Cellere

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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-00-0818A OAKLAND

2008-260

Dear Public Service Commission;

Please accept the attached application for a Certificate of Public Convenience and Necessity for a cellular communications tower at 2511 Oakland Ridge, 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

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-00-0818A OAKLAND) in Olive Hill Kentucky — Case No. 2008-00260

APPLICATION FOR A CERTIFICATE OF
PUBLIC CONVENIENCE AND NECESSITY

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-00-0818A OAKLAND ("OAKLAND") 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 OAKLAND 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 send 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.

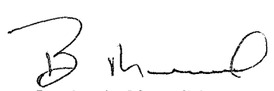
24. Correspondence and communication with regard to this application should be addressed to:

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 OAKLAND 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

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-1845-OE

Issued Date: 05/19/2008

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-00-0818A OAKLAND
Location:	Olive Hill, KY
Latitude:	38-24-01.10N NAD 83
Longitude:	83-09-38.02W
Heights:	300 feet above ground level (AGL) 1276 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 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)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.
This determination expires on 11/19/2009 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-1845-OE.

Signature Control No: 569641-102132084 (DNE)
Linda Steele
Technician
Attachment(s)
Additional Information

Additional information for ASN 2008-ASO-1845-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 any transmitting frequency(ies) on this antenna tower.

Notice of Proposed Construction or Alteration - Off Airport

Project Name: CENTR-000091824-08 **Sponsor:** Central States Tower Holdings, LLC

Details for Case : KY-00-0818A OAKLAND

Show Project Summary

Case Status

ASN: 2008-ASO-1845-OE
Status: Accepted
Date Accepted: 04/02/2008
Date Determined:
Letters: None

Construction / Alteration Information

Notice Of: Construction
Duration: Permanent
if Temporary : Months: Days:
Work Schedule - Start:
Work Schedule - End:
State Filing: Not filed with State

Structure Summary

Structure Type: Antenna Tower
Structure Name: KY-00-0818A OAKLAND
FCC Number:
Prior ASN:

Structure Details

Latitude: 38° 24' 1.1" N
Longitude: 83° 9' 38.02" W
Horizontal Datum: NAD83
Site Elevation (SE): 976 (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: Vacant field
Description of Proposal: Tower only

Common Frequency Bands

Low Freq	High Freq	Freq Unit	ERP	ERP Unit

Specific Frequencies

Ky-00-0818A Oakland

KENTUCKY AIRPORT ZONING COMMISSION

Steven L. Beshear
Governor

90 Airport Road
Frankfort, Kentucky 40601
http://transportation.ky.gov/aviation/kyzoning.htm
502-564-4480

502-564-4480
fax: 502-564-7953

No.: AS-022-2KY5-08-087

July 23, 2008

APPROVAL OF APPLICATION

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

SUBJECT: AS-022-2KY5-08-087

STRUCTURE:	Antenna Tower
LOCATION:	Olive Hill, KY
COORDINATES:	38-24-01.1 N / 83-09-38.02 W
HEIGHT:	300'AGL/1276'AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct 300'AGL/1276'AMSL Antenna Tower near, Olive Hill, KY 38-24-01.1 N / 83-09-38.02 W.

This permit is valid for a period of 18 months from its date of issuance. If construction is not completed within this period, this permit shall lapse and be void, and no work shall be performed without a new application being approved by the commission.

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

M-Dual Obstruction lighting is required

John Houlihan, Administrator

Kentucky UNBRIDLED SPIRIT

An Equal Opportunity Employer M/F/D

Steven L. Beshear
Governor

KENTUCKY AIRPORT ZONING COMMISSION
90 Airport Road
Frankfort, Kentucky 40601
http://transportation.ky.gov/aviation/kyzoning.htm
502-564-4480
502-564-4480
fax: 502-564-7953

No.: AS-022-2KY5-08-087

CONSTRUCTION/ALTERATION STATUS REPORT

July 23, 2008

AERONAUTICAL STUDY NUMBER: AS-022-2KY5-08-087

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 July 10, 2008. This permit is valid for a period of 18 months from the date of issuance. If construction is not completed within this period, this permit shall lapse and be void, and no work shall be performed without a new application being approved by the commission. 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, Building 400 Frankfort, KY 40601. (502) 564-4480.

STRUCTURE: Antenna Tower
LOCATION: Olive Hill, KY
COORDINATES: 38-24-01.1 N / 83-09-38.02 W
HEIGHT: 300'AGL/1276'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 UNBRIDLED SPIRIT

An Equal Opportunity Employer M/F/D

Kentucky

TC 56-50E (Rev. 02/05)

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-1022-ZK45-08-1857

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

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

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 _____

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-1845-OE

9. Latitude: 38 ° 24 ' 1.1 " N

10. Longitude: 83 ° 9 ' 38.02 " W

11. Datum: ☒ NAD83 ☐ NAD27 ☐ Other _____

12. Nearest Kentucky City: Olive Hill County Carter

13. Nearest Kentucky public use or Military airport:
Fleming-Mason

14. Distance from #13 to Structure: +/- 33 miles

15. Direction from #13 to Structure: SE-LY

16. Site Elevation (AMSL): 976 Feet

17. Total Structure Height (AGL): 300 Feet

18. Overall Height (#16 + #17) (AMSL): 1276 Feet

19. Previous FAA and/or Kentucky Aeronautical Study Number(s):

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 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 4/2/08

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, Cellere	Braxton Dougherty	4/4/08
Printed Name and Title	Signature	Date

PENALTIES: Persons failing to comply with Kentucky Revised Statutes (KRS 183.861 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:

☐ Chairman, KAZC ☒ Administrator, KAZC

☒ Approved
☐ Disapproved

Date 7-23-08

April 2, 2008

Administrator
Kentucky Airport Zoning Commission
Department of Aviation
200 Metro Street
Frankfort, KY 40622

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

Hello,

Enclosed please find Form TC-56-50-E for your review and approval for the construction of a new 300' telecommunications tower proposed in Olive Hill, Carter County, Kentucky. I have enclosed a copy of the FAA Form 7460-1, a quad map showing the location of the proposed tower and a copy of the 1A Certification.

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

Thank you,

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

Kentucky

KY-06-08IRA

TC 56-50E (Rev. 02/05)

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

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

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 _____

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-1845-OE

9. Latitude: 38 ° 24 ' 01.01 " N

10. Longitude: 83 ° 09 ' 38.02 " W

11. Datum: ☒ NAD83 ☐ NAD27 ☐ Other _____

12. Nearest Kentucky City: Olive Hill County Carter

13. Nearest Kentucky public use or Military airport:
Fleming Mason

14. Distance from #13 to Structure: +/- 33 miles

15. Direction from #13 to Structure: SE

16. Site Elevation (AMSL): 976 Feet

17. Total Structure Height (AGL): 300 Feet

18. Overall Height (#16 + #17) (AMSL): 1276 Feet

19. Previous FAA and/or Kentucky Aeronautical Study Number(s):
None

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 7.5 minute Quad Map and 1A Certification

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 4/2/08

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.

Printed Name and Title | Signature | Date 4/4/08

PENALTIES: Persons failing to comply with Kentucky Revised Statutes (KRS 183.861 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: ☐ Chairman, KAZC ☐ Administrator, KAZC

☐ Approved

☐ Disapproved _____ Date _____

Notice of Proposed Construction or Alteration - Off Airport

Project Name: CENTR-000091824-08 **Sponsor:** Central States Tower Holdings, LLC

Details for Case : KY-00-0818A OAKLAND

Show Project Summary

Case Status

ASN: 2008-ASO-1845-OE
Status: Work In Progress
Date Accepted: 04/02/2008
Date Determined:
Letters: None

Construction / Alteration Information

Notice Of: Construction
Duration: Permanent
***if Temporary*:** Months: Days:
Work Schedule - Start:
Work Schedule - End:
State Filing: Not filed with State

Structure Summary

Structure Type: Antenna Tower
Structure Name: KY-00-0818A OAKLAND
FCC Number:
Prior ASN:

Structure Details

Latitude: 38° 24' 1.1" N
Longitude: 83° 9' 38.02" W
Horizontal Datum: NAD83
Site Elevation (SE): 976 (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: Vacant field
Description of Proposal: Tower only

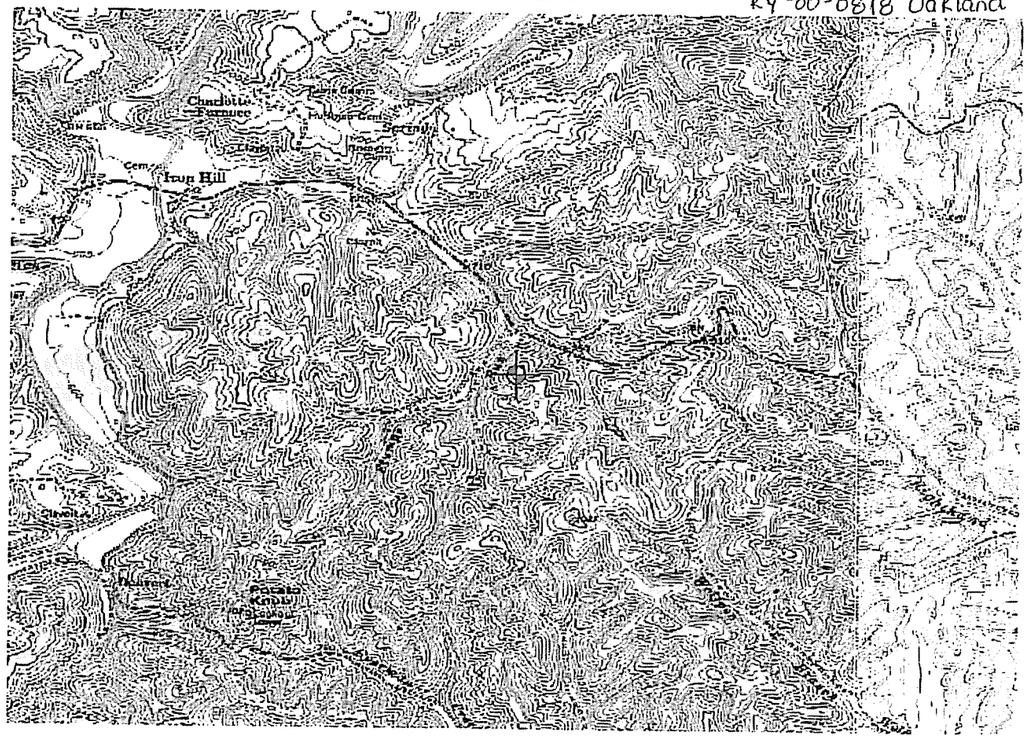
Common Frequency Bands

Low Freq	High Freq	Freq Unit	ERP	ERP Unit

Specific Frequencies

Close Print

KY-00-0818 Oakland



engineering & surveying
705-F Lakeview Plaza Blvd.
Worthington, Ohio 43085
Phone: (614) 841-0053
Fax: (614) 841-0170
E-mail: hlg@geoinno.com

Date: March 25, 2008

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

Site Number/Name: KY-00-0818A Oakland

County: Carter

Site Address: +/- 2511 Oakland Ridge; Olive Hill, Ky; 41164

Center of Tower: LATITUDE: N38°24' 01.10"
LONGITUDE: W83°09' 38.02"

HORIZONTAL DATUM: NAD 83

GROUND ELEVATION: 976 Feet

VERTICAL DATUM: NAVD 88

CERTIFICATION

I herby certify that the survey of this tower site was performed under my direct supervision, and to the best of my knowledge, the location of the center of the site, as shown in geographic coordinates above, has an horizontal accuracy within +/- 20 feet and a vertical accuracy within +/- 3 feet.

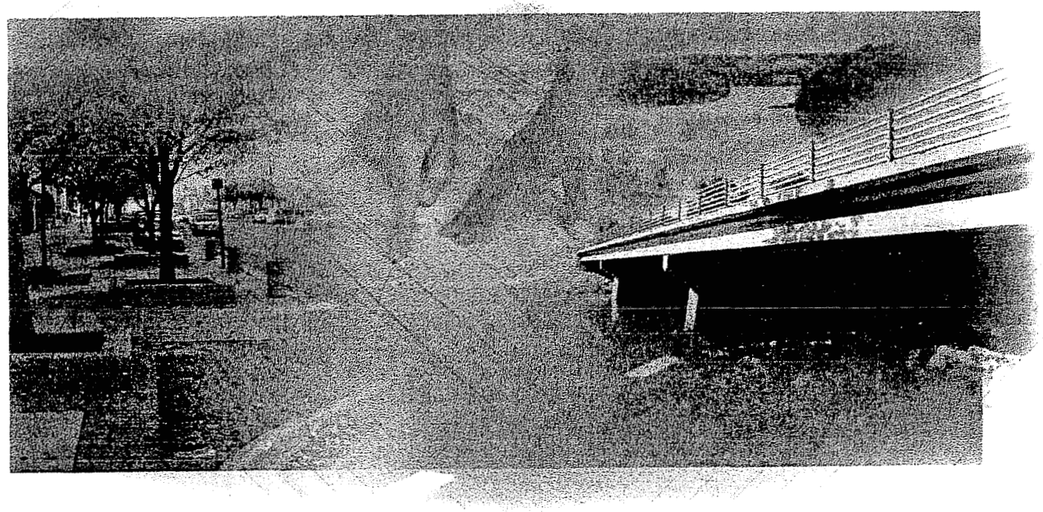
STATE OF KENTUCKY
ANTHONY J. ROBINSON
3601
LICENSED PROFESSIONAL LAND SURVEYOR

HLG Engineering & Surveying, Inc.

ANTHONY J. ROBINSON, P.S. # 3601, KENTUCKY — DATE 3-31-08
JOB# 1011.029

EXHIBIT B

Geotechnical Report; Survey; Tower Design
Tower Foundation Design



SOIL BORING AND ROCK CORING INVESTIGATION REPORT

CST SITE NO. KY-00-0818A

OAKLAND

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. 25036.00004.09

Applied Geotechnical Services, Inc.

June 9, 2008

Wilcox

STATE OF KENTUCKY
Arthur J. Krueger
25843
LICENSED PROFESSIONAL ENGINEER
7/28/08

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distance of approximately 30 feet uphill and 30 feet downhill 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 sulfide 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 Triad Engineering, Inc. of Scott Depot, 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 Triad Engineering, Inc. and project information provided by Cellere, Inc. Slope stability analyses for the proposed tower were beyond the scope of the present geotechnical investigation. We recommend an evaluation of the factor of safety of the proposed mat foundation with respect to global and sliding block failure mechanisms be performed prior to construction.

1. INTRODUCTION

We have completed the Soil Boring & Rock Coring Investigation for the proposed Central States Tower Site No. KY-00-0818A – Oakland self-supporting lattice tower to be located in Olive Hill, Carter County, Kentucky. Cellere, Inc. retained **Wilcox Professional Services, LLC** to perform this investigation. Subsequently, Wilcox has retained Applied Geotechnical Services, Inc. for laboratory testing and assistance with preparing the engineering report. 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 300-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 29 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 510 kips, an uplift load per leg of approximately 435 kips, a total shear load of approximately 75 kips and a overturning moment of approximately 12,080 foot-kips.

We estimate the tower base plate elevation may be in the range of Elevation 971 to 973 feet.

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 a

EXECUTIVE SUMMARY, Page 2 of 2

We anticipate the use of a jack-hammer or similar rock excavation equipment may be necessary to level the base of the mat foundation on the limestone bedrock surface.

Several feet of cut and fill is anticipated to achieve finished grades within the proposed tower area. We recommend the subgrade soils be scarified and properly benched prior to placement of engineered fill to reduce the risk of a slip plane forming along the native soil-engineered fill surface.

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

EXECUTIVE SUMMARY

The driller did not report encountering topsoil at the site. At the locations of Borings 1 and 3, approximately 2 to 3 feet of sandy clay was encountered, followed by weathered limestone. The driller reported auger refusal on apparent limestone at depths of 3 feet and 4½ feet, respectively. At the location of Boring 2, performed at the center of tower location, sandy clays were encountered to a depth of approximately 17 feet, followed by weathered limestone to a depth of 20 feet. The driller reported auger refusal on limestone at a depth of 20 feet. NQ rock coring was then performed from approximate depths of 20 feet to 30 feet below the existing ground surface. The rock coring encountered limestone that extended to the explored depth of 30 feet.

Borings 1 and 3 were reported as dry both during drilling and upon completion of the boring. Boring 2 was also reported as dry during drilling. However, water was introduced into Boring 2 during the NQ rock coring operations. Therefore, the groundwater level was not obtained upon completion. 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 300-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.

We understand mat-and-pier or mat-type foundations are typically used for support of the self-supporting towers such as proposed for the site. Based on the subsurface conditions revealed by the soil and rock core borings, we concur with the use of either-mat-and-pier or mat foundations for support of the proposed tower. We estimate the mat foundation may be on the order of 30 to 35 square feet in plan area and be constructed at a depth of approximately 6 feet below the existing ground surface. Based on these conditions, we recommend the mat be designed for a presumptive maximum net allowable soil pressure of 6,000 pounds per square foot (psf) on the undisturbed hard sandy clay or weathered limestone.

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 Boring Location Plan, a total of three (3) soil 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 HLG Engineering and Surveying, Inc. dated April 8, 2008 and are presented in Table 1.

Table 1: Approximate Ground Surface Elevation at Soil/Rock Core Boring Locations

Soil Boring No.	Approximate Ground Surface Elevation (ft)
B-1	977 +/-
B-2	975 +/-
B-3	971 +/-

A truck mounted rotary 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.

