEQUATE SUPPORTS FOR PIER & ANCHOR CONNECTIONS. IT MAY ALSO BE NECESSARY FOR THE CUSTOMER OR INSTALLER TO SECURE THE SERVICE OF A LOCAL ENGINEER TO DETERMINE THAT INSTALLATION COMPLIES WITH LOCAL BUILDING CODES.
  2. AFTER GALVANIZING CHECK DRAIN HOLES TO SEE THAT THEY ARE NOT PLUGGED.
  3. FOR USE WITH GUYED AND BRACKETED TOWERS ONLY.



**NOTE:** TOWER IS NOT TO STAND UNGUYED IN ANY CASE. TOWER MUST BE TEMPORARILY OR PERMANENTLY GUYED WITH STEEL GUYS AT ALL TIMES.



FILE NO. Standard-SSV

REVISIONS				
REV	DESCRIPTION	DWR	CHK	APP
2	ISSUED	OH	EL	NR
	DATE: 06/18/2015			

DWG REFERENCE

**ROHN**  
PRODUCTS

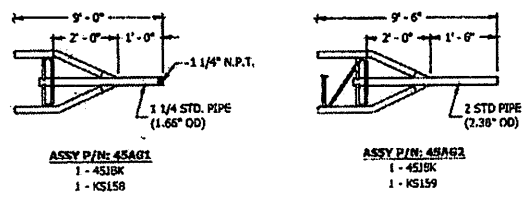
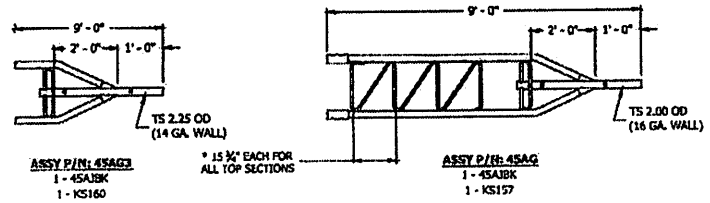
6718 WEST PLANK ROAD  
PEORIA, IL 61604  
TOLL FREE 800-777-ROHN

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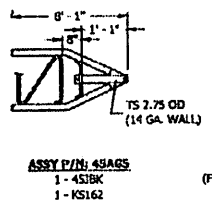
DWG BPC ASSEMBLY DETAILS

DWR:	OH	CHKD:	GR	DATE:	3/1/05/1968
ENGR:	TWS				
DRAWING NO.	B680606			REV:	2

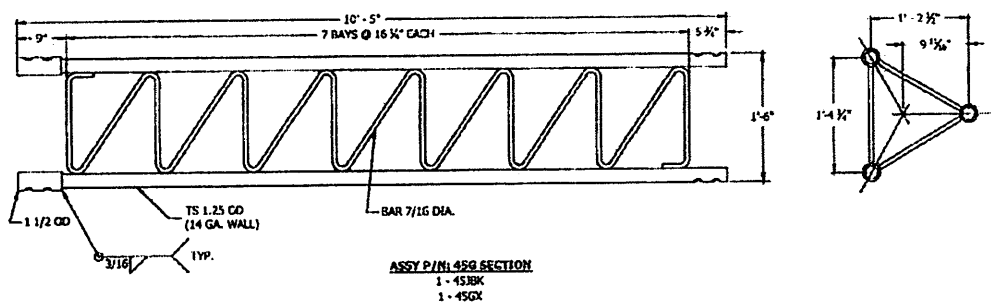
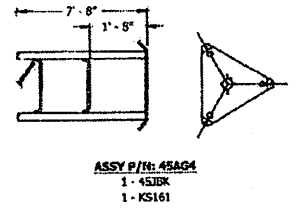
DRAWN BY: TWS  
 CHECKED BY: GR  
 DATE: 3/1/05/1968




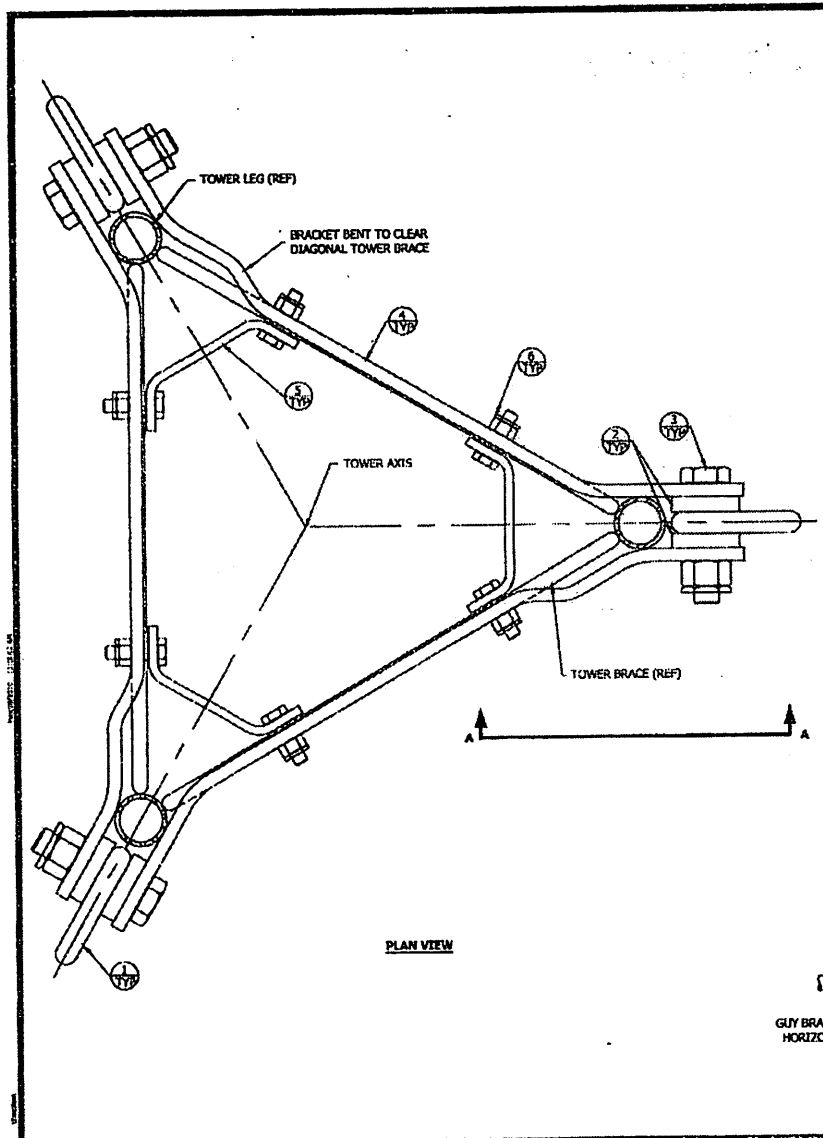
\*NOTE: SPECIFICATIONS OF TOP SECTIONS ARE THE SAME AS SECTION NO. 45 EXCEPT AS NOTED ABOVE.



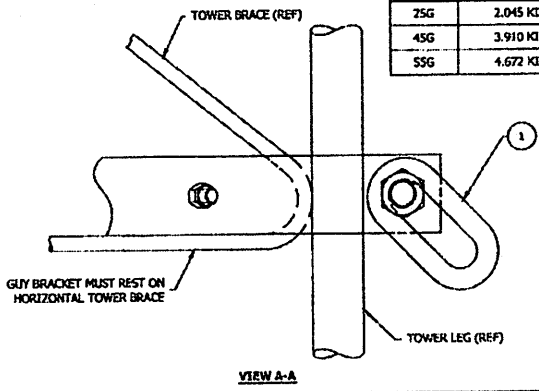
**TYPICAL PLAN VIEW**  
(FOR ALL SECTIONS EXCEPT 45AG4)



FILE NO.				
REVISIONS				
REV	DESCRIPTION	OWN	CHK	APP
 PO BOX 5999 PEORIA, IL 61661-9999 TOLL FREE 800-727-4245				
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<b>45G SECTION ASSEMBLY</b>				
DWG:	ZAW	CHK'D:	JDM	DATE:
			05/05/12	
ENGR:	UA	SHEET #:		1 OF 1
DRAWING NO:	DWG-0526			REV:
				0



PLAN VIEW



VIEW A-A

25G GUY BRACKET ASSEMBLY GA25GD - BILL OF MATERIALS

ITEM	QTY	PART NO.	DESCRIPTION
1	3	GL1/2	LINK GB25D.5" DIA. 75x3.38
2	6	K1E86	RINGFILL PL. .38X1.5" DIA. .568"
3	3	210152GA	BOLT ASSY 1/2x3 HSB A325 HDG
4	3	GB25D	BRACKET GUY BAR FORM .25x1.50"
5	3	KC688	BAR FLAT BRACE 1.5x1.99x.72"
6	6	210005GA	BOLT ASSY 3/8 X 1-1/4 HCS GS HDG
7	1	22209A	CARTON FOR GA25GD GUY ASSY

45G GUY BRACKET ASSEMBLY GA45GD - BILL OF MATERIALS

ITEM	QTY	PART NO.	DESCRIPTION
1	3	GL5/8	LINK GB45 & 55D .63"DIA X 4.5"
2	6	K1E423	RINGFILL PL. .31X2" DIA. .688"
3	3	210072GA	BOLT ASSY 5/8x3-1/4 HSB A325 HDG
4	3	GB45D	BRACKET GUY BAR FORM
5	3	KC192	BAR FLAT BRACE .25x1.5x6"
6	6	210008GA	BOLT ASSY 3/8 X 1-1/2 HCS GS HDG
7	1	22209A	CARTON FOR GA45GD & GA55GD

55G GUY BRACKET ASSEMBLY GA55GD - BILL OF MATERIALS

ITEM	QTY	PART NO.	DESCRIPTION
1	3	GL5/8	LINK GB45 & 55D .63"DIA X 4.5"
2	6	K1E424	RINGFILL PL. .46x2.0" DIA. .81"
3	3	210054GA	BOLT ASSY 3/4x3-1/2 HSB A325 HDG
4	3	GB55D	BRACKET GUY BAR FORM
5	3	KC192	BAR FLAT BRACE .25x1.5x6"
6	6	210008GA	BOLT ASSY 3/8 X 1-1/2 HCS GS HDG
7	1	22209A	CARTON FOR GA45GD & GA55GD

THIMBLE DATA		
GUY BRACKET P/N	MAXIMUM THIMBLE SIZE	MINIMUM THIMBLE SIZE
GA25GD	3/8 THH	1/4TH-5/16THH
GA45GD	9/16THH	1/4TH-5/16THH
GA55GD	9/16THH	1/4TH-5/16THH

SECTION	MAXIMUM REV "P" VERTICAL PULL	MAXIMUM GUY WIRE SIZE
25G	1.90 KIPS	3/16" EHS
45G	3.40 KIPS	1/4" EHS
55G	3.94 KIPS	5/16" EHS

SECTION	MAXIMUM REV "G" VERTICAL PULL	MAXIMUM GUY WIRE SIZE
25G	2.045 KIPS	3/16" EHS
45G	3.910 KIPS	1/4" EHS
55G	4.672 KIPS	5/16" EHS

FILE NO. Standard-45G

REVISIONS				
REV	DESCRIPTION	CHK	CHK	APP
5	ADD BTO A3000	JCA	JDM	N/A
6	DATE: Aug/1988 UPDATED TO REF Y POWER RELL ADD NEW GUY WIRE SIZE	AMS	JDM	NA
7	DATE: Dec/1988 UPDATED TO CORRECT REMOVED REV & WORKING PULL	AMS	JDM	NA
	DATE: Nov/2000			

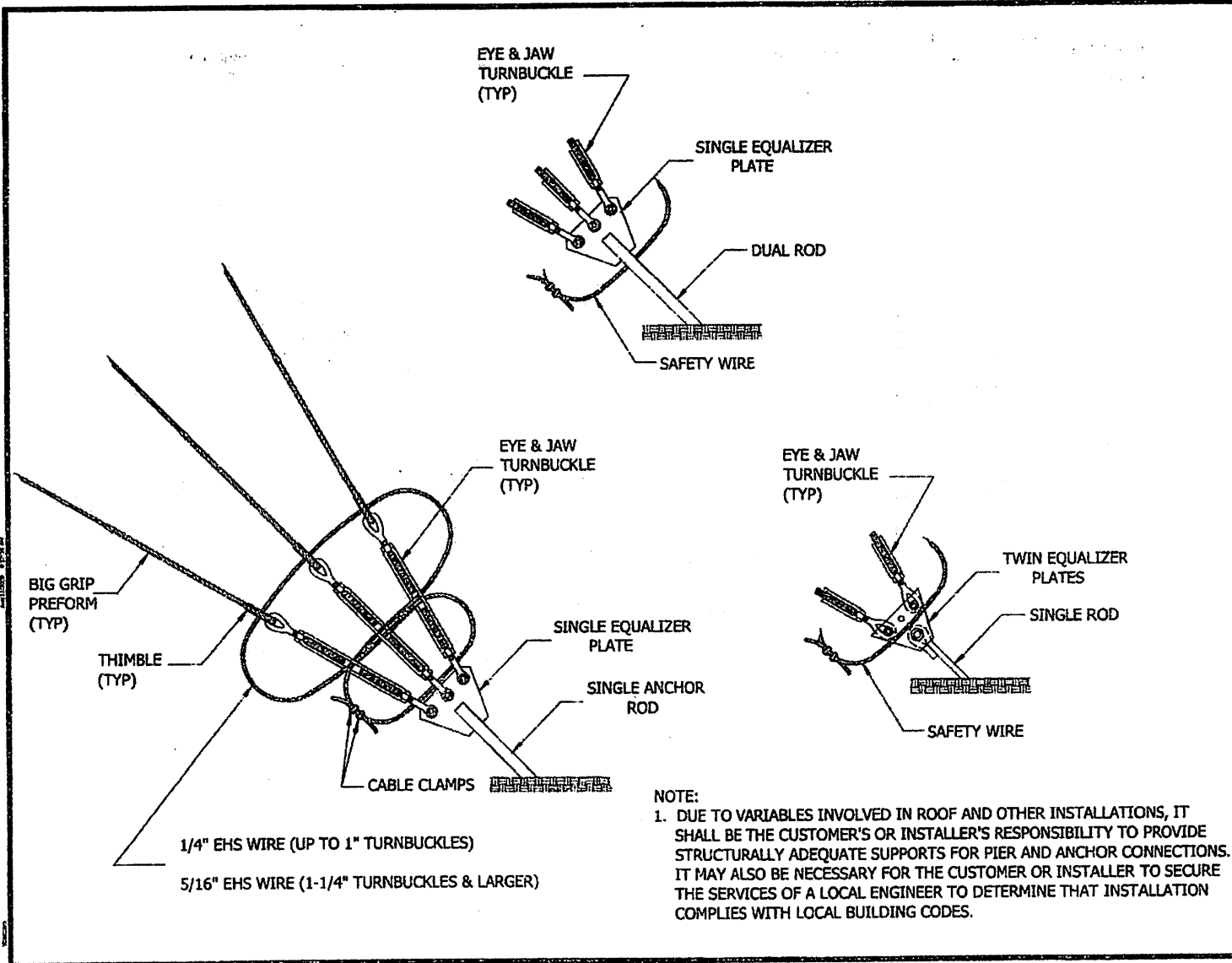
DWG REFERENCE


**ROHN**  
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PICOCA, IL 61604  
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SEE DRAWING FOR THE MEASUREMENT OF ROUNDED CORNERS.  
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THE WRITER'S CONSENT.

GUY BRACKET ASSY & HARDWARE  
25, 45, 55 TOWERS

DWR:	WCU	CRD:	GPW	DATE:	Apr/15/1988
ENGR:	ROB				
DRAWING NO:	C870710			REV:	7



**NOTE:**  
 1. DUE TO VARIABLES INVOLVED IN ROOF AND OTHER INSTALLATIONS, IT SHALL BE THE CUSTOMER'S OR INSTALLER'S RESPONSIBILITY TO PROVIDE STRUCTURALLY ADEQUATE SUPPORTS FOR PIER AND ANCHOR CONNECTIONS. IT MAY ALSO BE NECESSARY FOR THE CUSTOMER OR INSTALLER TO SECURE THE SERVICES OF A LOCAL ENGINEER TO DETERMINE THAT INSTALLATION COMPLIES WITH LOCAL BUILDING CODES.

FILE NO.				
Standard-80				
RHS/004				
REV	DESCRIPTION	CHG	CHK	APP
7	REVISION TO AIRFOOD	JDM	HJF	HA
DATE: May/17/2004				
REMOVED NOTE #7				
8		JDM	HJF	HA
DATE: April/20/09				


DWG REFERENCE

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 PEORIA, IL 61604  
 TOLL FREE 800-727-ROIN

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TURNBUCKLE SAFETY METHOD			
DWR:	CHKD:	DATE:	
KTL	O.H	Mar/D4/1968	
ENGR:			
TWS			
DRAWINGS NO.	REV:		
B680324	8		

WIRE SIZE	ANCHOR ROD	TURNBUCKLE	THIMBLE
3/16 EHS	GAR30	5/8TBE&J	5/16THH
	GAC303,305	3/8TBE&E	5/16THH
	GAC3455	1/2TBE&J	5/16THH
	GAC5655	5/8TBE&J	5/16THH
1/4 EHS	GAR30	5/8TBE&J	3/8THH
	GAC303,305	1/2TBE&E	3/8THH
	GAC3455	1/2TBE&J	3/8THH
	GAC5655	5/8TBE&J	3/8THH
5/16 EHS	GAR30	5/8TBE&J	7/16THH
	GAC303,305	5/8TBE&J	7/16THH
	GAC3455	5/8TBE&J	7/16THH
	GAC5655	5/8TBE&J	7/16THH
3/8 EHS	GAR30	5/8TBE&J	1/2THH
	GAC3455	5/8TBE&J	1/2THH
	GAC5655	5/8TBE&J	1/2THH

FILE NO. Standard-90				
REVISIONS				
REV	DESCRIPTION	DATE	CHK	APP
3	MODIFIED PER APPROV		W.P.	J.M.
	DATE: 09/20/97			
4	MODIFIED PER APPROV		J.E.	J.M.
	DATE: 09/12/97			
DWG REFERENCE				
 8718 WEST PLANK ROAD PEORIA, IL 61604 TOLL FREE 800-727-ROHN				
<small>THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.</small>				
GUY WIRE HARDWARE KIT				
DWG: WYW	CHKD: W.H	DATE: 09/30/1997		
ENGR: RDM				
DRAWING NO: A871382				REV: 4

