

**WHITLEY COUNTY BOARD OF ZONING APPEALS
STAFF REPORT**

19-W-SE-10 **SPECIAL EXCEPTION**
New Singular Wireless PCS, LLC
10800 S. 700 East

OCTOBER 22, 2019
AGENDA ITEM: 6

SUMMARY OF PROPOSAL

Current zoning: AG, Agricultural
Property area: 38.47 acres

The petitioner, lessee of the subject property, is requesting special exception approval for a communications tower to be constructed on the subject property located on west side of South 700 East, approximately 1,300' north of State Road 114 in Jefferson Township. The property is currently improved with a single-family dwelling and a barn, and is roughly half-wooded. The tower would be located about 290' south of the north property line.

The proposal is for a 199' tall monopole tower, inclusive of the lightning rod, within an 80' X 80' leased equipment compound (additional acreage is to be leased for the access drive). The site of the tower and equipment would be 70'x70' and enclosed by an 8' tall chain link and vinyl slats fence topped with barbed wire (9' total height). Evergreens (American Arborvitae) are to be installed on 10' centers around the perimeter of the fence.

A 12' wide gravel access drive located within an access/utility easement would be constructed from 700 East to the tower site.

In the AG, Agricultural District, communication towers require a special exception through the Board of Zoning Appeals, and the requirements of Section 5.16, Telecommunication Facilities Standards, apply.

REVIEW CRITERIA

Indiana Code §36-7-4-918.2 and Section 10.9(A) of the Zoning Code authorize the Board to review special exceptions and state the criteria listed below upon which the Board must base its review. Staff's comments/proposed findings of fact under each criterion.

- 1. The special exception shall not involve any elements or cause any condition that may be dangerous, injurious, or noxious to any other property or persons, and shall comply with the performance standards;**

The proposed monopole tower, in conjunction with the various required setback and development standards, is designed to minimize danger to other property and person by avoiding collapse and mitigating injury if a collapse does occur. More generally, communications towers typically do not include noxious elements and would be expected to comply with the specific performance standards of §5.7, with the following comment:

"B. Electrical Disturbance: No use on a property shall cause electrical disturbance adversely affecting radio, television or other equipment in the vicinity."

Telecommunications towers of all kinds can produce interference to radio, television, and other equipment in the area. However, the zoning code is specific in stating that no use shall cause "electrical disturbance," which, for example, may occur when using unshielded electric industrial equipment. Resolving radio signal interference caused by other radio sources should typically fall under the authority of the Federal Communications Commission.

2. The special exception shall be sited, or oriented and landscaped to produce a harmonious relationship of building and grounds to adjacent buildings and properties;

The proposed tower appears to comply with the landscaping and siting/setback requirements of the code.

3. The special exception shall produce a total visual impression and environment that is consistent with the environment of the neighborhood;

A telecommunications tower is an obviously different structure than the residences, horse stables, and farm buildings in the immediate neighborhood and so would have a different visual impression than those structures. However, given that the need for a telecommunications tower in this vicinity has been indicated by the petitioner, the Board should consider whether the proposed monopole design would be more or less visually consistent than other tower designs and heights that may be proposed to fulfill the stated need.

4. The special exception shall organize vehicular access and parking to minimize traffic congestion in the neighborhood; and

The proposed communication tower would likely not create traffic congestion or access problems since there is negligible traffic generated from this use.

5. The special exception shall preserve the purpose of this Ordinance as stated in Section 1.4.

For the Board's reference, the following is Section 1.4 of the Ordinance:

This Ordinance is intended to guide the growth and development of the County in accordance with the Whitley County Comprehensive Plan and for the following purpose.

- A. *To secure adequate light, air, and convenience of access; and safety from fire, flood, and other dangers;*
- B. *To promote the public health, safety, comfort, convenience, morals and general welfare;*
- C. *To plan for the future development of the County to the end;*
 - 1. *That the community grows only with adequate public ways, utility, health, educational, and recreational facilities;*
 - 2. *That the needs of agriculture, industry, and business be recognized in future growth;*
 - 3. *That residential areas provide healthful surroundings for family life;*
 - 4. *That the growth of the community is commensurate with and promotes the efficient and economical use of public funds; and*
 - 5. *That the community strives for high aesthetic value, quality planning and design.*

The Comprehensive Plan generally does not give recommendations on wireless facilities, but it does give general recommendations in Objectives 4.4 and 4.7 about promoting infrastructure, particularly broadband infrastructure, for economic development. Objective 1.6 discusses protection of "rural character" from suburban or urban development, but telecommunications towers do not obviously fall into such development types.

For convenience, Staff suggests that the purposes listed in §1.4 might be narrowed to striving for high aesthetic value and the promotion of public comfort and convenience as the primary considerations for the Board in this criterion. However, other purposes of course may factor into the Board's decision and findings.

SUGGESTED CONDITIONS

If the Board moves to grant the special exception, the following are suggested conditions of the approval:

1. The Special Exception is granted as presented and per the site plan.

In the case of either an approval or denial, it is suggested that the Board formally delegate authority to the Staff and Legal Counsel to cause Findings of Fact to be prepared in support of the Board's decision.

Date report prepared: 10/17/19.

BOARD OF ZONING APPEALS ACTION

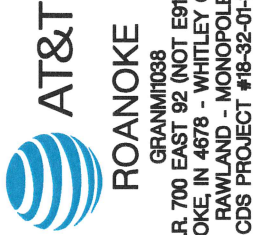
Motion:

By:

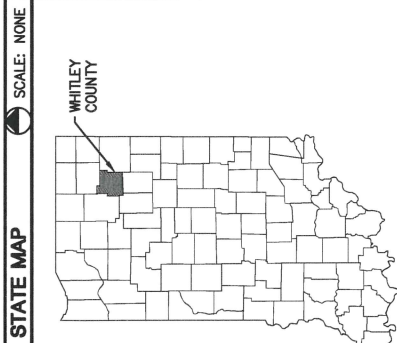
Second by:

Vote: Deckard Denihan Lopez Wilkinson Wright

<i>Yes</i>					
<i>No</i>					
<i>Abstain</i>					



ROANOKE
 GRANMI038
 SOUTH CR. 700 EAST 92 (NOT E911 ADDRESS)
 ROANOKE, IN 46783 - WHITLEY COUNTY
 RAWLAND - MONOPOLE
 CDS PROJECT #18-32-01-30



SITE LOCATION INFORMATION

LATITUDE: N41° 00' 32.78" (41.009106°)
 LONGITUDE: W85° 21' 28.08" (-85.3578°)
 ELEVATION AT GRADE: 830.9
 TOWER TYPE: 195' MONOPOLE

PROJECT TEAM

CUSTOMER:
 AT&T
 220 N. MERIDIAN ST., RM 1800
 INDIANAPOLIS, IN 46204

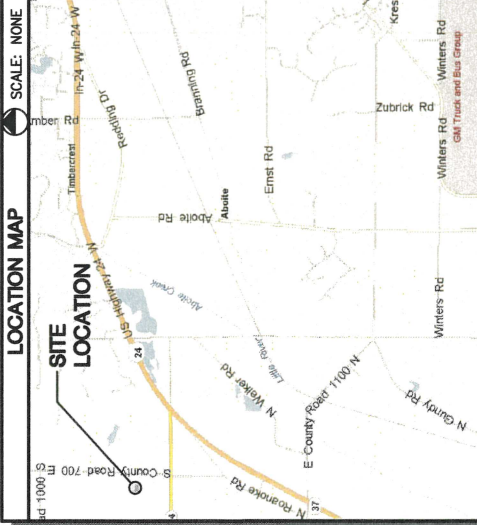
APPLICANT:
 BLACK & VEATCH
 3811 ILLINOIS RD., SUITE 100
 FORT WAYNE, IN 46804

PROPERTY OWNER:
 GALE E. & MARTHA A. RUST
 10900 SOUTH C.R. 700 EAST
 ROANOKE, IN 46783
 (260) 672-3331

DESIGN FIRM:
 RAW WIRELESS SERVICES
 1520 DEVELERS ROAD
 INDIANAPOLIS, IN 46227
 BRANDON WRIGHT
 (317) 363-7307

SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	A
N-1	GENERAL NOTES	A
N-2	GENERAL NOTES	A
C-1.0	PARTIAL SITE PLAN	A
C-1.1	COMPOUND PLAN	A
C-1.2	LANDSCAPING PLAN & DETAILS	A
C-2.0	ELEVATION & DETAILS	A
C-3.0	WC CABINET & PLATFORM DETAILS	A
C-3.1	GENERATOR & PLATFORM DETAILS	A
C-4.0	FENCE DETAILS	A
C-4.1	DETAILS	A
C-4.2	DETAILS	A
C-5.0	ANTENNA DETAILS	A
C-6.0	ONE-LINE RISER DIAGRAM	A
C-6.1	ELECTRICAL DETAILS	A
C-7.0	GROUNDING PLAN & DETAILS	A
1 OF 3	TOPOGRAPHIC SURVEY (FOR REF ONLY)	-
2 OF 3	TOPOGRAPHIC SURVEY (FOR REF ONLY)	-
3 OF 3	TOPOGRAPHIC SURVEY (FOR REF ONLY)	-



PROFESSIONAL CERTIFICATION

SCOPE OF WORK

- PROPOSED AT&T MOBILITY EQUIPMENT CABINET WITHIN PROPOSED LEASE AREA/FENCED COMPOUND.
- PROPOSED AT&T MOBILITY TOWER EQUIPMENT:
 - (6) ANTENNAS
 - (12) REMOTE RADIO HEADS (RRHs)
 - (2) SQUIDS
 - (4) DC POWER TRUNKS
 - (1) FIBER TRUNKS
- PROPOSED MONOPOLE.
- PROPOSED COMPOUND FENCE.
- PROPOSED GRAVEL DRIVE.
- PROPOSED MULTI TENANT UTILITY RACK WITHIN THE FENCED COMPOUND.
- PROPOSED ELECTRIC, COMMUNICATIONS, GROUNDING AS OUTLINED IN ATTACHED PLANS.

NOTE:

- PROJECT DESCRIPTION DOES NOT INCLUDE ALL EQUIPMENT & MATERIALS FOR A COMPLETE INSTALLATION.
- DRAWINGS BASED ON AT&T MOBILITY RFDS DATED: 07/09/19 GC TO COORDINATE WITH AT&T/BLACK & VEATCH PM FOR FINAL EQUIPMENT BASED ON MOST RECENT RF INFORMATION.
- THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

UTILITY INFORMATION

ELECTRICAL UTILITY CONTACT:
 NORI/EASTERN REMC
 (260) 625-3700

COMMUNICATIONS UTILITY CONTACT:
 AT&T
 (800) 288-2020

CODE COMPLIANCE

WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY COUNTY OF WHITLEY / STATE OF INDIANA & OTHER GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

INDIANA BUILDING CODE: TIA/EIA-222G OR (2012 IBC w/ 2014 STATE AMENDMENTS) LATEST ADOPTED EDITION

INDIANA MECHANICAL CODE: (2012 IMC w/ 2014 STATE AMENDMENTS)

INDIANA ELECTRICAL CODE: (NFPA 70-2008 w/ 2009 STATE AMENDMENTS)

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



1-800-382-6544



A	09/13/19	90% REVIEW CD
---	----------	---------------

PROJ # 18-32-01-30
 DWG BY: YYS
 CHKD BY: BMW

ROANOKE
 GRANMI038
 SOUTH C.R. 700 EAST 92
 ROANOKE, IN 46783 - WHITLEY COUNTY
 MONOPOLE

SHEET TITLE
 TITLE SHEET
 T-1

ELECTRICAL NOTES:

1. WORK UNDER THIS CONTRACT SHALL BE DONE IN STRICT ACCORDANCE WITH ALL APPLICABLE MUNICIPAL, STATE, AND LOCAL ELECTRICAL CODES THAT GOVERN EACH PARTICULAR TRADE AND THE NATIONAL ELECTRICAL CODE (LATEST EDITION).
2. THE CONTRACTOR SHALL EXAMINE DRAWINGS AND SHALL INSPECT THE EXISTING CONDITIONS OF THE SITE. FAILURE TO COMPLY WITH THIS REQUIREMENT WILL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR COMPLYING WITH THE CONTRACT DOCUMENTS.
3. THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF THE ELECTRICAL INSTALLATIONS. DETAILS OF PROPOSED DEPARTURES DUE TO ACTUAL FIELD CONDITIONS OR OTHER CAUSES SHALL BE SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION. REWORK OF COMPLETED ITEMS DUE TO IMPROPER FIELD COORDINATION SHALL BE AT THE CONTRACTOR'S EXPENSE.
4. PROVIDE SUFFICIENT ACCESS AND CLEARANCE FOR ITEMS OR EQUIPMENT REQUIRING SERVICING AND MAINTENANCE.
5. THE CONTRACTOR SHALL PREPARE THREE (3) COPIES OF A RECORD AND INFORMATION BOOKLET. THE BOOKLET SHALL BE BOUND IN A THREE RING LOOSE-LEAF BINDER AND INCLUDE ITEMS OF ELECTRICAL EQUIPMENT.
6. UPON COMPLETION OF THE ELECTRICAL INSTALLATION, THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF PRINTS OF THE ELECTRICAL CONTRACT DRAWINGS WHICH SHALL BE LEGIBLY MARKED IN RED TO SHOW CHANGES AND DEPARTURES OF THE INSTALLATIONS COMPARED WITH THE ORIGINAL DESIGN. THEY SHALL BE SUITABLE FOR USE IN PREPARATION OF RECORD DRAWINGS.
7. GUARANTEE: NEW ELECTRICAL INSTALLATIONS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR BEGINNING THE DAY OF THE FINAL ACCEPTANCE OF THE WORK OR BENEFICIAL OCCUPANCY OF THE OWNER, WHICHEVER OCCURS FIRST. THE ABOVE SHALL NOT IN ANY WAY VOID OR ABROGATE EQUIPMENT MANUFACTURER'S GUARANTEE OR WARRANTY. CERTIFICATES OF GUARANTEE SHALL BE DELIVERED TO THE OWNER UPON RECEIPT OF NOTICE FROM THE OWNER OF FAILURE OF ANY PART OF THE ELECTRICAL INSTALLATION DURING THE GUARANTEE PERIOD. NEW REPLACEMENT PARTS SHALL BE FURNISHED AND INSTALLED PROMPTLY AND AT NO COST TO OWNER.
8. ELECTRICAL WORK WHICH WILL INTERFERE WITH THE NORMAL USE OF THE ELECTRICAL SYSTEM IN ANY MANNER SHALL BE DONE AT SUCH TIME OR TIMES AS SHALL BE MUTUALLY AGREED UPON BETWEEN THE CONTRACTOR AND THE CONSTRUCTION MANAGER.
9. MOUNTING AND SUPPORTING OF EQUIPMENT PROVIDED BY THIS CONTRACTOR SHALL BE COORDINATED WITH CONSTRUCTION MANAGER IN THE FIELD.

CONDUIT AND BOXES NOTES:







1. CONDUIT BELOW GRADE SHALL BE SCHEDULED 40 PVC UNLESS NOTED OTHERWISE.
2. BOXES (WHETHER OUTLET, JUNCTION, PULL, OR EQUIPMENT) SHALL BE FURNISHED WITH APPROPRIATE COVERS.
3. NO SECTIONALIZED BOXES SHALL BE USED.
4. EMT CONDUIT FITTINGS SHALL BE COMPRESSION TYPE.
5. FIELD CUTS OR GALVANIZED ITEMS SHALL BE BRUSHED WITH MARINE GRADE GALVANIZING.
6. METALLIC OBJECTS EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL.