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 Triad Engineering, Inc.

Laboratory testing of the soil samples included estimating the unconfined compressive strength of the cohesive 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 Triad Engineering, Inc. engineer. The RQD is one of 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	65

3. SITE AND SUBSURFACE CONDITIONS

3.1 Site Conditions

The subject site is located at +/- 2511 Oakland Ridge in Olive Hill, Carter County, Kentucky. Based on our review of the Survey Plan prepared by HLG Engineering and Surveying, Inc. dated April 8, 2008 and the Central States Tower site Candidate Package, it appears the site is situated along the north side of a relatively gentle, wooded ridge sloping downwards towards the north. Within the proposed tower compound, the ground surface slopes downward at approximately 6½ units horizontal to 1 unit vertical. The ground surface elevations range from approximately Elevation 977 within the southeastern portion of the compound to Elevation 965 feet in the vicinity of the northwestern portion of the site.

3.2 Soil and Rock Conditions

The driller did not report encountering topsoil at the site. At the locations of Borings 1 and 3, approximately 2 to 3 feet of sandy clay was encountered, followed by weathered limestone. The driller reported auger refusal on apparent limestone at depths of 3 feet and 4½ feet, respectively. At the location of Boring 2, performed at the center of tower location, sandy clays were encountered to a depth of approximately 17 feet, followed by weathered limestone to a depth of 20 feet. The driller reported auger refusal on limestone at a depth of 20 feet. NQ rock coring was then performed from approximate depths of 20 feet to 30 feet below the existing ground surface. The rock coring encountered limestone that extended to the explored depth of 30 feet.

The sandy clays were stiff to hard with calibrated hand penetrometer unconfined compressive strengths of 1 to 4 tsf and natural moisture contents of approximately 22 to 29 percent. The limestone specimen obtained from the NQ rock coring possessed a recovery of 90 percent and an RQD value of 18 percent.

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

Borings 1 and 3 were reported as dry both during drilling and upon completion of the boring. Boring 2 was also reported as dry during drilling. However, water was introducing into Boring 2 during the NQ rock coring operations. Therefore, the groundwater level was not obtained upon completion. 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. 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 Mat Foundation Recommendations

We understand mat-and-pier or mat-type foundations are typically used for support of the self-supporting towers such as proposed for the site. Based on the subsurface conditions revealed by the soil and rock core borings, we concur with the use of either-mat-and-pier or mat foundations for support of the proposed tower. We estimate the mat foundation may be on the order of 30 to 35 square feet in plan area and be constructed at a depth of approximately 6 feet below the existing ground surface. Based on these conditions, we recommend the mat be designed for a presumptive maximum net allowable soil pressure of 6,000 pounds per square foot (psf) on the undisturbed hard sandy clay or weathered limestone. The mat foundation excavation must be properly sloped or shored in accordance with local, state, and federal trench safety requirements.

The mat foundation excavation can be backfilled with on-site excavated soils free of topsoil and other deleterious materials. All backfill should be constructed as engineered fill. We anticipate the on-site overburden will generally be sandy clay. Compaction equipment suitable for compacting cohesive materials should be used. Place the engineered fill in the mat foundation excavation in level lifts not exceeding 9 inches in loose thickness, and compact to a minimum of 95 percent of the maximum laboratory dry density as determined in accordance with ASTM Standard D-1557 (Modified Proctor). All engineered fill should be placed and compacted at or near the optimum moisture content. The moisture/density relations for the material to be used for engineered fill should be confirmed by a qualified geotechnical engineer prior to placement in the field.

Based on our experience with similar soils, we estimate 125 pounds per cubic foot (pcf) in-place moist density may result from the above compaction requirements.

We anticipate the use of a jack-hammer or similar equipment may be necessary to level the base of the mat foundation. In addition, we recommend the subgrade below fill areas be benched as discussed in Section 4.2 of this report. Slope stability analyses for the proposed tower were beyond the scope of the present geotechnical investigation. We recommend an evaluation of the factor of safety of the proposed mat foundation with respect to global and sliding block failure mechanisms be performed prior to construction.

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 scarified and 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 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.

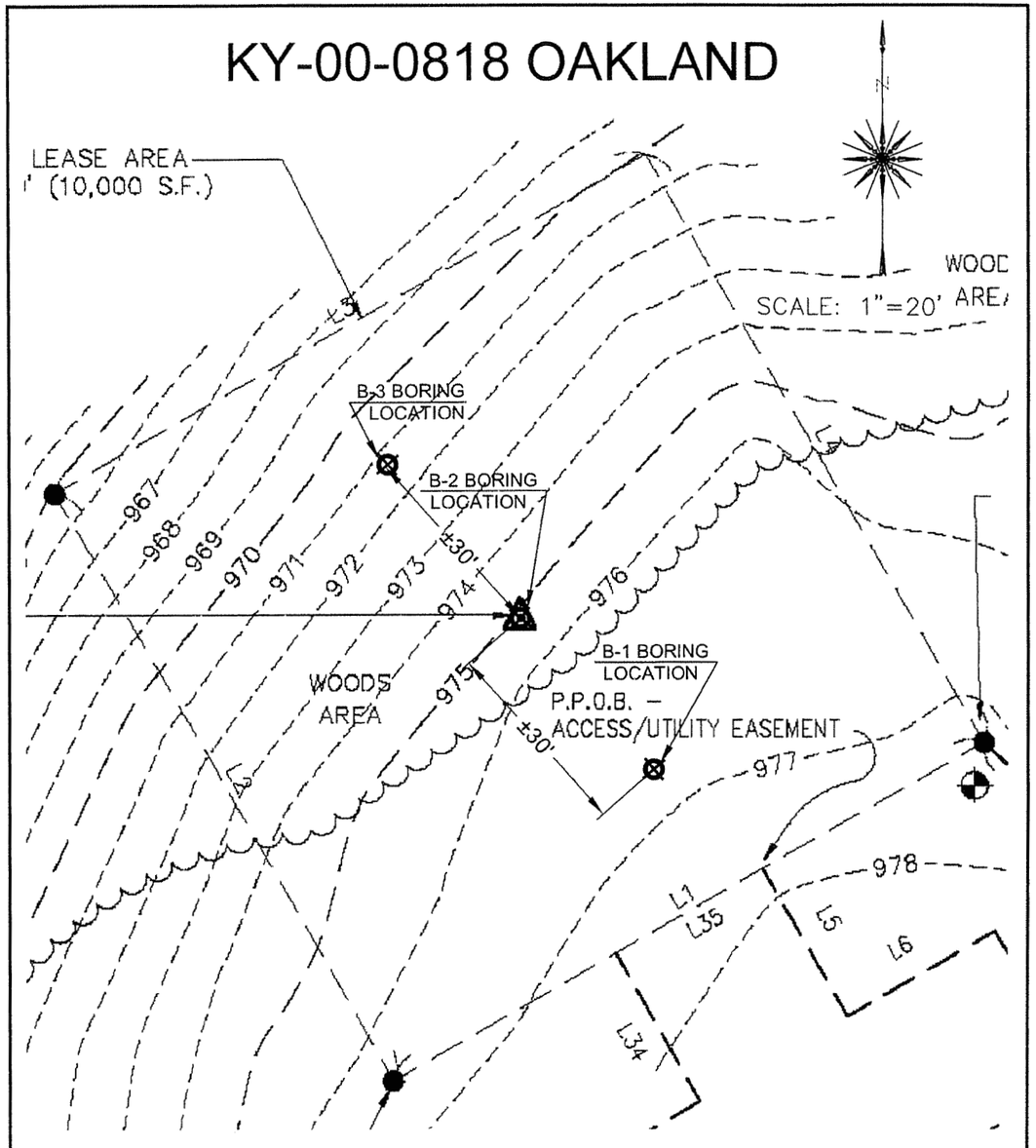
The contract specifications should include the following:

> "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 to B-3)
4. UNIFIED SOIL CLASSIFICATION SYSTEM

KY-00-0818 OAKLAND



SURVEYOR: HLG, ENGINEERING & SURVEYING, INC.

	KY-00-0818 OAKLAND SCHEMATIC SOIL BORING LOCATION PLAN	DATE 4-30-08	Wilcox Professional Services			
		DRN AJK				
		CHD AJK				
	CLIENT: CELLERE / CENTRAL STATE TOWERS	SCALE N/A	F.B. PG.	SHEET 1 OF 1	WILCOX JOB NO 25036.00004.09	

GENERAL NOTES

Drilling & Sampling Symbols

SS – Split Spoon ($1^3/_8$" I.D., 2" O.D., except where noted
ST – Shelby Tube (3" O.D., except where noted)
PA – Power Auger
PS – Piston Sample (3" diameter)
WB – Wash Boring
WS – Wash Sample
HA – Hand Auger Boring
BS – Bag Sample
RC – Rock Core with diamond bit, NX size, except where noted
RB – Roller Bit
N/A – Not applicable or available

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 – *Coarse*: ¼ to 3" (19 to 76 mm)
Fine: No.4 to ¾" (4.75 to 19 mm)
Sand – *Coarse*: No.10 to No.4 (2 to 4.75 mm)
Medium: No.40 to No.10 (.425 to 2 mm)
Fine: 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

Cohesionless Soil

Relative Density	"N" Value (Blows/ft)
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

Soil Constituents

"Trace"	Less than 10%
"Trace to Some"	10% to 19%
"Some"	20% to 34%
"And"	35% to 50%

Cohesive Soil

Unconfined Compressive (tons per ft^2)	Strength Consistency
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

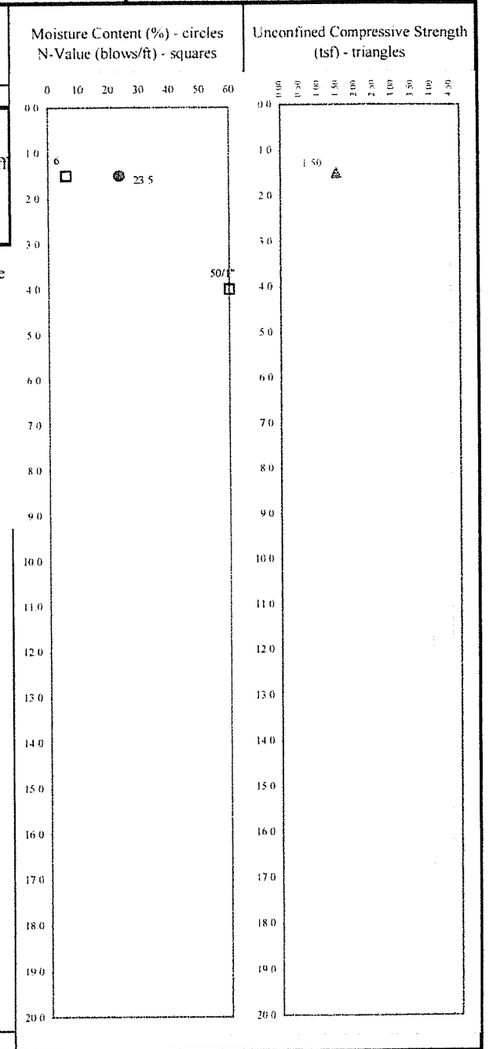
If clay content is sufficient so that clay dominates soil properties, then clay becomes the primary noun with other major soil constituent as modifier, i.e. silty clay. Other minor soil constituents may be added according to estimates of soil constituents present, i.e. silty clay, trace to some sand, trace gravel.

AGS, Inc.
15798 Riverside, Livonia, MI 48154
Tel/Fax: (734) 432-2631

Project: CST Site No. KY-00-0818A - Oakland
Client: Cellere, Inc.
Location: Olive Hill, Carter Co., Kentucky
Project #: 08-1015 **Boring Log #:** B-1

AGS, Inc.
37637 Five Mile Road #224
Livonia, MI 48154
Ph/Fax: (734) 293-5077

Sample No./Type	Recovery (in.)	Depth (ft.)	Description of Material
		0	Ground Surface Elevation = +/- 977'
SS-1	4	1	SANDY CLAY - some silt - occasional root fibers - stiff - brown (CL)
		2	
SS-2	15	3	Driller Reported Auger Refusal on Apparent Limestone Bedrock at a depth of 3'
		4	
		5	
		6	
		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: 4/9/08
Boring Completed: 4/9/08
Rig: Rotary
Driller: Triad Engineering

Approved:

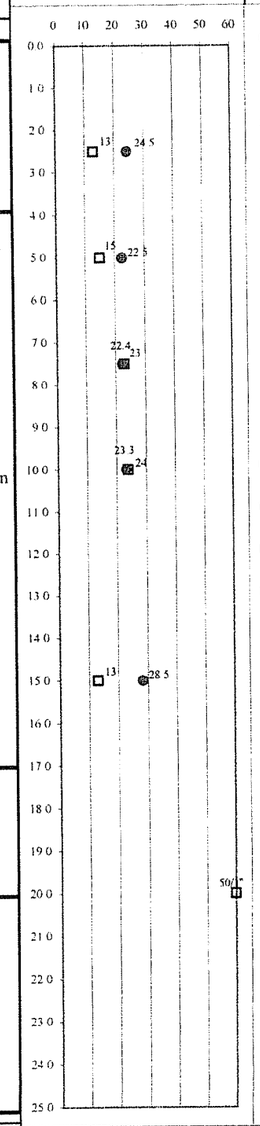
Drawn By: JTA

Project: CST Site No. KY-00-0818A - Oakland
Client: Cellere, Inc.
Location: Olive Hill, Carter Co., Kentucky
Project #: 08-1015 **Boring Log #: B-2**

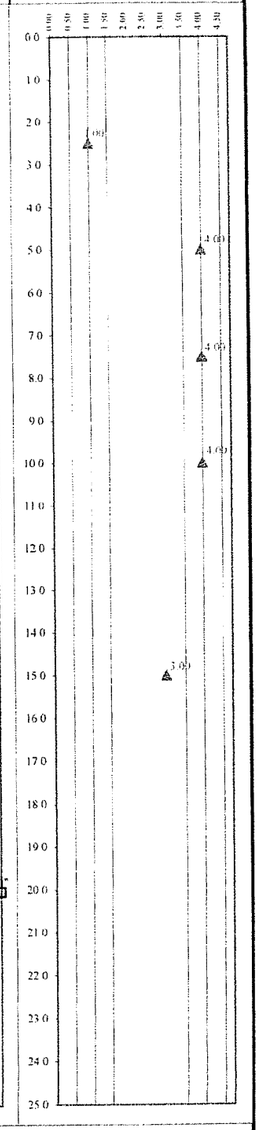
AGS, Inc.
37637 Five Mile Road #224
Livonia, MI 48154
Tel/Fax: (734) 293-5077

Sample No./Type	Recovery (in.)	Depth (ft.)	Description of Material
		0	Ground Surface Elevation = 975' +/-
SS-1	2	1–3	SANDY CLAY - some silt - stiff - brown (CL)
SS-2	18	4–9	SANDY CLAY - some silt - hard to very stiff - brown (CL)
SS-3	18		
SS-4	18		
SS-5	18	10–17	
SS-6	1	18–20	Driller Reported Weathered Limestone
RC-1	Rec= 90%/ RQD=18%	21–25	LIMESTONE - medium hard - gray to buff
			End of Boring (ft.): 30'

Moisture Content (%) - circles
N-Value (blows/ft) - squares



Unconfined Compressive Strength
(tsf) - triangles



Water Level Observations:
While Drilling: Dry
At Completion: NA
Cave-In At:

Boring Started: 4/9/08
Boring Completed: 4/9/08
Rig: Rotary
Driller: Triad Engineering

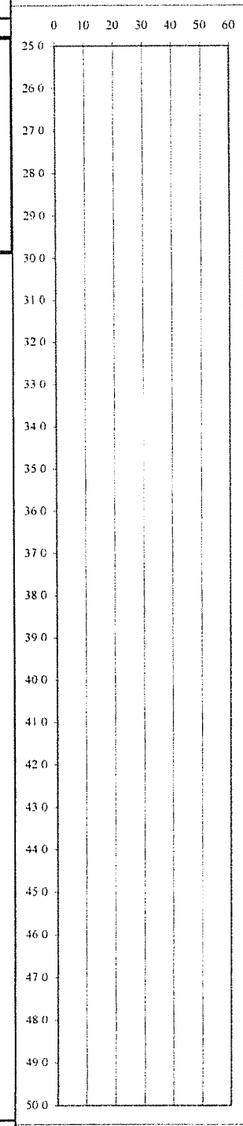
Remarks:

Approved:
Drawn By: JTA

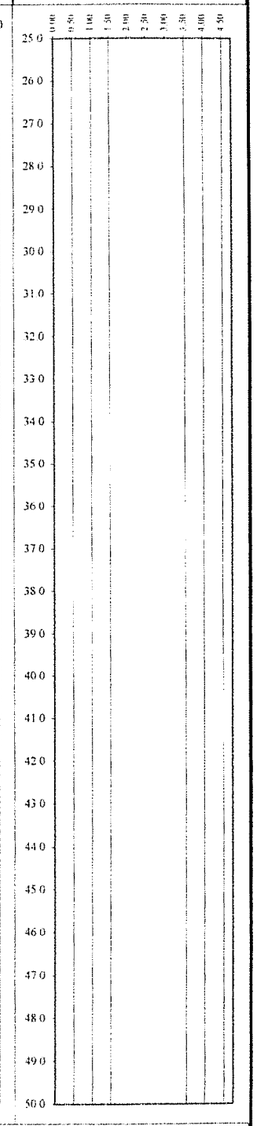
Project: CST Site No. KY-00-0818A - Oakland		AGS, Inc. 37637 Five Mile Road #224 Livonia, MI Tel/Fax: (734) 293-5077
Client: Cellere, Inc.		
Location: Olive Hill, Carter Co., Kentucky		
Project #: 08-1015	Boring Log #: B-2 (cont.)	

