



RECEIVED

AUG 04 2008

PUBLIC SERVICE
COMMISSION

July 30, 2008

Kentucky Public Service Commission
P.O. Box 615
211 Sower Blvd.
Frankfort, KY 40602-0615

RE: KY-00-0817 WOLF CREEK

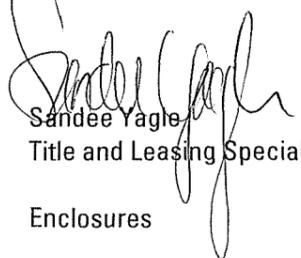
2008-261

Dear Public Service Commission;

Please accept the attached application for a Certificate of Public Convenience and Necessity for a cellular communications tower at 520 Sutton Road, Olive Hill, KY 41164.

Please find enclosed, one(1) original and five (5) copies of the entire application. Should you have any questions, please feel free to contact me at (231) 929-4555, ext. 28 or via email at syagle@cellere.us.

Sincerely,


Sandee Yagle
Title and Leasing Specialist

Enclosures

KY-00-0817 WOLF CREEK

TEL 231.929.4555
FAX 231.929.0099
www.cellere.us
info@cellere.us
4110 Copper Ridge Drive, Suite 204, Traverse City, MI 49684

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Application of Central States Tower Holdings, LLC for Issuance
of a Certificate of Public Convenience and Necessity to Construct
a Cell Site (KY-00-0817A WOLF CREEK) in Olive Hill Kentucky

Case No. 2008-00261

RECEIVED

AUG 04 2008

APPLICATION FOR A CERTIFICATE OF
PUBLIC CONVENIENCE AND NECESSITY

PUBLIC SERVICE
COMMISSION

Cellere, LLC ("Cellere") as agent for Central States Tower Holdings, LLC ("Central States"), pursuant to KRS 278.020 and 278.040, hereby submits this application for a certificate of public convenience and necessity to construct a cell site to be known as the KY-00-0817A WOLF CREEK ("WOLF CREEK") cell site in Olive Hill, Kentucky, namely the county of Carter, Kentucky.

1. As required by 807 KAR 5:001 Sections 8(1) and (3), and 807 KAR 5:063, Cellere states that it is a Michigan limited liability company who is acting as agent for Central States Tower Holdings, LLC, who is a Delaware limited liability company and whose full name and address are: Cellere, LLC, 4110 Copper Ridge Drive, Suite 204, Traverse City, Michigan 49684. Central States Tower Holdings, LLC, whose address is: 323 S. Hale Street, Suite #100, Wheaton, IL 60187.
2. Pursuant to 807 KAR §1(1)(b), a copy of the applicant's applications to and approval from the Federal Aviation Administration and Kentucky Airport Zoning Commission are submitted as Exhibit "A".
3. Pursuant to 807 KAR 5:063 § 1(1)(d), applicant is submitting as Exhibit "B", a geotechnical investigation report, signed and sealed by a professional engineer registered in Kentucky, that includes boring logs and foundation design recommendations; and as Exhibit "E", a map that outlines the finding as to the susceptibility of the area surrounding the proposed site to flood hazard.
4. Pursuant to 807 KAR 5:063 § 1(1)(e), clear directions from the county seat to the proposed site, including highway numbers and street names, if applicable, with the telephone number of the person who prepared the directions are submitted as Exhibit "C".
5. Pursuant to 807 KAR § 1(1)(f), a copy of the lease for the property on which the cell tower is proposed to be located is submitted as Exhibit "D".

6. Pursuant to 807 KAR § 1(1)(g), experienced personnel will manage and operate the WOLF CREEK cell site. The Vice President of Construction for Cellere, LLC., Chuck Norris, is ultimately responsible for all construction of the cell tower. Mr. Norris has over 15 years of experience. Arthur J. Krueger, Licensed Professional Engineer of Wilcox Professional Services, is responsible for the design specifications of the proposed tower (identified in Exhibit "B"). S.M. Naeem Akhter, Licensed Professional Engineer of Glenmartin, is responsible for the foundation design of the proposed tower (identified in Exhibit "B"). Central States Tower Holdings, LLC, is responsible for the operations of the tower, once constructed. Central States operates cellular communications towers in 19 states with the principals having 35+ years of experience.

7. Pursuant to 807 KAR 5:063 § 1(1)(h), a site development plan or survey, signed and sealed by a professional engineer registered in Kentucky, that shows the proposed location of the tower and all easements and existing structures within 500 feet of the proposed site on the property on which the tower will be located, and all easements and existing structures within 200 feet of the access drive, including the intersection with the public street system, is submitted as Exhibit "E"

8. Pursuant to 807 KAR 5:063 § 1(1)(i), a vertical profile sketch of the tower, signed and sealed by a professional engineer registered in Kentucky, indicating the height of the tower and the placement of all antennae is submitted as Exhibit "B".

9. Pursuant to 807 KAR 5:063 § 1(1)(j), the tower and foundation design plans and a description of the standard according to which the tower was designed, signed and sealed by a professional engineer registered in Kentucky, is submitted as Exhibit "B".

10. Pursuant to 807 KAR 5:063 § 1(1)(k), a map, drawn to a scale no less than one (1) inch equals 200 feet, that identifies every structure and every owner of real estate within 500 feet of the proposed tower, is submitted as Exhibit "E".

11. Pursuant to 807 KAR 5:063 § 1(1)(l), applicant hereby affirms that every person who owns property within 500 feet of the proposed tower has been: (i) notified by certified mail, return receipt requested, of the proposed construction, (ii) given the commission docket number under which the applications will be processed; and (iii) informed of his or her right to request intervention.

12. Pursuant to KRS 278.665 (2), applicant hereby affirms that every person who, according to the records of the property valuation administrator, owns property contiguous to the property where the proposed cellular tower will be located has been; (i) notified by certified mail, return receipt requested, of the proposed construction; (ii) given the commission docket number under which the application will be processed; and (iii) informed of his or her right to request intervention.

13. Pursuant to 807 KAR 5:063 § 1(1)(m), a list of the property owners who received the notice together with copies of the certified letters sent to listed property owners, is submitted as Exhibit "F".

14. Pursuant to 807 KAR 5:063 § 1(1)(n), applicant hereby affirms that the Office of Carter County Judge Executive has been: (i) notified by certified mail, return receipt requested, of the proposed construction; (ii) given the commission docket number under which the application will be processed; and (iii) informed of its right to request intervention.

15. Pursuant to 807 KAR 5:063 § 1(1)(o), a copy of the notice sent to the Carter County Judge Executive is submitted as Exhibit "G".

16. Pursuant to 807 KAR 5:063 § 1(1)(p), applicant hereby affirms that (i) two written notices meeting subsection two (2) of this section have been posted, one in a visible location on the proposed site and one on the nearest public road; and (ii) the notices shall remain posted for at least two weeks after the application has been filed.

17. Pursuant to 807 KAR 5:063 § 1(2)(a), applicant affirms that:

(a) A written notice, of durable material at least two (2) feet by four (4) feet in size, stating that "Central States Tower Holdings, LLC proposes to construct a telecommunications tower on this site", including the addresses and telephone numbers of the applicant and the Kentucky Public Service Commission, has been posted and shall remain in a visible location on the proposed site until final disposition of the application; and

(b) A written notice, of durable material at least two (2) feet by four (4) feet in size, stating that "Central States Tower Holdings, LLC, proposes to construct a telecommunications tower near this site", including the addresses and telephone numbers of the applicant and the Kentucky Public Service Commission, has been posted on the public road nearest the site.

A Copy of each sign is attached as Exhibit "H".

18. Pursuant to 807 KAR 5:063 § 1(1)(q), a statement that notice of the location of the proposed construction has been published in a newspaper of general circulation in the county in which the construction is proposed, a copy of which is submitted as Exhibit "I".

19. Pursuant to 807 KAR 5:063 § 1(1)(r), the cell site, which has been selected, is in a relatively undeveloped area in Olive Hill, in Carter County, Kentucky.

20. Pursuant to 807 KAR 5:063 § 1(1)(s), Central States, LLC, has considered the likely effects of the installation on nearby land uses and values and has concluded that there is no more suitable location reasonably available from which adequate service to the area can be provided, and that there is no reasonably available opportunity to co-locate. Central States, LLC, has attempted to co-locate on towers

designed to host multiple wireless service provider's facilities or existing structures, such as a telecommunications tower, or another suitable structure capable of supporting the utility's facilities.

21. Pursuant to 807 KAR 5:063 § 1(1)(t), a map of the area in which the tower is proposed to be located, that is drawn to scale and that clearly depicts the search area in which a site should, pursuant to radio frequency requirements, be located is submitted as Exhibit "J".

22. Pursuant to KRS 100.987 (2)(a), a grid map, that is drawn to scale, that shows the location of all existing cellular antenna towers and that indicates the general position of proposed construction sites for new cellular antenna towers is submitted as Exhibit "K".

23. No reasonably available telecommunications tower, or other suitable structure capable of supporting the cellular facilities of Central States, LLC and which would provide adequate service to the area exists.

24. Correspondence and communication with regard to this application should be addressed to:

Benjamin Meredith
Cellere, LLC
4110 Copper Ridge Drive, Suite 204
Traverse City, MI 49684
(231) 929-4555
(fax) 929-0099
bmeredith@cellere.us

WHEREFORE, Cellere, LLC , as agent for Central States Tower Holdings, LLC, requests the Commission to enter and order:

1. Granting a certificate of public convenience and necessity to construct the WOLF CREEK cell site;
- and
2. Granting all other relief as appropriate.

Respectfully submitted,



Benjamin Meredith
Cellere, LLC
4110 Copper Ridge Drive, Suite 204
Traverse City, MI 49684
(231) 929-4555
(fax) 929-0099
bmeredith@cellere.us

Index to Exhibits

- EXH. A FAA Application and Determination; Kentucky Airport Zoning Commission Application and Approval
- EXH. B Geotechnical Report; Survey; Tower Design; Tower Foundation Design
- EXH. C Directions to Site from County Seat
- EXH. D Memorandum of Lease
- EXH. E Site Plan- 500' Radius Map with Flood Plain Information
- EXH. F Affidavit of Notification of Adjacent Property Owners and Owners within 500 feet.
- EXH. G Certified Letter to Judge Executive
- EXH. H Public Notice Signs (photos)
- EXH. I Affidavit of Publication of Public Notice
- EXH. J Map of Search Area
- EXH. K Map of Existing and Proposed Towers

EXHIBIT A

**FAA Application and Determination
And
Kentucky Airport Zoning Commission
Application and Approval**



Federal Aviation Administration
Air Traffic Airspace Branch, ASW-520
2601 Meacham Blvd.
Fort Worth, TX 76137-0520

Aeronautical Study No.
2008-ASO-1516-OE

Issued Date: 04/23/2008

Brian Meier
Central States Tower Holdings, LLC
323 South Hale Street Suite 100
Wheaton, IL 60187

**** 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: Tower KY-00-0817 WOLF CREEK
Location: Olive Hill, KY
Latitude: 38-22-24.45N NAD 83
Longitude: 83-05-58.04W
Heights: 300 feet above ground level (AGL)
1151 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 marked and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, a med-dual system - Chapters 4,8(M-Dual),&12.

It is required that the enclosed FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

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

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

This determination expires on 10/23/2009 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) 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 POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

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 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 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 if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 838-1994. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2008-ASO-1516-OE.

Signature Control No: 567008-102023748

(DNE)

Linda Steele
Technician

Attachment(s)
Additional Information

7460-2 Attached

Additional information for ASN 2008-ASO-1516-OE

It should be noted that no transmitted frequencies were submitted or approved for this tower at this time.

A separate study is required for the addition of any transmitting frequency(ies) on this antenna tower in the future.

Notice of Proposed Construction or Alteration - Off Airport

Project Name: CENTR-000090648-08 **Sponsor:** Central States Tower Holdings, LLC

Details for Case : KY-00-0817 WOLF CREEK

Show Project Summary

Case Status		Date Accepted: 03/19/2008	
ASN: 2008-ASO-1516-OE		Date Determined: 04/23/2008	
Status: Determined		Letters: 04/23/2008  DNEFT18	
7460-2 (PART II) required within 5 days after the construction reaches its greatest height.			
Add Supplemental Notice (7460-2)			
Construction / Alteration Information		Structure Summary	
Notice Of: Construction		Structure Type: Antenna Tower	
Duration: Permanent		Structure Name: KY-00-0817 WOLF CREEK	
if Temporary : Months: Days:		FCC Number:	
Work Schedule - Start:		Prior ASN:	
Work Schedule - End:			
State Filing: Not filed with State			
Structure Details		Common Frequency Bands	
Latitude: 38° 22' 24.44" N		Low Freq	High Freq Freq Unit ERP ERP Unit
Longitude: 83° 5' 58.04" W			
Horizontal Datum: NAD83		Specific Frequencies	
Site Elevation (SE): 851 (nearest foot)			
Structure Height (AGL): 300 (nearest foot)			
Marking/Lighting: Dual-red and medium intensity			
Other :			
Nearest City: Olive Hill			
Nearest State: Kentucky			
Description of Location: Wooded lot			
Description of Proposal: Tower only			

Notice of Proposed Construction or Alteration - Off Airport

Project Name: CENTR-000090648-08 **Sponsor:** Central States Tower Holdings, LLC

Details for Case : KY-00-0817 WOLF CREEK

Show Project Summary

Case Status		Date Accepted: 03/19/2008	
ASN: 2008-ASO-1516-OE		Date Determined:	
Status: Accepted		Letters: None	
Construction / Alteration Information		Structure Summary	
Notice Of: Construction		Structure Type: Antenna Tower	
Duration: Permanent		Structure Name: KY-00-0817 WOLF CREEK	
if Temporary : Months: Days:		FCC Number:	
Work Schedule - Start:		Prior ASN:	
Work Schedule - End:			
State Filing: Not filed with State			
Structure Details		Common Frequency Bands	
Latitude: 38° 22' 24.44" N		Low Freq	High Freq Freq Unit ERP ERP Unit
Longitude: 83° 5' 58.04" W		Specific Frequencies	
Horizontal Datum: NAD83			
Site Elevation (SE): 851 (nearest foot)			
Structure Height (AGL): 300 (nearest foot)			
Marking/Lighting: Dual-red and medium intensity			
Other :			
Nearest City: Olive Hill			
Nearest State: Kentucky			
Description of Location: Wooded lot			
Description of Proposal: Tower only			



Kentucky Airport Zoning Commission
90 Airport Road, Bldg 400
Frankfort, KY 40601

502-564-4480
fax: 502-564-7953
No.: AS-022-2KY5-08-054

May 12, 2008

APPROVAL OF APPLICATION

APPLICANT:
Central States Tower, Inc
323 South Hale Street
Suite 100
Wheaton, IL 60187

SUBJECT: AS-022-2KY5-08-054

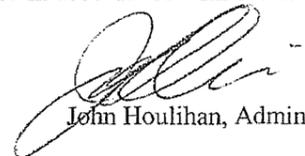
STRUCTURE: Antenna Tower
LOCATION: Olive Hill, KY
COORDINATES: 38-22-24.44 N / 83-05-58.04 W
HEIGHT: 300'AGL/1151'AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct 300'AGL/1151'AMSL Antenna Tower near Olive Hill, KY 38-22-24.44 N / 83-05-58.04 W.

This permit is valid for a period of 18 Month(s) from its date of issuance. If construction is not completed within said 18-Month period, this permit shall lapse and be void, and no work shall be performed without the issuance of a new permit.

A copy of the approved application is enclosed for your files.

Dual obstruction lighting is required in accordance with 602 KAR 50:100.


John Houlihan, Administrator



Kentucky Airport Zoning Commission
 90 Airport Road, Bldg 400
 Frankfort, KY 40601

502-564-4480
 fax: 502-564-7953
 No.: AS-022-2KY5-08-054

CONSTRUCTION/ALTERATION STATUS REPORT

May 12, 2008

AERONAUTICAL STUDY NUMBER: AS-022-2KY5-08-054

Central States Tower, Inc
 323 South Hale Street
 Suite 100
 Wheaton, IL 60187

This concerns the permit which was issued to you by the Kentucky Airport Zoning Commission on May 9, 2008. This permit is valid for a period of 18 Month(s) from its date of issuance. If construction is not completed within the said 18-Month period, this permit shall lapse and be void, and no work shall be performed without the issuance of a new permit. When appropriate, please indicate the status of the project in the place below and return this letter to John Houlihan, Administrator, Kentucky Airport Zoning Commission, 90 Airport Road, Bldg 400, Frankfort, KY 40601.
 502-564-4480.

STRUCTURE: Antenna Tower
 LOCATION: Olive Hill, KY
 COORDINATES: 38-22-24.44 N / 83-05-58.04 W
 HEIGHT: 300'AGL/1151'AMSL

CONSTRUCTION/ALTERATION STATUS

1. The project () is abandoned. () is not abandoned.

2. Construction status is as follows:

Structure reached its greatest height of _____ ft. AGL
 _____ ft. AMSL on _____ (date).

Date construction was completed. _____

Type of obstruction marking/painting. _____

Type of obstruction lighting. _____

As built coordinates. _____

Miscellaneous Information: _____

DATE _____

SIGNATURE/TITLE _____



Kentucky Transportation Cabinet, Kentucky Airport Zoning Commission, 200 Mero Street, Frankfort, KY 40622
APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE
INSTRUCTIONS INCLUDED

Kentucky Aeronautical Study Number

AS-1077-245-08-054

1. APPLICANT -- Name, Address, Telephone, Fax, etc.
Central States Tower, Inc.
323 South Hale Street, Suite 100
Wheaton, ILL 60187
(630) 221-8500

9. Latitude: 38 ° 22 ' 24 " 44 "
10. Longitude: 83 ° 05 ' 58 " 04 "
11. Datum: NAD83 NAD27 Other _____
12. Nearest Kentucky City: Olive Hill County Carter

2. Representative of Applicant -- Name, Address, Telephone, Fax
Cellere
4110 Copper Ridge Drive, Suite 204
Traverse City, MI 49684
(231) 929-4555

13. Nearest Kentucky public use or Military airport:
Fleming Mason
14. Distance from #13 to Structure: +/- 37 miles
15. Direction from #13 to Structure: SE

3. Application for: New Construction Alteration Existing
4. Duration: Permanent Temporary (Months _____ Days _____)
5. Work Schedule: Start _____ End _____
6. Type: Antenna Tower Crane Building Power Line
 Landfill Water Tank Other _____

16. Site Elevation (AMSL): 851 Feet
17. Total Structure Height (AGL): 300 Feet
18. Overall Height (#16 + #17) (AMSL): 1151 Feet
19. Previous FAA and/or Kentucky Aeronautical Study Number(s):
N/A

7. Marking/Painting and/or Lighting Preferred:
 Red Lights and Paint Dual - Red & Medium Intensity White
 White - Medium Intensity Dual - Red & High Intensity White
 White - High Intensity Other _____
8. FAA Aeronautical Study Number 2008-aso-1516-OE

20. Description of Location: (Attach USGS 7.5 minute Quadrangle Map or an Airport layout Drawing with the precise site marked and any certified survey)
See attached 1-A and Quad Map

21. Description of Proposal:
TOWER ONLY

22. Has a "NOTICE OF CONSTRUCTION OR ALTERATION" (FAA Form 7460-1) been filed with the Federal Aviation Administration?
 No Yes, When 3/19/2008

CERTIFICATION: I hereby certify that all the above statements made by me are true, complete and correct to the best of my knowledge and belief.
Braxton Dougherty, VP Construction
for Cellere
Printed Name and Title
Braxton Dougherty
Signature
3/24/08
Date

PENALTIES: Persons failing to comply with Kentucky Revised Statutes (KRS 183.881 through 183.990) and Kentucky Administrative Regulations (602 KAR 050:Series) are liable for fines and/or imprisonment as set forth in KRS 183.990(3). Non-compliance with Federal Aviation Administration Regulations may result in further penalties.

Commission Action:
 Approved Disapproved
 Chairman, KAZC Administrator, KAZC
[Signature]
Date 5-12-08



March 24, 2008

Administrator
Kentucky Airport Zoning commission
Department of Aviation
200 Mero Street
Frankfort, KY 40622

RE: Form TC 56-50E – Application for New Construction

Hello,

Attached please find Form TC 56-50E for your review and approval for the construction of a new 300' tower located in Olive Hill, Carter County, Kentucky. I have also attached a copy of the FAA Form 7460-1, a quadrangle map and a copy of the 1A previously submitted to the FAA on 3/19/08.

If you have any questions or require any additional information please don't hesitate to contact me.

Thank you,

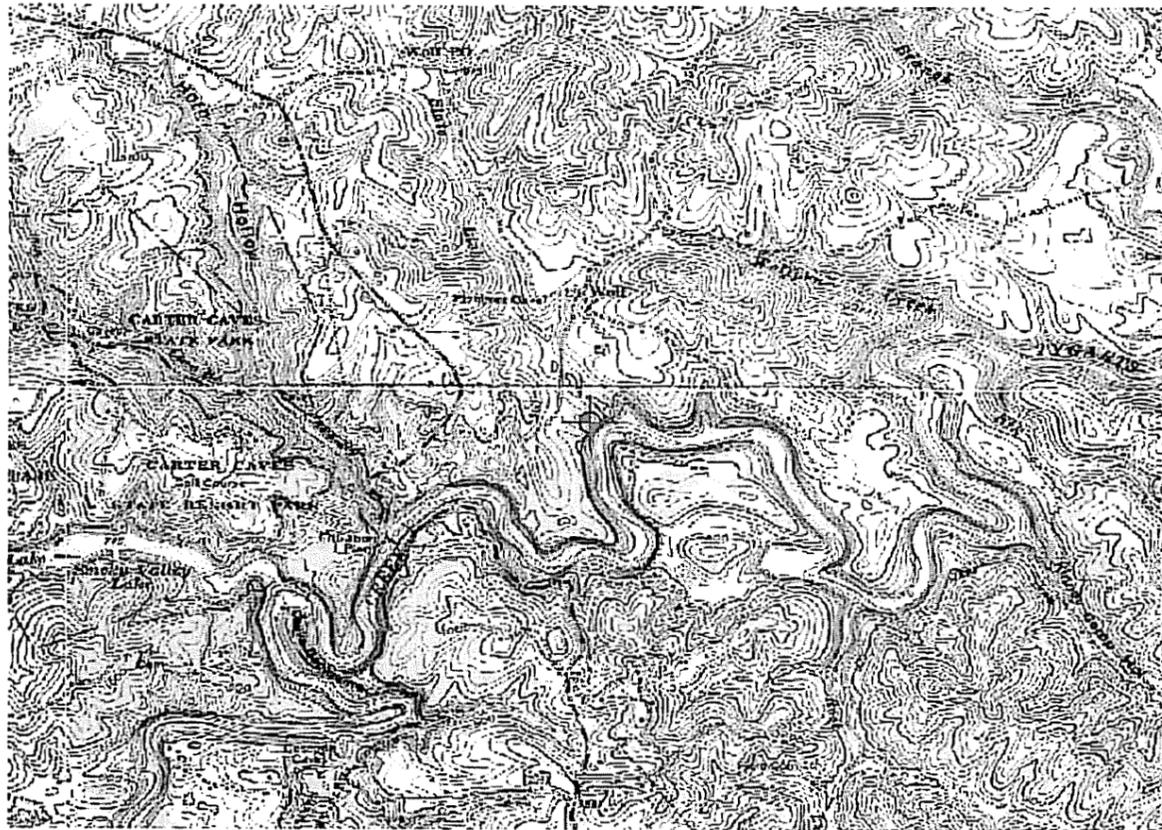
Joann Wendels
Cellere, Agent for Central States Tower, Inc.

TEL 231.929.4555
FAX 231.929.0099
WWW.cellere.us
info@cellere.us
4110 Copper Ridge Drive, Suite 204, Traverse City, MI 49684



Kentucky Transportation Cabinet, Kentucky Airport Zoning Commission, 200 Mero Street, Frankfort, KY 40622 APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE INSTRUCTIONS INCLUDED		Kentucky Aeronautical Study Number	
1. APPLICANT -- Name, Address, Telephone, Fax, etc. Central States Tower, Inc. 323 South Hale Street, Suite 100 Wheaton, ILL 60187 (630) 221-8500		9. Latitude: 38 ° 22 ' 24 . 44 ° 10. Longitude: 83 ° 05 ' 58 . 04 ° 11. Datum: <input checked="" type="checkbox"/> NAD83 <input type="checkbox"/> NAD27 <input type="checkbox"/> Other _____ 12. Nearest Kentucky City: <u>Olive Hill</u> County <u>Carter</u>	
2. Representative of Applicant -- Name, Address, Telephone, Fax Cellere 4110 Copper Ridge Drive, Suite 204 Traverse City, MI 49684 (231) 929-4555		13. Nearest Kentucky public use or Military airport: <u>Fleming Mason</u> 14. Distance from #13 to Structure: <u>+/- 37 miles</u> 15. Direction from #13 to Structure: <u>SE</u>	
3. Application for: <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Alteration <input type="checkbox"/> Existing 4. Duration: <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Temporary (Months _____ Days _____) 5. Work Schedule: Start _____ End _____ 6. Type: <input checked="" type="checkbox"/> Antenna Tower <input type="checkbox"/> Crane <input type="checkbox"/> Building <input type="checkbox"/> Power Line <input type="checkbox"/> Landfill <input type="checkbox"/> Water Tank <input type="checkbox"/> Other _____ 7. Marking/Painting and/or Lighting Preferred: <input type="checkbox"/> Red Lights and Paint <input checked="" type="checkbox"/> Dual - Red & Medium Intensity White <input type="checkbox"/> White - Medium Intensity <input type="checkbox"/> Dual - Red & High Intensity White <input type="checkbox"/> White - High Intensity <input type="checkbox"/> Other _____ 8. FAA Aeronautical Study Number: <u>2008-aso-1516-OE</u>		16. Site Elevation (AMSL): <u>851</u> Feet 17. Total Structure Height (AGL): <u>300</u> Feet 18. Overall Height (#16 + #17) (AMSL): <u>1151</u> Feet 19. Previous FAA and/or Kentucky Aeronautical Study Number(s): <u>N/A</u> 20. Description of Location: (Attach USGS 7.5 minute Quadrangle Map or an Airport layout Drawing with the precise site marked and any certified survey) <u>See attached 1-A and Quad Map</u>	
21. Description of Proposal: <u>TOWER ONLY</u>			
22. Has a "NOTICE OF CONSTRUCTION OR ALTERATION" (FAA Form 7480-1) been filed with the Federal Aviation Administration? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes, When <u>3/19/2008</u>			
CERTIFICATION: I hereby certify that all the above statements made by me are true, complete and correct to the best of my knowledge and belief.			
Braxton Dougherty, VP Construction for Cellere		<u>Braxton Dougherty</u> 3/24/08 Signature Date	
PENALTIES: Persons failing to comply with Kentucky Revised Statutes (KRS 183.861 through 183.890) and Kentucky Administrative Regulations (802 KAR 050:Series) are liable for fines and/or imprisonment as set forth in KRS 183.890(3). Non-compliance with Federal Aviation Administration Regulations may result in further penalties.			
Commission Action: <input type="checkbox"/> Chairman, KAZC <input type="checkbox"/> Administrator, KAZC <input type="checkbox"/> Approved _____ <input type="checkbox"/> Disapproved _____ Date _____			

Close Print



Notice of Proposed Construction or Alteration - Off Airport

Project Name: CENTR-000090648-08 Sponsor: Central States Tower Holdings, LLC

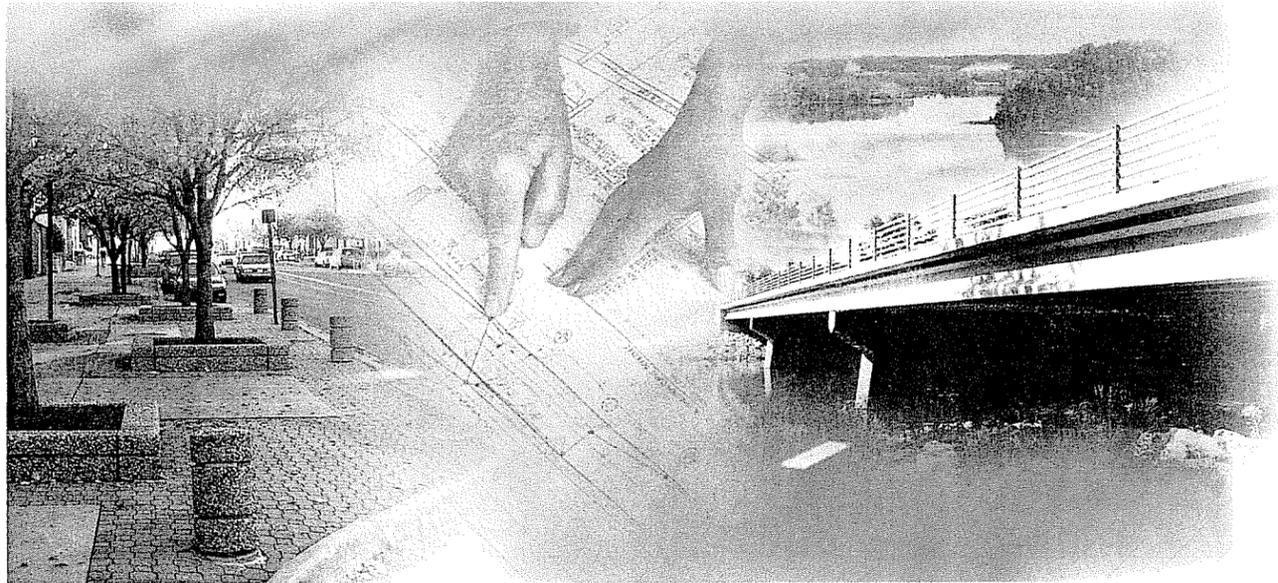
Details for Case : KY-00-0817 WOLF CREEK

Show Project Summary

Case Status		Date Accepted: 03/19/2008	
ASN: 2008-ASO-1516-0E		Date Determined:	
Status: Accepted		Letters: None	
Construction / Alteration Information		Structure Summary	
Notice Of: Construction		Structure Type: Antenna Tower	
Duration: Permanent		Structure Name: KY-00-0817 WOLF CREEK	
<i>If Temporary:</i> Months: Days:		FCC Number:	
Work Schedule - Start:		Prior ASN:	
Work Schedule - End:			
State Filing: Not filed with State			
Structure Details		Common Frequency Bands	
Latitude: 38° 22' 24.44" N		Low Freq	High Freq Freq Unit ERP ERP Unit
Longitude: 83° 5' 58.04" W		Specific Frequencies	
Horizontal Datum: NAD83			
Site Elevation (SE): 851 (nearest foot)			
Structure Height (AGL): 300 (nearest foot)			
Marking/Lighting: Dual-red and medium intensity			
<i>Other :</i>			
Nearest City: Olive Hill			
Nearest State: Kentucky			
Description of Location: Wooded lot			
Description of Proposal: Tower only			

EXHIBIT B

**Geotechnical Report; Survey; Tower Design
Tower Foundation Design**



**SOIL BORING AND ROCK CORING
INVESTIGATION REPORT**

CST SITE NO. KY-00-0817
WOLF CREEK

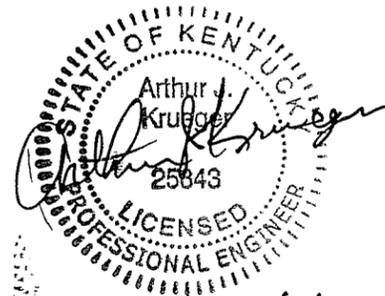
Olive Hill, Carter County, Kentucky

Prepared for:
CST Holdings, LLC
323 South Hale Street, Suite 100
Wheaton, Illinois 60187

Prepared by:
Wilcox Professional Services, LLC
One Madison Avenue
Cadillac, MI 49601
Wilcox Project No. 25036.00004.04

Applied Geotechnical Services, Inc.

March 5, 2008



3/6/08

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EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

The proposed center of tower location was approximately 85 feet northwest of an approximately 200-foot high, near vertical rock cliff. Wolf Creek is present at the base of the slope. The driller reported approximately 6 inches of topsoil at the boring locations. Below the topsoil, silty clay was encountered to depths ranging from 4 feet at the location of Boring 2, performed east of the tower center, to 13½ feet below the existing ground surface at the location of Boring 3 performed west of the tower center. Borings 2 and 3 were terminated at depths of 4 feet and 13½ feet, respectively upon encountering auger refusal on apparent bedrock. At the location of Boring 1, auger refusal on sandstone bedrock was encountered at a depth of 6 feet. NQ rock coring was then performed from approximate depths of 6 to 16 feet below the existing ground surface. The rock coring revealed sandstone to a depth of 7½ feet followed by limestone that extended to the explored depth of 16 feet. Our review of the "Carter County Karst Areas" map published by the Kentucky Geological Survey indicates the site is not located within an area described as "Intense Karst". However, the "Generalized Geologic Map for Land-Use Planning: Carter County" published by the Kentucky Geological Survey indicates landslides are relatively common.

The driller reported introducing approximately 750 gallons of water into the borehole during the NQ rock coring operations. No long-term groundwater level readings were obtained. However, based on our review of the site topographic map and the available soil and rock core information, we estimate the prevailing groundwater level may be located below the explored depth of the soil/ rock core borings.

We understand Central States Tower is planning the construction of a 250-foot self-supporting tower at the site. At the time of our investigation, no information was available to us as to the tower manufacturer or loads. These loads vary considerably depending on the tower characteristics and the number of carriers. Estimated tower loads, based on our experience with similar towers, are presented in Section 1.1 of this report.

In consideration of the variable depth to bedrock and difference in ground surface elevation across the proposed tower compound of approximately 16 feet, we recommend the tower be supported on a drilled pier type foundation system socketed into the medium hard limestone bedrock. For the drilled pier type foundation system, the uplift loads are resisted by the allowable rock socket side shear along the perimeter of the shaft together with the factored weight of the drilled pier concrete (we recommend neglecting the side shear in the overlying silty clays for resisting both uplift and compression loads). We recommend a presumptive allowable rock socket side shear in the sandstone of 1,400 pounds per square foot (psf). We recommend a presumptive allowable rock socket side-shear of 3,500 psf in the underlying medium hard limestone bedrock.

EXECUTIVE SUMMARY, Page 2 of 2

The compression loads are supported by end-bearing together with the above rock socket allowable side shear values to a depth above the drilled pier tip equal to the shaft diameter (we anticipate the compression loads can be entirely supported by end bearing in the soft to medium hard sandstone bedrock). We recommend a maximum net allowable presumptive end-bearing pressure on the medium hard sandstone bedrock of 12 tons per square foot (tsf). We estimate negligible tower foundation settlement on the limestone bedrock.

We anticipate the drilled pier foundation design will be controlled by uplift loads. Based on estimated loads, we anticipate an approximately 4 to 4½-foot diameter shaft, extending to an approximate depth of 8 to 12 feet into the medium hard limestone bedrock (i.e., total depths of approximately 14 to 18 feet) may be required to resist the uplift and compression loads.

The presumptive allowable rock socket values presented above are based on a presumptive uniaxial compressive strength for the sandstone and limestone bedrock of approximately 1,000 pounds per square inch (psi) and 2,500 psi, respectively. Appropriate factors of safety should be used for design.

We recommend the use of a temporary steel casing sealed into the bedrock during drilled pier foundation construction for safety. It may be necessary to twist the casing through the weathered sandstone to obtain a seal in the bedrock. We recommend the casing not be hammered into place to reduce the risk of excess vibrations. A rock core barrel will be required to core through the sandstone and limestone bedrock. It may be necessary to use a temporary liner when coring through the bedrock to provide safe access to the bearing surface for cleaning and testing.

Do not consider this summary separate from the entire text of this report, with all the conclusions and qualifications mentioned herein. Details of our analysis and recommendations are discussed in the following sections and in the appendix of this report.

REPORT PREPARED BY:
Applied Geotechnical Services, Inc.



Jefferey T. Anagnostou, P.E., C.P.G.
Project Consultant

REPORT REVIEWED BY:
Wilcox Professional Services, LLC



Arthur J. Krueger, P.E.
Project Manager

1. INTRODUCTION

We have completed the Soil Boring & Rock Coring Investigation for the proposed Central States Tower Site No. KY-00-0817 – Wolf Creek self-supporting lattice tower to be located in Olive Hill, Carter County, Kentucky. Cellere, Inc. retained **Wilcox Professional Services, LLC** to perform this investigation. This report presents the results of the soil boring/rock coring investigation and our estimated soil and rock parameters to be used in the design of the tower foundation.

1.1 Project Description

We understand Central States Tower is planning to construct a 250-foot high, self-supporting lattice type tower at the site. The tower will have three legs on an equilateral triangle. We estimate the tower base width may be approximately 26 feet. At the time this investigation was completed, the tower loads were not yet available. Based on estimated tower loads for a multi-carrier co-locate site, we estimate the tower may impose a compression load per leg of approximately 450 kips, an uplift load per leg of approximately 400 kips, and total shear load in the range of 50 to 60 kips.

We estimate the tower base plate elevation may be slightly above the existing grade.

1.2 Scope of Services

Our scope of services for this project is as follows.

- A) Performing one soil boring at the center of the tower to auger refusal on bedrock, followed by NQ rock coring to a depth of 10 feet into the bedrock and performing soil borings extending to auger refusal on bedrock at locations 35 feet up gradient and 35 feet down gradient of the tower center;

- B) Performing appropriate laboratory testing including visual engineering classification, natural moisture content, unconfined compressive strength estimates on representative cohesive samples, performing resistivity, pH, chloride, and sulfate testing of a composite soil sample obtained between depths of 1 to 10 feet; and

- C) Preparing an engineering report providing our recommendations for the tower foundation design and construction. The written report includes recommendations regarding the allowable soil bearing capacity, estimated settlement, and construction considerations related to foundation construction.

The field drilling operations were performed by EnviroProbe Integrated Solutions, Inc. of Nitro, West Virginia with coordination by Wilcox Professional Services, LLC. The laboratory testing and engineering report preparation were performed under the direction and supervision of a registered professional engineer according to generally accepted standards and procedures in the practice of geotechnical engineering. If changes occur in the design, location, or concept of the project, the conclusions and recommendations contained in this report are not valid unless Wilcox Professional Services, LLC reviews the changes. Wilcox Professional Services, LLC will then provide any necessary changes in writing. Our conclusions and recommendations are based on the soil boring/rock coring performed by EnviroProbe Integrated Solutions, Inc. and project information provided by Cellere, Inc.

2. FIELD AND LABORATORY PROGRAM

2.1 Field Program

Cellere, Inc. selected the depth and location of the borings in consultation with Wilcox Professional Services, Inc. As shown on the Schematic Soil/Rock Core Boring Location Plan, a total of three (3) soil/rock core borings were performed for the project. The approximate ground surface elevation at the soil rock core boring locations were estimated based on the ground surface elevation contour lines shown on the Survey Plan prepared by Wilcox Professional Services and are presented in Table 1.

Soil/Rock Core Boring No.	Approximate Ground Surface Elevation (ft)
B-1	850.5 +/-
B-2	846 +/-
B-3	854.5 +/-

A track mounted, GeoProbe® 7720D drill rig was used to perform the soil boring. Standard split-spoon samplers were used to obtain the soil samples by the Standard Penetration Test (SPT) method in general conformance with ASTM Standard D1586. The number of blows required to drive the sampler 12 inches, after an initial seating of 6 inches, with a 140-pound hammer falling 30 inches is termed the Standard Penetration Resistance, N-value. A graphical representation of the N-values is given on the boring logs appended to this report.

A diamond tipped bit in a double tube NQ core barrel was used to core through the sandstone bedrock between approximate depths of 6 to 16 feet below the existing ground surface at the location of Boring 1.

During the field operations, the drill crew maintained a log of the subsurface conditions, including changes in stratigraphy and observed groundwater levels. After completion of the drilling operations, the boreholes were backfilled with drill cuttings and bentonite crumbles.

2.2 Laboratory Testing

The soil and rock samples were placed in sealed containers in the field and brought to the laboratory for testing and classification. A geotechnical engineer classified the samples in general conformance with the Unified Soil Classification System. The cored rock samples were classified by EnviroProbe Integrated Solutions, Inc.

Laboratory testing of the soil samples included estimating the unconfined compressive strength of the split-spoon samples with a calibrated hand penetrometer. With a hand penetrometer, the unconfined compressive strength of a soil sample is estimated by measuring the resistance of the soil sample to the penetration of a small, calibrated spring-loaded cylinder. The penetrometer can measure a maximum unconfined compressive strength of 4½ tons per square foot (tsf).

The cores were logged for core recovery and Rock Quality Designation (RQD) by a EnviroProbe Integrated Solutions, Inc. engineer. The RQD is one the standard measurements of rock competence and is given by the percentage ratio of the total

length of the recovered samples 4 inches or more in length to the total length of the core run. Sometimes, core lengths smaller than 4 inches may be included if they are judged to have been fractured during coring and handling.

We will hold the soil and rock core samples for 60 days from the date of this report. If you would like the samples, please contact us within this time frame.

2.3 Laboratory Soil Box Resistivity Test Results

Estimated earth resistivity values of the subsoil below the proposed development area were obtained by performing laboratory resistivity testing using the Miller Soil Box Resistivity instrument. The testing was performed on selected composite split-spoon samples from Soil/Rock Core Borings B-1 through B-3. The composite samples were prepared by thoroughly mixing prior to placement in the soil box instrument. The following estimated earth resistivity values are presented based on the Miller Soil Box Resistivity test results and may be used with judgment in the design of the lightning protection grounding system:

Table 1. Miller Soil Box Resistivity Results			
Boring Numbers	Sample Numbers	Represented Depth Below Ground Surface (ft)	Resistivity (Ohm-feet)
B-1-B-3	S1 – S4	1 to 10	180

We note measured resistivity value appears to be higher than typically encountered for moist silty clays soils. However, we note the composite soil sample contained occasional weathered rock fragments.

3. SITE AND SUBSURFACE CONDITIONS

3.1 Site Conditions

The subject site is located at +/- 520 Sutton Road Olive Hill, Carter County, Kentucky. Based on our review of the Survey Plan prepared by Wilcox Professional Services and the Central States Tower site Candidate Package, it appears the site is situated within a wooded area southeast of a residential dwelling and appurtenant garage structure. The proposed center of tower location was approximately 85 feet northwest of an approximately 200-foot high, near vertical rock cliff. Wolf Creek is present at the base of the slope. Within the tower compound area, the ground surface sloped downward towards the southeast direction, towards the edge of the cliff.