GROUNDING NOTES:

1. GROUND RODS WILL BE 5/8" X 10 FOOT COPPER CLAD NOT LESS THAN 10 FOOT OR MORE THAN 15 FOOT APART AND 6 INCHES BELOW LOCAL FROST DEPTH.
2. CONNECTIONS TO THE GROUND RING, AND PERIPHERAL EQUIPMENT WILL BE MADE VIA EXOTHERMIC PROCESS UNLESS OTHERWISE SPECIFIED.
3. BELOW GRADE GROUND WIRES SHALL BE SOLID TINNED BARE COPPER UNLESS OTHERWISE SPECIFIED.
4. METALLIC COMPONENTS ON THE SITE MUST BE GROUNDED TO THE GROUND RING. THIS INCLUDES STEEL CONDUITS USED TO DELIVER THE TELCO AND POWER UTILITY LINES TO THE SITE OR USED TO PROVIDE ACCESS BY UTILITIES OR CONTRACTORS TO THE VARIOUS CABINETS.
5. WHEN EARTH RESISTANCE TEST INDICATE THAT THE SOIL IS ABOVE MINIMUM ALLOWABLE RESISTANCE, THEN CONTRACTOR SHALL ESTIMATE THE TYPE, NUMBER AND ARRANGEMENT OF EARTH ELECTRODES. CONTRACTOR SHALL ALSO CONSIDER OWNER'S SITE SPECIFIC APPROACHES FOR IMPROVING EARTH RESISTANCE AT THE SITE BY THE METHODS INDICATED BELOW:
 - A. USE MULTIPLE RODS.
 - B. LENGTHEN THE EARTH ELECTRODE.
 - C. TREAT THE SOIL.
 - D. USE CHEMICAL RODS.

GENERAL NOTES:

1. THE EXISTING TOPOGRAPHY AND VERTICAL GEOMETRY REPRESENTED ON THESE DRAWINGS IS TO BE VERIFIED BY CONTRACTOR. CONTRACTOR SHALL CONTACT UTILITY LOCATE SERVICES A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION TO IDENTIFY THE EXISTENCE AND LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES AND SERVICES. CONTRACTOR IS TO IMMEDIATELY NOTIFY ENGINEER OF DISCREPANCIES OR INTERFERENCE THAT WILL EFFECT THIS PROJECT. EXISTING UTILITIES SHALL BE PROTECTED AND REPAIRED @ THE CONTRACTOR'S EXPENSE. IF DAMAGED, EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW.
2. DAMAGE TO THE EXISTING FACILITY SHALL BE REPAIRED OR REPLACED TO MATCH EXISTING ORIGINAL CONDITIONS AT THE CONTRACTOR'S EXPENSE.
3. EXISTING INACTIVE UTILITIES, WHICH PROHIBIT CONSTRUCTION, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AS REQUIRED TO ALLOW CONSTRUCTION TO CONTINUE, COORDINATE WITH PROJECT MANAGER, OWNER, AND /OR LOCAL UTILITY COMPANIES FOR APPROVAL.
4. CONTRACTOR SHALL NOTIFY THE PROPERTY OWNER OF THE CONSTRUCTION START WELL IN ADVANCE (MIN. 1 WEEK) OF THE CONSTRUCTION DATE.
5. PROVIDE LABOR, MATERIAL, TOOLS, EQUIPMENT, TRANSPORTATION AND TEMPORARY POWER SERVICES NECESSARY FOR, AND INCIDENTAL TO COMPLETION OF WORK AS INDICATED ON THE DRAWINGS AND/OR AS SPECIFIED HEREIN.
6. THE CONTRACTOR SHALL FURNISH AND INSTALL MATERIALS AS REQUIRED FOR COMPLETE SYSTEMS, INCLUDING PARTS ORVOSUPLY OR REASONABLY INCIDENTAL TO A COMPLETE INSTALLATION, WHETHER SPECIFICALLY INDICATED OR NOT. SYSTEMS SHALL BE COMPLETELY ASSEMBLED, TESTED, ADJUSTED AND DEMONSTRATED TO BE READY FOR OPERATION PRIOR TO OWNER'S ACCEPTANCE.
7. THE CONTRACTOR SHALL OBTAIN, PAY FOR AND DELIVER REQUIRED PERMITS, CERTIFICATES OF INSPECTION, INCLUDING UTILITY CONNECTION FEES, ETC. REQUIRED BY THE AUTHORITIES HAVING JURISDICTION. DELIVER CERTIFICATES TO THE OWNER PRIOR TO FINAL ACCEPTANCE OF THE WORK.
8. THE CONTRACTOR SHALL MAINTAIN BENCHMARKS, CONSTRUCTION STAKING, AND OTHER ELEVATION CONTROL POINTS AND SHALL REESTABLISH IF DISTURBED OR DESTROYED, AT NO ADDITIONAL COST TO THE OWNER.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR AND OR RESTORATION OF DAMAGE TO THE EXISTING ACCESS ROADWAY AND ADJACENT SITE AREAS AS A RESULT OF USE DURING CONSTRUCTION. DISTURBED AND DAMAGED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR BETTER UPON COMPLETION OF WORK AT THE EXPENSE OF THE CONTRACTOR.
10. THE CONTRACTOR SHALL REMOVE WASTE, DEBRIS AND TRASH FROM SITE AND DISPOSE OF IN A LEGAL MANNER ON A DAILY BASIS.
11. CONTRACTOR SHALL COORDINATE THE CONSTRUCTION STAGING AREA AND PARKING WITH THE PROPERTY OWNER PRIOR TO THE CONSTRUCTION START DATE.
12. THE CONTRACTOR SHALL NOT INTERFERE W/ THE NORMAL OPERATIONS. ACCESS TO THE WORK AREA SHALL BE AS DIRECTED BY THE FACILITY'S OWNER.
13. THE CONTRACTOR SHALL CONFINE THEIR OPERATIONS TO THE DESIGNATED AREAS AND SHALL KEEP THE CONSTRUCTION AREA CLEAN. AISLES AND PATHWAYS SHALL BE KEPT UNOBSTRUCTED.
14. THE CONTRACTOR SHALL COORDINATE THE WORK OF VARIOUS TRADES SO AS TO INSURE PROPER SEQUENCING AND INSTALLATION.

					
ROANOKE SOUTH C.R. 700 EAST 92 GRANMHI038 ROANOKE, IN 46783 - WHITLEY COUNTY MONROE					
PROJ # 18-32-01-30 DWG BY: YYS CHKD BY: BMW					
SHEET TITLE GENERAL NOTES SHEET NUMBER N-1					

EQUIPMENT FOUNDATION STRUCTURAL NOTES:

1. PLATFORM DESIGN LOADS
 - a. ASCE 7-10/IBC 2015 100 MPH WIND LOAD, EXPOSURE B.
 - b. MAX. AXIAL COMPRESSION PER LEG = 3000 LBS
 - c. MAX. UPLIFT PER LEG = 800 PSF APPROX.
 - d. MAX. HORIZONTAL SHEAR = 800 PSF.
2. PRESUMPTIVE SOUL PARAMETERS:
 - a. SOIL UNIT WEIGHT, $\gamma=90$ PCF
 - b. ANGLE OF INTERNAL FRICTION = 30°
3. SEISMIC DESIGN PARAMETERS
 - a. OCCUPANCY CATEGORY II
 - b. SITE CLASS = D
 - c. SEISMIC USE GROUP = SUG II
 - d. SEISMIC DESIGN CATEGORY = D
 - e. MAPPED SPECTRAL RESPONSE ACCELERATION, 0.2 S PERIOD = 0.4
 - f. MAPPED SPECTRAL RESPONSE ACCELERATION, 1.0S PERIOD = 0.15
4. FABRICATION AND INSTALLATION SHOULD BE DONE BY A CONTRACTOR EXPERIENCED IN SIMILAR WORK.
5. CONTRACTOR SHOULD OBSERVE OSHA AND OTHER APPLICABLE SAFETY GUIDELINES DURING INSTALLATION.
6. FABRICATION AND INSTALLATION PRECEURE AND SITE SAFETY ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
7. CONTRACTOR SHOULD FIELD VERIFY DIMENSIONS AND FIT BEFORE FABRICATION.
8. THE DRAWINGS DO NOT INCLUDE ALL THE EXISTING FIELD CONDITIONS, SOME OF WHICH MAY INTERFERE WITH THE INSTALLATION. CONTRACTOR SHOULD CONDUCT A FIELD SURVEY TO IDENTIFY POTENTIAL DIFFICULTIES IN THE INSTALLATION BEFORE WORK COMMENCES. CONTACT THE ENGINEER IF THE FIELD CONDITIONS REQUIRE CHANGES IN THE DESIGN.
9. CONTRACTOR IS RESPONSIBLE FOR OBTAINING LICENSES, PERMITS AND OTHER APPROVALS REQUIRED FOR CONSTRUCTION.
10. PAINT THE NEW MEMBERS TO MATCH THE EXISTING STRUCTURE.
11. THE STRUCTURAL STEEL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ANCHOR BOLT LOCATION, ELEVATIONS OF TOP SCREW PIER AND BEARING PLATES, ALIGNMENT ETC. PRIOR TO START OF STEEL ERECTION.
12. THE LATEST EDITION OF THE FOLLOWING SPECIFICATIONS SHALL GOVERN:
 - a. AISC – ALLOWABLE STRESS DESIGN SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
 - b. AISC – CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES
 - c. AWS – D1.1 STRUCTURAL WELDING CODE – STEEL
13. MATERIAL, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS:
 - a. STRUCTURAL WIDE FLANGE & I SHAPES A992 OR A572, $F_y = 50$ KSI
 - b. OTHER STRUCTURAL SHAPES AND PLATES A36, $F_y = 36$ KSI
 - c. STRUCTURAL TUBING A500, GRADE B, $F_y = 48$ KSI
 - d. HIGH STRENGTH BOLTS A325
 - e. THREADED RODS A36
 - f. ANCHOR BOLTS A307 OR A36
 - g. PIPE (HANDRAL) SCH 40 PIPE
14. STEEL SHALL BE HOT DIPPED GALVANIZED AS PER ASTM A123 SPECIFICATION.
15. STEEL HARDWARE SHALL BE HOT DIPPED GALVANIZED PER ASTM A153.
16. BOLTS SHALL BE DOMESTIC, NEW ½ INCH DIAMETER HIGH STRENGTH GALVANIZED BOLTS, BEARING TYPE 'X', UNLESS NOTED OTHERWISE IN THE DRAWINGS AND SHALL CONFORM TO ASTM A325 SPECIFICATIONS. USE ANCO LOCKNUTS & FLAT WASHERS ON BOLTS.
17. FINISHED BOLT HOLES SHALL NOT BE MORE THAN 1/16 INCH LARGER THAN THE BOLT DIAMETER UNLESS NOTED OTHERWISE.
18. BOLTS SHALL BE TIGHTENED USING TURN-OF-THE-NUT METHOD.
19. BOLT HOLES EDGE DISTANCES SHALL BE 1 ½ INCH UNLESS OTHERWISE NOTED.
20. WELDING SHALL BE DONE USING E-70 ELECTRODES AND IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY STANDARDS AND SPECIFICATIONS.
21. FIELD CUTS MUST BE THOROUGHLY CLEANED AND DOUBLE COATED w/ RUST PROHIBITIVE PRIMER AND PAINT.
22. DO NOT HEAT STRUCTURAL MATERIAL FOR STRAIGHTENING BENT OR WARPED MEMBERS.
23. CLEAN THE SITE OF DEBRIS UPON COMPLETION OF THE WORK. STORE SURPLUS MATERIALS NEATLY IN AN AREA APPROVED BY THE OWNER.
24. BEFORE FIELD WELDING CLEAN PAINT AND GALVANIZING TO BARE METAL. PREHEATING AND POSTHEATING OF THE BASE METAL SHOULD BE AS PER AWS D1.1 SPECIFICATION AND APPLICABLE CODES REGARDING PREHEATING AND POSTHEATING.
25. CONTRACTOR TO PROVIDE FIRE PROTECTION BEFORE FIELD WELDING.
26. HOLES IN STEEL SHALL BE DRILLED OR PUNCHED. SLOTTED HOLES SHALL BE PROVIDED WITH SMOOTH EDGES. BURNING OF HOLES AND TORCH CUTTING AT THE SITE IS NOT PERMITTED. HOLES IN BEARING PLATES SHALL BE DRILLED.
27. EPOXY ANCHORS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.






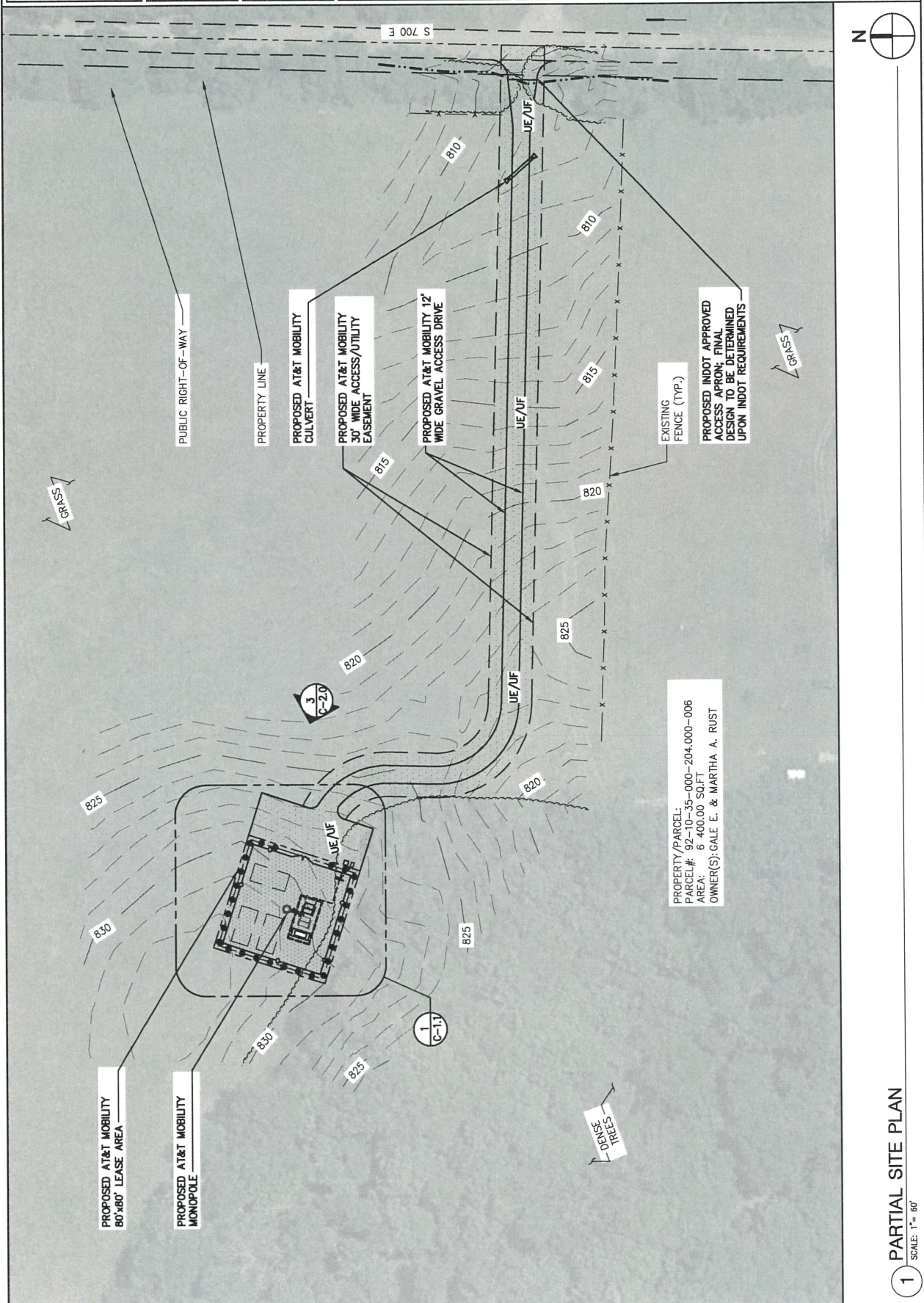
09/13/19	90% REVIEW CD
----------	---------------

ROANOKE
 GRANM11038
 SOUTH C.R. 700 EAST 92
 ROANOKE, IN 47853 - WHITLEY COUNTY
 MONOPOLE




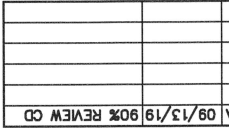
PROJ # 18-32-01-30
 DWG BY: YYS
 CHKD BY: BMM