Sample No./Type	Recovery (in.)	Depth (ft.)	Description of Material
RC-1	Rec=90%/ RQD=18%	26 – 30	LIMESTONE - medium hard - gray to buff
		30 – 50	End of Boring/Rock Core @ 30'

Moisture Content (%) - circles
N-Value (blows/ft) - squares



Unconfined Compressive Strength
(tsf) - triangles



End of Boring (ft.): 30'

Water Level Observations:	Boring Started: 4/9/08		Approved:
While Drilling: Dry	Boring Completed: 4/9/08	Remarks:	Drawn By: JTA
At Completion: NA	Rig: Rotary		
Cave-In At:	Driller: Triad Engineering		

Project: CST Site No. KY-00-0818A - Oakland
Client: Cellere, Inc.
Location: Olive Hill, Carter Co., Kentucky
Project #: 08-1015 **Boring Log #:** B-3

AGS, Inc.
37637 Five Mile Road #224
Livonia, MI 48154
Ph/Fax: (734) 293-5077

Sample No./Type	Recovery (in.)	Depth (ft.)	Description of Material
		0	Ground Surface Elevation = +/- 971'
SS-1	10	1	SANDY CLAY - some silt - very stiff - brown (CL)
		2	
SS-2	3	3	WEATHERED LIMESTONE -
		4	
SS-3	1	5	Driller Reported Auger Refusal on Limestone @ a depth of 4.5'
		6	
		7	
		8	
		9	
		10	
		11	
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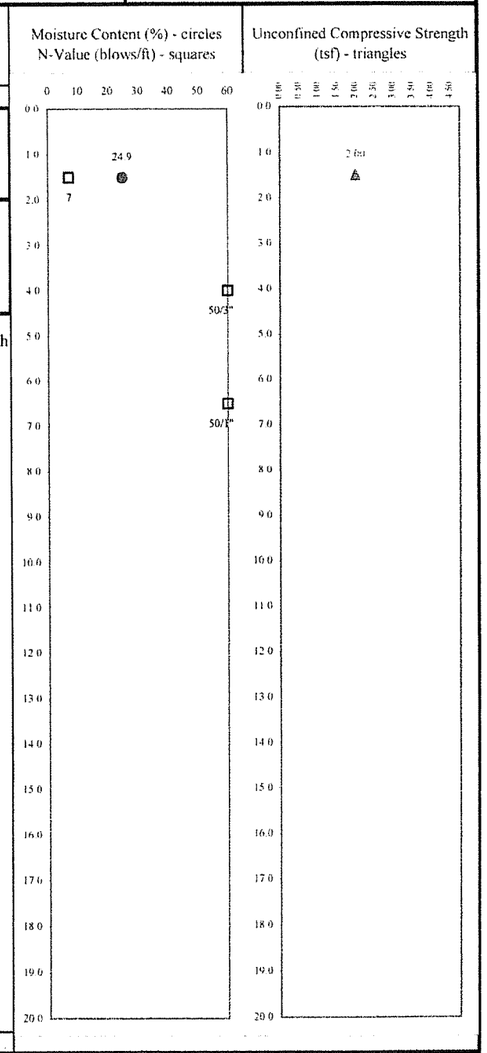


Water Level Observations:
While Drilling: Dry
At Completion: Dry
Cave-In At:

Boring Started: 4/9/08
Boring Completed: 4/9/08
Rig: Rotary
Driller: Triad Engineering

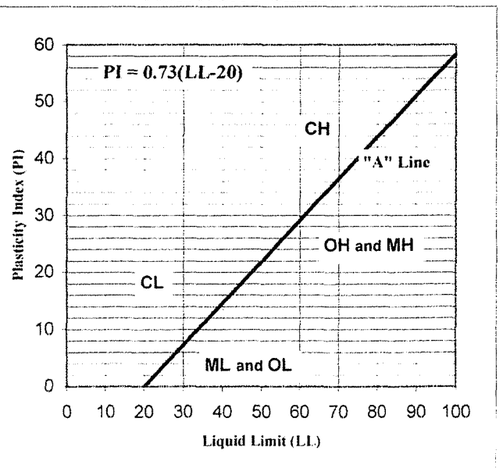
Approved:

Drawn By: JTA

Unified Soil Classification

Major Divisons			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	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 12%..... GM, GC, SM, SC 5 to 12%..... Borderline case requiring dual symbols	$C_u = D_{60}/D_{10}$ 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/u	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
			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/u	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)
			SC	Clayey sands, sand-clay mixtures		Atterberg Limits above "A" line with PI greater than 7	
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 sligh plasticity			
			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 diamaceous 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			

PLASTICITY CHART



Wilcox

An ISO 9001:2000
Certified Company

One Madison Ave
Cadillac, MI 49601
231-775-7755
Fax: 231-775-3135
www.wilcox.us

Built on Quality - continuously improving our quality of service to meet and exceed our clients' expectations.

July 29, 2008

Mr. Brian Meier
CST Holdings, LLC
323 South Hale Street, Suite 100
Wheaton, Illinois 60187

Re: Soil Boring & Rock Coring Investigation
Central States Tower Site No. KY-00-0818A – Oakland
+/- 2511 Oakland Ridge
Olive Hill, Carter County, Kentucky
Wilcox Project No. 25036.00004.09

Dear Mr. Meier:

We have completed the Soil Boring & Rock Coring Investigation for the proposed Central States Tower, Inc. 300-foot self support tower in Olive Hill, Carter County, Kentucky. This report presents the results of our soil boring/rock coring investigation and estimated soil and rock parameters to be used as a guideline in the design of the tower foundations.

This letter also presents the results of the analytical testing for the pH, chloride and sulfide in the soil samples. The pH, Chloride, and sulfide analytical testing was performed on a composite sample formed by mixing portions of split spoon samples S-1 through S-4 from Borings 1 through 3. The composite sample was prepared by thoroughly mixing prior to testing. The pH testing was performed by AGS using a Cole-Parmer Model 05985-80 Digi-Sense pH meter. Chloride and sulfide analytical testing was performed by EQL Laboratories, Inc. of Sterling Heights, Michigan. The test results indicate the soil sample possessed a pH of 7.3, a chloride content of 38 parts per million (ppm) and a sulfide content below the laboratory detection level. A copy of the test results is appended to this letter.

We appreciate the opportunity to assist you and the design team on this project. If there are any questions, please do not hesitate to contact me at 231-775-7755.

Respectfully,
WILCOX PROFESSIONAL SERVICES, LLC

Arthur J. Krueger, P.E.
Project Manager

Enclosure

CLIENT NAME: APPLIED GEOTECHNICAL SERVICES, INC. **PROJECT NAME/NO.:** 08-1015
37637 FIVE MILE RD, #224
LIVONIA, MI 48154

DATE RECEIVED 06/11/08 **DATE ANALYZED** 06/18/08 **DATE REPORTED** 06/20/08

ANALYZED BY: JL ALL RESULTS REPORTED IN ppMILLION

LAB NO./DESCRIPTION			**1313 SOIL CST SITE KY-00-0818A**
COMPOUND NAME		**RDL SOIL ppM**	**08-1015 B-1-B-3 S-1-4 1-10'**
SULFIDE	4500-S2-F	20	ND
CHLORIDE	4500-CL-C	10	38

NOTE: "ND" DENOTES THAT ANALYTE RESULT IS BELOW THE REPORTED REGULATORY DERIVED TARGET LIMIT OF DETECTION.

THOMAS S. MEGNA, PRESIDENT_____ ALA GAJDA, LAB SUPERVISOR_____

REFERENCES: 40 CFR PART 136. CURRENT EDITION. las

SITUATED IN THE CITY OLIVE HILL, COUNTY OF CARTER, AND STATE OF KENTUCKY

1.) TOWER LOCATION, AS SHOWN IN THE COORDINTES BELOW, HAVE A HORIZONTAL ACCURACY WITHIN ± 20 FEET AND A VERTICAL ACCURACY WITHIN ± 3 FEET.

LATITUDE: 38° 24'01.10" N
LONGITUDE: 83° 09' 38.02" W

GROUND ELEVATION: 976' FEET (NAVD 88)

TOWER COORDINATES

BASIS OF BEARING IS TRUE NORTH BY GPS OBSERVATIONS

THIS SURVEY PLAN IS NOT THE RESULT OF A FULL BOUNDARY SURVEY. IT IS THE RESULT OF COMPILATION OF RECORD INFORMATION AND LOCATION OF AVAILABLE MONUMENTATION.

4-23-08

ANTHONY J. ROBINSON, P.S. No. 3601 — DATE

BEARING BASIS: TRUE NORTH AS DETERMINED BY GPS OBSERVATION

STATE OF KENTUCKY
ANTHONY J. ROBINSON
3601
LICENSED PROFESSIONAL LAND SURVEYOR

FLOOD PLAIN INFORMATION

NO FLOOD ZONE DESIGNATION AVAILABLE FOR SUBJECT PARCEL PER FEMA COMMUNITY PANEL ID 210050-UNMAPPED

PROPERTY OWNERS:

JOHN BUCKLER & ALICE JOY GEE
2511 OAKLAND RIDGE ROAD
OLIVE HILL, KENTUCKY 41164

PARENT PARCEL LEGAL DESCRIPTION:

All that certain tract or parcel of land, situate, laying and being in Carter County Kentucky and on the Buffalo fork of Tygart Creek and bounded and described as follows:

Beginning at a white oak, corner to John W. Burton's land; thence a northwest course with said Burton's line to J. M. Cartee line; thence with said Cartee line to Pat McClone's line, thence S 13 W to a poplar; thence S. 29 W. to the top of the cliff; thence around the top of the cliff with J. M. Cartee's line to Denise Stallard's line; then with said Stallard's line to A. E. Kiser's corner at foot of cliff; thence S. 27 E. with A. B. Kiser's line 135 poles to Andrew Brown's line and corner; thence S. 44 E, with Brown's line to the beginning containing 140 acres plus or minus.

There is excluded from this conveyance the following described tract of land now owned by the estate of A. W. McClone – Beginning at a hickory 3.27 W. 37 poles to an elm standing by a rock; S. 66 1/2 W. 5 poles to a stone; N 16 W 3 3/5 poles to a stone; N 40 E 27 poles to a poplar and beech at the branch; N 19 E. 21 poles to a white oak on top of a cliff; S 43 E 26 poles to a poplar; N 73 E 32-2/5 poles to the beginning containing 14 13/16 acres, plus or minus.

Also, the following described strip of land on the waters of Buffalo Creek in Carter County Kentucky, to-wit:

Starting at a small spotted oak and set stone on top of cliff in A B. Kiser and Wayman Buckler line, the said spotted oak being 11 rods and 10 feet from the A. B. Kiser and Stallard Corner, thence running south with cliff 60 rods to a cedar and set stone and a spotted oak at top of cliff; thence running east 30 rods to a set stone and a cedar with the cliff line; thence running north west 75 rods with the old line back to the beginning corner of the cliff.

Also, the following described property, to-wit:

A certain tract of land laying and being on the waters of Buffalo Fork of Tygart's Creek in Carter County, Ky. And bounded as follows: Beginning at a large white oak, a corner to Frazier and in the original A. B. Kiser survey, thence with Kiser's line, S. 27 E– Va. 2 – 52 poles to a stone on said Kiser's line, a spotted oak bears N. 6 W. 18 links – thence leaving said Kiser's line on new lines S. 58 E. 20 1/2 poles to a small white oak and mulberry bush on east side of the County Road at the low-gap, thence N. 69 E. 32 1/2 poles to a small poplar near forks of the branch, thence N. 1/4 W. 45 1/5 poles to an X on the "Buzzard Rock" by a sourwood and sassafras, thence N. 19 E. 16 4/5 poles to a black oak, N. 12 E. 14 4/5 poles to a small locust at the road, thence with the road N. 74 1/2 W. 12 1/2 poles to a small hickory by the road N. 24 1/4 W. 32 3/5 poles to a black oak in Frosier line, thence with said Frasier's line S 44 W. 113 poles to the beginning containing 53 acres, more or less.

LSOT: Deed Book 192, Page 507, dated June 4, 1985, Office of the Clerk, Carter County, Kentucky.

GENERAL NOTES:

NO PROPOSED MUNICIPAL SEWER OR WATER UTILITIES ARE REQUIRED FOR THIS SITE.
FINISHED GRADE WILL MATCH EXISTING CONTOUR.
THERE WILL BE NO CHANGE IN DRAINAGE PATTERN DUE TO THE PROPOSED INSTALLATION.
NO SIGNIFICANT RUNOFF IS GENERATED BY 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.

ZONING INFORMATION:

SUBJECT PARCEL ZONING: NO ZONING (PER SITE PACKAGE)
ADJACENT ZONING: NONE PROVIDED

TOWER SETBACKS: (PER SITE PACKAGE)
FRONT: N/A
REAR: N/A
SIDES: N/A

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 UNDERGROUND PROTECTION, INC." AT 1-800-752-6007 THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

Legal Description for a Central States Tower, Inc. Lease Area
Project No. 50,467
April 8, 2008

Situated in County of Carter and State of Kentucky, also known as being part of lands conveyed to John and Alice Joy Gee Buckler by deed dated July 03, 1985 as recorded in Book 192, Page 507 of Carter County Court Clerk's Records further bounded and described as follows:

Commencing at an iron pin found and used at the Southeast corner of lands conveyed to Jennifer Evans by deed dated July 03, 2007 as recorded in OR 197, Page 482 of Carter County Court Clerk's Records

Thence, bearing North 46°29'00" West, a distance of 2695.31 feet to an iron pin set and the PRINCIPLE PLACE OF BEGINNING of the Lease Area herein described;

Thence, bearing South 60°06'52" West, a distance of 100.00 feet to an iron pin set;

Thence at a right angle, bearing North 29°53'08" West, a distance of 100.00 feet to an iron pin set;

Thence at a right angle, bearing North 60°06'52" East, a distance of 100.00 feet to an iron pin set;

Thence at a right angle, bearing South 29°53'08" East, a distance of 100.00 feet to an iron pin set and the PRINCIPLE PLACE OF BEGINNING, containing 0.2296 acres of land, more or less but subject to all legal highways and all covenants and agreements of record.

Bearings are based on True North as determined from GPS observations and are used herein to indicate angles only

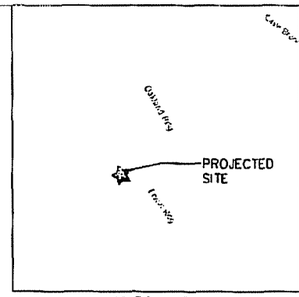
This legal description was prepared based on a survey under the supervision of Anthony J. Robinson, P.S. No. 3601 in April 2008

COMMITMENT No. BT-42916
EFFECTIVE DATE: MARCH 11, 2007
SCHEDULE B ITEMS:

11.) LEASE GRANTED TO C.O. ESHAR AS RECORDED IN LEASE BOOK 15, PAGE 411 ITEM IS A BLANKET LEASE AND COVERS THE ENTIRE SUBJECT PARCEL.

12.) LEASE GRANTED TO RALPH N. THOMAS AS RECORDED IN LEASE BOOK 18, PAGE 557. ITEM IS A BLANKET LEASE AND COVERS THE ENTIRE SUBJECT PARCEL.

13.) MEMORANDUM OF LEASE BETWEEN CENTRAL STATES TOWER HOLDINGS, LLC AND JOHN BUCKLER AND ALICE JOY GEE BUCKLER AS RECORDED IN OFFICIAL RECORD BOOK 211, PAGE 217. NOTHING TO PLOT ON SURVEY.



