

Cerro Gordo County Planning & Zoning Staff Report

SPECIAL USE

Case No.: 19-11	Date of Application: September 19, 2018
Use Request: 20.2(J) Wireless telecommunications tower	Owner: Dale and Lana Schaefer
Current Zoning: A-1 Agricultural	Petitioner: Michele Roth, Great Plains Land Service, for FTC Tower Co.
Address: 15507 140 th Street Rockwell, IA 50469	Size of Special Use: 500'x500' lease area
Legal: NE¼ of the NW¼, Section 16 Geneseo Township	Size of Parcel: 40 acres
	Hearing Date: October 30, 2018

BACKGROUND INFORMATION:

1) PURPOSE OF SPECIAL USE REQUEST -

FTC Tower Company proposes to construct a 300-foot tall, guyed communication tower, including a 5-foot lightning rod, for a total height of 305 feet (See Figure 1). The proposed tower will be located in a 500'x500' leased area west of the acreage at 15507 140th Street with a 75'x75' fenced-in compound to house tower equipment (See Figure 2). The leased area would be accessed by a service road via the existing access (See Figure 3).

2) EXISTING LAND USE AND ZONING CLASSIFICATION OF PROPERTY -

The land on which the tower is proposed is zoned A-1 Agricultural and is used as pastureland (See Figure 1).

3) LAND USE AND ZONING CLASSIFICATION OF SURROUNDING PROPERTY -

All surrounding land is zoned A-1 Agricultural. Nearby properties are in agricultural production. There are three agricultural residences to the north and east (See Figures 2 & 4-5). There is a hog confinement approximately ¼-mile to the west (See Figure 6).

GENERAL FINDINGS:

1) HARMONY AND ACCORD WITH GENERAL PRINCIPLES AND PROPOSALS OF ZONING ORDINANCE -

Section 20.2(J) of the Cerro Gordo County Zoning Ordinance allows wireless telecommunications towers to be placed in the A-1 Agricultural district by Special Use Permit (SUP) granted by the Board of Adjustment. The goal of the ordinance requirements in Section 20.2(J) is to promote co-location of antennas so as to maximize the use of new and existing towers and limit the need for new towers. Applicants are required to provide information on why existing structures cannot be used. If there is a tower within one mile of the proposed site that would meet the applicant's technical and engineering requirements, then the ordinance requires the denial of the permit. There are no communication towers within 1 mile of the proposed site, so a new tower would be in line with the goals of the Zoning Ordinance.

The ordinance also requires that permits from other entities are obtained prior to making application or the applicant must acknowledge that any SUP granted would be contingent on such permits being filed. The applicants have received a Determination of No Hazard from the FAA for the proposed height of the tower, showing it will not negatively impact air traffic.

2) COMPATIBILITY OF USE WITH APPEARANCE AND ESSENTIAL CHARACTER OF AREA -

The applicant has requested that the SUP allow them to construct a tower not to exceed 305', including appurtenances. For the most part, the topography in this area relatively flat, and tall structures can be seen from some distance. An existing 310-foot tall communication tower south of Rockwell is located approximately 1¾-miles east of the proposed tower site that demonstrates the likely visual impact (See Figure 7).

Section 20.2(J)(2)(b) requires that towers be of a camouflage design, if possible, such as blending into the environment. This is a wide-open area, which likely does not lend itself to such a strategy. Staff recommends that the tower, if approved, be constructed of materials that make it nearly invisible with lighting as required by the FAA. Requiring a vegetative buffer around the base of the tower, particularly to the north, would be a reasonable condition to soften the impact for nearby neighbors (See Figures 4 & 5).

3) IMPACT ON EXISTING AND FUTURE USES, VICINITY, AND COMMUNITY AS A WHOLE -

The proposed site is currently used as pastureland and will not affect adjacent agricultural operations (See Figure 1). The closest three houses will be impacted the most by the proposed tower (See Figures 2 & 4-5). Residents further away from the site may be impacted as well, but to a lesser degree. Potential impacts are generally aesthetic in nature, but may also include interference with nearby residents' television reception. One of the recommended conditions is the applicant must address any signal interference within 30 days of it being reported.

In general, the impacts of the proposed tower will be localized to the nearby vicinity and not carry over to the county as a whole. One suggestion is that the area around the lease site be buffered with trees and shrubs, at least on the north side.

4) ADEQUACY OF PUBLIC SERVICES (i.e., highways, streets, police, fire protection, drainage structures, refuse disposal, water and sewage facilities, or schools) -

There is an existing farm access into the proposed site (See Figure 3). The applicant plans to improve the driveway, including the installation of a new culvert. A permit is required from the County Engineer's Office for these improvements. The County Engineer's Office provided comment regarding the specifications for the proposed improvements, which is included in your packets. 260th Street carries 30 vehicles per day and is gravel-surfaced. A use such as this is not anticipated to generate a great deal of additional traffic. After construction is complete, the site will likely be visited by technicians every one or two months.

Law enforcement is provided by the Cerro Gordo County Sheriff's Department. The proposed site lies within the Rockwell-Swaedale Fire District. Additional demand for either service as a result of this special use is not anticipated.

The floodplain of the East Branch Beaverdam Creek is at least 100 feet to the west of the site. No impact to the floodplain is likely as a result of the proposed tower. There are no drainage districts or public drainage facilities close by. The proposed tower will not require water or sewage treatment and should not impact schools.

5) PUBLIC COST FOR ADDITIONAL PUBLIC FACILITIES AND SERVICES -

During operation, the proposed tower should not result in any costs to the public for additional public facilities or services. It is recommended as a condition of the SUP that the applicant is responsible for all costs to repair damage to public roads as a result of construction and that construction routes as determined by the County Engineer are used.

6) POTENTIAL DETRIMENTS TO PERSONS, PROPERTY, OR GENERAL WELFARE (i.e., excessive traffic, noise, smoke, fumes, glare, or odors) -

As stated above, the additional traffic generated by the proposed tower will be negligible. There will be no noise, smoke, fumes, or odors created by the proposed tower. It is possible that some residents could encounter glare from the tower or that it could interfere with television signals for nearby residences. It should be the applicant's responsibility to correct such problems. The major anticipated detriment is aesthetic in nature, unless the tower creates signal interference for neighbors.

The site is very close to three rural residences (See Figures 2 & 4-5). The tower's aesthetic impacts could be mitigated somewhat by requiring a planting screen of evergreens and shrubs along the north side of the lease area.

7) COMPATIBILITY AND CONSISTENCY WITH THE INTENT AND PURPOSE OF THE ZONING DISTRICT -

The stated purpose of the A-1 district is to permit the continued use of agricultural land for agricultural purposes. Compatibility with agricultural uses is questionable, however, such towers are allowed by Special Use Permit in A-1 districts. A minimal amount of pasture land will be disturbed if the special use is established.

8) COMPATIBILITY WITH COUNTY COMPREHENSIVE PLAN -

The county's Comprehensive Plan Update does not specifically address wireless communications towers and facilities. There are, however, several objectives and policy statements that relate to the proposed special use.

Objective 2.1 of the plan encourages, "A land use balance in order to promote the preservation, protection and efficient provision of appropriate land use, essential services, generation of revenues which cover the costs of those services, and a mixture of housing, shopping, and employment opportunities." Policy 2.1.5 under this objective states, "Incorporate performance standards, where appropriate, into land development regulations and criteria; particularly to encourage compatible development projects. Performance standards are a flexible method of regulating development, and are related to the effects of the development on adjacent properties or uses. The means of meeting development performance standards are flexible, and may be determined by the developer and the public representatives. Performance standards set the upper limits on those measurable effects of development, such as noise levels, water and air pollution, and other impacts on adjacent properties or upon the community area in general." Wireless communications infrastructure has become a relied-upon means of communication by the general public as much as wire-line phones and e-mail and could be considered an essential service. Where there are no regulatory reasons to deny a SUP for a tower, care must be taken to make sure the towers, which are an obvious addition to the landscape (See Figure 7), are made as compatible with surrounding development as possible.

Objective 2.4 of the plan discourages, "Non-farm rural uses, and those uses which propose to locate outside of cities in established urban fringe areas, from locating in active agricultural areas or on productive agricultural soils or on sensitive environmental land." Policy statement 2.4.3 under this objective states, "In order to protect and maintain the existing natural character of the land, such as topography, scenic views, existing vegetation, and waterways of the county, non-farm rural uses should be limited to areas that are appropriate for such development, and designed to blend with the natural character as much as possible through the use of screening, building placement, and scale or size of buildings." A wireless communications tower is a non-farm use. This one will be placed on moderately productive pasture land; however, only a fraction of an acre will be used to accommodate it. It is difficult to make an object that is over 300 feet tall blend in with the size and scale of surrounding agricultural development. Requiring vegetation along the north line of the lease area would be a reasonable condition to soften the visual impact of the tower for nearby rural residents.

COMPLIANCE WITH ADDITIONAL ARTICLE 20 REQUIREMENTS:

Additional requirements for the special use requested are as follows:

20.2 SPECIAL USES

- J. Commercial microwave, radio and television towers, public utility structures and accessory equipment, including their transmitting stations and towers, and wireless telecommunications facilities. Any district except residential, provided the following requirements are met:
1. Application. In making application for a Special Use Permit, the applicant shall file the following in addition to the standard application for Special Use Permit:
 - a. A site plan, drawn to scale, identifying the site boundary; tower or facility location; height of structure(s); guy wires and anchors; and existing and proposed structures including accessory structures. **The site plan conforms to these requirements.**
 - b. If the applicant is not the site owner, written authorization from the site owner. **A signed, written authorization from the site owner was included with the application.**
 - c. The applicant shall provide evidence that available public or private sites are unsuitable for operation of the facility under applicable telecommunications regulations and applicant's technical design requirements. A new tower shall not be permitted if co-location can be found upon an existing or alternative tower structure that meets engineering requirements of an applicant's wireless network within a one (1) mile radius of the proposed new tower site. Cost shall not be used as a reason against co-locating of antennas. **There are no tall structures within 1 mile that would be able to accommodate the use. The next closest cellular site is more than 1½ miles to the east.**
 - d. Evidence that all permits required by any other governmental entity have been obtained, or, if all such permits cannot practicably be obtained prior to the public hearing, the written acknowledgement by the applicant that any special use permit granted will be contingent upon the applicant obtaining all such permits and providing conclusive evidence thereof to the Administrative Officer, as the latter may require. **A Determination of No Hazard was filed showing that the proposed tower height is not a hazard to air traffic. The Mason City Municipal Airport has also reviewed the request and has no objections. FCC radio station authorizations were also provided with the application.**
 2. Conditions. Any applicant shall provide documentation that all of the following applicable conditions will be met for all towers:
 - a. The tower shall be constructed or easily modifiable, within thirty (30) days, to support the equipment of at least three (3) communications companies. **The application documents state that the tower is equipped to have at least three antennas mounted on the structure.**
 - b. Towers and telecommunications facilities shall be of camouflage design, if possible. Examples of camouflage facilities include, but are not limited to, architecturally screened roof-mounted antennas, antennas integrated into architectural elements, communications and telecommunications towers designed to blend into the surrounding environment or to look like an object other than a tower. Where camouflage design is impossible or impractical, the tower shall be built of materials that make it nearly invisible. Lighting on the tower shall be of the least conspicuous type and exist only to satisfy Federal Aviation Administration (FAA) requirements. **Camouflage design does not appear to be possible at this location. Because of its proximity to several rural residences, buffering around the base of the tower is recommended. Obstruction lighting consistent with FAA requirements should be located on the tower, preferably red to minimize impacts to nearby residences.**
 - c. The tower owner and the tower operator shall provide proof of adequate liability insurance in writing to the Administrative Officer of Cerro Gordo County for Planning and Zoning, under such further conditions and in such amounts as the Board of Adjustment or the Administrative Officer may direct, but in no

event shall such proof be required more often than annually. **A copy of the Certificate of Liability Insurance was provided with the application. FTC Tower Co. carries an umbrella liability insurance policy in the amount of \$10 million.**

- d. The base of the tower shall be at least the height of the tower from any public right-of-way and any existing principal or accessory structure, other than the base station. Guy wires, guy anchors, and base station structures shall comply with all setbacks for the zoning district in which they are located. No guy anchors, towers, or base station structures shall be located in an easement located on the property except that held by the applicant. **The proposed tower is 305' in height, including appurtenances. The center of the tower is proposed to be 269'-1" from the right-of-way line of 140th Street. This does not meet the minimum standard, as setbacks are measured from the closest point of a structure to property or right-of-way lines and includes the entire height of the tower, including appurtenances. The applicant is requesting a variance from this requirement for the proposed setback. The applicant provided a stamped fall zone letter from a licensed engineer stating the designed fall zone is within a 150-foot radius from the tower base.**

The proposed tower is guyed. The guy wires meet minimum setbacks for the A-1 District.

- e. Any signal interference complaints associated with the tower or related equipment shall be addressed within thirty (30) days in accordance with Federal Communications Commission (FCC) rules and procedures. **This should be a required condition of the SUP, if approved.**
- f. The tower and all appurtenances shall be removed upon the end of its useful life and the site restored to its condition prior to tower placement within one hundred eighty (180) days. **This should be a required condition of the SUP, if approved. A decommissioning statement to remove the tower at the end of its life was provided with the Operation Statement and is included with your packets.**
- g. Access from any public road shall be subject to the standards of the County Engineer. An access permit shall be obtained from the County Engineer prior to construction. **The access road will use the existing farm access (See Figure 3). According to the application, the access will be widened and improved with a new culvert. A permit from the Engineer's Office is required for the widening of the driveway and improvements. The Engineer's Office has provided FTC Tower Co. with the required specification for the driveway. This should be a required condition of the SUP, if approved.**
- h. A zoning permit shall be applied for and approved, subject to Article 22 of the Zoning Ordinance, prior to any construction. **This should be a required condition of the SUP, if approved.**
- i. A sign shall be placed on the base station structure or at the base of the tower that identifies a name and phone number of whom to contact in case of emergency. No advertising device is permitted anywhere on the facility except as permitted by this Ordinance. **This should be a required condition of the SUP, if approved.**

- 3. Exceptions. The Special Use Permit procedure shall not apply where:

- a. An applicant proposes to add an antenna to an existing tower and the addition of such antenna will not increase the total height of the tower.

In such cases, the applicant shall file an Application for Zoning Certificate for review by the Zoning Administrator, along with evidence that the required FAA and FCC permits have been obtained. **Since this request is for a new tower, this requirement does not apply.**

- 4. Transmission lines. The routing of transmission lines shall be restricted to locations that minimize the disruption of agricultural activity and developed residential areas. **It appears from the plans filed with the application that electrical and telephone lines will be run to the site underground.**

ZONING DISTRICT REQUIREMENTS:

Requirements of the zoning district for which the proposed special use is to be located are as follows:

- Minimum parcel size is 10 acres.
- 7.5 Height Regulations. No building hereafter erected or structurally altered shall exceed two and one-half (2½) stories or thirty-five (35) feet.
- 7.6 Yard Requirements. Each lot shall have front, side and rear yards not less than the depths or widths following:
 - A. Front yard depth, fifty (50) feet.
 - B. Each side yard width, twenty-five (25) feet.
 - C. Rear yard depth, thirty (30) feet.
- **Compliance with district regulations:**
The guyed-tower will be located in excess of all required yard setbacks on account of its height. All guyed-wires and anchors and tower facilities meet minimum district setbacks. The leased area plus the surrounding land exceeds 10 acres. The maximum height requirement of 2½ stories or 35' is not met; however, Section 6.27 of the Zoning Ordinance allows taller structures subject to the approval of the Board of Adjustment.

STATUTORY REQUIREMENTS:

Additional requirements under Iowa Code pertain to the Special Use applied for:

FTC Tower Co. must comply with all FCC and FAA rules and regulations regarding construction requirements, technical standards, interference protection, power and height limitations, and radio frequency standards. Copies of FAA and FCC compliance have been provided with the application.