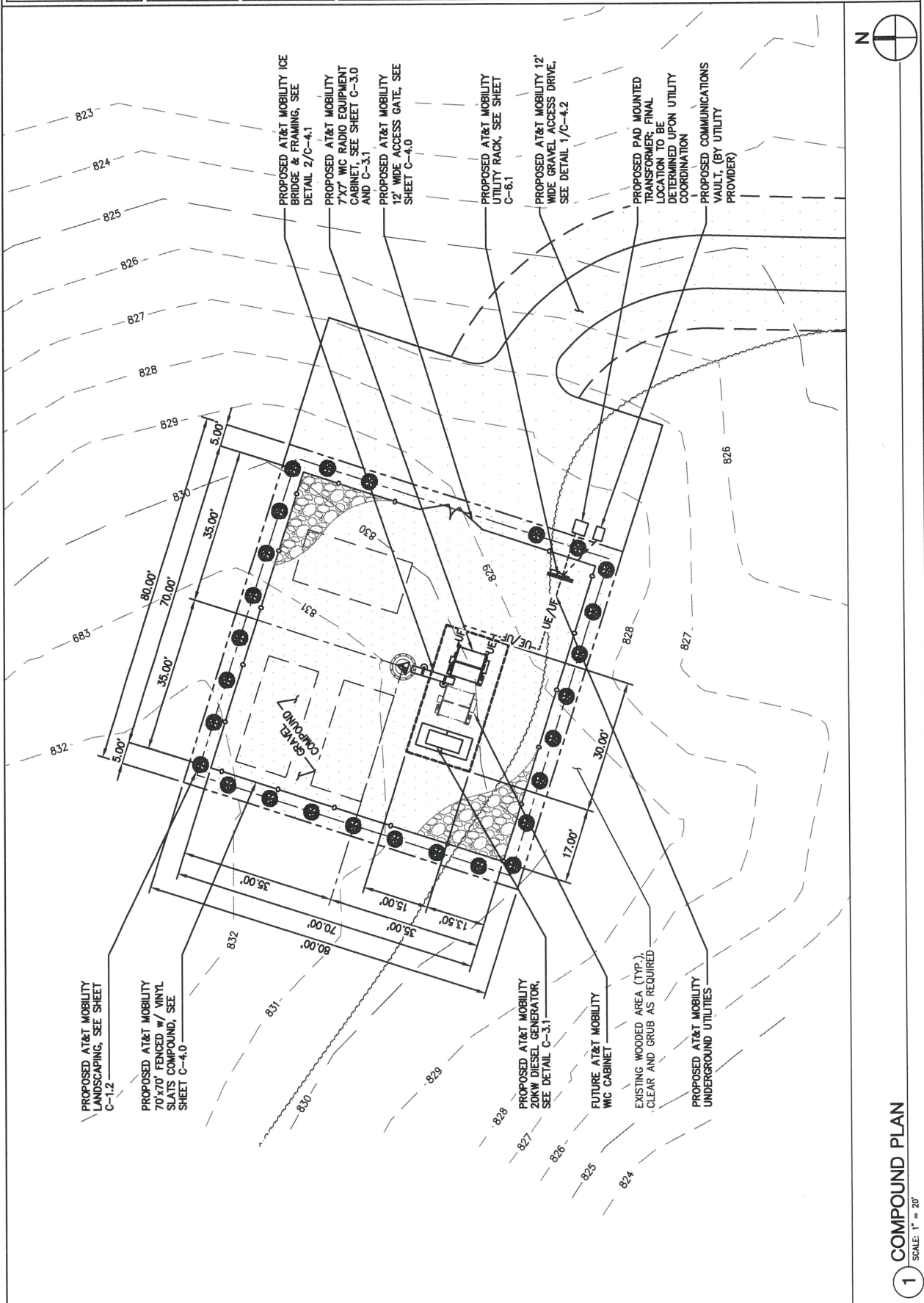
SHEET TITLE
 GENERAL NOTES
 SHEET NUMBER
N-2

			A 09/13/19 90% REVIEW CD	CHKD BY: BWM	DWG BY: YYS	PROJ # 18-32-01-30
					SHEET TITLE PARTIAL SITE PLAN	SHEET NUMBER C-10



1 PARTIAL SITE PLAN
 SCALE: 1" = 60'

				PROJ # 18-32-01-30 DWG BY: YYS CHKD BY: BMW
				ROANOKE GRANMI1038 SOUTH C.R. 700 EAST 92 ROANOKE, IN 46783 - WHITLEY COUNTY MONPOLE



1 COMPOUND PLAN
 SCALE: 1" = 20'



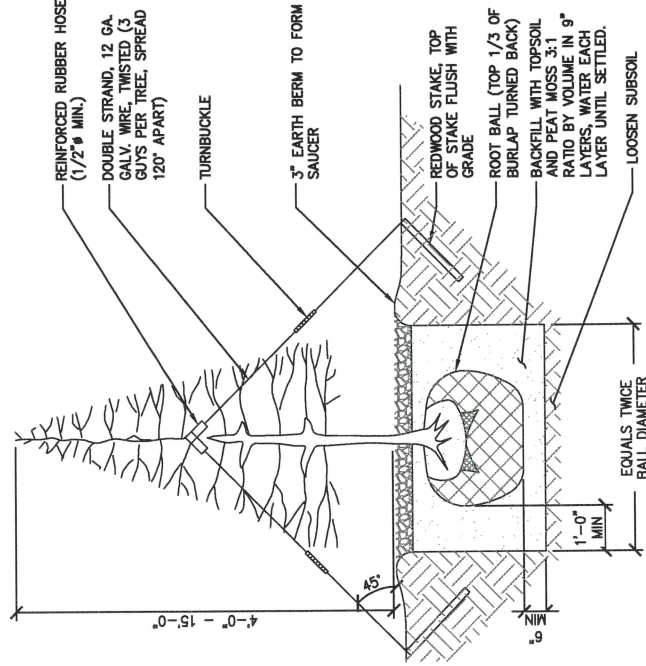
09/13/19	90% REVIEW CD

PROJ # 18-32-01-30	DWG BY: YYS	CHKD BY: BMM
ROANOKE GRANMI1038 SOUTH C.R. 700 EAST 92 ROANOKE, IN 47833 - WHITLEY COUNTY MONOPOLE		
SHEET TITLE LANDSCAPING PLAN & DETAILS		
SHEET NUMBER C-12		

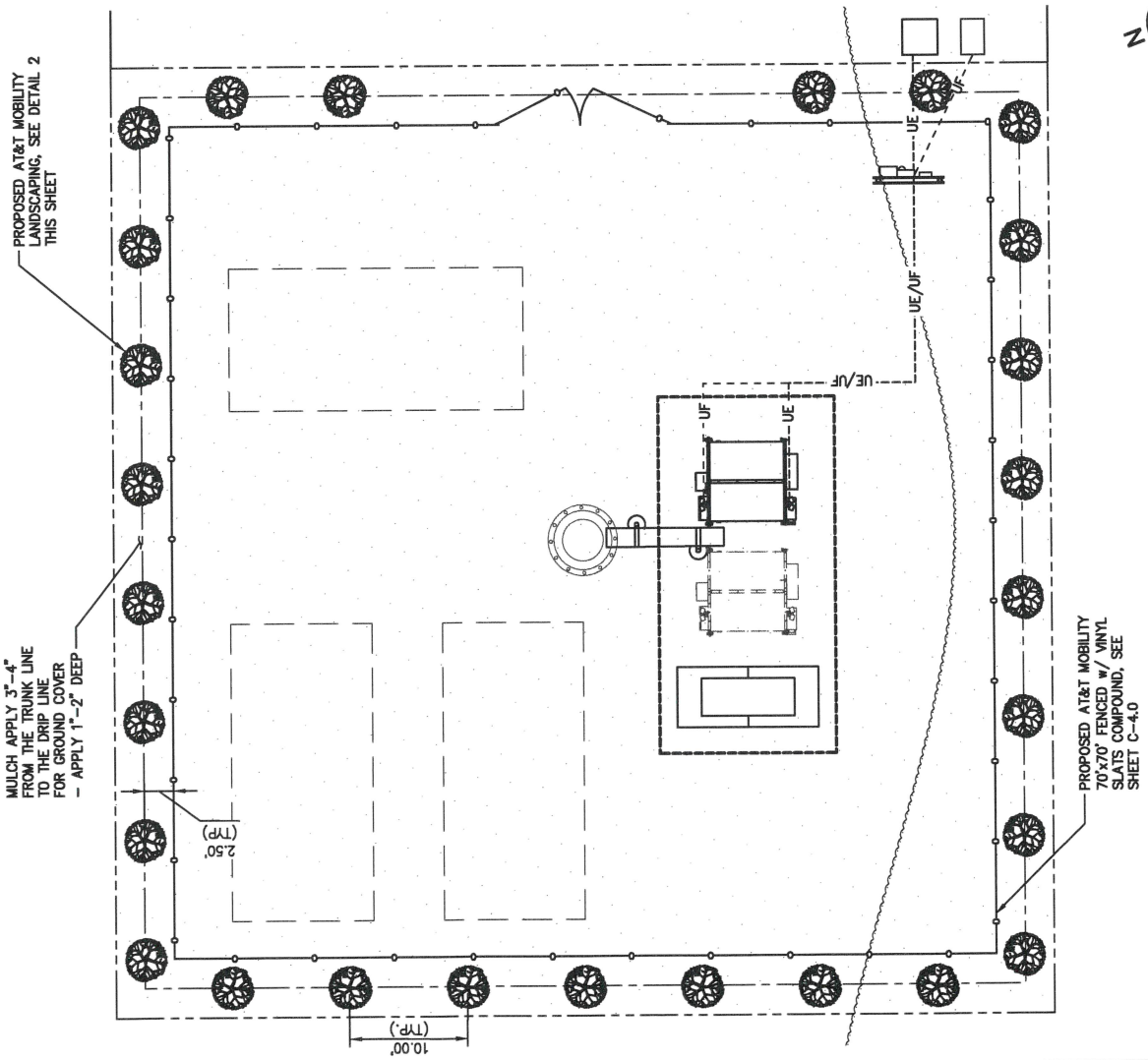
LANDSCAPE SCHEDULE				
DESCRIPTION: COMMON NAME	BOTANICAL NAME	MATURE SPREAD	MATURE HEIGHT	QTY.
AMERICAN ARBORVITAE	THUJA OCCIDENTALIS HYBRIDS	N/A	4' - 15'	27

LANDSCAPING NOTES:

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



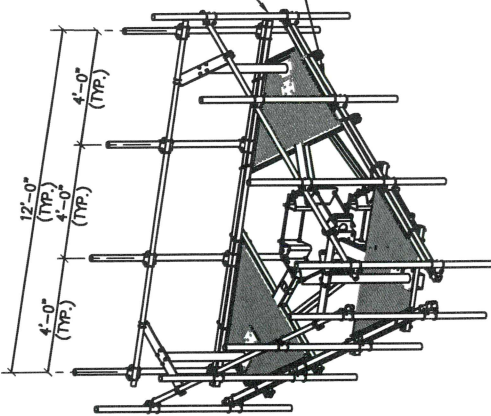
2 PLANTING DETAIL
SCALE: 3/8" = 1'-0"



1 COMPOUND PLAN
SCALE: 1" = 20'

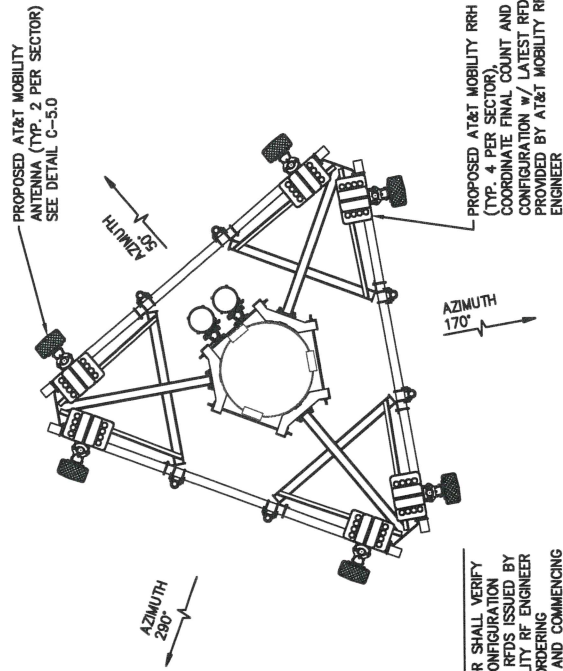


- NOTE:**
1. DETAIL BASED ON A TYPICAL SABRE HEAVY DUTY MONOPOLE PLATFORM MOUNT.
 2. CONTRACTOR SHALL COORDINATE ANTENNA MOUNTING w/ TOWER MANUFACTURER OR STRUCTURAL REPORT.



1 TYPICAL ANTENNA MOUNTING PLATFORM

SCALE: NONE



- NOTES:**
1. CONTRACTOR SHALL VERIFY FINAL RF CONFIGURATION WITH FINAL RFDS ISSUED BY AT&T MOBILITY RF ENGINEER PRIOR TO ORDERING MATERIALS AND COMMENCING CONSTRUCTION

2 ANTENNA ORIENTATION TOP VIEW

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



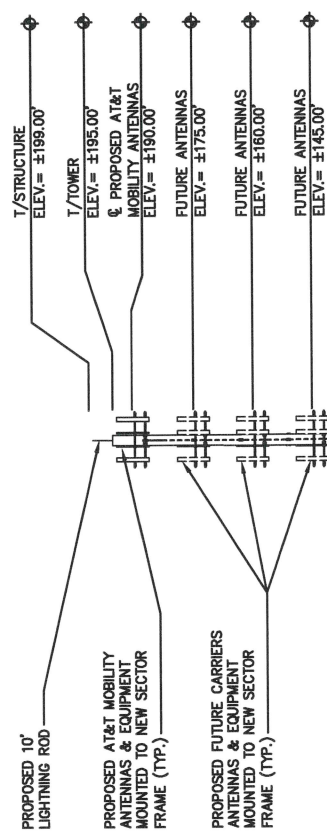
ROANOKE
 SOUTH C.R. 700 EAST 92
 GRANITE 038
 ROANOKE, IN 46783 -
 MONROE COUNTY

DWG BY: YYS
 CHKD BY: BMM

PROJ # 18-32-01-30

SHEET TITLE
 ELEVATION &
 DETAILS

SHEET NUMBER
 C-20



GENERAL NOTES

1. ELEVATION IS FOR REFERENCE PURPOSE ONLY.
2. CONTRACTOR SHALL PERFORM WORK DONE TO OR ON STRUCTURE IN ACCORDANCE WITH PROVIDED STRUCTURAL ANALYSIS SEPARATE FROM PBM WIRELESS DRAWINGS.



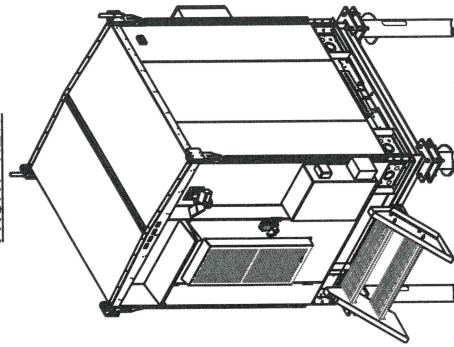
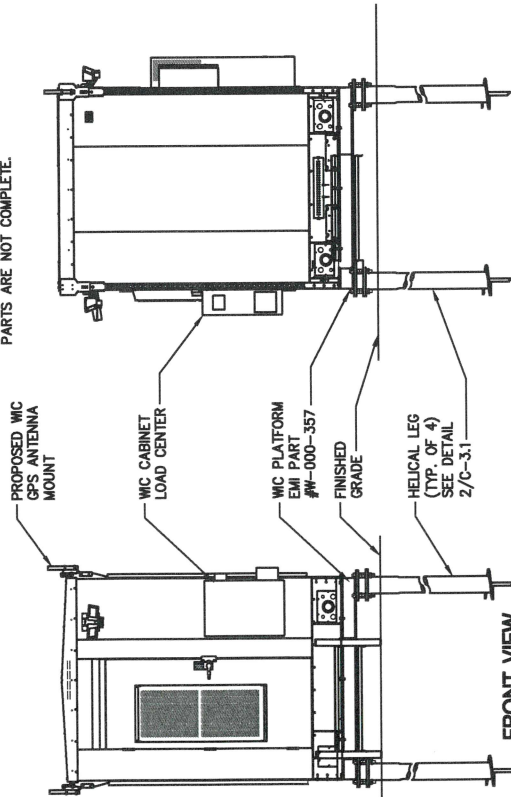
3 ELEVATION

SCALE: 1" = 30'

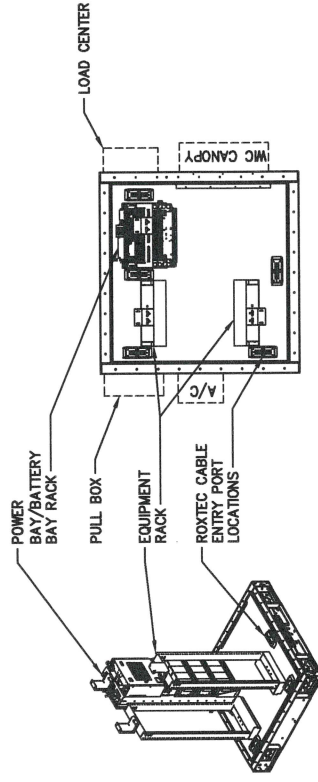
THIS DRAWING IS A SCHEMATIC REPRESENTATION OF THE CABINET'S EQUIPMENT LAYOUT INITIAL DESIGN. THE FINAL CONFIGURATION IS DEPENDANT ON THE OWNERS ACTUAL FINAL RF EQUIPMENT SELECTION. THE CONTRACTOR SHALL PROVIDE THE ACTUAL EQUIPMENT LAYOUT DRAWINGS TO THE APPROPRIATE BUILDING DEPARTMENT BEFORE START OF CONSTRUCTION

NOTES:

1. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS.
2. CONTRACTOR SHALL MAINTAIN A 10'-0" MINIMUM SEPARATION BETWEEN THE PROPOSED GPS ANTENNA AND TRANSMITTING ANTENNAS.
3. CONTRACTOR SHALL INSTALL WIC PARTS IN ACCORDANCE WITH WIC MANUFACTURER DRAWINGS.
4. BUILDING SHIPPED WITH INTERIOR COMPLETE, FIELD VERIFY UPON DELIVERY TO SITE AND CONTACT CONSTRUCTION MANAGER IF PARTS ARE NOT COMPLETE.