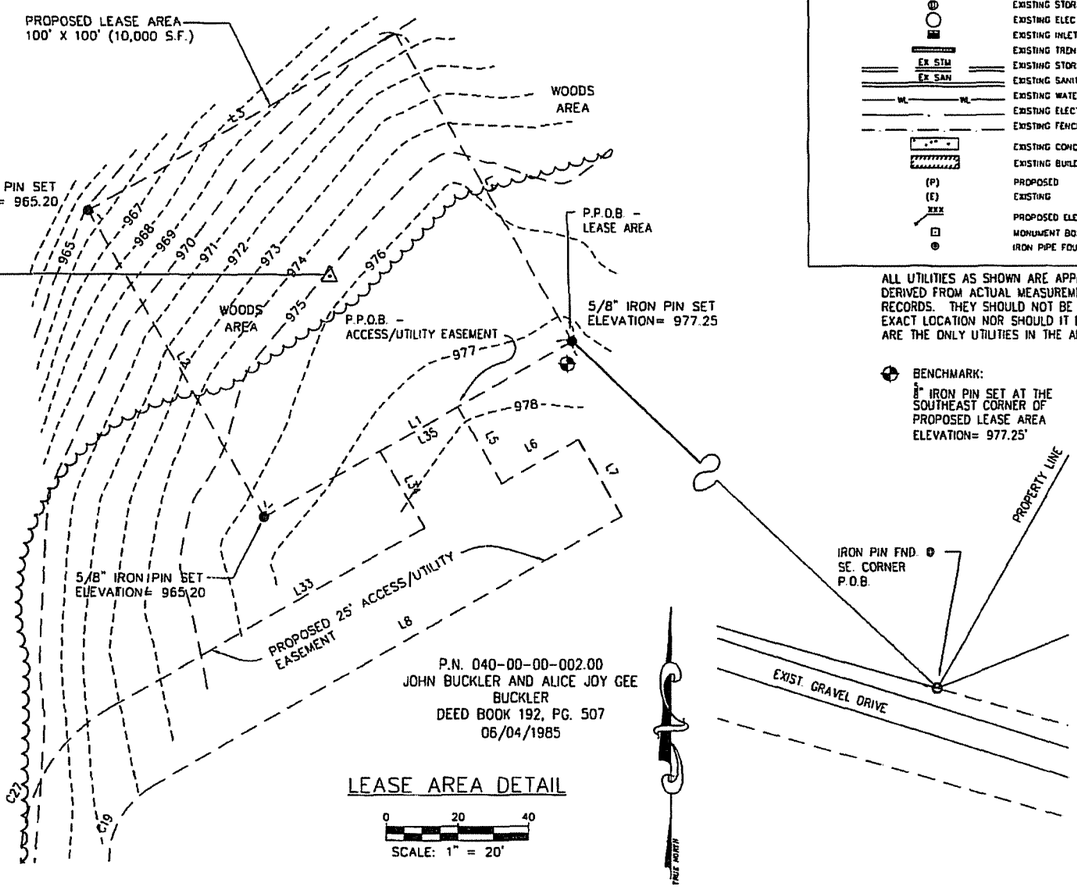
LOCATION MAP
(NOT TO SCALE)

LEGEND

- EXISTING TRANSFORMER
- EXISTING TREE
- BENCHMARK
- IRON PIN SET
- IRON PIN FOUND
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING WATER MANHOLE
- EXISTING WATER METER
- EXISTING PARKING METER
- EXISTING STREET SIGN
- EXISTING BILLBOARD & LARGE SIGNS
- EXISTING GUARDRAIL
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE WITH STREET LIGHT
- EXISTING GROUND GUY WIRE
- EXISTING GAS VALVE
- EXISTING TRAFFIC SIGNAL POLE
- EXISTING SANITARY MANHOLE
- EXISTING STORM MANHOLE
- EXISTING ELEC OR TELE MH
- EXISTING INLET
- EXISTING TRENCH DRAIN
- EX STM — EXISTING STORM DRAIN
- EX SAN — EXISTING SANITARY
- WL — EXISTING WATER MAIN
- EXISTING ELECTRIC WIRE
- EXISTING FENCE
- EXISTING CONCRETE
- EXISTING BUILDING
- (P) PROPOSED
- (E) EXISTING
- XXX PROPOSED ELEVATION MARK
- MONUMENT BOX W/IRON PIN
- IRON PIPE FOUND

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.

BENCHMARK:
⅝" IRON PIN SET AT THE SOUTHEAST CORNER OF PROPOSED LEASE AREA
ELEVATION= 977.25'



LEASE AREA DETAIL

0 20 40
SCALE: 1" = 20'

MAX ENGINEERING,LLC
9000 SW FREEWAY, Ste # 410
Houston, Texas 77074
Phone (713) 773-2525
Fax (713) 773-2558

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

SITE NAME: OAKLAND
SITE NO.: KY-00-0818A
SITE ADDRESS: 2511 OAKLAND RIDGE
OLIVE HILL, KENTUCKY 41164

– PLAN PREPARED BY –
HLG, ENGINEERING AND SURVEYING, INC.
705-F LAKEVIEW PLAZA BLVD.
WORTHINGTON, OH 43085
(614) 841-0053 (PHONE)
(614) 841-0170 (FAX)

NO.	DATE	REVISIONS	BY	CHK	APP'D
C.	04/23/08	TITLE COMMENTS	DP	AR	
B.	04/10/08	UPDATED TOPO SURVEY	DP	AR	
A.	04/08/08	FINAL SURVEY SUBMITTED	DP	AR	

SCALE AS SHOWN | CHECKED BY: DAP | DRAWN: PRE

SHEET S-1

SURVEY PLAN

JOB NO	DWG NO	REV
50467	50467_Master	C

Legal Description for a 25-Foot Access and Utility Easement
Project No. 50,467
April 8, 2008

Situated in County of Carter and State of Kentucky, also known as being part of lands conveyed to John and Alice Joy Gee Buckler by deed dated July 03, 1985 as recorded in Book 192, Page 507 of Carter County Court Clerk's Records further bounded and described as follows:

Commencing at an iron pin found and used at the Southeast corner of lands conveyed to Jennifer Evans by deed dated July 03, 2007 as recorded in OR 197, Page 482 of Carter County Court Clerk's Records

Thence, bearing North 46°29'00" West, a distance of 2695.31 feet to a Southeast corner of a Central States Tower, Inc. Lease Area;

Thence along the Southern line of said Lease Area, bearing South 60°06'52" West, a distance of 37.50 feet to a point thereon and the PRINCIPLE PLACE OF BEGINNING of the Access and Utility Easement herein described;

Thence at a right angle, bearing South 29°53'08" East, a distance of 25.00 feet to a point;

Thence at a right angle, bearing North 60°06'52" East, a distance of 25.00 feet to a point;

Thence at a right angle, bearing South 29°53'08" East, a distance of 25.00 feet to a point;

Thence at a right angle, bearing South 60°06'52" West, a distance of 152.43 feet to a point;

Thence along a tangent curve to the left with a radius of 25.00 feet, a tangent length of 15.42 feet, the chord of which bears South 28°26'56" West for a distance of 26.25 feet, along said arc for a distance of 27.63 feet to a point;

Thence, bearing South 03°13'01" East, a distance of 208.38 feet to a point;

Thence, bearing South 12°51'14" West, a distance of 172.90 feet to a point;

Thence along a tangent curve to the left with a radius of 260.00 feet, a tangent length of 169.95 feet, the chord of which bears South 20°18'59" East for a distance of 284.51 feet, along said arc for a distance of 301.04 feet to a point;

Thence, bearing South 53°29'12" East, a distance of 318.96 feet to a point;

Thence, bearing South 41°26'14" East, a distance of 176.17 feet to a point;

Thence, bearing South 28°44'39" East, a distance of 279.92 feet to a point;

Thence, bearing South 47°27'51" East, a distance of 270.64 feet to a point;

Thence, bearing South 44°31'56" East, a distance of 211.37 feet to a point;

Thence, bearing South 60°18'01" East, a distance of 199.34 feet to a point;

Thence, bearing South 76°04'24" East, a distance of 105.40 feet to a point;

Thence, bearing South 66°50'20" East, a distance of 131.04 feet to a point;

Thence along a tangent curve to the left with a radius of 405.00 feet, a tangent length of 175.20 feet, the chord of which bears North 89°46'05" East for a distance of 321.60 feet, along said arc for a distance of 330.71 feet to a point;

Thence, bearing North 66°22'30" East, a distance of 107.92 feet to a point;

Thence along a tangent curve to the right with a radius of 275.00 feet, a tangent length of 98.73 feet, the chord of which bears North 86°07'27" East for a distance of 185.85 feet, along said arc for a distance of 189.58 feet to a point;

Thence, bearing South 74°07'35" East, a distance of 258.21 feet to a point on the existing edge of pavement of Oakland Ridge Road;

Thence with the existing pavement of Oakland Ridge Road, along a non-tangent curve to the left having a radius of 82.64 feet, the long chord of which bears South 72°55'12" West for a distance of 45.96 feet for an arc length of 46.57 feet to a point thereon;

Thence, bearing North 74°07'35" West, a distance of 219.65 feet to a point;

Thence along a tangent curve to the left with a radius of 250.00 feet, a tangent length of 89.76 feet, the chord of which bears South 86°07'28" West for a distance of 168.95 feet, along said arc for a distance of 172.34 feet to a point;

Thence, bearing South 66°22'30" West, a distance of 107.92 feet to a point;

Thence along a tangent curve to the right with a radius of 430.00 feet, a tangent length of 186.02 feet, the chord of which bears South 89°46'05" West for a distance of 341.45 feet, along said arc for a distance of 351.13 feet to a point;

Thence, bearing North 66°50'20" West, a distance of 129.02 feet to a point;

Thence, bearing North 76°04'24" West, a distance of 105.84 feet to a point;

Thence, bearing North 60°18'01" West, a distance of 206.27 feet to a point;

Thence, bearing North 44°31'24" West, a distance of 213.55 feet to a point;

Thence, bearing North 47°27'51" West, a distance of 274.76 feet to a point;

Thence, bearing North 28°44'39" West, a distance of 281.26 feet to a point;

Thence, bearing North 41°26'14" West, a distance of 170.75 feet to a point;

Thence, bearing North 53°29'12" West, a distance of 316.32 feet to a point;

Thence along a tangent curve to the right with a radius of 285.00 feet, a tangent length of 186.29 feet, the chord of which bears North 20°18'59" West for a distance of 311.86 feet, along said arc for a distance of 329.99 feet to a point;

Thence, bearing North 12°51'14" East, a distance of 169.37 feet to a point;

Thence, bearing North 03°13'01" West, a distance of 204.85 feet to a point;

Thence along a tangent curve to the right with a radius of 50.00 feet, a tangent length of 30.84 feet, the chord of which bears North 28°26'56" East for a distance of 52.50 feet, along said arc for a distance of 55.27 feet to a point;

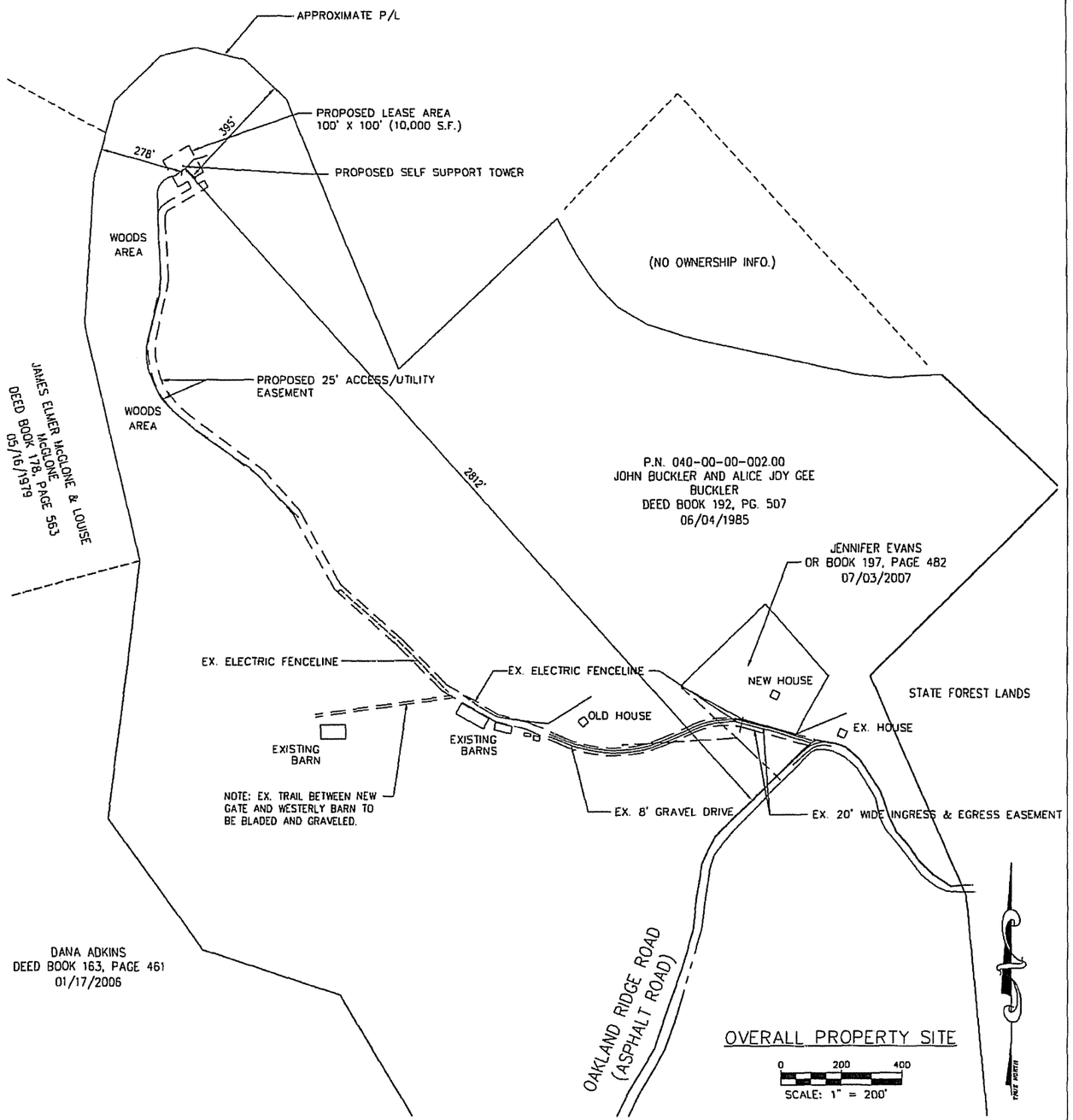
Thence, bearing North 60°06'52" East, a distance of 102.43 feet to a point;

Thence at a right angle, bearing North 29°53'08" West, a distance of 25.00 feet to a point;

Thence at a right angle, bearing North 60°06'52" East, a distance of 25.00 feet to a point on the Southern line of aforesaid Central States Tower, Inc. Lease Area and the PRINCIPLE PLACE OF BEGINNING, containing 1.9930 acres of land, intending to be a strip of land 25-foot wide to be used for access and utility purposes, more or less but subject to all legal highways and all covenants and agreements of record.

Bearings are based on True North as determined from GPS observations and are used herein to indicate angles only.

This legal description was prepared based on a survey under the supervision of Anthony J. Robinson, P.S. No. 3601 in April 2008.



MAX ENGINEERING,LLC
9000 SW FREEWAY, Ste # 410
Houston, Texas 77074
Phone (713) 773-2525
Fax (713) 773-2558

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

SITE NAME: OAKLAND
SITE NO.: KY-00-0818A
SITE ADDRESS: 2511 OAKLAND RIDGE
OLIVE HILL, KENTUCKY 41164

- PLAN PREPARED BY -
HLG, ENGINEERING AND SURVEYING, INC.
705-F LAKEVIEW PLAZA BLVD.
WORTHINGTON, OH 43085
(614) 841-0053 (PHONE)
(614) 841-0170 (FAX)

NO.	DATE	REVISIONS	BY	CHK	APP'D
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B.	04/10/08	UPDATED TOPO SURVEY	DP	AR	
A.	04/08/08	FINAL SURVEY SUBMITTED	DP	AR	

SCALE AS SHOWN | CHECKED BY: DAP | DRAWN: PRE

SHEET S-2

SURVEY PLAN

JOB NO.	DWG NO.	REV
50467	50467_Master	C

MATCHLINE A–A

MATCHLINE B–B

PROPOSED LEASE AREA
100' X 100' (10,000 S.F.)