11/20/97 10:00 AM 11/20/97 10:00 AM

**TO ACHIEVE MAXIMUM COVERAGE WITH THE END SLEEVE, THE APPLICATION SHOULD BE CONDUCTED IN THE FOLLOWING MANNER**



1

PLACE THE SLOT SIDE OF THE END SLEEVE OVER THE LONG LEG OF THE DEAD END



2


DRIVE THE SLEEVE DOWNWARD UNTIL THE RODS OF THE SHORT LEG ARE COMPLETELY COVERED



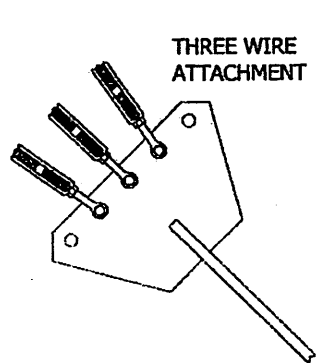
3

THE RODS OF THE LONG LEG SHOULD BE EVEN WITH, OR MAY EXTEND ABOVE, THE TOP EDGE OF THE SLEEVE

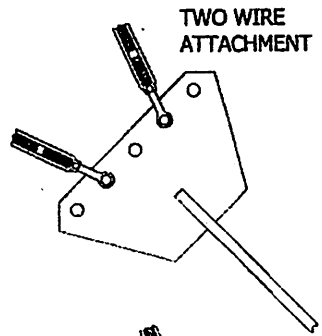
**BE SURE TO SELECT THE PROPER SIZE END SLEEVE**

FILE NO. Standard-80				
REVISIONS				
REV	DESCRIPTION	DRW	CHK	APP
3	REVISION IN AUTOCAD	EM	HP	HLA
DATE: 10/17/2008				
DWG REFERENCE				
 6718 WEST PLANK ROAD PEORIA, IL 61604 TOLL FREE 800-777-ROHN				
THIS DRAWING IS THE PROPERTY OF ROHN PRODUCTS. IT IS NOT TO BE REPRODUCED, COPIED OR TRACED IN WHOLE OR IN PART WITHOUT OUR WRITTEN PERMISSION.				
SPLICE CONNECTION FOR BIG GRIP & END SLEEVE				
DRWR:	HLA	CHKD:	RAM	DATE:
ENGR:	TYS			Jul/02/1970
DRAWING NO:				REV:
B700607				3

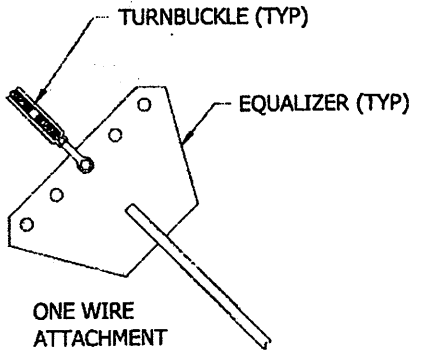




THREE WIRE ATTACHMENT

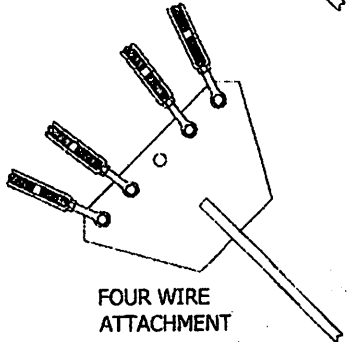


TWO WIRE ATTACHMENT

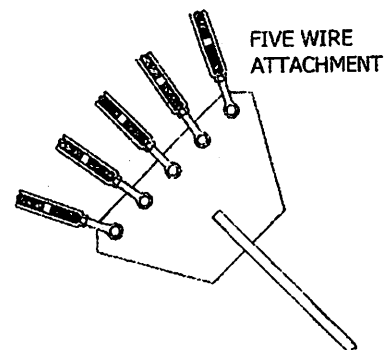


ONE WIRE ATTACHMENT

NOTE: SEE TOWER ASSEMBLY DRAWING FOR SIZE AND QTY OF TURNBUCKLES REQUIRED.



FOUR WIRE ATTACHMENT



FIVE WIRE ATTACHMENT

FILE NO. Standard-60

REVISIONS				
REV	DESCRIPTION	DWR	CHK	APP
2	FORWARD TO APPROVAL	JDA	JDA	MA
	DATE: 6/22/1982			

DWG REFERENCE

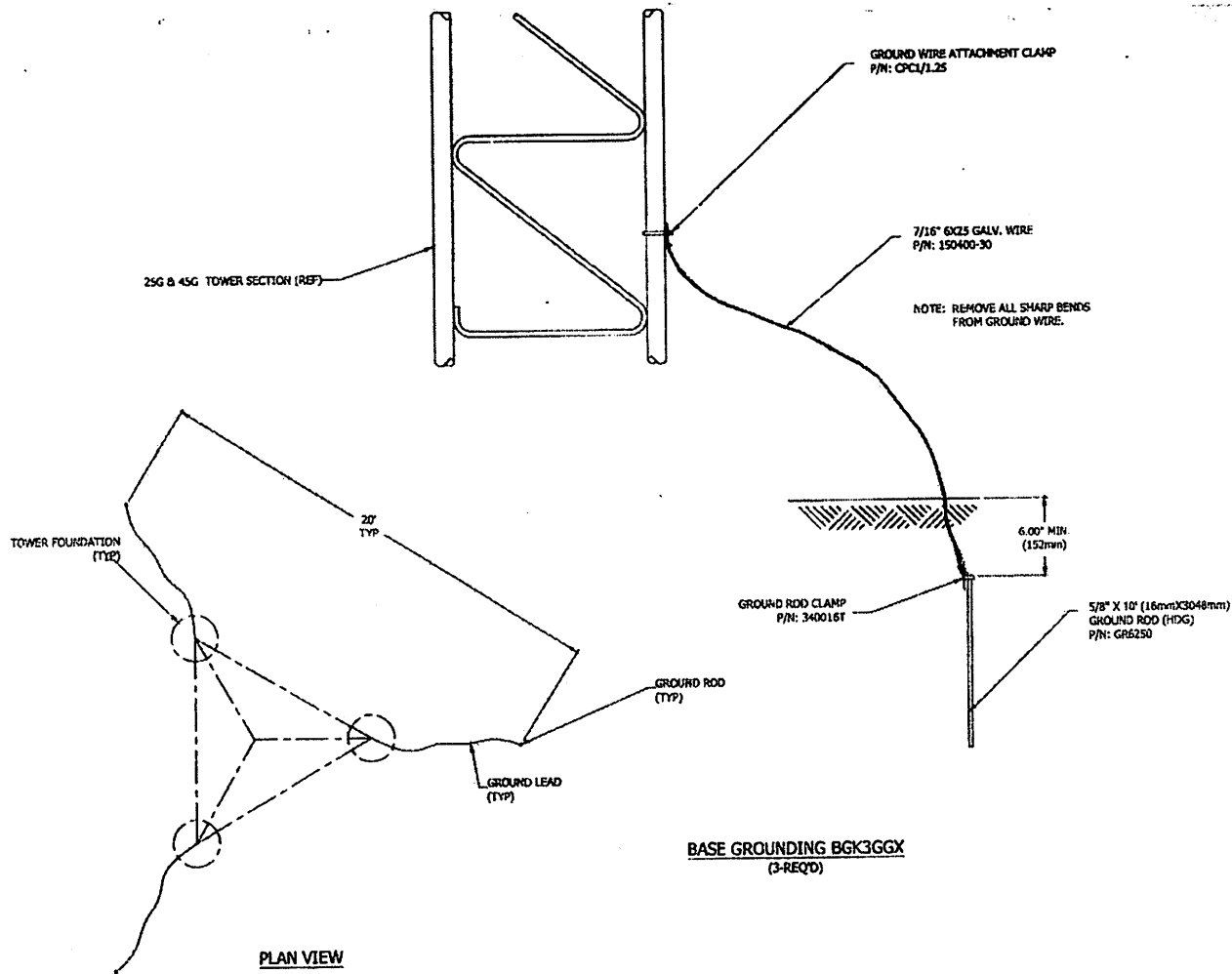
**ROHN**  
PRODUCTS  
6718 WEST PLANK ROAD  
PEARCE, IL 61604  
TOLL FREE 800-727-ROHN

THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED OR TRACED BY OTHERS IN WHOLE OR IN PART WITHOUT OUR WRITTEN CONSENT.

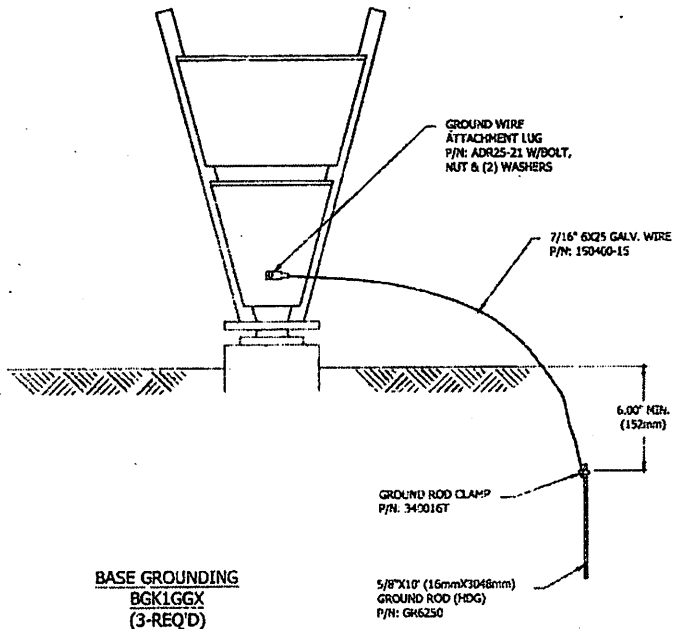
ANCHOR ATTACHMENT DETAIL

DWR:	AJG	CHKD:	WDL	DATE:	6/22/1982
ENGR:	RAM				
DRAWING NO:	8820511			REV:	2

DRAWING: 8820511

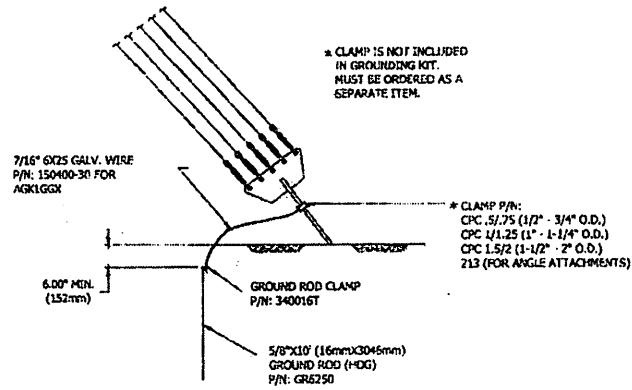


FILE NO.				
REVISIONS				
REV	DESCRIPTION	OWN	CHK	APP
1	ISSUE FOR FABRICATION	JC		WA
DATE: 6/29/11				
 PO BOX 5909 PEORIA, IL 61661-5909 TOLL FREE 800-727-RQIN				
<small>NOT VALIDATING IS THE RESPONSIBILITY OF RQIN. IT IS NOT TO BE          REPRODUCED, COPIED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS          WITHOUT THE WRITTEN PERMISSION OF RQIN.</small>				
KIT BASE GRD 25 & 45 TOWER				
DWR:	CHKD:	JDM	DATE:	FEB/2/2009
ENG:	1A	SHEET #:	1 OF 1	
DRAWING NO:	B090128			REV:
				2



**BASE GROUNDING**  
**BGK1GGX**  
**(3-REQ'D)**

NOTE: REMOVE ALL SHARP BENDS FROM GROUND WIRE.



**GUY WIRE GROUNDING - AGK1GGX**  
**(1-REQ'D PER ANCHOR RADIUS)**

**APPLICATION**  
**80 & 90 TAPERED BASES**

FILE NO.				
REVISIONS				
REV	DESCRIPTION	DATE	CHK	APP
3	UPDATE BOM AND STANDARDS		SC	KCL PA
DATE: 08/20/11				
PO BOX 9999 PEORIA, IL 61601-0999 TOLL FREE 800 777-ROHN				
<small>THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED OR TRANSMITTED IN ANY FORM WITHOUT EXPLICIT PERMISSION.</small>				
<b>REV. G 80 &amp; 90 TOWERS</b>				
DWGR:	JX	CHKDR:	JDM	DATE:
				DEC/27/2007
DWGR:	DWG	SHEET #:		1 OF 1
DRAWING NO:				REV:
B070996				3



**Special Use Permit Application - Form 0300**  
 Department of Planning and Community Development  
 P.O. Box 217, Independence, VA 24348  
 Voice 276-773-200 Fax-276-773-3673

**COMPLETE ALL INFORMATION  
 INCOMPLETE APPLICATIONS CAN NOT BE ACCEPTED**

The Planning Commission will study the Special Use Permit or Comprehensive Plan (15.2-2232) review requests to determine the need and justification for the change in terms of public health, safety, and general welfare. Please answer the following as thoroughly as possible. Use additional space if necessary.

It is the Applicant's responsibility to ensure that the project is feasible. A consultation with the Planning Director is encouraged to ensure the application is complete.

1. The Applicant is the:       Owner       Agent for Owner

<b>Applicant: Last Name, First</b>	GigaBeam Networks	
<b>Mailing Address:</b>	PO Box 135 Rich Creek, VA 24147	
<b>Phone Number:</b>	540-726-2317	
<b>Email Address:</b>	accounting@gigabeam.net	
<b>Property Owner: (if Different from Above)</b>	Fant, Palmer W and Sidney S	
<b>Mailing Address:</b>	6957 Peach Bottom Rd, Independence, VA	
<b>Phone Number:</b>	276-768-9466	
<b>Email Address:</b>	jsfant64@gmail.com	
<b>Tax Map Number:</b>	37-A-17	<b>Parcel Size in Acreage:</b> 46

2. Describe how the subject property(ies) is currently being used.

Farm / mountain land

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3. Describe the proposed project (uses to be changed, added, or expanded as part of the project, including the number of employees and hours of operation)

Construct a 45 G 140' tower for the purpose of providing wireless internet coverage to residents currently uncovered by the projected fiber build. Construction will require 6 people between 40-60 hours.

4. List and describe each proposed structure to be constructed or enlarged as part of this project. Each description must include the use of each structure, heights (ft. or stories), and sizes (sq. ft.) based on outside dimensions.

Construct one 140 foot tower which is a 116 inch triangle with guyed wires extending 112 feet. (see tower diagram attachment)  
Tower will be powered by electricity from ~~Park Place Drive~~. Solar panels.

\* Parkplace Dr. no longer a viable option.

5. List and describe the impact(s) of the request on the property itself, the adjoining properties, and the surrounding area, as well as the impacts on public services and facilities, including noise, water/sewer, roads, schools, churches, business, parks/recreation and fire, and rescue.

Some trees will be cleared for the tower build. There will be no environmental impact. The tower will provide several houses with internet service.

6. Is the project use consistent with the Comprehensive Plan? Specifically, reference comprehensive plan goals.

Yes, the Grayson County Comp Plan specifically references the support of broadband and wireless internet in Chapter 5-Economy 5-11 strategies state, Support efforts, where feasible to encourage the development of advanced communication infrastructure broadband & wireless internet. Expansions of fiber and wireless internet will help impact small business development, especially for small businesses that operate outside of major corridors and towns.

7. Will the project require a permit from other licensing agencies (e.g. Department of Environmental Quality, VA Department of Energy, VA Department of Social Service, Virginia Department of Motor Vehicles).  Yes  No If yes, please explain.
- 
- 
- 

8. **SITE PLAN**

The level of needed detail may vary depending on the nature, size, and complexity of the proposed project. The Planning Director may grant exemptions or require additional information depending on the nature of the project. The following items shall be addressed:

- Title of the Project
- Lot size in acres, showing right of ways, easements, road access, entrances
- Zoning District
- List of all adjoining properties with names of owners, tax map numbers, and those directly across any public right-of-way, including those in adjacent jurisdictions
- Utilities
- Parking areas
- Vegetative Buffers
- Natural water courses and 100-year flood plain limits, if applicable
- Fences
- Proposed and Existing structure locations
- Show linear distance from proposed and existing structures to property lines and roadways

An aerial site plan is preferred and is available at the Grayson County GIS at <https://www.webgis.net/va/grayson/>.

For Commercial and Industrial projects, a stamped (engineered) site plan is required to address the requirements above and other items deemed necessary by the Planning Director. Examples of requests may be typography of the project area with contours intervals of two feet or less, approximate location and sizes of sanitary and storm sewers, water mains, culverts, and underground structures, existing or planned, in or near the project, traffic analysis or traffic impact study.

*The Director may waive requirements for items determined unnecessary to review the project or proposal, based on the proposal application submission.*

**APPLICATION PROCESS**

The Special Use Permit application will be reviewed by the Grayson County Planning Commission at their regular monthly meeting. If recommended for approval, the application will proceed to a review by the Grayson County Board of Supervisors. The application may take 2 - 3 months for approval. The State Code of Virginia, 1950 requires that a Public Hearing be held for both the Planning Commission and the Board of Supervisors to review a Special Use Permit. A Public Hearing notice will be issued in the paper announcing the Public Hearing and all adjoining landowners will be notified by certified mail. In order to process the request a complete application, required to rezone fee, and a current site plan or survey representing the property must be submitted to the Zoning Department at least 3 weeks prior to the Planning Commission meeting date.

Applicants are encouraged to research the potential of the site for the ability to meet all local, state and federal regulations prior to applying for a Special Use Permit. This should include a review of the project by Virginia Department of Transportation for the ability to meet commercial entrance requirements, Virginia Department of Health and/or provider of well and septic services, discussion with the Grayson County Building Official, review of Erosion and Sediment Control Plan where grading is involved and conversations with adjacent landowners about any affect on their property.

Any changes to the application once it is received must be submitted at least 7 days prior to the meeting of the Planning Commission. The Applicant or a representative must be present at the meeting at which the application for rezone is considered. If the decision of the Planning Commission or Board of Supervisors is to be appealed, the Applicant should submit an appeal of the decision per State Code of Virginia, 1950, as amended.

**APPLICATION FEES**

Must accompany the application and are as follows:

- **Special Use Permit Fee**      **\$55.00 + certified letter fee**

The application fee will be assessed based on (cost of certified letters) x (number of the properties) required to be sent to adjoining landowners as required by the Code of Virginia for Public Hearing notice requirements.

**APPLICANT AND OWNER CERTIFICATION OF SIGNATURE**

I certify that the information listed on this application is true and correct to the best of my belief and knowledge. By signing this application, I agree to permit duly authorized representative(s) of any regulatory or advisory agency to enter upon the subject property at reasonable times to inspect and photograph site conditions, both in reviewing a proposal to issue a permit(s) and after permit issuance to determine compliance with the permit

*If the Applicant and Owner are different individuals, both must sign. If Applicant is the same, please sign as Owner.*

Applicant Signature Giga Beam Network Date: \_\_\_\_\_

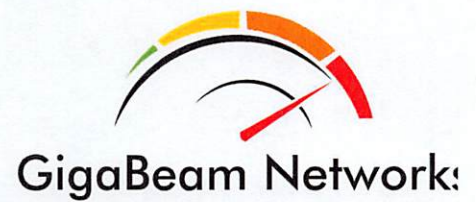
Owner Signature [Signature] Date: 10-26-22



STAFF NOTES:

OFFICE USE ONLY - Special Use Permit Application - Form 0300 - Revised 05/07/12	
Property ownership and zone review <input checked="" type="checkbox"/>	Floodplain Review: <u>N/A</u>
Application, and site plan submitted on <u>10/26/2022</u>	Public Hearing notice for BOS sent: <u>11/17/2022</u>
Fee: <u>WAIVED</u> Paid on: _____	BOS recommendation: _____ Date: _____
Building Official Consulted: <u>11/04/2022</u>	Disqualified use review: _____
VDOT Consulted: <u>N/A</u>	Conditions for approval: _____
Public Hearing notice for PC sent: <u>10/28/2022</u>	Zoning Administrator: _____
PC Recommendation: _____ Date: _____	Letter sent to applicant: _____
	Permit Number: <u>2022-0182</u>





Grayson County Planning & Development Department  
Jada C Black  
PO Box 217  
Independence, VA 24348

November 10, 2022

Dear Members of the Zoning Board:

GigaBeam Networks respectfully requests variance for the setback distance listed in county ordinances 3-14 and 3-15.8 regarding the distance from any adjacent property line or public street. If we were required to adhere to this distance, due to the mountainous terrain, GigaBeam would relinquish the height needed for the tower to effectively service residents with internet service. We are also asking for variance regarding the fence requirement listed in county ordinance 3-15.9 as relation to the security fencing. These permits are for private property in secluded locations. Additionally with the rugged terrain, there would be no expectation of anyone around the towers.