According to the site plan, a 12"x26" diameter culvert is proposed to be installed at the end of the service road, along with other improvement to the existing driveway. This work, any transmission line work in the county right-of-way, and connecting the service road to the public right-of-way requires a permit from the county Engineer's Office and should be a condition of the SUP. The Engineer's Office has already provided county requirements to the applicant regarding the driveway.

STAFF ANALYSIS AND RECOMMENDED ACTION:

The proposed tower does not meet the setback requirement from the right-of-way line of 140th Street, which is a minimum distance of 1 foot for every foot of total tower height, including appurtenances. The proposed setback is 269'-1" from the right-of-way line, and the tower is proposed to be 305 feet tall. The applicant provided a stamped fall zone letter from a licensed engineer stating the designed fall zone is within a 150-foot radius from the tower base. The Board would be justified in denying the application for not meeting this requirement. I am satisfied with this documentation from a safety standpoint. The biggest impact is going to be in the immediate vicinity for the closest residents.

The proposed tower will undoubtedly have a visual impact on the nearby homes along 140th Street. This is not reason alone to deny the permit. Perhaps by requiring plantings along the north line of the lease area, and perhaps the east line, and meeting setback requirements the visual impact at ground level can be mitigated. The applicant should also be responsible for correcting any signal interference or glare issues.

As with other tower applications the Board has reviewed, I have asked for comments from the Mason City Municipal Airport. The airport has no concerns with the proposed tower location. The County Engineer has not expressed concerns with the tower itself and has provided the applicant with requirements regarding the driveway. Driveway and work in the right-of-way permits are required for the service road access to North Street, connecting transmission lines, and other right-of-way work. These concerns and requirements are reflected in the recommended conditions.

In summary, the applicants meets all ordinance requirements for wireless communications towers except the setback requirement from the right-of-way line of 140th Street. Approval is recommended with the suggested conditions listed below. However, I do not recommend granting the requested variance for the required setback as outlined in Conditions 7, 11, and 16.

RECOMMENDED CONDITIONS TO BE MET IF POSITIVE VOTE BY BOARD OF ADJUSTMENT:

Note: In granting a Special Use Permit, the Board of Adjustment may attach conditions which it finds are necessary to carry out the purpose of the Zoning Ordinance, in conformance with what is provided in Article 20 of the Zoning Ordinance, and where reasonable and necessary may increase the required lot or yard, control the location and number of vehicular access points to the property, limit the number of signs, limit coverage or height of buildings because of obstruction to view and reduction of light and air to adjacent property, and require screening and landscaping to reduce noise and glare and maintain the property in character in keeping with the surrounding area. Special uses shall ordinarily comply with the standards of the district concerned for principal uses which are permitted therein, except as modified by the Board of Adjustment in granting a Special Use Permit.

The following conditions are recommended:

1. This Special Use Permit may be reviewed at any time in the future upon the request of the applicants or a majority of the Board of Adjustment members.
2. The provisions and/or regulations shall be minimum requirements and wherever the requirements of any other lawfully adopted rules, regulations or ordinances are at a variance, the most restrictive shall govern.
3. It is contemplated that from time to time during the operation of a wireless telecommunications facility, including accessory equipment and support buildings, that conditions may arise which are not covered by the terms of this permit and which cannot be anticipated. In the event such conditions do arise, the Board of Adjustment of Cerro Gordo County, Iowa, may impose additional regulations to meet any new conditions. In addition, if said facility should, at any time, be operated in any manner which violates the rules and regulations of any federal or state regulatory agency, then the Board of Adjustment may impose such other conditions so as to insure compliance with such rules and regulations.
4. This permit will be subject to revocation for operator's failure to comply with the provisions as herein set forth, in the Cerro Gordo County Zoning Ordinance, or such other provisions as may, from time to time, be imposed by the Board of Adjustment of Cerro Gordo County, Iowa, under the terms of this permit.
5. County representatives shall have the right to enter the premises at any time upon notification to the permit holder for the purposes of enforcing the provisions of this Special Use Permit.
6. This Special Use Permit shall be applicable to FTC Tower Company, its successors, and assigns as well as any future owner of the tower.
7. The special use shall be constructed and operated in accordance with the application and the revised site plan as required in Condition 16.
8. The tower shall be constructed or easily modifiable, within thirty (30) days, to support the equipment of at least three (3) communications companies.
9. The tower shall be built of materials that make it nearly invisible, subject to the approval of the FAA. Lighting shall be of the least conspicuous type and exist to satisfy FAA requirements only. If acceptable to the FAA, red lights shall be used rather than white strobes.
10. The tower owner and the tower operator shall provide proof of adequate liability insurance in writing to the Zoning Administrator of Cerro Gordo County, under such further conditions and in such amounts as the Board of Adjustment or the Zoning Administrator may direct, but in no event shall such proof be required more often than annually.
11. The base of the tower shall be at least the height of the tower, including appurtenances, from any public right-of-way and any existing principal or accessory structure other than the base station. Base station structures and guyed anchors shall comply with A-1 District setbacks. No base station structures shall be located in an easement located on the property except that held by the applicant.
12. Any signal interference complaints associated with the tower or related equipment shall be addressed within thirty (30) days in accordance with Federal Communications Commission (FCC) rules and procedures.
13. The applicant shall take appropriate steps to mitigate glare created by the special use within thirty (30) days of receipt of a complaint.

14. The tower and all appurtenances shall be removed upon the end of its useful life and the site restored to its condition prior to tower placement within one hundred eighty (180) days.
15. Current copies of permits and licenses from other local, state, or federal agencies shall be filed in the office of the Zoning Administrator prior to any Zoning Permit being approved for construction. FCC approval shall not be required until such time as an Application for Zoning Certificate is filed for an antenna.
16. A Zoning Permit shall be applied for and approved, subject to Article 22 of the Zoning Ordinance, prior to tower construction and for each antenna to be constructed on said tower. A revised site plan showing all changes and meeting all setback requirements and conditions of this Special Use Permit and a new, signed authorization statement from the site owner shall be submitted with the application.
17. A sign shall be placed on the base station structure or at the base of the tower that identifies a name and phone number of whom to contact in case of emergency. No advertising device is permitted anywhere on the facility except as permitted by this Ordinance.
18. A variance is hereby granted for the height of the tower, not to exceed 305 feet, including appurtenances.
19. Any damage to drainage structures resulting from the construction of the tower shall be the responsibility of the applicant.
20. The lease area shall be buffered continuously with evergreen-type trees and shrubs on the north side. Plantings shall be established within one year of construction completion. Said vegetative buffer shall be a minimum of 3 feet in height upon installation and a minimum of 5 feet at maturity.
21. Access from any public road shall be subject to the standards of the County Engineer. An access permit shall be obtained from the County Engineer prior to installation of any improvements to the existing driveway.
22. Required permits shall be obtained from the County Engineer for any work in county rights-of-way for the purpose of the special use, including but not limited to the installation of transmission/utility lines and drainage culverts.
23. Transportation of heavy equipment for construction shall be limited to routes designated by the Cerro Gordo County Engineer. Any road damaged as a result of the construction of the special use shall be restored to its pre-construction condition. Costs of repair of damage to county roads or rights-of-way resulting from the construction phase of this project shall be the responsibility of the applicant.

QUESTIONS & COMMENTS:

Proposed motion on application: To adopt the staff report as the Board's findings and to grant the application, subject to the conditions recommended by staff and as modified by the Board of Adjustment, for the placement of a wireless telecommunications facility, and further, that the grant of the application be made effective immediately and on the condition that the applicants shall perform all operations under the application under the specific direction of the Cerro Gordo County Zoning Administrator, not inconsistent with the proposed conditions and recommendations approved by the Board of Adjustment, until such time as a formal resolution is drafted and adopted by the Board of Adjustment, not to exceed 60 days.

*Proposed motion for **denial** of application:* To adopt the staff report as the Board's findings and to deny the application for the reasons stated in the staff report as well as for the following reasons: **[STATE ADDITIONAL REASONS FOR DENIAL, IF ANY]**. Said reasons for denial shall be stated in the official transcript and minutes of the Board of Adjustment, and shall be made in writing to the applicant in letter form by the Board's secretary.

Prepared by:
John Robbins
Planning and Zoning Administrator
Final draft date: November 14, 2018



PLANNING AND ZONING Cerro Gordo County Courthouse

220 N Washington Ave Mason City, IA 50401-3254
Tom Drzycimski, AICP, Administrative Officer
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APPEAL INSTRUCTIONS AND PROCEDURES Zoning Board of Adjustment ~ Cerro Gordo County

Read the attached **Rules of Procedure** for the Cerro Gordo County Board of Adjustment. These rules will be complied with in all applications or appeals before the Board of Adjustment. Please do not ask for a variance in these rules as none will be given.

Ordinance sections referred to in this document may be found at www.co.cerro-gordo.ia.us under the Planning and Zoning Department. Click on Zoning Ordinance.

All forms must be typewritten or written in black ink and returned to the address listed above.

FORMS OF APPEAL (choose one):

- Variance to a Zoning District requirement where there are unusual conditions or circumstances which cause a hardship when the provisions of Zoning are strictly applied.**

Required items for review:

- Fully completed application/appeal form (pp. 3 & 4) with necessary site plans
- Fully completed Variance Criteria Supplemental information (pp. 5 & 6)
- Six (6) copies of the property plat if the original plat filed with the Application for Zoning Certificate was drawn larger than 8½" x 14"
- \$100.00 non-refundable filing fee made payable to *Cerro Gordo County Treasurer*



- Special Uses listed in Article 20.2 of the Zoning Ordinance and upon which the Board is required to act under the Ordinance.**

Required items for review:

- Fully completed application/appeal form (pp. 3 & 4) with necessary site plans
- If the area to be considered is located within a flood plain, attach copy of Iowa Department of Natural Resources approval
- Written letter:
 - ✓ Describing the special use and how such building or use will affect the character of the neighborhood, traffic conditions, public utility facilities and

other matters pertaining to the public safety, public health and general welfare

- ✓ Addressing the provisions of Section 24.4(A)(2)(a-g) in the Zoning Ordinance, and
- ✓ Addressing the performance standards in the applicable subsection of Article 20.2
- Seven (7) copies of the schematic drawing
- \$175.00 non-refundable filing fee made payable to *Cerro Gordo County Treasurer*

Site plans are required for the following special uses and an additional fee of \$100.00 made payable to *Cerro Gordo County Treasurer* is required for an area of one acre or less, and \$200.00 for an area of more than one acre. Site plans shall comply with the provisions of Section 18.12(D) of the Zoning Ordinance. This fee is for site plan review only.

- Go-Kart Tracks, Racetracks, Drag strips
- Sewage Treatment Plants and Waste Stabilization Lagoons
- Public or Private Utility service
- Anhydrous Ammonia Pumping and Storage Facilities
- Wholesale Storage of Gasoline, Fuels, Oils, Flammable or Toxic Substances
- Commercial Feedlots and Confinement Operations
- Salvage Yards and/or Junk Yards
- Extraction and Primary Material Processing
- Permanent Asphalt Plants
- Mobile Home Park
- Travel Trailer Park

- Appeal an error in any order, requirement, decision or determination made by the Zoning Administrator in the enforcement of the Zoning Ordinance.**

Required items for review:

- Fully completed application/appeal form (pp. 3 & 4) with necessary site plans
- Written letter describing the reasons or facts you feel the order, requirement, decision or determination was in error.
- \$175.00 non-refundable filing fee made payable to *Cerro Gordo County Treasurer*

The Applicant shall, immediately after filing the appeal paperwork, mark all corners of the lot with lath and colored flags. The Applicant shall also mark with a different colored flag the location of the addition/structure being proposed.

APPLICATION/APPEAL FORM

[For Completion by All Applicants]

Date 9/17/18

TO: ZONING BOARD OF ADJUSTMENT
CERRO GORDO COUNTY, IOWA

I (WE), Michele L. Roth Agent for FTC Tower Co.,
(NAME)

OF 508 N. Polk Circle, Papillion, NE 68046
(MAILING ADDRESS)

respectfully request that a determination be made by the Board of Adjustment on this Application/Appeal based on the letter written by the Zoning Administrator dated 9/10/18 for the reason that it was a matter which, in his/her opinion, should come before the Board of Adjustment.

This Application/Appeal is: (Please Check One)

- A Variance to a Zoning District requirement where there are unusual conditions or circumstances which cause a hardship when the provisions of Zoning are strictly applied.
- A Special Use listed in Article 20.2 of the Zoning Ordinance upon which the Board is required to act under the Ordinance.
- An Appeal where it is alleged there is error in any order, requirement, decision or determination made by the Zoning Administrator in the enforcement of the Zoning Ordinance.

The property affected is located in Section 16 of 94 Township.

The property affected is zoned AG according to the Cerro Gordo County Zoning

District Maps. Legal description of the property is: A part of the NE 1/4 or the NW 1/4 of section 16, Township 94 N, Range 20W of the Fifth Principal Meridian, Cerro Gordo County, Iowa

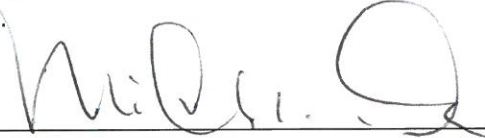
I am the Owner Contract Purchaser Other (Explain) Agent for FTC Tower Co.,
who is leasing land from Mr. Schaefer. _____ of the property affected.

Describe what you are proposing to do on the property affected.
FTC Tower Co is proposing a 300 foot guyed Communications tower. They are leasing a 500 ft x 500 ft
area for the tower with a 75 ft x 75 ft fenced in compound to house the equipment. We will be using the existing
access off of 140th street, but will replace the existing culvert with a 12" x 26" culvert.

I (We) grant permission to the Planning & Zoning staff and Board of Adjustment members to enter onto the above described property for purposes of review.

I (We) further state that if this request is granted, I (We) will proceed with the actual construction in accordance with the purposes herein stated and any conditions and/or requirements the Board of Adjustment may stipulate.

Signature of Applicant _____



Michele L. Roth - Agent for
FTC Tower Co., Applicant

OFFICE USE ONLY

Date Filed 9-19-18

Case Number 19-11

Date Set for Hearing _____

Fee Paid \$375

Application/Appeal was Granted

Denied

Tabled

Case No. 19-11
Michelle Roth on behalf of FTC Tower Co. (NE ¼ of the NW ¼, Section 16, Geneseo Township
Figure 1

Looking south toward the proposed tower location



October 2, 2018, J. Robbins

Figure 2

Looking at the acreage to the east of the proposed tower site



October 2, 2018, J. Robbins

Figure 3
Looking at the existing farm access



October 2, 2018, J. Robbins

Figure 4
Looking at the residence located north of the proposed tower site



October 2, 2018, J. Robbins

Figure 5

Looking at the residence located north-northeast of the proposed tower site



October 2, 2018, J. Robbins

Figure 6

Looking at the hog confinement facility to the west of the proposed tower site



October 2, 2018, J. Robbins

Figure 7

Looking east toward the communication tower south of Rockwell from the proposed tower site



October 11, 2018, J. Robbins

October 30, 2018

Mr. Aaron Kenealy
Edge Consulting Engineers, Inc.
624 Water Street
Prairie du Sac, WI 53578

RE: Proposed 300' Sabre Guyed Tower for Rockwell, IA

Dear Mr. Kenealy,

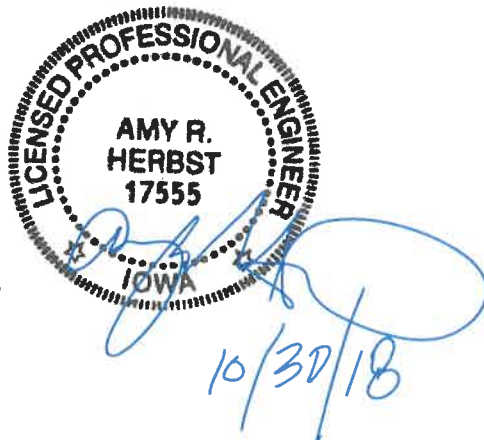
Upon receipt of order, we propose to design and supply a 300' guyed tower for the above referenced project for a Basic Wind Speed of 90 mph (115 mph Ultimate) with no ice and 50 mph with 1" ice, Structure Class II, Exposure C, Topographic Category 1, in accordance with the Telecommunications Industry Association Standard ANSI/TIA-222-G, "Structural Standard for Antenna Supporting Structures and Antennas".