EXIST. TRIAL (TO BARN)

NOTE: EX. TRAIL BETWEEN NEW GATE AND WESTERLY BARN TO BE BLADED AND GRAVELED. (SEE SHEET S-2)

EX. BARN

EX. BARN

NEW DRIVE-OVER CATTLE GATE

EX. FENCELINE

EX. CORN CRIB

EX. BUILDING

EX. GRAVEL DRIVE

P.N. 040-00-00-002.00
JOHN BUCKLER AND ALICE JOY GEE
BUCKLER
DEED BOOK 192, PG. 507
06/04/1985

OLD HOUSE

EX. 8' GRAVEL DRIVE

OHE

MATCHLINE C–C

PROPOSED 25' ACCESS/UTILITY EASEMENT

P.N. 040-00-00-002.00
JOHN BUCKLER AND ALICE JOY GEE
BUCKLER
DEED BOOK 192, PG. 507
06/04/1985

PROPOSED 25' ACCESS/UTILITY EASEMENT

NEW DRIVE-OVER CATTLE GATE

NEW FENCE LOCATION

EX FENCELINE

NEW FENCE LOCATION

JENNIFER EVANS
OR BOOK 197, PAGE 482
07/03/2007

NEW HOUSE

NEW DRIVE-OVER CATTLE GATE

EX. 8' GRAVEL DRIVE

EX. HOUSE

EX. UTILITY POLE

P.N. 040-00-00-002.00
JOHN BUCKLER AND ALICE JOY GEE
BUCKLER
DEED BOOK 192, PG. 507
06/04/1985

OAKLAND RIDGE ROAD
(ASPHALT ROAD)

EX. UTILITY POLE

P.N. 040-00-00-002.00
JOHN BUCKLER AND ALICE JOY GEE
BUCKLER
DEED BOOK 192, PG. 507
06/04/1985

PROPOSED 25' ACCESS/UTILITY EASEMENT

ACCESS/UTILITY EASEMENT DETAIL

0 50 100
SCALE: 1" = 50'

MATCHLINE A–A

MATCHLINE B–B

MAX ENGINEERING,LLC
9000 SW FREEWAY, Ste # 410
Houston, Texas 77074
Phone (713) 773-2525
Fax (713) 773-2558

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

SITE NAME: OAKLAND
SITE NO.: KY-00-0818A
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– PLAN PREPARED BY –
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B.	04/10/08	UPDATED TOPO SURVEY	DP	AR	
A.	04/08/08	FINAL SURVEY SUBMITTED	DP	AR	

SCALE AS SHOWN | CHECKED BY: DAP | DRAWN: PRE

SHEET S-3

SURVEY PLAN

JOB NO.	DWG NO	REV
50467	50467_Master	C

SITE No: KY-00-0818A

SITE NAME: OAKLAND

AT&T Site No: WV308A

AT&T Site Name: CST

DRAWING INDEX

		REV
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S-1, S-2 & S-3	SURVEY (BY OTHERS) 3 SHEETS	1
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P-2	SITE GRADING PLAN	1
C-1	TOWER ELEVATION & DETAILS	1
C-2	FOUNDATION PLAN & DETAILS	1
C-3	ICE BRIDGE & FENCE DETAILS	1
C-4	GENERAL NOTES	0
E-1	ELECTRICAL NOTES AND DETAILS	1
E-2	SINGLE LINE DIAGRAM & DETAILS	1
E-2A	RF CONFIGURATION & COLOR CODE	0
E-2B	COAX COLOR CODING	0
E-3	SINGLE LINE DIAGRAM & DETAILS	1
E-4	GROUNDING & ELEVATION DETAILS	1
E-5	GROUNDING PLAN AND NOTES	1
REF	CANOPY (DESIGN BY OTHER)	-

NOTES

AT&T COMPLIANCE:

SIGNATURE: _____

DATE: _____

AT&T CONSTRUCTION:

SIGNATURE: _____

DATE: _____

AT&T RF ENGINEER:

SIGNATURE: _____

DATE: _____

TURKEY CONTRUCTION:

SIGNATURE: _____

DATE: _____

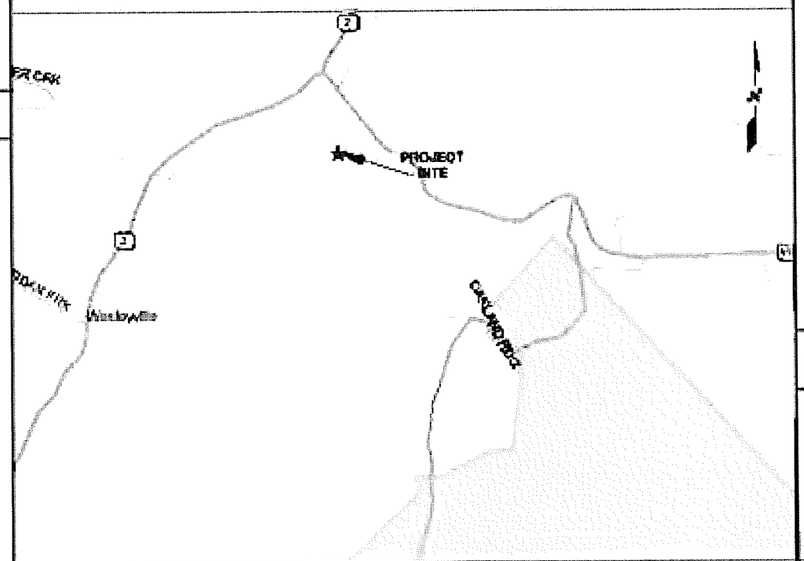
ARCHITECT/ENGINEER:
MAX ENGINEERING, LLC
9000 SW FREEWAY, STE 410
HOUSTON, TX 77074
PHONE: (713) 773-2525
FAX: (713) 773-2558

SURVEYOR:
H.G. ENGINEERING AND SURVEYING, INC
7086-F LAKEVIEW PLAZA BLVD.
WORTHINGTON, OH 43085
PHONE: (614) 841-0023
FAX: (614) 841-0170

VICINITY MAP

DIRECTIONS:

FROM HUNTINGTON, WV TAKE I-64 WEST 38 MILES INTO KENTUCKY, TAKE EXIT 181 (OLIVE HILL) TURN RIGHT (NORTH) ONTO US-60 TRAVEL 1.3 MILES TO SR-182 TURN LEFT (SOUTH) TRAVEL 6.5 MILES TO OAKLAND RIDGE TURN LEFT (SOUTH) AND TRAVEL TO SITE.



PROJECT INFORMATION

SCOPE OF WORK:
UNMANNED TELECOMMUNICATIONS FACILITY

TYPE OF CONSTRUCTION:
PROPOSED 200' SELF-SUPPORTING TOWER

SITE ADDRESS:
2511 OAKLAND RIDGE
OLIVE HILL, KY 41164

TOWER LOCATION:
LATITUDE: N38° 24' 01.18" (NAD 83)
LONGITUDE: W83° 08' 38.02" (NAD 83)
GROUND ELEVATION (AMSL): 976' (NAVD 88)
(FROM SURVEY DRAWING BY H.G. ENGINEERING AND SURVEYING, LLC DRAWING No. 50467)

SQUARE FOOTAGE:
PROPOSED LEASE AREA (10,000) SQ. FT.

PROPERTY OWNER:
JOHN BUCKLEY
2583 OAKLAND RIDGE ROAD
OLIVE HILL, KY 41164

PARCEL NUMBER (TAX ID):
1029-003

OCCUPANT LOAD
UNOCCUPIED

PARKING REQUIREMENTS:
ADDITIONAL PARKING REQUIRED. NONE
EXISTING PARKING SPACES (NUMBER AND DESCRIPTION): NONE

CALL BEFORE YOU DIG. DIAL 811 OR 1-800-752-6007
WEST VIRGINIA LAW REQUIRES 48 HOURS NOTICE FOR EXCAVATION OR DEMOLITION. CALL 811 OR 1-800-752-6007 OR LOCATE ON THE INTERNET AT WWW.MISSUTILITY.NET

NOTES

MAX ENGINEERING, LLC
9000 SW FREEWAY, Ste # 410
Houston, Texas 77074
Phone (713) 773-2525
Fax (713) 773-2558

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

SITE No: KY-00-0818A
SITE NAME: OAKLAND
2511 OAKLAND RIDGE
OLIVE HILL, KY 41164

NO	DATE	DESCRIPTION	BY	CK	APP
1	05/23/08	FOR ZONING & ELECTRICAL REVIEW	--	VS	MB
0	05/08/08	ISSUED FOR CONSTRUCTION	--	VS	MB
A	04/22/08	ITEM ADDED	J	VS	MB

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
T-1

THE TOWER LOCATION, AS SHOWN IN THE COORDINATES BELOW, HAVE A HORIZONTAL ACCURACY WITHIN ± 20 FEET AND A VERTICAL ACCURACY WITHIN ± 3 FEET.

LATITUDE: 38° 24'01.10" N
LONGITUDE: 83° 09' 38.02" W

GROUND ELEVATION: 976' FEET (NAVD 88)

TOWER COORDINATES

BASIS OF BEARING IS TRUE NORTH BY GPS OBSERVATIONS

THIS SURVEY PLAN IS NOT THE RESULT OF A FULL BOUNDARY SURVEY. IT IS THE RESULT OF COMPILATION OF RECORD INFORMATION AND LOCATION OF AVAILABLE MONUMENTATION.

ANTHONY J. ROBINSON, P.S. No. 3601 — DATE 4-23-08

BEARING BASIS: TRUE NORTH AS DETERMINED BY GPS OBSERVATION.

STATE OF KENTUCKY
ANTHONY J. ROBINSON
3601
LICENSED PROFESSIONAL LAND SURVEYOR

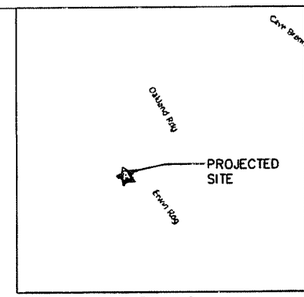
SITUATED IN THE CITY OLIVE HILL, COUNTY OF CARTER, AND STATE OF KENTUCKY

COMMITMENT No. BT-42916
EFFECTIVE DATE: MARCH 11, 2007
SCHEDULE B ITEMS:

11.) LEASE GRANTED TO C.O. ESHAR AS RECORDED IN LEASE BOOK 15, PAGE 411. ITEM IS A BLANKET LEASE AND COVERS THE ENTIRE SUBJECT PARCEL.

12.) LEASE GRANTED TO RALPH N. THOMAS AS RECORDED IN LEASE BOOK 18, PAGE 557. ITEM IS A BLANKET LEASE AND COVERS THE ENTIRE SUBJECT PARCEL.

13.) MEMORANDUM OF LEASE BETWEEN CENTRAL STATES TOWER HOLDINGS, LLC AND JOHN BUCKLER AND ALICE JOY GEE BUCKLER AS RECORDED IN OFFICIAL RECORD BOOK 211, PAGE 217 NOTHING TO PLOT ON SURVEY.



LOCATION MAP
(NOT TO SCALE)

LEGEND

- EXISTING TRANSFORMER
- EXISTING TREE
- BENCHMARK
- IRON PIN SET
- IRON PIN FOUND
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING WATER MANHOLE
- EXISTING WATER METER
- EXISTING PARKING METER
- EXISTING STREET SIGN
- EXISTING BILLBOARD & LARGE SIGNS
- EXISTING GUARDRAIL
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE WITH STREET LIGHT
- EXISTING GROUND GUY WIRE
- EXISTING GAS VALVE
- EXISTING TRAFFIC SIGNAL POLE
- EXISTING SANITARY MANHOLE
- EXISTING STORM MANHOLE
- EXISTING ELEC OR TELE MH
- EXISTING INLET
- EXISTING TRENCH DRAIN
- EX STM — EXISTING STORM DRAIN
- EX SAN — EXISTING SANITARY
- W — EXISTING WATER MAIN
- E — EXISTING ELECTRIC WIRE
- EXISTING FENCE
- EXISTING CONCRETE
- EXISTING BUILDING
- (P) PROPOSED
- (E) EXISTING
- XXX PROPOSED ELEVATION MARK
- MONUMENT BOX W/IRON PIN
- IRON PIPE FOUND

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.

BENCHMARK:
½" IRON PIN SET AT THE SOUTHEAST CORNER OF PROPOSED LEASE AREA
ELEVATION= 977.25'

PROPERTY OWNERS:

JOHN BUCKLER & ALICE JOY GEE
2511 OAKLAND RIDGE ROAD
OLIVE HILL, KENTUCKY 41164

PARENT PARCEL LEGAL DESCRIPTION:

All that certain tract or parcel of land, situate, laying and being in Carter County Kentucky and on the Buffalo fork of Tygart Creek and bounded and described as follows:

Beginning at a white oak, corner to John W. Burton's land; thence a northwest course with said Burton's line to J. M. Cortee line; thence with said Cortee line to Pat McGlone's line; thence S 13 W to a poplar; thence S. 29 W. to the top of the cliff; thence around the top of the cliff with J. M. Cortee's line to Denise Stallard's line; then with said Stallard's line to A. E. Kiser's corner at foot of cliff; thence S. 27 E. with A. B. Kiser's line 135 poles to Andrew Brown's line and corner; thence S. 44 E, with Brown's line to the beginning containing 140 acres plus or minus.

There is excluded from this conveyance the following described tract of land now owned by the estate of A. W. McGlone – Beginning at a hickory 3.27 W. 37 poles to an elm standing by a rock; S. 66 1/2 W. 5 poles to a stone; N 16 W 3 3/5 poles to a stone; N 40 E 27 poles to a poplar and beech at the branch; N 19 E. 21 poles to a white oak on top of a cliff; S 43 E 26 poles to a poplar; N 73 E 32-2/5 poles to the beginning containing 14 13/16 acres, plus or minus.

Also, the following described strip of land on the waters of Buffalo Creek in Carter County Kentucky, to-wit:

Starting at a small spotted oak and set stone on top of cliff in A. B. Kiser and Wayman Buckler line, the said spotted oak being 11 rods and 10 feet from the A. B. Kiser and Stellard Corner, thence running south with cliff 60 rods to a cedar and set stone and a spotted oak at top of cliff; thence running east 30 rods to a set stone and a cedar with the cliff line; thence running north west 75 rods with the old line back to the beginning corner of the cliff.

Also, the following described property, to-wit:

A certain tract of land laying and being on the waters of Buffalo Fork of Tygart's Creek in Carter County, Ky. And bounded as follows: Beginning at a large white oak, a corner to Frazier and in the original A. B. Kiser survey, thence with Kiser's line, S. 27 E- Va. 2 – 52 poles to a stone on said Kiser's line, a spotted oak bears N. 6 W. 18 links – thence leaving said Kiser's line on new lines S. 58 E. 20 1/2 poles to a small white oak and mulberry bush on east side of the County Road at the low-gap, thence N. 69 E. 32 1/2 poles to a small poplar near forks of the branch, thence N. 1/4 W. 45 1/5 poles to an X on the "Buzzard Rock" by a sourwood and sossafras, thence N. 19 E. 16 4/5 poles to a black oak, N. 12 E. 14 4/5 poles to a small locust at the road, thence with the road N. 74 1/2 W. 12 1/2 poles to a small hickory by the road N. 24 1/4 W. 32 3/5 poles to a black oak in Frasier line, thence with said Frasier's line S 44 W. 113 poles to the beginning containing 53 acres, more or less.

LSOT: Deed Book 192, Page 507, dated June 4, 1985, Office of the Clerk, Carter County, Kentucky.

FLOOD PLAIN INFORMATION

NO FLOOD ZONE DESIGNATION AVAILABLE FOR SUBJECT PARCEL PER FEMA COMMUNITY PANEL ID 210050-UNMAPPED.

GENERAL NOTES:

NO PROPOSED MUNICIPAL SEWER OR WATER UTILITIES ARE REQUIRED FOR THIS SITE.
FINISHED GRADE WILL MATCH EXISTING CONTOUR.
THERE WILL BE NO CHANGE IN DRAINAGE PATTERN DUE TO THE PROPOSED INSTALLATION
NO SIGNIFICANT RUNOFF IS GENERATED BY 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.

ZONING INFORMATION:

SUBJECT PARCEL ZONING: NO ZONING (PER SITE PACKAGE)
ADJACENT ZONING: NONE PROVIDED
TOWER SETBACKS: (PER SITE PACKAGE)
FRONT: N/A
REAR: N/A
SIDES: N/A

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 UNDERGROUND PROTECTION, INC." AT 1-800-752-6007 THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

Legal Description for a Central States Tower, Inc. Lease Area
Project No. 50,467
April 8, 2008

Situated in County of Carter and State of Kentucky, also known as being part of lands conveyed to John and Alice Joy Gee Buckler by deed dated July 03, 1985 as recorded in Book 192, Page 507 of Carter County Court Clerk's Records further bounded and described as follows:

Commencing at an iron pin found and used at the Southeast corner of lands conveyed to Jennifer Evans by deed dated July 03, 2007 as recorded in OR 197, Page 482 of Carter County Court Clerk's Records

Thence, bearing North 46°29'00" West, a distance of 2695.31 feet to an iron pin set and the PRINCIPLE PLACE OF BEGINNING of the Lease Area herein described;

Thence, bearing South 60°06'52" West, a distance of 100.00 feet to an iron pin set;

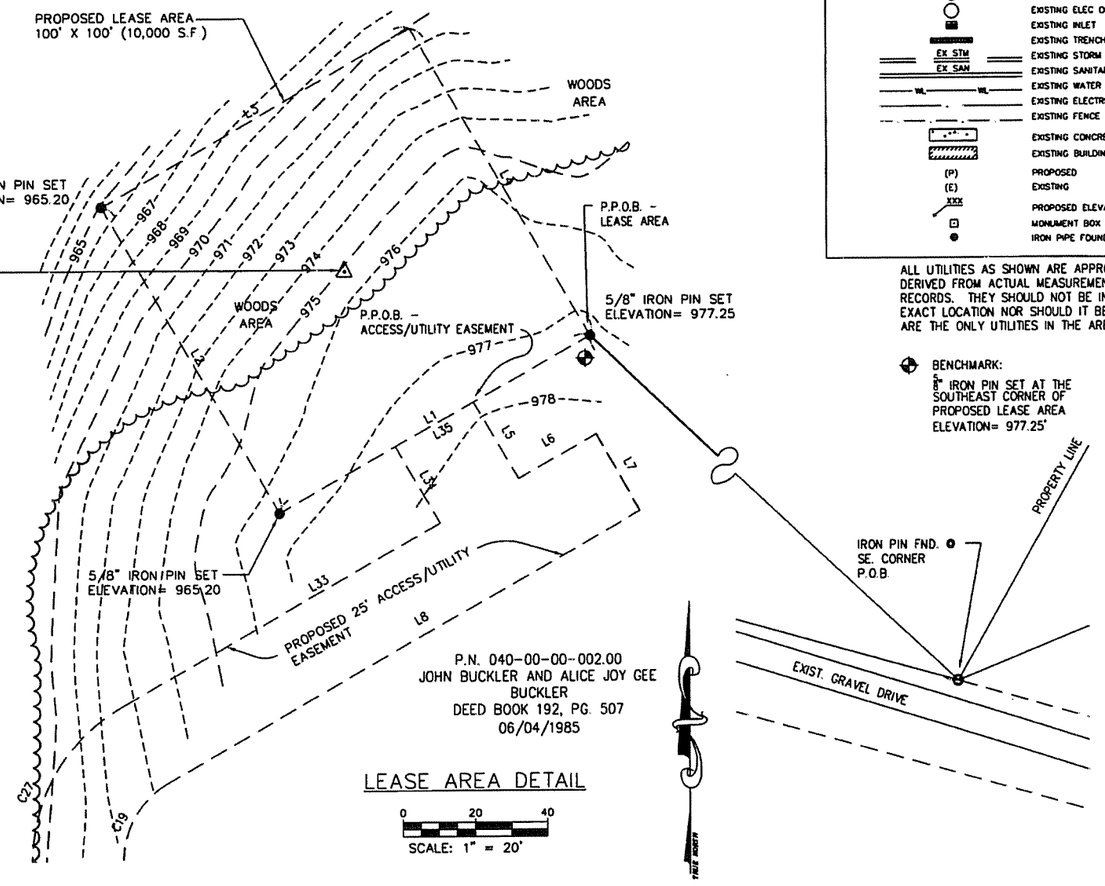
Thence at a right angle, bearing North 29°53'08" West, a distance of 100.00 feet to an iron pin set;

Thence at a right angle, bearing North 60°06'52" East, a distance of 100.00 feet to an iron pin set;

Thence at a right angle, bearing South 29°53'08" East, a distance of 100.00 feet to an iron pin set and the PRINCIPLE PLACE OF BEGINNING, containing 0.2296 acres of land, more or less but subject to all legal highways and all covenants and agreements of record.