3.2 Soil and Rock Conditions

The driller reported approximately 6 inches of topsoil at the boring locations. Below the topsoil, silty clay was encountered to depths ranging from 4 feet at the location of Boring 2, performed northeast of the tower center, to 13½ feet below the existing ground surface at the location of Boring 3 performed southwest of the tower center. Borings 2 and 3 were terminated at depths of 4 feet and 13½ feet, respectively upon encountering auger refusal on apparent bedrock. At the location of Boring 1, auger refusal on sandstone bedrock was encountered at a depth of 6 feet. NQ rock coring was then performed from approximate depths of 6 to 16 feet below the existing ground surface. The rock coring revealed sandstone to a depth of 7½ feet followed by limestone that extended to the explored depth of 16 feet. Our review of the "Carter County Karst Areas" map published by the Kentucky Geological Survey indicates the site is not located within an area described as "Intense Karst". However, the "Generalized Geologic Map for Land-Use

Central States Tower No. KY-00-0817 – Wolf Creek
Wilcox Project No. 25036.00004.04

Planning: Carter County” published by the Kentucky Geological Survey indicates landslides are relatively common.

The silty clays were stiff to hard with calibrated hand penetrometer unconfined compressive strengths of 1 to in excess of 4½ tsf and natural moisture contents of approximately 15 to 31 percent.

The 10-foot NQ rock core possessed a recovery of 91 percent and an RQD value of 33.5.

The stratification depths shown on the soil boring log represent the soil and rock conditions at the boring location. Variations may occur at locations away from the boring. Additionally, the stratigraphic lines represent the approximate boundary between soil and rock types; the transition may be more gradual than what is shown. The boring log was prepared on the basis of laboratory classification and testing as well as the field logs of the explored soils and bedrock.

The soil/rock core boring logs are presented in the appendix. The soil and rock profile described above is a generalized description of the conditions encountered at the boring location. Please consult the boring logs for more specific information.

3.3 Groundwater Level Observations

The driller looked for indications of groundwater during and after the performance of the soil boring. Groundwater seepage was not encountered during drilling of the borings through the overburden soils. The driller reported introducing approximately 750 gallons of water into the borehole during the rock coring operations. Based on the available information, we estimate the groundwater level may be located below the explored depth of the borings.

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Expect the prevailing groundwater level to vary due to changes in precipitation, evaporation, surface run-off, and other factors. The groundwater levels discussed herein and shown on the boring logs represent the conditions at the time of the measurements.

4. RESULTS & RECOMMENDATIONS

4.1 Drilled Pier Foundation Recommendations

In consideration of the variable depth to bedrock and difference in ground surface elevation across the proposed tower compound of approximately 16 feet, we recommend the tower be supported on a drilled pier type foundation system socketed into the medium hard limestone bedrock. For the drilled pier type foundation system, the uplift loads are resisted by the allowable rock socket side shear along the perimeter of the shaft together with the factored weight of the drilled pier concrete (we recommend neglecting the side shear in the overlying silty clays for resisting both uplift and compression loads). We recommend a presumptive allowable rock socket side shear in the sandstone of 1,400 pounds per square foot (psf). We recommend a presumptive allowable rock socket side-shear of 3,500 psf in the underlying medium hard limestone bedrock.

The compression loads are supported by end-bearing together with the above rock socket allowable side shear values to a depth above the drilled pier tip equal to the shaft diameter (we anticipate the compression loads can be entirely supported by end bearing in the soft to medium hard sandstone bedrock). We recommend a maximum net allowable presumptive end-bearing pressure on the medium hard sandstone bedrock of 12 tons per square foot (tsf). We estimate negligible tower foundation settlement on the limestone bedrock.

We anticipate the drilled pier foundation design will be controlled by uplift loads. Based on estimated loads, we anticipate an approximately 4 to 4½-foot diameter shaft, extending to an approximate depth of 8 to 12 feet into the medium hard limestone bedrock (i.e., total depths of approximately 14 to 18 feet) may be required to resist the uplift and compression loads.

Central States Tower No. KY-00-0817 – Wolf Creek
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The presumptive allowable rock socket values presented above are based on a presumptive uniaxial compressive strength for the sandstone and limestone bedrock of approximately 1,000 pounds per square inch (psi) and 2,500 psi, respectively. Appropriate factors of safety should be used for design.

We recommend the use of a temporary steel casing sealed into the bedrock during drilled pier foundation construction for safety. It may be necessary to twist the casing through the weathered sandstone to obtain a seal in the bedrock. We recommend the casing not be hammered into place to reduce the risk of excess vibrations. A rock core barrel will be required to core through the sandstone and limestone bedrock. It may be necessary to use a temporary liner when coring through the bedrock to provide safe access to the bearing surface for cleaning and testing.

Once the tower loads are known, Wilcox Professional Services, LLC should be notified so we can re-evaluate our design recommendations in the light of the actual loads.

We recommend all foundation construction be performed under the supervision of a qualified geotechnical engineer. The appropriate type and number of field tests and observations should be performed to verify the foundation bearing material is suitable.

4.2 Engineered Fill Placement

We anticipate several feet of cut and fill will be required to achieve finished grades within the tower compound area. To reduce the risk of a potential slip plane developing between the engineered fill and underlying subgrade soils, we recommend the subgrade surface be properly benched prior to placement of the engineered fill.

Any fill beneath on-grade structures should be an approved, environmentally clean material. The fill should also be free of organic matter, frozen soil, clods, or other harmful material. Spread the fill in level lifts, not exceeding 9 inches in loose thickness, and compact the soil to a minimum of 95 percent of the maximum dry density. Determine the maximum dry density according to ASTM Standard D1557 (Modified Proctor). All engineered fill should be placed at or near the optimum moisture content.

4.3 General Comments

The purpose of this report is to aid in the tower foundation. If changes occur in the design, location, or concept of the project, the recommendations contained in this report are not valid. The changes must be reviewed by **WILCOX PROFESSIONAL SERVICES, LLC** with the recommendations of this report modified or affirmed in writing by **WILCOX PROFESSIONAL SERVICES, LLC**.

We base the estimated soil and rock parameters presented in this report upon the data from the soil/rock core borings performed at the approximate locations shown on the Schematic Soil Boring/Rock Core Location Plan. This report does not reflect variations that may occur away from the boring location. The nature and extent of any such

Central States Tower No. KY-00-0817 – Wolf Creek
Wilcox Project No. 25036.00004.04

variations may not become clear until the time of construction. If significant variations then become evident, it may be necessary for us to re-evaluate our report recommendations.

We recommend **WILCOX PROFESSIONAL SERVICES, LLC** be given the opportunity to review the final design plans and specifications as they relate to the recommendations presented in this report. The review is necessary to verify that the report conclusions and recommendations have been interpreted according to our intent and are properly incorporated into the design. Further, the review will verify that subsequent changes to the project have not affected our recommendations. Without this review, we cannot be held responsible for misinterpretation of our data, analysis, and/or our recommendations or how these are incorporated in the final design.

We also recommend a qualified geotechnical engineer supervise all geotechnical related work, including foundation construction, subgrade preparation, and engineered fill placement. The geotechnical engineer should perform the appropriate testing to confirm the geotechnical conditions given in the report are found during construction.

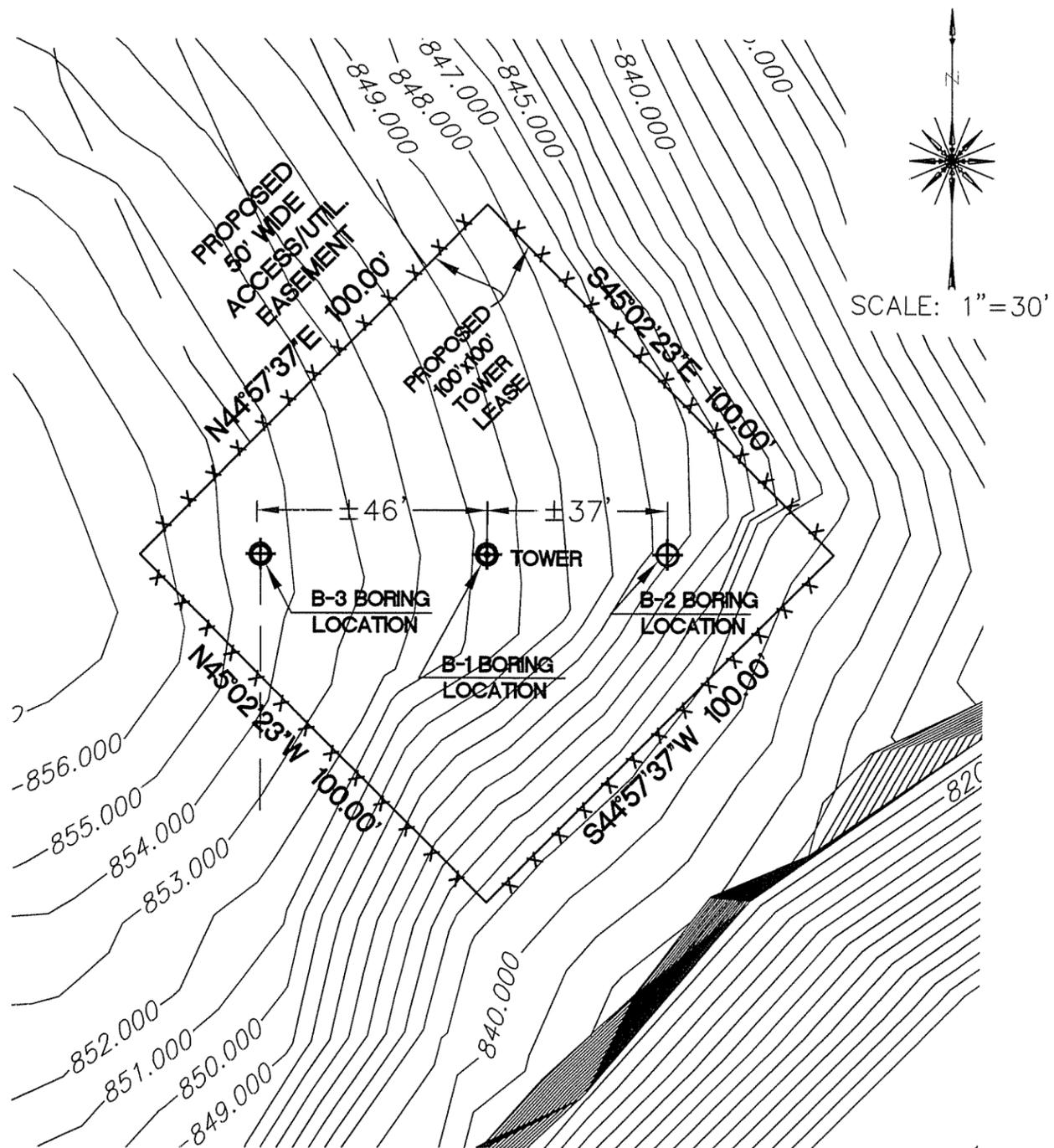
The contract specifications should include the following:

“The contractor will, upon becoming aware of subsurface or latent physical conditions differing from those disclosed by the original soil investigation work, promptly notify the owner verbally to permit verification of the conditions, and in writing, as to the nature of the differing conditions. No claim by the contractor for any conditions differing from those anticipated in the plans and specifications and disclosed by the soil studies will be allowed unless the contractor has so notified the owner, verbally and in writing, as required above, of such differing subsurface conditions.”

APPENDIX

1. SCHEMATIC SOIL\ROCK CORE LOCATION PLAN
2. GENERAL NOTES
3. SOIL/ROCK CORE BORING LOGS (B-1 through B-3)
4. UNIFIED SOIL CLASSIFICATION SYSTEM

KY-00-0817 WOLF CREEK



SURVEYOR: RICHARD L. HOWERTON PLS #3582
 HOWERTON ENGINEERING & SURVEYING, PLLC

KY-00-0817 Wolf Creek
 SCHEMATIC SOIL BORING
 LOCATION PLAN

DATE
 2-27-08
 DRN
 JLS
 CHD
 AJK



CLIENT: CELLERE / CENTRAL STATES TOWER

SCALE
 N/A

F.B.
 PG.

SHEET
 1 OF 1

WILCOX JOB NO.
 25036.00004.04

GENERAL NOTES

Drilling & Sampling Symbols

SS – Split Spoon (1 ³ / ₈ " I.D., 2" O.D., except where noted)	HA – Hand Auger Boring
ST – Shelby Tube (3" O.D., except where noted)	BS – Bag Sample
PA – Power Auger	RC – Rock Core with diamond bit, NX size, except where noted
PS – Piston Sample (3" diameter)	RB – Roller Bit
WB – Wash Boring	N/A – Not applicable or available
WS – Wash Sample	

Standard Penetration Test "N" Value – Blows per foot after an initial 6-inch seating of a 140-pound hammer falling 30 inches on a 2-inch O.D. split spoon, except where noted.

Water Level Measurement Notation

First—	When noted during drilling or sampling process.
Completion—	After all drilling tools are removed from borehole.
HR—	Number of hours after completion.
N/R—	Not recorded.
Dry—	No measurable water level found in borehole.

Particle Sizes

Boulders—	Greater than 6" (152 mm)
Cobbles –	3" to 6" (76 to 152 mm)
Gravel –	<i>Coarse:</i> ¼ to 3" (19 to 76 mm) <i>Fine:</i> No.4 to ¾" (4.75 to 19 mm)
Sand –	<i>Coarse:</i> No.10 to No.4 (2 to 4.75 mm) <i>Medium:</i> No.40 to No.10 (.425 to 2 mm) <i>Fine:</i> No.200 to No.40 (.074 mm to .425mm)
Silt –	Minus No.200 (.005 mm to .074 mm)
Clay –	Less than .005 mm

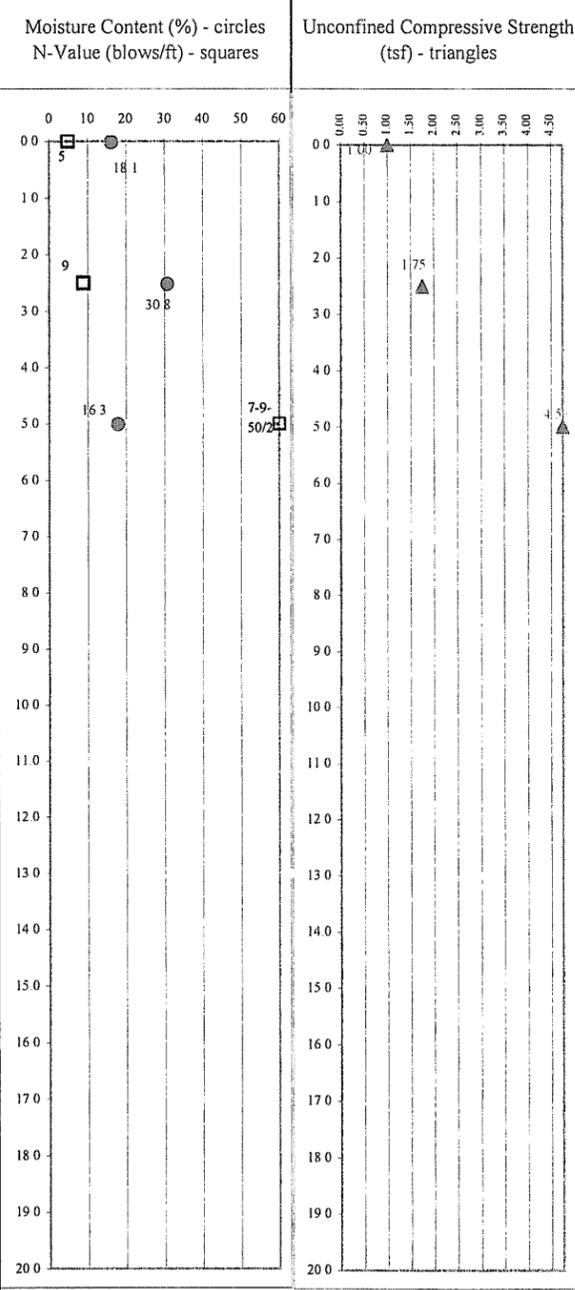
Water levels indicated on the boring logs are the levels measured in the boring at the time indicated. The accurate determination of groundwater levels may not be possible with short term observations, especially in impervious soils. The level shown may fluctuate throughout the year with variations in precipitation, evaporation, runoff, and other hydrogeologic features.

CLASSIFICATION

<p style="text-align: center;"><u>Cohesionless Soil</u></p> <table border="0"> <tr> <td><u>Relative Density</u></td> <td><u>"N" Value (Blows/ft)</u></td> </tr> <tr> <td>Very Loose</td> <td>0 to 4</td> </tr> <tr> <td>Loose</td> <td>5 to 9</td> </tr> <tr> <td>Medium Dense</td> <td>10 to 29</td> </tr> <tr> <td>Dense</td> <td>30 to 49</td> </tr> <tr> <td>Very Dense</td> <td>50 to 79</td> </tr> <tr> <td>Extremely Dense</td> <td>Over 80</td> </tr> </table> <p style="text-align: center;"><u>Soil Constituents</u></p> <table border="0"> <tr> <td>"Trace"</td> <td>Less than 10%</td> </tr> <tr> <td>"Trace to Some"</td> <td>10% to 19%</td> </tr> <tr> <td>"Some"</td> <td>20% to 34%</td> </tr> <tr> <td>"And"</td> <td>35% to 50%</td> </tr> </table>	<u>Relative Density</u>	<u>"N" Value (Blows/ft)</u>	Very Loose	0 to 4	Loose	5 to 9	Medium Dense	10 to 29	Dense	30 to 49	Very Dense	50 to 79	Extremely Dense	Over 80	"Trace"	Less than 10%	"Trace to Some"	10% to 19%	"Some"	20% to 34%	"And"	35% to 50%	<p style="text-align: center;"><u>Cohesive Soil</u></p> <table border="0"> <tr> <td><u>Unconfined Compressive</u></td> <td><u>Strength</u></td> </tr> <tr> <td>(tons per ft²)</td> <td><u>Consistency</u></td> </tr> <tr> <td>Less than 0.25</td> <td>Very Soft</td> </tr> <tr> <td>0.25 to 0.49</td> <td>Soft</td> </tr> <tr> <td>0.49 to 0.99</td> <td>Medium</td> </tr> <tr> <td>1.00 to 1.99</td> <td>Stiff</td> </tr> <tr> <td>2.00 to 3.99</td> <td>Very Stiff</td> </tr> <tr> <td>Greater than 4.00</td> <td>Hard</td> </tr> </table> <p>If clay content is sufficient so that clay dominates soil properties, then clay becomes the primary noun with other major soil constituent as modifier, i.e. silty clay. Other minor soil constituents may be added according to estimates of soil constituents present, i.e. silty clay, trace to some sand, trace gravel.</p>	<u>Unconfined Compressive</u>	<u>Strength</u>	(tons per ft ²)	<u>Consistency</u>	Less than 0.25	Very Soft	0.25 to 0.49	Soft	0.49 to 0.99	Medium	1.00 to 1.99	Stiff	2.00 to 3.99	Very Stiff	Greater than 4.00	Hard
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Project: CST Site No. KY-00-0817A - Wolf Creek		Applied Geotechnical Services, Inc. 37637 Five Mile Road #224 Livonia, MI 48154 Phone/Fax: (734) 293-5077
Client: Cellere, Inc.		
Location: Olive Creek, Carter Co., Kentucky		
Project #: 08-1006	Boring Log #: B-1	

Sample No./Type	Recovery (in.)	Depth (ft.)	Description of Material	Moisture Content (%) - circles N-Value (blows/ft) - squares	Unconfined Compressive Strength (tsf) - triangles
		0	Ground Surface Elevation = 850.5' +/-		
		0.5	Driller Reported Approximately 6" of Topsoil		
SS-1	18	1	Silty Clay - trace sand & gravel - occasional rock fragments - stiff - brown - (CL)	9	
		2			
		3			
SS-2	18	4	Silty Clay - trace sand & gravel - occasional rock fragments - hard - brown - (CL)	16.3	1.75
		5			
		6	Sandstone - occasional clay filled voids & limestone seams - light brown	7.9	
		7			
RC-1	109	8	Limestone - medium hard - light gray		
		9			
		10			
		11			
		12			
		13			
		14			
		15			
		16	End of Core/Boring @ 16'		
		17	Note: NQ rock coring performed from 6' to 16'. Recovery = 91% RQD = 33.5		
		18			
		19			
		20			



Water Level Observations:	Boring Started: 2/18/08	Approved: JTA
While Drilling:	Boring Completed: 2/19/08	
At Completion:	Rig: GeoProbe 7720	Drawn By: NJA
Cave-In At:	Driller: Enviroprobe Integrated S	

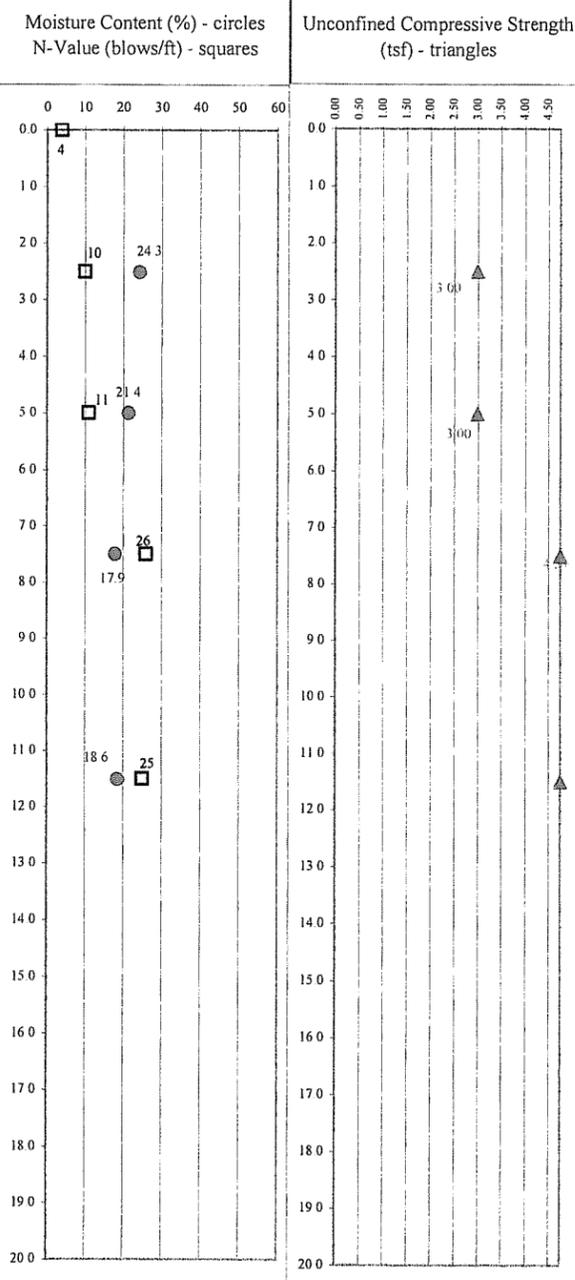
Project: CST Site No. KY-00-0817A - Wolf Creek		Applied Geotechnical Services, Inc. 37637 Five Mile Road #224 Livonia, MI 48154 Phone/Fax: (734) 293-5077
Client: Cellere, Inc.		
Location: Olive Creek, Carter Co., Kentucky		
Project #: 08-1006	Boring Log #: B-2	

Sample No./Type	Recovery (in.)	Depth (ft.)	Description of Material	Moisture Content (%) - circles N-Value (blows/ft) - squares	Unconfined Compressive Strength (tsf) - triangles
		0	Ground Surface Elevation = 846' +/-		
		0.5	Driller Report Approximately 6" of Topsoil		
SS-1	18	2	Silty Clay - trace sand & gravel - occasional root fibers - stiff to hard - brown (CL)	14.7	1.00
SS-2	10	3		15.5	4.5
		4	End of Boring @ 3.5'		
		6	Note: Driller Reported Auger Refusal @ 3.5'		
		7			
		8			
		9			
		10			
		11			
		12			
		13			
		14			
		15			
		16			
		17			
		18			
		19			
		20			

Water Level Observations: While Drilling: Dry At Completion: Dry Cave-In At:	Boring Started: 2/18/08 Boring Completed: 2/19/08 Rig: GeoProbe 7720 Driller: Enviroprobe Integrated S	Approved: JTA Drawn By: NJA
--	---	--

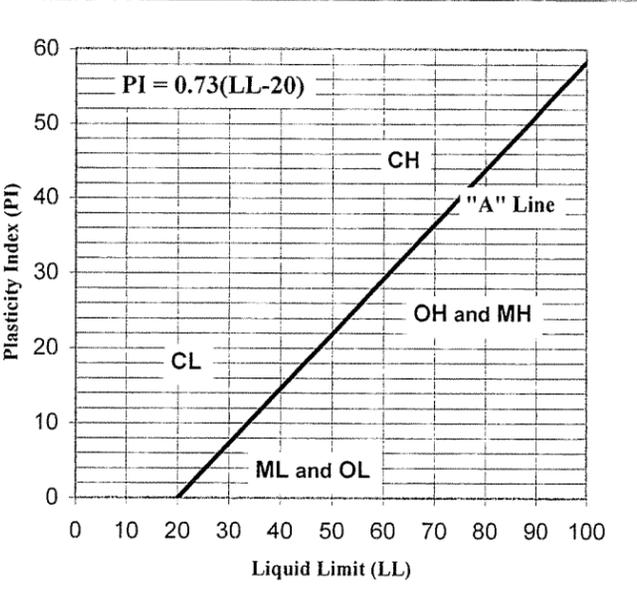
Project: CST Site No. KY-00-0817A - Wolf Creek		Applied Geotechnical Services, Inc. 37637 Five Mile Road #224 Farmington Hills, MI 48335 Ph: (248) 615-3000 Fx: (248) 615-3512
Client: Cellere, Inc.		
Location: Olive Creek, Carter Co., Kentucky		
Project #: 08-1006	Boring Log #: B-3	

Sample No./Typ	Recovery (in.)	Depth (ft.)	Description of Material	Moisture Content (%) - circles N-Value (blows/ft) - squares	Unconfined Compressive Strength (tsf) - triangles
		0	Ground Surface Elevation = 854.5' +/-		
SS-1	18	0	Driller Reported Approximately 6" of Topsoil		
		1	Clayey Fine to Medium Sand - trace gravel - occasional root fibers and organics - very loose - moist - brown		
		2			
SS-2	18	3			
		4			
SS-3	18	5			
		6			
		7			
SS-4	18	8	Silty Clay - trace sand & gravel - occasional weathered shale seams - very stiff to hard - brown (CL)		
		9			
		10			
SS-5	18	11			
		12			
		13			
		14	End of Boring @ 13.5'		
		15			
		16	Note: Driller Reported Auger Refusal @ 13.5'		
		17			
		18			
		19			
		20			



Water Level Observations: While Drilling: Dry At Completion: Dry Cave-In At:	Boring Started: 2/18/08	Approved: JTA Drawn By: NJA
	Boring Completed: 2/19/08	
	Rig: GeoProbe 7720 Driller: Enviroprobe Integrated S	

Unified Soil Classification

Major Divisions		Symbol	Typical Names	Laboratory Classification Criteria			
Coarse Grained Soils (More than half of material > No. 200 sieve)	Gravels (More than half of coarse fraction is larger than No. 4 sieve)	Clean Gravels (little or no fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines	$C_u = D_{60}/D_{10}$ greater than 4; $C_c = (D_{30})^2 / (D_{10} \times D_{30})$ between 1 and 3		
			GP	Poorly graded gravels, gravel-sand mixtures, little or no fines	Not meeting all gradation requirements for GW		
		Gravels with appreciable amount of fines	GM	d	Silty gravels, gravel-sand-silt mixtures	Atterberg Limits below "A" line or PI less than 4	Above "A" line with PI between 4 and 7 are borderline cases requiring dual symbols
			u				
	GC		Clayey gravels, gravel-sand-clay mixtures	Atterberg Limits above "A" line with PI greater than 7			
	Sands (More than half of coarse fraction is smaller than No. 4 sieve)	Clean Sands (little or no fines)	SW	Well graded sands, gravelly sands, little or no fines	$C_u = D_{60}/D_{10}$ greater than 6; $C_c = (D_{30})^2 / (D_{10} \times D_{30})$ between 1 and 3		
			SP	Poorly graded sands, little or no fines	Not meeting all gradation requirements for SW		
		Sands with appreciable amount of fines	SM	d	Silty sands, sand-silt mixtures	Atterberg Limits below "A" line or PI less than 4	Liquid Limits plotting between 10 and 30 with PI between 4 and 7 is a borderline case requiring dual symbols (CL-ML)
			u				
		SC		Clayey sands, sand-clay mixtures	Atterberg Limits above "A" line with PI greater than 7		
Depending on percentage of fines (fraction smaller than No. 200 sieve), coarse grained soils are classified as follows: Less than 5%.....GW, GP, SW, SP More than 5%.....GM, GC, SM, SC 5 to 12%.....Borderline case requiring dual symbols							
Fine Grained Soils (more than half of material < No. 200 sieve)	Silts and Clays (Liquid Limit < 50)	ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	PLASTICITY CHART 			
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, and lean clays				
		OL	Organic silts and silty clays of low plasticity				
	Silts and Clays (Liquid Limit > 50)	MH	Inorganic silts, micaceous or diamicaceous fine sandy or silty soils, elastic silts				
		CH	Inorganic clays of high plasticity, fat clays				
		OH	Organic clays of medium to high plasticity, organic silts				
	Highly Organic Soils	Pt	Peat and other highly organic soils				

LATITUDE & LONGITUDE

LATITUDE AND LONGITUDE OF SITE ARE BASED ON MAD83
 LATITUDE: 38°22'24.4469"
 LONGITUDE: -83°05'58.0371"
 GROUND ELEVATION AT TOWER BASE 850.70'

SITE INFORMATION

SITE ADDRESS:
 ±520 SUTTON ROAD
 OLIVE HILL, KY 41164

PROPERTY OWNER:
 GARY BOND
 520 SUTTON ROAD
 OLIVE HILL, KY 41164

GENERAL NOTES

NO PROPOSED MUNICIPAL SEWER OR WATER UTILITIES ARE REQUIRED FOR THIS SITE. THERE WILL BE NO CHANGE IN DRAINAGE PATTERN DUE TO THE PROPOSED INSTALLATION. NO HAZARDOUS MATERIALS WILL BE USED, PROCESSED OR STORED AT THE SITE. TOWER LIGHTING SHALL CONFORM TO FAA STANDARDS AS REQUIRED. ALL WORK SHALL CONFORM TO FAA & FCC REGULATIONS.

ACCESS/UTILITY EASEMENT DESCRIPTION

30.00' EASEMENT

BEING A CENTER LINE DESCRIPTION OF 268.92' OF A 30.00' WIDE EASEMENT, 15.00' LEFT AND RIGHT OF CENTER LINE. FOR INGRESS AND EGRESS AND THE INSTALLATION AND MAINTENANCE OF UTILITIES OVER/UNDER AND ACROSS SAID EASEMENT. BEING LOCATED ON THE PROPERTY OF GARY BOND (D.B. 166 PG. 134), 502 SUTTON ROAD, OLIVE HILL, KY.
 UNLESS OTHERWISE INDICATED, ANY (IPS) IRON PIN SET REFERRED TO HEREIN, IS A 1/2" DIAMETER REBAR 18-30 INCHES LONG WITH A PLASTIC CAP STAMPED "HOWERTON 2512".

BEGINNING AT A P.K. NAIL SET IN THE CENTER LINE OF SUTTON ROAD AND THE CENTER LINE OF A GRAVEL DRIVEWAY AT 502 SUTTON ROAD.
 THENCE, WITH THE CENTER OF SAID GRAVEL DRIVEWAY N 71-02-29 E AND 49.31' TO A POINT NOT MONUMENTED.
 THENCE, N 64-18-31 E AND 56.06' TO A POINT NOT MONUMENTED.
 THENCE, N 65-18-47 E AND 38.27' TO A POINT NOT MONUMENTED.
 THENCE, N 75-37-07 E AND 41.98' TO A POINT NOT MONUMENTED.
 THENCE, S 84-27-05 E AND 42.16' TO A POINT NOT MONUMENTED.
 THENCE, S 58-18-08 E AND 41.14' TO A POINT NOT MONUMENTED. BEING THE END OF SAID 30.00' EASEMENT. SAID POINT BEARS S 01-14-50 E AND 57.13' FROM A UTILITY POLE NUMBER 1137-4-02. AND BEING THE BEGINNING POINT FOR A 50.00' WIDE EASEMENT.
 THE ABOVE-DESCRIBED PARCEL IS SUBJECT, HOWEVER, TO THE RIGHTS OF WAY AND PUBLIC UTILITY EASEMENTS, IF ANY, THAT MAY BE ON LEGAL RECORDING COVERING SAID PREMISES.

50.00' EASEMENT

BEING A CENTER LINE DESCRIPTION OF 271.74' OF A 50.00' WIDE EASEMENT, 25.00' LEFT AND RIGHT OF CENTER LINE FOR INGRESS AND EGRESS AND THE INSTALLATION AND MAINTENANCE OF UTILITIES OVER/UNDER AND ACROSS SAID EASEMENT. BEING LOCATED ON THE PROPERTY OF GARY BOND (D.B. 166 PG. 134), 502 SUTTON ROAD, OLIVE HILL, KY.
 BEGINNING AT A POINT AT THE END OF A 30.00' WIDE EASEMENT SAID POINT BEING THE BEGINNING OF A 50.00' WIDE EASEMENT. SAID POINT IS LOCATED S 01-14-50 E AND 57.13' FROM AN EXISTING UTILITY POLE # 1137-4-02.
 THENCE, N 85-42-16 E AND 51.90' TO A POINT NOT MONUMENTED.
 THENCE, S 63-19-11 E AND 58.15' TO A POINT NOT MONUMENTED.
 THENCE, S 32-04-02 E AND 28.08' TO A POINT NOT MONUMENTED.
 THENCE, S 11-48-58 E AND 60.33' TO A POINT NOT MONUMENTED.
 THENCE, S 25-28-18 E AND 58.91' TO A POINT NOT MONUMENTED.
 THENCE, S 36-50-44 E AND 14.37' TO A POINT NOT MONUMENTED. BEING THE END OF SAID 50.00' EASEMENT. SAID EASEMENT TERMINATES ALONG THE NORTHWEST LINE OF THE LEASE AREA AS DESCRIBED BY THIS SURVEY. SAID POINT BEARS N 44-57-37 E AND 57.12' FROM AN IPS AT THE NORTHWEST CORNER OF SAID LEASE AREA.
 THE ABOVE-DESCRIBED PARCEL IS SUBJECT, HOWEVER, TO THE RIGHTS OF WAY AND PUBLIC UTILITY EASEMENTS, IF ANY, THAT MAY BE ON LEGAL RECORDING COVERING SAID PREMISES.

LEASE AREA DESCRIPTION

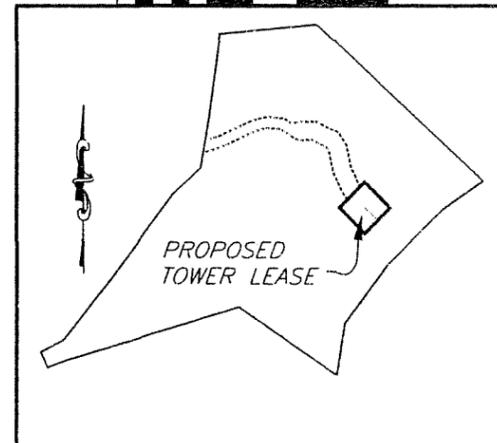
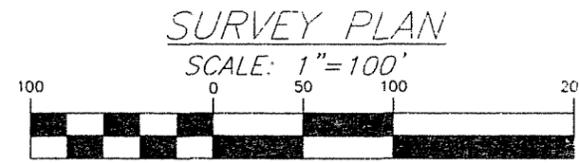
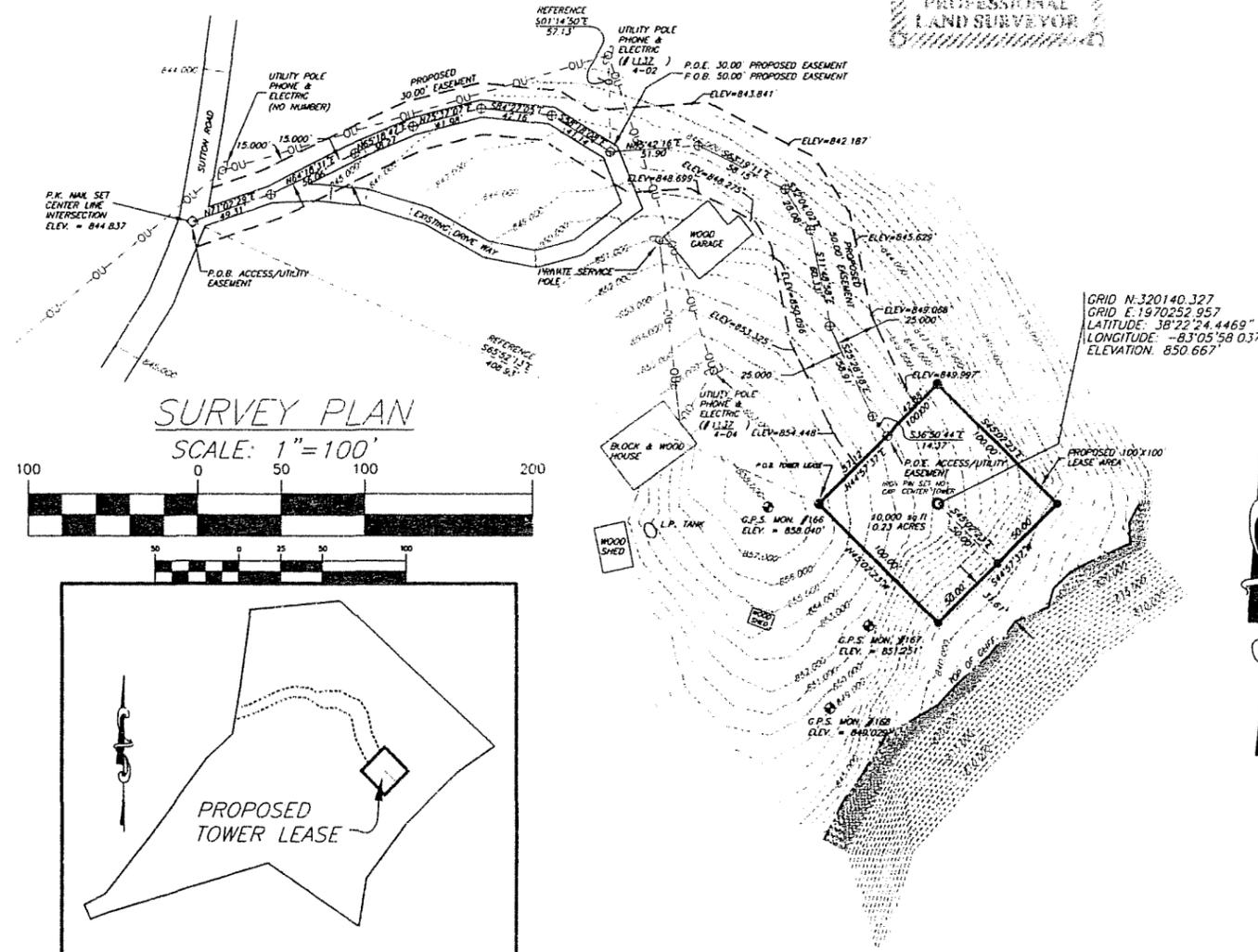
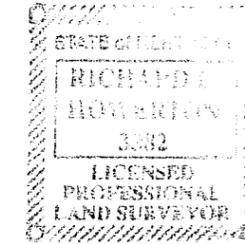
BEGINNING AT AN IPS AT THE NORTHWEST CORNER OF LEASE AREA. SAID IPS BEARS S 65-52-13 E AND 408.93' FROM A P.K. NAIL SET IN THE INTERSECTION OF SUTTON ROAD AND THE CENTER LINE OF THE ABOVE DESCRIBED 30.00' WIDE EASEMENT.
 THENCE, N 44-57-37 E AND 100.00' TO AN IPS. PASSING THE CENTER LINE POINT OF A 50.00' WIDE EASEMENT AT A DISTANCE OF 57.12'.
 THENCE, S 45-02-23 E AND 100.00' TO AN IPS.
 THENCE, S 44-57-37 W AND 100.00' TO AN IPS.
 THENCE, N 45-02-23 W AND 100.00' TO THE PLACE OF BEGINNING. CONTAINING 0.23 ACRES (10,000 SQ. FT.).

CERTIFICATION:

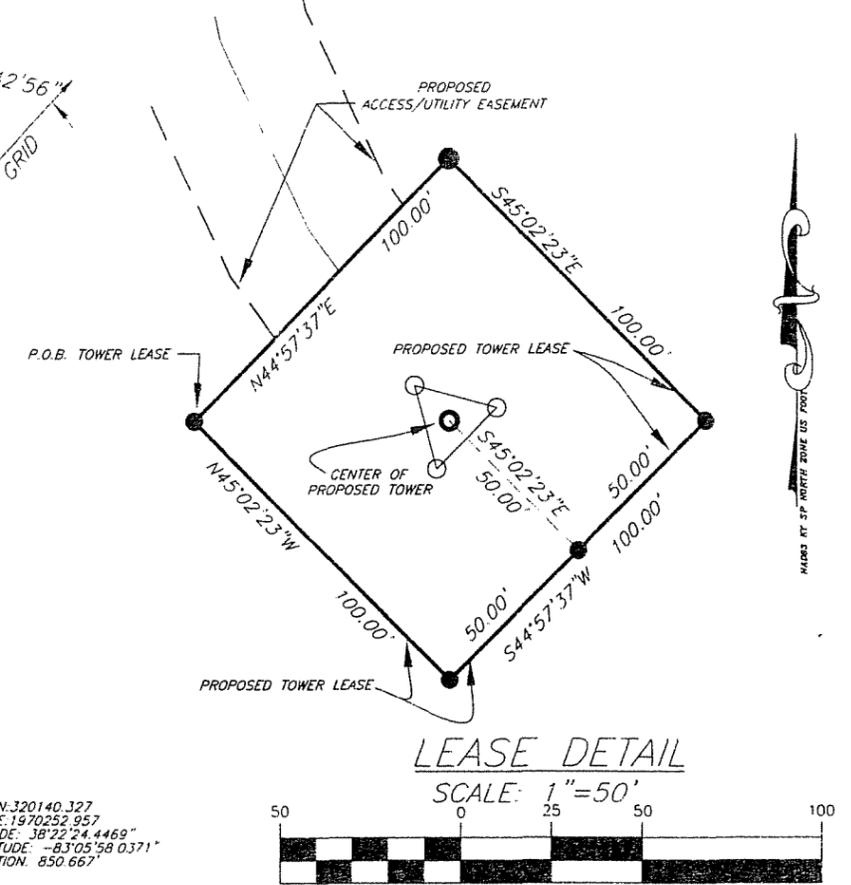
I, RICHARD L. HOWERTON CERTIFY THAT I HAVE LOCATED AND MARKED, THE PROPOSED INSTALLATION, AND EXISTING FEATURES

Richard Howerton
 RICHARD L. HOWERTON
 KENTUCKY PLS #3582

2/13/08
 DATE



PARENT PARCEL DETAIL
 SCALE: 1" = 250' (24x36)



LEASE DETAIL
 SCALE: 1" = 50'

SYMBOLS LEGEND

- (I.P.S.) IRON PIN SET, 1/2" DIA. REBAR-30" INCHES LONG WITH PLASTIC CAP STAMPED "HOWERTON 2512"
- (I.P.S.) IRON PIN SET, 1/2" DIA. REBAR 30" INCHES LONG (NO CAP)
- GPS MONUMENT
- POINT NOT MONUMENTED
- P.K. NAIL SET
- UTILITY POLE
- LINE OF SURVEY
- EDGE OF ROAD
- EASEMENT LINE
- CENTER LINE OF EASEMENT
- OVERHEAD UTILITY LINE
- CLIFF LINE

ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA.