GigaBeam will adhere to all other requirements including section 3-15.12 regarding the removal of abandoned antennas and towers, section 3-15.11 regarding the use of the towers by the county at no cost, and section 3a which states the towers will meet FAA regulations. The towers will initially be solar powered and will not have electrical lines to them.

GigaBeam greatly appreciates the consideration given to this request as we continue our combined efforts to provide internet access to Grayson County residents. If you have further questions or I may be of any assistance, please do not hesitate to contact me either by email or by phone.

Sincerely,

Greg Hedrick  
Director of Construction Projects & Field Services  
GigaBeam Networks  
[greggh@gigabeam.net](mailto:greggh@gigabeam.net)  
540-726-2317 ext. 255

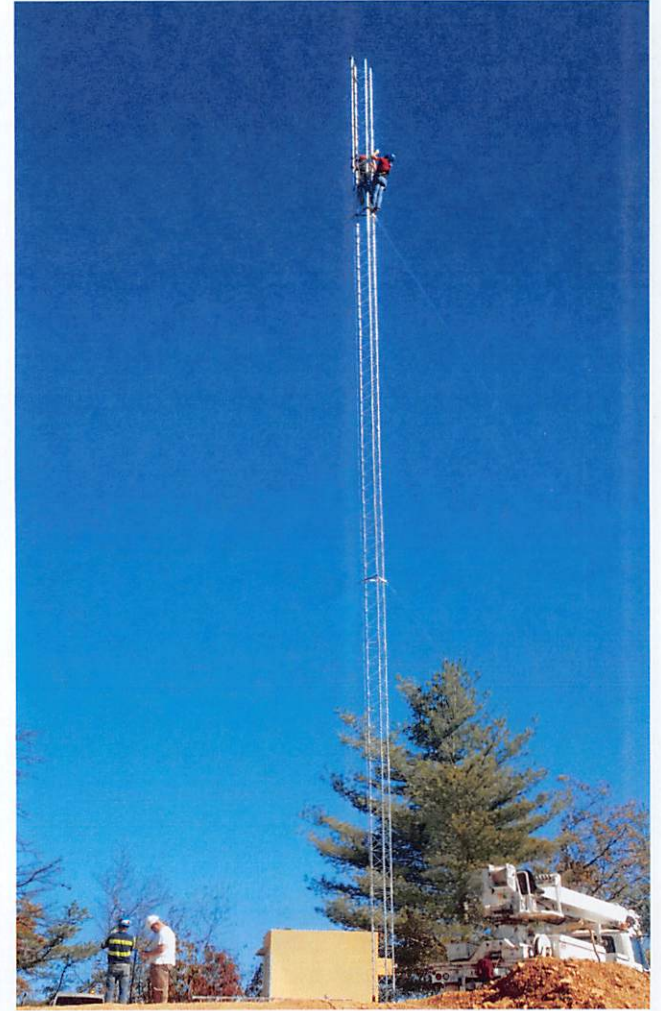
---

GigaBeam Networks  
PO Box 135  
Rich Creek, VA 24147  
[www.gigabeam.net](http://www.gigabeam.net)

#4



Photo Simulations





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This content is from the eCFR and is authoritative but unofficial.

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**Title 47 - Telecommunication**  
**Chapter I - Federal Communications Commission**  
**Subchapter A - General**  
**Part 17 - Construction, Marking, and Lighting of Antenna Structures**  
**Subpart B - Federal Aviation Administration Notification Criteria**

Authority: 47 U.S.C. 154, 301, 303, 309.

**§ 17.7 Antenna structures requiring notification to the FAA.**

A notification to the FAA is required, except as set forth in paragraph (e) of this section, for any of the following construction or alteration:

- (a) Any construction or alteration of more than 60.96 meters (200 feet) in height above ground level at its site.
- (b) Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:
  - (1) 100 to 1 for a horizontal distance of 6.10 kilometers (20,000 feet) from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 0.98 kilometers (3,200 feet) in actual length, excluding heliports.
  - (2) 50 to 1 for a horizontal distance of 3.05 kilometers (10,000 feet) from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 0.98 kilometers (3,200 feet) in actual length, excluding heliports.
  - (3) 25 to 1 for a horizontal distance of 1.52 kilometers (5,000 feet) from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.
- (c) When requested by the FAA, any construction or alteration that would be in an instrument approach area (defined in the FAA standards governing instrument approach procedures) and available information indicates it might exceed an obstruction standard of the FAA.
- (d) Any construction or alteration on any of the following airports and heliports:
  - (1) A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications;
  - (2) A military airport under construction, or an airport under construction that will be available for public use;
  - (3) An airport operated by a Federal agency or the United States Department of Defense.
  - (4) An airport or heliport with at least one FAA-approved instrument approach procedure.
- (e) A notification to the FAA is not required for any of the following construction or alteration:
  - (1) Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation;

#6

- (2) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA-approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose;
- (3) Any antenna structure of 6.10 meters (20 feet) or less in height, except one that would increase the height of another antenna structure.

**Note to § 17.7:** Consideration to aeronautical facilities not in existence at the time of the filing of the application for radio facilities will be given only when proposed airport construction or improvement plans are on file with the Federal Aviation Administration as of the filing date of the application for such radio facilities.

*[39 FR 7581, Feb. 27, 1974, as amended at 39 FR 26157, July 17, 1974; 42 FR 54823, Oct. 11, 1977; 42 FR 57127, Nov. 1, 1977; 79 FR 56986, Sept. 24, 2014]*

**From:** cdavis@graysoncountyva.gov  
**Sent:** Friday, November 4, 2022 2:05 PM  
**To:** jblack@graysoncountyva.gov  
**Subject:** towers

Jada,

This is the code language for the towers.

**SECTION 3108  
TELECOMMUNICATION AND BROADCAST TOWERS**

**[BS] 3108.1General.**

Towers shall be designed and constructed in accordance with the provisions of *TIA-222*. Towers shall be designed for seismic loads; exceptions related to seismic design listed in Section 2.7.3 of *TIA-222* shall not apply. In Section 2.6.6.2 of *TIA 222*, the horizontal extent of Topographic Category 2, escarpments, shall be 16 times the height of the escarpment.

**Exception:** Single free-standing poles used to support antennas not greater than 75 feet (22 860 mm), measured from the top of the pole to grade, shall not be required to be noncombustible.

**[BS] 3108.2Location and access.**

Towers shall be located such that guy wires and other accessories shall not cross or encroach on any street or other public space, or over above-ground electric utility lines, or encroach on any privately owned property without the written consent of the owner of the encroached-upon property, space or above-ground electric utility lines. Towers shall be equipped with climbing and working facilities in compliance with *TIA-222*. Access to the tower sites shall be limited as required by applicable OSHA, FCC and EPA regulations.

Thank you,

*Chris Davis*

Grayson County Building Official  
Grayson County Building Department  
P.O. Box 217  
Independence, VA 24348  
Phone: 276-773-2322  
[cdavis@graysoncountyva.gov](mailto:cdavis@graysoncountyva.gov)





**Details** [hide](#) ✕ ✕

**Identify Adjoining Parcels**

Select Features by Buffer

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**Parcels**

Zoom To Unhighlight Highlight Clear

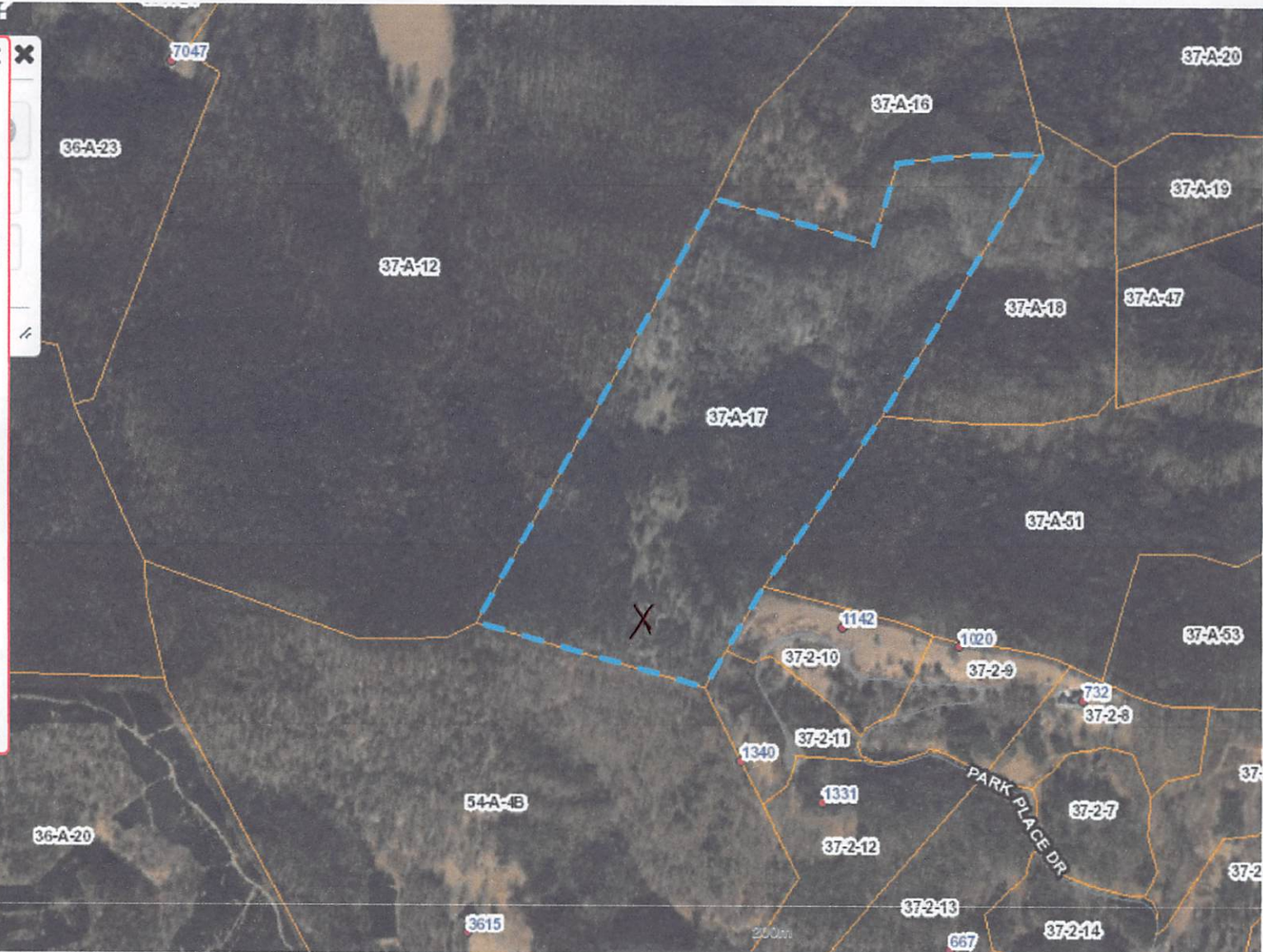
Export to KML Export to SHP

Map Number: 37-A-17  
 Owner: **FANT, PALMER W & SIDNEY S**  
 6957 PEACH BOTTOM RD  
 INDEPENDENCE VA 24348  
 Acres: 46  
 Occupancy Code: Vacant Land  
 Land Value: \$103,500  
 Deed Book: 268 Pg: 310  
 Description: 37-A-17

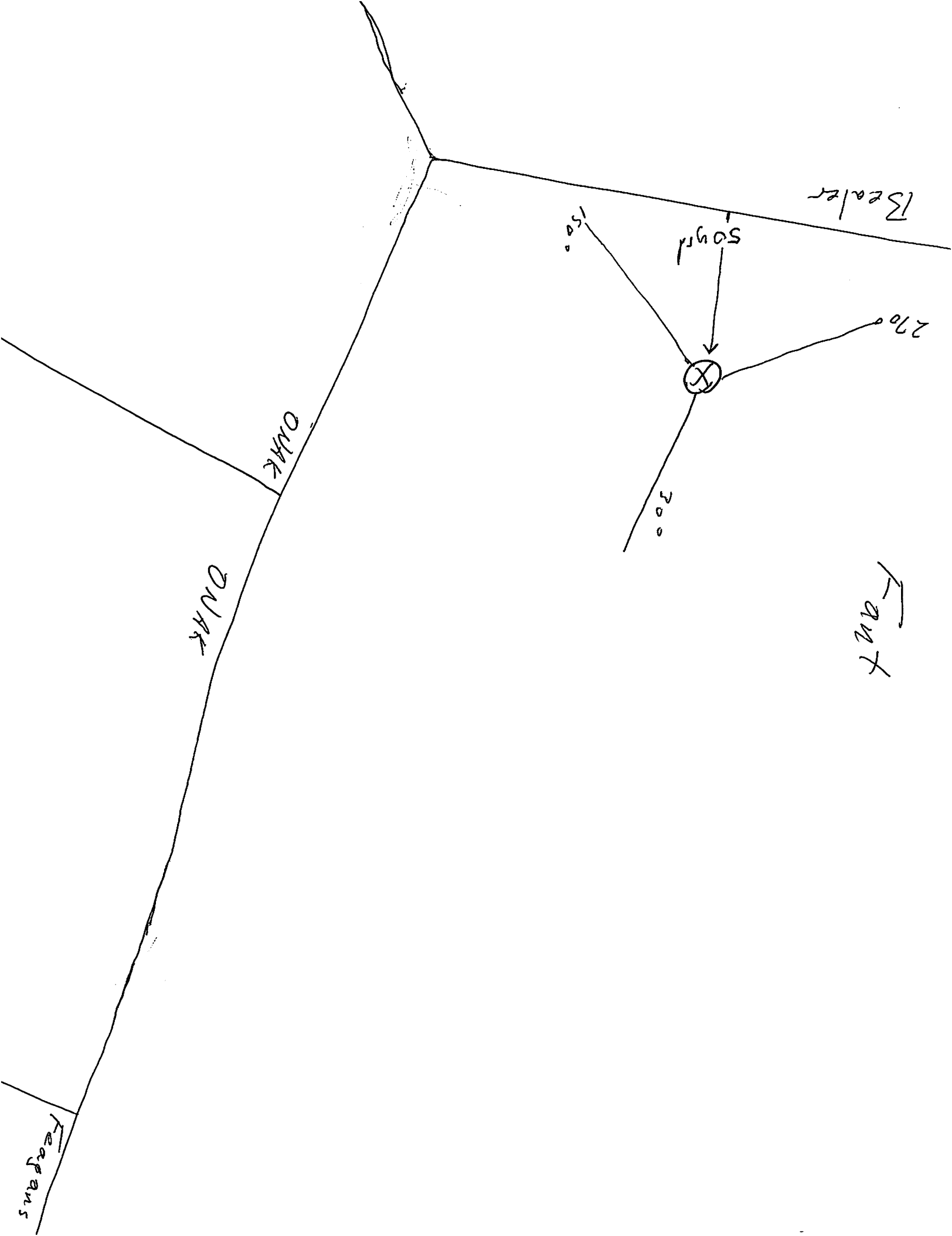
[Available Link \(right-click to copy\)](#)  
[View in GoogleMaps](#)  
[Grayson County Census Dashboard](#)

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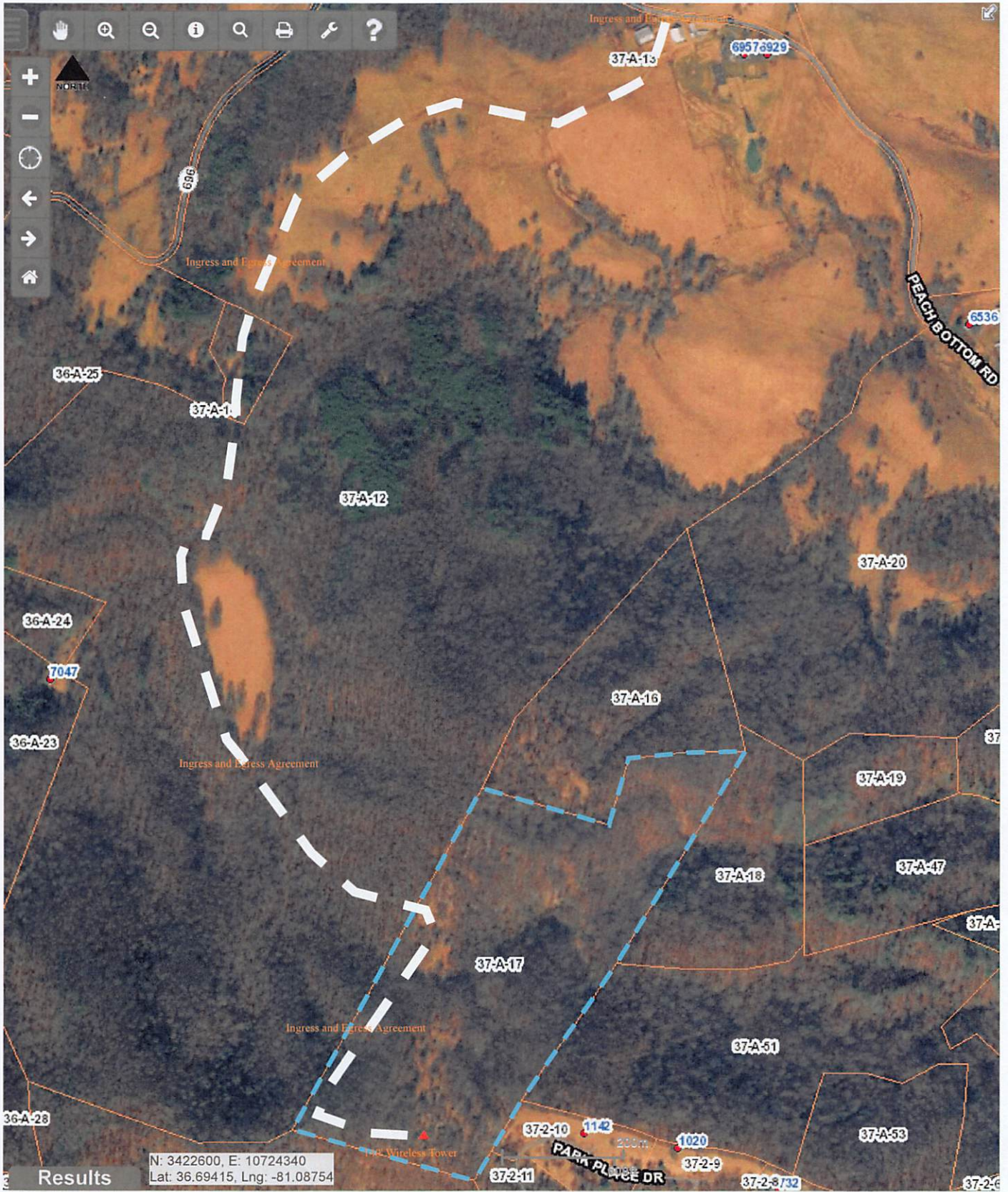
**Attributes at point:** N: 3417626, E: 10714784  
**Grayson County Zoning**  
 Zoning: Rural Farm  
**Voting Precinct**  
 District: Elk Creek  
 Precinct: Elk Creek



X = Tower











# GRAYSON COUNTY, VIRGINIA

## MEMORANDUM

**DATE:** November 2, 2022 (Joint Public Hearing 11/17)  
**TO:** Grayson County Board of Supervisors and Planning Commission  
**FROM:** Jada C. Black, Director of Planning and Zoning  
**SUBJECT:** Application Special Use Permit, Giga Beam Networks\_ McLean Site

### REQUEST

Application No. 20220183 is a request for a Special Use Permit pursuant to Article 4 Section 4-6.2.i of the Grayson County Zoning Ordinance to authorize the construction and operation of a communications tower for wireless internet in an unserved area of Grayson County located on one parcel containing approximately 57.995 acres of land located off of Woodbridge Lane and further identified as Tax Map No. 54-A-6. The proposed communication tower will be located on Tax Map number 54-A-6. The property is zoned Rural Farm (RF) and is not designated in the Enterprise Zone or Opportunity Zone, and no Historical Structures were identified within the proximity of the subject parcel.