Bearings are based on True North as determined from GPS observations and are used herein to indicate angles only.

This legal description was prepared based on a survey under the supervision of Anthony J. Robinson, P.S. No. 3601 in April 2008.



LEASE AREA DETAIL

0 20 40
SCALE: 1" = 20'

MAX ENGINEERING,LLC
9000 SW FREEWAY, Ste # 410
Houston, Texas 77074
Phone (713) 773-2525
Fax (713) 773-2558

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

SITE NAME: OAKLAND
SITE NO.: KY-00-0818A
SITE ADDRESS: 2511 OAKLAND RIDGE
OLIVE HILL, KENTUCKY 41164

- PLAN PREPARED BY -
HLG, ENGINEERING AND SURVEYING, INC.
705-F LAKEVIEW PLAZA BLVD.
WORTHINGTON, OH 43085
(614) 841-0053 (PHONE)
(614) 841-0170 (FAX)

NO.	DATE	REVISIONS	BY	CHK	APP'D
C.	04/23/08	TITLE COMMENTS	DP	AR	
B.	04/10/08	UPDATED TOPO SURVEY	DP	AR	
A.	04/08/08	FINAL SURVEY SUBMITTED	DP	AR	

SCALE AS SHOWN | CHECKED BY: DAP | DRAWN: PRE

SHEET S-1

SURVEY PLAN

JOB NO.	DWG.NO.	REV
50467	50467_Master	C

Legal Description for a 25-Foot Access and Utility Easement
Project No. 50,467
April 8, 2008

Situated in County of Carter and State of Kentucky, also known as being part of lands conveyed to John and Alice Joy Gee Buckler by deed dated July 03, 1985 as recorded in Book 192, Page 507 of Carter County Court Clerk's Records further bounded and described as follows:

Commencing at an iron pin found and used at the Southeast corner of lands conveyed to Jennifer Evans by deed dated July 03, 2007 as recorded in OR 197, Page 482 of Carter County Court Clerk's Records

Thence, bearing North 46°29'00" West, a distance of 2695.31 feet to a Southeast corner of a Central States Tower, Inc. Lease Area;

Thence along the Southern line of said Lease Area, bearing South 60°06'52" West, a distance of 37.50 feet to a point thereon and the PRINCIPLE PLACE OF BEGINNING of the Access and Utility Easement herein described;

Thence at a right angle, bearing South 29°53'08" East, a distance of 25.00 feet to a point;

Thence at a right angle, bearing North 60°06'52" East, a distance of 25.00 feet to a point;

Thence at a right angle, bearing South 29°53'08" East, a distance of 25.00 feet to a point;

Thence at a right angle, bearing South 60°06'52" West, a distance of 152.43 feet to a point;

Thence along a tangent curve to the left with a radius of 25.00 feet, a tangent length of 15.42 feet, the chord of which bears South 28°26'56" West for a distance of 26.25 feet, along said arc for a distance of 27.63 feet to a point;

Thence, bearing South 03°13'01" East, a distance of 208.38 feet to a point;

Thence, bearing South 12°51'14" West, a distance of 172.90 feet to a point;

Thence along a tangent curve to the left with a radius of 260.00 feet, a tangent length of 169.95 feet, the chord of which bears South 20°18'59" East for a distance of 284.51 feet, along said arc for a distance of 301.04 feet to a point;

Thence, bearing South 53°29'12" East, a distance of 318.96 feet to a point;

Thence, bearing South 41°26'14" East, a distance of 176.17 feet to a point;

Thence, bearing South 28°44'39" East, a distance of 279.92 feet to a point;

Thence, bearing South 47°27'51" East, a distance of 270.64 feet to a point;

Thence, bearing South 44°31'56" East, a distance of 211.37 feet to a point;

Thence, bearing South 60°18'01" East, a distance of 199.34 feet to a point;

Thence, bearing South 76°04'24" East, a distance of 105.40 feet to a point;

Thence, bearing South 66°50'20" East, a distance of 131.04 feet to a point;

Thence along a tangent curve to the left with a radius of 405.00 feet, a tangent length of 175.20 feet, the chord of which bears North 89°46'05" East for a distance of 321.60 feet, along said arc for a distance of 330.71 feet to a point;

Thence, bearing North 66°22'30" East, a distance of 107.92 feet to a point;

Thence along a tangent curve to the right with a radius of 275.00 feet, a tangent length of 98.73 feet, the chord of which bears North 86°07'27" East for a distance of 185.85 feet, along said arc for a distance of 189.58 feet to a point;

Thence, bearing South 74°07'35" East, a distance of 258.21 feet to a point on the existing edge of pavement of Oakland Ridge Road;

Thence with the existing pavement of Oakland Ridge Road, along a non-tangent curve to the left having a radius of 82.64 feet, the long chord of which bears South 72°55'12" West for a distance of 45.96 feet for an arc length of 46.57 feet to a point thereon;

Thence, bearing North 74°07'35" West, a distance of 219.65 feet to a point;

Thence along a tangent curve to the left with a radius of 250.00 feet, a tangent length of 89.76 feet, the chord of which bears South 86°07'28" West for a distance of 168.95 feet, along said arc for a distance of 172.34 feet to a point;

Thence, bearing South 66°22'30" West, a distance of 107.92 feet to a point;

Thence along a tangent curve to the right with a radius of 430.00 feet, a tangent length of 186.02 feet, the chord of which bears South 89°46'05" West for a distance of 341.45 feet, along said arc for a distance of 351.13 feet to a point;

Thence, bearing North 66°50'20" West, a distance of 129.02 feet to a point;

Thence, bearing North 76°04'24" West, a distance of 106.84 feet to a point;

Thence, bearing North 60°18'01" West, a distance of 206.27 feet to a point;

Thence, bearing North 44°31'24" West, a distance of 213.55 feet to a point;

Thence, bearing North 47°27'51" West, a distance of 274.76 feet to a point;

Thence, bearing North 28°44'39" West, a distance of 281.26 feet to a point;

Thence, bearing North 41°26'14" West, a distance of 170.75 feet to a point;

Thence, bearing North 53°29'12" West, a distance of 316.32 feet to a point;

Thence along a tangent curve to the right with a radius of 285.00 feet, a tangent length of 186.29 feet, the chord of which bears North 20°18'59" West for a distance of 311.86 feet, along said arc for a distance of 329.99 feet to a point;

Thence, bearing North 12°51'14" East, a distance of 169.37 feet to a point;

Thence, bearing North 03°13'01" West, a distance of 204.85 feet to a point;

Thence along a tangent curve to the right with a radius of 50.00 feet, a tangent length of 30.84 feet, the chord of which bears North 28°26'56" East for a distance of 52.50 feet, along said arc for a distance of 55.27 feet to a point;

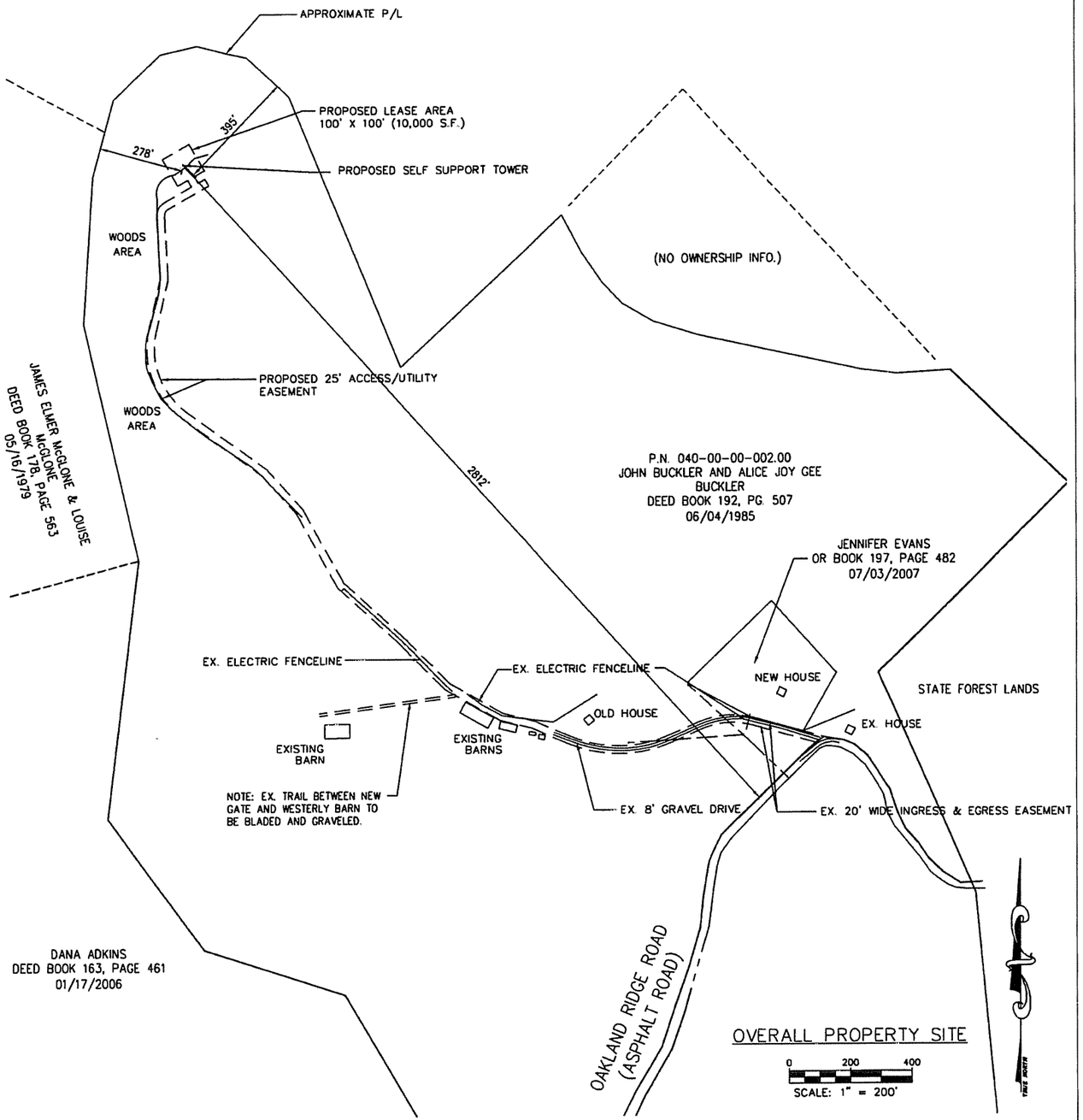
Thence, bearing North 60°06'52" East, a distance of 102.43 feet to a point;

Thence at a right angle, bearing North 29°53'08" West, a distance of 25.00 feet to a point;

Thence at a right angle, bearing North 60°06'52" East, a distance of 25.00 feet to a point on the Southern line of aforesaid Central States Tower, Inc. Lease Area and the PRINCIPLE PLACE OF BEGINNING, containing 1.9930 acres of land, intending to be a strip of land 25-foot wide to be used for access and utility purposes, more or less but subject to all legal highways and all covenants and agreements of record.

Bearings are based on True North as determined from GPS observations and are used herein to indicate angles only.

This legal description was prepared based on a survey under the supervision of Anthony J. Robinson, P.S. No. 3601 in April 2008.



MAX ENGINEERING,LLC
9000 SW FREEWAY, Ste # 410
Houston, Texas 77074
Phone (713) 773-2525
Fax (713) 773-2558

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

SITE NAME: OAKLAND
SITE NO.: KY-00-0818A
SITE ADDRESS: 2511 OAKLAND RIDGE
OLIVE HILL, KENTUCKY 41164

- PLAN PREPARED BY -
HLG, ENGINEERING AND SURVEYING, INC.
705-F LAKEVIEW PLAZA BLVD.
WORTHINGTON, OH 43085
(614) 841-0053 (PHONE)
(614) 841-0170 (FAX)

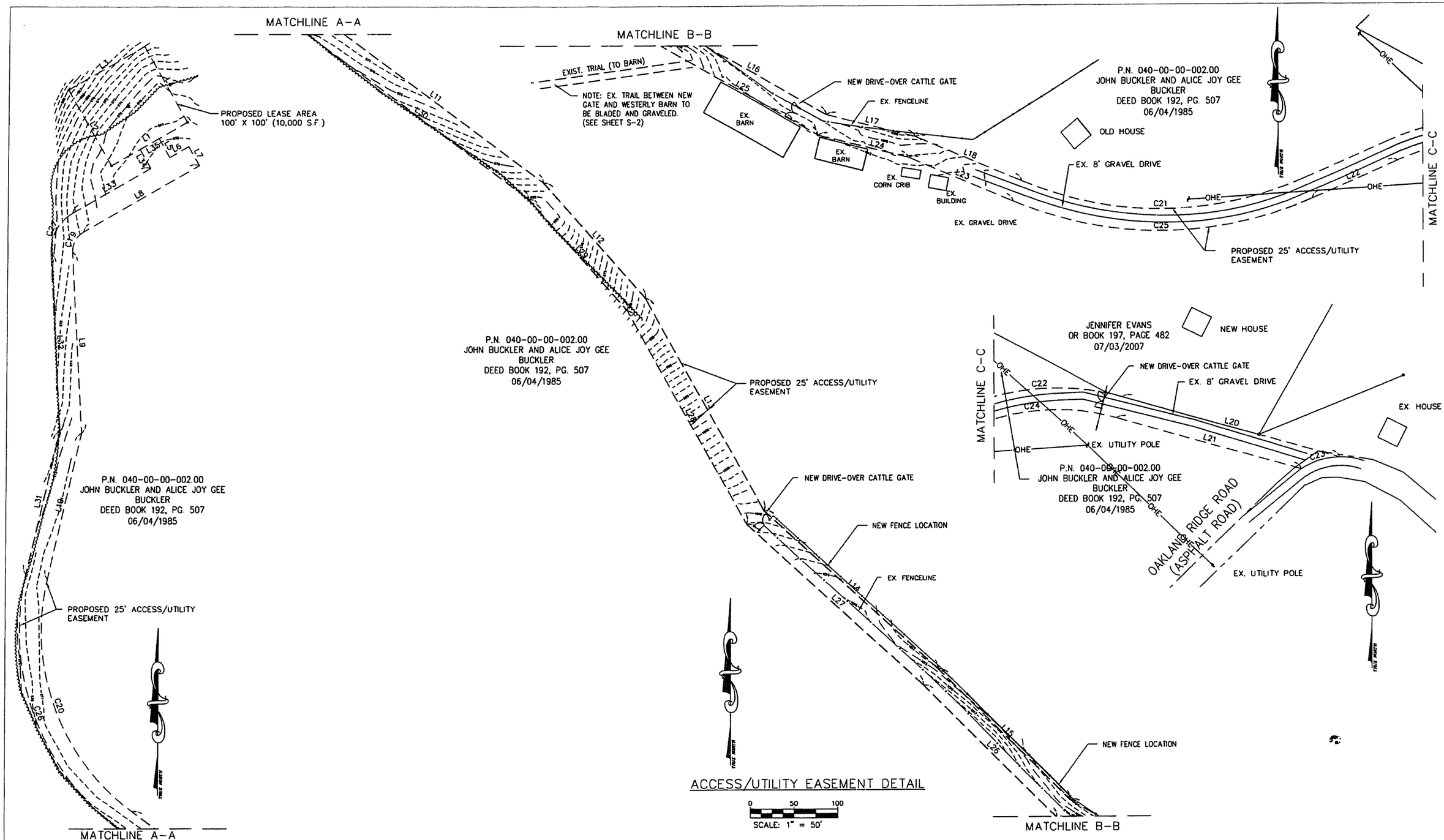
NO.	DATE	REVISIONS	BY	CHK	APP'D
C.	04/23/08	TITLE COMMENTS	DP	AR	
B.	04/10/08	UPDATED TOPO SURVEY	DP	AR	
A.	04/08/08	FINAL SURVEY SUBMITTED	DP	AR	

SCALE AS SHOWN | CHECKED BY: DAP | DRAWN: PRE

SHEET S-2

SURVEY PLAN

JOB NO.	DWG.NO.	REV
50467	50467_Master	C



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NO.	DATE	REVISIONS	BY	CHK	APP'D
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B.	04/10/08	UPDATED TOPO SURVEY	DP	AR	
A.	04/08/08	FINAL SURVEY SUBMITTED	DP	AR	