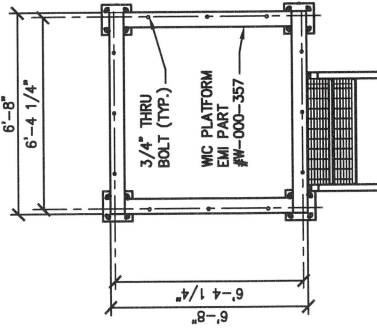


1 ELEVATED WIC PLATFORM DETAILS

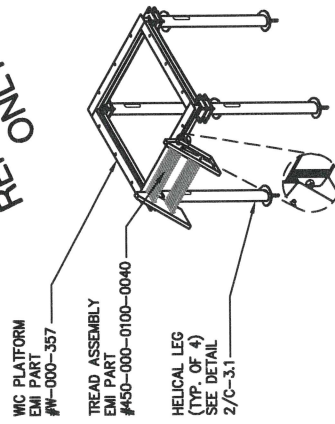


2 WALK-IN-CABINET EQUIPMENT LAYOUT

FOR REFERENCE ONLY



3 ELEVATED WIC PLATFORM DETAILS



3 ELEVATED WIC PLATFORM DETAILS



A	09/13/19	90% REVIEW CD
---	----------	---------------

ROANOKE
 GRANM11038
 SOUTH C.R. 700 EAST 92
 ROANOKE, IN 4783 - WHITLEY COUNTY
 MONOPOLE

DWG BY: YYS
 CHKD BY: BMM

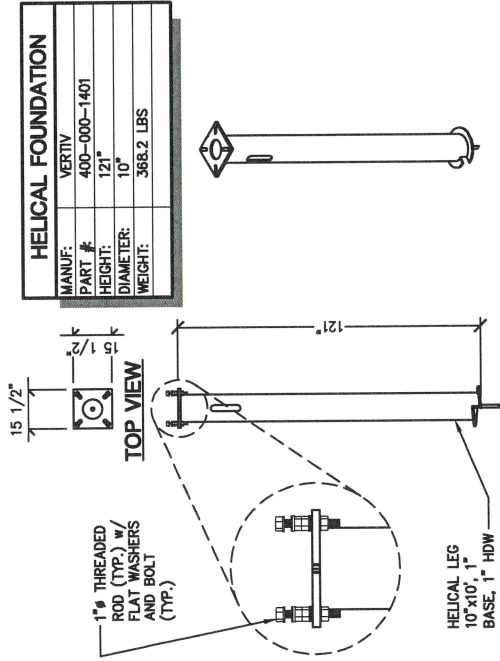
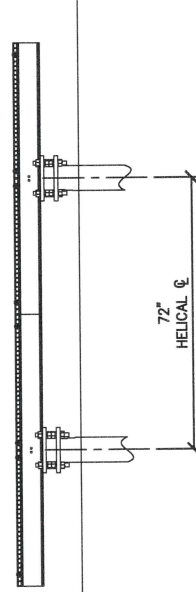
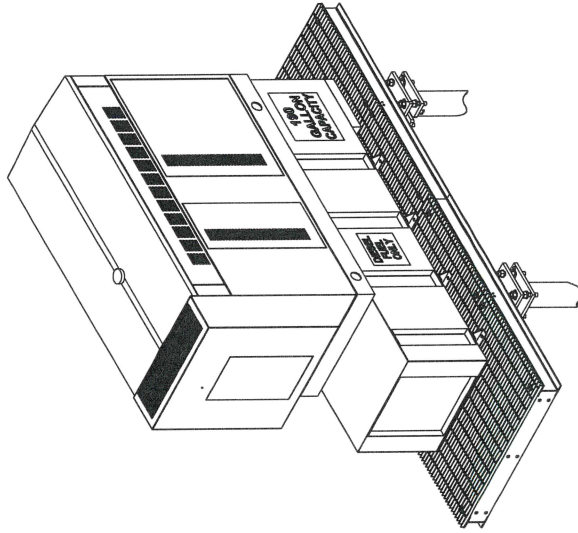
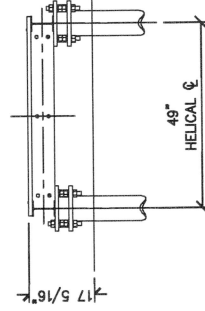
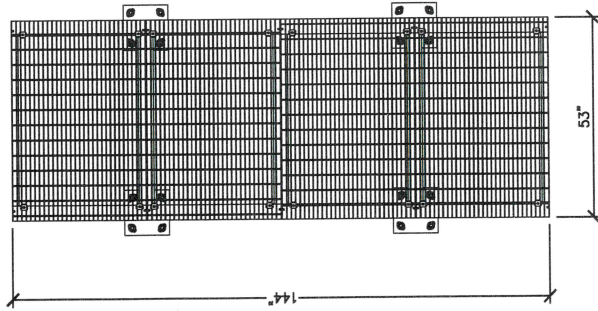
PROJ # 18-32-01-30

SHEET TITLE
 WIC CABINET &
 PLATFORM DETAILS

SHEET NUMBER
 C-30

THIS DRAWING IS A SCHEMATIC REPRESENTATION OF THE GENERATOR LAYOUT INITIAL DESIGN. THE FINAL CONFIGURATION IS DEPENDANT ON THE OWNER. THE CONTRACTOR SHALL PROVIDE THE ACTUAL EQUIPMENT LAYOUT DRAWINGS TO THE APPROPRIATE BUILDING DEPARTMENT BEFORE START OF CONSTRUCTION

FOR REFERENCE ONLY



HELICAL FOUNDATION	
MANUF:	VERTIV
PART #:	400-000-1401
HEIGHT:	121"
DIAMETER:	10"
WEIGHT:	368.2 LBS

ISOMETRIC VIEW

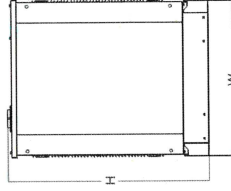
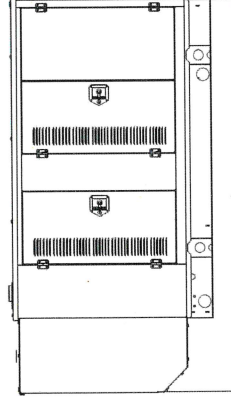
SECTION VIEW

HELICAL FOUNDATION KIT

2 SCALE: NONE

SD020 | 2.2L | 20 KW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency

GENERAC INDUSTRIAL



WEATHER PROTECTED ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)	
			Steel Enclosure Only	Aluminum Enclosure Only
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)	1,916 (870)	1,785 (811)
32	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)	1,350 (1,088)	1,291 (1,029)
78	132 (501)	94.8 (2,409) x 38.0 (965) x 74.5 (1,893)	2,626 (1,192)	2,495 (1,133)
113	190 (719)	106.0 (2,692) x 38.0 (965) x 78.5 (1,994)	2,840 (1,290)	2,709 (1,231)
125	211 (799)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)	2,835 (1,287)	2,704 (1,228)
178	300 (1,136)	94.8 (2,409) x 38.0 (965) x 90.0 (2,287)	2,898 (1,315)	2,767 (1,256)

3 DIESEL GENERATOR

SCALE: NONE

1 DIESEL GENERATOR PLATFORM

SCALE: NONE

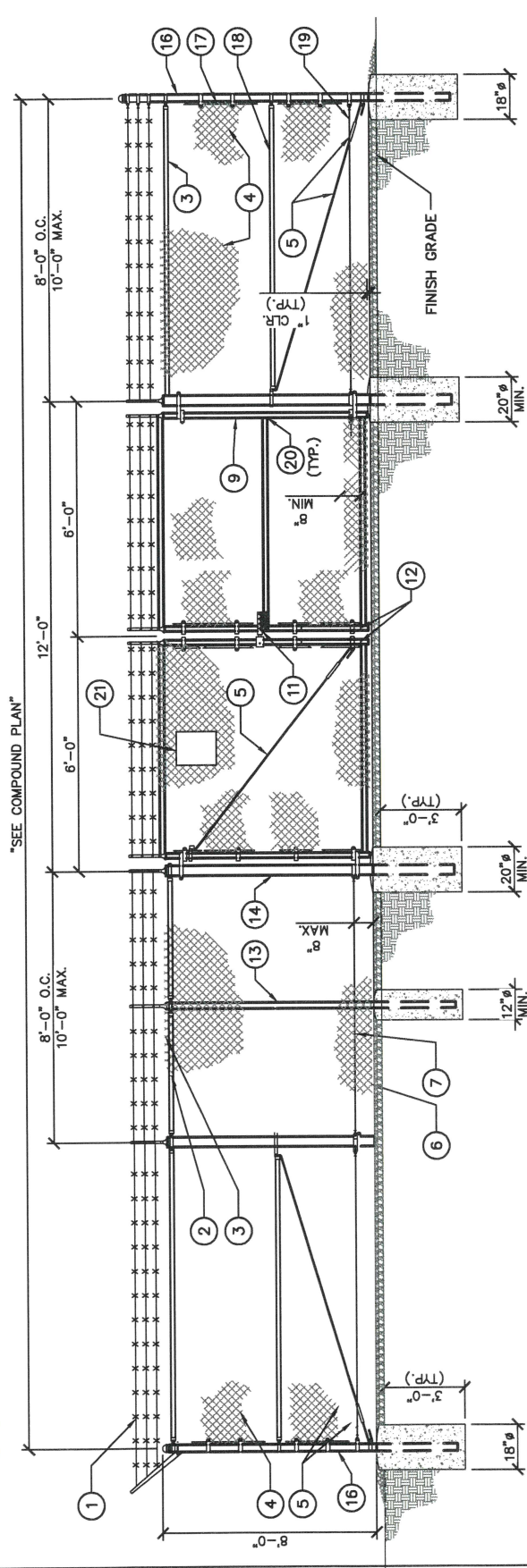


A	09/13/19	90% REVIEW CD
---	----------	---------------

ROANOKE
GRAMM1038
SOUTH C.R. 700 EAST 92
ROANOKE, IN 46783 - WHITLEY COUNTY
MONOPOLE
DWG BY: YYS
CHKD BY: BWM

PROJ # 18-32-01-30

SHEET TITLE
GENERATOR &
PLATFORM DETAILS
SHEET NUMBER
C-31



KEY NOTES:

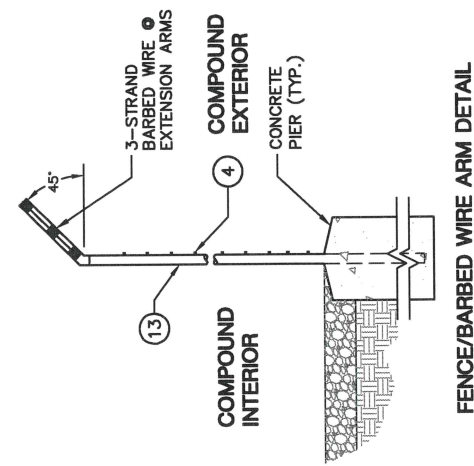
- 3 STRANDS OF DOUBLE STRAND 12-1/2" O.D. TWISTED WIRE TO MATCH FABRIC 14 GA., 4 POINT BARBS ON APPROXIMATELY 5" CENTERS (TYP.)
- 9 GA. ALUMINUM FABRIC TIES EVERY 24 INCHES ON TOP RAIL AND EVERY 14 INCHES ON LINE POSTS
- CHAIN LINK FABRIC TOP SELVAGE TWISTED
- 9 GA 2"x2" FENCE FABRIC (TYP.)
- 3/8" STL. TRUSS ROD w/ TURNBUCKLES @ CORNERS (TYP.)
- BOTTOM SELVAGE KNUCKLE
- HOG RING
- SCH. 40 GATE POST (TYP.) 4'-6" OPENING WIDTH 3-1/2" O.D.
- SCH. 40 GATE FRAME (TYP.) 1-5/8" O.D.
- SCH. 40 TOP RAIL (TYP.) 1-5/8" O.D.
- CHAIN LINK FENCE ELEVATION SCALE: 1/4" = 1'-0"
- STYMIE LOCK OR APPROVED EQUIVALENT.
- GATE STOP, SEE DETAIL 2/C-4.2
- SCH. 40 LINE POST (TYP.) 2-7/8" O.D.
- SCH. 40 GATE POST (TYP.) 6'-12" OPENING WIDTH 4" O.D. 12'-18" OPENING WIDTH 6-5/8" O.D. 18'-24" OPENING WIDTH 8-5/8" O.D.
- UNUSED
- 3/8" STL. TRUSS ROD w/ TURNBUCKLES @ CORNERS (TYP.)
- BOTTOM SELVAGE KNUCKLE
- HOG RING
- SCH. 40 GATE POST (TYP.) 4'-6" OPENING WIDTH 3-1/2" O.D.
- SCH. 40 GATE FRAME (TYP.) 1-5/8" O.D.
- SCH. 40 TOP RAIL (TYP.) 1-5/8" O.D.
- CHAIN LINK FENCE ELEVATION SCALE: 1/4" = 1'-0"

NOTES:

- MATERIALS SHALL BE PER LATEST ASTM REQUIREMENTS.
- FOR ADDITIONAL INFORMATION, SEE SHEET C-4.2

WELD GATE FRAMES AT JOINTS TO PROVIDE RIGID WATERTIGHT CONSTRUCTION

RF SIGNAGE

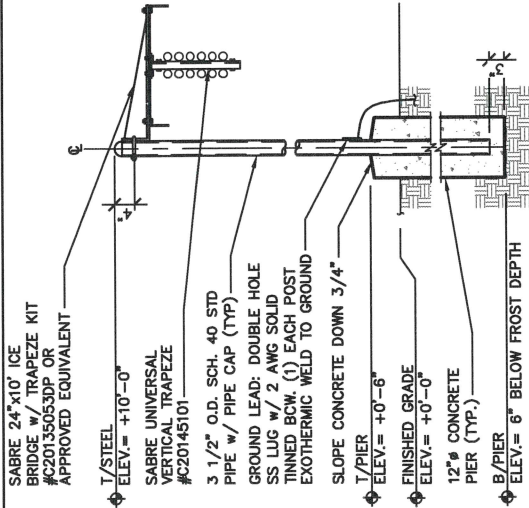


8 FOOT HIGH CHAIN LINK FENCE BARBED WIRE

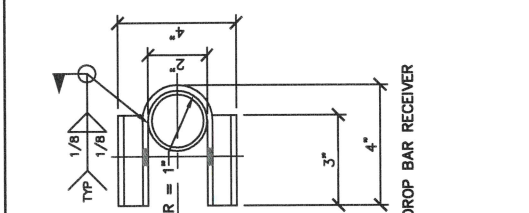
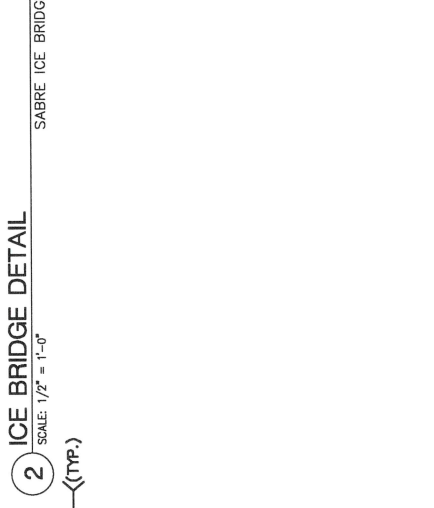
09/13/19	90% REVIEW CD