### DESCRIPTION

- Property Owner: Ricard McLean
- Location: Woodbridge Lane, Independence
- Area: Approximately 57.995 acres +/-
- Frontage: Woodbridge Lane, Independence  
Right-of-way lease agreement through tax parcel 53-A-89 and 54-A-8 owned by Edgar J. Hensdell, Jr. Agreement signed 11/8/2022.
- Utilities: Solar panels will be installed to energize the tower. Permission and access granted to add electrical service to the site.
- Topography: Relatively rolling and slopping approximately 2,967 feet in elevation.
- Zoning Classification: Rural Farm

- Existing Development: Mostly forested, with two residential dwellings on the property
- Surrounding Development:
  - North: Primarily agricultural operations and several single-family dwellings across Peach Bottom Road
  - East: Subject parcel adjoins vacant parcels, single-family dwelling along Forest Ridge Road.
  - South: Primarily agricultural and forestry
  - West: Primarily forestry and agricultural that adjoins Greenhouse Road
- Proposed Development: 140' 45G Communications Tower for wireless internet in unserved areas in Elk Creek District
- 

### **LOCATION, SITE PLAN, AND ROAD ACCESS**

1. The subject parcel is 57.995 acres and is located in the Elk Creek District, bound by primarily vacant forested and agricultural farmland. The nearest direct route from Peach Bottom Road to Woodbridge Lane.
2. The property is designated Rural Farm. Research indicates the area has no historical references through the Virginia Historical Society and is not designated within the Enterprise Zone.
3. Adjacent properties surrounding the subject parcels are all designated as Rural Farm.
4. Engineered plan for the proposed tower and other reference material include the following details: **Reference No. 1**
  - Construction Details
  - Building Official Coorespondence
  - Miro Site Lease Agreement with a term of 10 years options to renew for a period of 10 years, but can can be cancelled after initial term with written 90-day notice.
  - Color- Hot-Dipped Galvanized Steel Construction
  - Excavation Area is minimal pier footings as required for tower construction. Minimal tree removal will be required for tower location.

- Tower Specs- 45G self-supporting ladder tower, overall height 140' communications tower  
Vegetation on site will screen any local impact view. Tower constructed will be less than the requirements to meet FAA approval. Construction will meet FCC, Building Code Requirements, and other applicable Federal and State standards.
- Nearest residents property line is approximately feet from the communications tower
- Setbacks to residential structure 1560 ft.
- Fencing- Giga Beam has requested a variance for the fencing, a formal letter of request can be located in the reference pages attached.

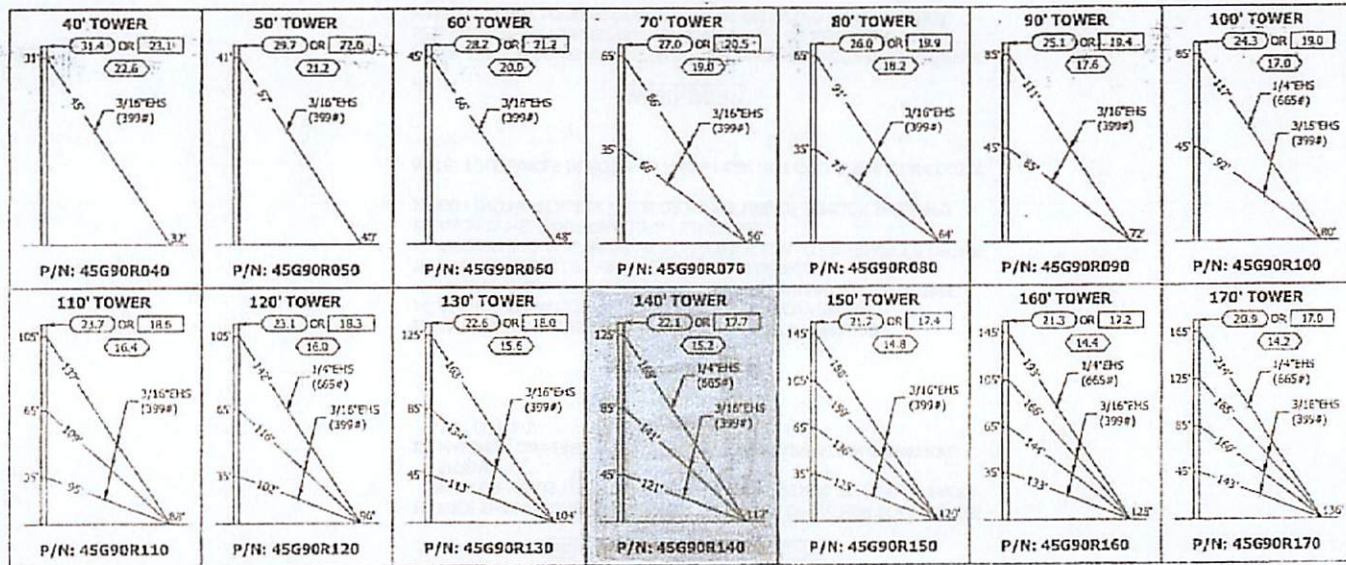
### **OTHER APPLICABLE REQUIREMENTS**

- Giga Beam Networks SUP Application **Reference No. 2**
- Co-location policy – the proposed tower will allow co-location of government access for emergency services free of charge.  
**Reference No. 3**  
**VARIANCE REQUEST Fencing and Setbacks Reference No. 4**
- Comprehensive Plan consistency – *Section 8-1 Support and encourage the development of advanced communication infrastructure, broadband, wireless internet, and cell coverage/towers (5-11)*
- Photo simulation pictures provided **Reference No. 5**
- No hazard to air traffic determination **Reference No. 6**
  - FAA requirements for lighting do not apply per §17.7 Antenna structure requiring notification to the FAA.

### **RECOMMENDATION**

For the purpose of public necessity, convenience, general welfare, public safety, and health or good zoning practice. Staff recommends to the Planning Commission approval for a Special Use Permit for a Communications Tower on parcel tax map number 54-A-6 in the Rural Farm Zone, Elk Creek District. The site will be developed as specified in the submitted plans and application and in accordance with Article 3-15 of the Zoning Ordinance and the Uniform Statewide Building Code.

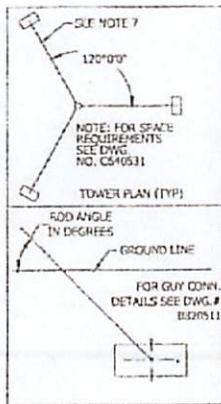




**45G TOWER GUYING DETAILS**  
**40' - 170'**  
**90MPH 3-SECOND GUST WIND SPEED**  
**NO ICE (REV G)**  
**70 MPH FASTEST MILE WIND SPEED**  
**NO ICE (REV F)**

**GENERAL NOTES:**

- TOWER DESIGNS ARE IN ACCORDANCE WITH ANSI/TIA-222-F.1 AND TIA-222-G, CLASS 1 STRUCTURES.
- ALLOWABLE PROJ. AREA (SQ. FT.) FOR EXPOSURE B - (REV G)
- ALLOWABLE PROJ. AREA (SQ. FT.) FOR EXPOSURE C - (REV G)
- ALLOWABLE PROJ. AREA (SQ. FT.) - (REV F)
- EFFECTIVE PROJ. AREAS MUST NOT EXCEED THE AREAS SHOWN.
- ANTENNAS AND MOUNTS ARE ASSUMED SYMMETRICALLY PLACED AT THE TOWER TOP.
- DESIGNS ASSUME TWO 1/2" DIA. LINES ON EACH TOWER FACE.
- FOR GUY HARDWARE INSTALLATION DETAILS, SEE DWG. A571382.
- ANCHOR RADIUS IS FROM TOWER BASE TO INTERSECTION OF ROD WITH GROUND.
- TOWER DESIGNS AND GUY CHORD LENGTHS SHOWN ARE BASED ON LEVEL GROUND. ADD 6 PERCENT TO CHORD LENGTHS (FOR SWS AND CONNECTIONS) FOR FINAL CUT LENGTHS. ( ) INDICATES INITIAL TENSION FOR GUY WIRES IN POUNDS AT 60 DEGREES FAHRENHEIT.
- DO NOT INSTALL OR DISMANTLE TOWERS WITHIN FALLING DISTANCE OF ELECTRICAL AND/OR TELEPHONE LINES.
- TOWER ERECTION AND DISMANTLING MUST BE DONE BY QUALIFIED AND EXPERIENCED PERSONNEL.
- TEMPORARY STEEL GUYS, WHEN REQUIRED DURING ERECTION OR DISMANTLING, MUST BE SUPPLIED AND INSTALLED BY THE ERECTOR.
- INSTALL WARNING PLATE (P/N: ACWS) IN A HIGHLY VISIBLE LOCATION.
- ALL ANTENNA INSTALLATIONS MUST BE GROUNDED IN ACCORDANCE WITH LOCAL AND NATIONAL CODES.
- EXTRA CABLE CLAMPS HAVE BEEN PROVIDED FOR TURNBUCKLE SAFETY REQUIREMENTS. FOR DETAILS SEE DWG. B68024 LATEST REVISION.
- PURCHASER SHALL VERIFY THE INSTALLATION IS IN CONFORMANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS FOR OBSTRUCTION, MARKING AND LIGHTING.
- TOLERANCE ON TOWER STEEL IS EQUAL TO PLUS 1% AND MINUS 1/2%.
- DESIGNS ASSUME THAT, AS A MINIMUM, MAINTENANCE AND INSPECTION WILL BE PERFORMED OVER THE LIFE OF THE STRUCTURE IN ACCORDANCE WITH ANSI/TIA-222-G.
- ANCHOR RODS CORROSION PROTECTION METHODS TO BE PROVIDED BY OTHERS.



TOWER HT.	BASE PIER (DWG: D090543)		ANCHOR DATA (DWG: D091250)	
	NO.	BLOCK NO.	ROD NO.	ROD ANGLE
47	CB1G	AB2	GAC455TOP	45
50	CB1G	AB2	GAC455TOP	46
60	CB1G	AB2	GAC455TOP	43
70	CB1G	AB2	GAC455TOP	43
82	CB1G	AB2	GAC455TOP	41
90	CB1G	AB2	GAC455TOP	42
100	CB1G	AB2	GAC455TOP	42
110	CB1G	AB2	GAC455TOP	40
120	CB1G	AB2	GAC455TOP	39
130	CB1G	AB2	GAC455TOP	40
140	CB1G	AB2	GAC455TOP	39
150	CB1G	AB2	GAC455TOP	38
160	CB1G	AB2	GAC455TOP	37
170	CB1G	AB2	GAC455TOP	38

FILE NO. Standard-15G

REVISIONS:

REV	DESCRIPTION	DATE	CHK	APP
1	ISSUED FROM APPROVAL AND 10% DRAWING TO 100% OF ALL LINES		JWS	KTL
2	ISSUED FROM APPROVAL AND 10% DRAWING TO 100% OF ALL LINES		JWS	KTL

DWG REFERENCE:


**ROIN PRODUCTS LLC**  
 P.O. BOX 5999  
 FORTLA, FL 32611-5999  
 TOLL FREE 800-727-9094

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SECTION ASSEMBLY  
**45G/90MPH 3-SECOND GUST/NO ICE**

DATE: 2/10/2010	DATE: 2/10/2010
DESIGNER: JWS	CHECKER: KTL
SCALE: 1/4"	REV: 2

DWG NO: DWG-0105-1

**FOUNDATION AND ANCHOR TOLERANCES**  
**ALL FOUNDATIONS**

1. CONCRETE DIMENSIONS - PLUS OR MINUS 1" (25mm).
2. DEPTH OF FOUNDATION - PLUS 3" (76mm) OR MINUS 0".
3. DRILLED FOUNDATIONS OUT OF PLUMB - 1.0 DEGREE.
4. REINFORCING STEEL PLACEMENT - PER A.C.I. 301.
5. PROJECTION OF EMBEDMENTS - PLUS OR MINUS 1/8" (3mm).
6. VERTICAL EMBEDMENTS OUT OF PLUMB - 0.5 DEGREE.

**ANCHOR BOLTS**

7. MAXIMUM DISTANCE FROM CENTERLINE OF ANCHOR BOLTS TO CENTERLINE OF FOUNDATION - 1/24 OF PIER DIAMETER UP TO A MAXIMUM OF 2" (51mm).
8. ANCHOR BOLT SPACING - 1/16" (2mm).
9. ANCHOR BOLT CIRCLE ORIENTATION - 0.25 DEGREE.
10. ANCHOR BOLT CIRCLE DIAMETER - PLUS OR MINUS 1/16" (2mm).

**SELF-SUPPORTING TOWERS**

11. FACE SPREAD DIMENSION CENTER TO CENTER OF ANCHOR BOLT CIRCLES - PLUS OR MINUS 1/16" (2mm) OR 1/16" (2mm) PER 20 FT. (6m) OF FACE SPREAD.
12. MAXIMUM DIFFERENCE BETWEEN ANY TWO FOUNDATION ELEVATIONS - 1/2" (13mm).

**GUYED TOWERS**

13. GUY RADIUS - PLUS OR MINUS 5% OF DISTANCE SPECIFIED.
14. ANCHOR ELEVATION - PLUS OR MINUS 5% OF GUY RADIUS.
15. ANCHOR ALIGNMENT (PERPENDICULAR TO GUY RADIUS) - 1.0 DEGREE.
16. ANCHOR ROD SLOPE - PLUS OR MINUS 1.0 DEGREE.
17. ANCHOR ROD ALIGNMENT WITH GUY RADIUS PLUS OR MINUS 1.0 DEGREE.
18. ANCHOR HEAD OUT OF PLUMB - 1.0 DEGREE.
19. GUY INITIAL TENSION - PLUS OR MINUS 10% OF TENSION SPECIFIED.

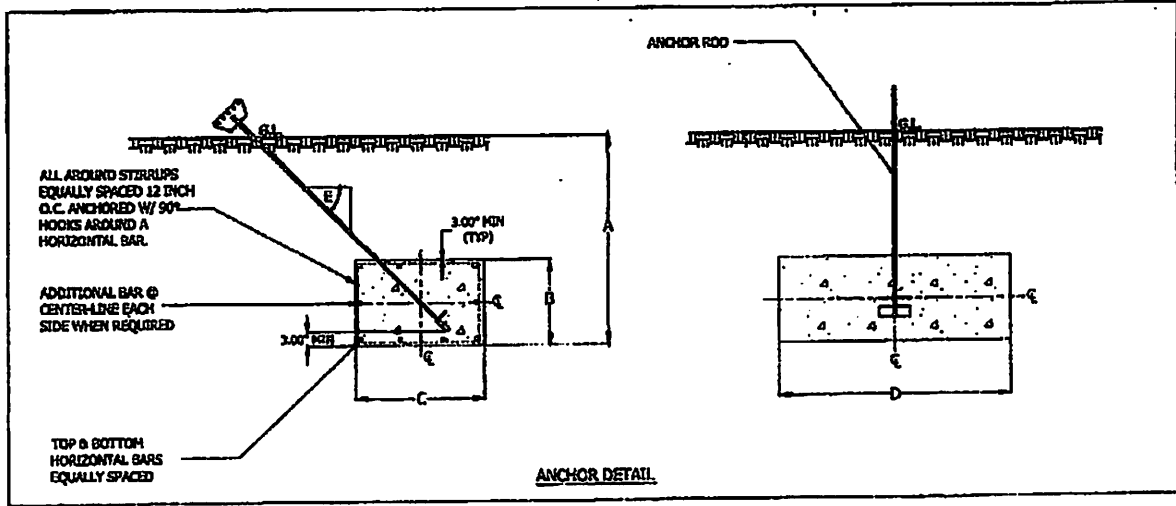
NOTE: TOLERANCES IN NOTES 13 AND 14 CAN NOT OCCUR SIMULTANEOUSLY

**WARNING!!!**

AFTER ANCHOR BOLTS ARE INSTALLED IN CONCRETE HAS TAKEN ITS INITIAL SET, ANCHOR BOLTS MUST NOT BE MOVED, BENT OR REALIGNED IN ANY MANNER. A NUT LOCKING DEVICE MUST BE INSTALLED ON ALL ANCHOR BOLTS.