When designed according to this Standard, the wind pressures and steel strength capacities include several safety factors, resulting in an overall minimum safety factor of 25%. Therefore, it is highly unlikely that the tower will fail structurally in a wind event where the design wind speed is exceeded within the range of the built-in safety factors. Should the wind speed increase beyond the capacity of the built-in safety factors, to the point of failure of one or more structural elements, the most likely location of the failure would be within one or more of the tower legs. This would result in a buckling failure mode, where the steel legs would bend beyond their elastic limit (beyond the point where the legs would return to their original shape upon removal of the wind load).

Assuming that the wind pressure profile is similar to that used to design the tower, it is likely that the overall effect of such an extreme wind event would be localized buckling of a tower section, leading to an accordion-like collapse to the ground. Please note that this letter applies only to a tower designed and manufactured by Sabre Towers & Poles. This would result in collapse to the ground within a radius of 150'.

Sincerely,

Amy R. Herbst, P.E.
Senior Design Engineer



Zoning Application packet submittal-FTC Tower Co

20.2 SPECIAL USES

J. Commercial microwave, radio and television towers, public utility structures and accessory equipment, including their transmitting stations and towers, and wireless telecommunications facilities. Any district except residential provided the following requirements are met: 1. Application. In making application for a Special Use Permit, the applicant shall file the following in addition to the standard application for Special Use Permit:

a. A site plan, drawn to scale, identifying the site boundary; tower or facility location; height of structure(s); guy wires and anchors; and existing and proposed structures including accessory structures.

- **Application for a Special Use permit is enclosed with applicable fees.**
- **(7) sets of site plan drawings provided that have been drawn to scale, identifying the site boundary, tower location, height of tower, guy wires and anchors and proposed structures and accessory structures.**

b. If the applicant is not the site owner, written authorization from the site owner.

- **Written owner authorization provided.**

c. The applicant shall provide evidence that available public or private sites are unsuitable for operation of the facility under applicable telecommunications regulations and applicant's technical design requirements. A new tower shall not be permitted if co-location can be found upon an existing or alternative tower structure that meets engineering requirements of an applicant's wireless network within a one (1) mile radius of the proposed new tower site. Cost shall not be used as a reason against co-locating of antennas.

- **There are no existing towers or alternative tower structures in the area within (1) mile of the proposed new tower site that**

can accommodate the height required for the technical design requirements and network.

d. Evidence that all permits required by any other governmental entity have been obtained, or, if all such permits cannot practicably be obtained prior to the public hearing, the written acknowledgement by the applicant that any special use permit granted will be contingent upon the applicant obtaining all such permits and providing conclusive evidence thereof to the Administrative Officer, as the latter may require.

- **FAA Final Determination of No Hazard**
- **Written Approval by Pam Osgood with the Mason City Airport Authority**
- **Proof of FCC application**

2. Conditions. Any applicant shall provide documentation that all of the following applicable conditions will be met for all towers: a. The tower shall be constructed or easily modifiable, within thirty (30) days, to support the equipment of at least three (3) communications companies.

- **Will provide proof within 30 days that the tower will be build to accommodate 3 carriers.**

b. Towers and telecommunications facilities shall be of camouflage design, if possible. Examples of camouflage facilities include, but are not limited to, architecturally screened roof-mounted antennas, antennas integrated into architectural elements, communications and telecommunications towers designed to blend into the surrounding environment or to look like an object other than a tower. Where camouflage design is impossible or impractical, the tower shall be built of materials that make it nearly invisible. Lighting on the tower shall be of the least conspicuous type and exist only to satisfy Federal Aviation Administration (FAA) requirements.

- **The base of the tower and equipment will be fenced in to aid in obstruction of equipment. This is a rural location and a camouflage design impractical.**

- **The only lighting on the tower will be what the FAA dictates in their Final Determination enclosed.**
- c. The tower owner and the tower operator shall provide proof of adequate liability insurance in writing, to the Administrative Officer of Cerro Gordo County for Planning and Zoning, under such further conditions and in such amounts as the Board of Adjustment or the Administrative Officer may direct, but in no event shall such proof be required more often than annually.
- **Proof of Liability Insurance provided.**
- d. The base of the tower shall be at least the height of the tower from any public right-of-way and any existing principal or accessory structure, other than the base station. Guy wires, guy anchors, and base station structures shall comply with all setbacks for the zoning district in which they are located. No guy anchors, towers, or base station structures shall be located in an easement located on the property except that held by the applicant.
- **Tower is set back tower height from public ROW and the guy wires, guy anchors and base station meet setback requirements.**
- e. Any signal interference complaints associated with the tower or related equipment shall be addressed within thirty (30) days in accordance with Federal Communications Commission (FCC) rules and procedures.
- **This is standard operating procedure and agreed to.**
- f. The tower and all appurtenances shall be removed upon the end of its useful life and the site restored to its condition prior to tower placement within one hundred eighty (180) days.
- **FTC Tower Co. has negotiated an agreement with the property owner to remove the tower within 90 days should it no longer be needed and the property restored.**

g. Access from any public road shall be subject to the standards of the County Engineer. An access permit shall be obtained from the County Engineer prior to construction.

- **We are utilizing an existing access, however, we will be adding rock and a new culvert as an improvement. See drawing detail on site plan. The Access permit is underway and access details being modified per Mary Kelly.**

h. A zoning permit shall be applied for and approved, subject to Article 22 of the Zoning Ordinance, prior to any construction.

- **Yes, this is understood**

i. A sign shall be placed on the base station structure or at the base of the tower that identifies a name and phone number of whom to contact in case of emergency. No advertising device is permitted anywhere on the facility except as permitted by this Ordinance.

- **Signage for communications facilities is regulated and we will only put up what is required, however, emergency contact name and number is standard and will be placed either on the building or fence.**

3. Exceptions. The Special Use Permit procedure shall not apply where:

- a. An applicant proposes to add an antenna to an existing tower and the addition of such antenna will not increase the total height of the tower.

In such cases, the applicant shall file an Application for Zoning Certificate for review by the Zoning Administrator, along with evidence that the required FAA and FCC permits have been obtained.

- **Understood-FAA Determination of No Hazard is complete and the FCC ASR has been applied for.**

4. Transmission lines. The routing of transmission lines shall be restricted to locations that minimize the disruption of agricultural activity and developed residential areas.

- **The property owner moved us to this location as it was out of the way of his operation and the most desirable location for him. It is in a grazing area.**

Zoning Information Packet Submittal-FTC Tower Co.

Operation Statement

John Robbins
Planning and Zoning Administrator
Cerro Gordo County
Planning & Zoning

The proposed 300 foot guyed tower located adjacent to 15507 140th Street, Rockwell, Iowa in Cerro Gordo County Iowa will be owned by FTC Tower Co. on land zoned AG. The use will be designed, constructed, operated and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such a use will not change the essential character of the area in which it is proposed.

The use will not be hazardous or disturbing to existing or future uses in the same general vicinity and will be a substantial improvement to the property in the immediate vicinity and to the community as a whole. This tower will bring increased wireless and data services to this area along with being a part of the FirstNet First Responder network in Iowa.

The proposed use will be served adequately by essential public facilities and services such as highways, streets, policy, fire protection, drainage structures, refuse disposal, water and sewage facilities or schools.

The proposed use will not create an excessive additional requirement at public cost for public facilities and services. The tower will utilize power and fiber facilities, but will not be a burden to existing facilities in the area. There will not be an additional traffic burden due to this installation after construction. The construction period will typically last 45 to 60 days maximum, depending on weather conditions.

The proposed use will not involve uses, activities, processes, materials, and equipment or conditions of operations that will be detrimental to any person, property or general welfare by reasons of excessive production of traffic, noise, smoke, fumes, glare, or odors.

The proposed use is also consistent with the intent and the purpose of the zoning district in which it is proposed to locate such use.

It is understood that the Board of Adjustment may attach conditions to the Special Use Permit should it reasonable and necessary.

The decommissioning plan at the end of the useful life of the tower has been negotiated with the property owner and the tower will be removed within 180 days of lease termination should the tower no longer be needed and the property restored.

Re: Tower in Cerro Gordo County Iowa

Michele Roth <michelelroth@msn.com>

Tue 9/4/2018 4:11 PM

To: Pam Osgood <posgood@masoncity.net>;

Thank you Pam. I'll let John Robbins know you reviewed.

Have a great rest of the short week!

Michele

Michele Roth, PMP
Great Plains Land Services Inc
508 N. Polk Circle
Papillion, NE 68046
(402) 515-4698 (mobile)
866-884-0227 (fax)
michelelroth@msn.com

From: Pam Osgood <posgood@masoncity.net>
Sent: Tuesday, September 4, 2018 3:13 PM
To: 'Michele Roth'
Subject: RE: Tower in Cerro Gordo County Iowa

Good Afternoon Michelle:

This tower will not affect the airport and I appreciate you checking with us first to ensure it was not a hazard.

Pam

From: Michele Roth [mailto:michelelroth@msn.com]
Sent: Tuesday, September 04, 2018 1:07 PM
To: Pam Osgood
Subject: Tower in Cerro Gordo County Iowa
Importance: High

Pam

Like I mentioned, I am working on a tower project in Iowa and one property we have secured for a tower is located in Cerro Gordo County, Iowa.

Attached is the FAA determination of no hazard, however, The County Zoning Administrator asked us to confirm with you that there will not be any hazard locally.

Let me know if we are okay to proceed with zoning and permitting.

If you require anything additional, please let me know.

Thank you!
Michele

Michele Roth, PMP
Great Plains Land Services Inc
508 N. Polk Circle
Papillion, NE 68046
(402) 515-4698 (mobile)
866-884-0227 (fax)
michelelroth@msn.com

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

9/5/2018

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

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

PRODUCER Telcom Insurance Services Corp. 6301 Ivy Lane, Suite 506 Greenbelt, MD 20770 www.TelcomInsGrp.com	CONTACT NAME: Telcom Insurance Services Corp.	
	PHONE (A/C, No. Ext): 800.222.4664	FAX (A/C, No): 301.474.6196
INSURED Farmers Telephone Cooperative, Inc. FTC Tower Co. LLC P.O. Box 588 1101 East Main Street Kingstree SC 29556	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	
	INSURER A: Rural Trust Insurance Company	
	INSURER B: Great American Alliance Insurance Co	
	INSURER C: AXIS Insurance Company	
	INSURER D:	
INSURER E:		
INSURER F:		
NAIC #		
26832		
37273		

COVERAGES

CERTIFICATE NUMBER: 44024246

REVISION NUMBER:

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

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR			RTIC-00021P-05	7/1/2018	7/1/2019	EACH OCCURRENCE	\$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 100,000
							MED EXP (Any one person)	\$ 10,000
							PERSONAL & ADV INJURY	\$ 1,000,000
							GENERAL AGGREGATE	\$ 2,000,000
							PRODUCTS - COMP/OP AGG	\$ 2,000,000
							OTHER:	\$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input checked="" type="checkbox"/> HIRED AUTOS ONLY			RTIC-00021P-05	7/1/2018	7/1/2019	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
							BODILY INJURY (Per person)	\$
							BODILY INJURY (Per accident)	\$
							PROPERTY DAMAGE (Per accident)	\$
							OTHER:	\$
B	<input type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> EXCESS LIAB			RTIC-00021P-05	7/1/2018	7/1/2019	EACH OCCURRENCE	\$ 10,000,000
							AGGREGATE	\$ 10,000,000
							OTHER:	\$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below			RTIC-00022-05	7/1/2018	7/1/2019	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER	
							E.L. EACH ACCIDENT	\$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	\$ 1,000,000
B	Cyber Tech Liab			NET 2402474	7/1/2018	7/1/2019		\$1,000,000
C	E&O			MC00014202	7/1/2018	7/1/2019		\$1,000,000
A	Business Interruption			RTIC-00021P-05	7/1/2018	7/1/2019		\$5,000,000
A	Crime			RTIC-00021P-05	7/1/2018	7/1/2019		\$750,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER**CANCELLATION**

	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE Peter J. Elliott

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**Federal Communications Commission
Wireless Telecommunications Bureau**

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: CECIL J MATHEW
NEW CINGULAR WIRELESS PCS, LLC
208 S AKARD ST., RM 1015
DALLAS, TX 75202

Call Sign WQDM569	File Number
Radio Service WZ - 700 MHz Lower Band (Blocks C, D)	

FCC Registration Number (FRN): 0003291192

Grant Date 09-30-2005	Effective Date 08-31-2018	Expiration Date 06-13-2019	Print Date
Market Number CMA425	Channel Block C	Sub-Market Designator 0	
Market Name Iowa 14 - Kossuth			
1st Build-out Date 06-13-2019	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

Conditions:

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

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

0008318733 - Cover 2, LLC

File Number 0008318733
Application Purpose LN - New Lease

Application Status 2 - Pending
Classification of Lease Spectrum Manager

General Information

Application Purpose LN - New Lease

Receipt Date 08/15/2018

Entered Date 08/15/2018

Waiver No

Attachments Yes

Application Fee Exempt No

Action Date 08/16/2018

Number of Rules

Waiver/Deferral Fee No

Licensee Information

FRN 0003291192
Name New Cingular Wireless PCS, LLC
ATTN Leslie Wilson
208 S. Akard Street, RM 1016
Dallas, TX 75202

Type Limited Liability Company
P:(855)699-7073
F:(214)746-6410
E:FCCMW@att.com

Race
Ethnicity

Gender

Licensee Contact Information

Name AT&T Mobility LLC
ATTN Michael P. Goggin
1120 20th Street NW - Suite 1000
Washington, DC 20036

P:(202)457-2055
E:michael.p.goggin@att.com

Lessee Information

FRN 0025959776
Name Cover 2, LLC
ATTN David Byers
P.O. Box 835
800 S. Main Street
Monona, IA 52159

Type Limited Liability Company
P:(563)539-2122
F:(563)539-2003
E:dabyers@netel.com

Real Party In Interest Cover 2, LLC

FRN of Real Party in Interest 0025959776

Race
Ethnicity

Gender

Lessee Contact Information

Name Herman & Whiteaker, LLC
Donald L Herman , Jr.
6720-B Rockledge Drive, Suite 150
Bethesda, MD 20817

P:(202)600-7273
F:(202)706-6056
E:dee@hermanwhiteaker.com

Lessee Qualifications and Ownership Information

Radio Service Type

Regulatory Status

Interconnected

Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.



Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2018-ACE-5269-OE

Issued Date: 08/30/2018

Chris Kellahan
 FTC Tower Co, LLC
 1101 E Main St
 Kingstree, SC 29556

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Antenna Tower Rockwell
 Location: Rockwell, IA
 Latitude: 42-57-53.73N NAD 83
 Longitude: 93-12-49.76W
 Heights: 1103 feet site elevation (SE)
 305 feet above ground level (AGL)
 1408 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, a med-dual system - Chapters 4,8(M-Dual),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

This determination expires on 03/01/2020 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5922, or debbie.cardenas@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-ACE-5269-OE.