NOTIFY UTILITY COMPANIES BEFORE DIGGING

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. THE CONTRACTOR SHALL NOTIFY "KENTUCKY 811" AT 1 (800) 752-6007 AT LEAST 2 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

Wilcox Professional Services
 ONE MADISON AVENUE
 CADILLAC, MI 49601
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CST CENTRAL STATES TOWER, INC.
 323 SOUTH HALE STREET
 SUITE 100
 WHEATON, IL 60187

404-A MAIN STREET
 GREENUP, KENTUCKY
 (606) 473-5684
HOWERTON ENGINEERING & SURVEYING PLLC
 533 2ND STREET
 PORTSMOUTH, OHIO
 (740) 354-3684

KY-00-0817
 WOLF CREEK TOWER SITE
 ±520 SUTTON ROAD
 OLIVE HILL, KY 41164

NO.	DATE	REVISIONS	BY	CHK	APPD

SCALE: AS SHOWN DESIGNED BY: DRAWN BY: CRK

SHEET 1 of 2

SURVEY PLAN

DRAWING NUMBER
 198-001

PROPOSED ±272 LF 12' WIDE GRAVEL DRIVE
 PROPOSED ACCESS/UTILITY EASEMENT

PROPOSED 14' WIDE GATE

PROPOSED 4' WIDE UTILITY ACCESS GATE

R 10' (TYP)

PROPOSED GRAVEL TURN AROUND

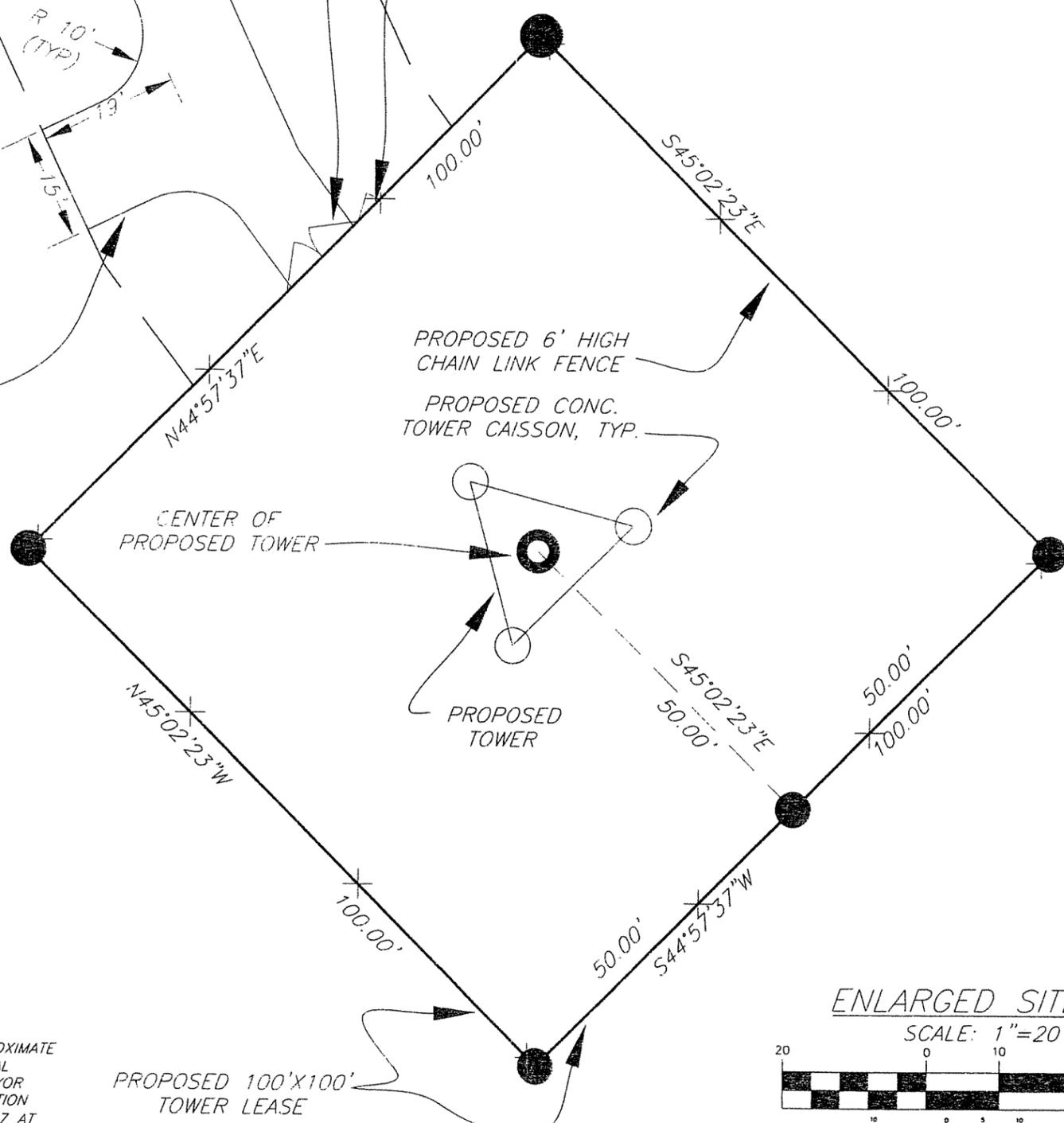
PROPOSED 6' HIGH CHAIN LINK FENCE

PROPOSED CONC. TOWER CAISSON, TYP.

CENTER OF PROPOSED TOWER

PROPOSED TOWER

PROPOSED 100'X100' TOWER LEASE



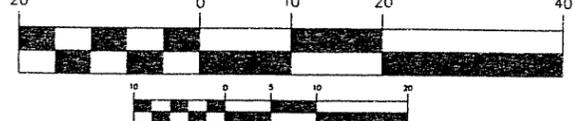
SYMBOLS LEGEND

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- (I.P.S.) IRON PIN SET, 1/2" DIA. REBAR 30" INCHES LONG (NO CAP)
- GPS MONUMENT
- POINT NOT MONUMENTED
- P.K. NAIL SET
- UTILITY POLE

- LINE OF SURVEY
- EDGE OF ROAD
- EASEMENT LINE
- CENTER LINE OF EASEMENT
- OVERHEAD UTILITY LINE
- CLIFF LINE

ENLARGED SITE PLAN

SCALE: 1"=20'



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ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA.

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KY-00-0817
 WOLF CREEK TOWER SITE
 ±520 SUTTON ROAD
 OLIVE HILL, KY 41164

NO.	DATE	REVISIONS	BY	CHK	APPD

SCALE: AS SHOWN DESIGNED BY: DRAWN BY: CRK

SHEET 2 of 2
 ENLARGED SITE PLAN
 DRAWING NUMBER
 198-001

NOTIFY UTILITY COMPANIES BEFORE DIGGING
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OMISSION OR VARIATION FROM THE LOCATION SHOWN, THE
CONTRACTOR SHALL NOTIFY "KENTUCKY 811" AT 1 (800)
752-6007 AT LEAST 2 WORKING DAYS PRIOR TO THE START
OF CONSTRUCTION.



APPROVAL

AT&T COMPLIANCE	SIGNATURE	PHONE NUMBER	DATE
AT&T CONSTRUCTION	SIGNATURE	PHONE NUMBER	DATE
TURNKEY CONSTRUCTION	SIGNATURE	PHONE NUMBER	DATE
AT&T RF	SIGNATURE	PHONE NUMBER	DATE

KY-00-0817A WOLF CREEK

WV309A CST WOLF

DRAWING INDEX

- T-1 TITLE SHEET
- S-1 SURVEY PLAN
- S-2 ENLARGED SITE PLAN
- C-1 TOWER ELEVATION & DETAILS
- C-2 SHELTER ELEVATIONS (N/A - OMITTED)
- C-3 FOUNDATION PLAN & DETAILS
- C-4 ICE BRIDGE & FENCE DETAILS
- C-5 BTS PLATFORM DETAILS
- C-6 OUTDOOR EQUIPMENT DETAILS
- E-1 ELECTRICAL NOTES & DETAILS
- E-2 UTILITY RACK & H-FRAME DETAILS
- E-3 GROUNDING DETAILS
- E-4 GROUNDING DETAILS
- E-5 GROUNDING NOTES & DETAILS
- E-6 RF CONFIG. & ANTENNA SCHEMATICS
- E-7 COAX COLOR CODING
- G-1 SITE GRADING PLAN
- GN-1 GENERAL NOTES

CIVIL ENGINEER

WILCOX PROFESSIONAL SERVICES
ONE MADISON AVENUE
CADILLAC, MI 49601
PHONE: (231) 775-7755
ARTHUR J. KRUEGER, PE

SURVEYOR

HOWERTON ENGINEERING & SURVEYING, PLLC
404-A MAIN STREET
GREENUP, KY 41144
PHONE: (606) 473-5684
CONTACT: RICHARD L. HOWERTON

PROJECT INFORMATION

SCOPE OF WORK:

UNMANNED TELECOMMUNICATIONS FACILITY

TYPE OF CONSTRUCTION

PROJECT TYPE: PROPOSED 295' SELF-SUPPORT W/ 5' LIGHTNING ROD

SITE ADDRESS:

±520 SUTTON ROAD
OLIVE HILL, KY 41164

TOWER INFORMATION:

(LATITUDE & LONGITUDE BASED ON NAD1983)
LATITUDE: 38° 22' 24.45" N
LONGITUDE: 83° 05' 58.04" W
GROUND ELEV= 850.70' AMSL
PROPOSED RAD CENTER HEIGHT: 295' AGL.

SQUARE FOOTAGE:

PROPOSED LEASE AREA: 10,000 SQ. FT.

PROPERTY OWNERS:

GARY BOND
520 SUTTON ROAD
OLIVE HILL, KY 41164

PARENT PARCEL I.D.:

1110-001; BOOK 166, PAGES 135-136, CARTER COUNTY RECORDS; MAP 50,
MAP NO. 062-00-00-012.00.

OCCUPANT LOAD:

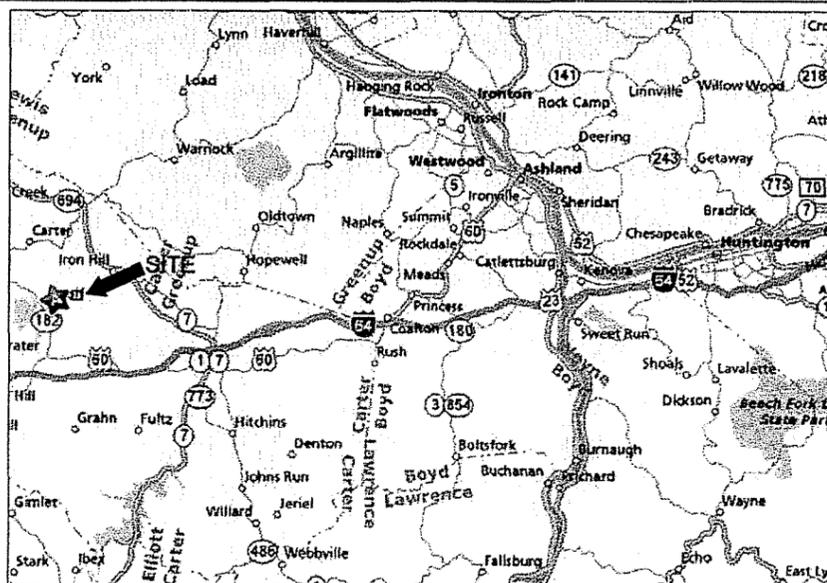
UNOCCUPIED

PARKING REQUIREMENTS:

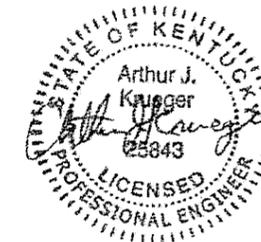
ADDITIONAL PARKING REQUIRED: NONE
EXISTING PARKING MODIFICATIONS: NONE REQUIRED

DIRECTIONS TO SITE:

FROM THE CITY OF HUNTINGTON, WV, TAKE I-64 WEST 88 MILES CROSSING INTO KENTUCKY. TAKE EXIT 161
(OLIVE HILL), TURN RIGHT (NORTH) ONTO US-60, TRAVEL 1.3 MILES TO SR-182, TURN LEFT (SOUTH), TRAVEL
2.8 MILES TO SUTTON ROAD, TURN RIGHT AND TRAVEL TO #520 SUTTON ROAD ON RIGHT. FOLLOW THE EXISTING
DRIVEWAY AND THE SITE IS BEHIND THE GARAGE ±200 FT.



VICINITY MAP
NOT TO SCALE



7/21/08

NOTE: THIS STAMP CERTIFIES THE CIVIL SHEETS
ONLY. ARCHITECTURAL, STRUCTURAL, ELECTRICAL
AND/OR MECHANICAL SHEETS ARE NOT CERTIFIED
BY THIS STAMP.

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752-6007 AT LEAST 2 WORKING DAYS PRIOR TO THE START
OF CONSTRUCTION.

NOTES

- CONCRETE AND REINFORCING STEEL NOTES (SEE PAGE GN-1)
- APPLICABLE BUILDING CODES AND STANDARDS (SEE PAGE GN-1)
- SITE WORK GENERAL NOTES (SEE PAGE GN-1)
- STRUCTURAL STEEL NOTES (SEE PAGE GN-1)
- GROUNDING NOTES (SEE PAGE E-5)
- ELECTRICAL INSTALLATION NOTES (SEE PAGE E-1)
- GENERAL NOTES (SEE PAGE GN-1)



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SUITE 100
WHEATON, IL 60187

KY-00-0817A / WOLF CREEK
WV309A / CST WOLF
±520 SUTTON ROAD
OLIVE HILL, KY 41164

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	07/21/08	REVISED PER NEW AT&T TEMPLATE DWGS	JLS	AJK	AJK
0	05/02/08	ISSUED FOR REVIEW	JLS	AJK	AJK
SCALE: AS SHOWN			DESIGNED BY: AJK		DRAWN BY: JLS

SHEET T-1

TITLE SHEET

DRAWING NUMBER

25036.00004.04

LATITUDE & LONGITUDE
 LATITUDE AND LONGITUDE OF SITE ARE BASED ON NAD83.
 LATITUDE: 38°22'24.4469"
 LONGITUDE: -83°05'58.0371"
 GROUND ELEVATION AT TOWER BASE: 850.70'

SITE INFORMATION
 SITE ADDRESS:
 ±520 SUTTON ROAD
 OLIVE HILL, KY 41164

PROPERTY OWNER:
 GARY BOND
 520 SUTTON ROAD
 OLIVE HILL, KY 41164

GENERAL NOTES
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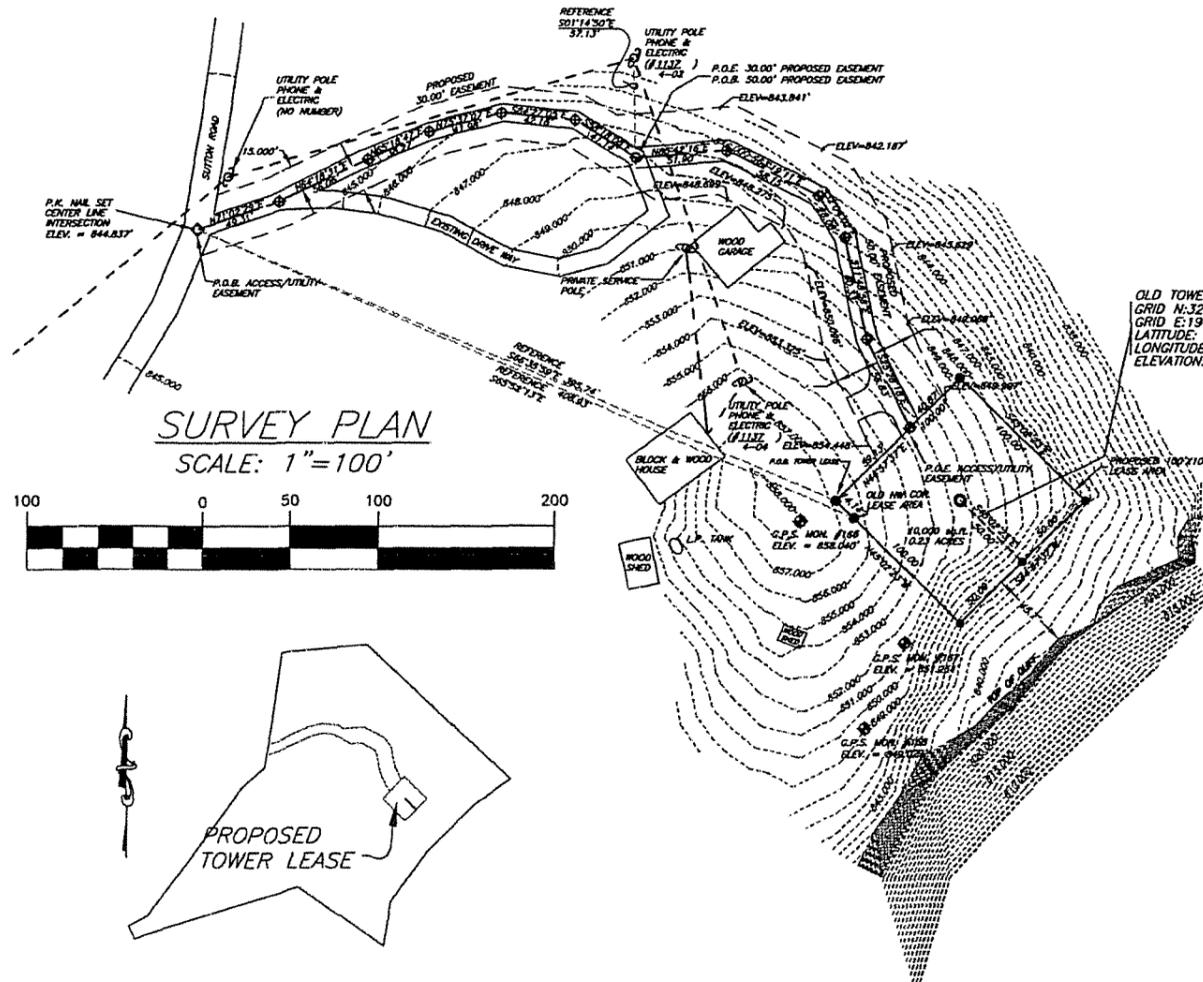
ACCESS/PUBLIC UTILITY EASEMENT DESCRIPTION

30.00' EASEMENT
 BEING A CENTER LINE DESCRIPTION OF 268.92' OF A 30.00' WIDE EASEMENT, 15.00' LEFT AND RIGHT OF CENTER LINE. FOR INGRESS AND EGRESS AND THE INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES OVER/UNDER AND ACROSS SAID EASEMENT. BEING LOCATED ON THE PROPERTY OF GARY BOND (D.B. 166 PG. 134), 502 SUTTON ROAD, OLIVE HILL, KY. UNLESS OTHERWISE INDICATED, ANY (I.P.S.) IRON PIN SET REFERRED TO HEREIN, IS A 1/2" DIAMETER REBAR 18-30 INCHES LONG WITH A PLASTIC CAP STAMPED "HOWERTON 2512".

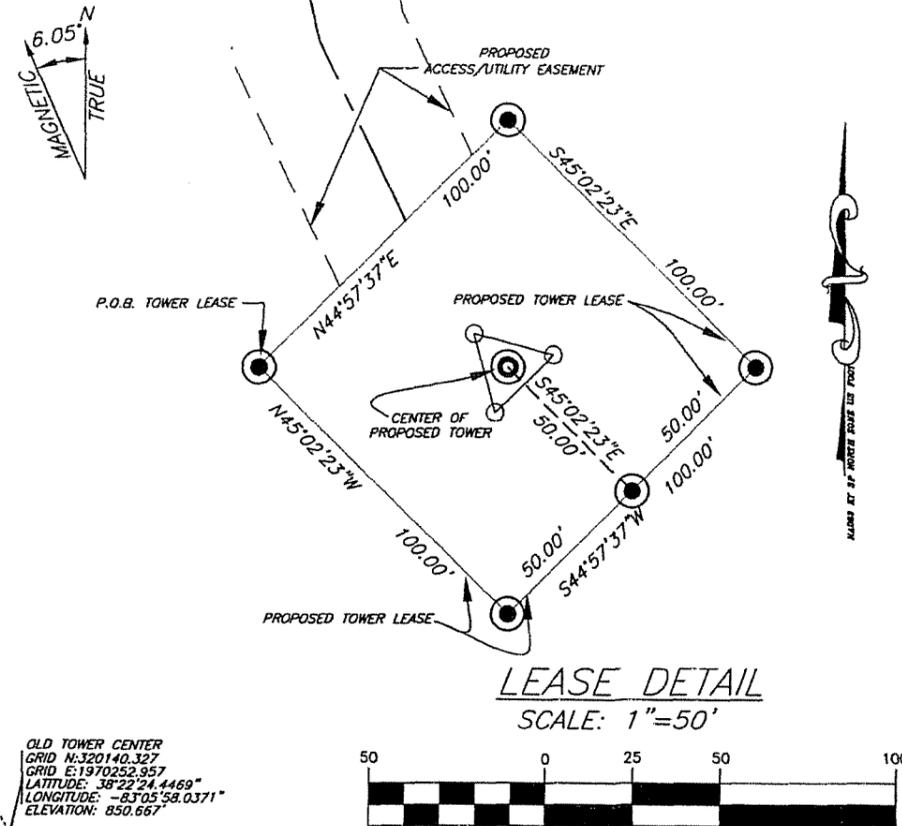
BEGINNING AT A P.K. NAIL SET IN THE CENTER LINE OF SUTTON ROAD AND THE CENTER LINE OF A GRAVEL DRIVEWAY AT 502 SUTTON ROAD. THENCE, WITH THE CENTER OF SAID GRAVEL DRIVEWAY N 71-02-29 E AND 49.31' TO A POINT NOT MONUMENTED. THENCE, N 64-18-31 E AND 56.06' TO A POINT NOT MONUMENTED. THENCE, N 65-18-47 E AND 38.27' TO A POINT NOT MONUMENTED. THENCE, N 75-37-07 E AND 41.98' TO A POINT NOT MONUMENTED. THENCE, S 84-27-05 E AND 42.16' TO A POINT NOT MONUMENTED. THENCE, S 58-18-08 E AND 41.14' TO A POINT NOT MONUMENTED. BEING THE END OF SAID 30.00' EASEMENT. SAID POINT BEARS S 01-14-50 E AND 57.13' FROM A UTILITY POLE NUMBER 1137-4-02. AND BEING THE BEGINNING POINT FOR A 50.00' WIDE EASEMENT. THE ABOVE-DESCRIBED PARCEL IS SUBJECT, HOWEVER, TO THE RIGHTS OF WAY AND PUBLIC UTILITY EASEMENTS, IF ANY, THAT MAY BE ON LEGAL RECORDING COVERING SAID PREMISES.

50.00' EASEMENT
 BEING A CENTER LINE DESCRIPTION OF 255.29' OF A 50.00' WIDE EASEMENT, 25.00' LEFT AND RIGHT OF CENTER LINE. FOR INGRESS AND EGRESS AND THE INSTALLATION AND MAINTENANCE OF UTILITIES OVER/UNDER AND ACROSS SAID EASEMENT. BEING LOCATED ON THE PROPERTY OF GARY BOND (D.B. 166 PG. 134), 502 SUTTON ROAD, OLIVE HILL, KY. BEGINNING AT A POINT AT THE END OF A 30.00' WIDE EASEMENT SAID POINT BEING THE BEGINNING OF A 50.00' WIDE EASEMENT. SAID POINT IS LOCATED S 01-14-50 E AND 57.13' FROM AN EXISTING UTILITY POLE # 1137-4-02. THENCE, N 85-42-16 E AND 51.90' TO A POINT NOT MONUMENTED. THENCE, S 63-19-11 E AND 58.15' TO A POINT NOT MONUMENTED. THENCE, S 32-04-02 E AND 28.08' TO A POINT NOT MONUMENTED. THENCE, S 11-48-58 E AND 60.33' TO A POINT NOT MONUMENTED. THENCE, S 25-28-18 E AND 56.83' TO A POINT NOT MONUMENTED. BEING THE END OF SAID 50.00' EASEMENT. SAID EASEMENT TERMINATES ALONG THE NORTHWEST LINE OF THE LEASE AREA AS DESCRIBED BY THIS SURVEY. SAID POINT BEARS N 44-57-37 E AND 59.13' FROM AN IPS AT THE NORTHWEST CORNER OF SAID LEASE AREA. THE ABOVE-DESCRIBED PARCEL IS SUBJECT, HOWEVER, TO THE RIGHTS OF WAY AND PUBLIC UTILITY EASEMENTS, IF ANY, THAT MAY BE ON LEGAL RECORDING COVERING SAID PREMISES.

LEASE AREA DESCRIPTION
 BEGINNING AT AN IPS AT THE NORTHWEST CORNER OF LEASE AREA. SAID IPS BEARS S 66-35-59 E AND 395.74' FROM A P.K. NAIL SET IN THE INTERSECTION OF SUTTON ROAD AND THE CENTER LINE OF THE ABOVE DESCRIBED 30.00' WIDE EASEMENT. THENCE, N 44-57-37 E AND 100.00' TO AN IPS. PASSING THE CENTER LINE POINT OF A 50.00' WIDE EASEMENT AT A DISTANCE OF 59.13'. THENCE, S 45-02-23 E AND 100.00' TO AN IPS. THENCE, S 44-57-37 W AND 100.00' TO AN IPS. THENCE, N 45-02-23 W AND 100.00' TO THE PLACE OF BEGINNING. CONTAINING 0.23 ACRES (10,000 SQ. FT.).



PARENT PARCEL DETAIL
 SCALE: 1"=500'



LEASE DETAIL
 SCALE: 1"=50'

SYMBOLS LEGEND

- (I.P.S.) IRON PIN SET, 1/2" DIA. REBAR-30" INCHES LONG WITH PLASTIC CAP STAMPED "HOWERTON 2512"
- (I.P.S.) IRON PIN SET, 1/2" DIA. REBAR 30" INCHES LONG (NO CAP)
- GPS MONUMENT
- POINT NOT MONUMENTED
- P.K. NAIL SET
- UTILITY POLE
- LINE OF SURVEY
- EDGE OF ROAD
- EASEMENT LINE
- CENTER LINE OF EASEMENT
- OVERHEAD UTILITY LINE
- CLIFF LINE

ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA.

NOTIFY UTILITY COMPANIES BEFORE DIGGING
 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, THE CONTRACTOR SHALL NOTIFY "KENTUCKY 811" AT 1 (800) 752-6007 AT LEAST 2 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

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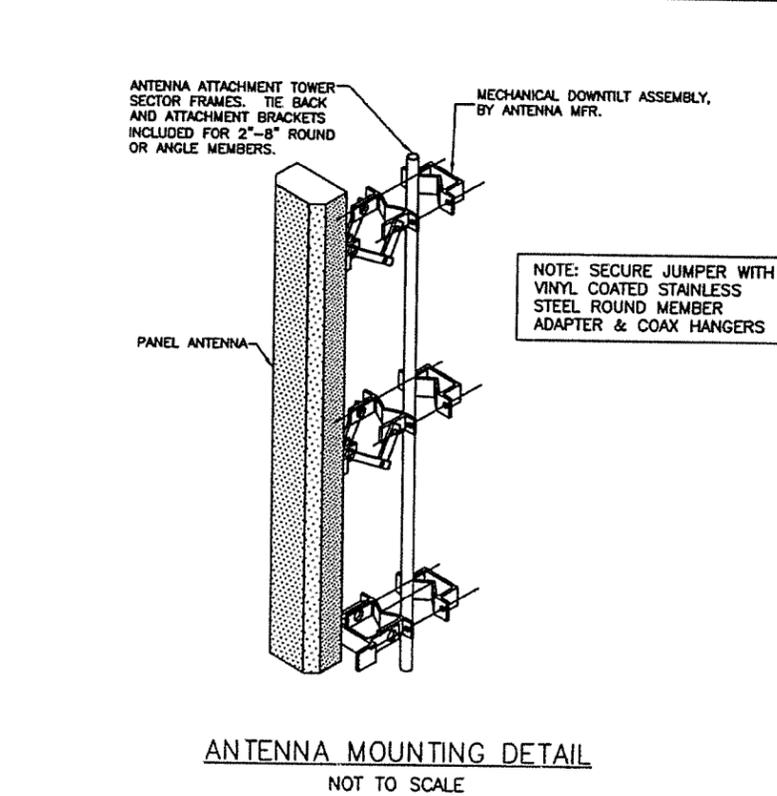
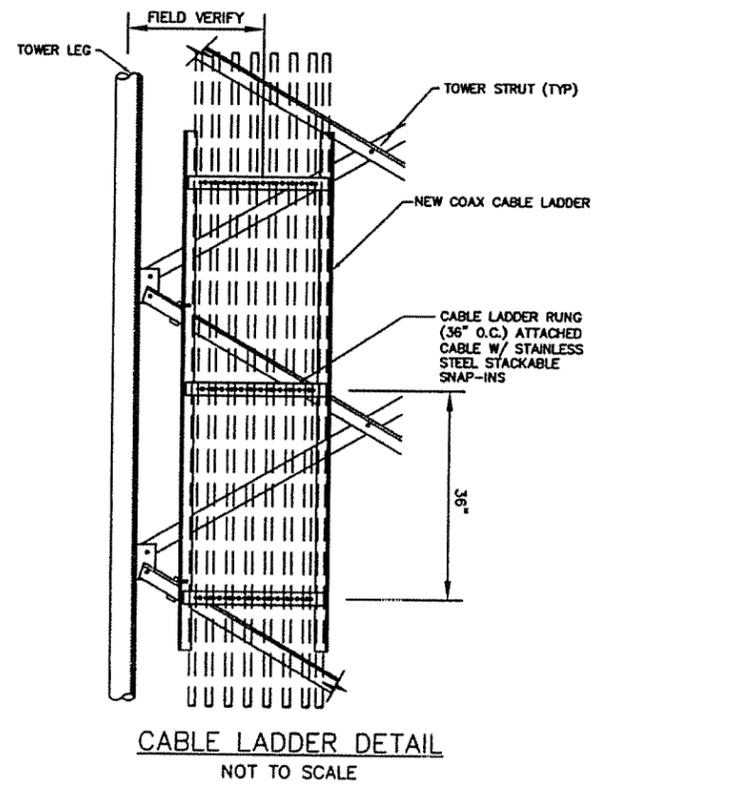
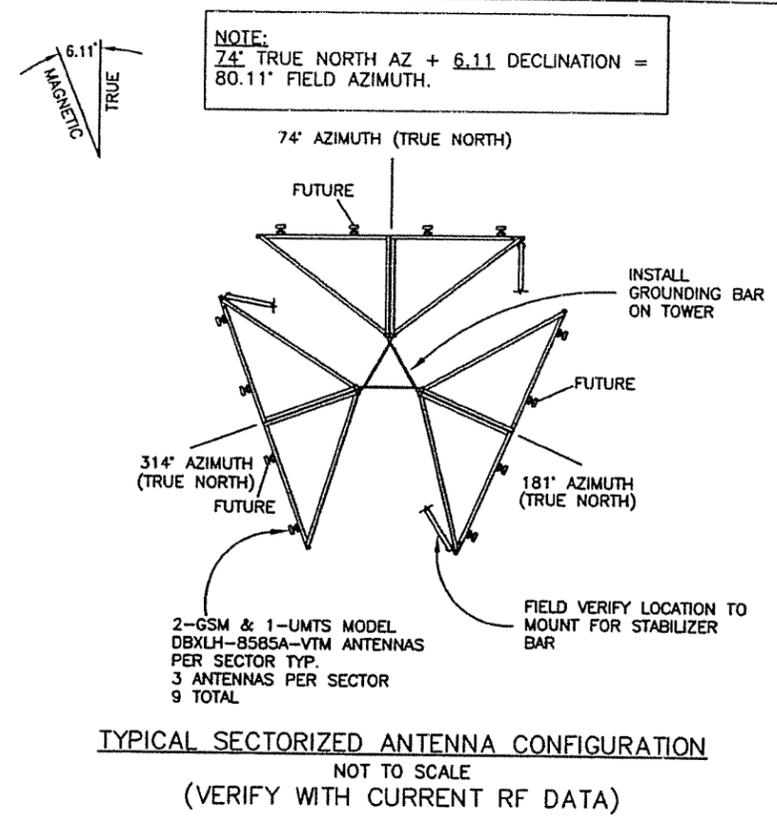
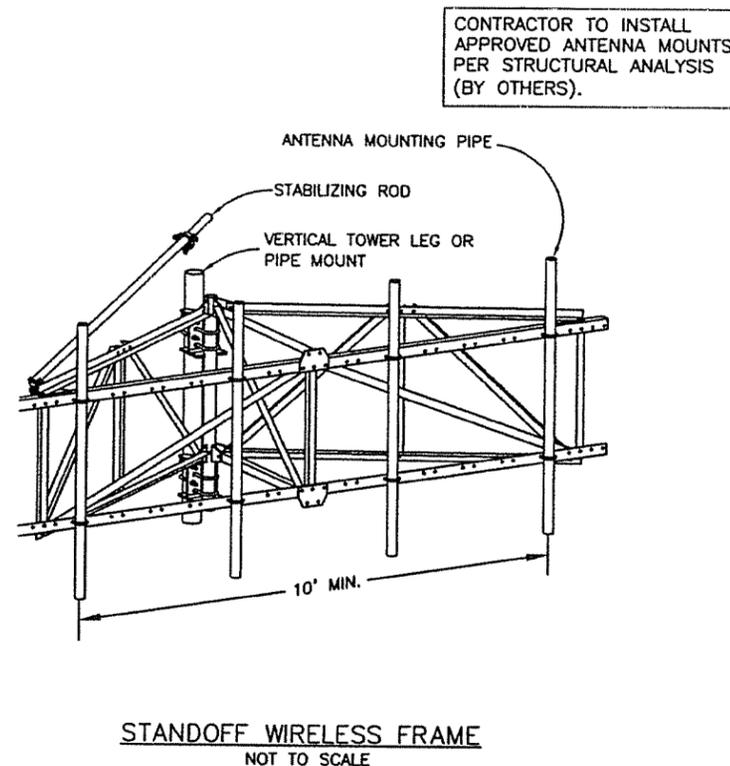
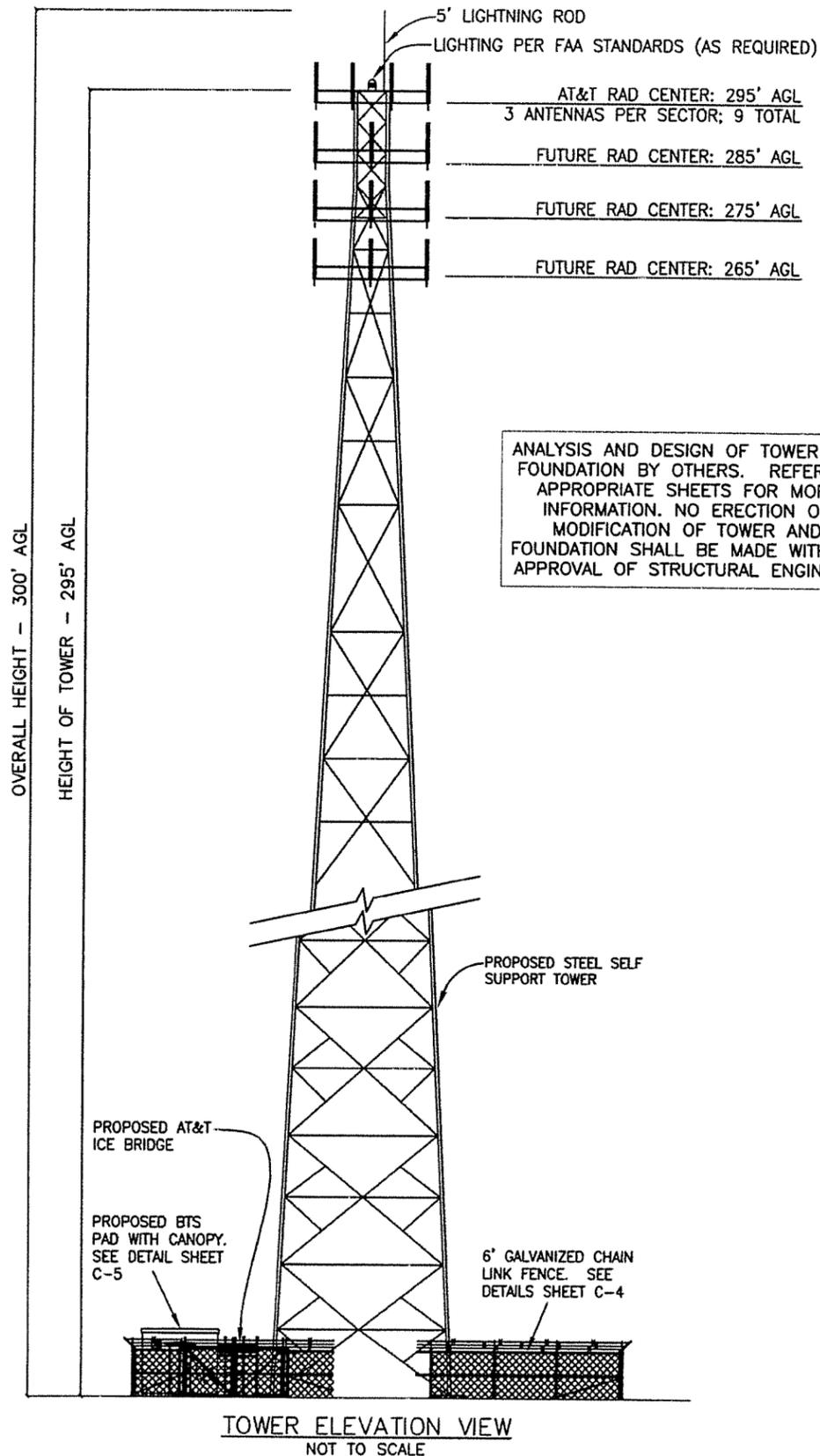
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 SUITE 100
 WHEATON, IL 60187

404-A MAIN STREET
 GREENUP, KENTUCKY
 (606) 473-5684
HOWERTON ENGINEERING & SURVEYING PLLC
 533 2ND STREET
 PORTSMOUTH, OHIO
 (740) 354-3684

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 WV309A / CST WOLF
 ±520 SUTTON ROAD
 OLIVE HILL, KY 41164

1	05/02/08	REVISED FOR CD'S	JLS	AJK	AJK
0	3/24/08	ISSUED FOR REVIEW	JLS	AJK	AJK
A	3-6-08	MOVED LEASE AREA TO 10' N AND 10' W	AJK	AJK	AJK
NO.	DATE	REVISIONS	BY	CHK	APP'D
SCALE: AS SHOWN			DESIGNED BY:		DRAWN BY: JOP

SHEET S-1	
SURVEY PLAN	
DRAWING NUMBER	
25039.00004.04	



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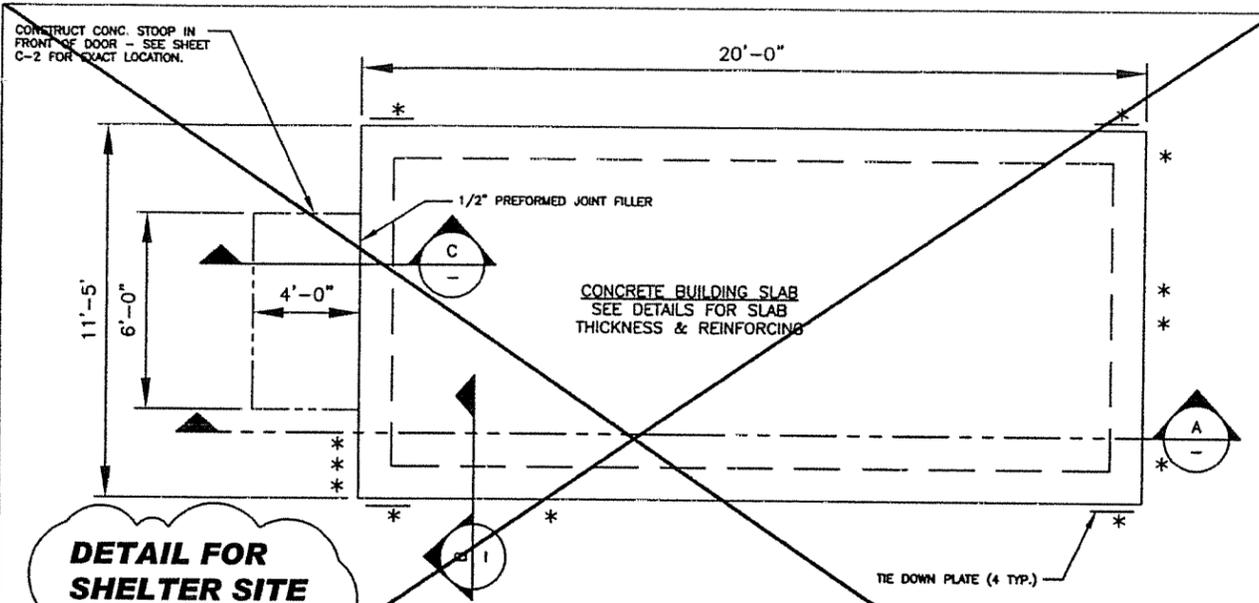
±520 SUTTON ROAD
OLIVE HILL, KY 41164

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	07/21/08	REVISED PER NEW AT&T TEMPLATE DWGS	JLS	AJK	AJK
0	05/02/08	ISSUED FOR REVIEW	JLS	AJK	AJK
SCALE: AS SHOWN			DESIGNED BY: AJK		DRAWN BY: JLS

SHEET C-1

TOWER ELEVATIONS & DETAILS

DRAWING NUMBER
25036.00004.04



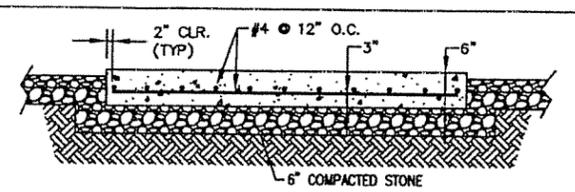
DETAIL FOR SHELTER SITE ONLY

SHELTER FOUNDATION PLAN
NOT TO SCALE

NOTE:
#2 GROUND PIG TAIL LOCATIONS SEE GROUNDING PLAN

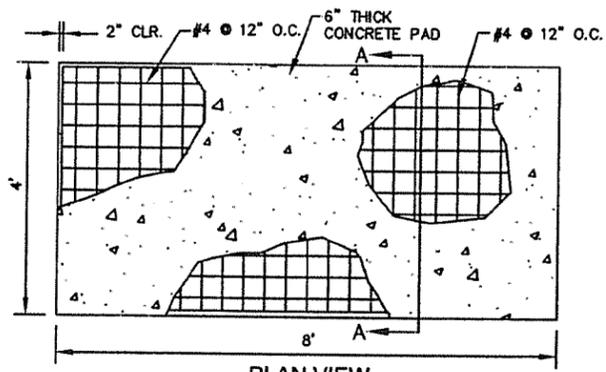
FOUNDATION GENERAL NOTES:

1. THE SITE SHALL BE STRIPPED OF ALL VEGETATION PRIOR TO FILL OR CONSTRUCTION OF THE FOUNDATION PAD.
2. ALL FILL SAND SHALL BE 0-15 P.I. WITH A COMPACTION TEST RUN ON EACH 6" LIFT - COMPACTED TO 95% MODIFIED PROCTOR.
3. THE SUBCONTRACTOR SHALL KEEP THE SITE SO IT WILL HAVE POSITIVE DRAINAGE AT ALL TIMES.
4. ALL EXCAVATIONS SHALL BE FREE OF WATER BEFORE POURING CONCRETE.
5. MINIMUM SOIL BEARING CAPACITY OF 2,500 PSF IN ALL FOUNDATION AND SLAB AREAS.