FILE NO. <b>Standard-SSV</b>			
<b>REVISION</b>			
NO.	DESCRIPTION	DATE	BY
0	ISSUED FOR CONSTRUCTION	JUN 2004	MA
<b>DWG REFERENCE</b>			
<b>ROHN</b> PRODUCTS			
6716 WEST PLANK ROAD PEORIA, IL 61604 TOLL FREE 800-727-4041			
<small>THE DIMENSIONS OF THE ANCHORS SPECIFIED HEREIN ARE FOR INFORMATION ONLY. CONSULT THE DIMENSIONS OF THE ANCHORS AS SHOWN ON THE ANCHOR TOLERANCE DRAWING.</small>			
<b>FOUNDATION &amp; ANCHOR TOLERANCE</b>			
DATE:	CDR:	CHKD:	DATE:
			5/24/2007
DRAWING NO. <b>AS10214</b>			APP: <b>8</b>





**CONCRETE ANCHOR BLOCK DATA FOR ANSI/TIA-222-G PRESUMPTIVE CLAY SOIL**

BLOCK	ANCHOR DIMENSIONS (IN)				HORIZONTAL BARS QTY./SIZE	STIRRUPS SIZE & SPACING	CONCRETE VOL (CU. YDS.)	LIFT CAPACITY (LBS)	LATERAL CAPACITY (LBS)
	A	B	C	D					
AB1	3'-0"	1'-0"	3'-0"	4'-0"	(8) #5 BARS TOTAL (4) #5 BARS TOP AND BOTTOM LAYERS (0) ADDITIONAL BAR EACH SIDE	#3 @ 12" O.C.	0.44 PER BLOCK 1.3 TOTAL FOR 3	4,900	2,150
AB2	4'-0"	1'-6"	4'-0"	6'-0"	(10) #6 BARS TOTAL (5) #6 BARS TOP AND BOTTOM LAYERS (0) ADDITIONAL BAR EACH SIDE	#3 @ 12" O.C.	1.33 PER BLOCK 4.0 TOTAL FOR 3	12,600	6,480
AB3	6'-0"	1'-6"	3'-0"	6'-0"	(8) #6 BARS TOTAL (4) #6 BARS TOP AND BOTTOM LAYERS (0) ADDITIONAL BAR EACH SIDE	#3 @ 12" O.C.	1.0 PER BLOCK 3.0 TOTAL FOR 3	28,700	10,500
AB4	6'-0"	1'-6"	4'-0"	9'-0"	(10) #6 BARS TOTAL (5) #6 BARS TOP AND BOTTOM LAYERS (0) ADDITIONAL BAR EACH SIDE	#4 @ 12" O.C.	2.0 PER BLOCK 6.0 TOTAL FOR 3	32,500	15,800
AB5	8'-0"	2'-0"	3'-0"	10'-0"	(10) #7 BARS TOTAL (4) #7 BARS TOP AND BOTTOM LAYERS (1) ADDITIONAL BAR EACH SIDE	#4 @ 12" O.C.	2.22 PER BLOCK 6.7 TOTAL FOR 3	43,000	21,000
AB6	8'-0"	2'-0"	4'-0"	10'-0"	(12) #7 BARS TOTAL (5) #7 BARS TOP AND BOTTOM LAYERS (1) ADDITIONAL BAR EACH SIDE	#4 @ 12" O.C.	2.96 PER BLOCK 8.9 TOTAL FOR 3	52,000	26,500

(SEE TOWER ASSEMBLY DRAWING FOR ANCHOR ROD SLOPE 'E'.)

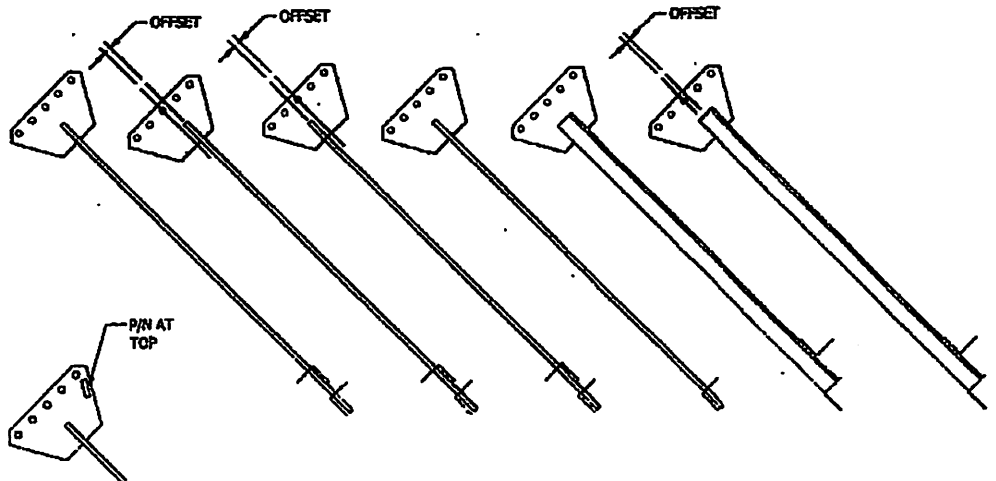
**GENERAL NOTES**

- SEE DRAWING NUMBER 8090548 FOR STANDARD FOUNDATION NOTES.
- ALL HORIZONTAL BARS MUST BE CONTINUOUS.
- DUE TO VARIABLES INVOLVED DURING INSTALLATION, IT SHALL BE THE CUSTOMER'S OR INSTALLER'S RESPONSIBILITY TO PROVIDE STRUCTURALLY ADEQUATE SUPPORTS FOR BASE AND ANCHOR CONNECTIONS. IT MAY ALSO BE NECESSARY FOR THE CUSTOMER OR INSTALLER TO SECURE THE SERVICE OF A LOCAL ENGINEER TO DETERMINE THAT INSTALLATION COMPLIES WITH LOCAL BUILDING CODES.
- ADDITIONAL CORROSION PROTECTION MAY BE REQUIRED FOR STEEL GUY ANCHORS IN DIRECT CONTACT WITH SOIL.

<b>STD/PUBLIC</b>			
REV	DESCRIPTION	DATE	BY
1	ANCHOR BLOCK REV. G	08/24/2008	NA
2	ANCHOR BLOCK REV. G	08/24/2008	NA
3	ANCHOR BLOCK REV. G	08/24/2008	NA
4	ANCHOR BLOCK REV. G	08/24/2008	NA
DWG REFERENCE			
<b>ROIN PRODUCTS</b>			
6715 WEST PLANK ROAD PO BOX 11, 61624 TOLL FREE 800-777-ROIN			
NO WARRANTIES OR REPRESENTATIONS ARE MADE EXCEPT AS SPECIFIED ON DRAWINGS OR IN WRITING BY ROIN PRODUCTS			
FOUNDATION ANCHOR BLOCK REV. G PRESUMPTIVE CLAY			
DATE:	REV:	DATE:	REV:
08/24/2008	NA	08/24/2008	NA
DRAWING NO:		REV:	
8090550		3	

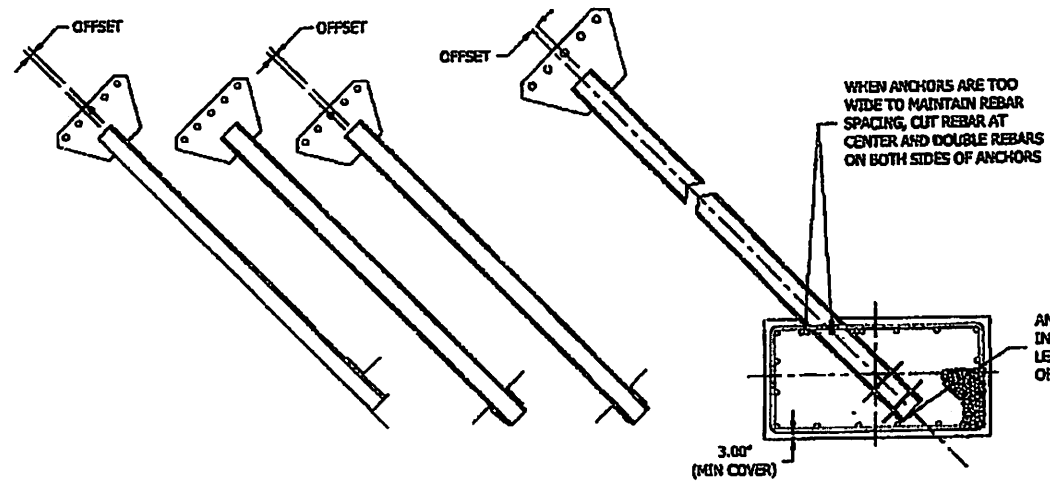






TYPICAL DETAIL

NOTE:  
INSTALL ANCHORS IN BLOCKS WITH EMBEDMENT  
ANGLES ORIENTED AS SHOWN AND WITH P/N AT  
TOP AS SHOWN.



WHEN ANCHORS ARE TOO  
WIDE TO MAINTAIN REBAR  
SPACING, CUT REBAR AT  
CENTER AND DOUBLE REBARS  
ON BOTH SIDES OF ANCHORS

ANCHOR TO BE INSERTED  
INTO CONCRETE BLOCK TO  
LEVEL WITH BOTTOM LAYER  
OF REINFORCING BARS

3.00"  
(MAIN COVER)

FILE NO. Standard-80

REV	DESCRIPTION	CON	CHK	APP
1	AS SHOWN	ML	SM	MA
2	REVISED TO SHOW ANCHOR INSTALLATION DETAIL	MS	MA	ML

DWG REFERENCE




REIN PRODUCTS  
6718 WEST PLAIN ROAD  
P.O. BOX 111804  
TOLL FREE 800-322-9699

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ANCHOR INSTALLATION DETAIL  
ANCHOR INSTALLATION DETAIL

DATE: 0\_11  
CHECKED: WOU  
DATE: Mar/22/1995

ENGR: TWS

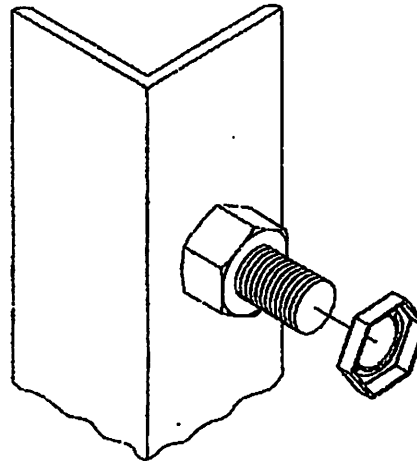
DRAWING NO. A951409


CPY: 3



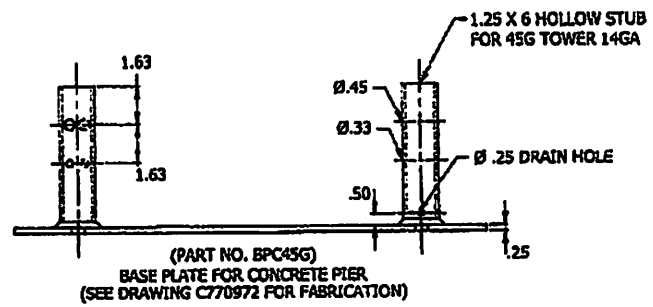
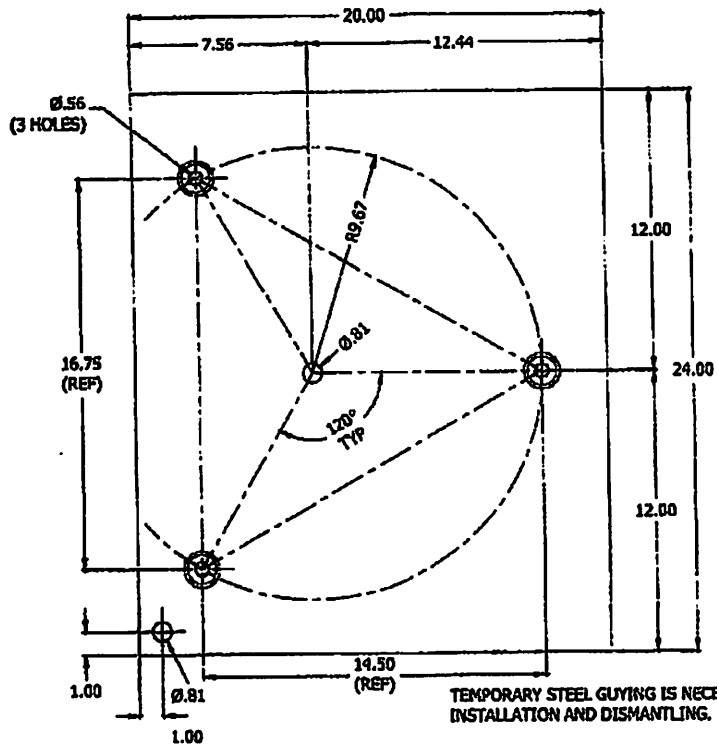
- ASSEMBLY BOLT INSTALLATION**
1. UNLESS OTHERWISE SPECIFIED, ASSEMBLY BOLTS AND ANCHOR BOLTS ARE TO BE TIGHTENED TO A SNUG TIGHT CONDITION (MEMBERS IN FIRM CONTACT) AND MUST INCLUDE A NUT LOCKING DEVICE. NO MINIMUM BOLT TENSION OR TORQUE VALUES ARE REQUIRED. WHEN LOCK WASHERS ARE PROVIDED AS A NUT LOCKING DEVICE, REPLACE ANY DAMAGED WASHERS DUE TO OVER TIGHTENING.
  2. WASHERS ARE TO BE INSTALLED OVER SLOTTED HOLES.

- PAL NUT INSTALLATION**
1. PAL NUTS ARE TO BE INSTALLED AFTER NUTS ARE TIGHT AND WITH EDGE LIP OUT (SEE PICTURE). PAL NUTS ARE NOT REQUIRED WHEN SELF-LOCKING NUTS OR LOCK WASHERS ARE PROVIDED.

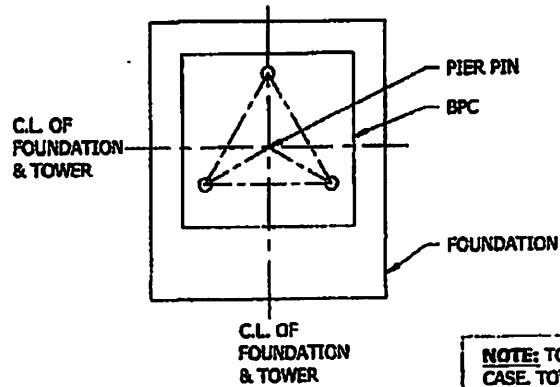


FILE NO.			
REVISION			
REV.	DESCRIPTION	DATE	BY
1	MANUFACTURING	02/01/99	PA
2	FOR BLDG		
 PO BOX 9929 MOBILE, AL 36688-9929 TOLL FREE 800-727-ROHN			
<small>© 1999 ROHN PRODUCTS. ALL RIGHTS RESERVED. THIS DRAWING IS THE PROPERTY OF ROHN PRODUCTS. IT IS TO BE USED ONLY FOR THE PROJECT AND FOR THE SPECIFIC APPLICATION AND LOCATION INDICATED THEREON. NO PARTS OF THIS DRAWING ARE TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.</small>			
<b>BOLT ASSEMBLY INSTALLATION</b>			
DATE:	02/01/99	DATE:	07/23/79
ENGR.:	THS	SHEET #:	1 OF 1
DRAWING NO.:	A790135	REV.	7

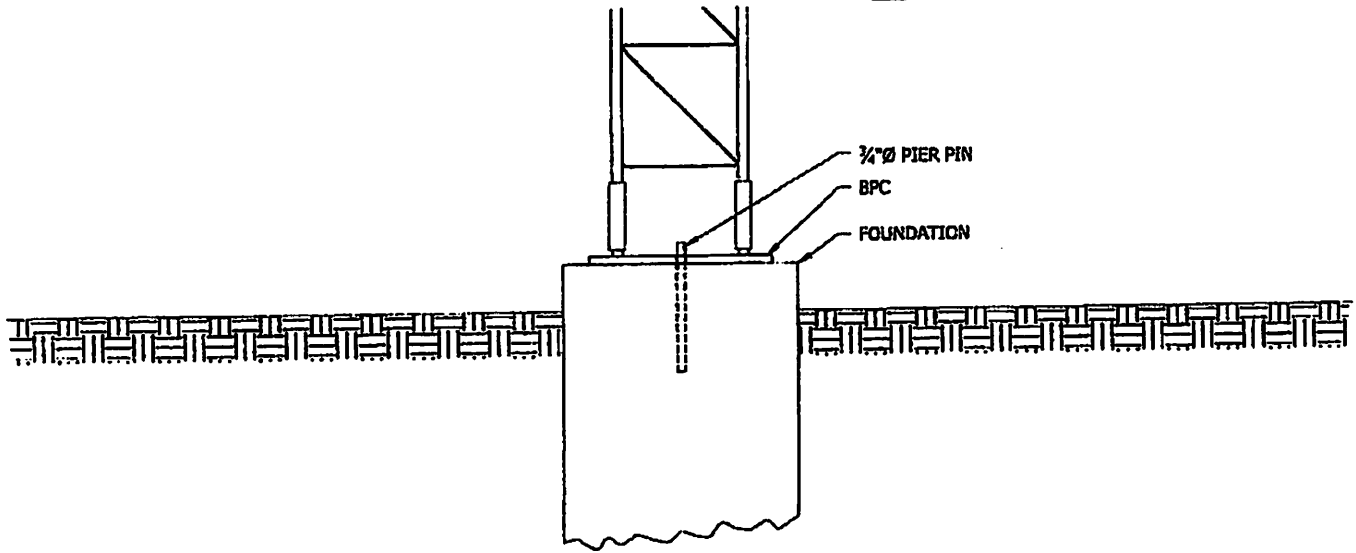
Part No. Standard-45G C770972 0	ENG'D BY: [ ] C770972 6500049	DATE: [ ] 45G CONCRETE BASE PLATE ASSY	REV: 8 C6700545
---------------------------------------	-------------------------------------	---	--------------------



- NOTES:**
1. DUE TO VARIABLES INVOLVED IN ROOF AND OTHER INSTALLATIONS, IT SHALL BE THE CUSTOMER'S OR INSTALLER'S RESPONSIBILITY TO PROVIDE STRUCTURALLY ADEQUATE SUPPORTS FOR PIER & ANCHOR CONNECTIONS. IT MAY ALSO BE NECESSARY FOR THE CUSTOMER OR INSTALLER TO SECURE THE SERVICE OF A LOCAL ENGINEER TO DETERMINE THAT INSTALLATION COMPLIES WITH LOCAL BUILDING CODES.
  2. AFTER GALVANIZING CHECK DRAIN HOLES TO SEE THAT THEY ARE NOT PLUGGED.
  3. FOR USE WITH GUYED AND BRACKETED TOWERS ONLY.



**NOTE: TOWER IS NOT TO STAND UNGUYED IN ANY CASE. TOWER MUST BE TEMPORARILY OR PERMANENTLY GUYED WITH STEEL GUYS AT ALL TIMES.**



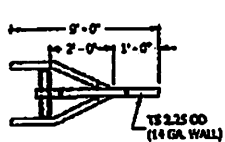
FORM NO.			
Standard-SSV			
REVISED			
REV	DESCRIPTION	DATE	CHK/APP
1	ISSUED	07/11/68	GR/WR
DATE: 06/27/68			

DWG REFERENCE	

**ROHN**  
 PRODUCTS  
 4714 WEST PLAIN ROAD  
 ROCKA, IL 61304  
 TOLL FREE 800-727-ROHN

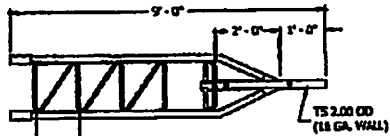
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DWG BPC ASSEMBLY DETAILS			
DWG:	DN	DATE:	07/11/68
DRG'G:	DWS	GR:	GR/WR
QUANTITY NO.	REV.		2
B5680605			

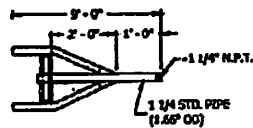


ASSY P/N: 45A03  
1 - 45A03K  
1 - KS150

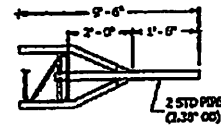
16 N° EACH FOR ALL TOP SECTIONS



ASSY P/N: 45A04  
1 - 45A04K  
1 - KS157

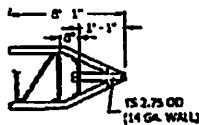


ASSY P/N: 45A07  
1 - 45A07K  
1 - KS158



ASSY P/N: 45A02  
1 - 45A02K  
1 - KS159

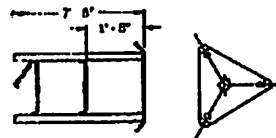
\*NOTE: SPECIFICATIONS OF TOP SECTIONS ARE THE SAME AS SECTION NO. 45 EXCEPT AS NOTED ABOVE.