ROANOKE	GRANM11038	SOUTH C.R. 700 EAST 92	ROANOKE, IN 46783 - WHITLEY COUNTY	MONOPOLE
DWG BY: YYS				
CHKD BY: BMW				
PRJ # 18-32-01-30				

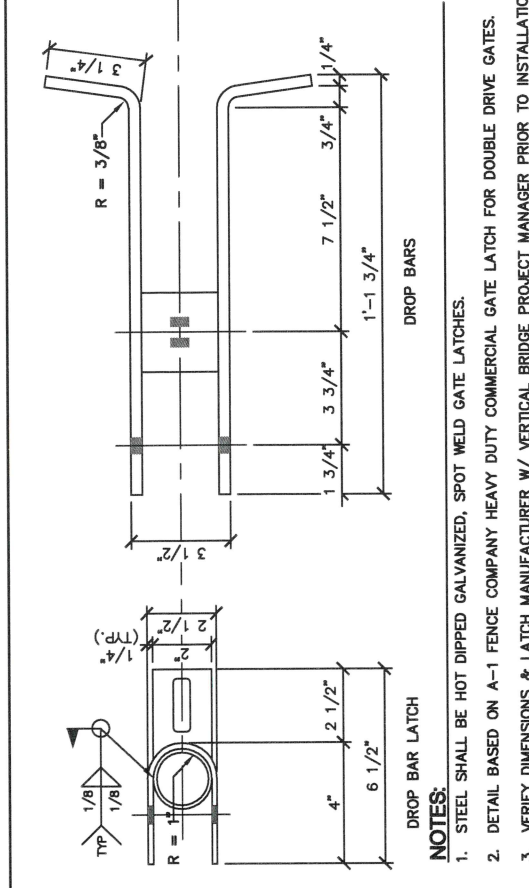
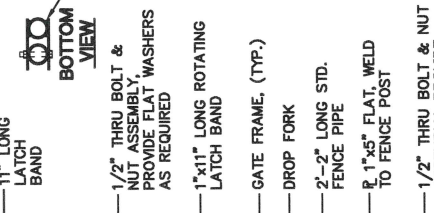
SHEET TITLE	DETAILS
C-4.1	



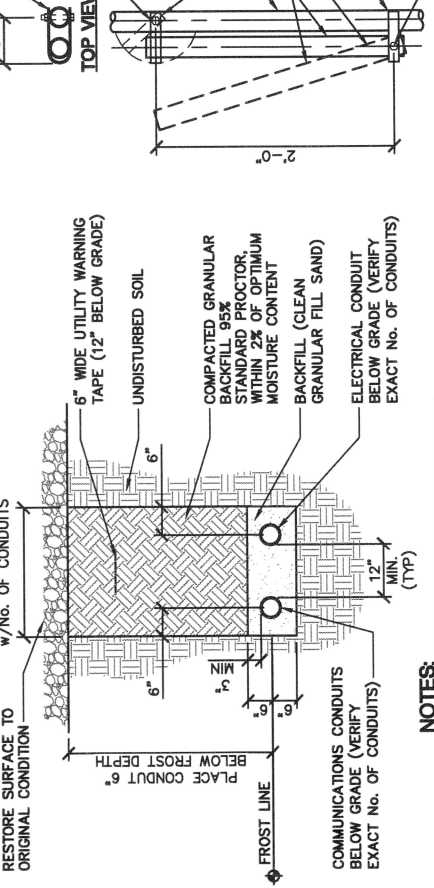
- NOTES:**
- *- COORDINATE ELEVATIONS WITH PORT HEIGHT.
 - DO NOT ATTACH ICE BRIDGE TO BUILDING STRUCTURE.
 - ICE BRIDGE TO TERMINATE WITHIN 6" OF EQUIPMENT & TOWER.
 - PROTECTIVE COAX PIECE TO BE INSTALLED AT TOWER END OF ICE BRIDGE TO PROVIDE RADIUS PROTECTION FOR COAX RUNS.
 - STEEL HOT DIP GALVANIZED.



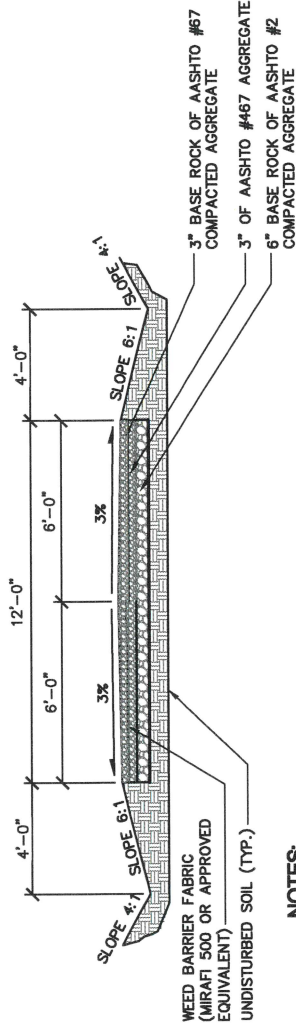
- NOTES:**
- STEEL SHALL BE HOT DIPPED GALVANIZED, SPOT WELD GATE LATCHES.
 - DETAIL BASED ON A-1 FENCE COMPANY HEAVY DUTY COMMERCIAL GATE LATCH FOR DOUBLE DRIVE GATES.
 - VERIFY DIMENSIONS & LATCH MANUFACTURER W/ VERTICAL BRIDGE PROJECT MANAGER PRIOR TO INSTALLATION.



- NOTES:**
- SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS



- NOTES:**
- SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS



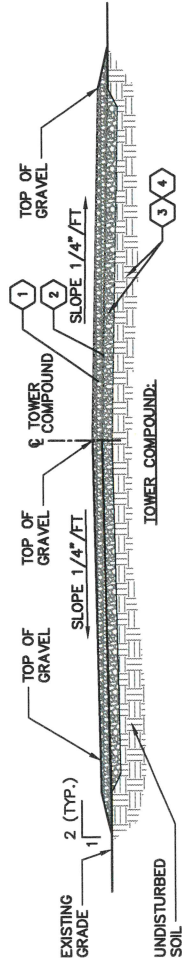
NOTES:

1. BASE ROCK TO BE INSTALLED FOR CONSTRUCTION TRAFFIC, FINISH STONE APPLIED FOR FINAL GRADE AND TRAFFIC.
2. ROAD SHALL BE CLEARED OF ORGANIC MATERIAL OR UNSUITABLE MATERIAL. SUBGRADE MUST BE COMPACTED TO 90% OF STANDARD PROCTOR DENSITY AND VERIFIED BY PROOF-ROLL OR GEOTECH RECOMMENDATIONS.
3. USE TENGATE OR APPROVED EQUIVALENT WHEN WATER IS PREVALENT NEAR SURFACE.

1 TYPICAL GRAVEL ROAD SECTION

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

GRAVEL ROAD SECTION



1. 3" OF 3/4"-1" MINUS (CHRUSHER RUN, FINE) ROCK.
2. WEED CONTROL FABRIC - MIRAFI 500X, OR APPROVED EQUIVALENT (WHEN SPECIFIED BY PROJECT MANAGER)
3. 5" BASE ROCK OF 3" DIA. ROCK (ROAD BASE), PROOF-ROLL PRIOR TO INSTALLATION OF FINISHED GRAVEL.
4. SITE SHALL BE CLEARED OF ORGANIC MATERIAL OR UNSUITABLE MATERIAL. SUBGRADE MUST BE COMPACTED TO 90% OF STANDARD PROCTOR DENSITY AND VERIFIED BY PROOF-ROLL OR GEOTECHNICAL RECOMMENDATIONS.
5. SITES WITH NO FENCE SHALL HAVE AN AREA COVERED WITH WEED BARRIER THAT IS A MINIMUM OF 5 FT WIDE AROUND THE SHELTER AND TOWER AREAS; THIS AREA SHALL BE USABLE AS PARKING SPACE OR FOR STORAGE OF A PORTABLE GENERATOR. LOCAL FIRE CODES MIGHT DICTATE MORE STRINGENT REQUIREMENTS.
6. THE FINISHED GRADE SHALL DIRECT WATER AWAY FROM THE SHELTER &/OR TOWER.

2 TYPICAL COMPOUND SECTION

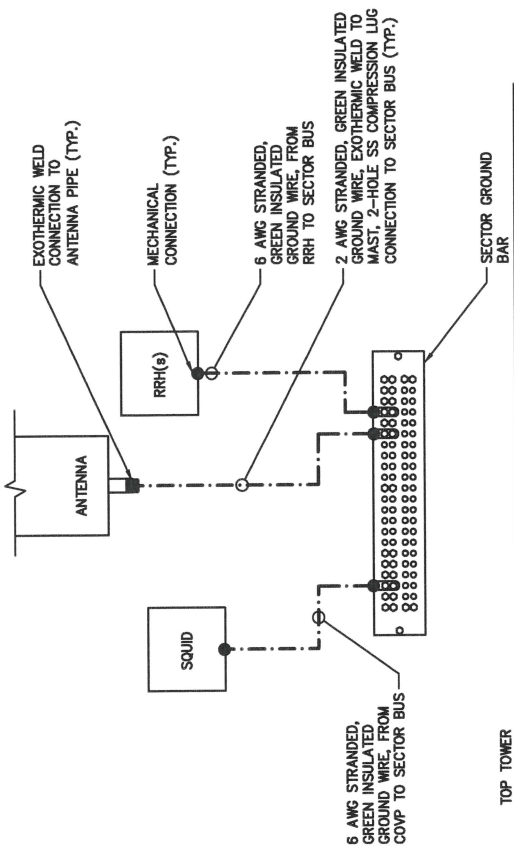
SCALE: NONE

TYPICAL-COMPOUND-SECTION



09/13/19	90%	REVIEW	CD
----------	-----	--------	----

PROJ # 18-32-01-30	DWG BY: YYS	CHKD BY: BWM
ROANOKE GRANM1038 SOUTH C.R. 700 EAST 92 ROANOKE, IN 47833 - WHITLEY COUNTY MONOPOLE		
SHEET TITLE ANTENNA DETAILS		
SHEET NUMBER C-50		



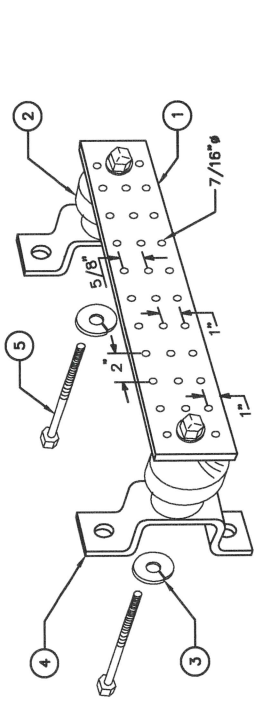
TOP TOWER

NOTES:

1. TYPICAL EACH SECTOR. SECTORS TIE DIRECTLY TO NEW MAIN TOWER TOP GROUND BAR, BEAM CLAMPED TO PLATFORM STEEL.
2. ACTUAL EQUIPMENT CONFIGURATION AND COUNT MAY VARY. REFERENCE FINAL RFDS PROVIDED BY AT&T MOBILITY RF ENGINEER.

2 SECTOR GROUNDING DIAGRAM (TYP.)

SCALE: NONE



TYPICAL SECTOR GROUNDING RISER

LEGEND

- 1 TINNED COPPER GROUND BAR, 1/4"x 4"x 20", HOLE CENTERS
- 2 INSULATORS
- 3 3/8" LOCKWASHERS
- 4 WALL MOUNTING BRACKET
- 5 3/8-11 X 2" H.H.C.S.BOLTS

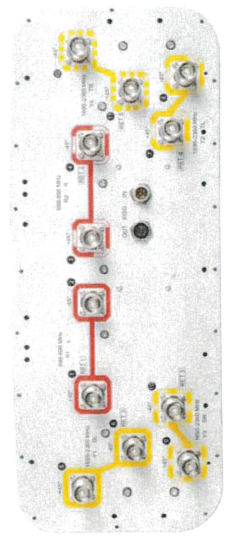
3 GROUND BAR DETAIL

SCALE: NONE

ISO-GROUND-BAR-20-HOLE

FOR REFERENCE ONLY

MECHANICAL CHARACTERISTICS	
DIMENSIONS (HEIGHT x WIDTH x DIAMETER)	96" x 19.6" x 7.8"
WEIGHT w/o MOUNT BRACKET	103.2 lbs
SURVIVAL WIND SPEED	> 150 mph
RF CONNECTOR INTERFACE	4.3-10 FEMALE
RF CONNECTOR LOCATION	BOTTOM