Signature Control No: 371419512-383844719

(DNE)

Debbie Cardenas
Technician

Attachment(s)
Frequency Data

cc: FCC

Frequency Data for ASN 2018-ACE-5269-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
6	7	GHz	55	dBW
6	7	GHz	42	dBW
10	11.7	GHz	55	dBW
10	11.7	GHz	42	dBW
17.7	19.7	GHz	55	dBW
17.7	19.7	GHz	42	dBW
21.2	23.6	GHz	55	dBW
21.2	23.6	GHz	42	dBW
614	698	MHz	1000	W
614	698	MHz	2000	W
698	806	MHz	1000	W
806	901	MHz	500	W
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
929	932	MHz	3500	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1670	1675	MHz	500	W
1710	1755	MHz	500	W
1850	1910	MHz	1640	W
1850	1990	MHz	1640	W
1930	1990	MHz	1640	W
1990	2025	MHz	500	W
2110	2200	MHz	500	W
2305	2360	MHz	2000	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W
2496	2690	MHz	500	W

SECTION 3: TRENCHING

3.1 MATERIALS

FILL MATERIALS SHALL BE OBTAINED, WHEN POSSIBLE, FROM MATERIALS EXCAVATED FROM TRENCHES ON-SITE. STRUCTURAL FILL, SAND OR SLURRY SHALL BE APPROVED BY THE CONSTRUCTION MANAGER AND SHALL CONFORM TO LOCAL UTILITY COMPANY REQUIREMENTS. THE FILL MATERIAL SHALL CONTAIN NO ORGANIC MATERIALS OR ROCKS. ALL FILL MATERIAL SHALL BE FREE OF OBJECTIONABLE MATERIALS AND/OR MATERIALS DESIGNATED AS HAZARDOUS OR POTENTIALLY HAZARDOUS. THE FILL MATERIAL SHALL CONTAIN FINES SUFFICIENT TO FILL ALL VOIDS IN THE MATERIAL. COMPACTION OF SOIL SHALL BE IN 8 INCH LOOSE LIFTS WHEN UTILIZING HEAVY COMPACTION EQUIPMENT OR 6 INCH LOOSE LIFTS WHEN UTILIZING HAND OPERATED TAMPERS.

3.2 PIPE DETECTION AND IDENTIFICATION

ALL ELECTRIC SERVICE TRENCHES SHALL BE MARKED WITH DETECTABLE WARNING TAPE.

3.3 TRENCH EXCAVATION

- A. DIG TRENCH TO DEPTHS AND GRADES SHOWN ON THE PLANS OR AS DIRECTED BY THE CONSTRUCTION MANAGER.
- B. TRENCH LENGTH SHALL BE SUFFICIENT TO ALLOW FOR SATISFACTORY CONSTRUCTION AND INSPECTION OF THE PROJECT, WITHOUT ENDANGERING OTHER CONSTRUCTION WORK OR ADJACENT FACILITIES.
- C. DISPOSE OF EXCESS AND UNSUITABLE EXCAVATION MATERIAL PROPERLY.
- D. USE HAND EXCAVATION METHODS WHEN REQUIRED BY LOCAL OR STATE GUIDELINES, OR WHEN NECESSARY TO AVOID ENDANGERING EXISTING OR NEW STRUCTURES OR OTHER FACILITIES.

3.4 TRENCH PROTECTION

- A. PROVIDE MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO PROTECT TRENCHES AT ALL TIMES.
- B. SHEETING AND BRACING SHOULD MEET OR EXCEED OSHA REQUIREMENTS.

3.5 BACKFILLING

- A. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER AT LEAST 24 HOURS IN ADVANCE OF BACKFILLING.
- B. PROTECT CONDUIT FROM LATERAL MOVEMENT, DAMAGE FROM IMPACT, OR UNBALANCED LOADING TO AVOID DISPLACEMENT OF CONDUIT AND/OR STRUCTURES. DO NOT FREE FALL BACKFILL INTO TRENCH UNTIL THERE IS AT LEAST 12 INCHES OF COVER OVER THE CONDUIT.

3.6 COMPACTION

- A. COMPACT BACKFILL TO AT LEAST 95% STANDARD PROCTOR.
- B. IF REQUIRED COMPACTION DENSITY IS NOT OBTAINED, REMOVE BACKFILL FROM TRENCH, REPLACE WITH APPROVED BACKFILL, AND RECOMPACT AS SPECIFIED.
- C. ANY SUBSEQUENT SETTLEMENT OF TRENCH OR BACKFILL DURING MAINTENANCE PERIOD (1 YEAR MINIMUM) SHALL BE REMOVED, REPLACED, AND RECOMPACTED BY CONTRACTOR AT NO ADDITIONAL EXPENSE TO OWNER.

SECTION 4: CONCRETE WORK

4.1 CONCRETE FORMWORK

CONTRACTOR SHALL FOLLOW ALL APPLICABLE CODES AND STANDARDS (BC, ACI, ETC.) WHEN COMPLETING CONCRETE WORK.

- A. FORMS SHALL BE SMOOTH AND FREE OF SURFACE IRREGULARITIES. CONTRACTOR SHALL UTILIZE FORM RELEASE AGENTS AS NECESSARY.
- B. EXPOSED EDGES OF ALL TOWER FOUNDATIONS SHALL RECEIVE A 3/4" CHAMFER. OTHER EXPOSED EDGES SHALL RECEIVE A TOOLED RADIUS FINISH.
- C. UPON COMPLETION, CONTRACTOR SHALL REMOVE ALL FORMS, INCLUDING THOSE CONCEALED OR BURIED.
- D. REFER TO PLANS AND TOWER DRAWINGS FOR ADDITIONAL REQUIREMENTS.

4.2 CONCRETE REINFORCEMENT

REFER TO PLANS AND TOWER DRAWINGS FOR REINFORCEMENT REQUIREMENTS.

4.3 CAST-IN-PLACE CONCRETE

REFER TO STRUCTURAL DRAWINGS FOR CONCRETE REQUIREMENTS FOR FOOTINGS, FOUNDATIONS, ETC. ANY NON-STRUCTURAL SITE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

A. ALL CONCRETE SUBJECT TO FREEZE-THAW SHALL CONTAIN 4-8% AIR ENTRAINMENT.

B. ALL CONCRETE SHALL BE VIBRATED IN PLACE USING HIGH FREQUENCY, LOW AMPLITUDE MECHANICAL IMMERSION TYPE VIBRATORS. INSERT VIBRATORS IN CONCRETE AT REGULAR INTERVALS AND OVER ENTIRE SURFACE TO SOLIDLY FILL AROUND AND BETWEEN REINFORCEMENT AND INTO CORNERS AND IRREGULARITIES. DISCONTINUE VIBRATION WHEN RISING ENTRAPPED AIR BUBBLES STOP BREAKING THE LEVELING SURFACE. DO NOT OVERVIBRATE AS THIS MAY CAUSE SEGREGATION.

4.4 QUALITY CONTROL

A. ALL STRUCTURAL CONCRETE SHALL BE INSPECTED BY INDEPENDENT, QUALIFIED PERSONNEL (ACI OR OTHERWISE). ALL STRUCTURAL CONCRETE SHALL BE TESTED BY AN INDEPENDENT LAB. AT A MINIMUM, 5 CYLINDERS SHALL BE CAST AND TESTED AT 7, 14, AND 28 DAYS. THE REMAINING CYLINDER SHALL BE RESERVED FOR RE-TESTING, IF NECESSARY.

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH THE CONSTRUCTION MANAGER AND/OR TESTING AGENCY A MINIMUM OF 48 HOURS PRIOR TO EACH FOUNDATION POUR. IF A POUR OCCURS WITHOUT THE REQUESTED INSPECTION, THE OWNER CAN ASSUME THAT THE INSTALLATION WAS NOT INSTALLED CORRECTLY AND REQUIRE REPLACEMENT.

B. THE CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND REPLACE, AT HIS SOLE EXPENSE, ANY CONCRETE THAT DOES NOT MEET THE ABOVE SPECIFICATIONS, OR SIMILAR SPECIFICATIONS CONTAINED IN THE PLANS OR TOWER DRAWINGS. ANY CONCRETE THAT DOES NOT MEET THE MINIMUM COMPRESSIVE STRENGTH REQUIRED UPON COMPLETION OF LAB TESTING SHALL BE REPLACED. THE AVERAGE OF THE TWO 28 DAY BREAK RESULTS SHALL GOVERN. NO DISPUTES REGARDING THE METHOD USED TO COLLECT THE TEST CYLINDERS OR PERFORM THE LAB TESTING ARE ALLOWED. IF THE CONTRACTOR CHOOSES, HE MAY COLLECT AND TEST ADDITIONAL CYLINDERS AT HIS SOLE EXPENSE.

C. DESPITE THE ABOVE REQUIREMENT, THE CONTRACTOR IS RESPONSIBLE TO PERFORM QUALITY WORK AND IS THE GUARANTOR OF THE FINISHED PRODUCT. IF A DEFECT IS NOT IMMEDIATELY IDENTIFIED BY THE INSPECTOR, OWNER, OR CONSTRUCTION MANAGER, BUT IDENTIFIED SUBSEQUENTLY, THE CONTRACTOR SHALL STILL BE RESPONSIBLE TO CORRECT SAID DEFECT.

D. CONTRACTOR MUST VERIFY THAT CONCRETE MEETS DESIGN REQUIREMENT (FOR STRENGTH AND OTHER PARAMETERS) BEFORE PLACING ANY SERVICE LOADS.

SECTION 5: STRUCTURAL STEEL

A. UNLESS OTHERWISE NOTED, ALL DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL CONFORM TO THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 315).

B. ALL REINFORCING STEEL SHALL BE NEW BILLET STEEL, CONFORMING TO ASTM A-615, GRADE 60, DEFORMED.

C. HEATING AND WELDING OF BARS IS PROHIBITED UNLESS WRITTEN APPROVAL IS OBTAINED FROM THE STRUCTURAL ENGINEER.

D. ALL REINFORCEMENT BARS ARE TO BE FREE FROM LOOSE RUST AND SCALE.

E. UNLESS OTHERWISE NOTED, ALL REINFORCEMENT SHALL HAVE A MINIMUM CONCRETE COVER OF 3 INCHES. CONTRACTOR SHALL UTILIZE SPACERS AND CHAIRS AS REQUIRED.

F. SPLICES IN REINFORCEMENT STEEL ARE PROHIBITED, UNLESS APPROVED BY THE STRUCTURAL ENGINEER. ALL SPLICES MUST THEN MEET ALL APPLICABLE ASTM STANDARDS FOR SPLICING.

G. WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS) D.1.1-92. STRUCTURAL WELDING CODE.

SECTION 6: GROUNDING

A. GROUND RING IS TO BE CONSTRUCTED OF MATERIALS INDICATED ON THE DRAWINGS. ALL ABOVE GROUND LEADS TO BE SEALED IN CARFLEX CONDUITS.

B. GROUND ALL CORNER POSTS WITH EXOTHERMIC WELDS (CONNECTION TO BE: NO MORE THAN 12 INCHES ABOVE GROUND BUT MUST BE VISIBLE).

C. ICE BRIDGE GROUND - GROUND SUPPORT POST TO GROUND RING AND GROUND ICE BRIDGE TO THE POST.

D. A SMOOTH, DOWNWARD PATH TO GROUND IS REQUIRED FOR ALL GROUND LEADS.

E. CONTRACTOR TO BOND PROPOSED GROUND SYSTEM TO EQUIPMENT/BUILDING GROUND RING IN 2 LOCATIONS.

F. PROPOSED GROUND RING SHALL BE INSTALLED A MINIMUM OF 2' FROM ANY STRUCTURE.

G. AT BASE OF ANTENNA TOWER, ATTACH GROUND KITS FROM COAXIAL CABLES TO TOWER GROUND BAR. LOCATE GROUND RING AROUND TOWER AND BOND GROUND BAR TO GROUND RING AS INDICATED ON DRAWINGS. CONTRACTOR TO PROVIDE GROUND BAR AND ALL MOUNTING HARDWARE.

H. DOUBLING UP OR "STACKING" OF CONNECTION IS NOT PERMITTED.

I. OXIDE INHIBITING COMPOUND TO BE USED AT ALL CONNECTIONS.

J. RESISTIVITY TEST SHALL BE PERFORMED BY THE CONTRACTOR PRIOR TO BACKFILLING. A MAXIMUM RESISTIVITY OF 5 OHMS MUST BE ACHIEVED PRIOR TO PROCEEDING. THE RESULTS OF THIS TEST SHALL BE DOCUMENTED, WITH COPIES PROVIDED TO THE OWNER AND CONSTRUCTION MANAGER.

K. DO NOT INSTALL BURIED GROUND RING OUTSIDE OF THE LEASED AREA. CONTRACTOR SHALL NOTIFY THE OWNER 24 HOURS IN ADVANCE OF THE GROUND RING INSTALLATION SO THAT A REPRESENTATIVE CAN INSPECT THE GROUND RING BEFORE IT IS BACKFILLED. IF A REPRESENTATIVE IS NOT PRESENT, CONTRACTOR SHALL PHOTOGRAPH ENTIRE INSTALLATION AND PROVIDE PHOTOGRAPHS TO CONSTRUCTION MANAGER WITHIN 48 HOURS.

SECTION 7: ELECTRICAL

A. PROVIDE 2 PULL STRINGS SECURELY FASTENED AT EACH END OF ALL CONDUITS.

B. THE CONTRACTOR SHALL LOCATE AND MARK ALL EXISTING UNDERGROUND POWER, TELCO, GROUNDING CONDUITS, AND ALL OTHER UTILITY EASEMENTS AND/OR WIRES PRIOR TO TRENCHING. ANY DAMAGE CAUSED TO THE EXISTING UNDERGROUND SERVICES OR SYSTEMS SHALL BE REPAIRED AT THE CONTRACTOR'S SOLE EXPENSE.

C. CONTRACTOR SHALL CONTACT UTILITY PROVIDER PRIOR TO BIDDING AND CONSTRUCTION TO VERIFY THAT SERVICE HAS BEEN ORDERED AND DISCUSS ANY SITE SPECIFIC REQUIREMENTS. CHANGE ORDERS RELATED TO UTILITY REQUIREMENTS OR REQUESTS WILL NOT BE ALLOWED UNLESS THIS CONDITION HAS BEEN MET.

D. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS SHALL BE PAID BY CONTRACTOR.

E. ALL MATERIALS UTILIZED SHALL BE U.L. LISTED.

SECTION 8: TOWER AND ANTENNA INSTALLATION

A. IF REQUIRED, ERECT FURNISHED TOWER. PRIOR TO ERECTION, CONTRACTOR MUST VERIFY THAT CONCRETE HAS MET THE MINIMUM STRENGTH REQUIREMENTS AS WELL AS ANY OTHER INSPECTION OR TESTING REQUIREMENTS.

B. INSTALL ANTENNAS AND LINES AS INDICATED ON THE DRAWINGS AND PER OWNER SPECIFICATIONS.

C. INSTALL ANTENNA AND COAX MOUNTING HARDWARE AS INDICATED ON THE DRAWINGS OR APPROVED BY THE CONSTRUCTION MANAGER.

D. ASSIST OWNER TECHNICIANS IN PERFORMING SWEEP TEST OF INSTALLED COAX.

E. ANTENNA INSTALLATION TO BE CONDUCTED BY FIELD CREWS EXPERIENCED IN THE ASSEMBLY AND ERECTION OF ANTENNAS, TRANSMISSION LINES AND SUPPORT STRUCTURES.

F. CONTRACTOR SHALL FOLLOW ALL APPLICABLE STANDARDS INCLUDING, BUT NOT LIMITED TO: EIA 222 (LATEST VERSION), FAA ADVISORY CIRCULAR AC0707460-1A, FCC RULES & REGULATIONS.

SECTION 9: LANDSCAPING & SITE RESTORATION

CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN LANDSCAPE WORK AS SHOWN ON THE CONSTRUCTION DRAWINGS OR REQUIRED IN THE SPECIFICATIONS.

CONTRACTOR SHALL UTILIZE THE SERVICES OF A LANDSCAPE CONTRACTOR TO ENSURE THE LANDSCAPING IS PROPERLY INSTALLED, WATERED, AND OTHERWISE MAINTAINED. CONTRACTOR SHALL GUARANTEE LANDSCAPING FOR A MINIMUM OF 1 YEAR AND SHALL REPLACE ANY DEAD OR VISIBLY DISTRESSED PLANTS WITHIN THIS PERIOD.