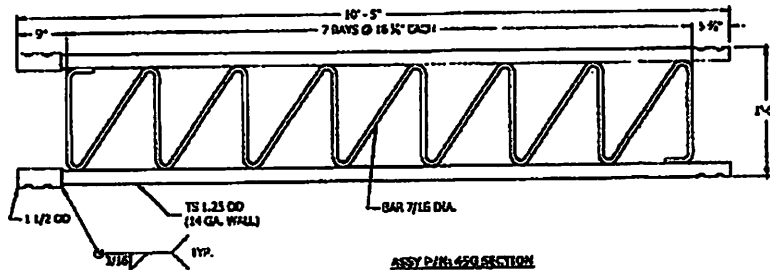
ASSY P/N: 45A05  
1 - 45A05K  
1 - KS162



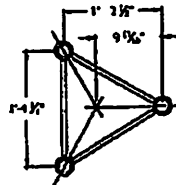
TYPICAL PLAN VIEW  
(FOR ALL SECTIONS EXCEPT 45A04)



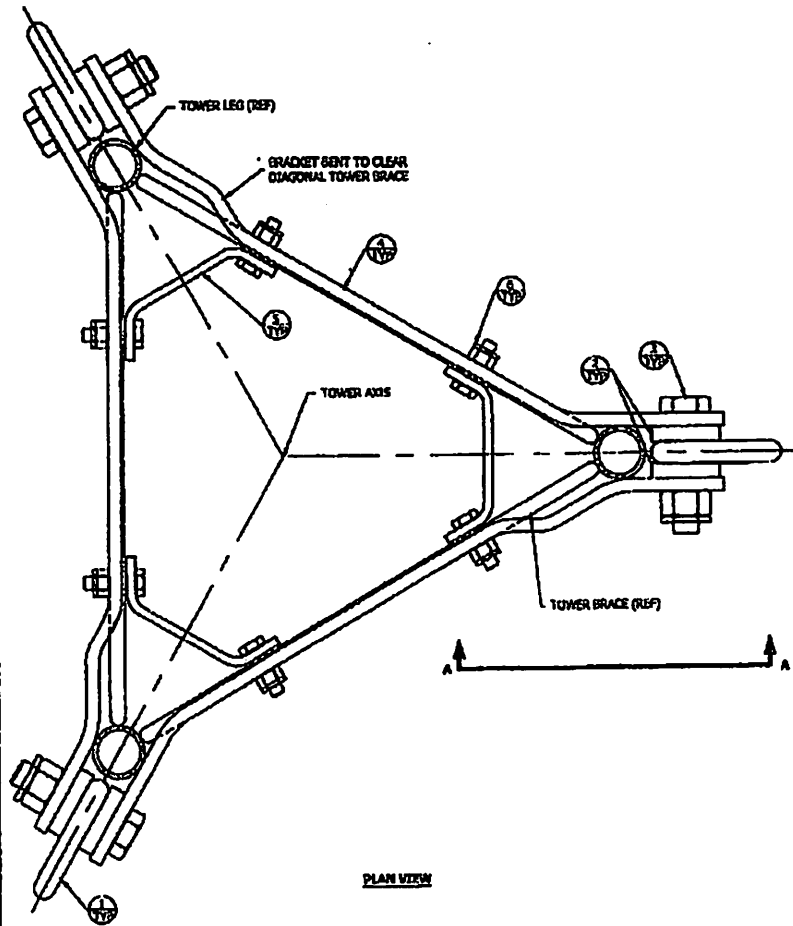
ASSY P/N: 45A06  
1 - 45A06K  
1 - KS161



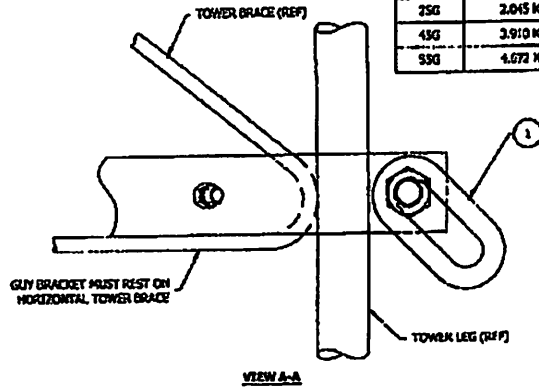
ASSY P/N: 450.6SECTION  
1 - 450.6K  
1 - 450.6X



FILE NO.			
REV			
DATE	BY	CHKD	APP
PO BOX 9399 PEORCA, IL 62661-9399 TEL: 618/265-7407			
ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN INCHES AND DECIMALS THEREOF. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY.			
49G SECTION ASSEMBLY			
DATE	BY	CHKD	DATE
CHKD	HA	CHKD	DATE
DRAWING NO.			REV
DWG-0526			0



PLAN VIEW



VIEW A-A

25G GUY BRACKET ASSEMBLY G45GD - BILL OF MATERIALS			
ITEM	QTY	PART NO.	DESCRIPTION
1	3	G112	LINK G45GD 5" DIA. 7.5' L
2	6	R0083	RINGFILL PL. 3/8" DIA. 5/8"
3	3	210152GA	BOLT ASSY 1/2" X 1 1/2" HCS 45S HDG
4	3	G45GD	BRACKET GUY BAR FORM 25G 5.5'
5	3	R0288	BAR FLAT BRACE 1.5" X 1.5" X 5.5'
6	6	210000GA	BOLT ASSY 3/8" X 1-1/2" HCS GS HDG
7	1	22209A	CARTON FOR G45GD GUY ASSY

45G GUY BRACKET ASSEMBLY G45GD - BILL OF MATERIALS			
ITEM	QTY	PART NO.	DESCRIPTION
1	3	G123	LINK G45G 8.5" DIA. 4.5' L
2	6	R00422	RINGFILL PL. 3/8" DIA. 5/8"
3	3	210072GA	BOLT ASSY 3/8" X 1 1/4" HCS 45S HDG
4	3	G45GD	BRACKET GUY BAR FORM
5	3	R0312	BAR FLAT BRACE 2.5" X 2.5" X 5.5'
6	6	210000GA	BOLT ASSY 3/8" X 1-1/2" HCS GS HDG
7	1	22209A	CARTON FOR G45GD & G45GD

55G GUY BRACKET ASSEMBLY G45GD - BILL OF MATERIALS			
ITEM	QTY	PART NO.	DESCRIPTION
1	3	G123	LINK G45G 8.5" DIA. 4.5' L
2	6	R00424	RINGFILL PL. 3/8" DIA. 5/8"
3	3	210054GA	BOLT ASSY 3/8" X 1 1/4" HCS 45S HDG
4	3	G45GD	BRACKET GUY BAR FORM
5	3	R0312	BAR FLAT BRACE 2.5" X 2.5" X 5.5'
6	6	210000GA	BOLT ASSY 3/8" X 1-1/2" HCS GS HDG
7	1	22209A	CARTON FOR G45GD & G45GD

TENSILE DATA		
GUY BRACKET P/N	MAXIMUM TENSILE SIZE	MINIMUM TENSILE SIZE
G45GD	3/8 TH1	1/4TH-5/16TH1
G45GD	9/16TH1	1/4TH-5/16TH1
G45GD	9/16TH1	1/4TH-5/16TH1

SECTION	MAXIMUM REV "T" VERTICAL PULL	MAXIMUM GUY WIRE SIZE
25G	1.50 KIPS	3/16" EHS
45G	3.40 KIPS	1/4" EHS
55G	3.04 KIPS	5/16" EHS

SECTION	MAXIMUM REV "Q" VERTICAL PULL	MAXIMUM GUY WIRE SIZE
25G	2.045 KIPS	3/16" EHS
45G	3.910 KIPS	1/4" EHS
55G	4.672 KIPS	5/16" EHS

Standard 45G				
REV	DESCRIPTION	DATE	BY	APP
1	ISSUED FOR CONSTRUCTION	04/11/1988	RDG	MS
2	REVISED TO REFLECT CHANGES TO GUY BRACKET ASSEMBLY	04/11/1988	RDG	MS
3	REVISED TO REFLECT CHANGES TO GUY BRACKET ASSEMBLY	04/11/1988	RDG	MS

DWG REFERENCE	

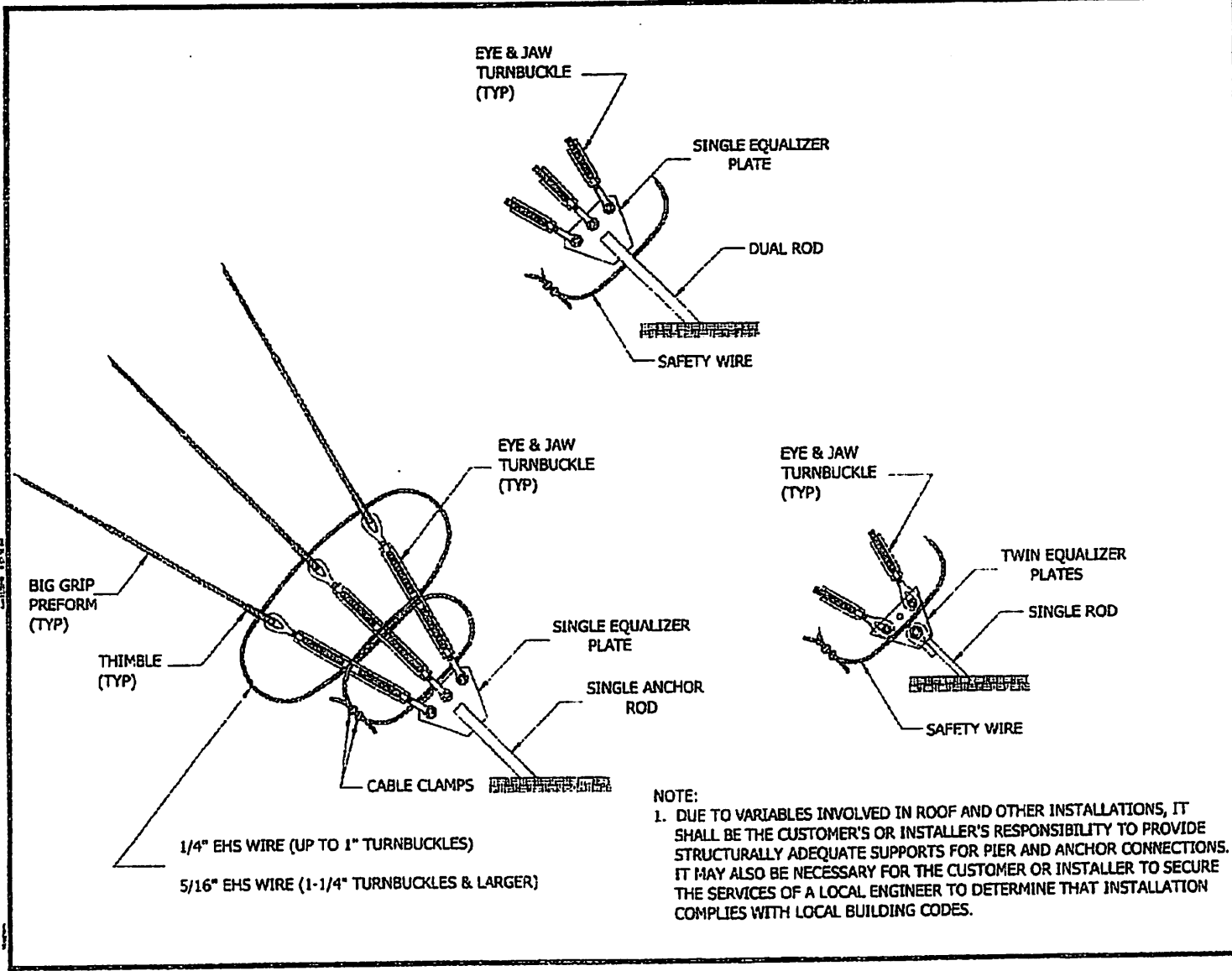
DWG REFERENCE	

DWG REFERENCE	

**ROHN**  
 PRODUCTS  
 6716 HESTER PLANK ROAD  
 PEOPLES, D. C. 21134  
 TOLL FREE 800-767-8689

GUY BRACKET ASSY & HARDWARE  
 25, 45, 55 TOWERS

DATE: WOLU	DATE: GPH	DATE: APR 11/1988
ENGR: RDG		
DRAWING NO: C870710		REV: 7



FILE NO				
Standard-80				
REVISIONS				
REV	DESCRIPTION	DATE	BY	APP
7	REVISION BY REVISED	2/21	RJA	RAA
8	DATE: REVISED	2/21	RJA	RAA
9	DATE: REVISED			
DRAWING REFERENCE				
<p><b>ROHN</b>          PRODUCTS          6715 WEST FLANK ROAD          TROPICAL, IL 61804          TOLL FREE 800-727-4074</p>				
<small>THIS DRAWING IS THE PROPERTY OF ROHN PRODUCTS. IT IS TO BE USED ONLY FOR THE PROJECT AND SPECIFICATIONS FOR WHICH IT WAS PREPARED. IT IS NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF ROHN PRODUCTS.</small>				
TURNBUCKLE SAFETY METHOD				
DATE:	0/00	0/01	DATE:	Mar/04/1998
BY:	TWS			
DRAWING NO:	8580324		REV:	8



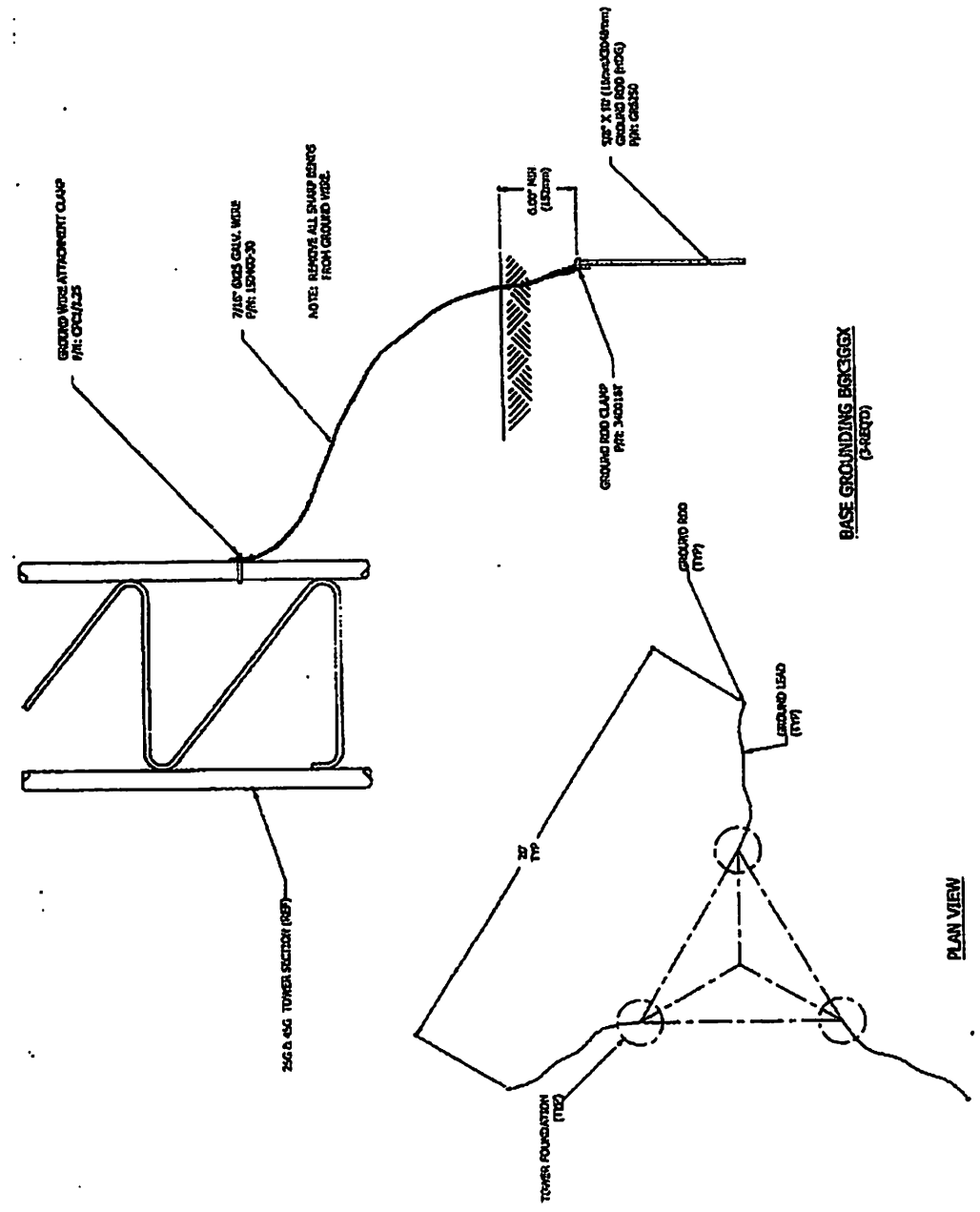


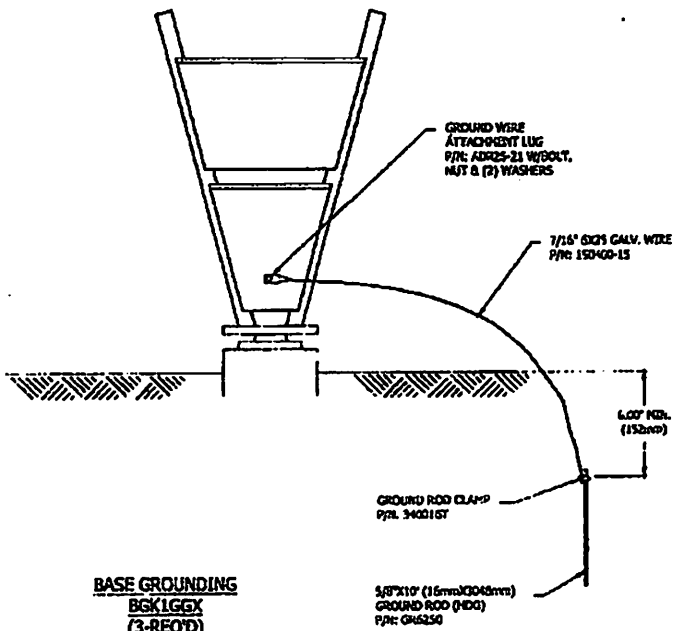




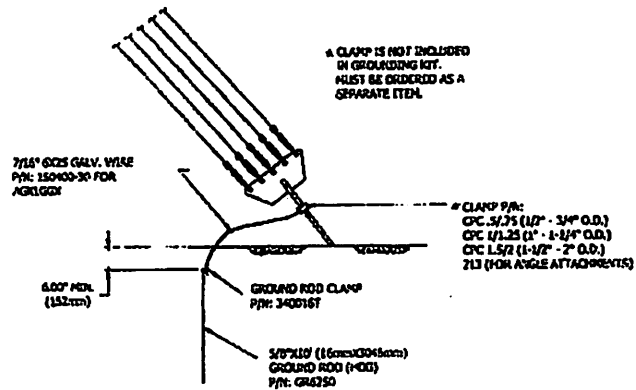
PROJ. NO. 60981129 SHEET NO. 2 DATE 10/1/81 DRAWN BY J. G. S.	TITLE KIT BASE GRD 25 A 43 TOWER
CHECKED BY DATE DESIGNED BY DATE	DATE PREPARED SHEET # OF #
CONTRACT NO. 60981129	

**ROBIN**  
 PROJECTS  
 PO BOX 1200  
 PRINCETON, N.J. 08540-1200  
 TEL: 609/524-1000  
 FAX: 609/524-1001  
 CABLE: ROBINPROJ  
 CREDIT CARD: 001 234 567 890





NOTE: REMOVE ALL SHARP BENDS FROM GROUND WIRE.