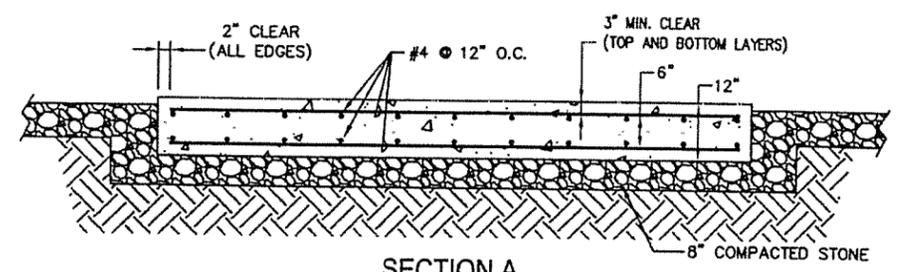


SECTION A

- GENERAL NOTES:**
1. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL OF UNSUITABLE MATERIAL THAT WILL NOT COMPACT PROPERLY.
 2. SLAB TO BE LEVEL AND FLAT.
 3. FOOTING SHALL EXTEND TO DEPTH SHOWN OR BEAR ON SOLID ROCK IF ENCOUNTERED DURING EXCAVATION.
 4. MINIMUM STRENGTH OF CONCRETE SHALL BE 4000 PSI.



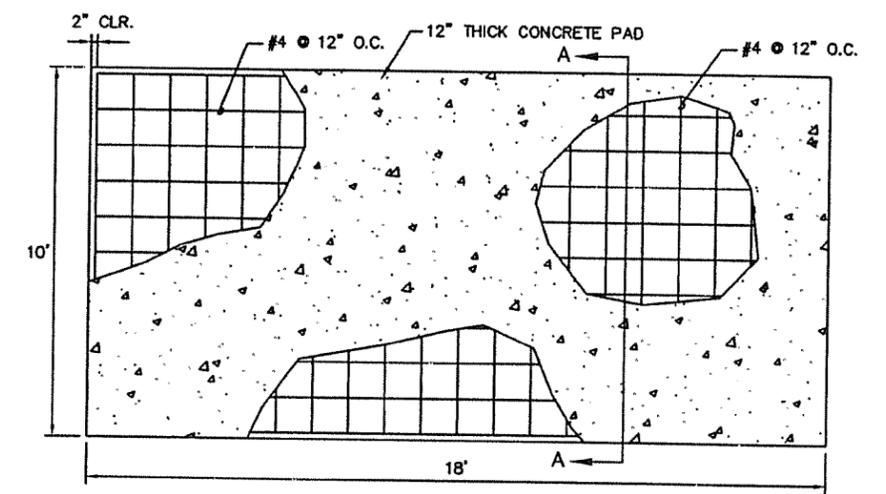
GENERATOR CONCRETE PAD DETAIL
NOT TO SCALE



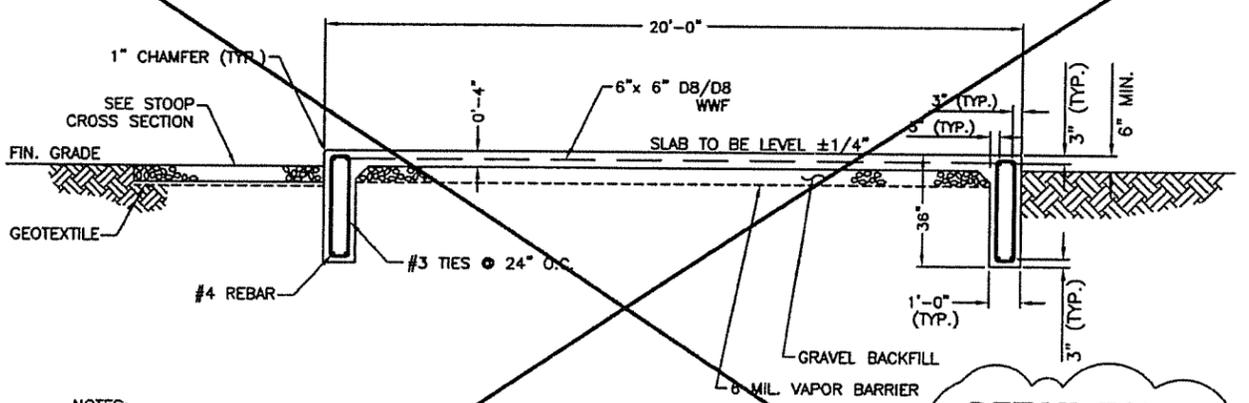
SECTION A

GENERAL NOTES:

1. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL OF UNSUITABLE MATERIAL THAT WILL NOT COMPACT PROPERLY.
2. SLAB TO BE LEVEL AND FLAT.
3. FOOTING SHALL EXTEND TO DEPTH SHOWN OR BEAR ON SOLID ROCK IF ENCOUNTERED DURING EXCAVATION.
4. MINIMUM STRENGTH OF CONCRETE SHALL BE 4000 PSI.

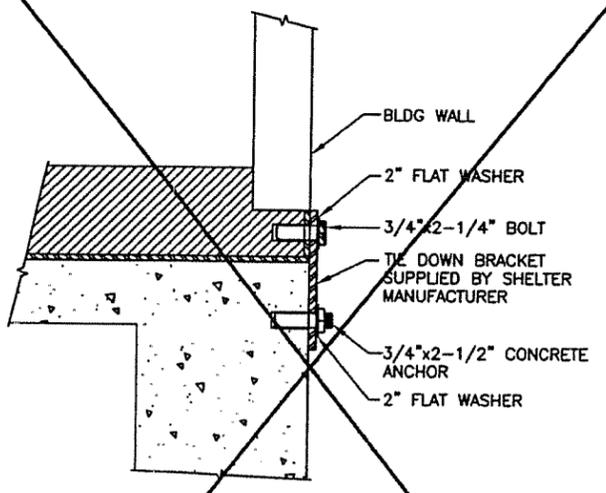


BTS CONCRETE PAD DETAIL
NOT TO SCALE



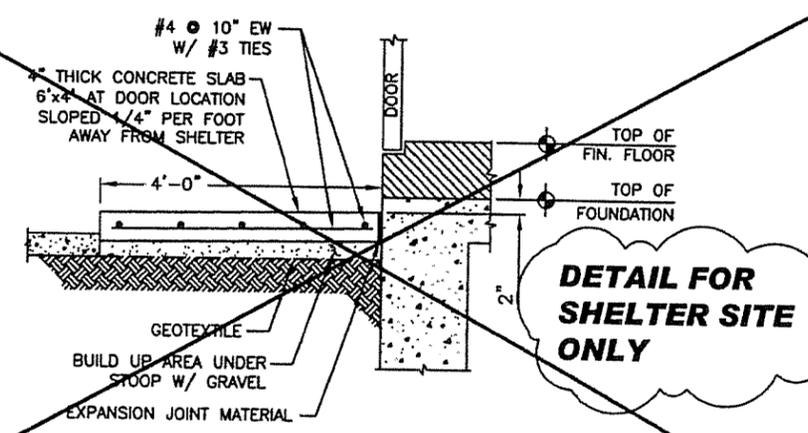
SHELTER FOUNDATION SECTION A-A
NOT TO SCALE

- NOTES:**
1. CONCRETE FINISH TO BE CLASS A TOLERANCE.
 2. TEST FOR 4000 PSI AT 7, 14, & 28 DAYS PER POUR BY INDEPENDENT LAB.
 3. ALL CONCRETE TO BE SIX SACK MIX.
 4. PERFORM CONCRETE SLUMP TEST (4" MAX). NO WATER TO BE ADDED TO CONCRETE MIX AFTER 4" SLUMP HAS BEEN ESTABLISHED.



BLDG/FND ATTACHMENT DETAIL B-B
NOT TO SCALE

DETAIL FOR SHELTER SITE ONLY



STOOP DETAIL C-C
NOT TO SCALE

DETAIL FOR SHELTER SITE ONLY

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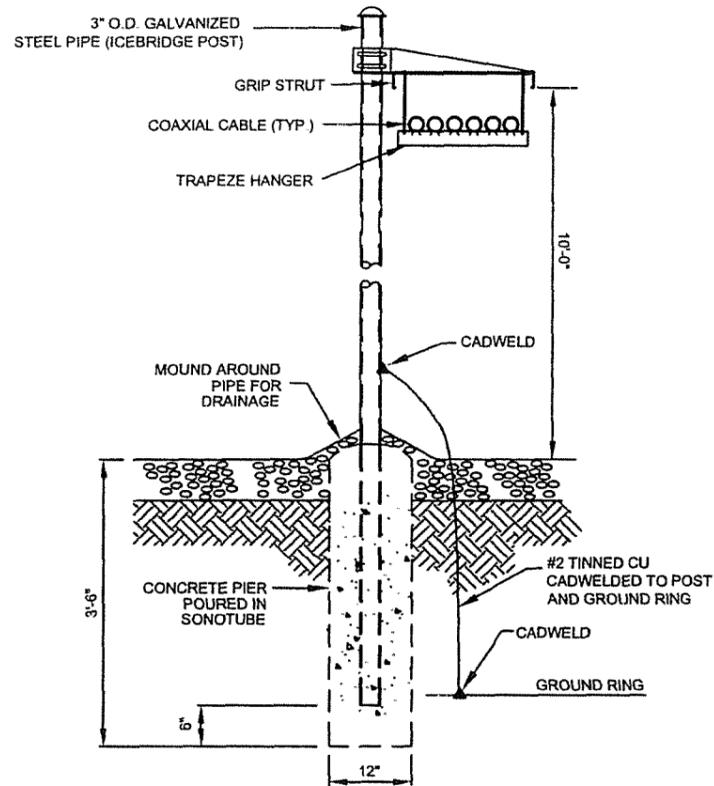
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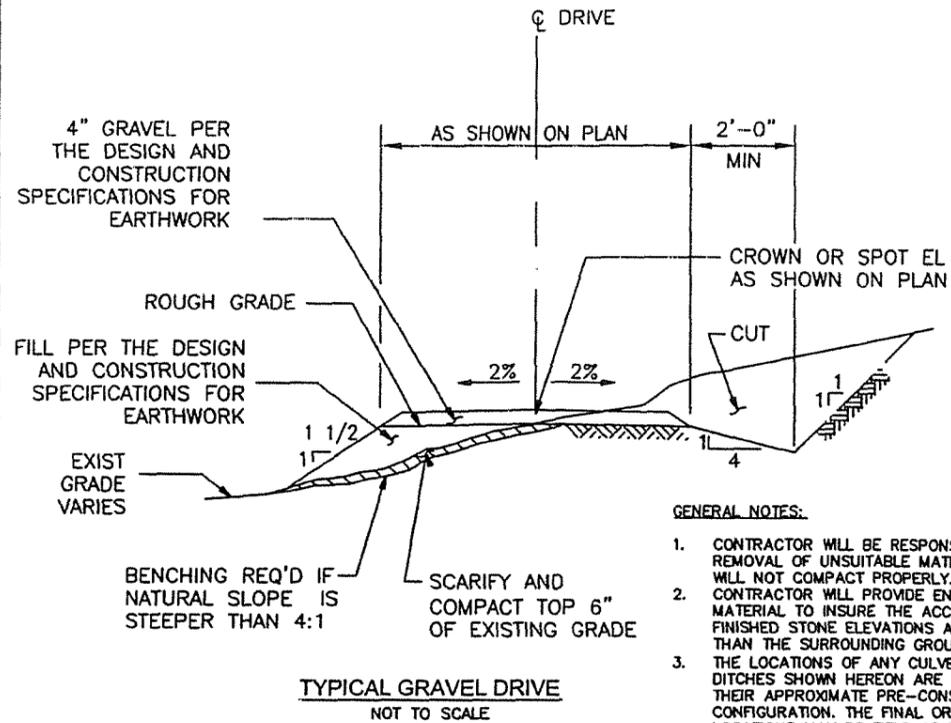
NO.	DATE	REVISIONS	BY	CHK	APP'D
1	07/21/08	REVISED PER NEW AT&T TEMPLATE DWGS	JLS	AJK	AJK
0	05/02/08	ISSUED FOR REVIEW	JLS	AJK	AJK

SCALE: AS SHOWN DESIGNED BY: AJK DRAWN BY: JLS

SHEET C-3
FOUNDATION PLAN & DETAILS
DRAWING NUMBER
25036.00004.04



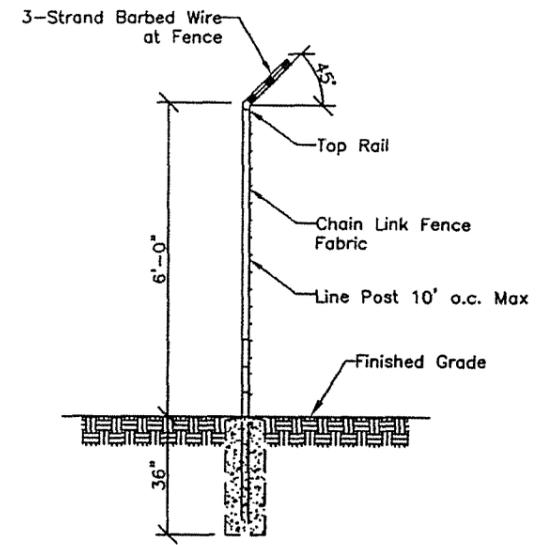
ICE BRIDGE DETAIL
NOT TO SCALE



TYPICAL GRAVEL DRIVE
NOT TO SCALE

GENERAL NOTES:

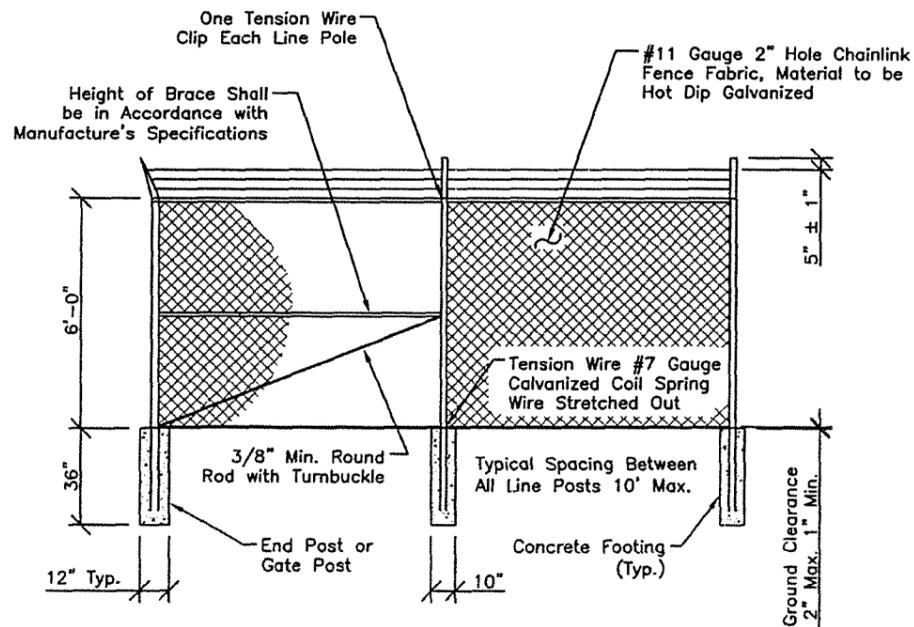
1. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL OF UNSUITABLE MATERIAL THAT WILL NOT COMPACT PROPERLY. CONTRACTOR WILL PROVIDE ENOUGH MATERIAL TO INSURE THE ACCESS ROAD FINISHED STONE ELEVATIONS ARE HIGHER THAN THE SURROUNDING GROUND.
2. THE LOCATIONS OF ANY CULVERTS AND/OR DITCHES SHOWN HEREON ARE SHOWN IN THEIR APPROXIMATE PRE-CONSTRUCTION CONFIGURATION. THE FINAL OR AS-BUILT LOCATIONS MAY BE FIELD ADJUSTED BY THE CONSTRUCTION MANAGER TO COMPENSATE FOR MINOR VARIATIONS IN THE ROADWAY LOCATION, SLOPES, DITCHES, ETC.



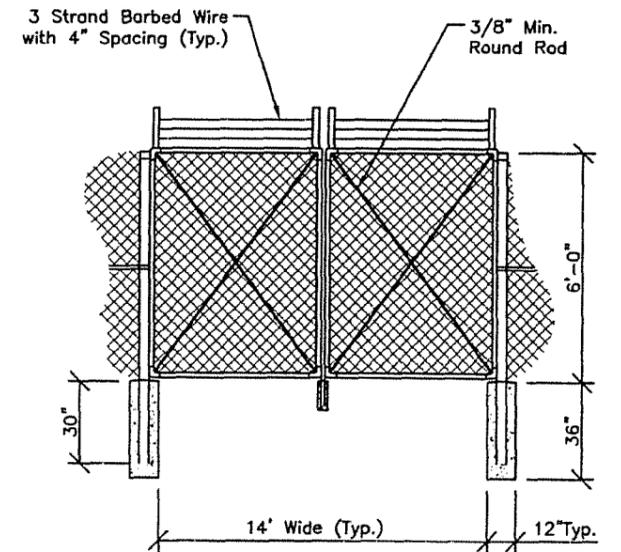
FENCE / BARBED WIRE ARM DETAIL
NOT TO SCALE

NOTES:

1. WHEN USING COMPONENTS AS SHOWN IN STANDARD DETAILS, MAXIMUM ALLOWABLE SPAN BETWEEN SUPPORTS ON A CONTINUOUS SINGLE SECTION OF BRIDGE CHANNEL SHALL BE 9 FEET FOR 10 FEET BRIDGE CHANNEL.
2. WHEN USING COMPONENTS FOR SPLICING BRIDGE CHANNEL SECTIONS, THE SPLICE SHOULD BE PROVIDED AT THE SUPPORT, IF POSSIBLE, OR AT A MAXIMUM OF 2 FEET FROM THE SUPPORT.
3. WHEN USING COMPONENTS, SUPPORT SHOULD BE PROVIDED AS CLOSE AS POSSIBLE TO THE ENDS OF ICE BRIDGES, WITH A MAXIMUM CANTILEVER DISTANCE OF 2 FEET FROM THE SUPPORT TO THE FREE END OF THE ICE BRIDGE.
4. CUT BRIDGE CHANNEL SECTIONS SHALL HAVE RAW EDGES SPRAYED WITH COLD GALVANIZE WITH SOFTENER ADDED TO PROTECT LINES, OR EQUIVALENT, FINISH.
5. ICE BRIDGES MAY BE CONSTRUCTED WITH COMPONENTS FROM OTHER MANUFACTURERS, PROVIDED THE MANUFACTURER'S INSTALLATION GUIDELINES ARE FOLLOWED.
6. DEVIATIONS FROM STANDARDS FOR COMPONENT INSTALLATIONS ARE PERMITTED WITH THE RESPECTIVE MANUFACTURER'S APPROVAL.
7. DEVIATIONS FROM ICE BRIDGE FOUNDATIONS REQUIRE ENGINEERING APPROVAL.



TYPICAL FENCE ELEVATION DETAIL
NOT TO SCALE



NOTE:
FENCING ELEVATIONS ARE ONLY EXAMPLES.
FOLLOW CONSTRUCTION CONTRACT.

TYPICAL SWING GATE DETAIL
NOT TO SCALE



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1	07/21/08	REVISED PER NEW AT&T TEMPLATE DWGS	JLS	AJK	AJK
0	05/02/08	ISSUED FOR REVIEW	JLS	AJK	AJK

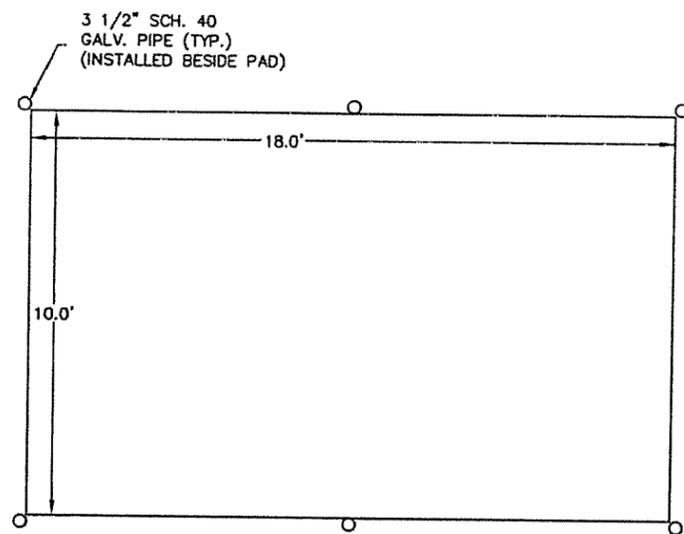
SCALE: AS SHOWN DESIGNED BY: AJK DRAWN BY: JLS

SHEET C-4

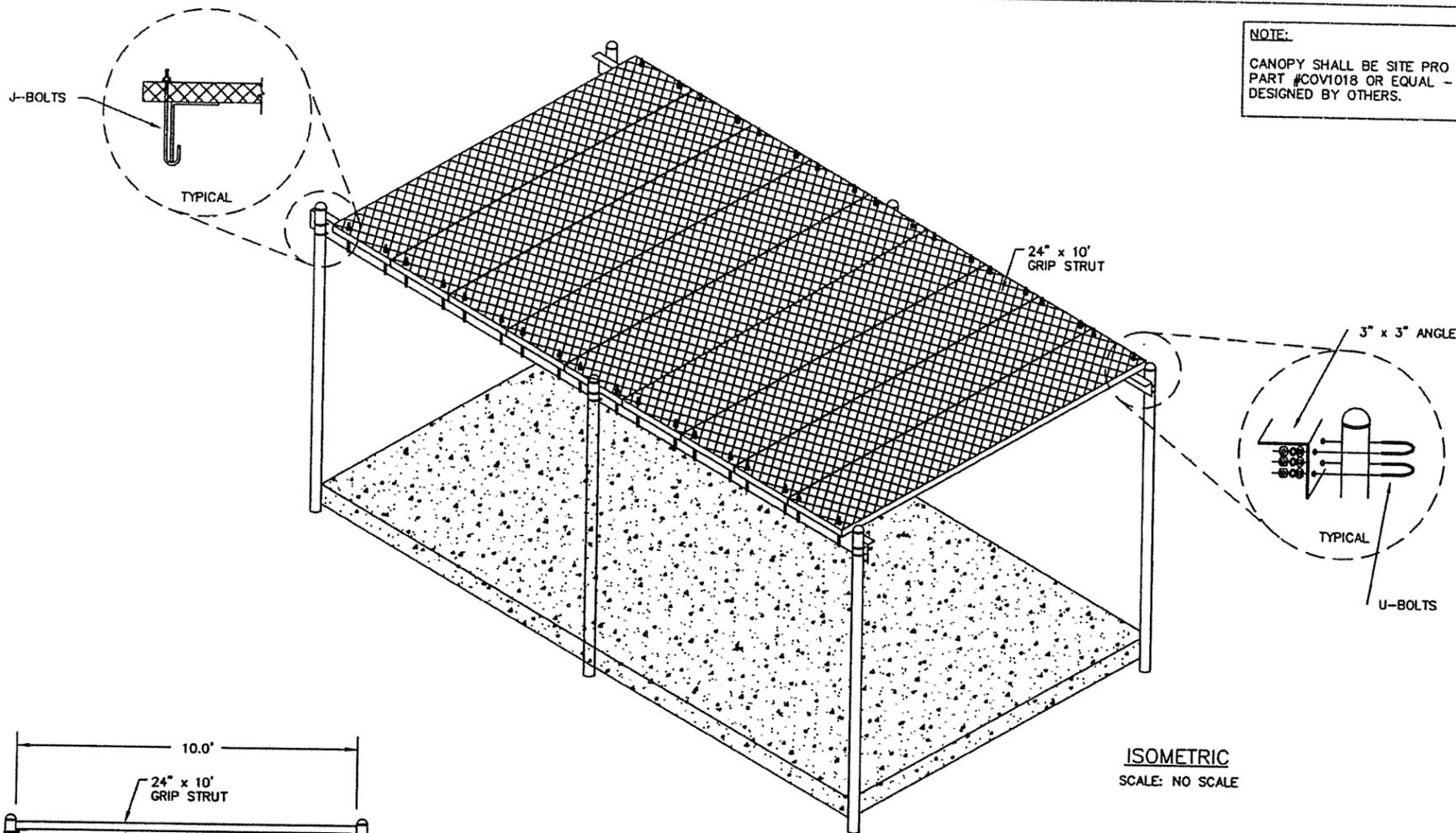
ICE BRIDGE & FENCE DETAILS

DRAWING NUMBER

25036.00004.04

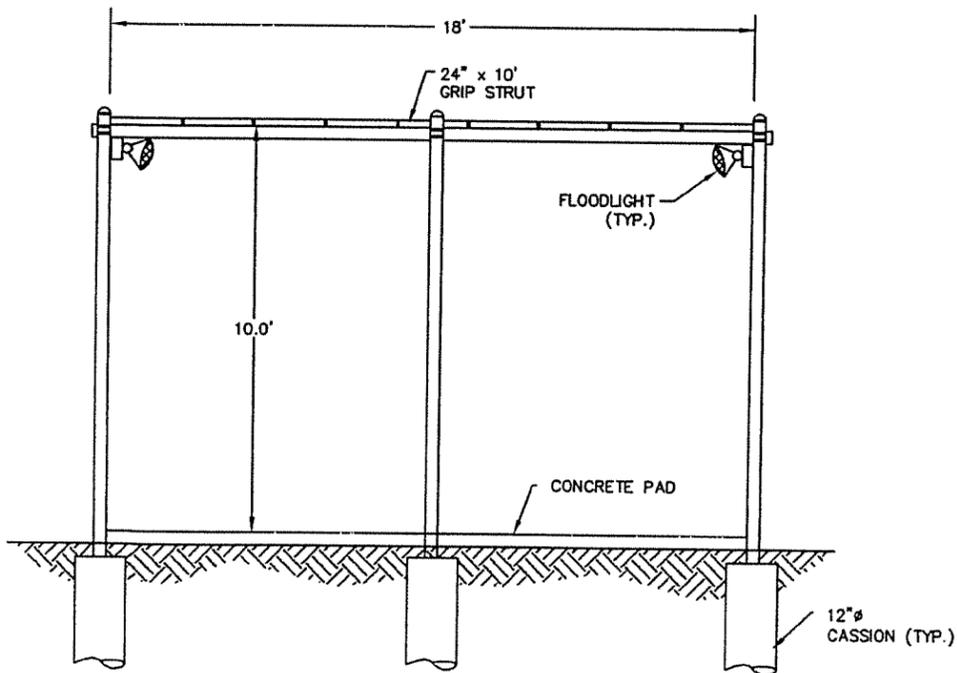


PLAN VIEW
SCALE: NO SCALE

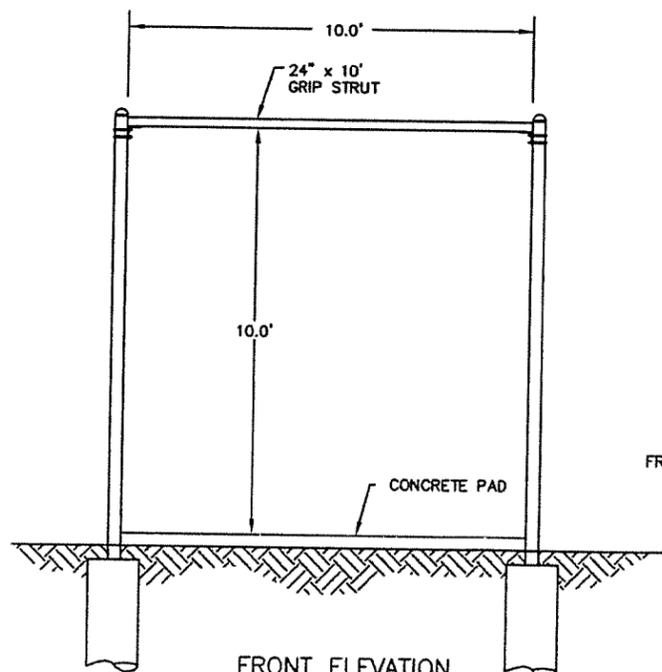


NOTE:
CANOPY SHALL BE SITE PRO 1
PART #COV1018 OR EQUAL -
DESIGNED BY OTHERS.

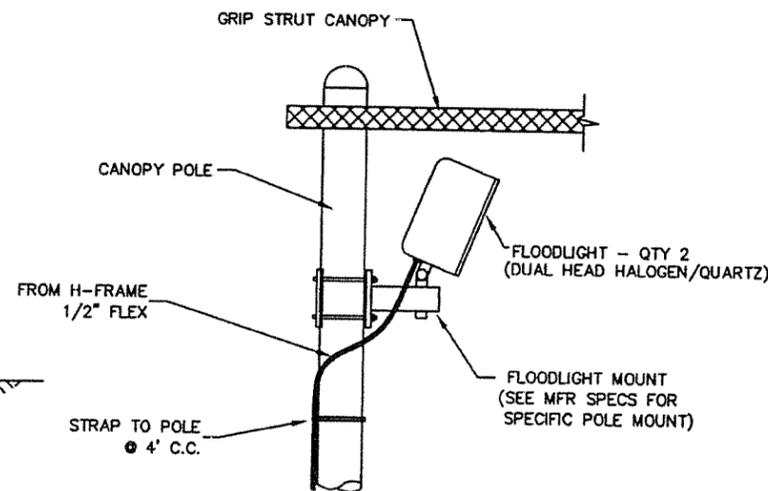
ISOMETRIC
SCALE: NO SCALE



SIDE ELEVATION
SCALE: NO SCALE



FRONT ELEVATION
SCALE: NO SCALE



FLOODLIGHT DETAIL
SCALE: NO SCALE

NOTE:
LIGHTS TO BE MOUNTED ON THE
SIDE OF CANOPY OPPOSITE OF
THE CABINETS. AIM LIGHTS AT
CABINETS.

PARTS LIST			
COMPONENT	DESCRIPTION	U/M	QTY.
GRS24	GRIP STRUT CHANNEL 24" x 10"	EA.	9
ANG314	1/4" GALV. ANGLE 3" x 3"	EA.	2
P3160	3-1/2" x 160" SCH 40 GALV PIPE	EA.	4
X-UB1358	1/2" x 3-5/8" x 5-1/2" x 3" GALV U-BOLT	EA.	4
G12NUT	1/2" HDG HEAVY 2H HEX NUT	EA.	8
G12LW	1/2" HDG LOCKWASHER	EA.	8
G12FW	1/2" HDG USS FLATWASHER	EA.	8
X-JBB	3/8" x 5/8" x 8" x 8" GALV. J-BOLT	EA.	16
G38LW	3/8" HDG LOCKWASHER	EA.	16
G38LW	3/8" HDG USS FLATWASHER	EA.	16
G38NUT	3/8" HDG HEAVY 2H HEX NUT	EA.	16
SQW38	SQUARE WASHER 3/8"	EA.	16



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0	05/02/08	ISSUED FOR REVIEW	JLS	AJK	AJK

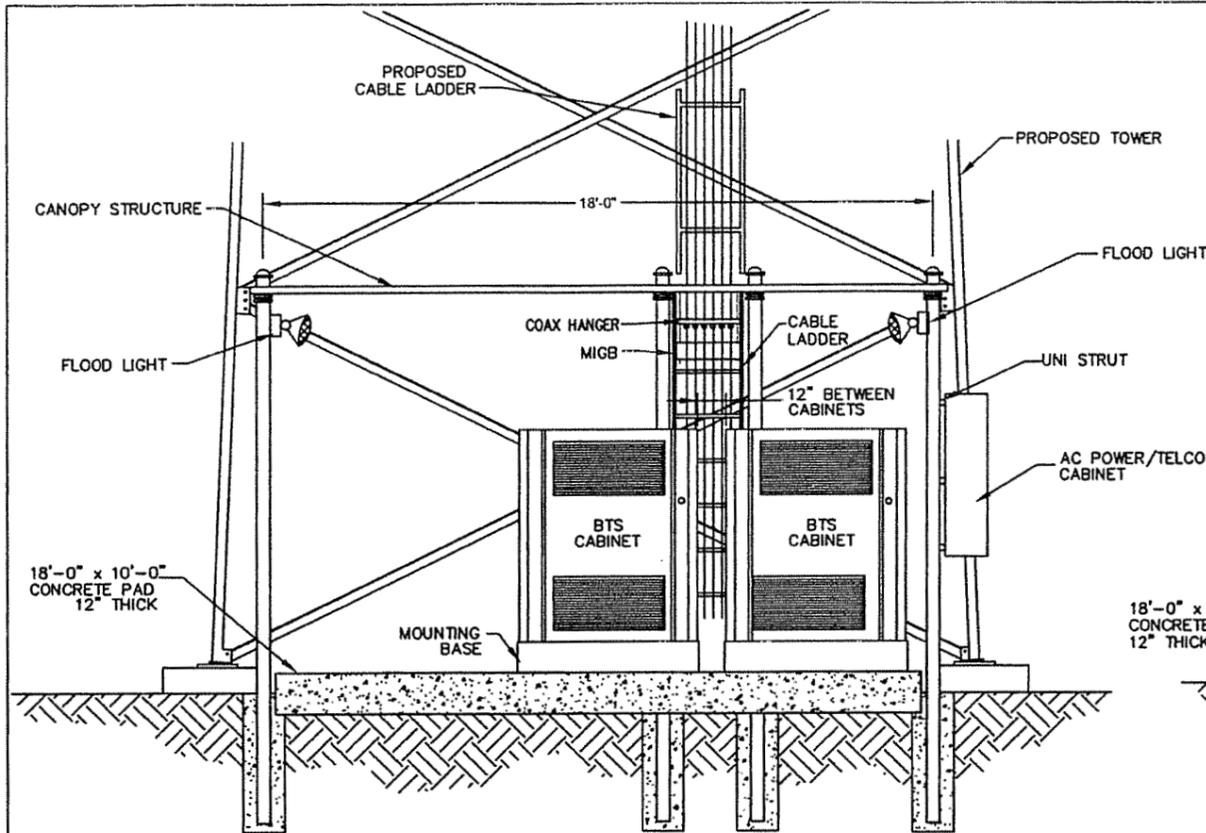
SCALE: AS SHOWN DESIGNED BY: AJK DRAWN BY: JLS

SHEET C-5

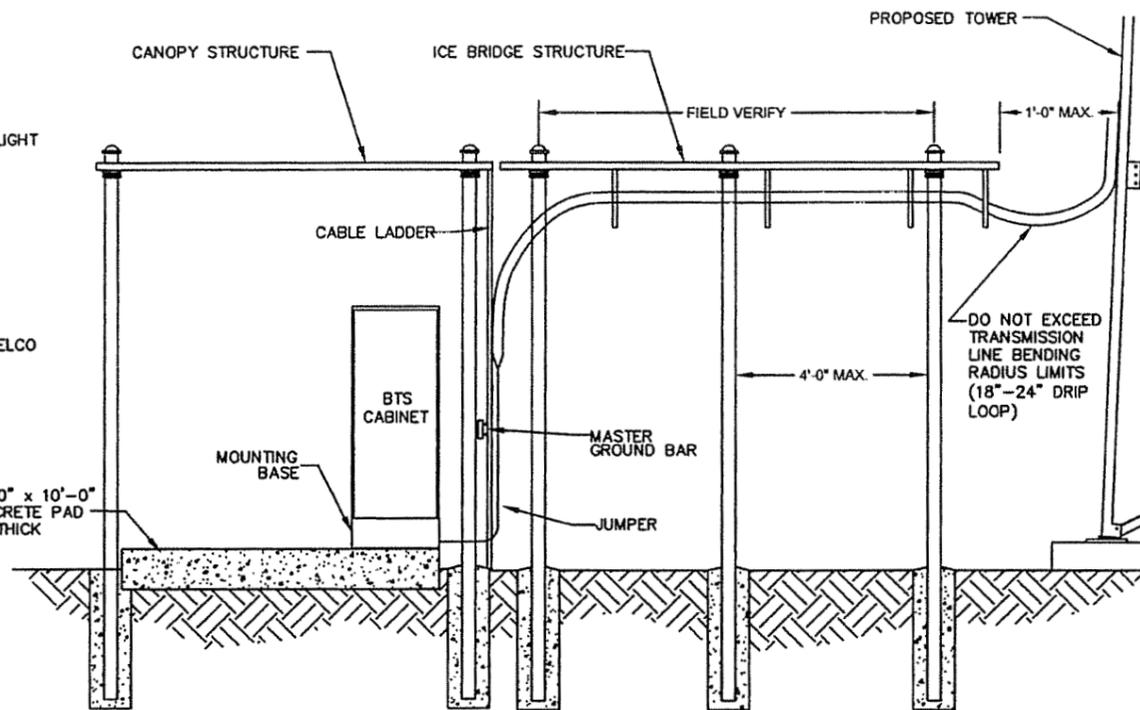
BTS PLATFORM DETAILS

DRAWING NUMBER

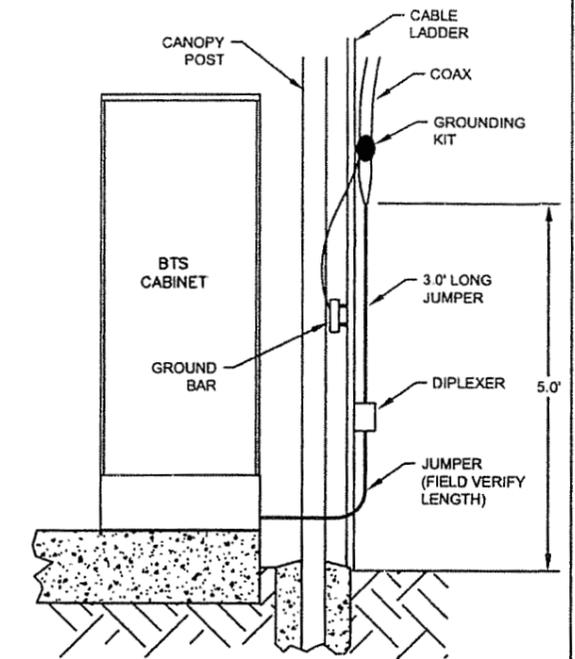
25036.00004.04



CABINET FRONT ELEVATION
SCALE: NO SCALE



CABINET SIDE ELEVATION
SCALE: NO SCALE



CABLE TRANSITION TO CABINET
SCALE: NO SCALE

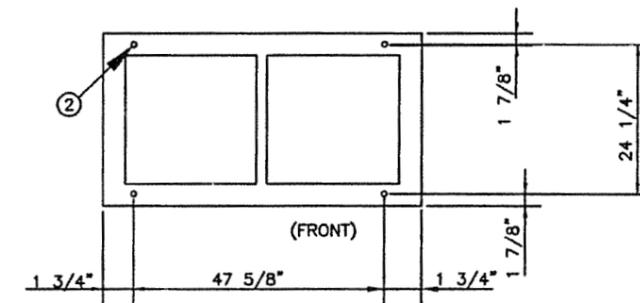
NOTE: THIS VIEW SHOWN WITHOUT MIDDLE CANOPY POST. SEE SHEET C-5 FOR CANOPY POST LAYOUT AND QUANTITY.