SCALE AS SHOWN | CHECKED BY: DAP | DRAWN: PRE

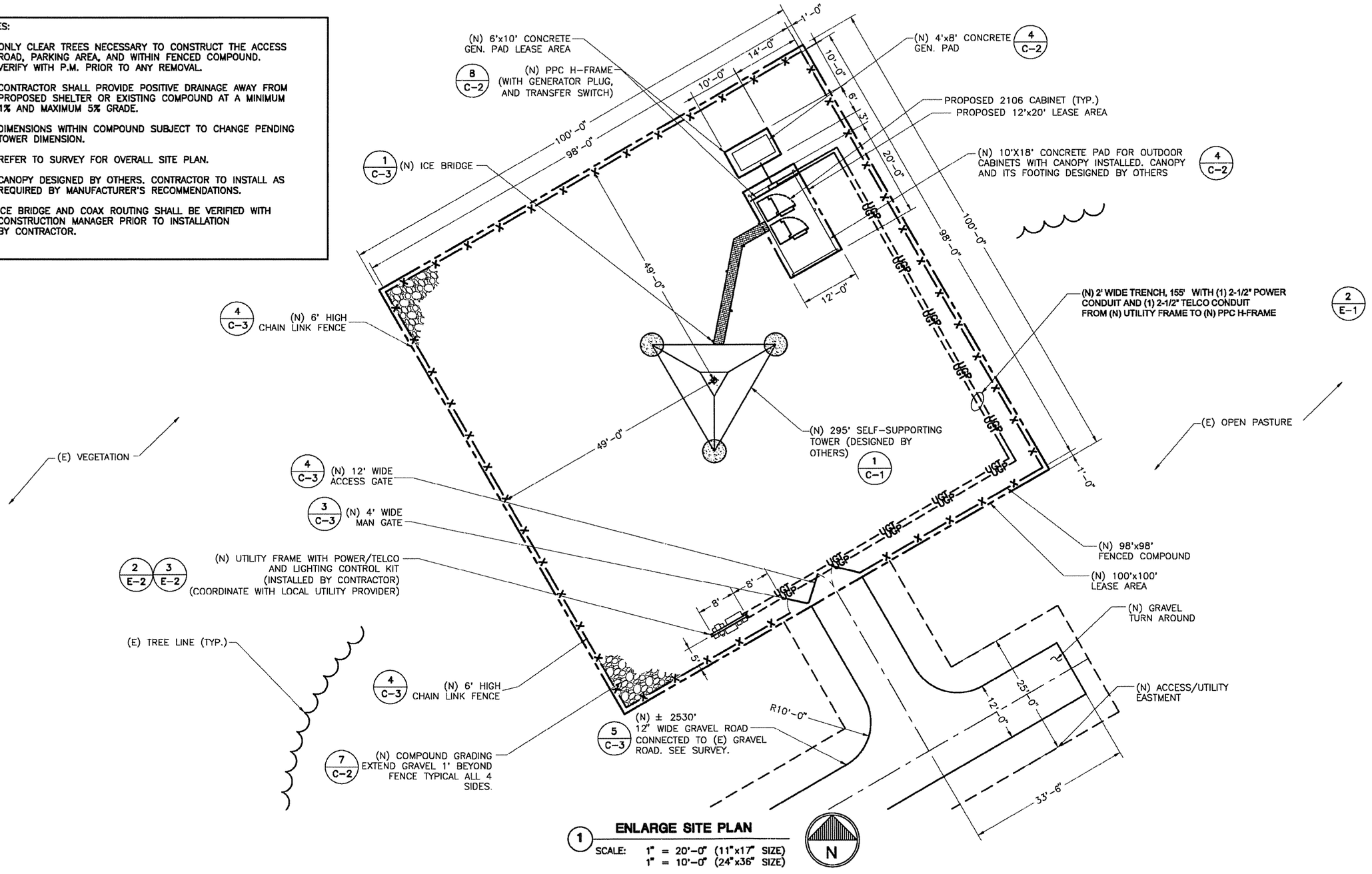
SHEET S-3

SURVEY PLAN

JOB NO.	DWG.NO.	REV
50467	50467_Master	C

NOTES:

1. ONLY CLEAR TREES NECESSARY TO CONSTRUCT THE ACCESS ROAD, PARKING AREA, AND WITHIN FENCED COMPOUND. VERIFY WITH P.M. PRIOR TO ANY REMOVAL.
2. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM PROPOSED SHELTER OR EXISTING COMPOUND AT A MINIMUM 1% AND MAXIMUM 5% GRADE.
3. DIMENSIONS WITHIN COMPOUND SUBJECT TO CHANGE PENDING TOWER DIMENSION.
4. REFER TO SURVEY FOR OVERALL SITE PLAN.
5. CANOPY DESIGNED BY OTHERS. CONTRACTOR TO INSTALL AS REQUIRED BY MANUFACTURER'S RECOMMENDATIONS.
6. ICE BRIDGE AND COAX ROUTING SHALL BE VERIFIED WITH CONSTRUCTION MANAGER PRIOR TO INSTALLATION BY CONTRACTOR.



1 ENLARGE SITE PLAN

SCALE: 1" = 20'-0" (11"x17" SIZE)
1" = 10'-0" (24"x36" SIZE)

MAX ENGINEERING, LLC
9000 SW FREEWAY, Ste # 410
Houston, Texas 77074
Phone (713) 773-2525
Fax (713) 773-2558

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

SITE No: KY-00-0818A
SITE NAME: OAKLAND
2511 OAKLAND RIDGE
OLIVE HILL, KY 41164

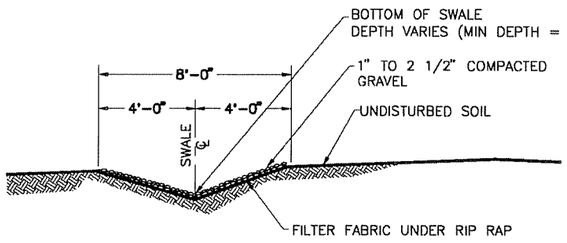
NO.	DATE	REVISIONS	BY	CHK	APP'D
1	07/29/08	PER CLIENT'S RECOMMENDATIONS	HD	VD	HM
0	05/06/08	FOR CONSTRUCTION	HD	VD	HM
A	04/22/08	FOR REVIEW	HD	VD	HM

SCALE: AS SHOWN | DESIGNED BY: EC | DRAWN BY: CM

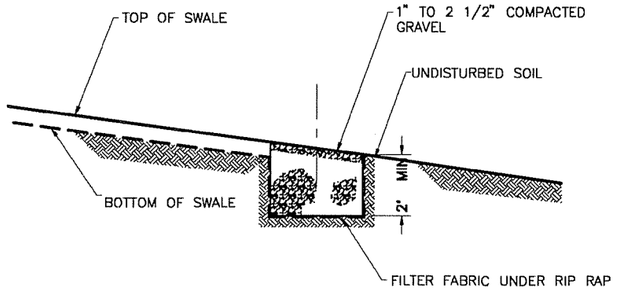
STATE OF KENTUCKY
HAK-PONG MA
07-29-08
LICENSED PROFESSIONAL ENGINEER

SHEET TITLE
ENLARGE SITE PLAN

SHEET NUMBER
P-1



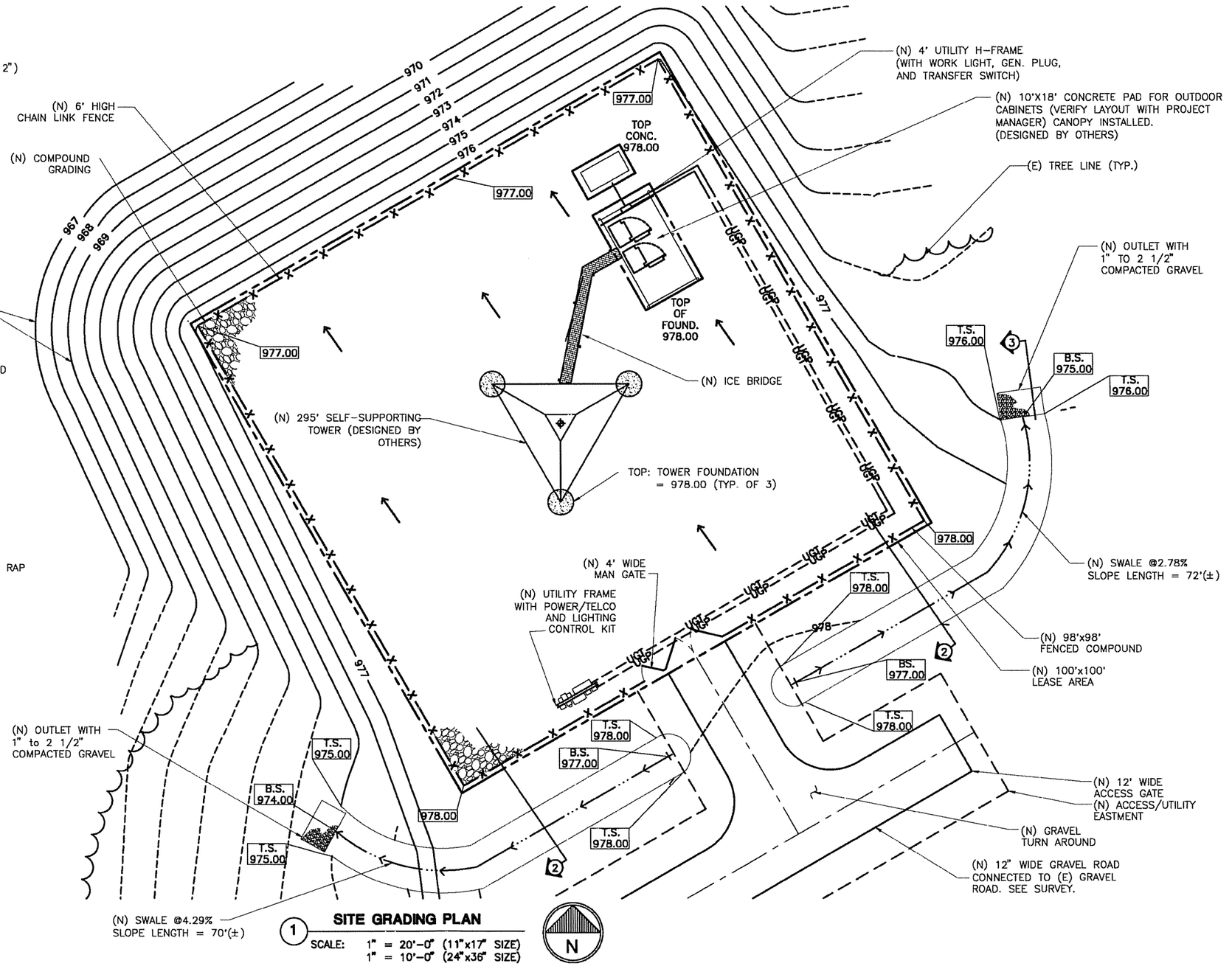
2 SWALE DETAIL
SCALE: N.T.S



3 OUTLET DETAIL
SCALE: N.T.S

LEGENDS:

–XXX.XX–	EXISTING CONTOUR
XXX.XX	PROPOSED CONTOUR
XXX.XX	PROPOSED ELEVATION
T.S. XXX.XX	TOP OF SWALE ELEVATION
B.S. XXX.XX	BOTTOM OF SWALE ELEVATION
→	DRAINAGE FLOW



1 SITE GRADING PLAN
SCALE: 1" = 20'-0" (11"x17" SIZE)
1" = 10'-0" (24"x36" SIZE)

MAX ENGINEERING, LLC
9000 SW FREEWAY, Ste • 410
Houston, Texas 77074
Phone (713) 773-2525
Fax (713) 773-2558

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

SITE No: KY-00-0818A
SITE NAME: OAKLAND
2511 OAKLAND RIDGE
OLIVE HILL, KY 41164

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	07/29/08	PER CLIENT'S RECOMMENDATIONS	HD	VD	HM
0	05/06/08	FOR CONSTRUCTION	HD	VD	HM
A	04/22/08	FOR REVIEW	HD	VD	HM

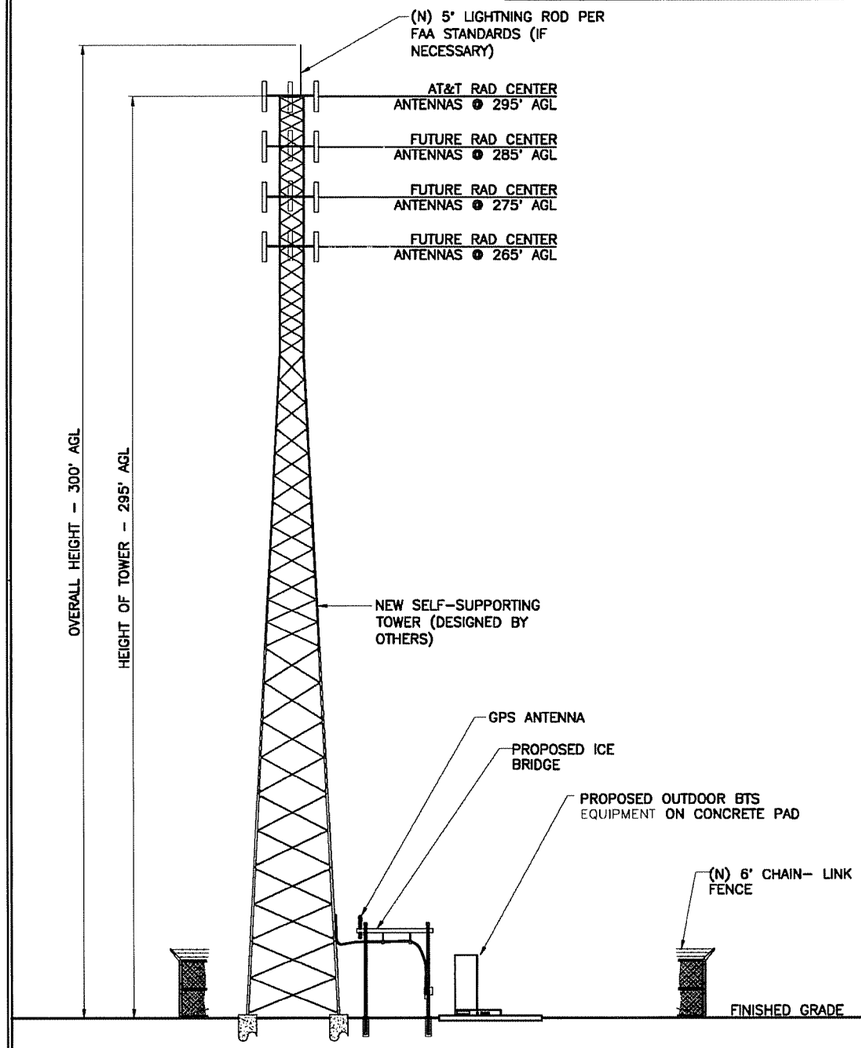
SCALE: AS SHOWN | DESIGNED BY: EC | DRAWN BY: CM

STATE OF KENTUCKY
HAK-FONG MA
07-29-08
LICENSED PROFESSIONAL ENGINEER

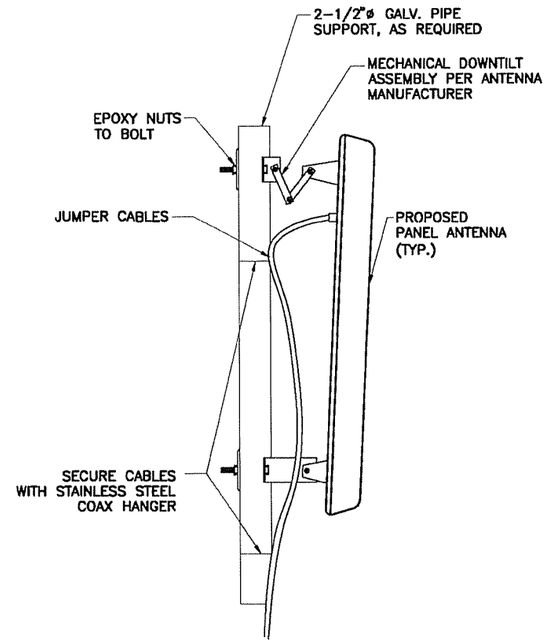
SHEET TITLE
SITE GRADING PLAN

SHEET NUMBER
P-2

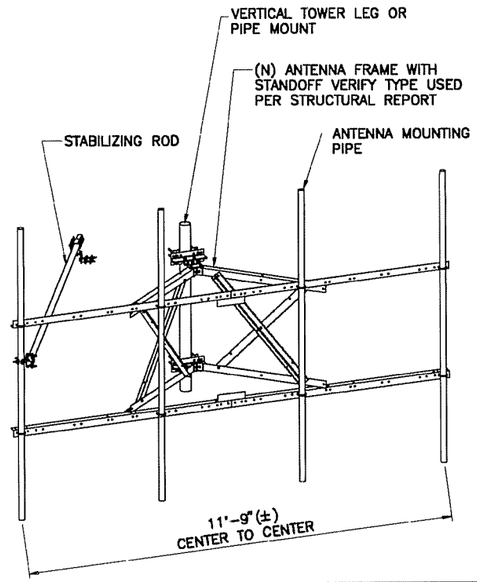
ANALYSIS AND DESIGN OF TOWER AND FOUNDATION BY OTHERS. REFER TO APPROPRIATE SHEETS FOR MORE INFORMATION. NO ERECTION OR MODIFICATION OF TOWER AND FOUNDATION SHALL BE MADE WITHOUT APPROVAL OF STRUCTURAL ENGINEER