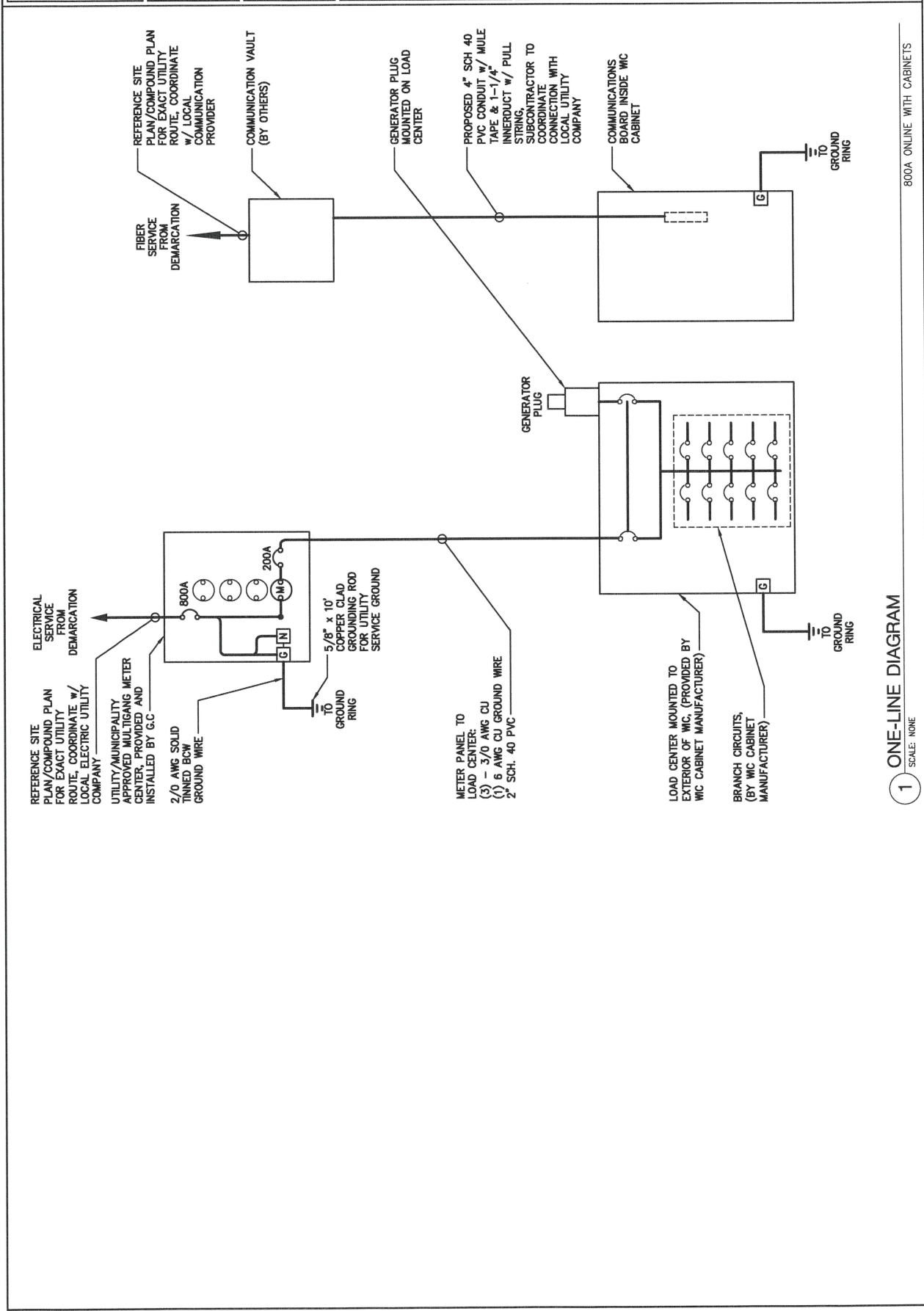


BOTTOM VIEW OF ANTENNA

1 ANTENNA DETAILS

SCALE: NONE

COMMSCOPE - NNH4-65C-R6

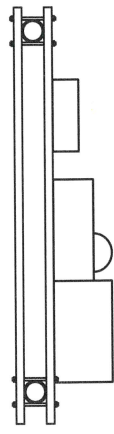


1 ONE-LINE DIAGRAM
 SCALE: NONE

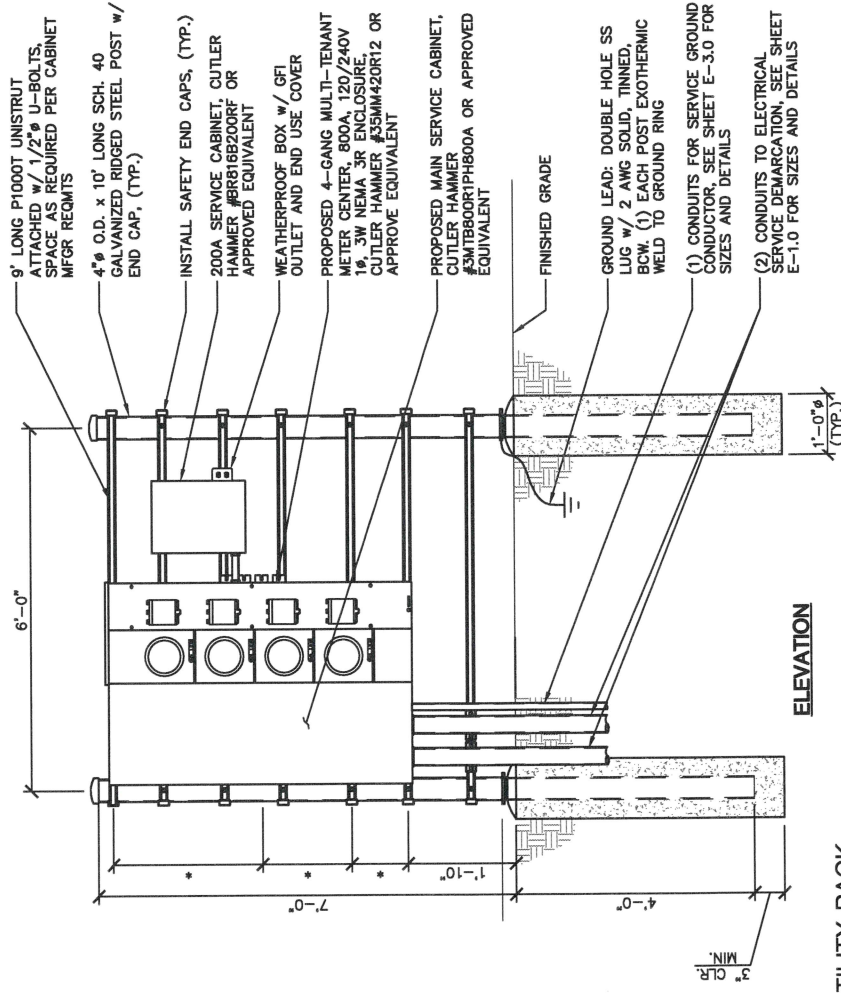
800A ONLINE WITH CABINETS

NOTES:

1. * - COORDINATE ELEVATIONS WITH EQUIPMENT/MOUNTING HEIGHT.
2. STEEL SHALL BE HOT DIP GALVANIZED.
3. CABINETS SHALL BE MOUNTED WITH STAINLESS STEEL BOLTS.
4. METAL POSTS ARE NOT ALLOWED TO SERVE AS EQUIPMENT GROUNDING CONDUCTOR.
5. UNISTRUT SHALL NOT EXTEND BEYOND POST & MUST HAVE SAFETY END CAPS FOR SAFETY REASONS.
6. METALLIC PARTS SHALL BE BONDED ACCORDING TO THE NEC.
7. GROUNDING SHALL CONFORM TO NEC AND SECTION 436-439.
8. ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 (LATEST REVISION). THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTION AND OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES AND REQUIREMENTS IN FORCE. ANY INSTALLATION WHICH WOULD VOID THE U.L. LISTING (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE SHALL NOT BE PERMITTED.
9. COORDINATE ELECTRIC SERVICE WITH LOCAL POWER UTILITY COMPANY.
10. CONDUIT SHALL BE SEALED WATERTIGHT UNTIL FINAL TERMINATIONS ARE MADE.
11. PROVIDE PULL CORD IN CONDUITS. SECURE AT EACH END.
12. ADJUST DEPTH OF CONDUITS TO PASS ABOVE GROUNDING SYSTEM.
13. PROVIDE 18 INCH (MIN.) RADIUS ELBOWS FOR BENDS.
14. PROVIDE PHENOLIC ENGRAVED NAMEPLATES AT THE SERVICE DISCONNECT LABELED: "SERVICE DISCONNECT" & "NOTE ENGINE GENERATOR NEUTRAL IS ALSO BONDED TO GROUND AT THE SERVICE DISCONNECT" PROVIDE ADDITIONAL NAMEPLATES NOTING TYPE AND LOCATION OF STANDBY POWER SOURCE.



PLAN

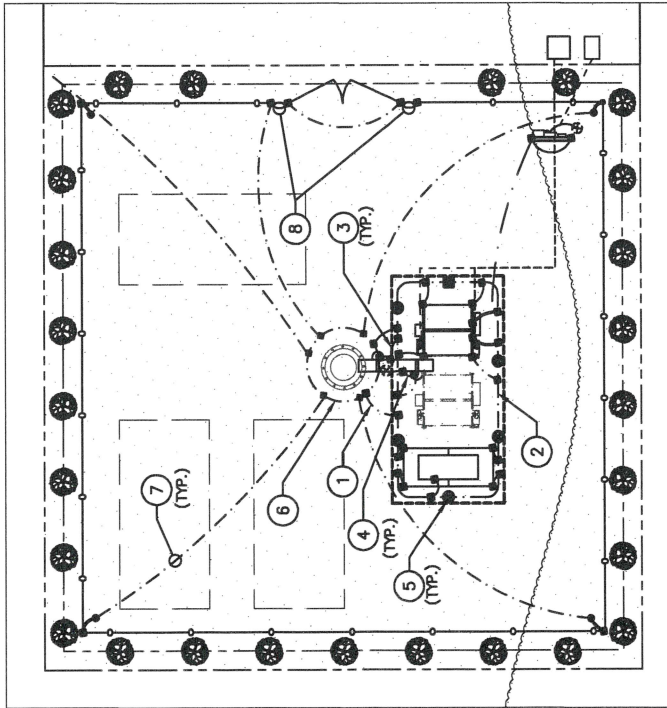


1 UTILITY RACK
SCALE: 1/2" = 1'-0"

METAL UTILITY RACK

KEY NOTES:

- 1. 2 AWG SOLID TINNED BARE COPPER WIRE (TO NEW GROUND RING, TYP. 2 CONNECTIONS ARE REQUIRED.)
- 2. 2 AWG SOLID TINNED BARE COPPER WIRE EQUIPMENT GROUND RING BURIED TO A DEPTH OF 6" BELOW FROST LINE.
- 3. GENERAL CONTRACTOR SHALL GROUND ICE BRIDGE POSTS TO GROUND RING.
- 4. GENERAL CONTRACTOR SHALL GROUND ICE BRIDGE POSTS TO ICE BRIDGE SECTIONS.
- 5. COPPER CLAD STEEL GROUND ROD
- 6. SOLID TINNED BARE COPPER WIRE, TOWER GROUND RING, INSTALL 6" BELOW FROST DEPTH, MIN. SEE NOTE 2.
- 7. 2 AWG STRANDED INSULATED GREEN CU GROUND WIRE, ROUTED IN 3/4" PVC CONDUIT
- 8. FENCE GATE GROUNDING, SEE DETAIL 2 THIS SHEET



GROUNDING NOTES:

- 1. GROUND WIRES ARE 2 AWG SOLID TINNED BCW U.N.O.
- 2. GROUND RING/RODS SHALL BE 6" BELOW FROST DEPTH, DEPTH MAY VARY.
- 3. METALS WITHIN 6' OF THE GROUND RING SHALL BE BONDED TO THE GROUND RING.
- 4. EXOTHERMIC WELD, (3) 2 AWG SOLID TINNED BCW, (2) TOWER BASE PLATE, CONNECT TO TOWER GROUND RING w/ EXOTHERMIC WELD (TYP. 3 PLACES.)

1 GROUNDING PLAN

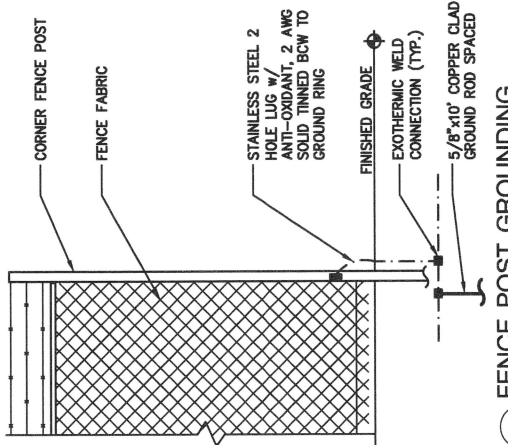
SCALE: 1" = 20'

NOTES:

- 1. THE 2 INSULATED STRANDED COPPER FROM THE RING GROUND SHALL BE EXOTHERMIC WELDED TO THE POST ABOVE.
- 2. BOND EACH HORIZONTAL POLE/BRACE TO EACH OTHER AND TO EACH VERTICAL POLE BONDED TO THE EXTERIOR GROUND RING.
- 3. GATE JUMPER SHALL BE 2 AWG STRANDED INSULATED GREEN CU WITH SLEEVES ON EACH END DESIGNED FOR EXOTHERMIC WELDING.
- 4. GATE JUMPER SHALL BE INSTALLED SO THAT IT WILL NOT BE SUBJECTED TO DAMAGING STRAIN WHEN GATE IS FULLY OPEN IN EITHER DIRECTION.

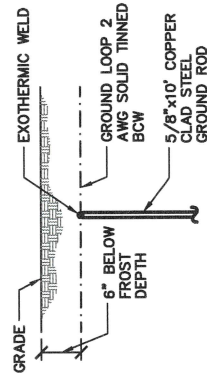
2 GATE GROUNDING ELEVATION

SCALE: NONE



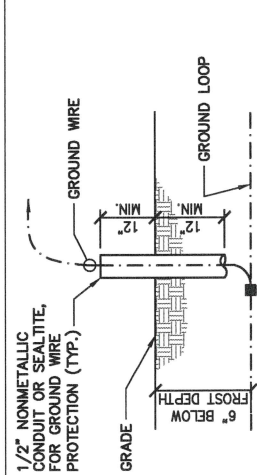
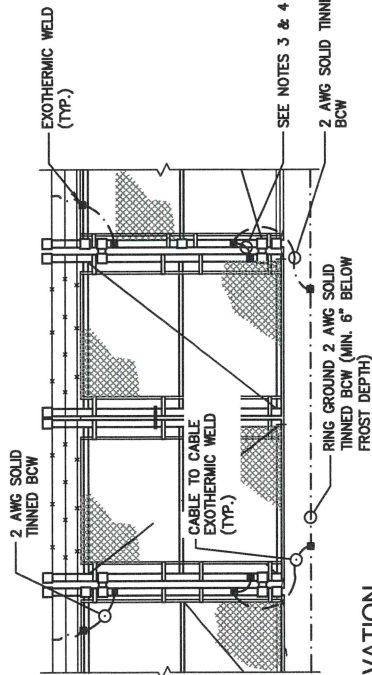
3 FENCE POST GROUNDING

SCALE: NONE



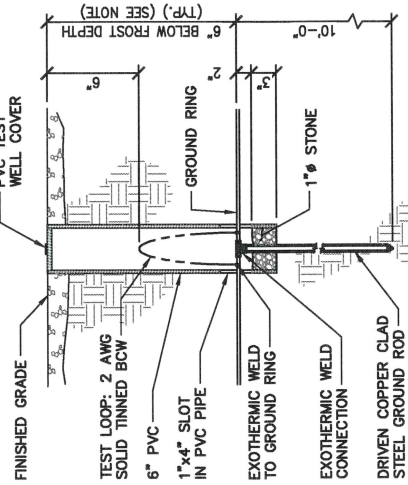
5 GROUND ROD

SCALE: NONE



4 GROUND WIRE PROTECTION

SCALE: NONE



NOTE: 6" BELOW FROST DEPTH, DEPTH MAY VARY, WORK SHALL CONFORM TO THE LOCAL BUILDING CODES.

6 INSPECTION WELL DETAIL

SCALE: NONE

GROUND INSPECTION WELL



09/13/19	90% REVIEW CD
----------	---------------

ROANOKE
 GRANMI1038
 SOUTH C.R. 700 EAST 92
 ROANOKE, IN 46783 - WHITLEY COUNTY
 MONPOLE
 DWG BY: YYS
 CHKD BY: BMM

PROJ # 18-32-01-30

SHEET TITLE
 GROUNDING PLAN
 SHEET NUMBER
C-7.0

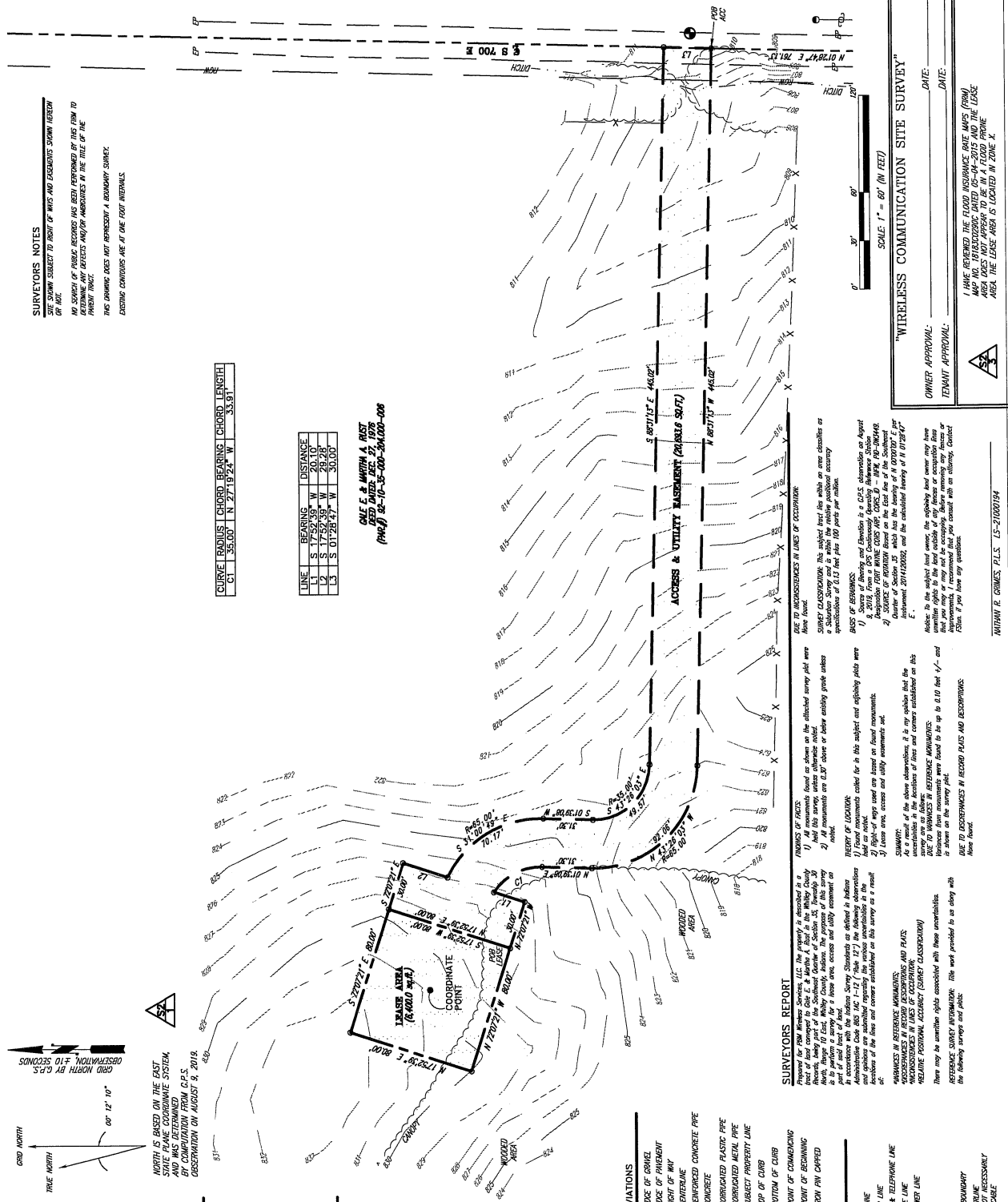
Land Surveyors
1012 S. 4th Street, Suite 101
Lafayette, NY 14203
Phone: (505) 638-5111
Fax: (505) 638-5024