APPLICATION  
80 & 90 TAPERED BASES

REVISIONS				
NO.	DESCRIPTION	DATE	BY	APP.
1	ISSUE FOR PRODUCTION			
2	REV. 01/20			

**ROHN**  
PRODUCTS

PO BOX 2929  
MORRIS, IL 62454-0299  
TEL: 618-262-1544

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REV. G 80 & 90 TOWERS

DATE:	BY:	CHK'D:	APP.	DATE:	CHK'D:
DRAWN:			CHECKED:		
DWC			I OF 1		
DRAWING NO:				REV:	
8070996				3	



**Special Use Permit Application - Form 0300**  
 Department of Planning and Community Development  
 P.O. Box 217, Independence, VA 24348  
 Voice 276-773-200 Fax-276-773-3673

**COMPLETE ALL INFORMATION  
 INCOMPLETE APPLICATIONS CAN NOT BE ACCEPTED**

The Planning Commission will study the Special Use Permit or Comprehensive Plan (15.2-2232) review requests to determine the need and justification for the change in terms of public health, safety, and general welfare. Please answer the following as thoroughly as possible. Use additional space if necessary.

It is the Applicant's responsibility to ensure that the project is feasible. A consultation with the Planning Director is encouraged to ensure the application is complete.

1. The Applicant is the:       Owner       Agent for Owner

<b>Applicant: Last Name, First</b>	Giga Beam Networks	
<b>Mailing Address:</b>	PO Box 135 Rich Creek, VA 24147	
<b>Phone Number:</b>	540-726-2317	
<b>Email Address:</b>	accounting@gigabeam.net	
<b>Property Owner: (if Different from Above)</b>	Richard "Rick" McLean	
<b>Mailing Address:</b>	77 Woodbridge Lane, Independence, VA	
<b>Phone Number:</b>	276-773-3526	
<b>Email Address:</b>	n/a	
<b>Tax Map Number:</b>	54-A-6	<b>Parcel Size in Acreage:</b> 57.995

2. Describe how the subject property(ies) is currently being used.

Farm / Mountain Land

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3. Describe the proposed project (uses to be changed, added, or expanded as part of the project, including the number of employees and hours of operation)

Construct a 45G 140' Tower for the purpose of providing wireless internet coverage to residents currently uncovered by the projected fiber build. Construction will require 6 people between 40-60 hours.

4. List and describe each proposed structure to be constructed or enlarged as part of this project. Each description must include the use of each structure, heights (ft. or stories), and sizes (sq. ft.) based on outside dimensions.

Construct one 140 foot tower which is a 16 inch triangle with guyed wires extending 112 feet. (See tower diagram attachment). Solar panels will be on the ground to provide power.

5. List and describe the impact(s) of the request on the property itself, the adjoining properties, and the surrounding area, as well as the impacts on public services and facilities, including noise, water/sewer, roads, schools, churches, business, parks/recreation and fire, and rescue.

Some trees will be cleared for the tower built. There will be no environmental impact. The tower will provide several houses with internet service.

6. Is the project use consistent with the Comprehensive Plan? Specifically, reference comprehensive plan goals.

Yes, the Grayson County Comp Plan specifically references the support of broad band & wireless internet in Chpt. 5-Economy 5-11 Strategies reference, support efforts, where feasible, to encourage the developm of advanced communication infrastructure broadband & wireless internet. Expansions of fiber and wireless internet will help impact small business development, especially for small businesses that operate outside of major corridors and towns.

7. Will the project require a permit from other licensing agencies (e.g. Department of Environmental Quality, VA Department of Energy, VA Department of Social Service, Virginia Department of Motor Vehicles).  Yes  No If yes, please explain.
- 
- 
- 

8. **SITE PLAN**

The level of needed detail may vary depending on the nature, size, and complexity of the proposed project. The Planning Director may grant exemptions or require additional information depending on the nature of the project. The following items shall be addressed:

- Title of the Project
- Lot size in acres, showing right of ways, easements, road access, entrances
- Zoning District
- List of all adjoining properties with names of owners, tax map numbers, and those directly across any public right-of-way, including those in adjacent jurisdictions
- Utilities
- Parking areas
- Vegetative Buffers
- Natural water courses and 100-year flood plain limits, if applicable
- Fences
- Proposed and Existing structure locations
- Show linear distance from proposed and existing structures to property lines and roadways

An aerial site plan is preferred and is available at the Grayson County GIS at <https://www.webgis.net/va/grayson/>.

For Commercial and Industrial projects, a stamped (engineered) site plan is required to address the requirements above and other items deemed necessary by the Planning Director. Examples of requests may be typography of the project area with contours intervals of two feet or less, approximate location and sizes of sanitary and storm sewers, water mains, culverts, and underground structures, existing or planned, in or near the project, traffic analysis or traffic impact study.

*The Director may waive requirements for items determined unnecessary to review the project or proposal, based on the proposal application submission.*



**APPLICATION PROCESS**

The Special Use Permit application will be reviewed by the Grayson County Planning Commission at their regular monthly meeting. If recommended for approval, the application will proceed to a review by the Grayson County Board of Supervisors. The application may take 2 - 3 months for approval. The State Code of Virginia, 1950 requires that a Public Hearing be held for both the Planning Commission and the Board of Supervisors to review a Special Use Permit. A Public Hearing notice will be issued in the paper announcing the Public Hearing and all adjoining landowners will be notified by certified mail. In order to process the request a complete application, required to rezone fee, and a current site plan or survey representing the property must be submitted to the Zoning Department at least 3 weeks prior to the Planning Commission meeting date.

Applicants are encouraged to research the potential of the site for the ability to meet all local, state and federal regulations prior to applying for a Special Use Permit. This should include a review of the project by Virginia Department of Transportation for the ability to meet commercial entrance requirements, Virginia Department of Health and/or provider of well and septic services, discussion with the Grayson County Building Official, review of Erosion and Sediment Control Plan where grading is involved and conversations with adjacent landowners about any affect on their property.

Any changes to the application once it is received must be submitted at least 7 days prior to the meeting of the Planning Commission. The Applicant or a representative must be present at the meeting at which the application for rezone is considered. If the decision of the Planning Commission or Board of Supervisors is to be appealed, the Applicant should submit an appeal of the decision per State Code of Virginia, 1950, as amended.

**APPLICATION FEES**

Must accompany the application and are as follows:

- Special Use Permit Fee \$55.00 + certified letter fee

The application fee will be assessed based on (cost of certified letters) x (number of the properties) required to be sent to adjoining landowners as required by the Code of Virginia for Public Hearing notice requirements.

**APPLICANT AND OWNER CERTIFICATION OF SIGNATURE**

I certify that the information listed on this application is true and correct to the best of my belief and knowledge. By signing this application, I agree to permit duly authorized representative(s) of any regulatory or advisory agency to enter upon the subject property at reasonable times to inspect and photograph site conditions, both in reviewing a proposal to issue a permit(s) and after permit issuance to determine compliance with the permit

*If the Applicant and Owner are different individuals, both must sign. If Applicant is the same, please sign as Owner.*

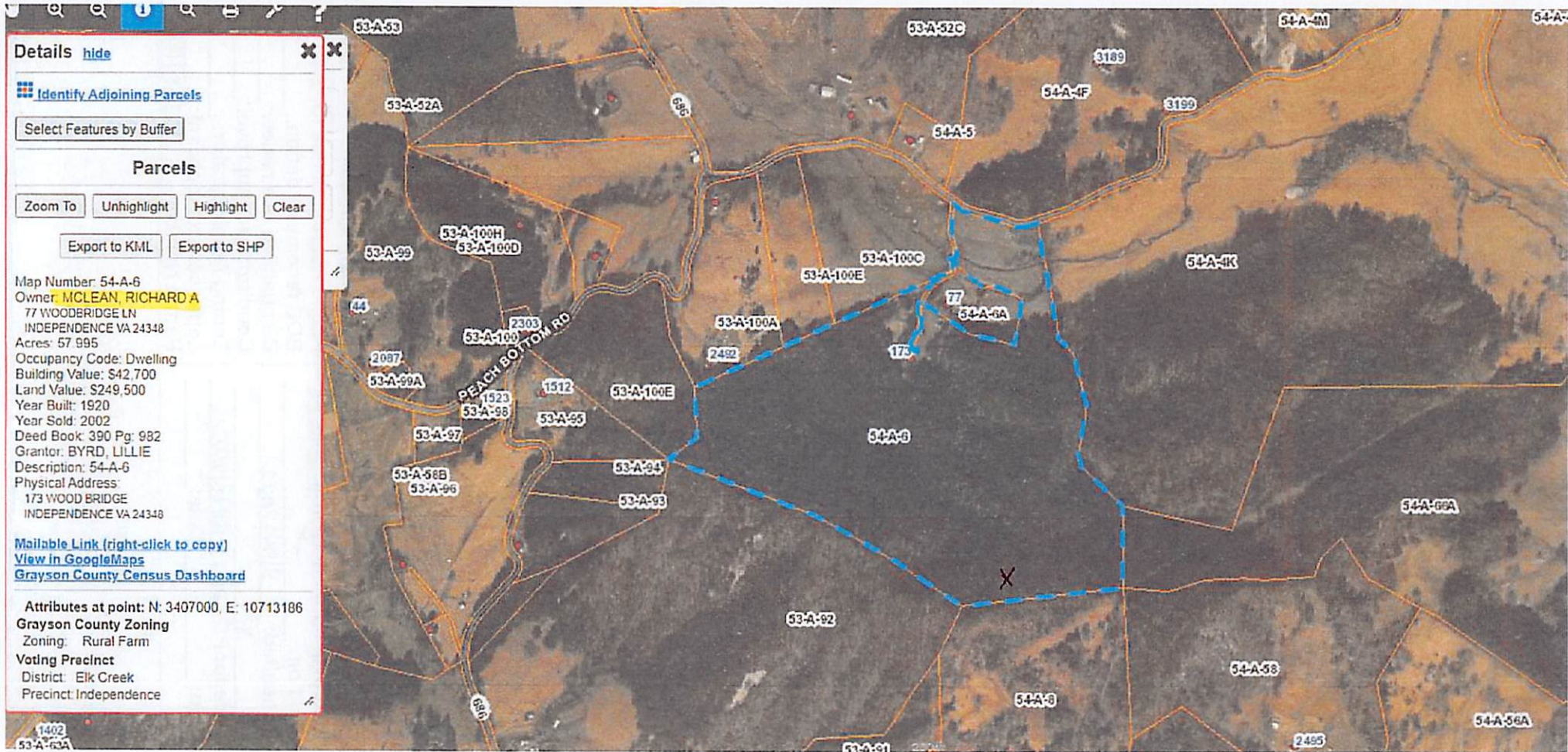
Applicant Signature Giga Beam Networks Date: \_\_\_\_\_

Owner Signature [Signature] Date: 10-26-22

STAFF NOTES:

OFFICE USE ONLY - Special Use Permit Application - Form 0300 - Revised 05/07/12	
Property ownership and zone review <input checked="" type="checkbox"/>	Floodplain Review: <u>N/A</u>
Application, and site plan submitted on <u>10/26/2022</u>	Public Hearing notice for BOS sent: <u>11/17/2022</u>
Fee: <u>WAIVED</u> Paid on: _____	BOS recommendation: _____ Date: _____
Building Official Consulted: <u>11/04/2022</u>	Disqualified use review: _____
VDOT Consulted: <u>N/A</u>	Conditions for approval: _____
Public Hearing notice for PC sent: <u>10/28/2022</u>	Zoning Administrator: _____
PC Recommendation: _____ Date: _____	Letter sent to applicant: _____
	Permit Number: <u>20220183</u>





X = Tower



Details [hide](#)

[Identify Adjoining Parcels](#)

Select Features by Buffer

Parcels

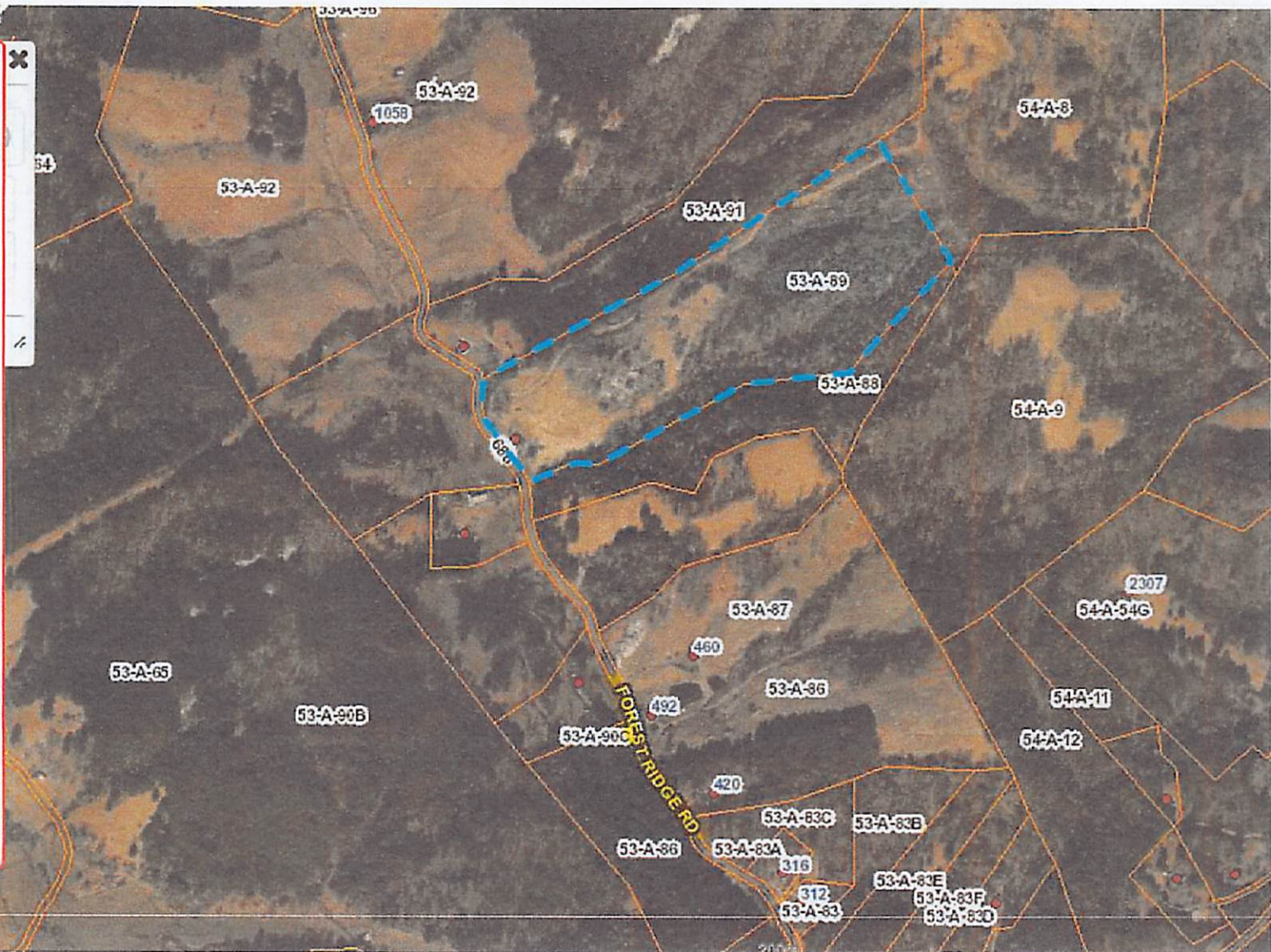
Zoom To Unhighlight Highlight Clear

Export to KML Export to SHP

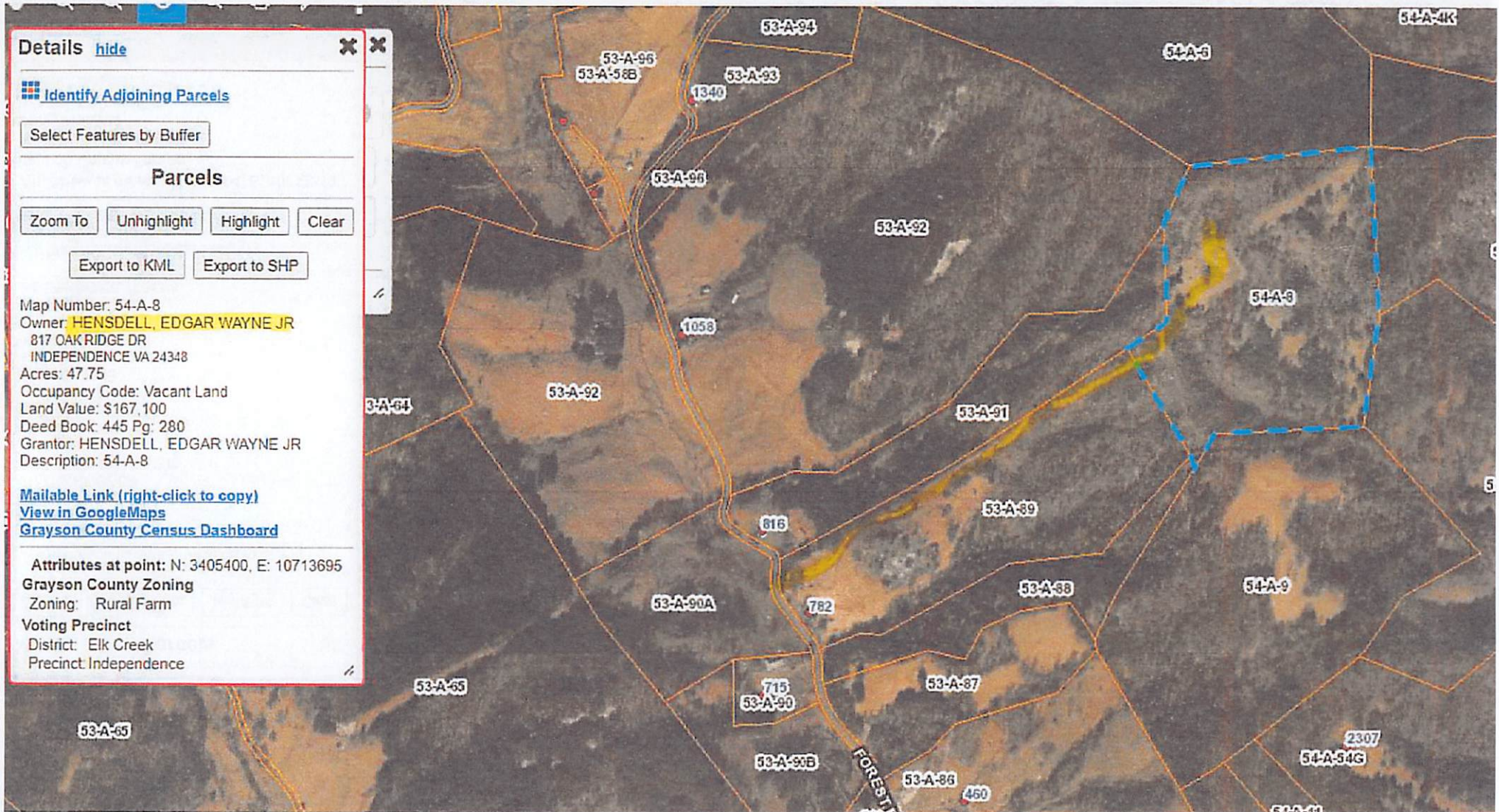
Map Number: 53-A-89  
Owner: **ILA MAE HENSDALL**  
817 OAK RIDGE DR  
INDEPENDENCE VA 24348  
Acres: 28.75  
Occupancy Code: Dwelling  
Building Value: \$21,300  
Land Value: \$134,500  
Year Built: 1945  
Deed Book: 240 Pg: 579  
Description: 53-A-89  
Physical Address:  
782 FOREST RIDGE  
INDEPENDENCE VA 24348