9.1 PROTECTION

A. CONTRACTOR SHALL PROTECT SEEDED AREAS FROM EROSION THROUGH THE USE OF AN EROSION CONTROL MESH OR MULCH NET.

B. ALL TREES PLACED IN CONJUNCTION WITH A LANDSCAPE PLAN WILL BE WRAPPED, TIED WITH HOSE PROTECTED WIRE AND SECURED TO A STEEL ANGLE EXTENDING TWO FEET INTO THE GROUND ON FOUR SIDES OF THE TREE.

C. ALL EXPOSED AREAS SHALL BE PROTECTED AGAINST WASHOUTS AND SOIL EROSION.

9.2 INSTALLATION

A. SEED AND FERTILIZER SHALL BE APPLIED TO SURFACE CONDITIONS TO ENCOURAGE ROOTING. RAKE AREAS TO BE SEED TO EVEN THE SURFACE AND LOOSEN THE SOIL.

B. SOW SEED IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCER.

C. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE GROWTH OF SEEDING AND LANDSCAPED AREAS BY WATERING. CONTINUE TO REWORK BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.

CONSULTANT:



CLIENT:

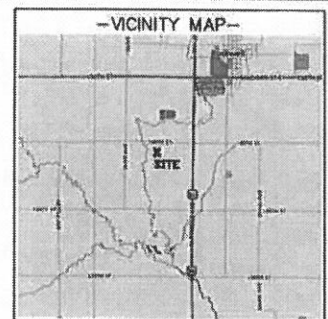
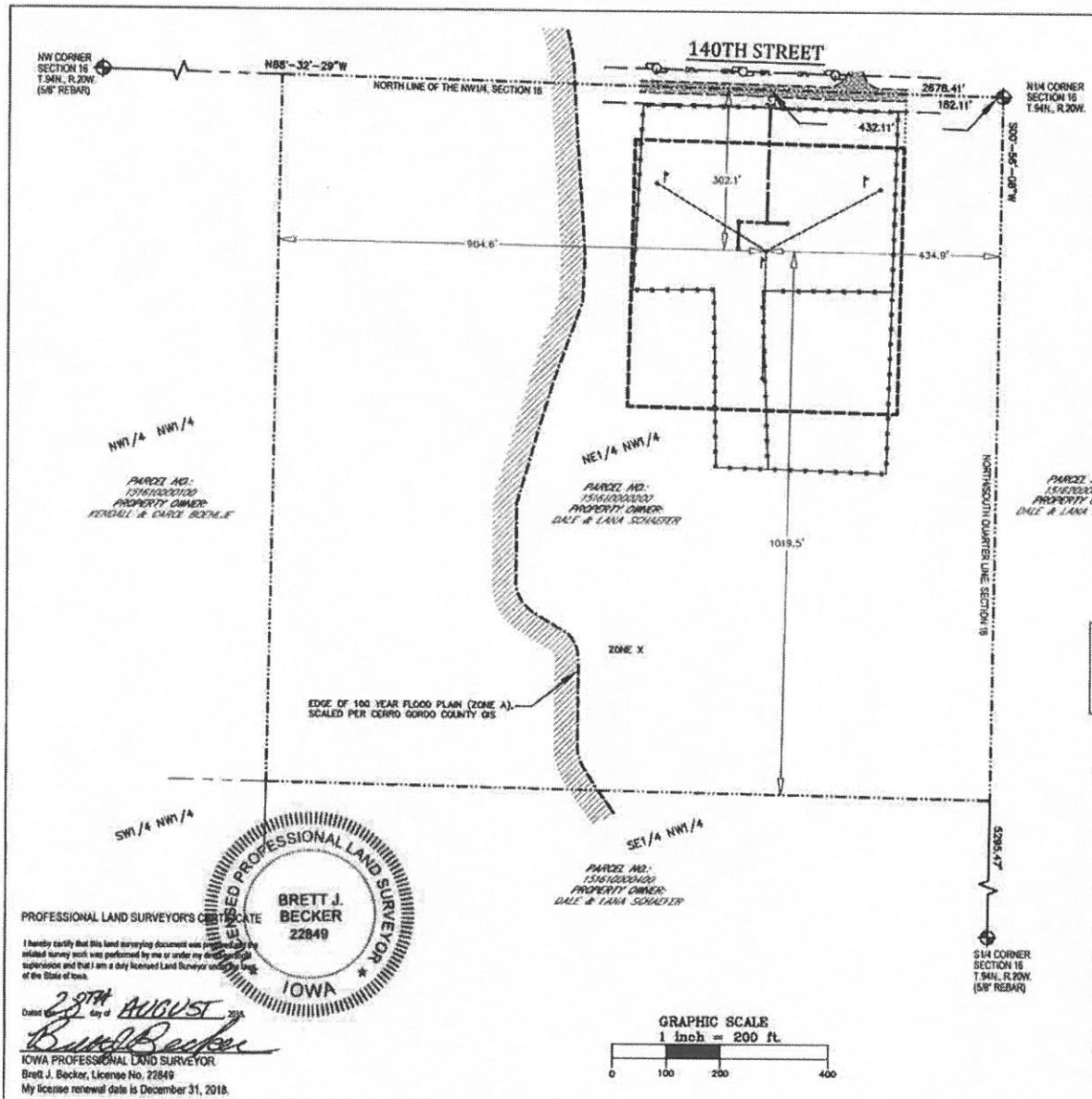


GENERAL SPECIFICATIONS
ROCKWELL
ROCKWELL, IOWA

SHEET TITLE

SUBMITTAL:		
NO.	DATE:	DESCRIPTION:
NAT	07/29/18	REV. 0
JEM	08/29/18	FINAL CDN REV. 0

CHECKED BY:	APK
PLLOT DATE:	8/29/2018
PROJECT NUMBER:	18755
SIT TYPE:	PRELIM DWGS.
SHEET NUMBER:	G-003



- LEGEND-
- = 1" X 18" IRON PIPE SET
 - = 6" NAIL SET
 - ⊕ = COUNTY MONUMENT FOUND
 - ⊙ = EXISTING POWER POLE
 - ⊙ = EXISTING GUY ANCHOR
 - ⊕ = WOOD LATH
 - ⊕ = OVERHEAD ELECTRIC
 - ⊕ = EXISTING FENCE LINE
 - ⊕ = PROPERTY LINE



BEARINGS REFERENCED TO THE IOWA STATE PLANE COORDINATE SYSTEM (NAD83/2011) OF THE NW1/4, SECTION 16, T.54N. R.20W. WHICH BEARS: N88°-32'-29"W

SURVEY NOTES:

- THE LOCATION OF THE EXISTING UTILITIES, AS SHOWN ON THIS PLAN, ARE APPROXIMATE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL LOCATION AND DEPTH OF ALL EXISTING UTILITIES. THE OWNER AND THE SURVEYOR SHALL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATION FROM THE LOCATION SHOWN.
- IOWA ONE CALL HOTLINE TICKET NO. 181621341.
- THIS SURVEY WAS PREPARED WITH THE AID OF TITLE ABSTRACT NO. 47267 BY CERRO GORDO ABSTRACT COMPANY DATED JUNE 26, 2018.
- THIS IS NOT A BOUNDARY SURVEY OF THE PARENT PARCEL. THIS SURVEY REPRESENTS THE LEASE AREA AND EASEMENTS ONLY.

FEMA NOTE:

- ACCORDING TO FEDERAL EMERGENCY AGENCY MAPS, THE PROPOSED TELECOMMUNICATIONS SITE IS LOCATED IN ZONE "X", COMMUNITY PANEL NO. 1903300355C, DATED MAY 18 2012, AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. ZONE "X" IS DESIGNATED AS: "AREA OF MINIMAL FLOOD HAZARD."

WETLAND NOTE:

- THE PRESENCE AND LOCATION OF WETLANDS HAS NOT BEEN DETERMINED ON THIS PROPERTY. WETLANDS SHOULD ONLY BE DETERMINED BY ACTUAL FIELD DELINEATION PERFORMED BY A QUALIFIED WETLAND SPECIALIST.

SURVEYED FOR:

Edge
Consulting Engineers, Inc.
524 Weber Street
Protein Bu Sac, WI 53578
608.644.1499 voice
608.644.1549 fax
www.edgeconsult.com

SURVEYED FOR:

FTC
Tower Co.
1101 E. MAIN STREET
KINGSTREE, SC 29556

MERIDIAN
SURVEYING, LLC
N0637 Friendship Drive Office: 820-993-0881
Kokouma, WI 54130 Fax: 820-273-6037

SITE NAME:
39 ROCKWELL

SITE NUMBER:
XX

SITE ADDRESS:
15507 140TH STREET
ROCKWELL IA, 50469

PROPERTY OWNER:
DALE SCHAEFER
15507 140TH STREET
ROCKWELL, IA 50469

PARCEL NO.: 151610000200

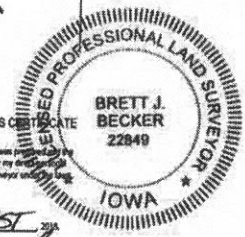
ZONED: AG

DEED REFERENCE: DOC. NO. 2013-5844

LEASE EXHIBIT
FOR
FTC TOWER CO.
A PART OF THE NE1/4 OF THE NW1/4,
SECTION 16, T.54N. R.20W., 5TH P.M.,
CERRO GORDO COUNTY, IOWA

NO.	DATE	DESCRIPTION	BY
3	8/28/18	Added Title Note	JD
2	7/19/18	Added Tower, Lease, & Eas.	JD
1	8/25/18	Preliminary Survey	JD

DRAWN BY: J.D.	FIELD WORK DATE: 8-20-18
CHECKED BY: C.A.K.	FIELD BOOK: M-47, PG. 50
JOB NO.: 10410	SHEET 1 OF 3

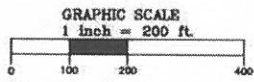


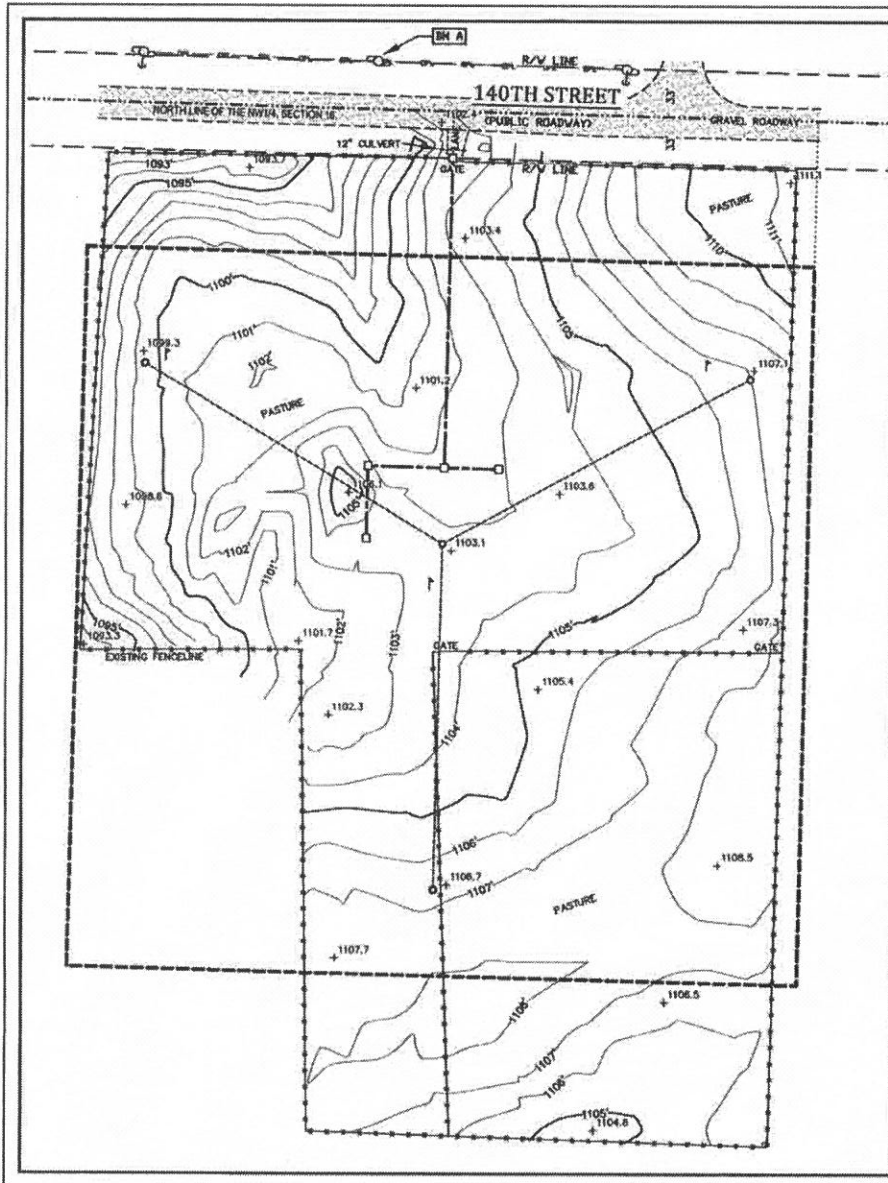
PROFESSIONAL LAND SURVEYORS CERTIFICATE

I hereby certify that this land surveying document was prepared by the related surveyor and that I am a duly licensed Land Surveyor under the laws of the State of Iowa.

23RD AUGUST 2018

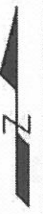
Brett J. Becker
IOWA PROFESSIONAL LAND SURVEYOR
Brett J. Becker, License No. 22849
My license renewal date is December 31, 2018.





- LEGEND-**
- = 1" X 18" IRON PIPE SET
 - = 6" NAIL SET
 - ⊕ = COUNTY MONUMENT FOUND
 - ⊙ = EXISTING POWER POLE
 - ⊙ = EXISTING GUY ANCHOR
 - ⊥ = WOOD LATH
 - = OVERHEAD ELECTRIC
 - +— = EXISTING FENCE LINE
 - - - - = PROPERTY LINE

BEARINGS REFERENCED TO THE IOWA STATE PLANE COORDINATE SYSTEM (NAD83/2011) WITH THE EXCEPTED AREA OF THE NW1/4, SECTION 16, T.94N. R.20W. WHICH BEARS: N85°37'20" W



SURVEYED FOR:

Edge
 Consulting Engineers, Inc.
 424 Water Street
 Potosi, WI 53578
 608.644.1449 voice
 608.644.1549 fax
 www.edgeconrs.com

SURVEYED FOR:

FTC
 Tower Co.
 1101 E. MAIN STREET
 KINGSTREE, SC 29556

MERIDIAN
 SURVEYING, LLC
 19837 Friendship Drive Office: 820-993-0881
 Kaukaun, WI 54130 Fax: 920-273-6037

SITE NAME:
39 ROCKWELL

SITE NUMBER:
XX

SITE ADDRESS:
15507 140TH STREET
ROCKWELL IA, 50469

PROPERTY OWNER:
DALE SCHAEFER
15507 140TH STREET
ROCKWELL, IA 50469

PARCEL NO.: 151610000200

ZONED: AG

DEED REFERENCE: DOC. NO. 2013-5844

LEASE EXHIBIT
 FOR
 FTC TOWER CO.
 A PART OF THE NE1/4 OF THE NW1/4,
 SECTION 16, T.94N. R.20W., 5TH P.M.,
 CERRO GORDO COUNTY, IOWA

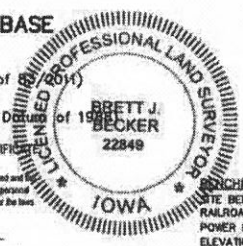
PROPOSED TOWER BASE
 LATITUDE: 42°-57'-53.73"
 LONGITUDE: 93°-12'-49.76"
 (Per North American Datum of 1983)
 Ground Elevation: 1103.1'
 (Per North American Vertical Datum of 1988)

PROFESSIONAL LAND SURVEYOR'S CERTIFICATE

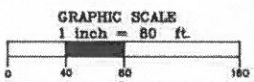
I hereby certify that this land surveying document was prepared and related survey work was performed by me or under my direct personal supervision and that I am a duly licensed Land Surveyor under the laws of the State of Iowa.

Dated this 28th day of AUGUST, 2018.