RF NOTES:

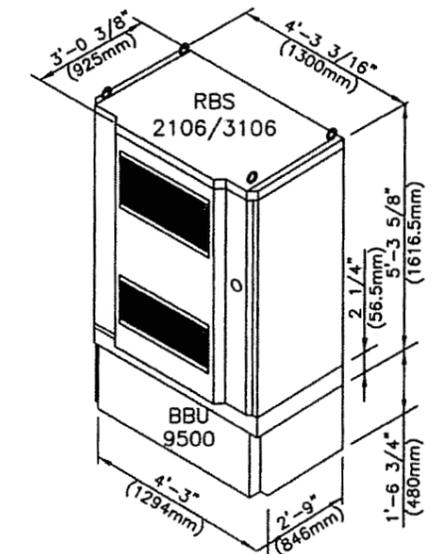
- ACTUAL LENGTHS SHALL BE DETERMINED PER SITE CONDITION BY SUBCONTRACTORS.
- THE DESIGN IS BASED ON RF DATA SHEETS, SIGNED AND APPROVED.
- RADIO SIGNAL CABLE AND RACEWAY SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC, NFPA 70), CHAPTER 8.
- ALL SPECIFIED MATERIAL FOR EACH LOCATION (E.G., OUTDOORS, INDOORS-OCCUPIED, INDOORS-UNOCCUPIED, OLENUMS, RISER SHAFTS, ETC.) SHALL BE APPROVED, LISTED, OR LABELED AS REQUIRED BY THE NEC.
- FOLLOW THE TECHNICAL GUIDELINE FOR OUTSIDE ANTENNA JUMPER SUPPORT (24782-3DJ-GEX-00001). HARDLINE CABLE SHALL BE SUPPORTED AS REQUIRED BY THE MANUFACTURER BUT AT A MINIMUM OF EVERY THREE (3) FEET, EXCEPT INSIDE MONOPOLES OR LATTICE TOWERS WHERE CABLE AND CONNECTOR MANUFACTURER'S RECOMMENDATIONS SHALL BE FOLLOWED. MANUFACTURER RECOMMENDED CABLE SUPPORT ACCESSORIES SHALL BE USED.
- THE OUTDOOR CABLE SUPPORT SYSTEM SHALL BE PROVIDED WITH AN ICE SHIELD TO SUPPORT AND PROTECT ANTENNA CABLE RUNS.
- DRIP LOOPS SHALL BE REQUIRED ON ALL OUTSIDE CABLES. CABLES SHALL BE SLOPED AWAY FROM THE BUILDING OR OUTDOOR BTS CABINETS TO PREVENT WATER FROM ENTERING THROUGH THE COAXIAL CABLE PORT.
- ALL FEEDER LINE AND JUMPER CONNECTORS FOR AT&T GSM SHALL BE AT&T APPROVED 7/16 DIN CABLE CONNECTORS THAT MEET IP68 STANDARDS.
- DELETED
- 7/16 DIN CONNECTORS REQUIRE NO WEATHER PROOFING IN INDOOR APPLICATIONS. IN OUTDOOR APPLICATIONS WEATHER PROOFING IS REQUIRED AND THE FOLLOWING PROCEDURE SHOULD BE FOLLOWED: APPLY A 'COURTESY' WRAP OF ONE LAYER OF 7MIL THICK VINYL ELECTRICAL TAPE EXTENDING APPROXIMATELY TWO (2) INCH ON EACH SIDE OF THE COAX CABLE/ CONNECTOR JUNCTURE.

USING WEATHERPROOFING KIT APPROVED BY CABLE MANUFACTURER AND CONTRACTOR, START TAPE APPROXIMATELY 5 INCHES FROM THE CONNECTOR AND WRAP 2 INCHES TOWARD THE CONNECTOR, THEN REVERSE THE TAPE SO THAT THE STICKY SIDE IS UP. TAPE OVER THE CONNECTOR OR SURGE ARRESTOR UNTIL THREE (3) TO FOUR (4) INCHES BEYOND THE CONNECTOR AND REVERSE AGAIN WITH THE STICKY SIDE DOWN FOR ANOTHER INCH OR TWO. ADD THE BUTYL RUBBER AND FINISH WITH A FINAL LAYER OF TAPE. COLD SHRINK IS STRICTLY PROHIBITED.

- DELETED
- ANTENNAS SHALL BE PAINTED, WHEN REQUIRED, BY THE LANDLORD OR AUTHORITY HAVING JURISDICTION IN ACCORDANCE WITH ANTENNA MANUFACTURERS, SURFACE PREPARATION AND PAINTING REQUIREMENTS.
- CABLE SHIELDS, AND TOWER CONDUITS SHALL BE GROUNDED AT THE TOP OF THE TOWER, WITHIN 10 FEET OF THEIR CONNECTORS, AND AT THE BOTTOM OF THE TOWER ABOUT 6 INCHES BEFORE THEY TURN TOWARD THE FACILITY. THEY SHALL BE GROUNDED AT THE MIDDLE OF TOWERS THAT ARE BETWEEN 100 FEET AND 200 FEET HIGH, AND AT INTERVALS OF 100 FEET OR LESS ON TOWERS THAT ARE HIGHER THAN 200 FEET.
- APPROVED GROUNDED KITS, WHICH INCLUDE GROUNDED STRAPS, SHALL BE USED TO GROUND THE COAXIAL CABLE SHIELDS, AND CONDUITS. THE GROUND CONDUCTORS FOR THE KITS AT THE TOP OF THE TOWER, AND IN THE MIDDLE SECTION OF THE TOWER, ARE BONDED DIRECTLY TO TOWER STEEL USING EXOTHERMIC, BOLTED, OR APPROVED CLAMP CONNECTIONS.
- ALL RADIO SIGNAL CABLE SHALL BE LABELED PER MARKET REQUIREMENTS.
- DELETED
- DELETED
- MHA/TMA'S TO BE INSTALLED AT TOWER TOP, SHALL BE SUPPLIED TO THE SUBCONTRACTOR (WHERE REQUIRED) AND INSTALLED BY THE SUBCONTRACTOR. THE GROUND CONDUCTORS OF THE TMA MAY BE BONDED DIRECTLY TO THE TOWER STEEL USING EXOTHERMIC, BOLTED, OR APPROVED CLAMP CONNECTIONS. EXOTHERMIC WELDS SHALL BE PERMITTED ON TOWERS ONLY WITH THE EXPRESS APPROVAL OF THE TOWER MANUFACTURER OR THE CONTRACTORS STRUCTURAL ENGINEER.
- ANTENNA FEED LINE SYSTEM SWEEP TESTING SHALL BE PERFORMED AND REPORTED IN ACCORDANCE WITH THE REQUIREMENTS OF AT&T-GSM SERVICES PROJECT DOCUMENT NO. 24782-000-3PS-EFYO-00001. CONTRACTOR WILL NOT ACCEPT A RADIO SIGNAL CABLE INSTALLATION WITH UNSATISFACTORY SWEEP RESULTS.



CABLE BASE FRAME FOOTPRINT (BOTTOM)



EQUIPMENT DETAIL
SCALE: N.T.S.

ERICSSON RBS 2106/3106 MINIMUM CLEARANCES	
DIRECTION	MINIMUM CLEARANCE
CABINET FRONT	55"
CABINET REAR	2"
CABINET LEFT	0" (3' MIN. FOR 135° DOOR SWING)
CABINET RIGHT	0"
ABOVE THE CABINET	-



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NO.	DATE	REVISIONS	BY	CHK	APP'D
1	07/21/08	REVISED PER NEW AT&T TEMPLATE DWGS	JLS	AJK	AJK
0	05/02/08	ISSUED FOR REVIEW	JLS	AJK	AJK

SCALE: AS SHOWN DESIGNED BY: AJK DRAWN BY: JLS

SHEET C-6

OUTDOOR EQUIPMENT DETAILS

DRAWING NUMBER

25036.00004.04

ELECTRICAL INSTALLATION NOTES

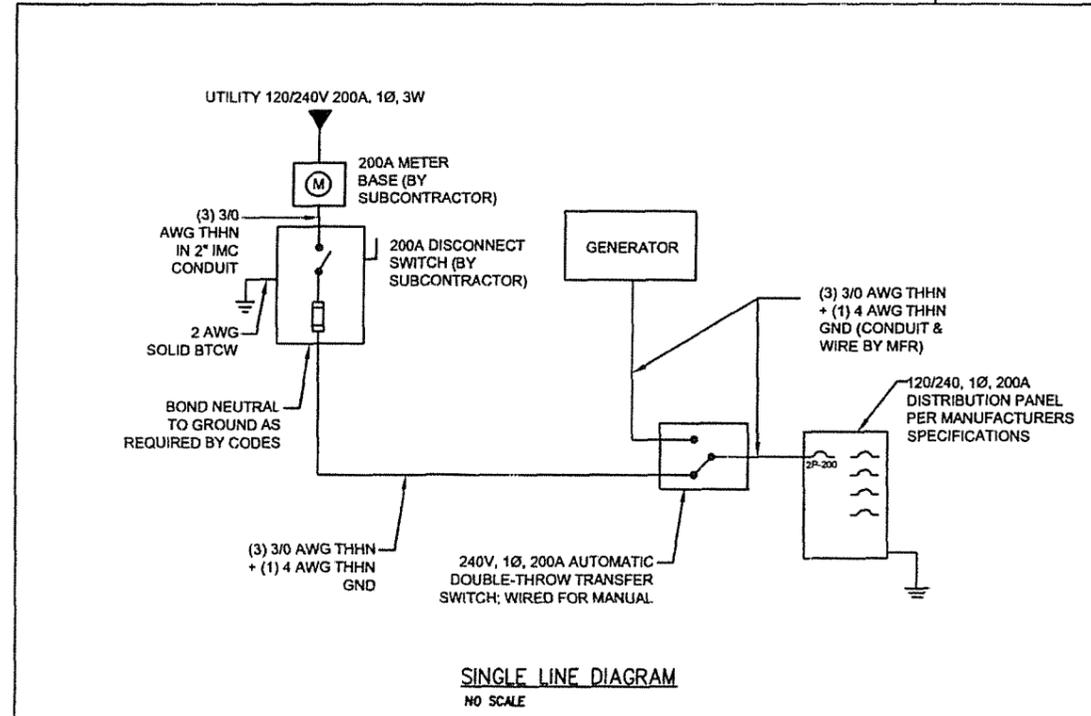
- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
- CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
- WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.
- CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
- EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA.
- ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
- PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
- ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
- ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
- ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
- RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
- LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
- CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
- WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

ELECTRICAL INSTALLATION NOTES (cont.)

- EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

SYMBOLS		ABBREVIATIONS	
	SOLID GROUND BUS BAR	AGL	ABOVE GRADE LEVEL
	SOLID NEUTRAL BUS BAR	BTS	BASE TRANSCIEVER STATION
	SUPPLEMENTAL GROUND CONDUCTOR	(E)	EXISTING
	2-POLE THERMAL-MAGNETIC CIRCUIT BREAKER	MIN	MINIMUM
	SINGLE-POLE THERMAL-MAGNETIC CIRCUIT BREAKER	N.T.S.	NOT TO SCALE
	CHEMICAL GROUND ROD	REF	REFERENCE
	GROUND ROD	RF	RADIO FREQUENCY
	DISCONNECT SWITCH	T.B.D.	TO BE DETERMINED
	METER	T.B.R.	TO BE RESOLVED
	CADWELD TYPE CONNECTION	TYP	TYPICAL
	COMPRESSION TYPE CONNECTION	REQ	REQUIRED
	GROUNDING WIRE	EGR	EQUIPMENT GROUND RING
		AWG	AMERICAN WIRE GAUGE
		MGB	MASTER GROUND BUS
		EG	EQUIPMENT GROUND
		BCW	BARE COPPER WIRE
		SIAD	SMART INTEGRATED ACCESS DEVICE
		GEN	GENERATOR
		IGR	INTERIOR GROUND RING (HALO)
		RBS	RADIO BASE STATION

ABBREVIATIONS & SYMBOLS



- NOTES:**
- SUBCONTRACTOR SHALL PROVIDE 200AMP, SINGLE PHASE, 120/240 VAC, 60HZ SERVICE FOR SITE.
 - SUBCONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY BEFORE THE START OF CONSTRUCTION. POWER AND TELEPHONE CONDUIT SHALL BE PROVIDED AND INSTALLED PER UTILITY REQUIREMENTS.
 - FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT REFER TO DRAWINGS PROVIDED BY PANEL MANUFACTURER.
 - SUBCONTRACTOR SHALL PROVIDE ELECTRICAL SERVICE EQUIPMENT WITH FAULT CURRENT RATINGS GREATER THAN THE AVAILABLE FAULT CURRENT FROM THE POWER UTILITY.

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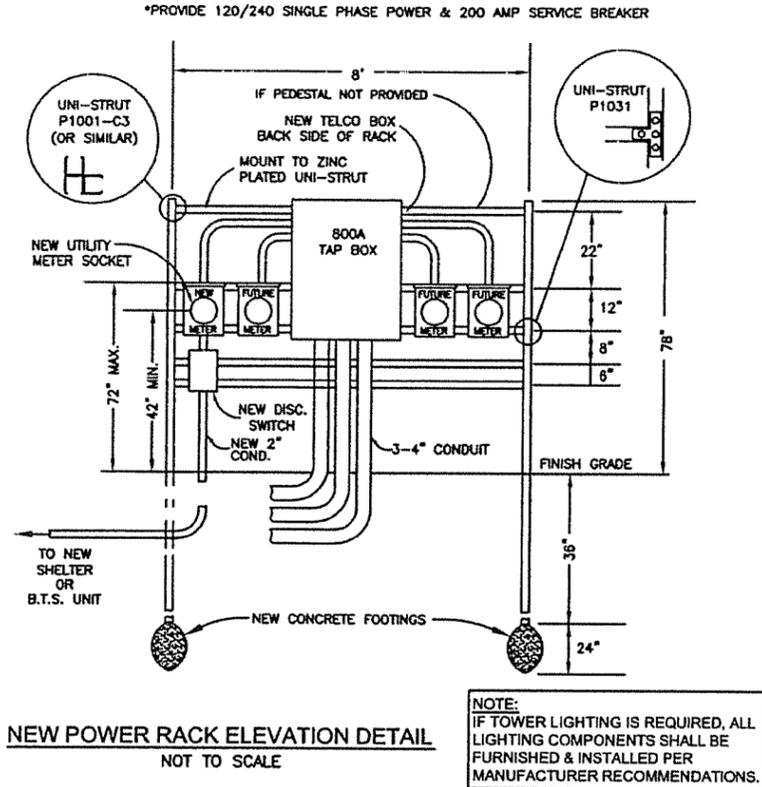
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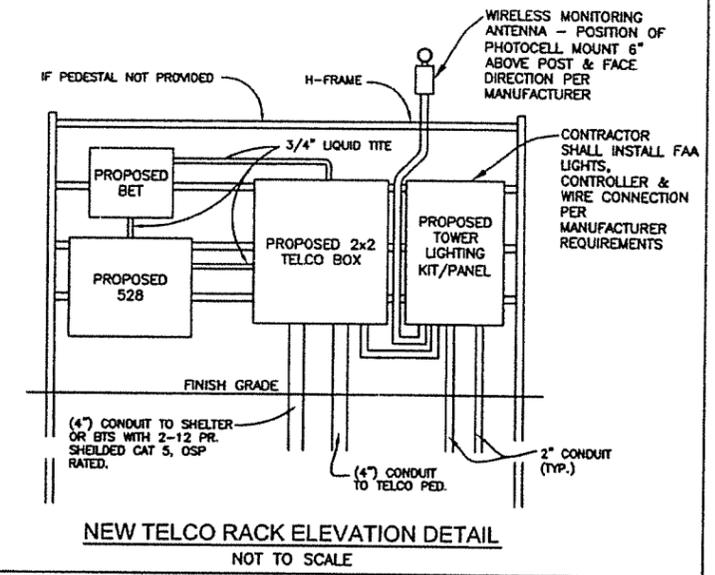
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SCALE: AS SHOWN		DESIGNED BY: AJK	DRAWN BY: JLS		

SHEET E-1
 ELECTRICAL NOTES & DETAILS
 DRAWING NUMBER
 25036.00004.04

- FROM TAP BOX: THE TWO (2) FOUR-INCH (4") CONDUIT WILL RETURN TO THE LOCATION DETERMINED BY LOCAL UTILITY AND EXTEND OUT OF THE FINISHED GRADE 12" AND 36" RESPECTIVELY (SEE DETAIL). BOTH CONDUITS SHALL BE INSTALLED WITH PULL-STRINGS AND WATERPROOF CAPS.
- CABINET AND CONDUCTORS FURNISHED & INSTALLED BY CUSTOMER, 350 KCMIL SERVICE CONDUCTORS FURNISHED & INSTALLED BY UTILITY.
- EQUIPMENT ASSEMBLY DRAWINGS AND RISER DIAGRAMS MUST BE SUBMITTED TO A UTILITY PLANNER FOR ACCEPTANCE PRIOR TO INSTALLATION.
- CABINETS AND CONDUITS SHOWN SHALL CONTAIN ONLY UNMETERED LINE CONDUCTORS. CABINET SHALL BE SEALABLE WITH ACCEPTABLE SEALING HASP.
- TRANSMISSION TOWER SERVICES WILL UTILIZE A STANDARD 200 AMP SERVICE W/ CONTINUOUS CONDUIT TO THE SOURCE.
- SUBSTATION CELLULAR SERVICES WILL BE A SINGLE 200-AMP SERVICE OR BUILT TO THIS SPECIFICATION. NO SERVICE SHALL BE TAKEN OUT OF THE SUBSTATION HOUSE SERVICE.
- ALL CONDUIT AND NIPPLE ENTRIES TO CABINET AND METER BOXES WILL BE MADE WITH WEATHERPROOF HUBS, CONNECTORS OR LOCKNUTS LISTED FOR THE APPLICATIONS. NON-METALLIC BUSHINGS.
- FOR INACCESSIBLE LOCATIONS CONSULT WITH METER ENGINEERING FOR POSSIBLE ERT METER INSTALLATION.
- ONLY ONE SERVICE ALLOWED PER LUG. ALL GROUNDING AND BONDING MUST COMPLY WITH NEC 250 REQUIRED.

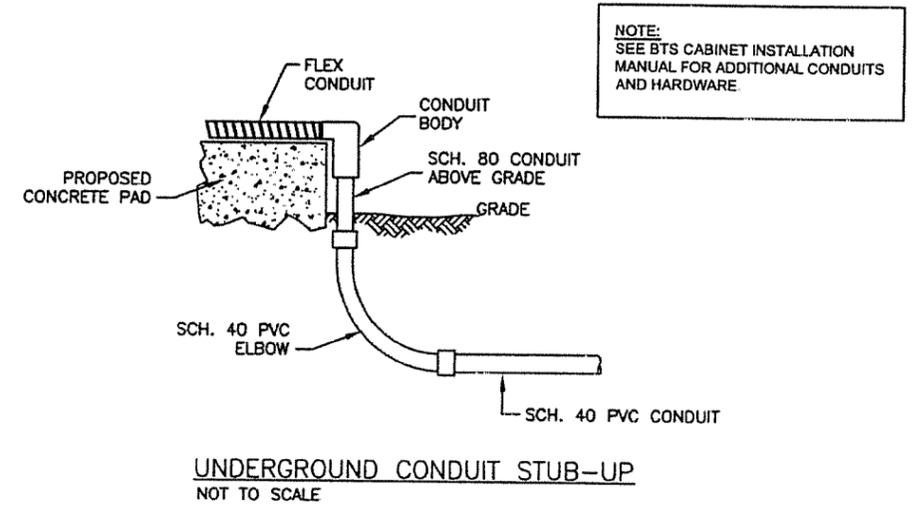
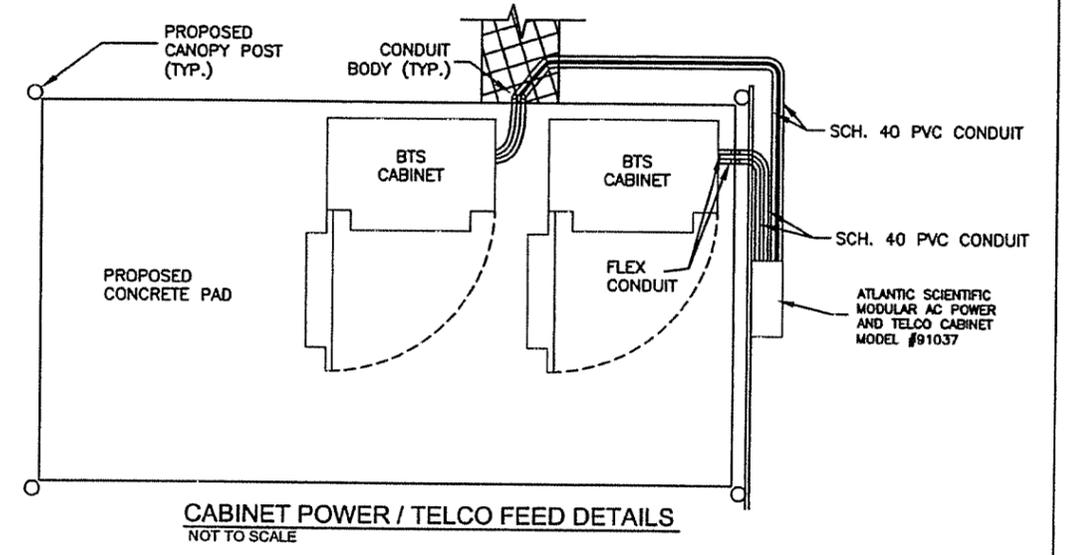
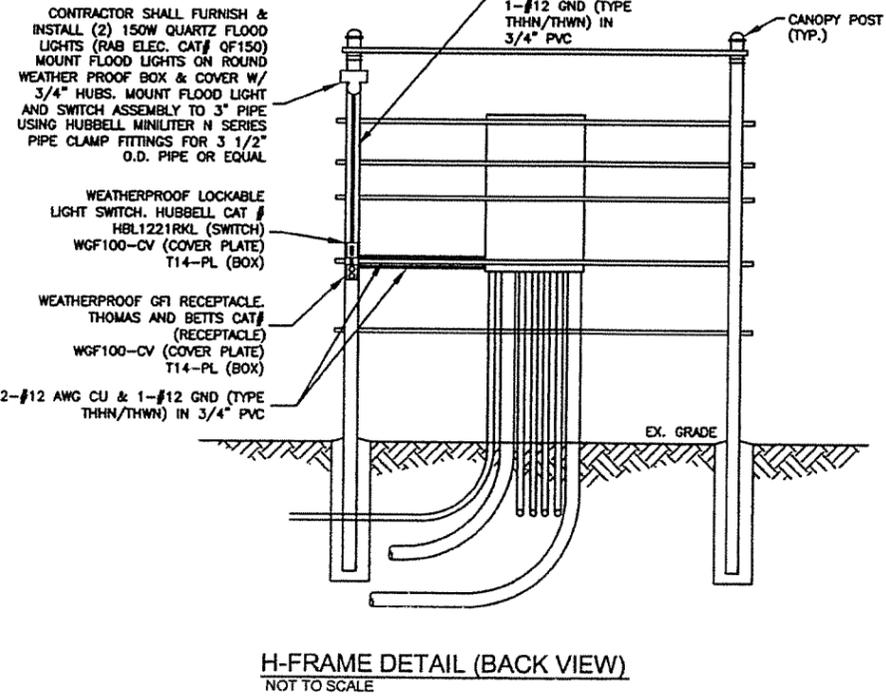
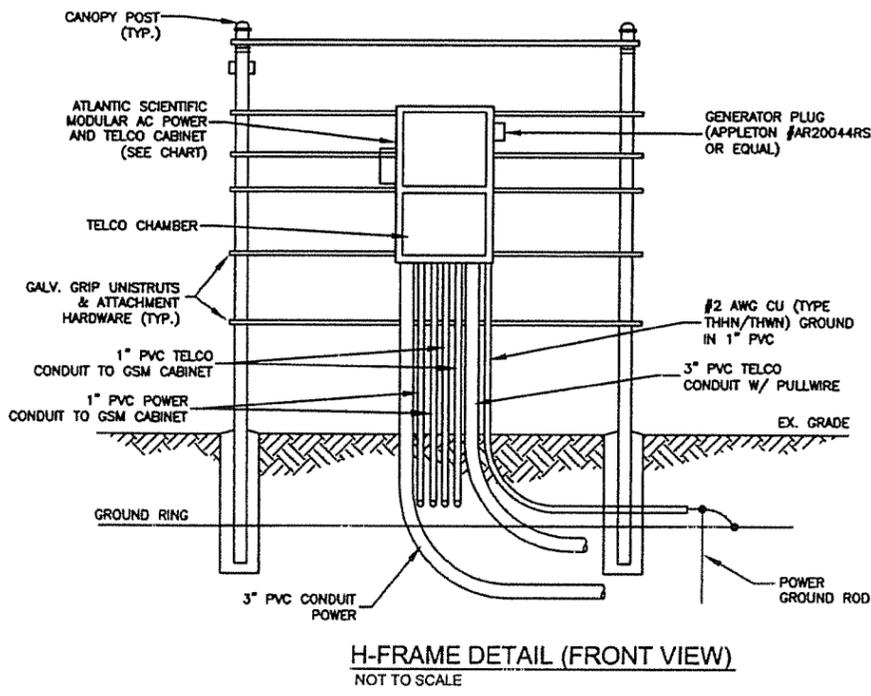


- NOTES:
- COORDINATE WITH LOCAL TELCO UTILITY PRIOR TO PROCURING AND INSTALLATION OF BOX AND COMPONENTS.
 - ALL MATERIAL SHALL MEET REQUIREMENTS OF LOCAL TELCO UTILITY.
 - ITEM #4 SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR. BOND SURGE PROTECTION UNIT TO GROUND BAR WITH #6 AWG INSULATED WIRE.
 - COORDINATE SIZE, TYPE AND QUANTITY OF ITEM(S) #5 WITH LOCAL UTILITY.
 - INSTALL ITEM #6 ONLY IF REQUIRED BY UTILITY. RECEPTACLE POWERED FROM SPARE BREAKER IN DISTRIBUTION PANEL.
- MATERIAL LIST:
- ① 20" X 20" X 8" NEMA 3R ENCLOSURE (HOFFMAN A-20R208HCR OR SIMILAR)
- NOTE: IF TOWER LIGHTING IS REQUIRED, ALL LIGHTING COMPONENTS SHALL BE FURNISHED & INSTALLED PER MANUFACTURER RECOMMENDATIONS.



GENERATOR CHART			
CHARLESTON	BECKLEY	ELKINS	CLARKSBURG
4 - PRONG MODEL # 91037	3 - PRONG MODEL # XXXX	4 - PRONG MODEL # 91037	3 - PRONG MODEL # XXXX

NOTE: ALL PARTS PROVIDED BY CONTRACTOR SHALL BE EQUAL OR EQUIVALENT TO THE PART NUMBERS SHOWN.



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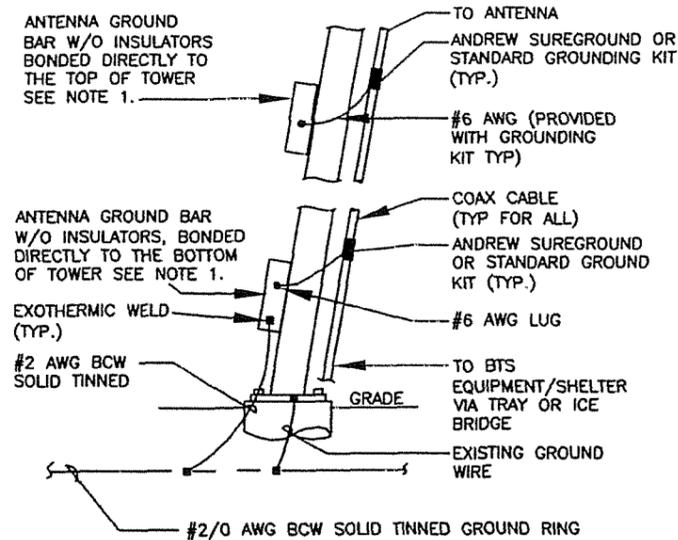
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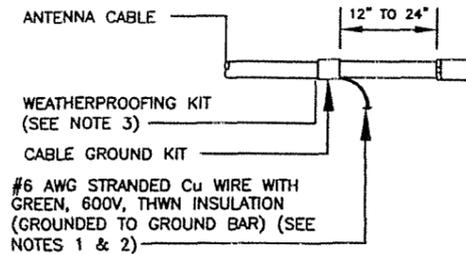
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			SHEET E-2		
			UTILITY RACK & H-FRAME DETAILS		
1	07/21/08	REVISED PER NEW AT&T TEMPLATE DWGS	JLS	AJK	AJK
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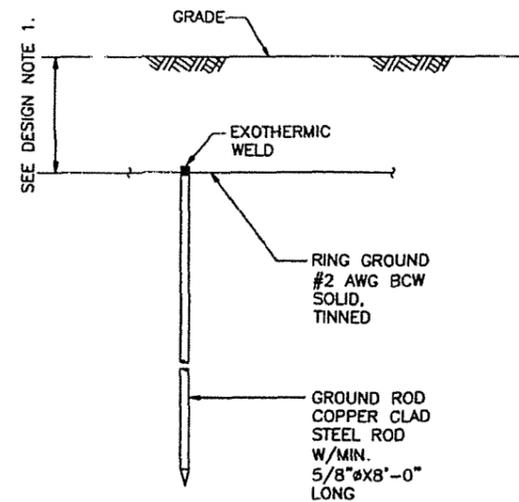
NOTE:
 1. NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATIONS AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED.
 2. ADD ADDITIONAL GROUND BARS ON THE MIDDLE OF TOWER IF TOWER HEIGHT IS MORE THAN 200'.

ANTENNA CABLE GROUNDING DETAIL - SELF SUPPORT
 NOT TO SCALE



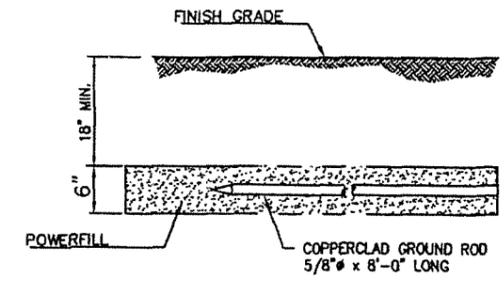
NOTES:
 1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
 2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
 3. WEATHER PROOFING SHALL BE (TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.)

CONNECTION OF CABLE GROUND KIT TO ANTENNA CABLE DETAIL
 NOT TO SCALE

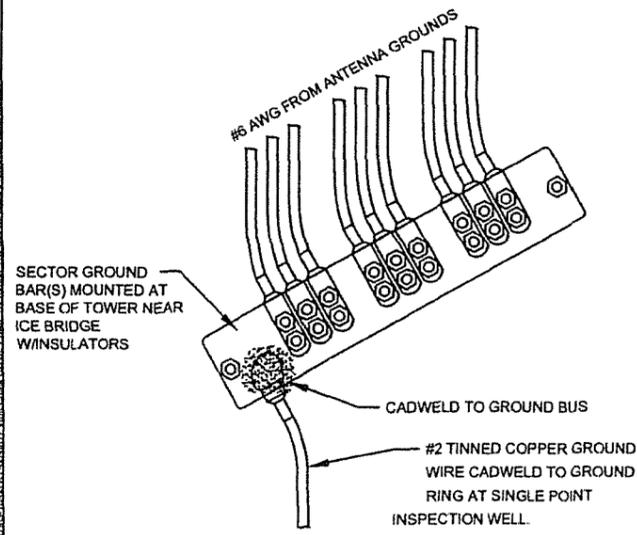


1. ELECTRICAL GROUNDING DESIGNER/ENGINEER TO DETERMINE DIMENSION WHICH SHALL BE BELOW THE FROST LINE OR 18" MINIMUM.
 2. GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL.

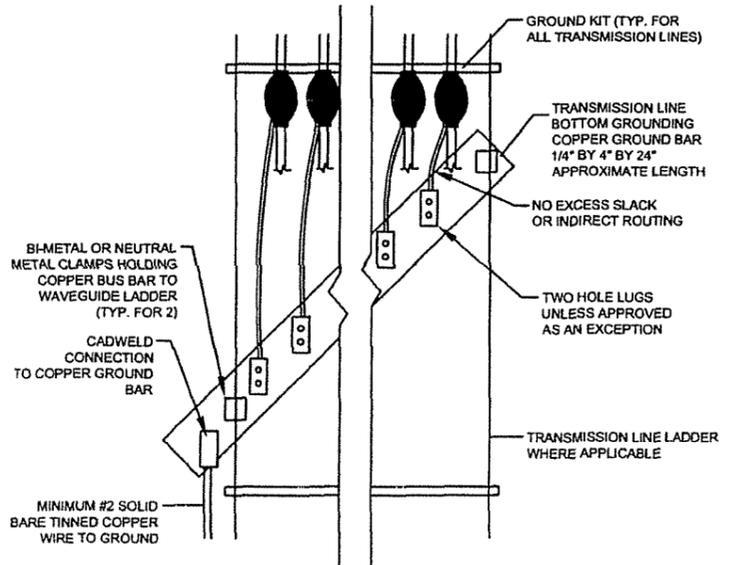
GROUND ROD - VERTICAL INSTALLATION DETAIL
 NOT TO SCALE



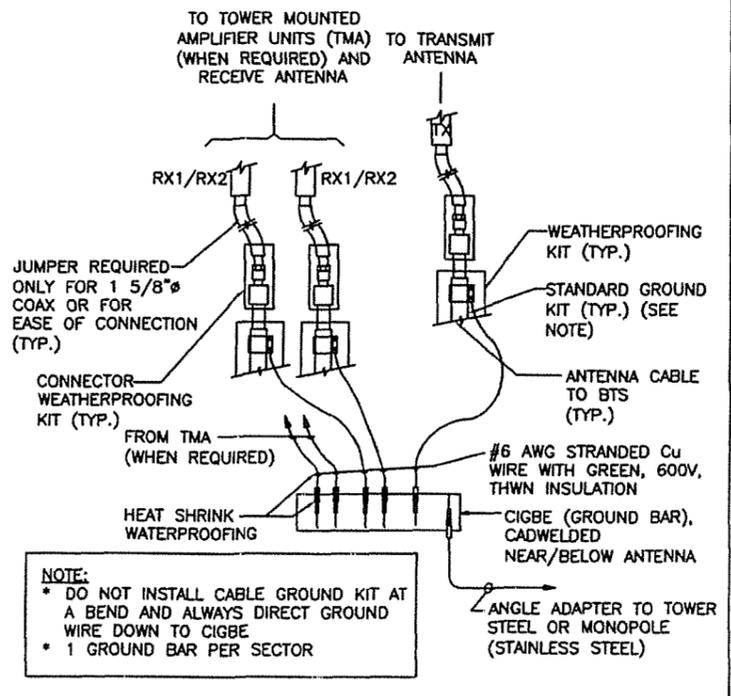
GROUND ROD - HORIZONTAL INSTALLATION DETAIL
 NOT TO SCALE



TOWER GROUND BARS (AT BASE OF TOWER)
 NOT TO SCALE
 FIGURE 2

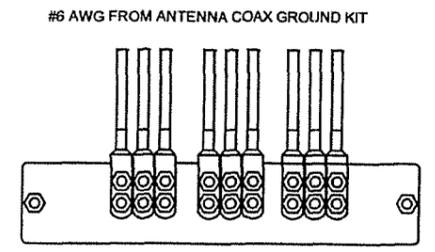


TOWER EXIT GROUND KITS AND GROUND BAR
 NOT TO SCALE

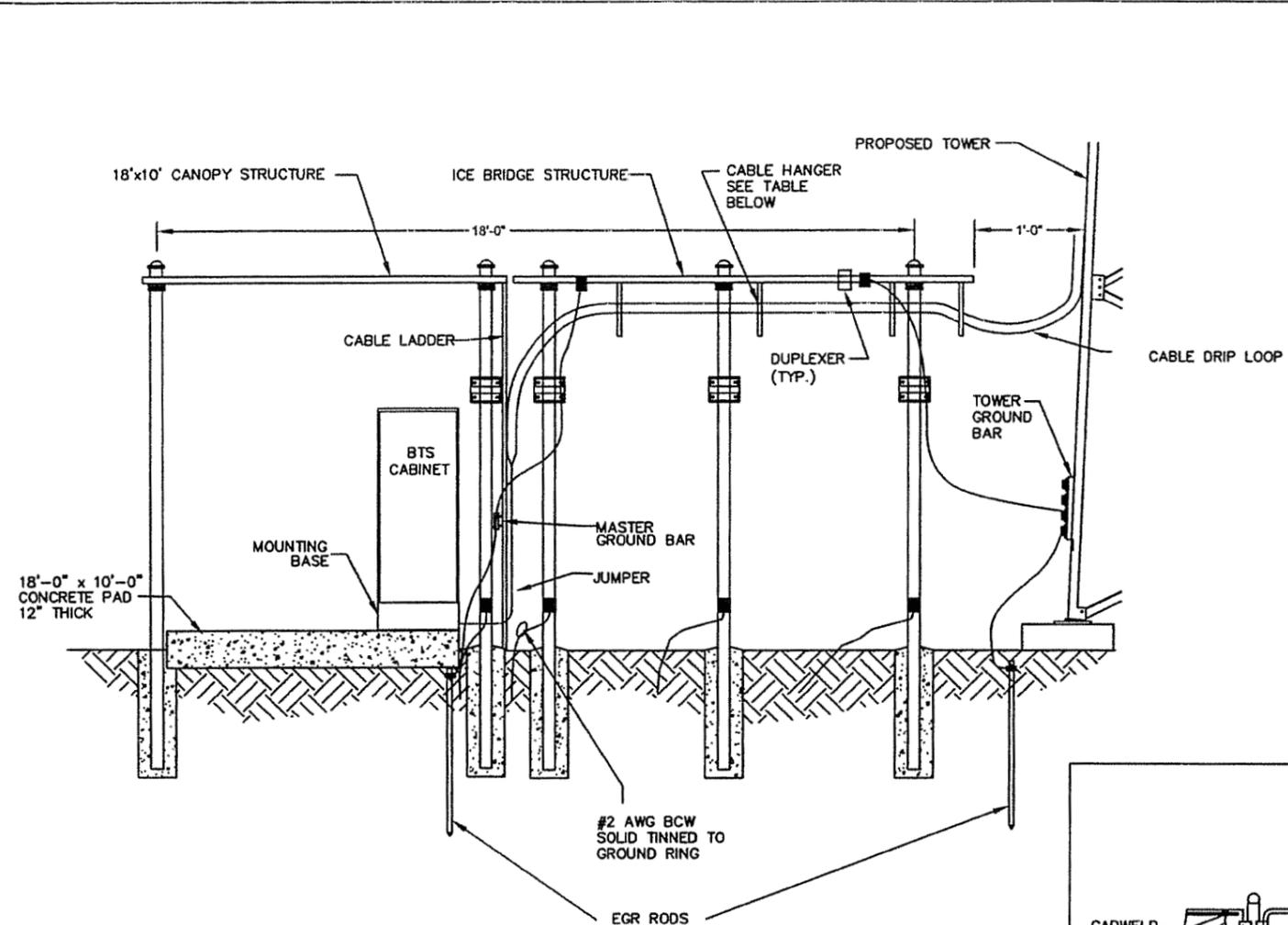


NOTE:
 * DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE
 * 1 GROUND BAR PER SECTOR

SECTOR GROUND BAR CONNECTION OF GROUND WIRE TO GROUNDING BAR (CIGBE)
 TOWER / MONOPOLE / ROOFTOP
 NOT TO SCALE

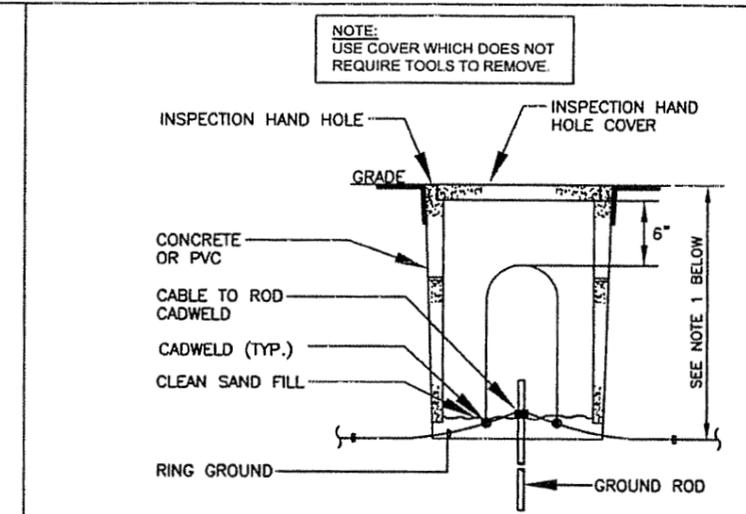


TOWER GROUND BARS (TOP OF TOWER) (MIDDLE OF TOWER- IF REQUIRED)
 NOTE: GROUND BAR ATTACHES DIRECTLY TO WAVEGUIDE- NO INSULATORS ARE REQUIRED



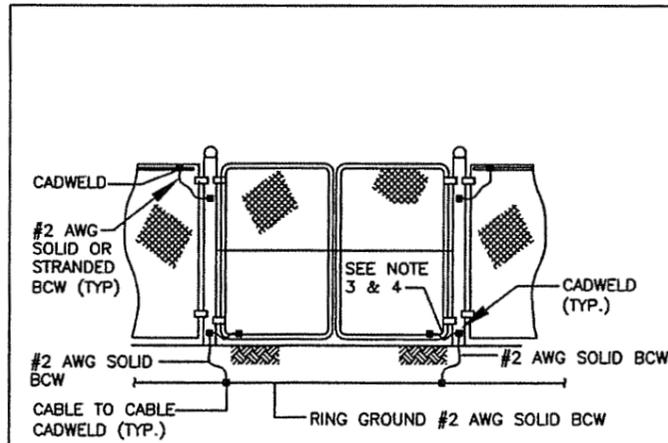
NOMINAL CABLE SIZE	CABLE TYPE NUMBER	CABLE HANGER TYPE NUMBER	MANUF. MIN. BEND RADIUS	MAX NO. OF CABLES/CND
1/2"	LDF4-50A	206706-1	5"	9
1/2"	FSJ4-50B	206706-1	1.25"	9
7/8"	LDF5-50A	206706-2	10"	3
1 1/4"	LDF6-50	206706-3	15"	1
1 5/8"	LDF7-50A	206706-4	20"	1

TRANSMISSION LINE GROUNDING - EQUIPMENT & SERVICE (SIDE ELEVATION)
NOT TO SCALE



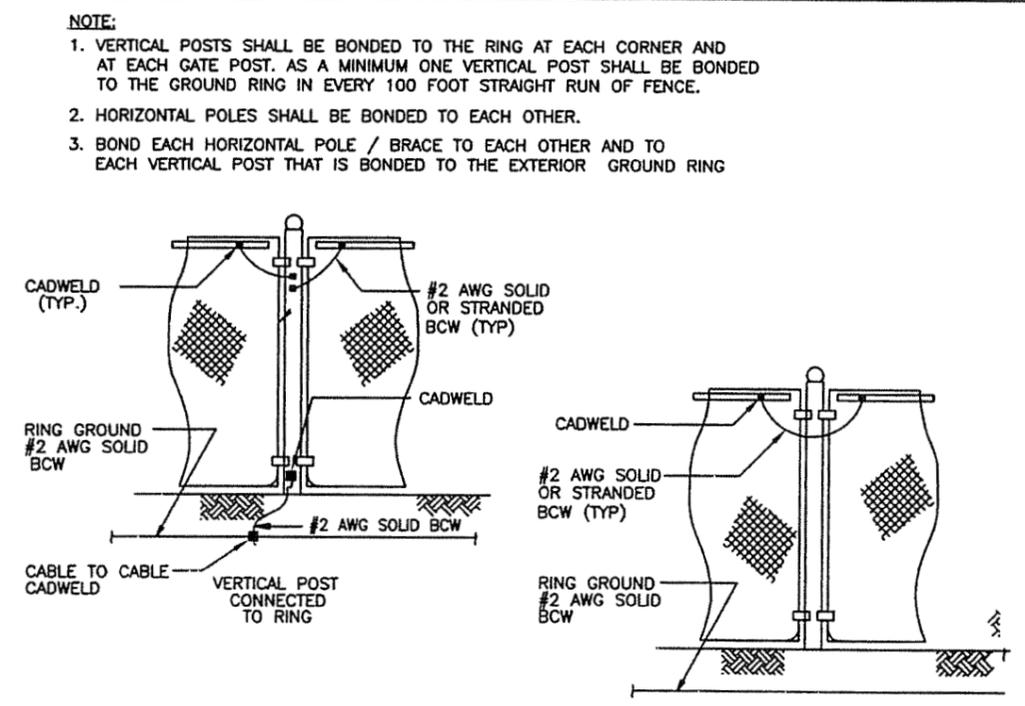
- NOTES:
- ELECTRICAL GROUNDING DESIGNER/ENGINEER TO DETERMINE DIMENSION WHICH SHALL BE BELOW THE FROST LINE OR 18" MINIMUM.
 - INSPECTION HAND HOLE MAY BE CONCRETE OR PVC AND SHALL BE A MINIMUM OF 6" IN WIDTH/DIAMETER

GROUND ROD W/ ACCESS AREA
INSPECTION WELL DETAIL
NOT TO SCALE



- NOTES:
- THE #2 AWG, BCW, FROM THE RING GROUND SHALL BE CADWELDED TO THE POST ABOVE GRADE.
 - BOND EACH HORIZONTAL POLE/BRACE TO EACH OTHER AND TO EACH VERTICAL POLE BONDED TO THE EXTERIOR GROUND RING
 - GATE JUMPER SHALL BE #4/0 AWG WELDING CABLE OR FLEXIBLE COPPER BRAID BURNDY TYPE B WITH SLEEVES ON EACH END DESIGNED FOR EXOTHERMIC WELDING.
 - GATE JUMPER SHALL BE INSTALLED SO THAT IT WILL NOT BE SUBJECTED TO DAMAGING STRAIN WHEN GATE IS FULLY OPEN IN EITHER DIRECTION.