NATHAN R. GRIMES
RENAISSANCE DESIGN
BUILD, INC
172 S. ARKANA AVE.
SUITE 200A
LAFAYETTE, IN 46783
PHONE: (317) 242-4229
WWW.RENAISSANCEBUILD.COM

SITE NUMBER: GRAMM1038
SITE NAME: ROADWIDE
SITE ADDRESS: S 700 E-92
ROADWIDE, IN 46783
LEASE AREA: 6,400.00 SQ.FT.
PROPERTY OWNER: GALE E. & MARTHA A. RUST
1000 S. 700 E
ROADWIDE, IN 46783
PARCEL NUMBER: 92-10-35-400-204.000-006
SOURCE OF TITLE:
DNG BR: CHRD BR: DATE:
SWS MRC 8.19.16
FSM PROJECT NO.: 19-10487
R.D.B.I. PROJECT NO.: 2019-586
SHEET 2 OF 3

REVISIONS:
DST. TO P.L. - 8.19.19
SITE NAME - 8.20.19

VACANT LAND



SURVEYORS NOTES
SITE SHOWN SUBJECT TO RIGHT OF WAYS AND EASEMENTS SHOWN HEREON OR NOT.
NO SEARCH OF PUBLIC RECORDS HAS BEEN PERFORMED BY THIS FIRM TO DETERMINE WHETHER ANY OTHER INTERESTS OR ENCUMBRANCES IN THE TITLE OF THE PROPERTY SHOWN ARE AFFECTED BY THIS SURVEY.
THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY.
EXISTING CONDITIONS ARE AT ONE FOOT INTERVALS.

PROPERTY INFORMATION
PROPERTY: GRAMM1038
SITE NAME: ROADWIDE
SITE ADDRESS: S 700 E-92
ROADWIDE, IN 46783
LEASE AREA: 6,400.00 SQ.FT.
PROPERTY OWNER: GALE E. & MARTHA A. RUST
1000 S. 700 E
ROADWIDE, IN 46783
PARCEL NUMBER: 92-10-35-400-204.000-006
SOURCE OF TITLE:
DNG BR: CHRD BR: DATE:
SWS MRC 8.19.16
FSM PROJECT NO.: 19-10487
R.D.B.I. PROJECT NO.: 2019-586
SHEET 2 OF 3

PROPERTY INFORMATION
PROPERTY: GRAMM1038
SITE NAME: ROADWIDE
SITE ADDRESS: S 700 E-92
ROADWIDE, IN 46783
LEASE AREA: 6,400.00 SQ.FT.
PROPERTY OWNER: GALE E. & MARTHA A. RUST
1000 S. 700 E
ROADWIDE, IN 46783
PARCEL NUMBER: 92-10-35-400-204.000-006
SOURCE OF TITLE:
DNG BR: CHRD BR: DATE:
SWS MRC 8.19.16
FSM PROJECT NO.: 19-10487
R.D.B.I. PROJECT NO.: 2019-586
SHEET 2 OF 3

PROPERTY INFORMATION
PROPERTY: GRAMM1038
SITE NAME: ROADWIDE
SITE ADDRESS: S 700 E-92
ROADWIDE, IN 46783
LEASE AREA: 6,400.00 SQ.FT.
PROPERTY OWNER: GALE E. & MARTHA A. RUST
1000 S. 700 E
ROADWIDE, IN 46783
PARCEL NUMBER: 92-10-35-400-204.000-006
SOURCE OF TITLE:
DNG BR: CHRD BR: DATE:
SWS MRC 8.19.16
FSM PROJECT NO.: 19-10487
R.D.B.I. PROJECT NO.: 2019-586
SHEET 2 OF 3

ABBREVIATIONS
EP EDGE OF DRIVE
EP METAL TRAFFIC POLE
EP LIGHT POLE
EP GUY POLE
EP GUY ANCHOR
EP MANHOLE
EP WATER VALVE
EP WATER METER
EP FIRE HYDRANT
EP ELECTRIC BOX
EP FENCE POST
EP CP
EP SPOT ELEVATION
EP SET AS BEARING (SEE NOTE)
EP EXISTING (SEE BEARING)
EP (EXISTING OVERHEAD WATER)

SYMBOL LEGEND
TO OVERHEAD POWER POLE
TO CONCRETE POWER POLE
TO METAL TRAFFIC POLE
TO LIGHT POLE
TO GUY POLE
TO GUY ANCHOR
TO MANHOLE
TO WATER VALVE
TO WATER METER
TO FIRE HYDRANT
TO ELECTRIC BOX
TO FENCE POST
TO CP
TO SPOT ELEVATION
TO SET AS BEARING (SEE NOTE)
TO EXISTING (SEE BEARING)
TO (EXISTING OVERHEAD WATER)

LINE LEGEND
TO OVERHEAD ELECTRIC
TO UNDERGROUND GAS LINE
TO UNDERGROUND WATER LINE
TO OVERHEAD ELECTRIC & TELEPHONE LINE
TO OVERHEAD TELEPHONE LINE
TO OVERHEAD TELEPHONE SHER LINE
TO OVERHEAD TELEPHONE SHER LINE
TO PROCESS FENCE
TO 6' DRED / SWALE
TO SUBJECT PROPERTY BOUNDARY
TO RIGHT OF WAY CENTERLINE
TO UNDEVELOPED OR UNIMPROVED AREAS DO NOT NECESSARILY APPEAR ON DRAWINGS. USE ONLY AS APPLICABLE.

- LEGAL DESCRIPTIONS (LEASE AREA)
- LEGAL DESCRIPTIONS (ACCESS ESMIT)
- LEGAL DESCRIPTIONS (PARENT TRACT)

LEGAL DESCRIPTIONS:

This is a description for A1&T, of a lease area to be located on the property of the Gale E. & Martha A. Rust, and being a part of the Southeast Quarter of Section 35, Township 30 North, Range 10 East, Whitley County, Indiana which is further described as follows:

LEASE AREA

Being a part of the Southeast Quarter of the Southeast Quarter of Section 35, Township 30 North, Range 10 East, Whitley County, Indiana which is further described as follows:
 Commencing at a railroad spike found at the Southeast corner of said Southeast Quarter of Section 35; thence with the East line of Quarter Section N 12847* E - 494.50' to the Southeast corner of the property conveyed to Gale E. & Martha A. Rust in the Whitley County Recorder's Office; thence continuing with the said East line of said Quarter Section with the Access & Utility Easement; thence with the perimeter of said Access & Utility Easement for the next six (6) calls: (1) leaving said Quarter Section line and said property line and traversing said Rust property N 88°31'13" W - 445.02' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence (2), with a curve to the right with a radius of 65.00' and a chord of N 1°39'08" E - 31.30' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence (3) N 1°39'08" E - 31.30' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence (4) along a curve to the left with a radius of 35.00' and a chord of N 27°19'24" W - 20.10' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence (5) S 17°52'39" W - 30.00' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence (6) N 72°07'21" W - 30.00' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; and being the True Point of Beginning of the Lease Area; thence leaving said Access & Utility Easement N 72°07'21" W - 80.00' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence N 17°52'39" E - 80.00' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence S 72°07'21" E - 80.00' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence S 17°52'39" W - 80.00' to the point of beginning, containing 6,400.0 square feet as per survey by Nathan R. Grimes dated August 19, 2019.



ACCESS & UTILITY EASEMENT

Being a part of the Southeast Quarter of the Southeast Quarter of Section 35, Township 30 North, Range 10 East, Whitley County, Indiana which is further described as follows:
 Commencing at a railroad spike found at the Southeast corner of the property conveyed to Gale E. & Martha A. Rust in the Whitley County Recorder's Office; thence continuing with the said East line of said Quarter Section with the Access & Utility Easement; thence leaving said Quarter Section line and said property line and traversing said Rust property N 88°31'13" W - 445.02' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence, with a curve to the right with a radius of 65.00' and a chord of N 1°39'08" E - 31.30' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence along a curve to the left with a radius of 35.00' and a chord of N 27°19'24" W - 20.10' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence N 72°07'21" W - 30.00' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; and being the Southeast corner of the lease area; thence with the East line of said Lease Area N 17°52'39" E - 80.00' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence leaving said Lease Area S 72°07'21" E - 30.00' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence N 17°52'39" W - 29.28' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence along a curve to the right with the radius of 65.00' and a chord of S 37°00'49" E - 70.17' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence S 1°39'08" W - 31.30' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence along a curve to the left with a radius of 35.00' and a chord of S 43°26'03" E - 49.57' to a set 5/8" re-bar with a cap stamped "N GRIMES LS 21000194"; thence S 88°31'13" E - 445.02' to a set Mag Nail on said East line of said quarter section and said Rust property; thence with said East line S 17°52'39" W - 30.00' to the point of beginning, containing 20,693.6 square feet as per survey by Nathan R. Grimes dated August 19, 2019.



NATHAN R. GRIMES
RENAISSANCE DESIGN
BUILD, INC
 117 S. WYOMING AVE.
 FISH LAKE, IN 46732
 PHONE (317) 256-2927
 FAX (317) 256-4209
 WWW.NRGRIMESDESIGN.COM

PROPERTY OWNER:
 GALE E. & MARTHA A. RUST
 700 E-92
 ROANOK, IN 46783

PARCEL NUMBER:
 92-10-35-000-204.000-006

SOURCE OF TITLE:

DATE:
 8.19.19

PROJECT NO.:
 19-10487

PROJECT NO.:
 2019-566

SHEET 3 OF 3

REVISIONS:

DATE TO P.L.: 8.19.19

DATE: 8.19.19

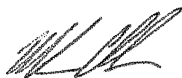
SIZE: NAME - 8201.19

VACANT LAND

TO: Whitley County Boards of Zoning Appeals
FROM: Mark Cullnane
SUBJECT: Comment RE: 19-W-SE-10

To whom it may concern,

I received a telephone call from Robert Fahl, 10460 S. 700 E-92, Roanoke, IN 46783, at 11:00 A.M. on Monday, September 23, 2019 regarding potential special exception 19-W-SE-10. Mr. Fahl expressed multiple concerns pertaining to a special exception to permit a wireless telecommunication facility at 10900 S. 700 East-92, Roanoke, IN 46873.



Mark Cullnane
Planner I
Columbia City/Whitley County Joint Planning & Building Department

Mark Cullnane

From: Robert Fahl
Sent: Tuesday, October 15, 2019 1:10 PM
To: Mark Cullnane
Subject: Docket...19-W-SE-10

To All Whom It May Concern:

My name is Robert S. Fahl. My wife and I own our residential property at 10460 S700E-92. We also own agricultural property located at 10382 S700E and at 10196 S700E.

I am sending this E-mail in reference to the request for a "cell phone" tower construction site at 10900 S700E-92. The distance from the tower site to our home is approximately 1,500 ft.

It is important to note and to take into serious consideration before approval, that there are six residential properties with appraised tax values in excess of \$400,000 and at least 3 more properties that are between the \$200,000 to \$300,000 value within this 1,500 ft. proximity. One of the \$400,00 plus homes is the upscale horse and equestrian complex known as The Salida del Sol located at 10680 S700E. The residence is approximately 250 ft. from the tower site and the building for the horses is within 450 ft. of the tower.

The duration of this land lease for the tower is upwards of 100 years. There would be one family benefiting financially from the erection of this 200 ft. tower. Several families in the close proximity of this tower site address also received registered information from a law firm in Indianapolis concerning the contract by AT&T and the financial terms. My wife and I read the information several times before agreeing that we could not, in good conscience, be responsible for blighting this area with such an eye sore for the next three generations to come.

Therefore, we sincerely ask that you deny the request for this tower construction site on the basis of location near so many residences and wondering..."surely there must be other sites available which are not in such close proximity to houses and families".

Thank you for reading and considering our thoughts.

Submitted by neighbor,
Robert S. Fahl

Mark Cullnane

From: Nathan Bilger
Sent: Friday, October 4, 2019 2:13 PM
To: Mark Cullnane
Subject: FW: 19-W-SE-10 (Les & Marti McFarren)

From: Marti McFarren [REDACTED]
Sent: Friday, October 4, 2019 2:08 PM
To: Nathan Bilger <wcplanning@whitleygov.com>
Subject: 19-W-SE-10 (Les & Marti McFarren)

*Les & Marti McFarren
10383 S 700 E -92 Roanoke, IN 46783*

[REDACTED]
*Docket number: 19-W-SE-10
Cellular tower exemption*

*Hello Mr. Cullnane~
I am sending this email in regards to Singular's request to put in a 199 ft cell tower. We are opposing their request. This is a residential area. The request would be out of place. It could hinder my neighbors values that are directly in contact with or across the road from this location and possibly ours as well. It will be an eye sore near the road. We request that you deny this request.*

Thank you,

Les & Marti McFarren

Marti McFarren, REALTOR
RE/MAX Results
7806 A W Jefferson Blvd
Fort Wayne, IN 46806

Mark Cullnane

From: Katy Harris [REDACTED]
Sent: Monday, October 14, 2019 1:20 PM
To: Mark Cullnane
Subject: 19-W-SE-10 - Katy Scheer

To Whom it May Concern,

I am writing in regards to the building of a cell tower at 10900 S700 E-92, docket number 19-W-SE-10.

I am extremely concerned about the radiation emitted from these towers. While studies and information out there regarding these towers seems to be conflicting and uncertain, everyone seems to agree that there is radiation put off from these towers and can sometimes cause averse health affects.

This tower would be within close proximity to where I board my horse at 10680 S 700 E-92, directly next door, and placed within 200 feet of the barn and house on the property. I would certainly be concerned for the well being of my horse, but also for my own, anyone else who came to the property and the people who reside in the home on the property, which includes an infant.

Additionally, I am concerned for the owner of the property and her business, as anyone could surmise this would affect her ability to conduct business. I have kept my horse with Diana Vandeman at Salida del Sol for six years with no intention of leaving, however, this would certainly give me concern enough to do so.

Not only would this affect Mrs. Vandeman's ability to conduct business, I can safely assume this would dramatically reduce the value of her property that she has kept immaculate and invested a tremendous amount of money into.

Permitting this tower would be reckless on behalf of Whitley County in regards to the safety of the citizens who would reside near this tower, and on behalf of a business owner of this County. I strongly recommend that an ordinance not be granted for this tower.

Thank you.