Brett J. Becker
 Brett J. Becker, License No. 22849
 My license renewal date is December 31, 2018.

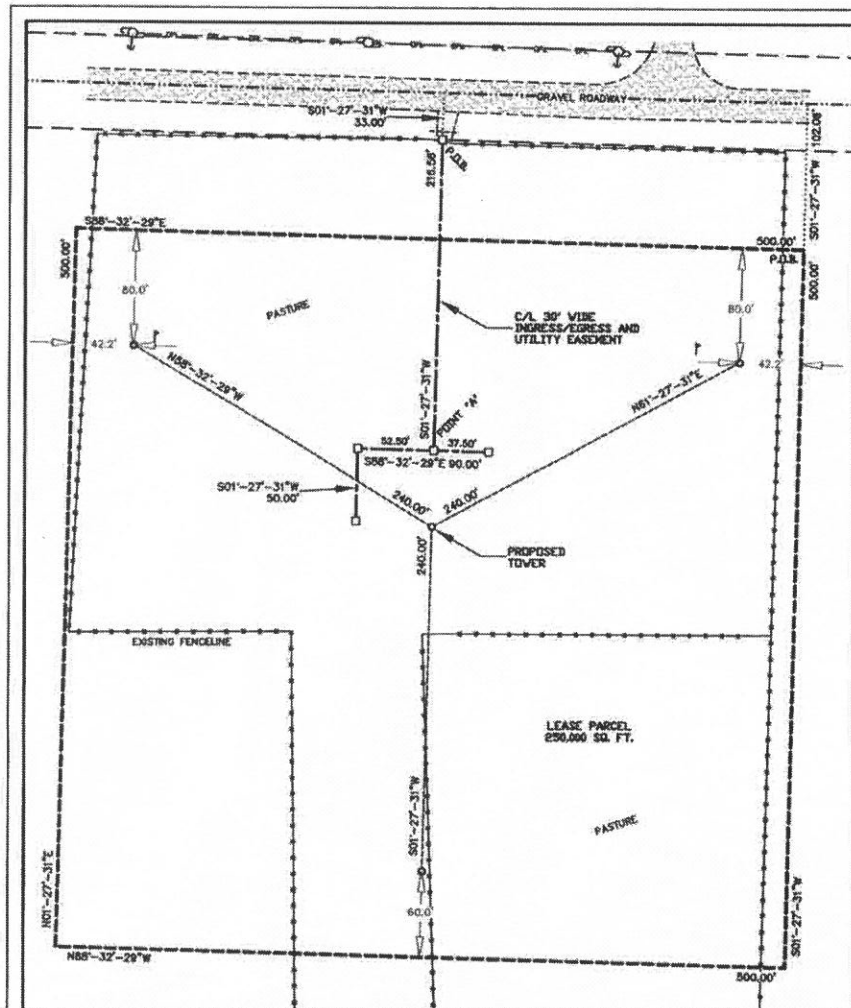


BENCHMARK INFORMATION
 SITE BENCHMARK: (BM A)
 RAILROAD SPIRE SET IN SOUTH FACE OF
 POWER POLE; ±1' ABOVE GROUND LEVEL
 ELEVATION: 1103.17'

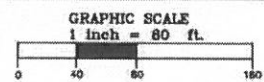


NO.	DATE	DESCRIPTION	BY
3	8/28/18	Added Title Note	JB
2	7/19/18	Added Tower, Lease, & Eas.	JB
1	6/25/18	Preliminary Survey	JD

DRAWN BY: J.D.	FIELD WORK DATE: 6-20-18
CHECKED BY: C.A.K.	FIELD BOOK: M-47, PG. 80
JOB NO.: 10410	SHEET 2 OF 3



- LEGEND—**
- = 1" X 18" IRON PIPE SET
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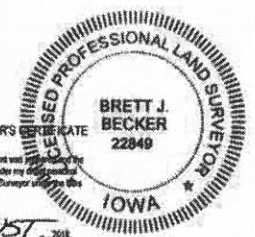


LEASE PARCEL

A part of the Northeast Quarter (NE1/4) of the Northwest Quarter (NW1/4) of Section Sixteen (16), Township Ninety-Four (94) North, Range Twenty (20) West of the Fifth Principal Meridian, Cerro Gordo County, Iowa containing 250,000 square feet (5.739 acres) of land and being described by:
Commencing at North Quarter Corner of said Section 16; thence N88°-32'-29" W 182.11 feet along the north line of the NW1/4 of said Section 16; thence S01°-27'-31" W 102.06 feet to the point of beginning; thence continue S01°-27'-31" W 500.00 feet; thence N88°-32'-29" W 500.00 feet; thence N01°-27'-31" E 500.00 feet; thence S88°-32'-29" E 500.00 feet to the point of beginning, being subject to any and all easements and restrictions of record.

30' WIDE INGRESS/EGRESS & UTILITY EASEMENT

A part of the Northeast Quarter (NE1/4) of the Northwest Quarter (NW1/4) of Section Sixteen (16), Township Ninety-Four (94) North, Range Twenty (20) West of the Fifth Principal Meridian, Cerro Gordo County, Iowa containing 10,967 square feet (0.252 acres) of land and being Fifteen (15) feet each side of and parallel with the following described line:
Commencing at North Quarter Corner of said Section 16; thence N88°-32'-29" W 432.11 feet along the north line of the NW1/4 of said Section 16; thence S01°-27'-31" W 216.56 feet to a point on the south line of 140th Street and the point of beginning; thence continue S01°-27'-31" W 216.56 feet to a point herein after referred to as Point "A"; thence S88°-32'-29" E 37.50 feet to the point of termination. Also beginning at said Point "A"; thence N88°-32'-29" W 52.50 feet; thence S01°-27'-31" W 50.00 feet to the point of termination. The side lot lines of said easement are to be shortened or lengthened to terminate on said south line of 140th Street.



PROFESSIONAL LAND SURVEYORS CERTIFICATE
I hereby certify that this land surveying document was prepared by me or under my direct supervision and that I am a duly licensed Land Surveyor under the laws of the State of Iowa.
Date: 28th day of AUGUST, 2018.
Brett J. Becker
IOWA PROFESSIONAL LAND SURVEYOR
Brett J. Becker, License No. 22849
My license renewal date is December 31, 2018.

BEARINGS REFERENCED TO THE IOWA STATE PLANE COORDINATE SYSTEM (NAD83/2011) - NORTH ZONE AND THE NORTH LINE OF THE NW1/4, SECTION 16, T.94N. R.20W., WHICH BEARS N88°-32'-29" W

SURVEYED FOR:
Edge
Consulting Engineers, Inc.
624 Water Street
Piquette St. S.W. #1 53578
608.644.1477 voice
608.644.1569 fax
www.edgeconul.com

SURVEYED FOR:
FTC
Tower Co.
1101 E. MAIN STREET
KINGSTREE, SC 29556

MERIDIAN
SURVEYING, LLC
N9637 Friendship Drive Office: 820-993-0881
Kaukauna, WI 54130 Fax: 820-273-6037

SITE NAME:
39 ROCKWELL
SITE NUMBER:
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SITE ADDRESS:
15507 140TH STREET
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PROPERTY OWNER:
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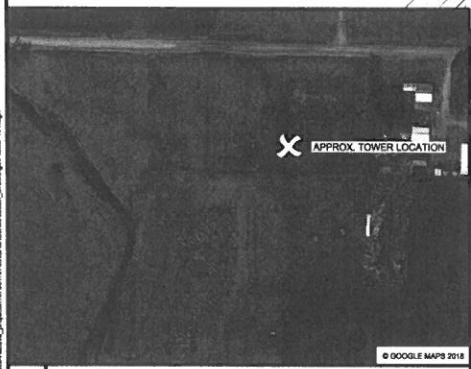
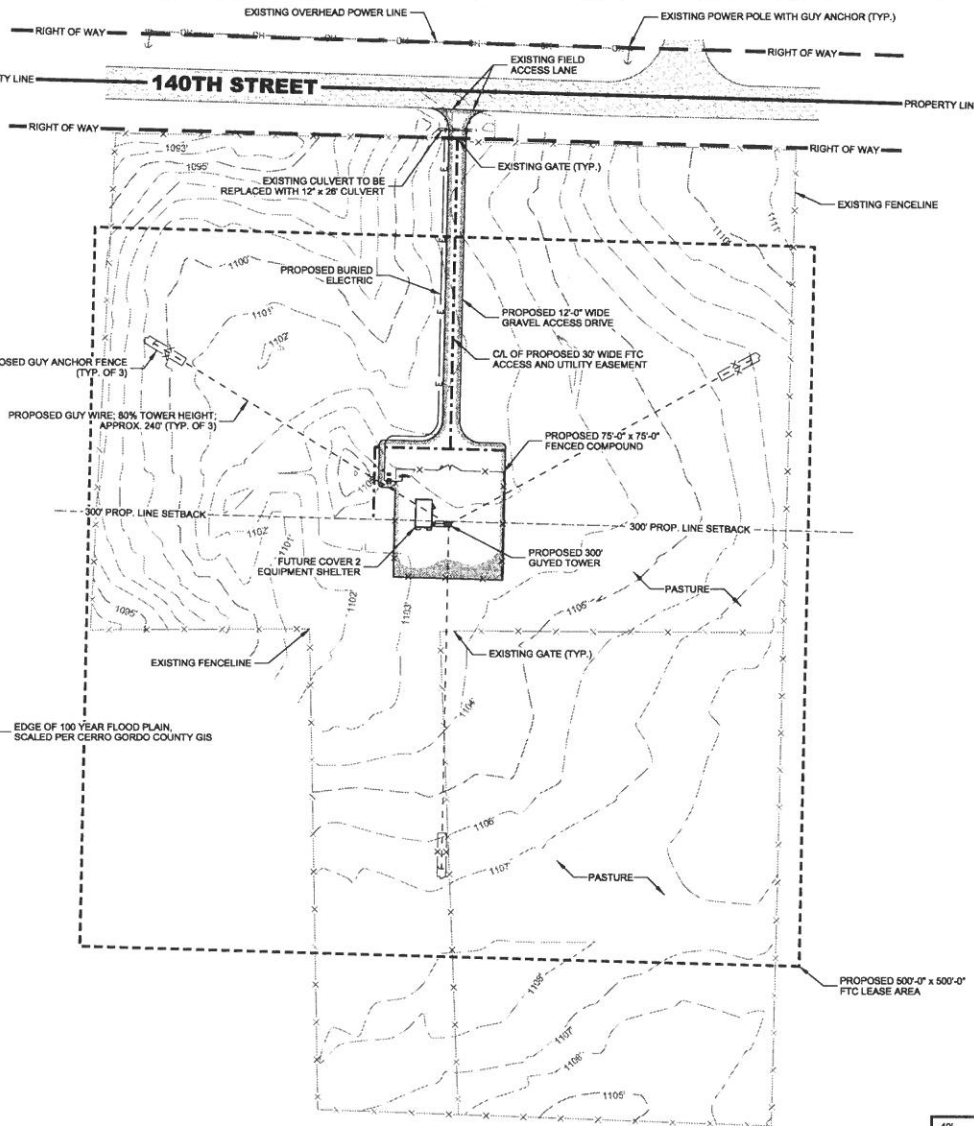
LEASE EXHIBIT
FOR
FTC TOWER CO.
A PART OF THE NE1/4 OF THE NW1/4,
SECTION 16, T.94N. R.20W., 5TH P.M.,
CERRO GORDO COUNTY, IOWA

NO.	DATE	DESCRIPTION	BY
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DRAWN BY: J.D.	FIELD WORK DATE: 6-20-18
CHECKED BY: C.A.K.	FIELD BOOK: M-47, PG. 30
JOB NO.: 10410	SHEET 3 OF 3



NORTH



A AERIAL OVERVIEW OF SITE

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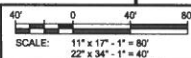
CLIENT:
FTC
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 1101 E. MAIN STREET
 ROCKWELL, NC 28681

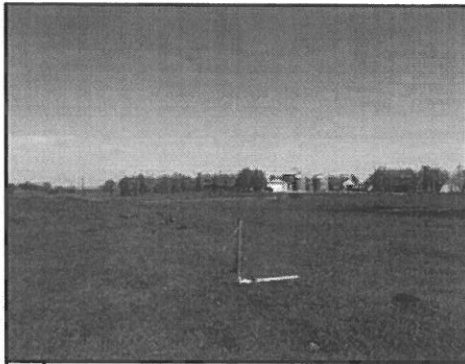
**SITE PLAN
 ROCKWELL,
 IOWA**

SHEET TITLE

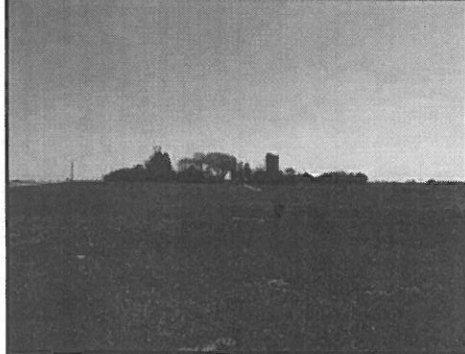
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INT.	DATE	DESCRIPTION
NAT	07/29/18	REV. 0
JEM	08/29/18	FINAL CD# REV. 0

CHECKED BY	APK
PLAT DATE	8/29/2018
PROJECT NUMBER	18755
SET TYPE	PRELIM DWGS.
SHEET NUMBER	C-101

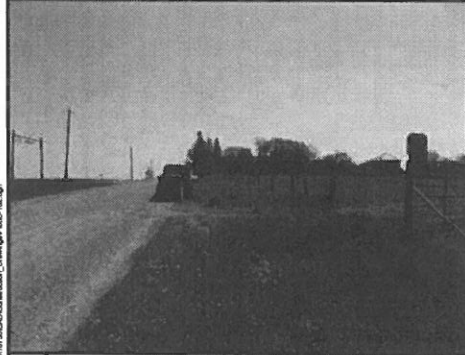




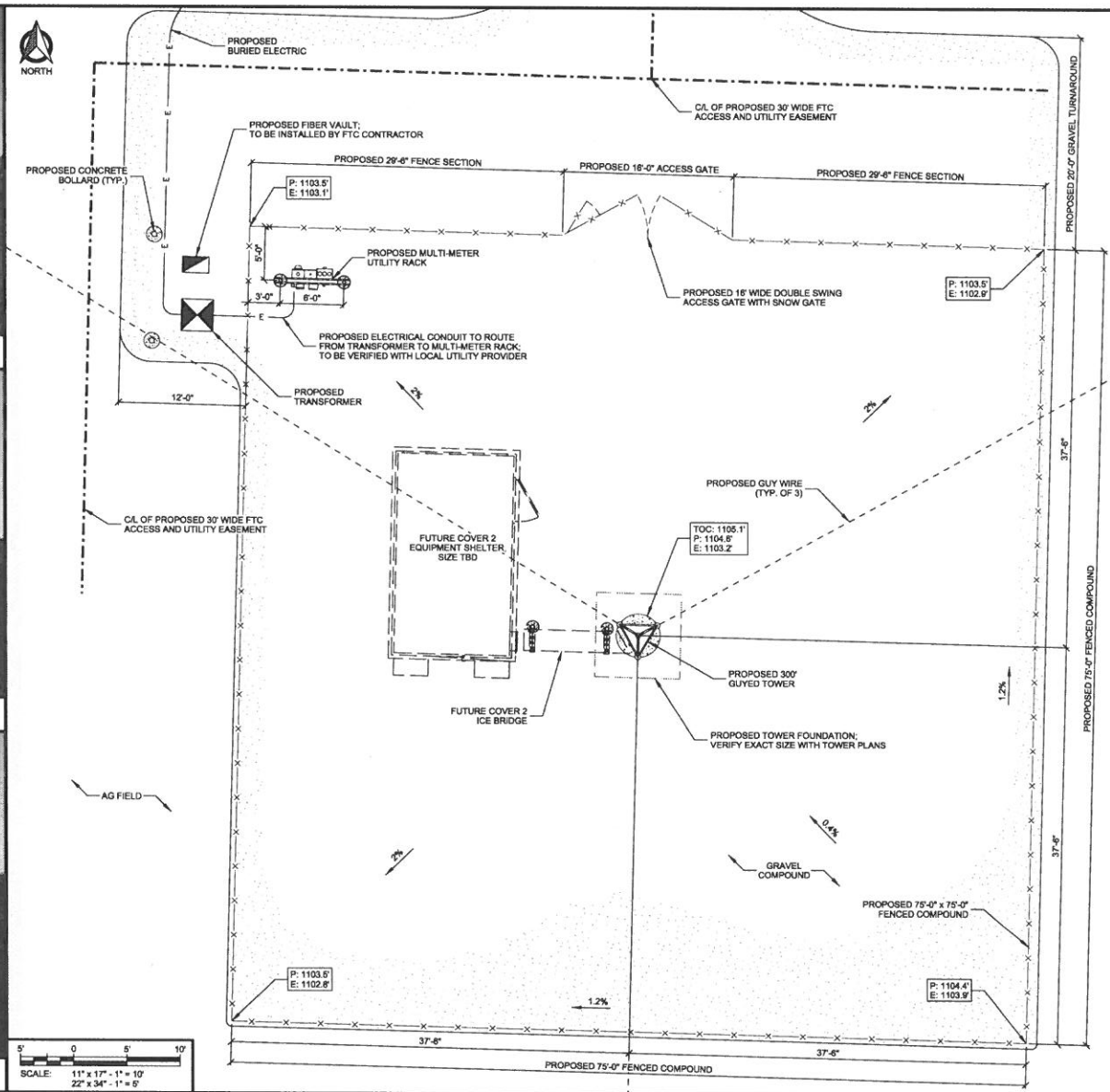
A **SITE OVERVIEW (LOOKING NORTH)**



B **SITE OVERVIEW (LOOKING EAST)**



C **EXISTING FIELD ACCESS LANE (LOOKING EAST)**



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COMPOUND PLAN
ROCKWELL
ROCKWELL, IOWA