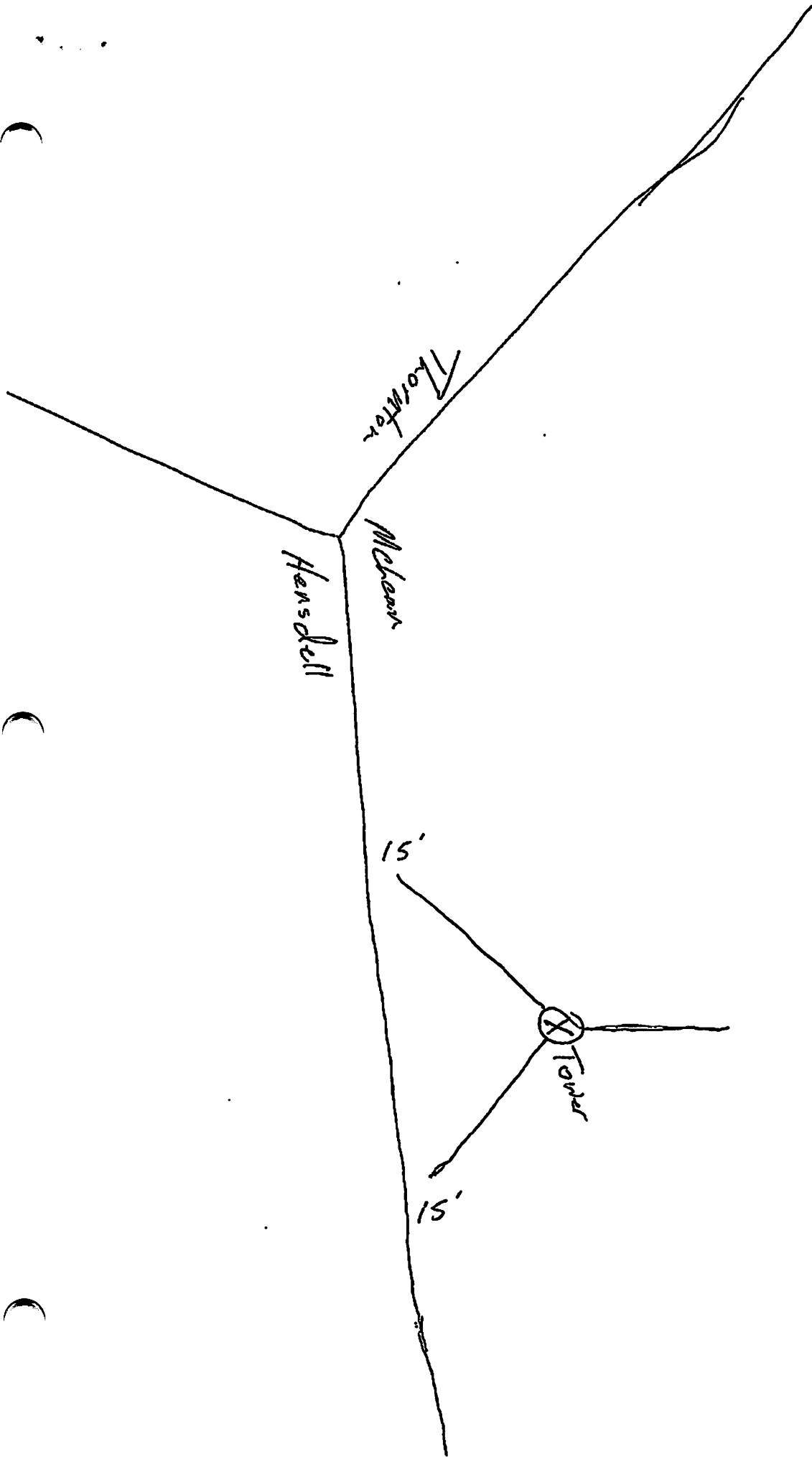
[Mailable Link \(right-click to copy\)](#)  
[View in GoogleMaps](#)  
[Grayson County Census Dashboard](#)

Attributes at point: N: 3404394, E: 10712319  
Grayson County Zoning  
Zoning: Rural Farm  
Voting Precinct  
District: Elk Creek  
Precinct: Independence

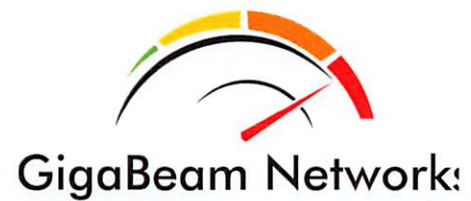
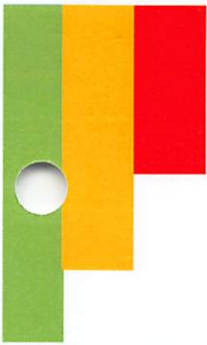












Grayson County Planning & Development Department  
Jada C Black  
PO Box 217  
Independence, VA 24348

November 10, 2022

Dear Members of the Zoning Board:

GigaBeam Networks respectfully requests variance for the setback distance listed in county ordinances 3-14 and 3-15.8 regarding the distance from any adjacent property line or public street. If we were required to adhere to this distance, due to the mountainous terrain, GigaBeam would relinquish the height needed for the tower to effectively service residents with internet service. We are also asking for variance regarding the fence requirement listed in county ordinance 3-15.9 as relation to the security fencing. These permits are for private property in secluded locations. Additionally with the rugged terrain, there would be no expectation of anyone around the towers.

GigaBeam will adhere to all other requirements including section 3-15.12 regarding the removal of abandoned antennas and towers, section 3-15.11 regarding the use of the towers by the county at no cost, and section 3a which states the towers will meet FAA regulations. The towers will initially be solar powered and will not have electrical lines to them.

GigaBeam greatly appreciates the consideration given to this request as we continue our combined efforts to provide internet access to Grayson County residents. If you have further questions or I may be of any assistance, please do not hesitate to contact me either by email or by phone.

Sincerely,

Greg Hedrick  
Director of Construction Projects & Field Services  
GigaBeam Networks  
[greggh@gigabeam.net](mailto:greggh@gigabeam.net)  
540-726-2317 ext. 255

---

GigaBeam Networks  
PO Box 135  
Rich Creek, VA 24147  
[www.gigabeam.net](http://www.gigabeam.net)

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This content is from the eCFR and is authoritative but unofficial.

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## **Title 47 - Telecommunication**

### **Chapter I - Federal Communications Commission**

#### **Subchapter A - General**

#### **Part 17 - Construction, Marking, and Lighting of Antenna Structures**

#### **Subpart B - Federal Aviation Administration Notification Criteria**

Authority: 47 U.S.C. 154, 301, 303, 309.

### **§ 17.7 Antenna structures requiring notification to the FAA.**

A notification to the FAA is required, except as set forth in paragraph (e) of this section, for any of the following construction or alteration:

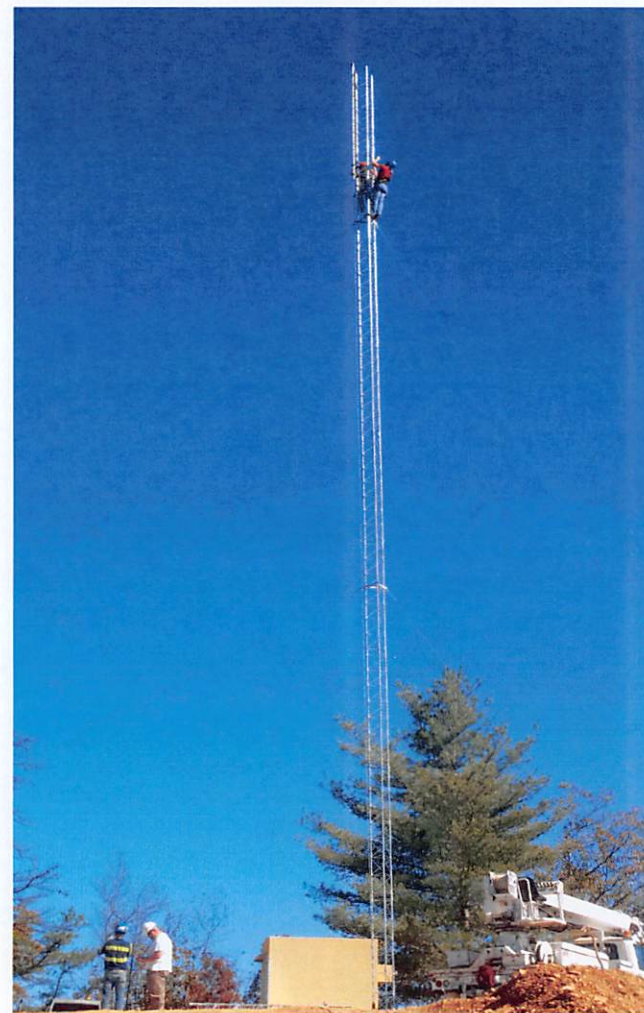
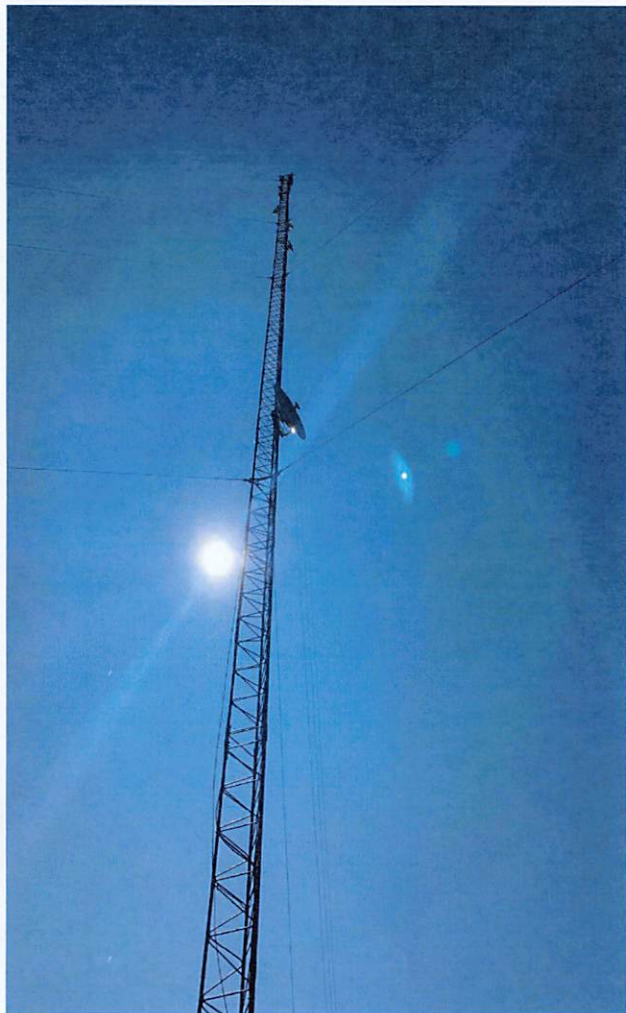
- (a) Any construction or alteration of more than 60.96 meters (200 feet) in height above ground level at its site.
- (b) Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:
  - (1) 100 to 1 for a horizontal distance of 6.10 kilometers (20,000 feet) from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 0.98 kilometers (3,200 feet) in actual length, excluding heliports.
  - (2) 50 to 1 for a horizontal distance of 3.05 kilometers (10,000 feet) from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 0.98 kilometers (3,200 feet) in actual length, excluding heliports.
  - (3) 25 to 1 for a horizontal distance of 1.52 kilometers (5,000 feet) from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.
- (c) When requested by the FAA, any construction or alteration that would be in an instrument approach area (defined in the FAA standards governing instrument approach procedures) and available information indicates it might exceed an obstruction standard of the FAA.
- (d) Any construction or alteration on any of the following airports and heliports:
  - (1) A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications;
  - (2) A military airport under construction, or an airport under construction that will be available for public use;
  - (3) An airport operated by a Federal agency or the United States Department of Defense.
  - (4) An airport or heliport with at least one FAA-approved instrument approach procedure.
- (e) A notification to the FAA is not required for any of the following construction or alteration:
  - (1) Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation;

- (2) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA-approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose;
- (3) Any antenna structure of 6.10 meters (20 feet) or less in height, except one that would increase the height of another antenna structure.

Note to § 17.7: Consideration to aeronautical facilities not in existence at the time of the filing of the application for radio facilities will be given only when proposed airport construction or improvement plans are on file with the Federal Aviation Administration as of the filing date of the application for such radio facilities.

[39 FR 7581, Feb. 27, 1974, as amended at 39 FR 26157, July 17, 1974; 42 FR 54823, Oct. 11, 1977; 42 FR 57127, Nov. 1, 1977; 79 FR 56986, Sept. 24, 2014]

Photo Simulations





**From:** cdavis@graysoncountyva.gov  
**Sent:** Friday, November 4, 2022 2:05 PM  
**To:** jblack@graysoncountyva.gov  
**Subject:** towers

Jada,

This is the code language for the towers.

**SECTION 3108  
TELECOMMUNICATION AND BROADCAST TOWERS  
[BS] 3108.1 General.**

Towers shall be designed and constructed in accordance with the provisions of TIA-222. Towers shall be designed for seismic loads; exceptions related to seismic design listed in Section 2.7.3 of TIA-222 shall not apply. In Section 2.6.6.2 of TIA 222, the horizontal extent of Topographic Category 2, escarpments, shall be 16 times the height of the escarpment.

**Exception:** Single free-standing poles used to support antennas not greater than 75 feet (22 860 mm), measured from the top of the pole to grade, shall not be required to be noncombustible.

**[BS] 3108.2 Location and access.**

Towers shall be located such that guy wires and other accessories shall not cross or encroach on any street or other public space, or over above-ground electric utility lines, or encroach on any privately owned property without the written consent of the owner of the encroached-upon property, space or above-ground electric utility lines. Towers shall be equipped with climbing and working facilities in compliance with TIA-222. Access to the tower sites shall be limited as required by applicable OSHA, FCC and EPA regulations.

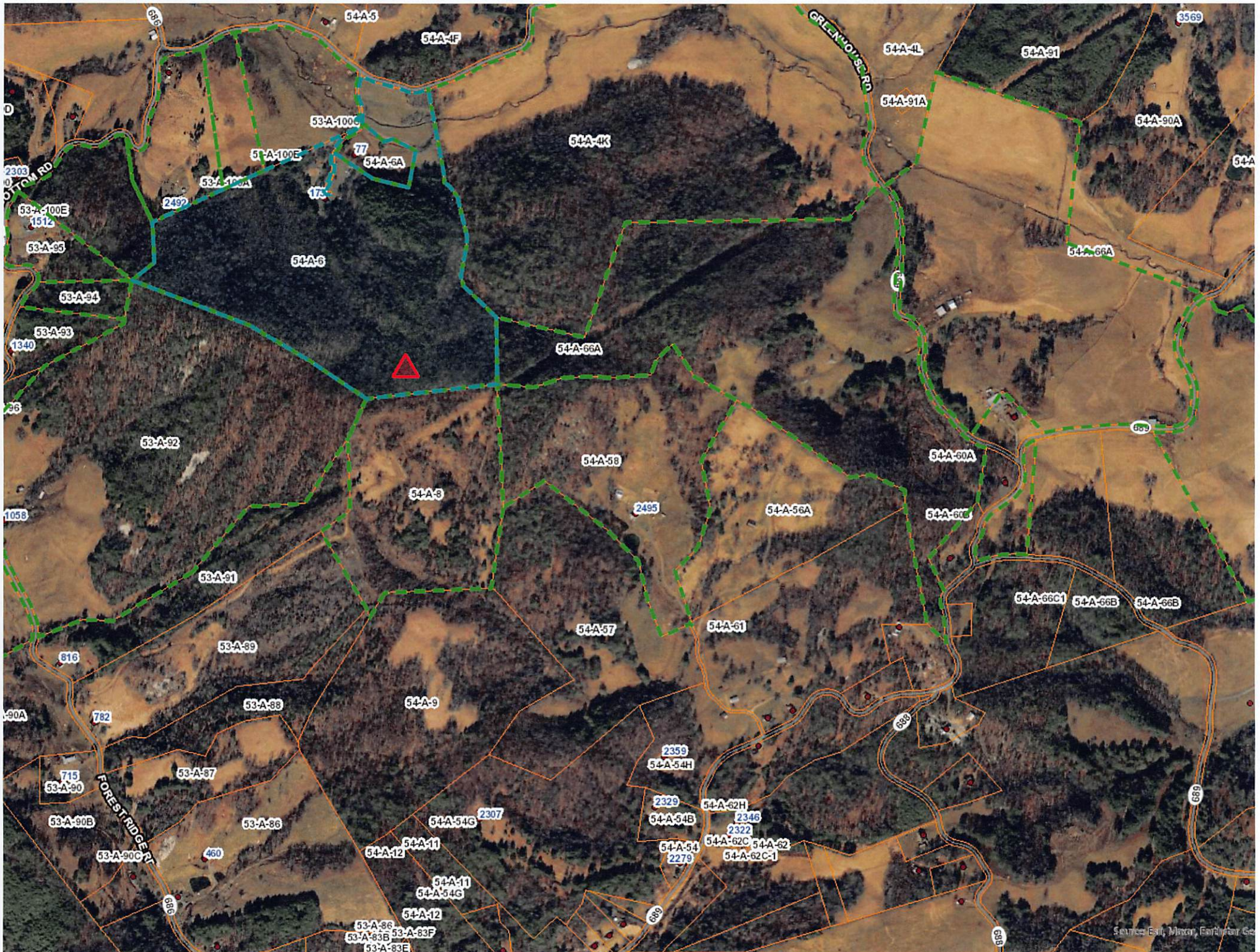
Thank you,

***Chris Davis***

Grayson County Building Official  
Grayson County Building Department  
P.O. Box 217  
Independence, VA 24348  
Phone: 276-773-2322  
[cdavis@graysoncountyva.gov](mailto:cdavis@graysoncountyva.gov)









1560 FT

654

McClellan Tower

Grayson Consulting Service

686

Tall Oaks Ln