FENCE GATE GROUNDING DETAIL
NOT TO SCALE



- NOTE:
- VERTICAL POSTS SHALL BE BONDED TO THE RING AT EACH CORNER AND AT EACH GATE POST. AS A MINIMUM ONE VERTICAL POST SHALL BE BONDED TO THE GROUND RING IN EVERY 100 FOOT STRAIGHT RUN OF FENCE.
 - HORIZONTAL POLES SHALL BE BONDED TO EACH OTHER.
 - BOND EACH HORIZONTAL POLE / BRACE TO EACH OTHER AND TO EACH VERTICAL POST THAT IS BONDED TO THE EXTERIOR GROUND RING

FENCE GROUNDING DETAIL
NOT TO SCALE

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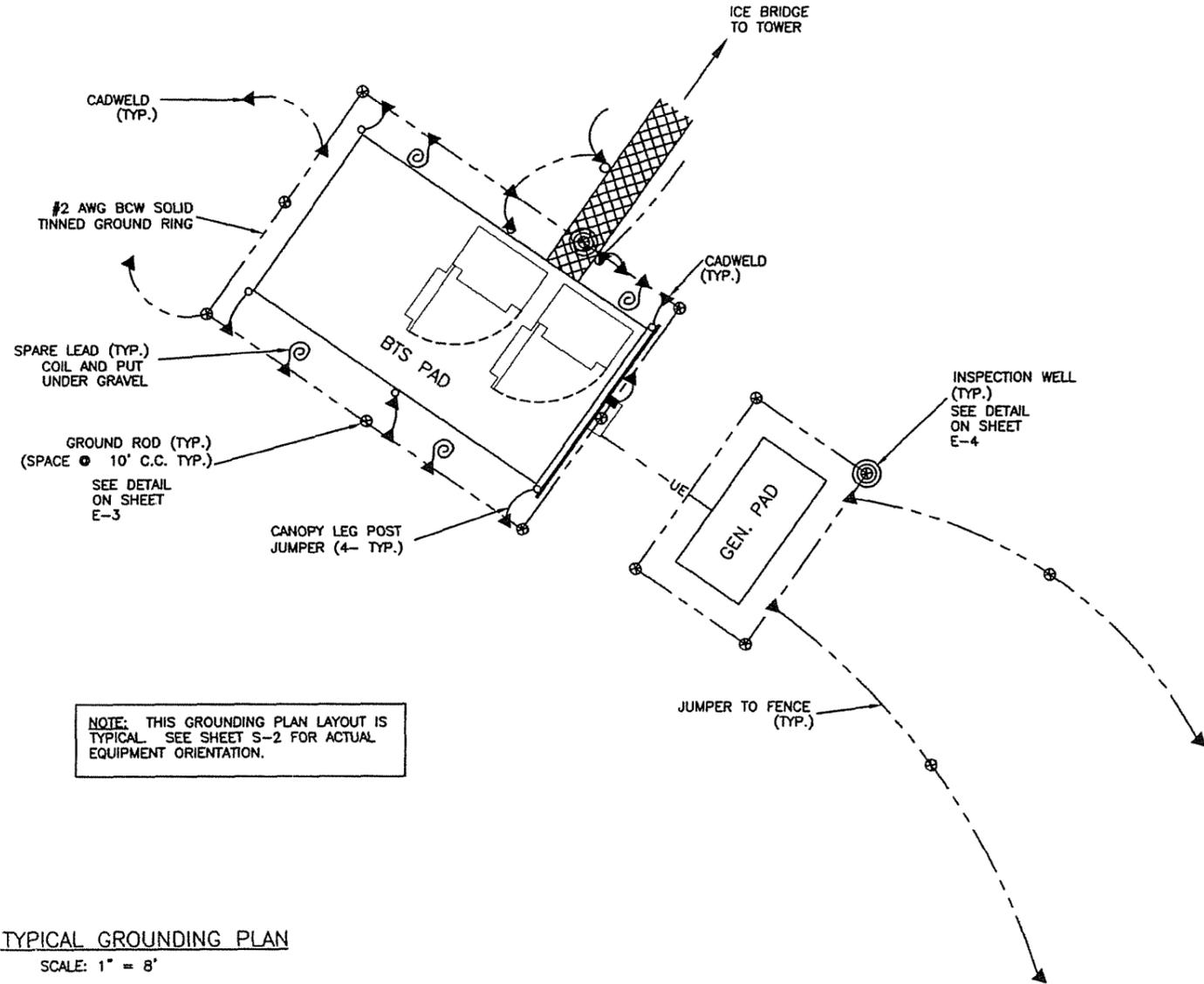
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SCALE: AS SHOWN DESIGNED BY: AJK DRAWN BY: JLS

SHEET E-4
 GROUNDING DETAILS
 DRAWING NUMBER
 25036.00004.04

GROUNDING NOTES

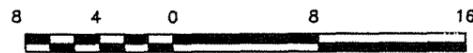
1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 10 OHMS OR LESS.
3. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDING AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
6. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE 45° BENDS MAXIMUM. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS IS PROHIBITED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR & EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 FT OF MAIN GROUND WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
20. INSTALL GROUND RODS FOR THE NEW GROUND RING. SEPARATION BETWEEN GROUND RODS SHOULD NOT BE LESS THAN THE LENGTH OF THE RODS NOR BE MORE THAN ONE AND ONE-HALF TIMES THE LENGTH OF THE RODS. CONNECT THE NEW RING TO EXISTING GROUND RING IN AT LEAST TWO SEPARATE PLACES.



NOTE: THIS GROUNDING PLAN LAYOUT IS TYPICAL. SEE SHEET S-2 FOR ACTUAL EQUIPMENT ORIENTATION.

TYPICAL GROUNDING PLAN

SCALE: 1" = 8'



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 WHEATON, IL 60187

KY-00-0817A / WOLF CREEK
 WV309A / CST WOLF
 ±520 SUTTON ROAD
 OLIVE HILL, KY 41164

				SHEET E-5		
				GROUNDING NOTES & DETAILS		
				DRAWING NUMBER		
				25036.00004.04		
NO.	DATE	REVISIONS	BY	CHK	APP'D	
1	07/21/08	REVISED PER NEW AT&T TEMPLATE DWGS	JLS	AJK	AJK	
0	05/02/08	ISSUED FOR REVIEW	JLS	AJK	AJK	
SCALE: AS SHOWN			DESIGNED BY: AJK		DRAWN BY: JLS	

AT&T Wireless RF Site Build Specification

Site Number: **WV WV309A** Candidate Name: **CST_Wolf**

TTV Date: _____ Site Build Status: Preliminary Final Issued: _____ 2C: _____
 Cingular Ranking: Primary CD: _____ On Air:

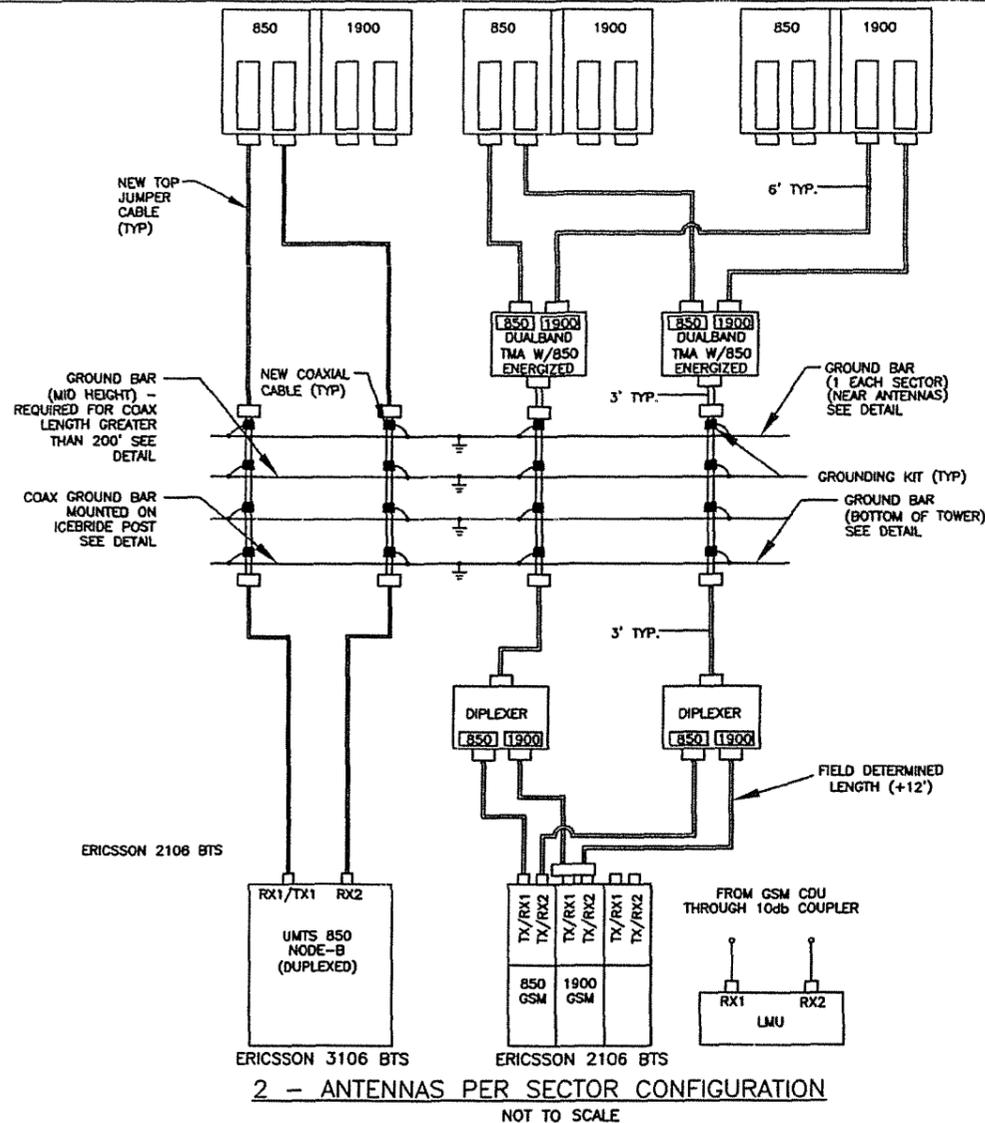
Struct. Height (ft): 300	GE AMSL (ft): 840	Structure Type: Build to Suite	
Lat: 38 22 24.2 Lon: 83 5 57.6	Source: NAD83	Structure Owner: Central State Towers	
Mounting Height / Antenna Spacing Distance	Sector 1 (Alpha)	Sector 2 (Beta)	Sector 3 (Gamma)
1. Rad Center	295 ft.	295 ft.	295 ft.
Spacial Diversity Vertical	10 ft.	10 ft.	10 ft.
Horizontal	10 ft.	0 ft.	10 ft.
Antenna / Cable Specification			
1. Azimuth Orientation	74 deg.	181 deg.	314 deg.
2. # of Ant / Ant Model GSM	2 DBXLH-8585A-VTM	2 DBXLH-8585A-VTM	2 DBXLH-8585A-VTM
# of Ant / Ant Model UMTS	1 DBXLH-8585A-VTM	1 DBXLH-8585A-VTM	1 DBXLH-8585A-VTM
CONFIGURATION			
Manufacturer / Polarization	Andrew / Dual +/-45	Andrew / Dual +/-45	Andrew / Dual +/-45
Antenna Gain / Fixed Elec. DT	13.3 / 0	13.3 / 0	13.3 / 0
Horiz / Vert 3dB Beamwidth	87 / 16	87 / 16	87 / 16
Dimensions L x W x H	48.3" x 12" x 7"	48.3" x 12" x 7"	48.3" x 12" x 7"
3. Downtilt (total)	GSM (2) UMTS (2) deg	GSM (2) UMTS (2) deg	GSM (2) UMTS (2) deg
Mechanical	0 / 0 deg	0 / 0 deg	0 / 0 deg
Remote Electrical	2 / 2 deg	2 / 2 deg	2 / 2 deg
4. Main Cable Diameter	AVA7-50 - 1 5/8"	AVA7-50 - 1 5/8"	AVA7-50 - 1 5/8"
Number	6	6	6
Estimated Length / Loss dB	315 ft. / 3.213	315 ft. / 3.213	315 ft. / 3.213
Bending Radius / Weight	15 in / 0.72 lbs/ft	15 in / 0.72 lbs/ft	15 in / 0.72 lbs/ft
5. Top Jmpr Length / Size	6' / 1/2" LDF4P	6' / 1/2" LDF4P	6' / 1/2" LDF4P
6. Bottom Jmpr Length / Size	6' / 1/2" SF	6' / 1/2" SF	6' / 1/2" SF
7. RBS Type	Ericsson 2206	Ericsson 2206	Ericsson 2206
8. # of TMA / TMA Type	2 KRY 112 75/1	2 KRY 112 75/1	2 KRY 112 75/1
9. # of GMA / GMA Type	0	0	0
10. # of Diplexer / Diplexer Type	2 LGP 21903	2 LGP 21903	2 LGP 21903

Comments/Rev. Notes
 This is the optimum set for configuration. We will need two antennas for GSM1900/GSM850 and One antenna for UMTS. Please see the plumbing diagram Antenna Config_WV_20 for visual.

Release Signature _____ Date _____ RF Engineer **Chris La Tendresse**

4/11/2008 10:30:44 AM

Prepared by: WFI



- NOTES:**
- ALL MATERIALS SHALL BE PROVIDED BY THE CONTRACTOR TO THE SUBCONTRACTOR FOR INSTALLATION.
 - SUBCONTRACTOR SHALL DOCUMENT AS-BUILT CABLE LENGTHS AND PROVIDE ANTENNA SERIAL NUMBERS ON RED-LINED DRAWINGS.
 - ANTENNAS SHALL BE PROCURED AND INSTALLED WITH DOWNTILT BRACKETS AND HEAVY DUTY CLAMPS SUPPLIED BY ANTENNA MANUFACTURER.
 - FOLLOW DETAIL FOR AT&T COAX COLOR CODING.
 - COAX GROUND KITS, COAX WEATHER PROOFING, SNAP-IN HANGER CLAMPS AND HOISTING GRIPS SHALL BE PROVIDED BY THE CONTRACTOR TO THE SUBCONTRACTOR FOR INSTALLATION.
 - RF DATA IS TO BE VERIFIED BY CONTRACTOR WITH AT&T PRIOR TO CONSTRUCTION.
 - ALL JUMPERS FROM TMA AND GROUND KITS TO BE SUPPORTED TO TOWER WITH STAINLESS STEEL BRACKETS OR STRAPS.

TAGS	SECTOR	ANTENNA TYPE	ANTENNA SERIAL NUMBER	ELEC. DOWN TILT	MECH DOWN TILT	AZIMUTH	ANTENNA RAD CTR	ANTENNA TIP HEIGHT	CABLE LENGTH	COAXIAL CABLE	TOP JUMPER	BOTTOM JUMPER	COLOR CODE	TMA TYPE	DIPLEXER	DC BLOCK Y/N
A1	1	DBXLH-8585A-VTM (51.4"x15.4"x5")		2'	0'	74°	295'	297'	300	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	1 GREEN STRIPE	KRY112 75/1	LGP 21903	N
A2	1	DBXLH-8585A-VTM (51.4"x15.4"x5")		2'	0'	74°	295'	297'	300	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	2 GREEN STRIPES	KRY112 75/1	LGP 21903	N
A3	-	-		-	-	-	-	-	-	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	3 GREEN STRIPES	-	-	N
A4	1	DBXLH-8585A-VTM (51.4"x15.4"x5")		2'	0'	74°	295'	297'	300	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	4 GREEN STRIPES	KRY112 75/1	LGP 21903	N
B1	2	DBXLH-8585A-VTM (51.4"x15.4"x5")		2'	0'	181°	295'	297'	300	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	1 BLUE STRIPE	KRY112 75/1	LGP 21903	N
B2	2	DBXLH-8585A-VTM (51.4"x15.4"x5")		2'	0'	181°	295'	297'	300	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	2 BLUE STRIPES	KRY112 75/1	LGP 21903	N
B3	-	-		-	-	-	-	-	-	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	3 BLUE STRIPES	-	-	N
B4	2	DBXLH-8585A-VTM (51.4"x15.4"x5")		2'	0'	181°	295'	297'	300	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	4 BLUE STRIPES	KRY112 75/1	LGP 21903	N
C1	3	DBXLH-8585A-VTM (51.4"x15.4"x5")		2'	0'	314°	295'	297'	300	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	1 WHITE STRIPE	KRY112 75/1	LGP 21903	N
C2	3	DBXLH-8585A-VTM (51.4"x15.4"x5")		2'	0'	314°	295'	297'	300	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	2 WHITE STRIPES	KRY112 75/1	LGP 21903	N
C3	-	-		-	-	-	-	-	-	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	3 WHITE STRIPES	-	-	N
C4	3	DBXLH-8585A-VTM (51.4"x15.4"x5")		2'	0'	314°	295'	297'	300	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	4 WHITE STRIPES	KRY112 75/1	LGP 21903	N

N.T.S.

COLOR CODE DETAILS & NOTES

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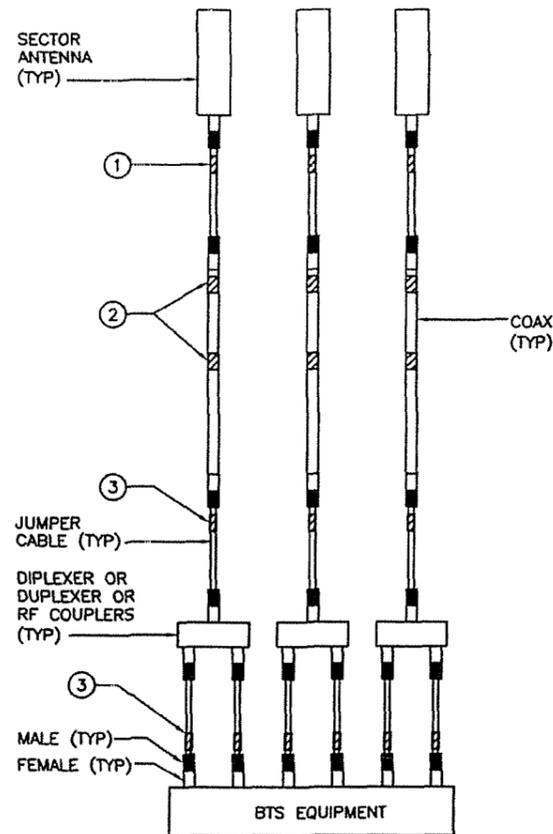
CST
 CENTRAL STATES TOWER, INC.
 323 SOUTH HALE STREET
 SUITE 100
 WHEATON, IL 60187

KY-00-0817A / WOLF CREEK
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 ±520 SUTTON ROAD
 OLIVE HILL, KY 41164

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1	07/21/08	REVISED PER NEW AT&T TEMPLATE DWGS	JLS	AJK	AJK
0	05/02/08	ISSUED FOR REVIEW	JLS	AJK	AJK

SCALE: AS SHOWN DESIGNED BY: AJK DRAWN BY: JLS

SHEET E-6
 RF CONFIG. & ANTENNA SCHEMATICS
 DRAWING NUMBER
 25036.00004.04

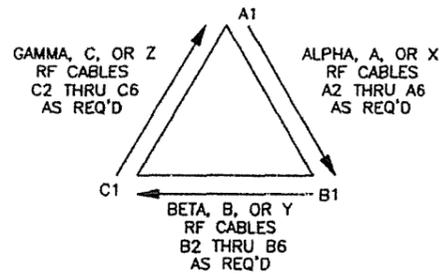


CABLE MARKING LOCATIONS DIAGRAM

ALL RF CABLE SHALL BE MARKED AS PER CABLE MARKING LOCATIONS TABLE BELOW:

CABLE MARKING LOCATIONS TABLE			
NO.	TAPE	TAG	LOCATIONS
1.	X		EACH TOP-JUMPER SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS.
2.	X		EACH MAIN COAX SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS NEAR THE TOP-JUMPER CONNECTION AND WITH (1) SET OF 3/4" WIDE COLOR BANDS JUST PRIOR TO ENTERING THE BTS OR TRANSMITTER BUILDING.
3.	X		ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.
4.	*	*	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.

(* - DENOTES TAG OR TAPE.)



NOTE:
SECTOR ORIENTATION/AZIMUTH WILL VARY FROM REGION TO REGION AND IS SITE SPECIFIC. REFER TO RF REPORT FOR EACH SPECIFIC SITE TO DETERMINE THE SECTOR ORIENTATION.

ANTENNA SECTOR AND CABLE DEFINITION



TO PROVIDE ADDITIONAL IDENTIFICATION EACH RF CABLE SHALL BE IDENTIFIED WITH A METAL TAG MADE OF STAINLESS STEEL OR BRASS AND STAMPED WITH THE SECTOR, CABLE NUMBER, AND "AT&T" TO IDENTIFY AT&T MOBILITY CABLES. THE ID MARKING LOCATIONS SHOULD BE AS PER "CABLE MARKING LOCATIONS TABLE". THE TAG SHOULD BE ATTACHED WITH CORROSION PROOF WIRE AROUND THE CABLE. PREFERRED TAG LABELING SHOULD BE AS SHOWN ABOVE "TDMA LINE TAG", "GSM LINE TAG" AND "UMTS LINE TAG".

CABLE MARKING TAGS

NOTES:

1. USING COLOR BANDS ON THE CABLES, MARK ALL RF CABLES BY SECTOR AND CABLE NUMBER, AS SHOWN ON "CABLE MARKING COLOR CONVENTION TABLE" (EX. SECTOR ALPHA, CABLE A3 WOULD BE THREE GREEN BANDS)
2. THE STANDARD CABLE MARKING TAPE IS BASED ON THE 5 "NEMA" COLORED TAPES: GREEN, BLUE, WHITE, RED AND ORANGE.
3. UMTS CABLES WILL BE MARKED WITH A MINIMUM OF 3" WIDE AT TOP AND MIDDLE OF TOWER, AND 2" WIDE AT THE BOTTOM. ALL JUMPERS SHALL BE INCLUDED.
4. ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE INSTALLED USING A MINIMUM OF (3) WRAPS OF TAPE AND SHALL BE NEATLY TRIMMED AND SMOOTHED OUT TO AVOID UNWRAPPING.
5. ALL COLOR CODE TAPE SHALL BE 3" WIDE AT TOP AND MIDDLE OF TOWER, AND 2" WIDE AT THE BOTTOM. ALL JUMPERS SHALL BE INCLUDED

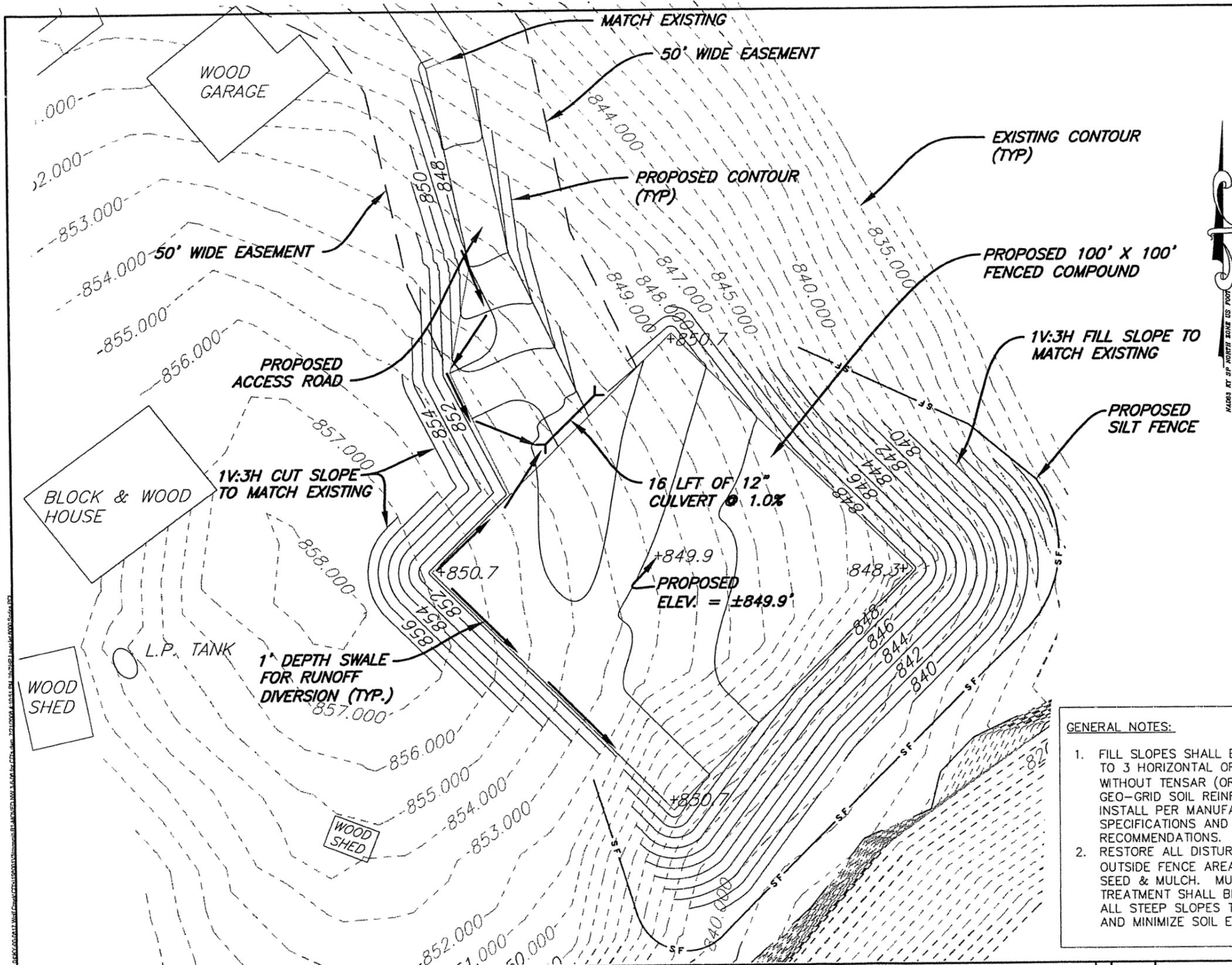
COAX COLOR CODING AND IDENTIFICATION DETAIL FOR OVERLAY

SCALE: N.T.S.

FSA3 - CABLE MARKING COLOR CONVENTION TABLE

SECTOR	850 TDMA/GSM		1900 TDMA/GSM		850 UMTS (FUTURE)		1900 UMTS	
	CABLE A1	CABLE A2	CABLE A3	CABLE A4	CABLE UMTS1	CABLE UMTS2	CABLE UMTS3	CABLE UMTS4
SECTOR ALPHA, A, OR X	ONE (1) 3/4" GRN	TWO (2) 3/4" GRN	THREE (3) 3/4" GRN	FOUR (4) 3/4" GRN	ONE (1) 1 1/2" GRN 3/4" ORG	TWO (2) 1 1/2" GRN 3/4" ORG	THREE (3) 1 1/2" GRN 3/4" ORG	FOUR (4) 1 1/2" GRN 3/4" ORG
SECTOR BETA, B, OR Y	ONE (1) 3/4" BLUE	TWO (2) 3/4" BLUE	THREE (3) 3/4" BLUE	FOUR (4) 3/4" BLUE	ONE (1) 1 1/2" BLUE 3/4" ORG	TWO (2) 1 1/2" BLUE 3/4" ORG	THREE (3) 1 1/2" BLUE 3/4" ORG	FOUR (4) 1 1/2" BLUE 3/4" ORG
SECTOR GAMMA, C, OR Z	ONE (1) 3/4" WHT	TWO (2) 3/4" WHT	THREE (3) 3/4" WHT	FOUR (4) 3/4" WHT	ONE (1) 1 1/2" WHT 3/4" ORG	TWO (2) 1 1/2" WHT 3/4" ORG	THREE (3) 1 1/2" WHT 3/4" ORG	FOUR (4) 1 1/2" WHT 3/4" ORG
SECTOR DELTA, D, OR W	ONE (1) 3/4" RED	TWO (2) 3/4" RED	THREE (3) 3/4" RED	FOUR (4) 3/4" RED	ONE (1) 1 1/2" RED 3/4" ORG	TWO (2) 1 1/2" RED 3/4" ORG	THREE (3) 1 1/2" RED 3/4" ORG	FOUR (4) 1 1/2" RED 3/4" ORG

MICROWAVE YELLOW

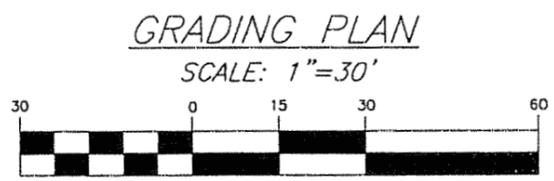


- SITE GRADING NOTES:**
1. SITE HAS BEEN ROUGHLY GRADED AND ALTERED SINCE THE ORIGINAL TOPO CONTOURS WERE MAPPED.
 2. TEMPORARY GRADING EASEMENTS MAY BE REQUIRED FOR EARTHWORK PERFORMED OUTSIDE OF THE LEASE AREA AND ACCESS/UTILITY EASEMENT.
 3. GRADE SITE TO DIVERT STORM WATER RUNOFF IN SHALLOW DITCHES OR SWALES FROM THE UPHILL SIDE OF LEASE AREA TO BYPASS AROUND THE SIDES OF THE LEASE AREA.
 4. INSTALL TEMPORARY AND PERMANENT SOIL EROSION CONTROL DEVICES SUCH AS MULCH BLANKETS AND/OR ROCK CHECK DAMS AS REQUIRED TO AVOID EROSION NEAR THE LEASE AREA AND ALONG ROAD DITCHES.
 5. REMOVE ALL TOPSOIL, ORGANIC MATERIAL, FROZEN SOIL OR CLODS PRIOR TO PLACING ENGINEERED FILL MATERIAL.
 6. SCARIFY SURFACE AND PROPERLY BENCH PRIOR TO PLACEMENT OF ENGINEERED FILL.
 7. ENGINEERED FILL SHALL BE FREE FROM TOPSOIL, ORGANIC MATERIAL, FROZEN SOIL, CLODS OR OTHER HARMFUL MATERIAL.
 8. SPREAD ENGINEERED FILL IN LEVEL LIFTS OF 9 INCHES OR LESS (LOOSE THICKNESS) AND COMPACT TO 95% MAXIMUM DRY DENSITY PER ASTM D1557 (MODIFIED PROCTOR).
 9. ALL ENGINEERED FILL SHALL BE PLACED AT OR NEAR OPTIMUM MOISTURE CONTENT.
 10. A QUALIFIED GEOTECHNICAL ENGINEER SHOULD SUPERVISE ALL GEOTECHNICAL RELATED WORK, INCLUDING FOUNDATION CONSTRUCTION, SUBGRADE PREPARATION, AND ENGINEERED FILL PLACEMENT. THE GEOTECHNICAL ENGINEER SHOULD PERFORM THE APPROPRIATE TESTING TO CONFIRM THE GEOTECHNICAL CONDITIONS GIVEN IN THE SOIL BORING AND ROCK CORING INVESTIGATION REPORT ARE FOUND DURING CONSTRUCTION.
 11. THE CONTRACTOR SHALL, UPON BECOMING AWARE OF SUBSURFACE OR LATENT PHYSICAL CONDITIONS DIFFERING FROM THOSE DISCLOSED BY THE ORIGINAL SOIL INVESTIGATION WORK, PROMPTLY NOTIFY THE OWNER VERBALLY TO PERMIT VERIFICATION OF THE DIFFERING CONDITIONS, AND IN WRITING, AS TO THE NATURE OF THE DIFFERING CONDITIONS. NO CLAIM BY THE CONTRACTOR FOR ANY CONDITIONS DIFFERING FROM THOSE ANTICIPATED IN THE PLANS AND SPECIFICATIONS AND DISCLOSED BY THE SOIL STUDIES WILL BE ALLOWED UNLESS THE CONTRACTOR HAS SO NOTIFIED THE OWNER, VERBALLY AND IN WRITING, AS REQUIRED ABOVE, OF SUCH DIFFERING SUBSURFACE CONDITIONS.

ESTIMATED EARTHWORK QUANTITIES FOR LEASE AREA & PARKING AREA

CUT (CYD)	FILL (CYD)
±796	±1046
SIDESLOPE 1V:3H	SIDESLOPE 1V:3H
EXCESS: ±250 CYD FILL	
ASSUMED TOPSOIL THICKNESS: 6"	

- GENERAL NOTES:**
1. FILL SLOPES SHALL BE 1 VERTICAL TO 3 HORIZONTAL OR FLATTER WITHOUT TENSAR (OR EQUAL) GEO-GRID SOIL REINFORCEMENT. INSTALL PER MANUFACTURERS SPECIFICATIONS AND RECOMMENDATIONS.
 2. RESTORE ALL DISTURBED AREAS OUTSIDE FENCE AREA W/ TOPSOIL, SEED & MULCH. MULCH BLANKET TREATMENT SHALL BE USED ON ALL STEEP SLOPES TO STABILIZE AND MINIMIZE SOIL EROSION.



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				SCALE: AS SHOWN DESIGNED BY: AJK DRAWN BY: JLS	NO. DATE REVISIONS BY	

SITE WORK GENERAL NOTES:

1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING & EXCAVATION.
3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
5. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.
6. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION.
7. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE.
8. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
9. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
10. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
11. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
12. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS OTHERWISE NOTED.
2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION". PAINTED SURFACES SHALL BE TOUCHED UP.
3. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4") CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
5. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. CONCRETE CYLINDER BREAK TESTS SHALL BE PERFORMED ON 7, 14 AND 28 DAYS FOR THE TOWER FOUNDATION.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
 CONCRETE CAST AGAINST EARTH.....3 IN.
 CONCRETE EXPOSED TO EARTH OR WEATHER:
 #6 AND LARGER2 IN.
 #5 AND SMALLER & WWF.....1 1/2 IN.
 CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
 SLAB AND WALL3/4 IN.
 BEAMS AND COLUMNS.....1 1/2 IN.
5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
 CONTRACTOR - CELLERE
 SUBCONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION)
 OWNER - CENTRAL STATE TOWERS
 OEM - ORIGINAL EQUIPMENT MANUFACTURE
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO SCALE AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
7. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
8. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING.
9. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
10. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
11. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
12. CONSTRUCTION SHALL COMPLY WITH SPECIFICATION 24782-000-3APS-A00Z-00002, "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T GSM SITES."

APPLICABLE BUILDING CODES AND STANDARDS:

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

International Building Code (IBC 2000)

National Electrical Code (NEC 2002 part 8 state amendments) with local

UnderWriter Laboratories Approved Electrical Products
 Life Safety Code NFPA - 101

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING

AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD,

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) EIA-222-G, STRUCTURAL STANDARD FOR STRUCTURAL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM

IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT

IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")

TIA 607 COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR

TELCORDIA GR-1503 COAXIAL CABLE CONNECTIONS

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ABBREVIATIONS AND SYMBOLS

ABBREVIATIONS

- AGL ABOVE GRADE LEVEL
- BTS BASE TRANSCIVER STATION
- (E) EXISTING
- MIN MINIMUM
- N.T.S. NOT TO SCALE
- REF REFERENCE
- RF RADIO FREQUENCY
- T.B.D. TO BE DETERMINED
- T.B.R. TO BE RESOLVED
- TYP TYPICAL
- REQ REQUIRED
- EGR EQUIPMENT GROUND RING
- AWG AMERICAN WIRE GAUGE
- MGB MASTER GROUND BUS
- EG EQUIPMENT GROUND
- BCW BARE COPPER WIRE
- SIAD SMART INTEGRATED ACCESS DEVICE
- GEN GENERATOR
- IGR INTERIOR GROUND RING (HALO)
- RBS RADIO BASE STATION

SYMBOLS

- SOLID GROUND BUS BAR
- SOLID NEUTRAL BUS BAR
- SUPPLEMENTAL GROUND CONDUCTOR
- 2--POLE THERMAL-MAGNETIC CIRCUIT BREAKER
- SINGLE-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
- CHEMICAL GROUND ROD
- GROUND ROD
- DISCONNECT SWITCH
- METER
- CADWELD TYPE CONNECTION
- COMPRESSION TYPE CONNECTION
- GROUNDING WIRE

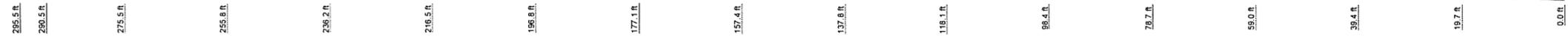
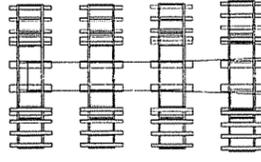
Wilcox Professional Services
 ONE MADISON AVENUE
 CADILLAC, MI 49601
 (231) 775-7755 OFFICE
 (231) 775-3135 FAX
 www.wilcox.us



CENTRAL STATES TOWER, INC.
 323 SOUTH HALE STREET
 SUITE 100
 WHEATON, IL 60187

KY-00-0817A / WOLF CREEK
 WV309A / CST WOLF
 ±520 SUTTON ROAD
 OLIVE HILL, KY 41164

				SHEET GN-1		
				GENERAL NOTES		
				DRAWING NUMBER		
				25036.00004.04		
1	07/21/08	REVISED PER NEW AT&T TEMPLATE DWGS	JLS	AJK	AJK	
0	05/02/08	ISSUED FOR REVIEW	JLS	AJK	AJK	
NO.	DATE	REVISIONS	BY	CHK	APP'D	
SCALE: AS SHOWN			DESIGNED BY: AJK		DRAWN BY: JLS	



Section	Legs	Leg Grade	Diagonals	Diagonal Grade	Top Chits	Face Width (ft)	# Panels @ (ft)	Weight (lb)
11	A	P3x 226	L1 1/2x1 1/2x1/8	A36M-50	N/A			102.0
12	A	P2x 154					3 @ 4.97222	105.0
13	A	P3x 226	L1 3/4x1 3/4x3/16	A36M-50		5.60714	24 @ 4.89917	1274.5
14	A	P5x 258	L2 1/2x2 1/2x3/16	A36M-50		7.21425		1413.8
15	A	P6x 28	L2 1/2x2 1/2x3/16	A36M-50		8.82143		1916.5
16	A	P8x 322	L3 1/2x3 1/2	A36M-50		10.4285		2542.3
17	A	P8x 322	L3 1/2x3 1/2	A36M-50		12.0357		2913.0
18	A	P10x 355	L3 1/2x3 1/2x1/4	A36M-50		13.6425		3244.1
19	A	P10x 355	L3 1/2x3 1/2x1/4	A36M-50		15.25		3524.1
20	A	P10x 355	L3 1/2x3 1/2x1/4	A36M-50		16.857		3844.7
21	A	P10x 355	L3 1/2x3 1/2x1/4	A36M-50		18.4643		4165.5
22	A	P10x 355	L3 1/2x3 1/2x1/4	A36M-50		20.0714	24 @ 6.53222	4486.3
23	A	P12x 375	L4 1/2x5/16	A36M-50		21.6786		4807.3
24	A	P12x 375	L4 1/2x5/16	A36M-50		23.2857		5128.3
25	A	P12x 375	L4 1/2x5/16	A36M-50		24.8928		5449.3
26	A	P12x 375	L4 1/2x5/16	A36M-50		26.5		5770.3
27	A	P12x 375	L4 1/2x5/16	A36M-50		28.1071		6091.3
28	A	P12x 375	L4 1/2x5/16	A36M-50		29.7143		6412.3
29	A	P12x 375	L4 1/2x5/16	A36M-50		31.3214		6733.3
30	A	P12x 375	L4 1/2x5/16	A36M-50		32.9286		7054.3
31	A	P12x 375	L4 1/2x5/16	A36M-50		34.5357		7375.3
32	A	P12x 375	L4 1/2x5/16	A36M-50		36.1429		7696.3
33	A	P12x 375	L4 1/2x5/16	A36M-50		37.75		8017.3
34	A	P12x 375	L4 1/2x5/16	A36M-50		39.3571		8338.3
35	A	P12x 375	L4 1/2x5/16	A36M-50		40.9643		8659.3
36	A	P12x 375	L4 1/2x5/16	A36M-50		42.5714		8980.3
37	A	P12x 375	L4 1/2x5/16	A36M-50		44.1786		9301.3
38	A	P12x 375	L4 1/2x5/16	A36M-50		45.7857		9622.3
39	A	P12x 375	L4 1/2x5/16	A36M-50		47.3929		9943.3
40	A	P12x 375	L4 1/2x5/16	A36M-50		49.0		10264.3

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
BM-1207	295	BM-1207	275
(411x6" Antenna	285	(411x6" Antenna	275
(411x6" Antenna	285	(411x6" Antenna	275
(411x6" Antenna	285	(411x6" Antenna	275
BM-1207	285	BM-1207	265
(411x6" Antenna	285	(411x6" Antenna	265
(411x6" Antenna	285	(411x6" Antenna	265
(411x6" Antenna	285	(411x6" Antenna	265

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	P1 5x 145	C	1 @ 4.91667
B	L1 1/2x1 1/2x1/8		

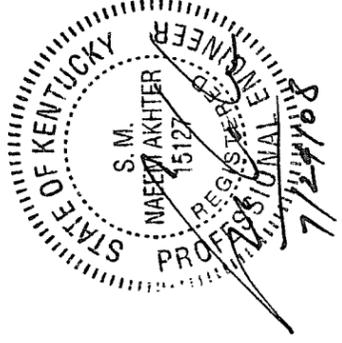
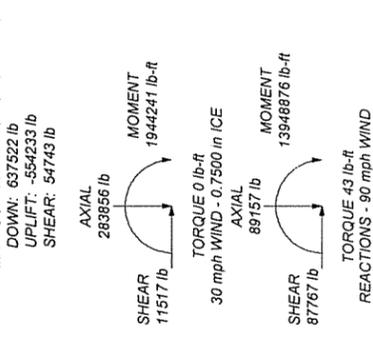
MATERIAL STRENGTH

GRADE	FY	FU	GRADE	FY	FU
A500-50	50 ksi	62 ksi	A36M-50	50 ksi	65 ksi

TOWER DESIGN NOTES

1. Tower is located in Carter County, Kentucky.
2. Tower designed for Exposure C to the TIA-222-G Standard.
3. Tower designed for a 90 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 30 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. All members stamped for identification in accordance with EIA/TIA-222G.
7. Lock washers provided for all brace bolted connections. Brace connection bolts meet A325X structural joint specification. All X-braces are center bolted.
8. Step bolt climb ladder provided on single leg with fall protection cable.
9. All members hot dipped galvanized after fabrication per ASTM A123. Hardware (Bolts, Nuts, Etc.) galvanized per ASTM B695 Class 50 (Mechanical).
10. All welded joints and connections certified for integrity and quality per AWS D1.1

MAX. CORNER REACTIONS AT BASE:



GLENMARTIN Job: **Site: Wolf Creek SO: 18926**
 Project: 295' HS 90mph-G (18754 model)
 Client: Cellere
 Drawn by: GM
 Date: 07/15/08
 Scale: NTS
 Phone: (660) 882-2734
 Path: C:\Documents and Settings\GlenMartin\My Documents\Projects\18926\18926.dwg
 FAX: (660) 882-2700
 Dwg No: E-1

GLENMARTIN GLENMARTIN 13620 Old Hwy 40 Boonville, Mo 65233 Phone: (660) 882-2734 FAX: (660) 882-7200	Job Site: Wolf Creek SO: 18926	Page 1 of 10
	Project 295' HS 90mph-G (18754 geometry)	Date 12:10:49 07/15/08
	Client Cellere	Designed by GM

SITE NAME: Wolf Creek
SITE #: KY-00-0817
SALES ORDER: 18926
SITE ADDRESS: Carter County, Kentucky

Purchaser: Cellere
Project Contact: Braxton Dougherty
231-929-4555
bdougherty@cellere.us

Contact Address:
Attn: Braxton Dougherty
Cellere, LLC
4110 Copper Ridge Drive
Ste 204
Traverse City MI 49684

All documents and details prepared in accordance with applicable EIA/TIA-222-G under the direct supervision of a registered professional engineer under the laws of the state of Kentucky, Enclosed calculations are certified and meet all specified purchaser requirements.