SHEET TITLE:

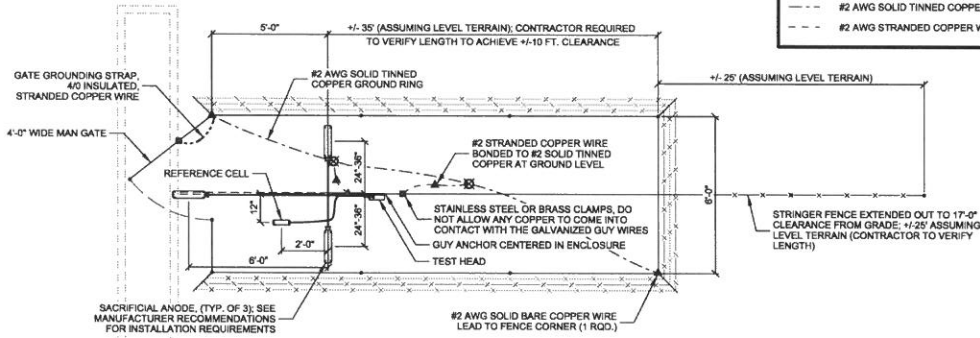
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NAT	07/23/18 REV. 0
JIM	08/29/18 FINAL CDW REV. 0

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PLOT DATE:	8/29/2018
PROJECT NUMBER:	18755
SET TYPE:	PRELIM DWGS.
SHEET NUMBER:	C-102

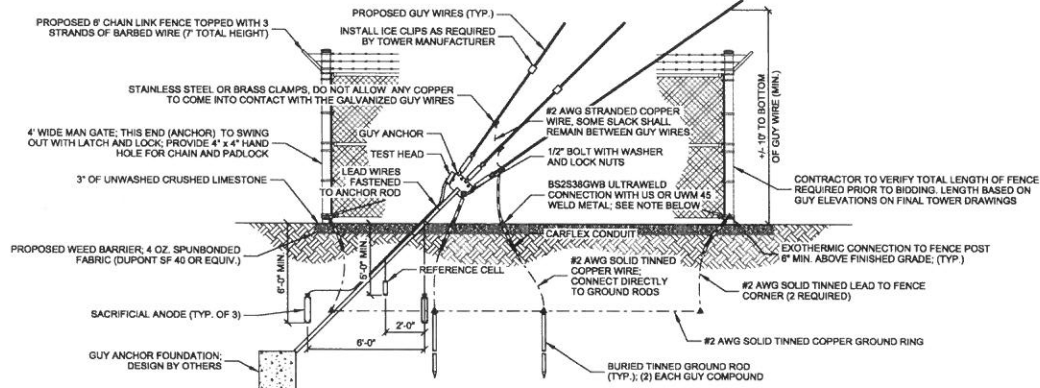
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LEGEND: (THIS SHEET)

- ▲ EXOTHERMIC CONNECTION
- MECHANICAL CONNECTION
- TINNED GROUND ROD (5/8" x 10' LONG)
- - - #2 AWG SOLID TINNED COPPER WIRE
- - - #2 AWG STRANDED COPPER WIRE



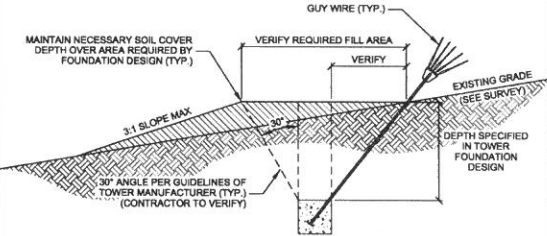
A PLAN VIEW



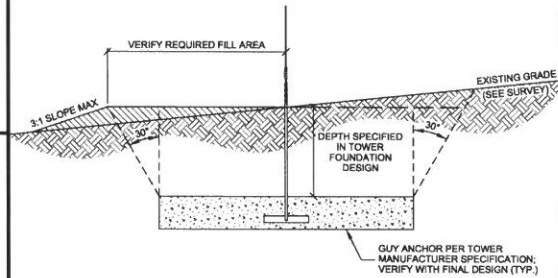
B TYP. ENCLOSURE LAYOUT AT GUY ANCHOR WITH GROUNDING

NOTES:

1. CONTRACTOR TO PROVIDE AND INSTALL ANCHORGUARD CORROSION CONTROL SYSTEM MODEL # AG-3 (OR EQUIVALENT). AG-3 SYSTEM INCLUDES: (B) SACRIFICIAL ANODES, (C) REFERENCE CELLS, (D) ANCHOR TEST HEADS, LEAD WIRES FOR ALL REFERENCE CELLS AND ANODES, REQUIRED INSTALLATION MOUNTING HARDWARE.
2. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR SYSTEM INSTALLATION REQUIREMENTS.
3. INSTALL SACRIFICIAL ANODES WITH A MINIMUM HORIZONTAL SPACING OF 6'-0" AND A MINIMUM DEPTH OF 6'-0" BELOW FINISHED GRADE (DEPTH TO EXCEED LOCAL FROST DEPTH).
4. INSTALL REFERENCE CELL A MINIMUM DEPTH OF 5'-0" BELOW FINISHED GRADE (DEPTH TO EXCEED LOCAL FROST DEPTH).
5. BURY ALL LEAD WIRING A MINIMUM OF 12" BELOW FINISHED GRADE.
6. CONTRACTOR TO INSTALL GUY WIRE GROUND KIT BY HARGER, PART # 5810PTU27X50.



SIDE VIEW



REAR VIEW

NOTES:

1. ENCLOSURE IS 6'-0" WIDE x 35'-0" LONG WITH 4'-0" MAN GATE AT ANCHOR END. CONTRACTOR TO CONSULT FINAL TOWER PLANS AND ADJUST DIMENSIONS AS NECESSARY TO ACHIEVE REQUIRED CLEARANCE.
2. AREA WITHIN ENCLOSURE TO BE COVERED WITH 3" OF UNWASHED CRUSHED LIMESTONE WITH WEED FABRIC, PLACE FENCE 1" MAXIMUM OPEN TO SURFACE GRADE. GRADE SURFACE TO 12" MINIMUM BEYOND FENCE. GRAVEL TO 6" BEYOND FENCE.
3. COMPLETE DETAILED GROUNDING AT EACH GUY ANCHOR.
4. THE GUY WIRES WILL BE BONDED TO #2 AWG STRANDED COPPER WIRE USING STAINLESS STEEL OR BRASS CLAMPS (SOME SLACK SHALL REMAIN BETWEEN THE GUY WIRES). BOND STRANDED COPPER WIRE TO #2 AWG SOLID BARE COPPER LEAD A MINIMUM OF 6" ABOVE FINISHED GRADE, AND EXOTHERMICALLY WELD OR COMPRESSION CRIMP WIRE TO THE FIRST GROUND ROD.
5. DO NOT ALLOW COPPER TO COME INTO CONTACT WITH GALVANIZED GUY WIRES AS GALVANIC CORROSION WILL OCCUR.
6. CONSULT GEOTECHNICAL REPORT FOR CORROSION PROTECTION RECOMMENDATIONS.
7. FOLLOW ALL MFG. DESIGN AND INSTALLATION RECOMMENDATIONS & EIA/TIA-222-G & F STANDARDS. ANY QUESTIONS OR DISCREPANCIES SHOULD BE ADDRESSED WITH TOWER AND FOUNDATION DESIGNER (BY CONTRACTOR) PRIOR TO BIDDING AND INSTALLATION.
8. SOME GUY ANCHORS MAY BE PLACED ON STEEP SLOPES AND/OR HAVE SIGNIFICANT GRADE CHANGES SIDE TO SIDE. SIGNIFICANT GRADING MAY BE REQUIRED TO MAINTAIN THE PROPER SOIL COVER USED FOR THE FOUNDATION DESIGN.
9. THE AREA DIRECTLY OVER THE ANCHOR SHOULD MAINTAIN THE MINIMUM COVER SPECIFIED IN THE TOWER FOUNDATION DESIGN PLAN.
10. MAINTAIN A MINIMUM SLOPE OF 2% DOWNHILL & MATCH INTO EXISTING GRADE AT A MAX. SLOPE OF 3:1. CONTRACTOR TO REVIEW FINAL SURVEY, GEOTECH AND TOWER FOUNDATION PLANS IN THEIR ENTIRETY PRIOR TO BIDDING.
11. UTILIZE A 30° ANGLE IN CALCULATING REQUIRED FILL. (VERIFY WITH TOWER MANUFACTURER AND DESIGN).

C TYP. GRADING AT GUY ANCHOR

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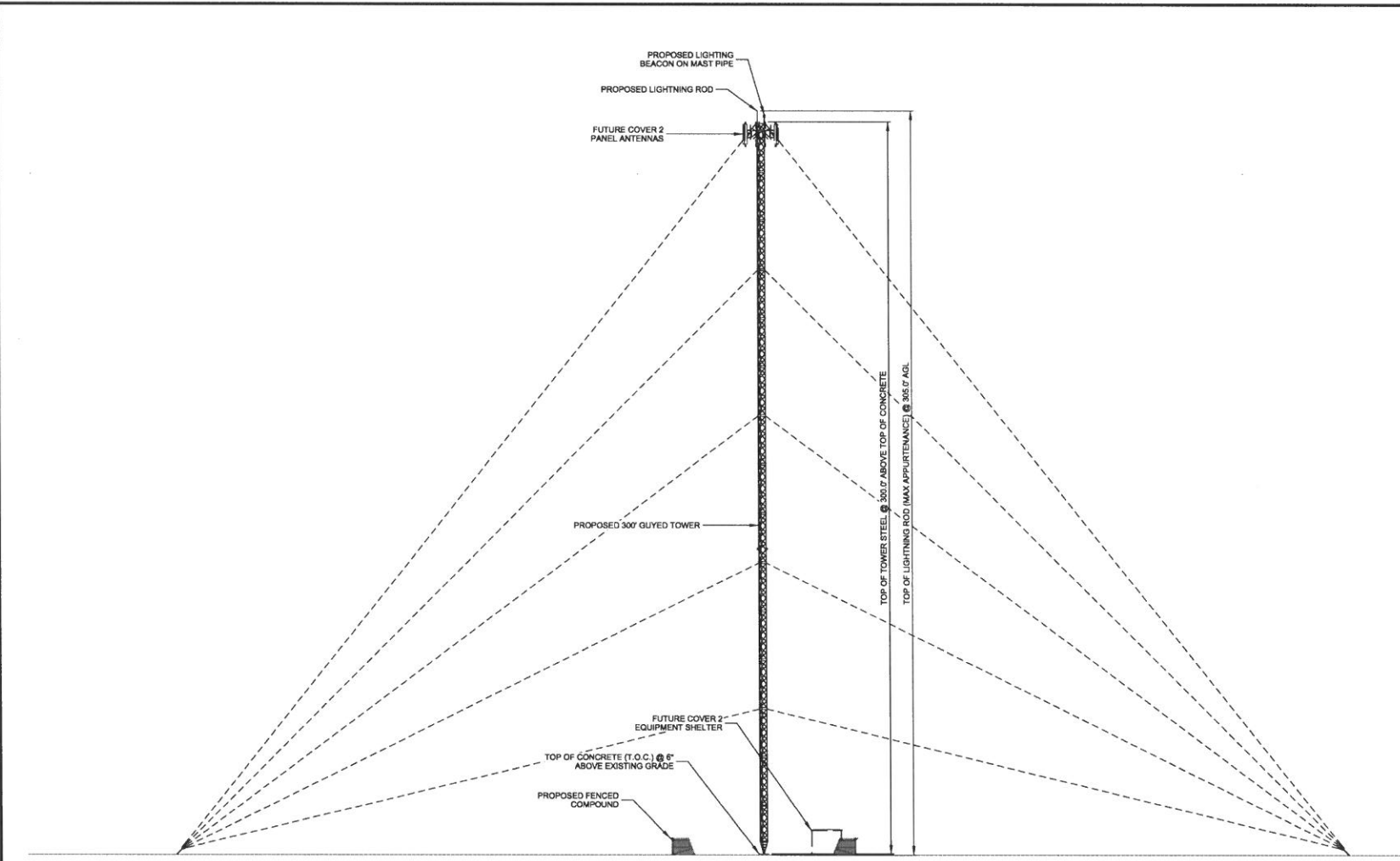
**GUY ANCHOR FENCING
 ROCKWELL, IOWA**

SHEET TITLE:

SUBMITTAL:		
INT.	DATE	DESCRIPTION
NAT	07/29/18	REV. 0
JRM	08/29/18	FINAL CDN REV. 0

CHECKED BY:	APK
PLCOT DATE:	8/29/2018
PROJECT NUMBER:	18755
SET TYPE:	PRELIM DWGS.
SHEET NUMBER:	C-503

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- NOTES:**
1. CONTRACTOR TO VERIFY HEIGHT AND DIRECTION OF ANTENNAS WITH PROJECT MANAGER.
 2. CONTRACTOR TO VERIFY LIGHTNING ROD EXTENDS 2' MIN. ABOVE ALL ANTENNAS & EQUIPMENT.