Katy Scheer
526 Commercial St.
Roanoke, IN 46783

[REDACTED]
--

KATY SCHEER

Head of Tasting Room Operations

Two-EE's Winery

p: 260-672-2000 | ext. 3
www.twoees.com

CONFIDENTIALITY NOTICE: This e-mail transmission and any attachment hereto contains information from Two-EE's Winery. The information is intended for the sole use of the individual or entity to which it is addressed. If you are not the intended recipient, or an agent responsible for delivering it to the intended recipient, your use, dissemination, forwarding, printing or copying of this information is prohibited. If you received this e-mail in error, please notify us immediately by e-mail, and delete the original message

TO: Whitley County Boards of Zoning Appeals
FROM: Mark Cullnane
SUBJECT: Comment RE: 19-W-SE-10

To whom it may concern,

I received a telephone call from Fred Vandeman, 5928 N. Bridge Road, Fort Wayne, IN 46814, at 10:50 A.M. on Thursday, September 26, 2019 regarding the potential special exception 19-W-SE-10. Mr. Vandeman is an owner of 10680 S. 700 East-92, Roanoke, IN 46783, adjacent to the property upon which the telecommunication facility associated with 19-W-SE-10 is planned. Mr. Vandeman expressed his opposition to a special exception to permit a wireless telecommunication facility at 10900 S. 700 East-92, Roanoke, IN 46783.



Mark Cullnane
Planner I

Columbia City/Whitley County Joint Planning & Building Department

Oct 11, 2019

Fred N Vandeman
10680 S700E-92
Roanoke, IN

Topic: Cellular tower exemption
Docket number: 19-W-SE-10

Dear Mr. Mark Cullnane wcplanning2@whitleygov.com

My name is Fred Vandeman and I live next-door to the proposed site for a new cell tower. My address is 10680 S700E, Roanoke, IN.

I purchased my property in Whitley County in 2006. I had dreams of owning a beautiful site for our house and horses. I found that beautiful country place. I purchased this property based on a number of important factors which include the tranquil country setting, beautiful surroundings and the peacefulness and quiet nature setting.

Recently some of my neighbors and myself received a proposal from a wireless cellular company wanting to lease space for a cell tower to be placed on our property. All of my neighbors, except one, have refused this proposal. I strongly feel that this will negatively impact our community and property values. There is more than ample documentation for this happening in communities throughout this region of the country. I have no argument that the community needs wireless cellular coverage but I feel strongly that this should not negatively impact homeowners in a residential/agricultural area where such tower placement is restricted by zoning. I will outline some of my reasons for this below.

Home and property investment as one of the largest single investments that family's make. This is why a great deal of care and planning goes into such a important decision. We naturally do everything we can to protect our investment. There is considerable documentation that establishes the solid connection between a reduction in property values and placement of cell towers. This is estimated to be 2-20%. I feel that this will negatively affect my property and potentially the property value.

My neighbor is now planning to allow a cellular tower (199+/- ft) to be placed within about 300 feet of my house and barn. This structure will project 34 degrees into the sky as viewed from my house and barn/arenas. This will absolutely ruin the visual landscape and pollute the tranquil soundscape with the never ending electrical hum produced by these sites.

Our horse farms viability also depend on a pleasant, safe and attractive environment for the horses and riders. This cell tower could potentially limit our ability to retain and attract clients. The public's perception (right or wrong) is that cellular radiation present health risks. As we know, for many people - "perception is reality". This "reality" could impact our ability the retain and attract new borders for the farm and renters for the house. Especially parents of children riders or renters with children. Not to mention the potential difficulty securing interest in a potential buyer, should I decide to sell the property some day.

The proposed site for the tower is zoned Agricultural, and this prohibits construction of this cell tower without an exemption. I feel strongly that any request for an exemption to the zoning should be denied. There are many, more acceptable, sites for this cell tower in this part of the county without damaging the local environment. The cell tower should be placed in a location which is zoned for such a structure/construction or granting an exemption will not cause substantial environmental damage and financial hardship to neighboring property owners.

Thank you for listening and respectfully representing my interests in this matter. I do not support granting the zoning exemption to build a wireless cell tower on the proposed site.

Thank you,



Fred N Vandeman

Oct 17, 2019

Fred N Vandeman
10680 S700E-92
Roanoke, IN

Topic: Cellular tower exemption
Docket number: 19-W-SE-10

Dear Mr. Mark Cullnane wcplanning2@whitleygov.com

This represents an additional letter to supplement the previous response to docket number 19-W-SE-10. I am writing this to add references and bibliography to justify comments made in my original letter.

I would like to also include for your review, some small excerpts from these articles. This research is easily referenced online based on the individual URL provided. This sampling only includes a small portion of well-documented research on these topics. These references examine potential health and cancer risks, Decrease in property values near cell towers and aesthetics.

<https://scientists4wiredtech.com/what-are-4g-5g/cell-tower-installation-plans-lower-property-values/>

<https://www.nar.realtor/cell-phone-towers#section-165807>

<http://www.emfsa.co.za/news/property-values-desirability-cell-towers/>

<https://uhs.berkeley.edu/sites/default/files/cellphonescelltowerswirelessafety.pdf>

<https://www.vox.com/2018/7/16/17067214/cellphone-cancer-5g-evidence-studies>

<http://greenwoodmeadows.org/cell-towers-and-property-values/>

<http://greenwoodmeadows.org/cell-towers-and-property-values/>

I can provide many additional references if needed.

Thank you for listening and respectfully representing my interests in this matter. I do not support granting the zoning exemption to build a wireless cell tower on the proposed site.

Thank you,



Fred N Vandeman

wireless antennas placed on top of or on the side of a building, would impact a home buyer's or renter's interest in a real estate property.

The overwhelming majority of respondents (94%) reported that cell towers and antennas in a neighborhood or on a building would impact interest in a property and the price they would be willing to pay for it. And 79% said under no circumstances would they ever purchase or rent a property within a few blocks of a cell tower or antenna.

Study Results

- 94% said a nearby cell tower or group of antennas would negatively impact interest in a property or the price they would be willing to pay for it.
- 94% said a cell tower or group of antennas on top of, or attached to, an apartment building would negatively impact interest in the apartment building or the price they would be willing to pay for it.
- 95% said they would opt to buy or rent a property that had zero antennas on the building over a comparable property that had several antennas on the building.
- 79% said under no circumstances would they ever purchase or rent a property within a few blocks of a cell tower or antennas.
- 88% said that under no circumstances would they ever purchase or rent a property with a cell tower or group of antennas on top of, or attached to, the apartment building.
- 89% said they were generally concerned about the increasing number of cell towers and antennas in their residential neighborhood.
- 57% had previously experienced cognitive effects from radiation emitted by

a cell phone, wireless router, portable phone, utility smart meter, or neighborhood antenna or cell tower

The National Institute for Science, Law and Public Policy (NISLAPP) was curious if respondents had previous experience with physical or cognitive effects of wireless radiation, or if their concern about neighborhood antennas was unrelated to personal experience with the radiation. Of the 1,000 respondents, 57% had previously experienced cognitive effects from radiation emitted by a cell phone, wireless router, portable phone, utility smart meter, or neighborhood antenna or cell tower, and 43% had not experienced cognitive effects. 63% of respondents had previously experienced physical effects from these devices or neighborhood towers and antennas and 37% had not experienced physical effects.

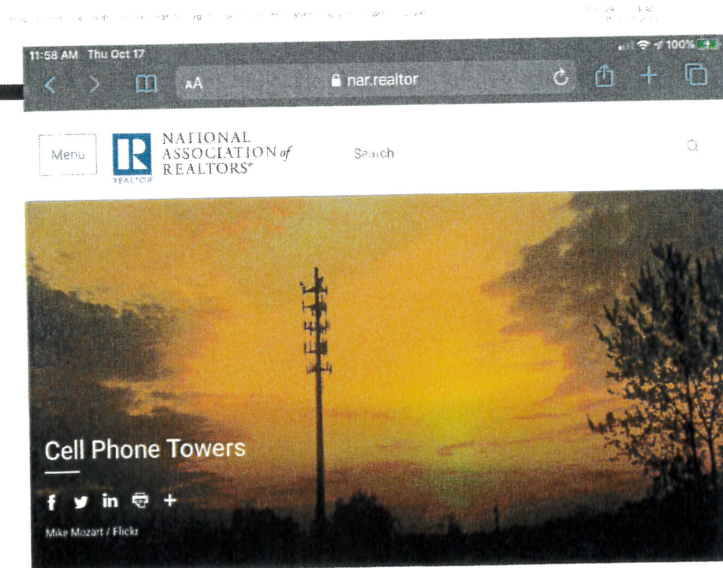
The majority of respondents provided contact information indicating they would like to receive the results of this survey or news related to the possible connection between neighborhood cell towers and antennas and real estate decisions.

Comments from real estate brokers who completed the NISLAPP survey:

"I am a real estate broker in NYC. I sold a townhouse that had a cell tower attached. Many potential buyers chose to avoid purchasing the property because of it. There was a long lease."

"I own several properties in Santa Fe, NM and believe me, I have taken care not to buy near cell towers. Most of these are rental properties and I think I would have a harder time renting those units with a cell tower or antenna nearby. Though I have not noticed any negative health effects myself I know many people are affected. And in addition, these antennas and towers are often extremely ugly, despite the attempt not to put anything there as chemicals or take them."

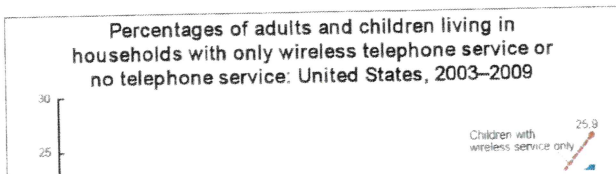
"We are home owners and real estate investors in Main County and have been for the last 25 years. We own homes and an apartment building here in Maine. We would not think of ever buying real estate that would harm our clients. All our properties are free of smart meters. Thank you for all of your work."



Real Estate Topics Land Use & Property Rights

OVERVIEW REFERENCES

Cell phone towers may bring extra tax revenue, greater reception, and security to a city or town. Despite these benefits, many remain skeptical of towers due to potential health risks, environmental aesthetics and the impact on property values.



Facebook

My concluding thoughts

We are guinea pigs in a massive technological experiment that threatens our health. Our government needs to determine what constitutes a safe level of long-term exposure to wireless radiation and strengthen the FCC's radio frequency exposure guidelines. In the meantime, the government should impose a moratorium on technologies that increase our exposure to wireless radiation, especially new forms of wireless radiation like 5G cellphone radiation.

[NTP Cell Phone Radiation Study: Final Reports](#)

References

References for this presentation are available at:

<http://www.saferemr.com/2016/08/key-cell-phone-radiation-research.html>

12:28 PM Thu Oct 17 ncbi.nlm.nih.gov

Format: Abstract

Neurolog. Sci. 2017 May;38(5):797-810. doi: 10.1007/s10072-017-2850-8. Epub 2017 Feb 17.

Mobile phone use and risk of brain tumours: a systematic review of association between study quality, source of funding, and research outcomes.

Prasad M¹, Kalhauria P², Nair P², Kumar A², Prasad K².

Author information

- 1 Department of Community Medicine, Postgraduate Institute of Medical Sciences, Rohtak, 124001, India, Haryana. manya.2311@gmail.com.
- 2 Department of Neurology, All India Institute of Medical Sciences, Ansari Nagar East, AIIMS Campus, New Delhi, 110029, India.

Abstract

Mobile phones emit electromagnetic radiations that are classified as possibly carcinogenic to humans. Evidence for increased risk for brain tumours accumulated in parallel by epidemiologic investigations remains controversial. This paper aims to investigate whether methodological quality of studies and source of funding can explain the variation in results. PubMed and Cochrane CENTRAL searches were conducted from 1966 to December 2016, which was supplemented with relevant articles identified in the references. Twenty-two case control studies were included for systematic review. Meta-analysis of 14 case-control studies showed practically no increase in risk of brain tumour [OR 1.03 (95% CI 0.92-1.14)]. However, for mobile phone use of 10 years or longer (or >1640 h), the overall result of the meta-analysis showed a significant 1.33 times increase in risk. The summary estimate of government funded as well as phone industry funded studies showed 1.07 times increase in risk of brain tumour. There was no significant association between any increase in risk of brain tumour and source of funding. Metaregression analysis indicated that the association was significantly associated with methodological study quality ($p < 0.019$, 95% CI 0.009-0.09). Relationship between source of funding and log OR for each study was not statistically significant ($p < 0.32$, 95% CI 0.036-0.010). We found evidence linking mobile phone use and risk of brain tumours especially in long-term users (≥ 10 years). Studies with higher quality showed a trend towards high risk of brain tumour, while lower quality showed a trend towards lower risk/protection.

KEYWORDS: Brain tumour; Meta-analysis; Metaregression; Mobile phones; Risk

Comment in

Use of cell phones and brain tumors: a true association? [J. Neurol. Sci. 2017].

PMID: 28213724. DOI: 10.1007/s10072-017-2850-8
(Indexed by MEDLINE)

Publication types, MeSH terms

LinkOut - more resources

Send to: Full text links, Save items, Similar articles, Cited by 2 PubMed Central articles, Related information, Recent Activity

Support Center

Mark Cullnane

From: Diana Creative [REDACTED]
Sent: Friday, October 11, 2019 3:13 PM
To: Mark Cullnane
Subject: docket number: 19-W-SE-10

Dear Mr. Cullnane;

I am attaching my letter for you to review. I hope you understand my concerns and will stop the cell tower.

October 11, 2019

Subject: Docket Number: 19-W-SE-10

Dear Mr. McCullnane:

I am writing about the cell tower that the company is trying to get a special exemption in order to place the tower in residential area. This should say it all, but I will state my case. Needing an exemption is the first problem, it is going to ruin what we call a "peaceful" residential area. The sound that the facility will make will be annoying and may be heard from our property.

This brings me to my second point: The tower will be too close to houses. If you do your research, you will see that cell towers are placed in industrial areas or in areas that are not near houses. This tower will be too close to my house along with the other houses in the area. I should not have to give up my right to a peaceful existence for someone's profit. What next!!! A gas station in my back yard??? We live in the country for a reason. We have a horse farm. We are peaceful people that keep to ourselves and we protect our horses. If this tower is built and cause problems for my family or my horses, you can believe I would seek a legal remedy. If one of my riders were to get hurt because of the tower spooking the horse, this would be because the exemption was granted. You never can know when a horse will spook, even with a good rider. The key is to keep things the same and peaceful, so no one gets hurt. The tower will be seen by all my horses and the noise could very well cause problems along with the sight of it.

My next point is this. This company sent letters to anyone with property in the area. The neighbors that I have talked to and myself have no desire to allow a cell tower on our property. This company wants to profit from using our peaceful land for their gain without any respect for our land values or concern with animals and children. This is why the tower should be placed in a properly zoned area which will minimally effect the neighboring residents.

Children are a big issue also. Children will be able to access this tower and play near it. This is another reason why these towers are NOT near houses, so our children are not exposed to an element that has potential harm. Whether or not this is true, this certainly is

the perception of many people in our society. What about Climbing the tower!!!? I would like to think parents watch their children, but teenagers can be very intent on doing what they want. This danger, near our houses, should not be allowed?


I am also concerned about land values. Well established research and public opinion have shown that a cell tower lowers property values. The company that owns the tower profits, but we lose??? We are residents that have paid our taxes for years and should have the right to stop this. Would you want your house and children next to the tower?

STOP this tower. We abide by all laws; you need to respect the rights and wishes of your taxpayers. STOP the tower.

Diana Vandeman

10680 S. 700 E.-92

Roanoke, Indiana 46814


P.S. I will be at the meeting to oppose the exemption.....



Bishop, Daniel L

Richter, James A & Janet S

Fischer, Richard C & Kimberly L

Moreland Inc

Zimmerman, Virginia Lee

Moehle, Philip & Sandra

Hellingner, Daniel O & Amanda M

ESR 114

State Of Indiana

6503

6451

6714

6755

6871

State Of Indiana

10966

10945

10380

Fahl, Robert S & Roseann

Moore, Steven M & Virginia M

Alter, Michael W & Harmon, Alysia M

Salida Del Sol LLC

Rust, Gale E & Martha A

Reese, Craig & Deborah Ann

Turner, Larry M & Daleen K

Geible, Rebecca L & Ferguson, Helen C

Stovall, Andre B & Maxine C

Fingerle, Benjamin T & Nichole B

Stine, Jerry A

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Blasius, Douglas M & Sherie M

Pritchard, John C & Lona R

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

Stine's Triple S Ranch LLC

Stine, Jan Russell & Beverly Jean Trustees of the Jan Russell Stine & Beverly Jean Stine Family Trust