CERTIFIED BY: Naeem Akhter

DATE REVIEWED: 7-24-08



GLENMARTIN GLENMARTIN 13620 Old Hwy 40 Boonville, Mo 65233 Phone: (660) 882-2734 FAX: (660) 882-7200	Job Site: Wolf Creek SO: 18926	Page 2 of 10
	Project 295' HS 90mph-G (18754 geometry)	Date 12:10:49 07/15/08
	Client Cellere	Designed by GM

Tower Input Data

The main tower is a 3x free standing tower with an overall height of 295.52 ft above the ground line.

The base of the tower is set at an elevation of 0.00 ft above the ground line.

The face width of the tower is 4.00 ft at the top and 26.50 ft at the base.

This tower is designed using the TIA-222-G standard.

The following design criteria apply:

Tower is located in Carter County, Kentucky.

Basic wind speed of 90 mph.

Structure Class II.

Exposure Category C.

Topographic Category 1.

Crest Height 0.00 ft.

Nominal ice thickness of 0.7500 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

A wind speed of 30 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

All members stamped for identification in accordance with EIA/TIA-222G..

Lock washers provided for all brace bolted connections. Brace connection bolts meet A325X structural joint specification. All X-braces are center bolted..

Step bolt climb ladder provided on single leg with fall protection cable..

All members hot dipped galvanized after fabrication per ASTM A123. Hardware (Bolts, Nuts, Etc.) galvanized per ASTM B695 Class 50 (Mechanical)..

All welded joints and connections certified for integrity and quality per AWS D1:1..

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

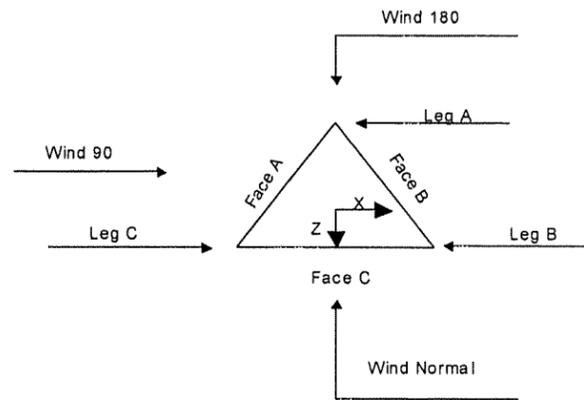
Stress ratio used in tower member design is 1.

Local bending stresses due to climbing loads, feedline supports, and appurtenance mounts are not considered.

Options

- | | | |
|-------------------------------------|-------------------------------------|--------------------------------------|
| Consider Moments - Legs | √ Distribute Leg Loads As Uniform | √ Treat Feedline Bundles As Cylinder |
| Consider Moments - Horizontals | Assume Legs Pinned | Use ASCE 10 X-Brace Ly Rules |
| Consider Moments - Diagonals | √ Assume Rigid Index Plate | √ Calculate Redundant Bracing Forces |
| Use Moment Magnification | √ Use Clear Spans For Wind Area | Ignore Redundant Members in FEA |
| √ Use Code Stress Ratios | √ Use Clear Spans For KL/r | SR Leg Bolts Resist Compression |
| √ Use Code Safety Factors - Guys | Retension Guys To Initial Tension | √ All Leg Panels Have Same Allowable |
| Escalate Ice | Bypass Mast Stability Checks | Offset Girt At Foundation |
| Always Use Max Kz | Use Azimuth Dish Coefficients | Consider Feedline Torque |
| Use Special Wind Profile | √ Project Wind Area of Appurt | Include Angle Block Shear Check |
| √ Include Bolts In Member Capacity | Autocalc Torque Arm Areas | Poles |
| √ Leg Bolts Are At Top Of Section | √ SR Members Have Cut Ends | Include Shear-Torsion Interaction |
| √ Secondary Horizontal Braces Leg | Sort Capacity Reports By Component | Always Use Sub-Critical Flow |
| Use Diamond Inner Bracing (4 Sided) | √ Triangulate Diamond Inner Bracing | Use Top Mounted Sockets |
| Add IBC 6D+W Combination | | |

GLENMARTIN 13620 Old Hwy 40 Boonville, Mo 65233 Phone: (660) 882-2734 FAX: (660) 882-7200	Job Site: Wolf Creek SO: 18926	Page 3 of 10
	Project 295' HS 90mph-G (18754 geometry)	Date 12:10:49 07/15/08
	Client Cellere	Designed by GM



Triangular Tower

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	295.52 - 290.52	18.910	47	0.7416	0.0000
T2	290.52 - 275.52	18.131	47	0.7376	0.0000
T3	275.52 - 255.84	15.844	47	0.6795	0.0000
T4	255.84 - 236.16	13.163	47	0.5929	0.0000
T5	236.16 - 216.48	10.829	47	0.5166	0.0000
T6	216.48 - 196.8	8.834	47	0.4307	0.0000
T7	196.8 - 177.12	7.163	47	0.3618	0.0000
T8	177.12 - 157.44	5.720	47	0.3157	0.0000
T9	157.44 - 137.76	4.468	47	0.2687	0.0000
T10	137.76 - 118.08	3.410	47	0.2212	0.0000
T11	118.08 - 98.4	2.524	47	0.1876	0.0000
T12	98.4 - 78.72	1.777	47	0.1536	0.0000
T13	78.72 - 59.04	1.164	47	0.1195	0.0000
T14	59.04 - 39.36	0.691	47	0.0850	0.0000
T15	39.36 - 19.68	0.340	47	0.0570	0.0000
T16	19.68 - 0	0.109	43	0.0286	0.0000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
295.00	BM-1207	47	18.829	0.7414	0.0000	93027
285.00	BM-1207	47	17.274	0.7225	0.0000	25319
275.00	BM-1207	47	15.767	0.6770	0.0000	10978
265.00	BM-1207	47	14.363	0.6310	0.0000	12220

GLENMARTIN GLENMARTIN 13620 Old Hwy 40 Boonville, Mo 65233 Phone: (660) 882-2734 FAX: (660) 882-7200	Job Site: Wolf Creek SO: 18926	Page 4 of 10
	Project 295' HS 90mph-G (18754 geometry)	Date 12:10:49 07/15/08
	Client Cellere	Designed by GM

Maximum Tower Deflections - Design Wind

Section No	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	295.52 - 290.52	68.175	18	2.6741	0.0002
T2	290.52 - 275.52	65.366	18	2.6597	0.0002
T3	275.52 - 255.84	57.121	18	2.4502	0.0002
T4	255.84 - 236.16	47.458	18	2.1380	0.0002
T5	236.16 - 216.48	39.042	18	1.8630	0.0002
T6	216.48 - 196.8	31.850	18	1.5533	0.0002
T7	196.8 - 177.12	25.823	18	1.3047	0.0001
T8	177.12 - 157.44	20.622	18	1.1383	0.0001
T9	157.44 - 137.76	16.106	18	0.9690	0.0001
T10	137.76 - 118.08	12.290	18	0.7976	0.0001
T11	118.08 - 98.4	9.098	18	0.6763	0.0001
T12	98.4 - 78.72	6.406	18	0.5538	0.0000
T13	78.72 - 59.04	4.195	18	0.4307	0.0000
T14	59.04 - 39.36	2.491	18	0.3065	0.0000
T15	39.36 - 19.68	1.226	18	0.2054	0.0000
T16	19.68 - 0	0.394	18	0.1031	0.0000

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
295.00	BM-1207	18	67.883	2.6733	0.0002	25166
285.00	BM-1207	18	62.278	2.6053	0.0002	7021
275.00	BM-1207	18	56.847	2.4411	0.0002	3054
265.00	BM-1207	18	51.784	2.2755	0.0002	3399

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load lb	Ratio Load Allowable	Allowable Ratio	Criteria
T1	295.52	Leg	A325X	0.7500	4	0.08	29820.60	0.000 ✓	1	Bolt Tension
		Diagonal	A325X	0.5000	1	1771.86	7312.50	0.242 ✓	1	Member Bearing
T2	290.52	Leg	A325X	0.7500	4	1079.89	29820.60	0.036 ✓	1	Bolt Tension
		Diagonal	A325X	0.5000	1	4924.84	7312.50	0.673 ✓	1	Member Bearing
T3	275.52	Leg	A325X	1.0000	4	8674.69	53014.40	0.164 ✓	1	Bolt Tension
		Diagonal	A325X	0.5000	1	6273.35	8835.73	0.710 ✓	1	Bolt Shear
T4	255.84	Leg	A325X	1.0000	4	22077.00	53014.40	0.416 ✓	1	Bolt Tension
		Diagonal	A325X	0.5000	1	5952.42	8835.73	0.674 ✓	1	Bolt Shear

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Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load lb	Ratio Load Allowable	Allowable Ratio	Criteria
T5	236.16	Leg	A325X	1.0000	4	33914.80	53014.40	0.640 ✓	1	Bolt Tension
		Diagonal	A325X	0.5000	1	5912.06	8835.73	0.669 ✓	1	Bolt Shear
T6	216.48	Leg	A325X	1.0000	6	29304.50	53014.40	0.553 ✓	1	Bolt Tension
		Diagonal	A325X	0.5000	1	6381.53	8835.73	0.722 ✓	1	Bolt Shear
T7	196.8	Leg	A325X	1.0000	6	35420.50	53014.40	0.668 ✓	1	Bolt Tension
		Diagonal	A325X	0.5000	1	6976.47	8835.73	0.790 ✓	1	Bolt Shear
T8	177.12	Leg	A325X	1.0000	6	41249.70	53014.40	0.778 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	1	7604.15	12339.80	0.616 ✓	1	Member Bearing
T9	157.44	Leg	A325X	1.0000	6	47056.20	53014.40	0.888 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	1	8435.19	12339.80	0.684 ✓	1	Member Bearing
T10	137.76	Leg	A325X	1.0000	10	31679.10	53014.40	0.598 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	1	9404.66	16453.10	0.572 ✓	1	Member Bearing
T11	118.08	Leg	A325X	1.0000	10	35075.90	53014.40	0.662 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	1	10441.50	16453.10	0.635 ✓	1	Member Bearing
T12	98.4	Leg	A325X	1.0000	10	38500.50	53014.40	0.726 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	1	11208.60	16453.10	0.681 ✓	1	Member Bearing
T13	78.72	Leg	A325X	1.0000	10	41918.20	53014.40	0.791 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	2	6269.76	19880.40	0.315 ✓	1	Bolt Shear
T14	59.04	Leg	A325X	1.0000	10	45357.20	53014.40	0.856 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	2	6651.12	19880.40	0.335 ✓	1	Bolt Shear
T15	39.36	Leg	A325X	1.0000	10	48761.40	53014.40	0.920 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	2	7143.93	19880.40	0.359 ✓	1	Bolt Shear
T16	19.68	Leg	A325X	1.0000	10	52180.40	53014.40	0.984 ✓	1	Bolt Tension
		Diagonal	A325X	0.7500	2	7977.60	19880.40	0.401 ✓	1	Bolt Shear

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u lb	φP _n lb	Ratio P _u /φP _n
T1	295.52 - 290.52	P1 5x 145	5.00	4.92	94.8 K=1.00	0.7995	-3168.53	18657.20	0.170 ¹ ✓
T2	290.52 - 275.52	P2x 154	15.00	4.97	75.8 K=1.00	1.0745	-29967.10	31766.40	0.943 ¹ ✓
T3	275.52 - 255.84	P3 5x 226	19.70	4.90	44.0 K=1.00	2.6795	-86789.00	104643.00	0.829 ¹ ✓
T4	255.84 -	P5x 258	19.70	4.90	31.3	4.2999	-138482.00	180083.00	0.769 ¹ ✓

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Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u lb	φP _n lb	Ratio $\frac{P_u}{\phi P_n}$
T5	236.16 - 216.48	P5x258	19.70	4.90	K=1.00 31.3	4.2999	-182415.00	180083.00	1.013 ¹ X
T6	216.48 - 196.8	4.9-3 (1.01 CR) - 88 P6x28	19.70	4.90	K=1.00 26.2	5.5813	-223048.00	238856.00	0.934 ¹
T7	196.8 - 177.12	P8x322	19.70	4.90	K=1.00 20.0	8.3993	-262624.00	367036.00	0.716 ¹
T8	177.12 - 157.44	P8x322	19.70	4.90	K=1.00 20.0	8.3993	-302407.00	367036.00	0.824 ¹
T9	157.44 - 137.76	P8x322	19.70	6.54	K=1.00 26.7	8.3993	-340120.00	358753.00	0.948 ¹
T10	137.76 - 118.08	P10x365	19.70	6.54	K=1.00 21.4	11.9083	-380056.00	518292.00	0.733 ¹
T11	118.08 - 98.4	P10x365	19.70	6.54	K=1.00 21.4	11.9083	-420567.00	518292.00	0.811 ¹
T12	98.4 - 78.72	P10x365	19.70	6.54	K=1.00 21.4	11.9083	-461484.00	518292.00	0.890 ¹
T13	78.72 - 59.04	P10x365	19.70	6.54	K=1.00 21.4	11.9083	-503025.00	518292.00	0.971 ¹
T14	59.04 - 39.36	P12x375	19.70	6.54	K=1.00 17.9	14.5790	-545112.00	640815.00	0.851 ¹
T15	39.36 - 19.68	P12x375	19.70	6.54	K=1.00 17.9	14.5790	-587980.00	640815.00	0.918 ¹
T16	19.68 - 0	P12x375	19.70	6.54	K=1.00 17.9	14.5790	-630459.00	640815.00	0.984 ¹

¹ P_u / φP_n controls

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u lb	φP _n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	295.52 - 290.52	L1 1/2x1 1/2x1/8	6.34	3.04	K=1.00 123.3	0.3594	-1771.86	5338.98	0.332 ¹
T2	290.52 - 275.52	L1 1/2x1 1/2x1/8	6.38	3.03	K=1.00 122.9	0.3594	-4924.84	5377.19	0.916 ¹
T3	275.52 - 255.84	L1 3/4x1 3/4x3/16	7.30	3.56	K=1.00 124.3	0.6211	-6273.35	9075.09	0.691 ¹
T4	255.84 - 236.16	L1 3/4x1 3/4x3/16	8.56	4.12	K=1.00 143.9	0.6211	-5805.27	6779.15	0.856 ¹
T5	236.16 - 216.48	L2x2x3/16	9.92	4.81	K=1.00 146.4	0.7150	-5912.06	7536.18	0.784 ¹
T6	216.48 - 196.8	L2 1/2x2 1/2x3/16	11.34	5.48	K=1.00 132.7	0.9020	-6381.53	11563.90	0.552 ¹
T7	196.8 - 177.12	L2 1/2x2 1/2x3/16	12.81	6.12	K=1.00 148.5	0.9020	-6976.47	9244.29	0.755 ¹
T8	177.12 - 157.44	L3x3x3/16	14.31	6.88	K=1.00 138.5	1.0900	-7797.43	12840.00	0.607 ¹

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Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u lb	φP _n lb	Ratio P _u / φP _n
T9	157.44 - 137.76	L3x3x3/16	16.35	7.93	159.6 K=1.00	1.0900	-8783.71	9668.03	0.909 ¹ ✓
T10	137.76 - 118.08	L3x3x1/4	17.83	8.58	173.9 K=1.00	1.4400	-9669.66	10761.70	0.899 ¹ ✓
T11	118.08 - 98.4	L3 1/2x3 1/2x1/4	19.34	9.33	161.4 K=1.00	1.6900	-10709.30	14659.20	0.731 ¹ ✓
T12	98.4 - 78.72	L3 1/2x3 1/2x1/4	20.85	10.10	174.6 K=1.00	1.6900	-11524.50	12527.70	0.920 ¹ ✓
T13	78.72 - 59.04	L4x4x1/4	22.39	10.86	164.0 K=1.00	1.9400	-12539.50	16296.60	0.769 ¹ ✓
T14	59.04 - 39.36	L4x4x1/4	23.93	11.55	174.3 K=1.00	1.9400	-13302.30	14418.00	0.923 ¹ ✓
T15	39.36 - 19.68	L4x4x5/16	25.48	12.33	187.0 K=1.00	2.4000	-14287.90	15502.20	0.922 ¹ ✓
T16	19.68 - 0	L4x4x3/8	27.03	13.11	199.6 K=1.00	2.8600	-15955.20	16216.80	0.984 ¹ ✓

¹ P_u / φP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u lb	φP _n lb	Ratio P _u / φP _n
T1	295.52 - 290.52	L1 1/2x1 1/2x1/8	4.00	3.84	155.6 K=1.00	0.3594	-972.47	3351.34	0.290 ¹ ✓

¹ P_u / φP_n controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u lb	φP _n lb	Ratio P _u / φP _n
T1	295.52 - 290.52	P1.5x.145	5.00	4.92	94.8	0.7995	2694.55	35975.60	0.075 ¹ ✓
T2	290.52 - 275.52	P2x.154	15.00	4.97	75.8	1.0745	27738.30	48353.90	0.574 ¹ ✓
T3	275.52 - 255.84	P3.5x.226	19.70	4.90	44.0	2.6795	80964.30	120579.00	0.671 ¹ ✓
T4	255.84 - 236.16	P5x.258	19.70	4.90	31.3	4.2999	129839.00	193494.00	0.671 ¹ ✓
T5	236.16 -	P5x.258	19.70	4.90	31.3	4.2999	170687.00	193494.00	0.882 ¹ ✓

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Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u lb	φP _n lb	Ratio $\frac{P_u}{\phi P_n}$
	216.48								✓
T6	216.48 - 196.8	4 9-3 (1.01 CR) - 88 P6x 28	19.70	4.90	26.2	5.5813	207610.00	251161.00	0.827 ¹
T7	196.8 - 177.12	P8x 322	19.70	4.90	20.0	8.3993	242774.00	377967.00	0.642 ¹
T8	177.12 - 157.44	P8x 322	19.70	4.90	20.0	8.3993	277659.00	377967.00	0.735 ¹
T9	157.44 - 137.76	P8x 322	19.70	6.54	26.7	8.3993	310638.00	377967.00	0.822 ¹
T10	137.76 - 118.08	P10x 365	19.70	6.54	21.4	11.9083	344611.00	535873.00	0.643 ¹
T11	118.08 - 98.4	P10x 365	19.70	6.54	21.4	11.9083	378692.00	535873.00	0.707 ¹
T12	98.4 - 78.72	P10x 365	19.70	6.54	21.4	11.9083	412864.00	535873.00	0.770 ¹
T13	78.72 - 59.04	P10x 365	19.70	6.54	21.4	11.9083	447120.00	535873.00	0.834 ¹
T14	59.04 - 39.36	P12x 375	19.70	6.54	17.9	14.5790	481254.00	656053.00	0.734 ¹
T15	39.36 - 19.68	P12x 375	19.70	6.54	17.9	14.5790	515416.00	656053.00	0.786 ¹
T16	19.68 - 0	P12x 375	19.70	6.54	17.9	14.5790	548812.00	656053.00	0.837 ¹

¹ P_u / φP_n controls

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u lb	φP _n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	295.52 - 290.52	L1 1/2x1 1/2x1/8	6.34	3.04	78.5	0.2109	1769.36	10283.20	0.172 ¹
T2	290.52 - 275.52	L1 1/2x1 1/2x1/8	6.38	3.03	78.2	0.2109	4795.16	10283.20	0.466 ¹
T3	275.52 - 255.84	L1 3/4x1 3/4x3/16	7.30	3.56	79.5	0.3779	6091.42	18424.10	0.331 ¹
T4	255.84 - 236.16	L1 3/4x1 3/4x3/16	7.60	3.65	81.6	0.3779	5820.21	18424.10	0.316 ¹
T5	236.16 - 216.48	L2x2x3/16	9.92	4.81	93.5	0.4484	5645.86	21857.50	0.258 ¹
T6	216.48 - 196.8	L2 1/2x2 1/2x3/16	11.34	5.48	84.5	0.5886	6143.06	28694.70	0.214 ¹
T7	196.8 - 177.12	L2 1/2x2 1/2x3/16	12.81	6.12	94.5	0.5886	6784.89	28694.70	0.236 ¹
T8	177.12 - 157.44	L3x3x3/16	14.31	6.88	87.9	0.6945	7604.15	33854.60	0.225 ¹
T9	157.44 - 137.76	L3x3x3/16	16.35	7.93	101.3	0.6945	8435.19	33854.60	0.249 ¹

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Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u lb	φP _n lb	Ratio $\frac{P_u}{\phi P_n}$
T10	137.76 - 118.08	L3x3x1/4	17.83	8.58	110.7	0.9159	9404.66	44652.00	0.211 ¹ ✓
T11	118.08 - 98.4	L3 1/2x3 1/2x1/4	19.34	9.33	102.8	1.1034	10441.50	53792.60	0.194 ¹ ✓
T12	98.4 - 78.72	L3 1/2x3 1/2x1/4	20.85	10.10	111.2	1.1034	11208.60	53792.60	0.208 ¹ ✓
T13	78.72 - 59.04	L4x4x1/4	22.39	10.86	104.3	1.2909	12220.20	62933.20	0.194 ¹ ✓
T14	59.04 - 39.36	L4x4x1/4	23.93	11.55	110.9	1.2909	12966.10	62933.20	0.206 ¹ ✓
T15	39.36 - 19.68	L4x4x5/16	25.48	12.33	119.3	1.5949	13932.00	77752.40	0.179 ¹ ✓
T16	19.68 - 0	L4x4x3/8	27.03	13.11	127.9	1.8989	15543.80	92571.70	0.168 ¹ ✓

¹ P_u / φP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u lb	φP _n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	295.52 - 290.52	L1 1/2x1 1/2x1/8	4.00	3.84	99.1	0.2695	923.20	13139.60	0.070 ¹ ✓

¹ P_u / φP_n controls

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	φP _{allow} lb	% Capacity	Pass Fail
T1	295.52 - 290.52	Leg	P1.5x1.45	1	-3168.53	18657.20	17.0	Pass
		Diagonal	L1 1/2x1 1/2x1/8	7	-1771.86	5338.98	33.2	Pass
		Top Girt	L1 1/2x1 1/2x1/8	5	-972.47	3351.34	29.0	Pass
T2	290.52 - 275.52	Leg	P2x1.54	15	-29967.10	31766.40	94.3	Pass
		Diagonal	L1 1/2x1 1/2x1/8	16	-4924.84	5377.19	91.6	Pass
T3	275.52 - 255.84	Leg	P3.5x.226	34	-86789.00	104643.00	82.9	Pass
		Diagonal	L1 3/4x1 3/4x3/16	37	-6273.35	9075.09	69.1	Pass
T4	255.84 - 236.16	Leg	P5x.258	61	-138482.00	180083.00	76.9	Pass
		Diagonal	L1 3/4x1 3/4x3/16	64	-5805.27	6779.15	85.6	Pass
T5	236.16 - 216.48	Leg	P5x.258	89	-182415.00	180083.00	101.3	Pass
		Diagonal	L2x2x3/16	92	-5912.06	7536.18	78.4	Pass
T6	216.48 - 196.8	Leg	P6x.28	115	-223048.00	238856.00	93.4	Pass
		Diagonal	L2 1/2x2 1/2x3/16	118	-6381.53	11563.90	55.2	Pass
T7	196.8 - 177.12	Leg	P8x.322	143	-262624.00	367036.00	71.6	Pass

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Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail	
		Diagonal	L2 1/2x2 1/2x3/16	145	-6976.47	9244.29	75.5	Pass	
							79.0 (b)		
T8	177.12 - 157.44	Leg	P8x.322	169	-302407.00	367036.00	82.4	Pass	
		Diagonal	L3x3x3/16	172	-7797.43	12840.00	60.7	Pass	
							61.6 (b)		
T9	157.44 - 137.76	Leg	P8x.322	198	-340120.00	358753.00	94.8	Pass	
		Diagonal	L3x3x3/16	199	-8783.71	9668.03	90.9	Pass	
T10	137.76 - 118.08	Leg	P10x.365	217	-380056.00	518292.00	73.3	Pass	
		Diagonal	L3x3x1/4	220	-9669.66	10761.70	89.9	Pass	
T11	118.08 - 98.4	Leg	P10x.365	240	-420567.00	518292.00	81.1	Pass	
		Diagonal	L3 1/2x3 1/2x1/4	243	-10709.30	14659.20	73.1	Pass	
T12	98.4 - 78.72	Leg	P10x.365	260	-461484.00	518292.00	89.0	Pass	
		Diagonal	L3 1/2x3 1/2x1/4	262	-11524.50	12527.70	92.0	Pass	
T13	78.72 - 59.04	Leg	P10x.365	280	-503025.00	518292.00	97.1	Pass	
		Diagonal	L4x4x1/4	283	-12539.50	16296.60	76.9	Pass	
T14	59.04 - 39.36	Leg	P12x.375	301	-545112.00	640815.00	85.1	Pass	
							85.6 (b)		
		Diagonal	L4x4x1/4	307	-13302.20	14418.00	92.3	Pass	
T15	39.36 - 19.68	Leg	P12x.375	322	-587980.00	640815.00	91.8	Pass	
							92.0 (b)		
		Diagonal	L4x4x5/16	325	-14287.90	15502.20	92.2	Pass	
T16	19.68 - 0	Leg	P12x.375	343	-630459.00	640815.00	98.4	Pass	
							98.4 (b)		
		Diagonal	L4x4x3/8	347	-15955.20	16216.80	98.4	Pass	
							Summary		
							Leg (T5)	101.3	Pass
							Diagonal (T16)	98.4	Pass
							Top Girt (T1)	29.0	Pass
							Bolt Checks	98.4	Pass
							RATING =	101.3	Pass

SST TOWER CAISSON FOUNDATION DESIGN WORK SHEET:

REVIEWED
By Xinguo Cai at 4:57 pm, Jul 18, 2008

Tower Site Name **WOLF CREEK**
 Project Number (Quote or Sales) **SO:18926**
 Foundation Drawing Number **GM-10107**
 Site Number **KY-00-0817-WOLF CREEK**
 Site Location **CARTER COUNTY, KENTUCKY**
 Client Name **CELLERE**
 Drawing Revision Number **0**
 Geotech Report Number **25036.00004.04**
 Geotech Company Name **WILCOX PROFESSIONAL SERVICES**
 Geotech Company Location **WHEATON, ILLINOIS**
 Geotech Report Date **2/28/2008**
 Concrete Compressive Strength **4 Kpsi**

GLEN MARTIN	Site: Wolf Creek SO: 18926
13620 Old Hwy 40	Boonville Mo 65233
Phone (660) 652-2734	FAX (660) 652-7200
Cellere	TIA-222-G
07/18/05	

Ultimate Bearing Pressure **25000 psf**
 Pier Compression Force (Down) **637.522 kips**
 Pier Tension Force (Uplift) **554.233 kips**
 Pier Shear Force (Pier) **54.743 kips**
 Tower Axial Force (Down) **89.157 kips**
 Tower Overturning Moment **13948.876 ft kips**
 Tower Shear Force (Base) **87.767 kips**

Tower Weight **51813.4 lbs**
 Tower Spread (Input) **26.5 ft**
 Tower Spread (Print on drawing) **26.5 ft** **26'-6" / 12**
 1/3 Distance (Center to Face) **7'-7 3/4" ft** **7'-8" / 12**
 2/3 Distance (Center to Leg) **15'-3 9/16" ft** **15'-4" / 12**
 1/2 Distance (Half Spread) **13'-3" ft** **13'-3" / 12**

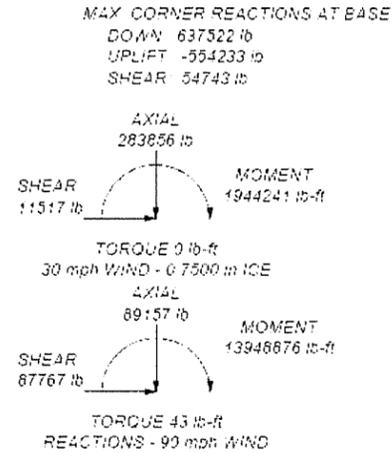
Pier Diameter **4 ft** **4**
 Pier Height Below Grade **15 5/8 ft** **15'-6" / 12**
 Total Pier Height **16 5/8 ft** **16'-6" / 12**
 Pier Height Above Grade **1 ft** **1**
 Tower Height: **295.5 ft**

Vertical Rebar Size (Round) **9 # Rebar**
 Vertical Rebar Quantity (Round) **15**
 Horizontal Tie Size **4 12" Spacing**
 Fc, Concrete Strength **4 ksi**
 Fy, Rebar Yield Stress **60 ksi**

Anchor Bolt Diameter **2 in** **2**
 Anchor Bolt Quantity **8**
 Anchor Bolt Circle Diameter **19 in** **XX** **in**
 Anchor Bolt Projector **11 in** **11** **in**
 Anchor Bolt Length **72 in** **72** **in**

Base Plate Thickness **in**

DRAWN **GD**
 DATE **7/18/2008**
 CHECKED **XIN**
 DATE **7/18/2008**



UPLIFT AND VERTICAL DOWN CHECKING

PIER DIAMETER	4	ft	VERT. LOAD	398.45125	kips	Soil type	Kc
GROUND WATER	100	ft	UPLIFT	346.395625	kips	sand	1.0 to 2.0
ARM LENGTH	22.9496615	ft	OTM	8718.0475	ft-kips	silt	1
CONCRETEWT	150	pcf	UPLIFT CALCS:	380	kips	clay	1
p	0.008		TOWER SPREAD	26.5	ft	Adh factor:	Undrained shear str
BGRW	0.00	ft	ULTIMATE END BEARING			1	0.25
PLENGTH	15.50	ft	PER GEOTECH	25000	psf	0.65	0.5
RESULT			ANALYSIS OK IN UPLIFT			0.5	75 or greater
			ANALYSIS OK IN VERTICAL DOWN				
			ANALYSIS OK IN OTM				

STRATAS	Allowable Skin		Soil Density (pcf)	Kc (Down) Compresison	Kt (Uplift) Tension	Friction Angle δ (degree)	Cohesion C (psf)
	Soil Depth (ft)	Friction (SF-2) (psf)					
1	1	0	100	0	0	0	0
2	3.5	0	110	0	0	0	0
3	1.5	0	110	0	0	0	0
4	1.5	1400	125	0	0	0	0
5	8	3500	125	0	0	0	0
6	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0

CONT.							
DESIGN UPLIFT	401.42	kips	DESIGN DOWN	613.68	kips		
VERTICAL BAR SIZING			dp	34.5	in		
BAR SIZE	9	#	AREA BARSHEAR	0.299629399	in^2		
BAR NUMBER	15		DESIGN SPACING	8.560839981	in		
CHECK SPACE	SPACING OK FOR REBAR SIZING		PIER BAR ACI LIMITS	21	in		ACI 11.5.4.2
REBAR UP. CHECK	REBAR OK FOR UPLIFT		REBAR UP. CAPACITY	675.2256	kips		

ANCHOR BOLT DESIGN

SET INDEX	24		FLANGE THICK	1.5	in		
LEG SIZE (DIA)	P12	in	OTM	12000	ft-lb		OTM=12000
BOLT DIAMETER	2	in	AXIAL WEIGHT	398451.25	lb		AXIALWEIGHT=1
BOLT QUANTITY	8		SHEAR FORCE	34214.375	lb		SHEARFORCE=
BOLT CIRCLE DIA	19	in	Fc	4000	psi		
BOLT LENGTH	72	in	Fy	60000	psi		
BASE PLATE DIA	26	in	BASE PLATE STR	880.7706391	psi		
BOLT PROJECT	11	in					
RESULT	ANALYSIS OK FOR ANCHOR BOLT RATIO						
	ANALYSIS OK FOR PUNCHING						
	ANALYSIS OK FOR BASE PLATE STRENGTH						

MINTENSTRBLTU	55000	psi	DIA NUTPUNCHING	3.13	in
ALLTENSTRBLT	36300	psi	THREADS PER LENG	4.5	in
YIELDSTRFLANGE	50000	psi	DATA2	5.7	in
DIASTREBOLT	1.78348889	in	AREASTREBOLT	2.498225937	in^2
AXIALBOLT	49806.4063	lb	AREANOMBOLT	3.1416	in^2
			STRESSBOLT	19936.71009	psi
BOLTDEGREE	45	degree			
Yt	451.2500	in^2	BOLTRADIUS	0.7853975	rad
Ya	361.0000	in^2	RADIUSBC	9.5	in
MINERSINBOLT	0.49665083	in^4	MINEBOLTTOTAL	905.83277	in^4

MAX ANCHOR BOLT LENGTH DEVELOPMENT

ld	8.69626357		DIASHEARIN	15	in
SHEARPLATETH	0.7	in	DIASHEAROT	23	in
			AREAPLATE	238.7616	in^2
F(DIAMNB)	0.05	in			
K(DIAMNB)	0	in			
G(DIAMNB)	0	in	SHPLATETH	0.75	in
ST1	119380.8	in	ALD	55.49192507	in
TOTALANLEN	5.54099376	ft			
H(TOTAANLEN)	6				
P(TOTAANLEN)	0				
J(TOTAANLEN)	0				
FSHEARFORCE	4276.79688	lb	SSHEARSBB	2282.578108	
XSHEARFACTOR	0.06288094				

SST TOWER PIER/MAT FOUNDATION DESIGN WORK SHEET:

REVIEWED
By Xinguo Cai at 4:53 pm, Jul 16, 2008

Site Name: **WOLF CREEK**
 Project #: **SO:18926**
 DRW. #: **GM-10099**
 Site #: **KY-00-0817-WOLF CREEK**
 Site Location: **CARTER COUNTY, KENTUCKY**
 Client: **CELLERE**
 Revision: **0**
 Geotech Report #: **25036.00004.04**
 Report By: **WILCOX PROFESSIONAL SERVICES**
 Of: **WHEATON, ILLINOIS**
 Report Date: **2/28/2008**

Allowable bearing pressure: **8000 psi**
 Concrete Compressive Strength: **4000 psi**
 Sack Mix:
 Minimum Slump:
 Maximum Slump:
 Ultimate Bearing Pressure: **16000 psf**
 Vertical Down: **637.522 kips**
 MAX Uplift: **554.233 kips**
 MAX Shear/Leg: **54.743 kips**
 Axial Load: **89.157 kips**
 OTM: **13948.876 ft kips**
 Total Shear @ Base: **87.767 kips**

Tower weight: **51813.4 lbs**
 Fy of Re-bars (ksi): **60 ksi**

Tower Spread (Input): **26.5**
 Tower Spread (Dimension sign): **26'-6" ft**
 1/3 Distance: **7'-7 3/4" ft**
 2/3 Distance: **15'-3 9/16" ft**
 1/2 Face Distance: **13'-3" ft**

Pier Diameter (Pad Width): **4'-0" ft**
 1/2 Pier Diameter (1/2 Pad width): **2'-0" ft**
 Total PIER HEIGHT: **5'-6" ft**
 Finished Height Above Grade: **1 ft**
 Total Mat Width: **33'-6" ft**
 1/2 Total Mat Width: **16'-9" ft**
 Mat Thickness: **2'-0" ft**
 Tower height: **295.5 ft**
 Total height: **7'-6" ft**

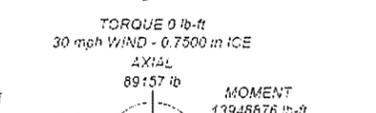
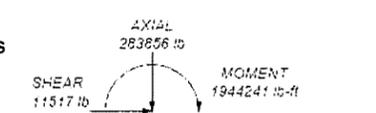
Volume of Concrete Pier:
 Total Volume of Concrete:
 Pier height below grade: **4'-6" ft**
 PIER BAR SIZE: **9 # Rebar**
 PIER BAR NUMBER: **15**
 Size of Horizontal Ties: **4 12" Spacing**
 MAT BAR SIZE: **9 # Rebar**
 MAT BAR NUMBER: **25**
 TOTAL MAT BAR NUMBER: **100**
 Anchor Bolt Diameter: **2 in**
 Quantity of Anchor Bolts: **8**
 Bolt Circle Diameter: **19 in**
 Anchor Bolt Projection: **11 in**
 Anchor bolt length: **72 in**
 Distance Base Plate & Pad: **in**
 Thickness Base Plate: **in**

DRAWN: **GD**
 DATE: **7/17/2008**
 CHECKED: **XIN**
 DATE: **7/17/2008**

SQUARE BAR SIZE: **9**
 SQUARE BAR NUMBER: **20**
 PIERS MOVE UP DIMENSION: **2.55 ft**
 MAT LARGER HALF DIMENSION: **19'-4" ft**
 MAT SMALLER HALF DIMENSION: **14'-2" ft**

DATE	7/17/2008	BY	GD
DESCRIPTION	DESIGN	DATE	7/17/2008

MAX CORNER REACTIONS AT BASE
 DOWN: **637522 lb**
 UPLIFT: **-554233 lb**
 SHEAR: **54743 lb**



TORQUE 0 lb-ft
 30 mph WIND - 0.7500 in ICE
 TORQUE 43 lb-ft
 REACTIONS - 90 mph WIND

INPUT DATA AND DESIGN PARAMETERS

MAT WIDTH	33.5	ft	CONCRETE DENSITY	150	pcf		
MAT THICKNESS	2	ft	BACKFILL DENSITY	110	pcf		
PIER DIAMETER	4	ft	MINSOIL DENSITY	110	pcf		
PIER TOTAL HEIGHT	5.5		AXIAL LOAD	89157	lb		
PIER HEIGHT AGL	1	ft	UPLIFT LOAD	554233	lb		
INPUT WATER TABLE	N/A	ft	BASE SHEAR FORCE	87767	lb	BASE SHEAR	
WATER TABLE FOR CALCS	N/A	ft	OTM	13948876	ft-lb		
MAT LENGTH	33.5	ft	CONCRETE STRENGTH	4000	psi		
ρ (PIER)	0.008		ULTIMATE BEAR PRESSURE	16000	psf	SOIL PROPERTIES	
ρ (MAT)	0.005		TOWER SPREAD	26.5			
COHESION	500	psf	LOCAL OTM	120000	ft-lb		
COFRICTION	0.45	base footing					

PIER BAR SIZE	9	#	SPACING OK FOR PIER BAR SIZING	REBAR UP. CAP.	651440.6526	lb	
PIER BAR NUMBER	15		SPACING OK FOR SQUARE BAR SIZING	REBAR UP. CHECK	PIER REBAR OK FOR UPLIFT		
SQUARE BAR SIZE	9	#	SPACING OK FOR MAT BAR SIZING				
SQUARE BAR NUMBER	20						
MAT BAR SIZE	9	#	PIER HEIGHT DESIGN OK				
MAT BAR NUMBER	50						
ECENTRICITY	13.9882424		Qo	997185.75	lb		
ECENTRICITY FACTOR	5.58333333		PIER TO CENTER	15.30	ft		
RESULT	ECENTRICITY ANALYSIS OK						
SDIE EDGE CHECK	SIDE EDGE OK	N/A					
BOTTOM EDGE CHECK	MOVE PIERS UP AT LEAST	2.55					

DOWN, UPLIFT, AND OVERTURNING MOMENT CHECKING

ACTUAL AREA WIDTH	5.52351518	ft	WEIGHT OF SOIL	617866.6725	lb		
ACTUAL AREA LENGTH	5.52351518	ft	WEIGHT OF CONCRETE	376275	lb		
INVERSE SOIL HEIGHT	2.5965	ft	DESIGN UPLIFT	745606.2544	lb	(WR/2)+(WC/1.25)	(WR+WC)/1.5
FOOTING PERIMETER	134	ft	REQUIRED UPLIFT	607988.0828	lb		
INVERSE SOIL VOLUME	782.84475	ft^3	DESIGN DOWN	2220453.101	lb	0.75	Φs EIA-222-G
INVERSE SOIL WEIGHT	86112.9225	lb	REQUIRED DOWN	2175977.25	lb		
RESULT	UPLIFT ANALYSIS OK						
	DOWN ANALYSIS OK						

SLIDING FRICTION

FRICTION CAPACITY	448733.588	lb					
RESULT	ANALYSIS OK IN HORIZONTAL MOVEMENT						

PUNCHING SHEAR IN FOOTING

PU1	1178791.5	lb		ONE WAY PUNCHING SHEAR-ASSUMED SQUARE BASE FOOTING			
d	21	in	φ	TWO WAY PUNCHING SHEAR-ASSUMED SQUARE BASE FOOTING WITH COLUMN LOCAT			
e1	156	in	vc	0.85			
vu1	54.1863868	psi	SH1	107.5174404	psi		
PU2	98072.7	lb	JF	4705627.5			
MU2	1584000	lb-in	R2	83.74812876			
b2	69	in	v2	0.4			
AREAP	5796	in^2	AREAF	161604	in^2		
vu2	21.551638	psi	SH2	215.0348809	psi		
RESULT	FOUNDATION DESIGN, ONEWAY SHEAR PUNCHING OK						
	FOUNDATION DESIGN, TWO-WAY SHEAR PUNCHING OK						

ANCHOR BOLT DESIGN

LEG TYPE & SIZE	P12	(FROM TOWER DESIGN)	SET INDEX	24			
LEG TYPE & SIZE	P12	(FROM SET INDEX)	FLANGE THICK	1.5	in	(FROM PIER)	
BOLT DIAMETER	2	in	OTM	12000	ft-lb	OTM=12000	
BOLT QUANTITY	8		AXIALWEIGHT	398451.25	lb	VERTICAL LOAD	
BOLT LENGTH	72	in	SHEARFORCE	34214.375	lb	SHEAR PER LEG	
BOLT CIRCLE DIA	19	in	Fc	4000	psi		
BASE PLATE DIA	26	in	Fy	60000	psi		
BOLT PROJECTION	11	in	BASE PLATE STR	750.4791245	psi		
RESULT	OK IN LEG TYPE AND SIZE MATCH						
	ANALYSIS OK FOR ANCHOR BOLT RATIO						
	ANALYSIS OK FOR PUNCHING						
	ANALYSIS OK FOR BASE PLATE STRENGTH						

MINTENSTRBLTU	55000	psi	DIA NUTPUNCHING	3.13	in		
ALLTENSTRBLT	36300	psi	THREADS PER LENG	4.5	in		
YIELDSTRFLANGE	50000	psi	OUTSIDE DIA	27	in		
DATA2	5.7	in					

DIASTREBOLT	1.78348889	in	AREASTREBOLT	2.498225937	in^2		
AXIALBOLT	49806.4063	lb	AREANOMBOLT	3.1416	in^2		
			STRESSBOLT	19936.71009	psi		

TIA222-G 4 9 61

EXHIBIT C

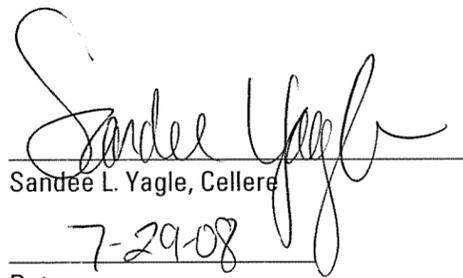
Directions to Site from County Seat



Directions to the Site
From the County Seat of Carter County, Kentucky

Wolf Creek Site
Carter County, Kentucky

From the Carter County Courthouse in Grayson, Kentucky, begin heading West on US-60/ W. Main Street toward N. Hord Street. Continue to follow US -60 for 9.0 miles. Turn Right onto KY-182 for 3.2 miles. Turn Right onto Sutton Road for 1.5 miles (portions of the road are unpaved). End at 520 Sutton Road, Olive Hill, Kentucky. Site is on the East side of the road.