A SITE ELEVATION
 SCALE: 11" x 17" - 1" = 40'-0"
 22" x 34" - 1" = 20'-0"

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**SITE ELEVATION
 ROCKWELL,
 ROCKWELL, IOWA**

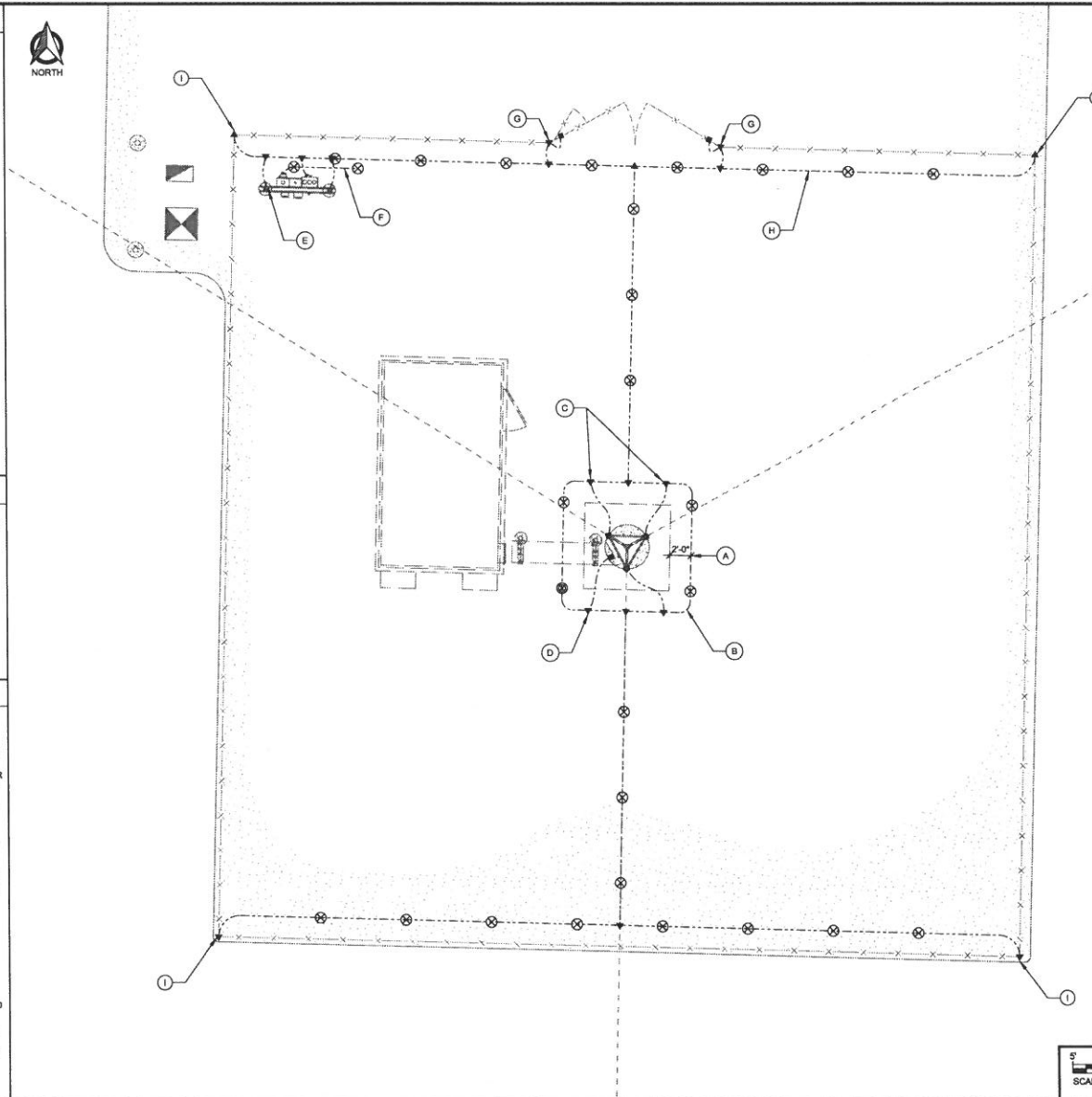
SHEET TITLE:

SUBMITTAL:	
INT. DATE:	DESCRIPTION:
NAT 07/23/18	REV. 0
20M 06/28/18	FINAL CD REV. 0

CHECKED BY:	APK
PLOT DATE:	8/28/2018
PROJECT NUMBER:	18755
SET TYPE:	PRELIM DWGS.
SHEET NUMBER:	T-201

KEYNOTES: (THIS SHEET)

- (A) MAINTAIN 2-FOOT CLEARANCE FROM ALL STRUCTURES
- (B) TOWER GROUND RING, #2 SOLID BARE TINNED COPPER
- (C) GROUND LEADS FROM TOWER STEEL TO GROUND RING (TYP. OF 3) (USE GROUNDING TABS WHEN AVAILABLE), #2 SOLID BARE TINNED COPPER
- (D) TOWER FOUNDATION GROUND, #2 SOLID BARE TINNED COPPER
- (E) MULTI-METER RACK POST (TYP.)
- (F) GROUND ELECTRIC METER HOUSING TO (2) INDEPENDENT GROUND RODS, SPACED 10' O.C. WITH #2 SOLID BARE TINNED COPPER
- (G) GATE GROUND LEAD
- (H) PERIPHERAL GROUND RING SHOULD BE INSTALLED 1' TO 2' INSIDE THE FENCED LINE, #2 SOLID BARE TINNED COPPER
- (I) FENCE CORNER GROUND LEAD, GROUND FENCE WITHIN 25-FEET OF TOWER



GROUNDING LEGEND: (THIS SHEET)

- ▲ EXOTHERMIC OR UL RATED IRREVERSIBLE CONNECTION
- MECHANICAL CONNECTION
- GROUND LEAD
- ⊗ GROUND INSPECTION WELL
- ⊗ COPPER CLAD GROUND ROD, (5/8" DIA. x 8' LONG) SPACE @ 10' O.C. MAX.
- ⊗ COPPER PLATE, (18" x 18" x .032" THK) SPACE @ 10' O.C. MAX.

NOTES: (THIS SHEET)

1. ALL EXTERIOR GROUNDING SHALL MEET OR EXCEED THE CURRENT NEC AND NFPA 780 CODE.
2. THE GROUNDING SYSTEM & CONDUCTORS SHALL BE INSPECTED PRIOR TO BACK FILLING WITH RESULTS APPROVED BY THE CARRIER. THE SYSTEM SHALL PROVIDE 5 OHM OR LESS RESISTANCE UPON COMPLETION.
3. HIGH COMPRESSION TYPE CONNECTORS SHALL BE USED FOR SECONDARY GROUNDING CONDUCTOR TO MAIN GROUNDING CONDUCTOR CONNECTIONS. AFTER INSPECTION CONNECTIONS SHALL BE WRAPPED WITH ELECTRICAL VINYL TAPE.
4. ALL MECHANICAL CONNECTIONS SHALL INCLUDE ANTI-OXIDANT COMPOUND BETWEEN LUG & CONNECTION POINT. SCARF PAINT FROM OBJECT BEING CONNECTED TO TOUCH UP PAINT ANY EXPOSED METAL AFTER CONNECTION IS INSTALLED.
5. GROUNDING CONDUCTORS SHALL MAINTAIN, TO THE EXTENT PRACTICAL, A HORIZONTAL OR DOWNWARD DIRECTION FREE FROM UP AND DOWN POCKETS. THE RADIUS OF BEND SHALL NOT BE LESS THAN 6" AND THE ANGLE OF ANY BEND SHALL NOT BE SHARPER (LESS) THAN 90°.
6. THE MAXIMUM HORIZONTAL AND VERTICAL SPACING BETWEEN GROUNDING CONDUCTOR (NOT IN CONDUIT) SUPPORTS SHALL NOT EXCEED 4 FT.
7. IF A GROUNDING CONDUCTOR IS INSTALLED IN FERROUS METAL CONDUITS, THE CONDUCTOR SHALL BE BONDED TO THE TOP AND BOTTOM OF THE CONDUIT.
8. ALL NON-INSULATED GROUND LEADS EXTENDING ABOVE GROUND LEVEL SHALL BE ENCASED IN 3/4" PVC & SEALED WITH SILICONE ON BOTH ENDS.
9. ALL ABOVE GRADE CADDLED CONNECTIONS (TO GALVANIZED ITEMS) SHALL BE SPRAYED WITH COLD GALVANIZING COMPOUND TO PREVENT CORROSION.
10. GROUND RINGS & TOP OF RODS SHALL BE INSTALLED AT 30" BELOW FINISHED GRADE.
11. INSTALL 18" x 18" COPPER PLATES IN LIEU OF GROUND RODS WHEN INSTALLING OVER TOWER FOUNDATION OR WHERE DRYING GROUND RODS IS NOT FEASIBLE. REFER TO GEOTECH REPORT FOR SOIL CONDITIONS.

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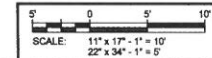
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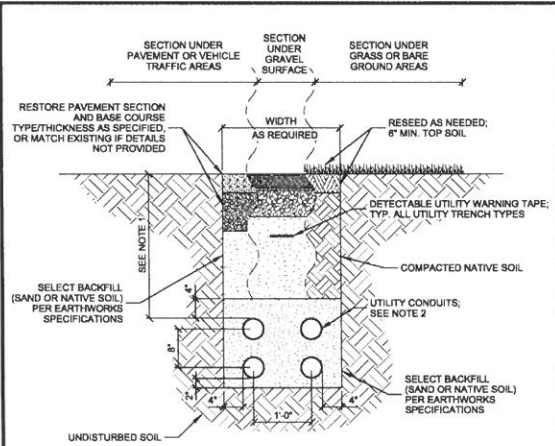
**GROUNDING PLAN
 ROCKWELL, IOWA**

SHEET TITLE

INT.	DATE	DESCRIPTION
NAT	07/23/18	REV. 0
25M	06/29/18	FINAL CDN REV. 0

CHECKED BY	APK
PLOT DATE	8/29/2018
PROJECT NUMBER	18755
SHEET TYPE	PRELIM DWGS.
SHEET NUMBER	E-101





- NOTES:
1. UTILITY CONDUITS TO BE BURIED A MINIMUM DEPTH OF 42" BELOW GROUND LEVEL OR 6" BELOW THE FROST LINE. CONDUIT TYPE, SIZE, AND QUANTITY SHOWN ON E-102.
 2. CONDUIT TYPE, SIZE, AND QUANTITY SHOWN ON E-102.

A UTILITY TRENCH

WARNING TAPE & TRACE WIRE NOTES: (THIS SHEET)

1. WARNING TAPE TO BE INSTALLED ABOVE THE ELECTRICAL RUN FROM THE GENERATOR TO THE PLATFORM AND ABOVE THE FUEL LINE BETWEEN THE GENERATOR AND FUEL SOURCE.
2. WARNING TAPE SHALL BE RUN CONTINUOUSLY ALONG THE ENTIRE LENGTH AND INSTALLED 12 INCHES ABOVE THE TOP OF THE CONDUITS.
3. TRACER WIRE SHALL RUN CONTINUOUSLY ALONG THE ENTIRE LENGTH OF THE BURIED GAS AND ELECTRIC CONDUITS.
4. TRACER WIRE SHALL BE SECURED TO THE CONDUIT AND MAINTAINED ABOVE THE CONDUIT CENTERLINE DURING TRENCH BACKFILLING.
5. TRACER WIRE TO EXTEND TO THE TOP OF PVC ABOVE CONCRETE ON BOTH ENDS - LOOP AND WRAP AROUND APPROPRIATE CONDUIT.
6. TRACER WIRE SHALL CONSIST OF 14GA. SOLID COPPER WIRE WITH A CORROSION PROTECTIVE COATING.
7. INSTALL TRACER WIRE WITH SPACER AND SECURE PER MFG. RECOMMENDATIONS - AT A MIN. EVERY 10' AND AT ALL BENDS. - DO NOT WRAP BURIED CONDUIT WITH TRACER WIRE TO AVOID UNNECESSARY STRESS ON TRACER. - CONTRACTOR TO CHECK CONTINUITY OF TRACER WIRE BEFORE AND AFTER BURIAL AND DOCUMENT RESULTS. 12" ABOVE THE TOP OF THE CONDUITS.

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UTILITY DETAILS
ROCKWELL
ROCKWELL, IOWA

SHEET TITLE:

INT.	DATE	DESCRIPTION
NAT	07/23/18	REV. 0
ISS	08/29/18	FINAL CON REV. 0

CHECKED BY: **APK**

PLOT DATE: **8/29/2018**

PROJECT NUMBER: **18755**

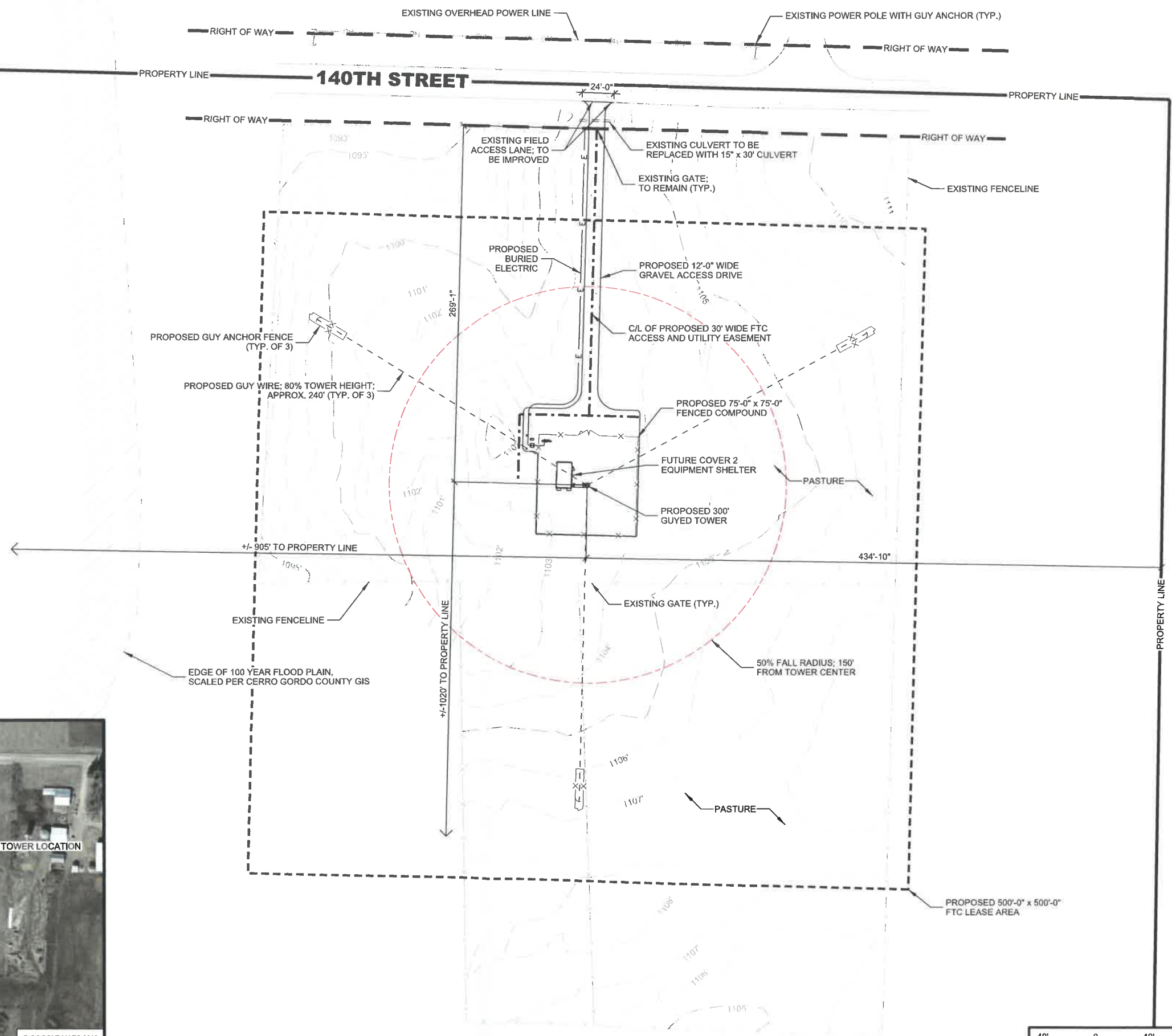
SET TYPE: **PRELIM DWGS.**

SHEET NUMBER: **E-502**

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NORTH



A AERIAL OVERVIEW OF SITE

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**SITE PLAN
ROCKWELL
ROCKWELL, IOWA**

SHEET TITLE:

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
NAT	07/23/18	REV. 0
JSM	08/29/18	FINAL CD's REV. 0
JSM	10/29/18	FINAL CD's REV. 1

CHECKED BY	APK
PLOT DATE	10/29/2018
PROJECT NUMBER	18755
SET TYPE	FINAL DWGS.
SHEET NUMBER	C-101