Sandee L. Yagle, Cellere

Date

7-29-08

EXHIBIT D

Memorandum of Lease

MEMORANDUM OF LEASE

Return to:
C/O Central States Tower Holdings, LLC
323 S. Hale Street, Suite 100
Wheaton, IL 60187
(630) 221-8500 Main Number
Attn: Property Manager

Prepared By:
Benjamin Meredith
Cellere
4110 Copper Ridge Drive Ste. 204
Traverse City, MI 49684
(231) 929-4555

Re: Cell Site #KY-00-0817; Cell Site Name: Wolf Creek

State: Kentucky
County: Carter

This Memorandum of Lease is entered into on this 28th day of Dec., 2007, by and between Gary Bond, a single man, having a mailing address of 520 Sutton Road, Olive Hill, KY 41164 (hereinafter referred to as "**Landlord**") and Central States Tower Holdings, LLC, a Delaware limited liability company, having a mailing address of 323 S. Hale Street, Suite 100, Wheaton, IL 60187 (hereinafter referred to as "**Tenant**").

1. Landlord and Tenant entered into a certain Option and Lease Agreement ("**Agreement**") on the 28th day of Dec., 2007, for the purpose of installing, operating and maintaining a communications facility and other improvements. All of the foregoing are set forth in the Agreement.
2. The initial lease term will be five (5) years ("**Initial Term**") commencing on the effective date of written notification by Tenant to Landlord of Tenant's exercise of the Option, with five (5) successive five (5) year options to renew.
3. A portion of the Property being leased to Tenant contained and described in **Exhibit A** annexed hereto.
4. This Memorandum of Lease is not intended to amend or modify, and shall not be deemed or construed as amending or modifying, any of the terms, conditions or provisions of the Agreement, all of which are hereby ratified and affirmed. In the event of a conflict between the provisions of this Memorandum of Lease and the provisions of the Agreement, the provisions of the Agreement shall control. The Agreement shall be binding upon and inure to the benefit of the parties and their respective heirs, successors, and assigns, subject to the provisions of the Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be effective as of the last date written below.

WITNESSES:

"LANDLORD"

Mike Burton
Print Name: _____

By: Gary Lee Bond
Print Name: Gary Bond
Its: Owner

Date: 12/11/07

Mike Burton

Print Name: _____

By: _____
Print Name: _____

Its: _____

Date: _____

WITNESSES:

"TENANT"

Central States Tower Holdings, LLC
a Delaware limited liability company

Marianne Grant
Print Name: MARIANNE GRANT

By: Brian P. Meier
Print Name: Brian P. Meier

Its: C.O.O

Date: 12-28-2007

[ACKNOWLEDGMENTS APPEAR ON THE NEXT PAGE]

LANDLORD ACKNOWLEDGMENT

INDIVIDUAL ACKNOWLEDGMENT

STATE OF Kentucky)
) ss:
COUNTY OF Carter)

BE IT REMEMBERED, that on this 11th day of Dec 2007 before me, the subscriber, a person authorized to take oaths in the State of Kentucky, personally appeared Gary Bond who, being duly sworn on his/her/their oath, deposed and made proof to my satisfaction that he/she/they is/are the person(s) named in the within instrument; and I, having first made known to him/her/them the contents thereof, he/she/they did acknowledge that he/she/they signed, sealed and delivered the same as his/her/their voluntary act and deed for the purposes therein contained.

Notary Public: 
My Commission Expires: 04-02-10

PARTNERSHIP (consisting of corporations) ACKNOWLEDGMENT

STATE OF)
) ss:
COUNTY OF)

I CERTIFY that on _____, 2007, _____ personally came before me and this/these person(s) acknowledged under oath to my satisfaction, that:

- (a) this/these person(s) signed, sealed and delivered the attached document as _____ of _____ a corporation of the State of _____, which is a general partner of the partnership named in this document;
- (b) the proper corporate seal of said corporate general partner was affixed; and
- (c) this document was signed and delivered by the corporation as its voluntary act and deed as [a] general partner(s) on behalf of said partnership [by virtue of authority from its Board of Directors].

Notary Public: _____
My Commission Expires: _____

EXHIBIT A

DESCRIPTION OF PROPERTY

Page 1 of 1

to the Memorandum of Lease dated 11 Dec 2007, by and between Gary Bond, a single man, as Landlord, and Central States Tower Holdings, LLC, a Delaware limited liability company, as Tenant.

The Property is described and/or depicted as follows:

A certain tract of Land Situated on Tygarus Creek in Carter County, Kentucky and BEGINNING at a cedar stump on top of a cliff, a corner to J.E. Hignite land; thence; thence with the J.E. Hignite and Ada Bond Line N.47.W with a survey of the J.E. Hignite Line 609 feet to a Hickory S 62 W 271 feet to a stake by the road thence with the road westerly 941 feet to a 14 inch white Oak on the west side of a road leading to Tygarts Creek, South 26 ¼ East passing a Beech at 37 feet in all 46 feet to a stake in the Ada Bond and Charlie Burhett line; thence with the same North 69 East 53 ½ feet to a White Oak; North 73 East 496 feet to win Poplars, marked South 56 East 330 feet to a 12 inch Chestnut Oak on top of the cliff; North 47 East with the meanders of a high cliff to the point beginning, containing the boundary.

There is excluded from the foregoing description and not hereby conveyed a lot 50 ft. by 100 ft. heretofore conveyed to Bob Lee, by deed recorded in Deed Book 141, page 258, Carter County, Kentucky, Deed Records.

Being a part of the same property conveyed to Basil Bond and Ada Bond, his wife, with survivorship, by deed recorded in Deed Book 97, page 418, Carter County, Kentucky, Deed Records. The said Basil Bond is now deceased.



303559
Filed on: 1/9/2008 12:29:41 PM
Book: OR Number: 209
Pages: 76 - 80
Mike D. Johnston, Carter County
DC: SHANNA BRADLEY

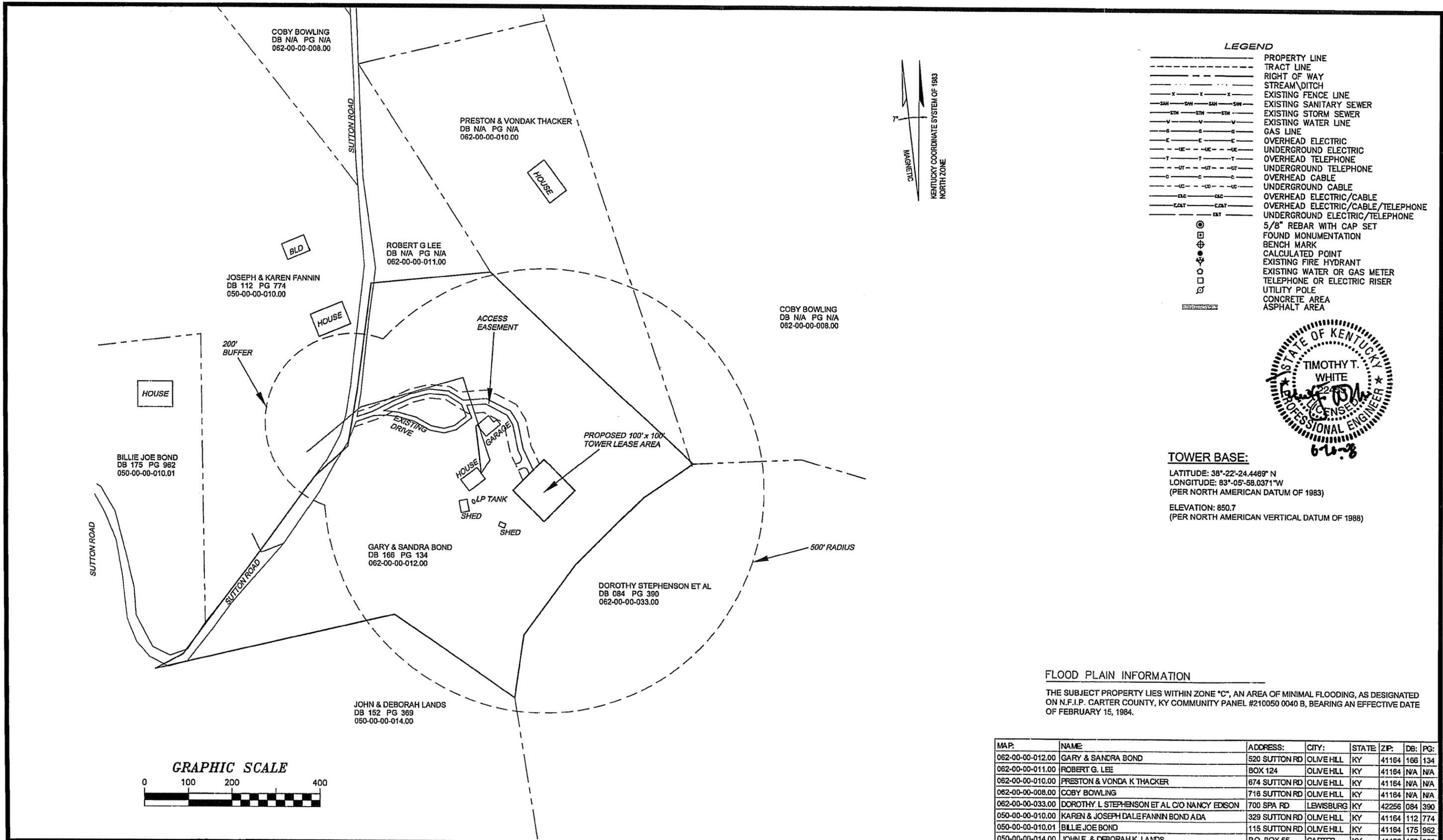
Site Name: Wolf Creek
Site Number: KY-00-817

Carter County

OR 209 PG 80

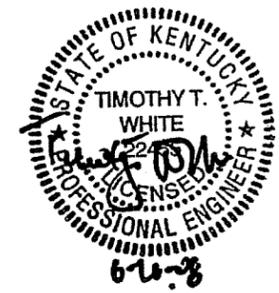
EXHIBIT E

**Site Plan – 500' Radius Map with
Flood Plain Information**



LEGEND

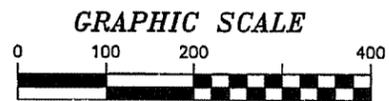
---	PROPERTY LINE
- - - -	TRACT LINE
---	RIGHT OF WAY
---	STREAM/DITCH
X - X - X	EXISTING FENCE LINE
-S-W- S-W- S-W- S-W-	EXISTING SANITARY SEWER
-S-W- S-W- S-W- S-W-	EXISTING STORM SEWER
-V- V- V- V-	EXISTING WATER LINE
-G- G- G- G-	GAS LINE
-E- E- E- E-	OVERHEAD ELECTRIC
-LE- LE- LE- LE-	UNDERGROUND ELECTRIC
-T- T- T- T-	OVERHEAD TELEPHONE
-UT- UT- UT- UT-	UNDERGROUND TELEPHONE
-C- C- C- C-	OVERHEAD CABLE
-UC- UC- UC- UC-	UNDERGROUND CABLE
-EC- EC- EC- EC-	OVERHEAD ELECTRIC/CABLE
-ECAT- ECAT- ECAT- ECAT-	OVERHEAD ELECTRIC/CABLE/TELEPHONE
-UCAT- UCAT- UCAT- UCAT-	UNDERGROUND ELECTRIC/TELEPHONE
⊙	5/8" REBAR WITH CAP SET
⊕	FOUND MONUMENTATION
⊕	BENCH MARK
⊕	CALCULATED POINT
⊕	EXISTING FIRE HYDRANT
⊕	EXISTING WATER OR GAS METER
⊕	TELEPHONE OR ELECTRIC RISER
⊕	UTILITY POLE
⊕	CONCRETE AREA
⊕	ASPHALT AREA



TOWER BASE:
 LATITUDE: 38°-22'-24.4489" N
 LONGITUDE: 83°-05'-58.0371" W
 (PER NORTH AMERICAN DATUM OF 1983)
 ELEVATION: 850.7
 (PER NORTH AMERICAN VERTICAL DATUM OF 1988)

FLOOD PLAIN INFORMATION
 THE SUBJECT PROPERTY LIES WITHIN ZONE "C", AN AREA OF MINIMAL FLOODING, AS DESIGNATED ON N.F.I.P. CARTER COUNTY, KY COMMUNITY PANEL #210050 0040 B, BEARING AN EFFECTIVE DATE OF FEBRUARY 15, 1984.

MAP:	NAME:	ADDRESS:	CITY:	STATE:	ZIP:	DB:	PG:
062-00-00-012.00	GARY & SANDRA BOND	520 SUTTON RD	OLIVE HILL	KY	41164	166	134
062-00-00-011.00	ROBERT G. LEE	BOX 124	OLIVE HILL	KY	41164	N/A	N/A
062-00-00-010.00	PRESTON & VONDA K THACKER	674 SUTTON RD	OLIVE HILL	KY	41164	N/A	N/A
062-00-00-008.00	COBY BOWLING	716 SUTTON RD	OLIVE HILL	KY	41164	N/A	N/A
062-00-00-033.00	DOROTHY L STEPHENSON ET AL C/O NANCY EDSON	700 SPA RD	LEWISBURG	KY	42256	084	390
050-00-00-010.00	KAREN & JOSEPH DALE FANNIN BOND ADA	329 SUTTON RD	OLIVE HILL	KY	41164	112	774
050-00-00-010.01	BILLIE JOE BOND	115 SUTTON RD	OLIVE HILL	KY	41164	175	962
050-00-00-014.00	JOHN F. & DEBORAH K. LANDS	P.O. BOX 55	CARTER	KY	41128	152	369



Waco Professional Services
 ONE MADISON AVENUE
 CADILLAC, MI 49601
 (231) 775-7755 OFFICE
 (231) 775-3135 FAX
 www.waco.us

(CST) CENTRAL STATES TOWER, INC.
 323 SOUTH HALE STREET
 SUITE 100
 WHEATON, IL 60187

TERRADON
 P.O. Box 519
 Nitro, West Virginia 25143
 (304) 755-8291 FAX 755-2636

KY-00-0817
WOLF CREEK
 ±520 SUTTON ROAD
 OLIVE HILL, KY 41164

NO.	DATE	REVISIONS	BY	CHK	APP'D

DATE: 06/23/08 SCALE: AS SHOWN DESIGNED BY: SFP DRAWN BY: SFP

SHEET R-1
 500' RADIUS MAP &
 FLOOD PLAIN INFORMATION
 DRAWING NUMBER
 KY-00-0817

EXHIBIT F

**Affidavit of Notification of Adjacent Property
Owners and Owners within 500 feet**

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Application of Central States Tower Holdings, LLC for Issuance
of a Certificate of Public Convenience and Necessity to Construct
a Cell Site (KY-00-0817A WOLF CREEK) in Olive Hill Kentucky

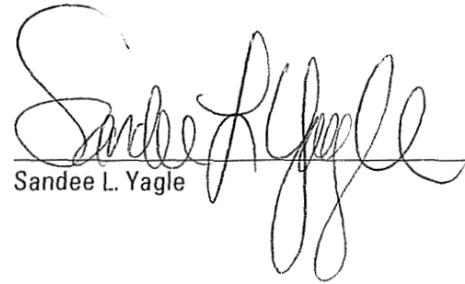
Case No. 2008-00261

Affidavit of Sandee L. Yagle

I, Sandee L. Yagle, being duly sworn, depose and state as follows:

1. My name is Sandee L. Yagle and I am an employee of Cellere, LLC, agent for Central States Tower Holdings, LLC and am submitting this affidavit in conjunction with the above referenced matter.
2. In order to demonstrate compliance with 807 KAR 5:063 § 1(1)(1), Exhibit 1 identifies the names of the residents/ tenants and property owners within 500 feet of the proposed tower who have been: (i) notified by written notice of the proposed construction, sufficient postage prepaid, by United States Certified Mail, return receipt requested; (ii) given the Commission docket number under which the application will be processed; and (iii) informed of the right to request intervention.
3. Attached as Exhibit 2 is a copy of the United States Certified Mail return receipts that demonstrate proof of service of the written notice of the proposed construction upon: (1) Gary and Sandra Bond; (2) Robert G. Lee; (3) Preston and Vonda Thacker; (4) Coby Bowling; (5) Dorothy Stephenson, et. Al., c/o Nancy Edison; (6) Joseph and Karen Finnin; (7) Billie Joe Bond; and (8) John and Deborah Lands. (See Exhibit1)

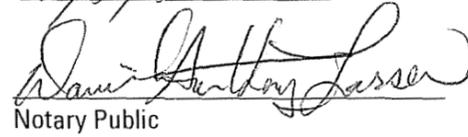
Further Affiant saith not.


Sandee L. Yagle

State of Michigan)
) SS:
County of Grand Traverse)

Subscribed and Sworn to before me this 30th day of July, 2008.

My commission expires: 2/2/2012


Notary Public

DAVID ANTHONY LARSEN
Notary Public, State of Michigan
County of Grand Traverse
My Commission Expires 02-02-2012
Acting in the County of Grand Traverse

Landowner and Adjacent Landowner List

Central States Tower Holdings, LLC
Wolf Creek Site
Olive Hill, Kentucky

Gary and Sandra Bond
520 Sutton Road
Olive Hill, KY 41164

Robert G. Lee
991 County Rd. Lane
Olive Hill, KY 41164

Preston and Vonda Thacker
674 Sutton Road
Olive Hill, KY 41164

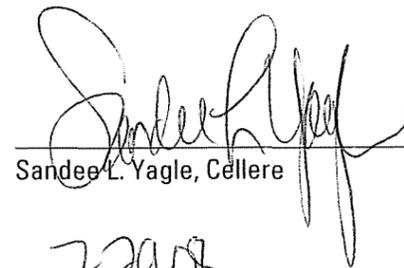
Coby Bowling
716 Sutton Road
Olive Hill, KY 41164

Billie Joe Bond
115 Sutton Road
Olive Hill, KY 41164

Joseph and Karen Finnin
329 Sutton Road
Olive Hill, KY 41164

Dorothy Stephenson, et. al.
c/o Nancy Edison
700 Spa Road
Lewisburg, KY 42256

John and Deborah Lands
174 Sutton Road
Olive Hill, KY 41164



Sandee L. Yagle, Cellere

7-29-08

Date

July 2, 2008

Gary and Sandra Bond
520 Sutton Road
Olive Hill, KY 41164

Public Notice

Cellere, LLC, a Michigan limited liability company as agent for Central States Tower Holdings, LLC is applying to the Public Service Commission of the Commonwealth of Kentucky (the "Commission") for a Certificate of Public Convenience and Necessity to construct a new cellular tower facility to provide cellular telephone service. This facility will include a 300 foot tower to be located at +/- 520 Sutton Road, Olive Hill, Kentucky 44164. A map showing the location is attached.

The Commission invites your comments regarding this proposed construction. Also, the Commission wants you to be aware of your right to intervene in this matter. Your comments and request for intervention should be addressed to:

Executive Director's Office
Public Service Commission of Kentucky
P.O. Box 615
Frankfort, Kentucky 40602

Please refer to case number 2008-00261 in your correspondence.

Cellere and Central States welcome the opportunity to serve and provide wireless service in your community!

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"><input checked="" type="checkbox"/> Complete items 1, 2, and 3. Also complete Item 4 if Restricted Delivery is desired.<input checked="" type="checkbox"/> Print your name and address on the reverse so that we can return the card to you.<input checked="" type="checkbox"/> Attach this card to the back of the mailpiece, or on the front if space permits.	A. Received by (Please Print Clearly) <u>Gary Bond</u> B. Date of Delivery <u>7-12-08</u>
1. Article Addressed to:	C. Signature <u>Gary Bond</u> <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee
<p>Gary and Sandra Bond 520 Sutton Road Olive Hill, KY 41164</p>	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No
2. Article Number (Copy from service label)	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.
	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes
	7008 0150 0001 5347 7877

July 2, 2008

Robert G. Lee
991 County Road Lane
Olive Hill, KY 41164

Public Notice

Cellere, LLC, a Michigan limited liability company as agent for Central States Tower Holdings, LLC is applying to the Public Service Commission of the Commonwealth of Kentucky (the "Commission") for a Certificate of Public Convenience and Necessity to construct a new cellular tower facility to provide cellular telephone service. This facility will include a 300 foot tower to be located at +/- 520 Sutton Road, Olive Hill, Kentucky 44164. A map showing the location is attached.

The Commission invites your comments regarding this proposed construction. Also, the Commission wants you to be aware of your right to intervene in this matter. Your comments and request for intervention should be addressed to:

Executive Director's Office
Public Service Commission of Kentucky
P.O. Box 615
Frankfort, Kentucky 40602

Please refer to case number 2008-00261 in your correspondence.

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SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none">■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.■ Print your name and address on the reverse so that we can return the card to you.■ Attach this card to the back of the mailpiece, or on the front if space permits.	A. Received by (Please Print Clearly) DOROTHY LEE	B. Date of Delivery 7-12-08
1. Article Addressed to: Robert G. Lee 991 County Road Lane Olive Hill, KY 41164	C. Signature X Dorothy Lee	<input type="checkbox"/> Agent <input type="checkbox"/> Addressee
	D. Is delivery address different from item 1? If YES, enter delivery address below:	<input type="checkbox"/> Yes <input type="checkbox"/> No
	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes <input type="checkbox"/> No	
2. Article Number (Copy from service label)	7008 0150 0001 5347 7860	
PS Form 3811, July 1999	Domestic Return Receipt	102595-00-M-0952

July 2, 2008

Preston and Vonda Thacker
674 Sutton Road
Olive Hill, KY 41164

Public Notice

Cellere, LLC, a Michigan limited liability company as agent for Central States Tower Holdings, LLC is applying to the Public Service Commission of the Commonwealth of Kentucky (the "Commission") for a Certificate of Public Convenience and Necessity to construct a new cellular tower facility to provide cellular telephone service. This facility will include a 300 foot tower to be located at +/- 520 Sutton Road, Olive Hill, Kentucky 44164. A map showing the location is attached.

The Commission invites your comments regarding this proposed construction. Also, the Commission wants you to be aware of your right to intervene in this matter. Your comments and request for intervention should be addressed to:

Executive Director's Office
Public Service Commission of Kentucky
P.O. Box 615
Frankfort, Kentucky 40602

Please refer to case number 2008-00261 in your correspondence.

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<ul style="list-style-type: none"><input checked="" type="checkbox"/> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.<input checked="" type="checkbox"/> Print your name and address on the reverse so that we can return the card to you.<input checked="" type="checkbox"/> Attach this card to the back of the mailpiece, or on the front if space permits.	<p>A. Received by (Please Print Clearly) <i>Vonda K. Thacker</i> B. Date of Delivery <i>7-14-08</i></p> <p>C. Signature <i>Vonda K. Thacker</i> <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
1. Article Addressed to: Preston and Vonda Thacker 674 Sutton Road Olive Hill, KY 41164	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input checked="" type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.
2. Article Number (Copy from service label)	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes 7008 0150 0001 5347 8140
PS Form 3811, July 1999	Domestic Return Receipt 102595-00-M-0952

July 2, 2008

Coby Bowling
716 Sutton Road
Olive Hill, KY 41164

Public Notice

Cellere, LLC, a Michigan limited liability company as agent for Central States Tower Holdings, LLC is applying to the Public Service Commission of the Commonwealth of Kentucky (the "Commission") for a Certificate of Public Convenience and Necessity to construct a new cellular tower facility to provide cellular telephone service. This facility will include a 300 foot tower to be located at +/- 520 Sutton Road, Olive Hill, Kentucky 44164. A map showing the location is attached.

The Commission invites your comments regarding this proposed construction. Also, the Commission wants you to be aware of your right to intervene in this matter. Your comments and request for intervention should be addressed to:

Executive Director's Office
Public Service Commission of Kentucky
P.O. Box 615
Frankfort, Kentucky 40602

Please refer to case number 2008-00261 in your correspondence.

Cellere and Central States welcome the opportunity to serve and provide wireless service in your community!

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none">Complete Items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.Print your name and address on the reverse so that we can return the card to you.Attach this card to the back of the mailpiece, or on the front if space permits.	<p>A. Received by (Please Print Clearly) <u>Coby Bowling</u> B. Date of Delivery <u>7-12-08</u></p> <p>C. Signature <u>[Signature]</u> <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee</p> <p>D. Is delivery address different from Item 1? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If YES, enter delivery address below:</p>
1. Article Addressed to: Coby Bowling 716 Sutton Road Olive Hill, KY 41164	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.
2. Article Number (Copy from service-label)	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes 7008 0150 0001 5347 7839

July 2, 2008

Dorothy L. Stephenson, et al.
c/o Nancy Edison
700 Spa Road
Lewisburg, KY 42256

Public Notice

Cellere, LLC, a Michigan limited liability company as agent for Central States Tower Holdings, LLC is applying to the Public Service Commission of the Commonwealth of Kentucky (the "Commission") for a Certificate of Public Convenience and Necessity to construct a new cellular tower facility to provide cellular telephone service. This facility will include a 300 foot tower to be located at +/- 520 Sutton Road, Olive Hill, Kentucky 44164. A map showing the location is attached.

The Commission invites your comments regarding this proposed construction. Also, the Commission wants you to be aware of your right to intervene in this matter. Your comments and request for intervention should be addressed to:

Executive Director's Office
Public Service Commission of Kentucky
P.O. Box 615
Frankfort, Kentucky 40602

Please refer to case number 2008-00261 in your correspondence.

Cellere and Central States welcome the opportunity to serve and provide wireless service in your community!

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"><input checked="" type="checkbox"/> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.<input checked="" type="checkbox"/> Print your name and address on the reverse so that we can return the card to you.<input checked="" type="checkbox"/> Attach this card to the back of the mailpiece, or on the front if space permits.	A. Received by (Please Print Clearly) B. Date of Delivery NANCY EDISON 7/11/08
1. Article Addressed to:	C. Signature x Nancy Edison <input type="checkbox"/> Agent <input type="checkbox"/> Addressee
Dorothy Stephenson, et. al c/o Nancy Edison 700 Spa Road Lewisburg, KY 42256	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No
2. Article Number (Copy from service label)	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.
PS Form 3811, July 1999	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes
Domestic Return Receipt	7008 0150 0001 5347 8157
102596-00-M-0952	

July 2, 2008

Joseph and Karen Finnin
329 Sutton Road
Olive Hill, KY 41164

Public Notice

Cellere, LLC, a Michigan limited liability company as agent for Central States Tower Holdings, LLC is applying to the Public Service Commission of the Commonwealth of Kentucky (the "Commission") for a Certificate of Public Convenience and Necessity to construct a new cellular tower facility to provide cellular telephone service. This facility will include a 300 foot tower to be located at +/- 520 Sutton Road, Olive Hill, Kentucky 44164. A map showing the location is attached.

The Commission invites your comments regarding this proposed construction. Also, the Commission wants you to be aware of your right to intervene in this matter. Your comments and request for intervention should be addressed to:

Executive Director's Office
Public Service Commission of Kentucky
P.O. Box 615
Frankfort, Kentucky 40602

Please refer to case number 2008-00261 in your correspondence.

Cellere and Central States welcome the opportunity to serve and provide wireless service in your community!

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none">Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.Print your name and address on the reverse so that we can return the card to you.Attach this card to the back of the mailpiece, or on the front if space permits.	<p>A. Received by (Please Print Clearly) B. Date of Delivery <i>Melissa Finnin</i> 7-12-08</p> <p>C. Signature <input type="checkbox"/> Agent <i>x Melissa Finnin</i> <input type="checkbox"/> Addressee</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
1. Article Addressed to:	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.
Joseph and Karen Finnin 329 Sutton Road Olive Hill, KY 41164	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes
2. Article Number (Copy from service label)	7008 0150 0001 5347 7846

July 2, 2008

Billie Joe Bond
115 Sutton Road
Olive Hill, KY 41164

Public Notice

Cellere, LLC, a Michigan limited liability company as agent for Central States Tower Holdings, LLC is applying to the Public Service Commission of the Commonwealth of Kentucky (the "Commission") for a Certificate of Public Convenience and Necessity to construct a new cellular tower facility to provide cellular telephone service. This facility will include a 300 foot tower to be located at +/- 520 Sutton Road, Olive Hill, Kentucky 44164. A map showing the location is attached.

The Commission invites your comments regarding this proposed construction. Also, the Commission wants you to be aware of your right to intervene in this matter. Your comments and request for intervention should be addressed to:

Executive Director's Office
Public Service Commission of Kentucky
P.O. Box 615
Frankfort, Kentucky 40602

Please refer to case number 2008-00261 in your correspondence.

Cellere and Central States welcome the opportunity to serve and provide wireless service in your community!

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none">Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.Print your name and address on the reverse so that we can return the card to you.Attach this card to the back of the mailpiece, or on the front if space permits.	<p>A. Received by (Please Print Clearly) <u>Billie J. Bond</u> B. Date of Delivery <u>7-12-08</u></p> <p>C. Signature <u>Billie J. Bond</u> <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If YES, enter delivery address below:</p>
1. Article Addressed to: <p>Billie Joe Bond 115 Sutton Road Olive Hill, KY 41164</p>	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D. <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
2. Article Number (Copy from service label)	7008 0150 0001 5347 7822

July 2, 2008

John and Deborah Lands
174 Sutton Road
Olive Hill, KY 41164

Public Notice

Cellere, LLC, a Michigan limited liability company as agent for Central States Tower Holdings, LLC is applying to the Public Service Commission of the Commonwealth of Kentucky (the "Commission") for a Certificate of Public Convenience and Necessity to construct a new cellular tower facility to provide cellular telephone service. This facility will include a 300 foot tower to be located at +/- 520 Sutton Road, Olive Hill, Kentucky 44164. A map showing the location is attached.

The Commission invites your comments regarding this proposed construction. Also, the Commission wants you to be aware of your right to intervene in this matter. Your comments and request for intervention should be addressed to:

Executive Director's Office
Public Service Commission of Kentucky
P.O. Box 615
Frankfort, Kentucky 40602

Please refer to case number 2008-00261 in your correspondence.

Cellere and Central States welcome the opportunity to serve and provide wireless service in your community!

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none">Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.Print your name and address on the reverse so that we can return the card to you.Attach this card to the back of the mailpiece, or on the front if space permits.	A. Received by (Please Print Clearly) <u>Deborah Lands</u> B. Date of Delivery <u>7-15-08</u>
1. Article Addressed to: John and Deborah Lands 174 Sutton Road Olive Hill, KY 41164	C. Signature <u>X Deborah Lands</u> <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee
	D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If YES, enter delivery address below:
	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.
	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes
2. Article Number (Copy from service label)	7008 0150 0001 5347 7853

EXHIBIT G

Certified letter to Judge Executive

July 7, 2008

Via Certified Mail
Carter County Judge Executive
Charles Wallace
300 West Main Street
Room 227
Grayson, KY 41143

RE: Public Notice – Public Service Commission of Kentucky
Case No. 2008-00261

Cellere, LLC, as agent for Central States Tower Holdings, LLC, is applying to the Public Service Commission of Kentucky (the "Commission") for a Certificate of Public Convenience and Necessity to propose construction and operation for a new facility to provide cellular telecommunications service in Carter County. The facility will include a 300 foot tower and an equipment shelter to be located at +/- 520 Sutton Road, Olive Hill, Kentucky 44164. A map showing the location of the proposed new facility is enclosed.

The Commission invites your comments regarding the proposed construction. You also have the right to intervene in this matter.

Your comments and request for intervention should be addressed to:

Executive Director's Office
Public Service Commission of Kentucky
P.O. Box 615
Frankfort, Kentucky 40602

Please refer to case number 2008-00261 in your correspondence.

Sincerely,

Benjamin Meredith
Cellere, LLC

Enclosure

sly

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> ■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Received by (Please Print Clearly) <i>Charles Wallace</i> B. Date of Delivery <i>7/2/08</i></p> <p>C. Signature <i>Charles Wallace</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to:</p> <p>Carter County Judge Executive Charles Wallace 300 W. Main St., Rm. 227 Grayson, KY 41143</p>	<p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Copy from service label)</p>	<p>7008 0150 0001 5347 7808</p>

EXHIBIT H

**Public Notice Signs
(Photos)**

PUBLIC NOTICE

Central States Tower Holdings, LLC
proposes to
construct a cellular
communications

TOWER

on this site. If you have any
questions please contact:

Central States Tower Holdings, LLC	The Executive Director
10000 E. 1st Ave. Suite 100	Public Service Commission
Denver, CO 80231	1775 Tower Blvd., 17th Floor
	Denver, CO 80202

Please refer to P.S.C.

Case #2008-00261

In your correspondence.

PUBLIC NOTICE

Central Station Tower Holdings, LLC
proposes to
construct a cellular
communications

TOWER

near this site. If you have any
questions please contact:

Mr. [Name]	Mr. [Name]
[Phone]	[Phone]
[Address]	[Address]
[City, State, Zip]	[City, State, Zip]

Please refer to P.S.C.
Case #2008-00261

in your correspondence.

FASTSIGNS
Sign & Graphics Solutions

445 HJS

EXHIBIT I

Affidavit of Publication of Public Notice

Morehead News Group

Newspaper Holdings, Inc.

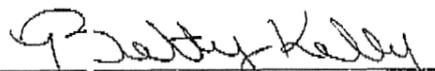
722 W. First St., Morehead, KY 40351
606-784-4116 or 800-247-6142

Affidavit of Publication

STATE OF KENTUCKY

COUNTY OF Carter

I, Betty Kelly, classified clerk, of Morehead News Group, in the aforesaid State and County, hereby certify that the attached advertisement appeared on 7-30-08 in the Olive Hill Times.



Betty Kelly, Classified Clerk

7-24-08

Date

Subscribed and sworn to before me, a Notary Public, within and for the State and County aforesaid, by Betty Kelly, on the above date.

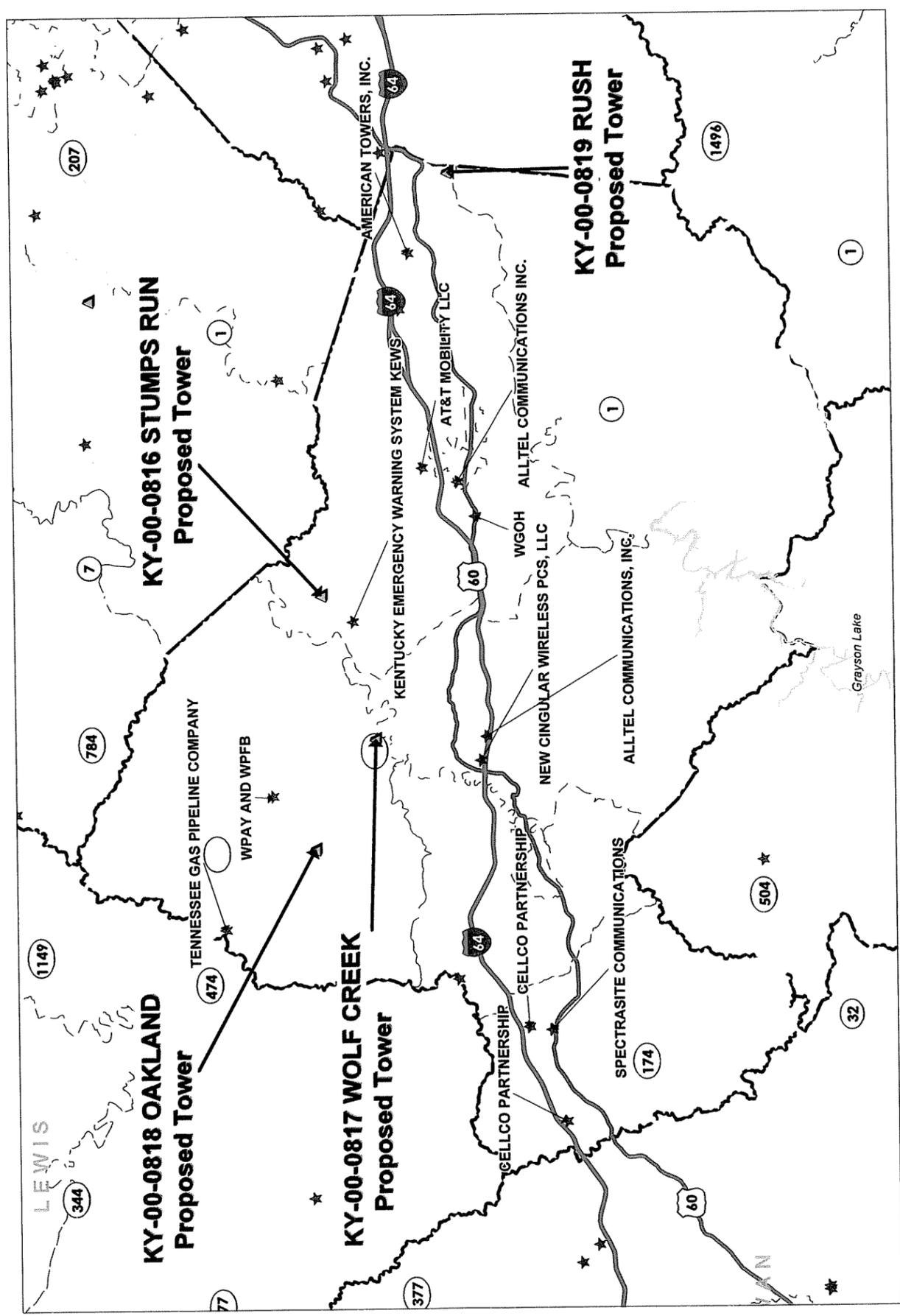

Notary Public, State at Large, Kentucky

My Commission Expires: _____

EXHIBIT J

Map of Search Area

**PROPOSED TOWER LOCATIONS IN CARTER COUNTY and
Identified Existing Tower Locations within Carter County**



1" = 3.643 miles