1 TOWER ELEVATION
N.T.S.

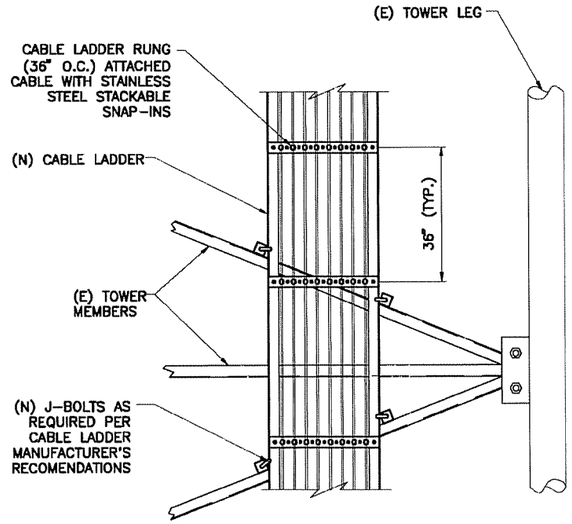


2 ANTENNA MOUNTING DETAILS
N.T.S.

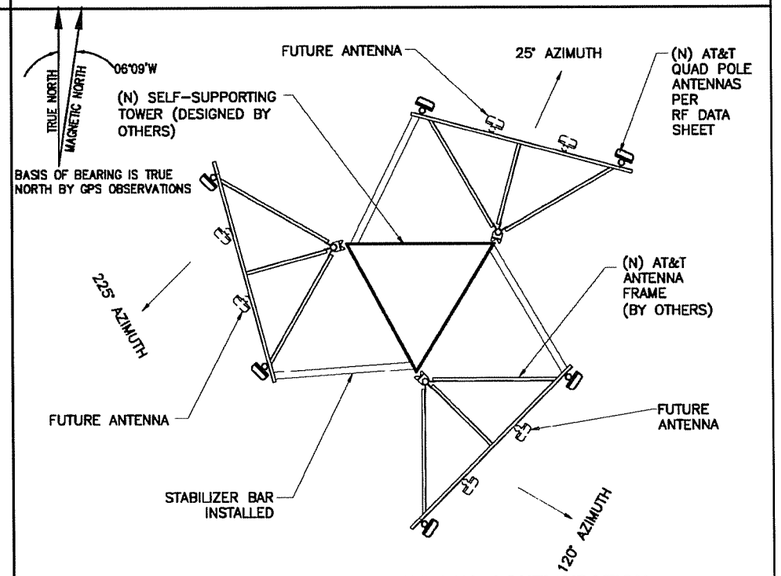


NOTE:
CONTRACTOR TO INSTALL APPROVED ANTENNA MOUNTS PER STRUCTURAL ANALYSIS (DONE BY OTHERS).

3 STANDOFF WIRELESS FRAME
N.T.S.



4 CABLE LADDER DETAILS
N.T.S.



5 TYPICAL SECTORIZED ANTENNA CONFIGURATION
N.T.S.

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STATE OF KENTUCKY
HAK-FONG MA
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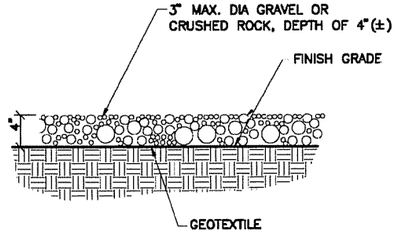
LICENSED PROFESSIONAL ENGINEER

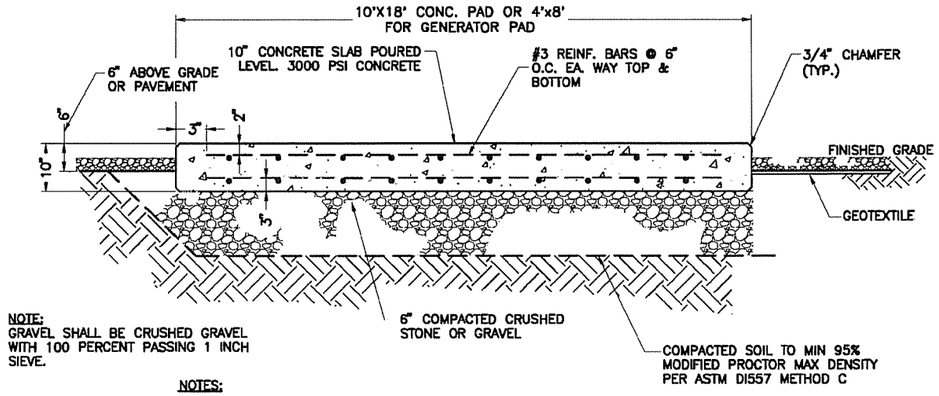
SHEET TITLE
TOWER ELEVATION & DETAILS
SHEET NUMBER
C-1

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 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE.
3. SLAB FOUNDATION DESIGN ASSUMING ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF.
4. 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.
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 DRAWING. 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.



⑦ COMPOUND GRADE
N.T.S.

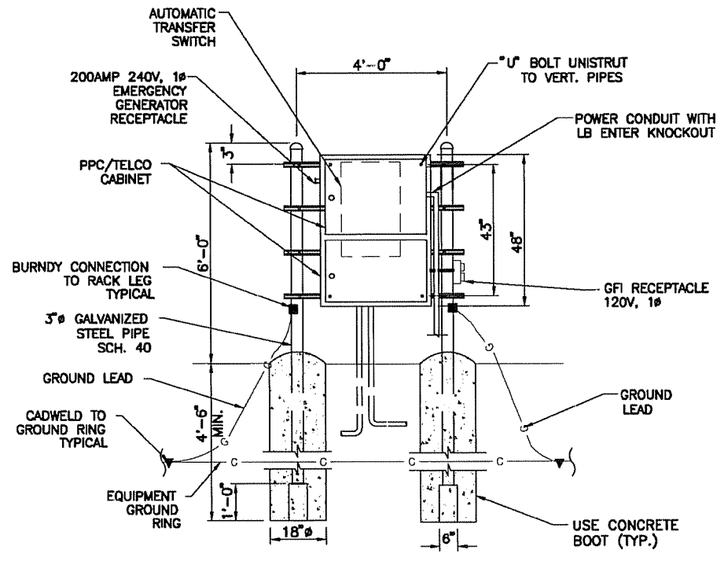


NOTE:
GRAVEL SHALL BE CRUSHED GRAVEL WITH 100 PERCENT PASSING 1 INCH SIEVE.

NOTES:

1. CONCRETE FINISH TO BE CLASS "A" TOLERANCE.
2. TEST FOR 3000 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 BY INDEPENDENT LAB.

④ CONCRETE BTS PAD / GEN. PAD SECTION
N.T.S.



⑧ 4' H-FRAME DETAIL
N.T.S.

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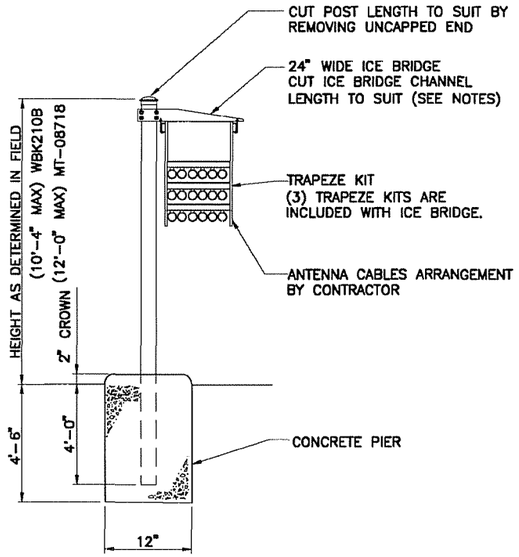
STATE OF KENTUCKY
HAK-FONG MA
07-29-08
LICENSED PROFESSIONAL ENGINEER

SHEET TITLE
FOUNDATION PLAN & DETAILS

SHEET NUMBER
C-2

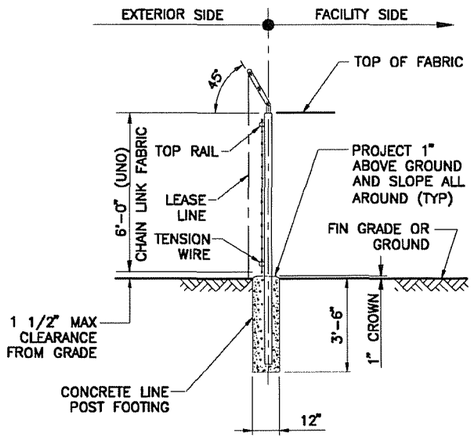


NOTES:

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 CANTILIVER 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. SOFTENERS WILL BE ADDED TO PROTECT THE FEEDLINES.
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.
8. THE DESIGN IS BASED ON ASCE 7-98, 3 SECOND GUST WIND SPEED OF 110 MPH, EXPOSURE C, ELEVATION AT GRADE.
9. THIS DESIGN IS BASED ON 24" WIDE ICE BRIDGE AND (18) 1 5/8" DIA COAX CABLES AND MAX. POST SUPPORT SPACING OF 10'-0".

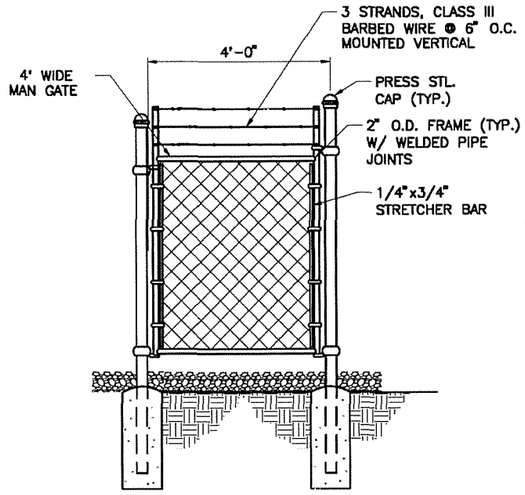
(1) ICE BRIDGE SUPPORT POST FOUNDATION

N.T.S.



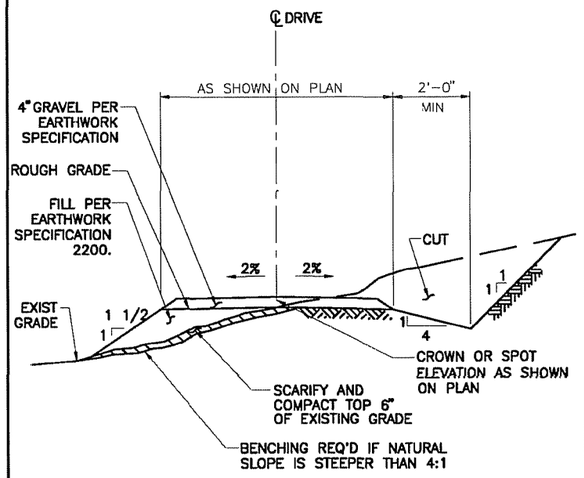
(2) FENCE/BARBED WIRE ARM DETAIL

N.T.S.



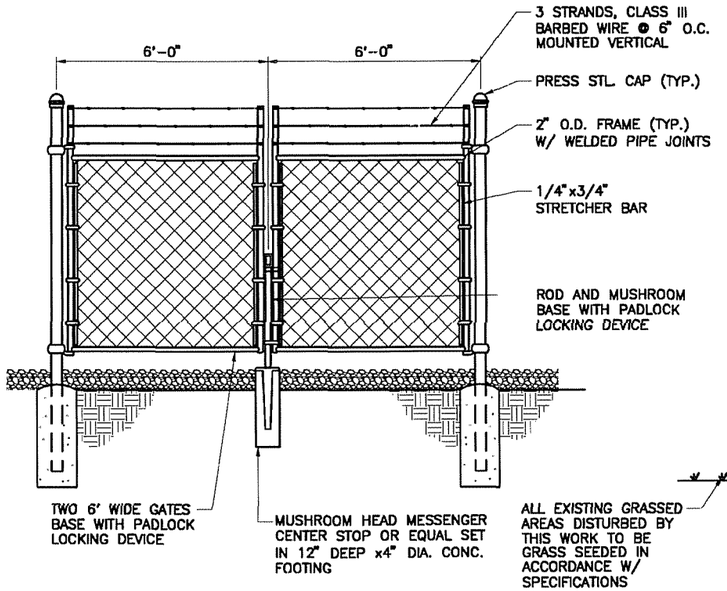
(3) 4' MAN GATE DETAIL

N.T.S.



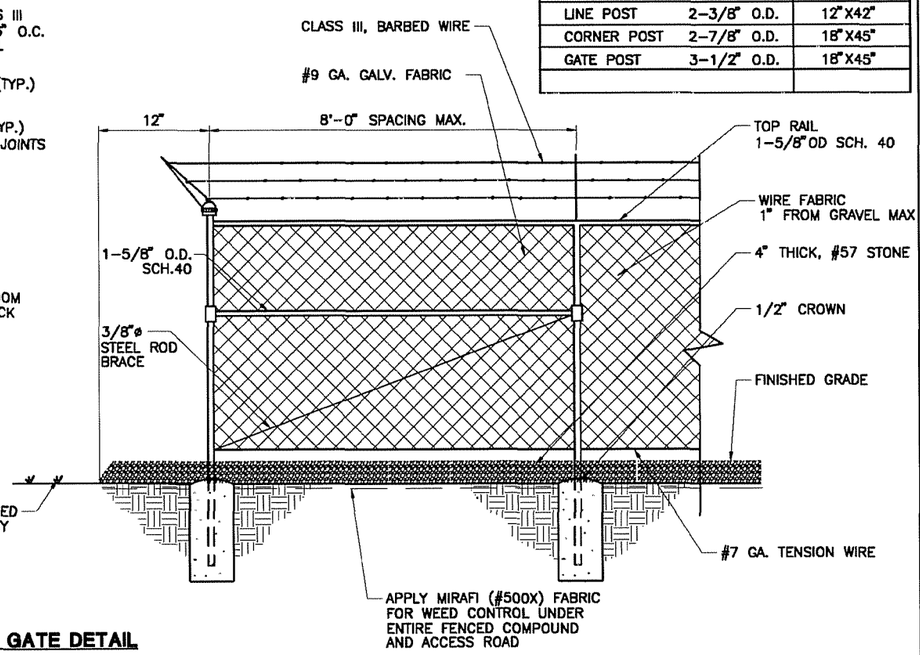
(5) GRAVEL DRIVE DETAILS

N.T.S.



FRONT VIEW

6' HIGH FENCE		FOOTINGS
LINE POST	2-3/8" O.D.	12"X42"
CORNER POST	2-7/8" O.D.	18"X45"
GATE POST	3-1/2" O.D.	18"X45"



(4) FENCE AND GATE DETAIL

N.T.S.

MAX ENGINEERING, LLC
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CST

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SCALE: AS SHOWN | DESIGNED BY: EC | DRAWN BY: CM

STATE OF KENTUCKY HAK-FONG MA 07-29-08 LICENSED PROFESSIONAL ENGINEER

SHEET TITLE
ICE BRIDGE & FENCE DETAILS

SHEET NUMBER
C-3

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. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE.
7. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
8. 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.
9. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
10. 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 STABALIZED 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"ø) 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 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE.
3. SLAB FOUNDATION DESIGN BASED ON ASSUMING ALLOWABLE SOIL SOIL BEARING PRESSURE OF 2000 PSF.
4. 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.
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 RECOMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFIRM TO MANUFACTURER'S RECOMENDATION 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 TOWER, INC. (CST)
   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.

APPLICABLE BUILDING CODES AND STANDARDS

SUBCONTRACTORS WORK SHALL COMPLY WITH ALL THE 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 THE CONTRACT AWARD SHALL GOVERN THE DESIGN.

2003 STATE CONSTRUCTION CODE (2003 IBC)

NATIONAL ELECTRICAL CODE (NEC 2002 PART 8 STATE MENDMENTS) WITH LOCAL UNDERWRITTEN LABORATORIES APPROVED ELECTRICAL PRODUCTS

LIFE SAFETY CODE NFPA – 101

SUBCONTRACTOR'S WORK SHALL COOMPLY WITH THE LATEST EDITION OF THE FOLLOWING:

AMERICAN CONCRETE INSTITUTE 9ACIO 318, BUILDING CODE REQUIREMENT FOR STRUCTURAL

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

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

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINNERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDENCE AND EARTH SURFACE POTENTIAL OF A GROUND SYSTEM.

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

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

TIA 807 COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECORDIA GR-1503 COAXIAL CABLE CONNECTIONS.

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

ABBREVIATIONS & SYMBOLS

SYMBOLS

- S/G — SOLID GROUND BUS BAR
- S/N — 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
- (M) METER
- EXOTHERMIC WELD (CADWELD) (UNLESS OTHERWISE NOTED)
- MECHANICAL CONNECTION (UNLESS OTHERWISE NOTED)
- 5/8" x 10' COPPER CLAD STEEL GROUND
- 5/8" x 10' COPPER CLAD STEEL GROUND ROD WITH INSPECTION SLEEVE
- EXOTHERMIC WELD (CADWELD) WITH INSPECTION SLEEVE
- GROUNDING WIRE

ABBREVIATIONS

AGL	ABOVE GRADE LEVEL
BTS	BASE TRANSCEIVER 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

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SCALE: AS SHOWN | DESIGNED BY: EC | DRAWN BY: CM

STATE OF KENTUCKY — HAK-FONG MA — 07-29-08 — LICENSED PROFESSIONAL ENGINEER

SHEET TITLE
GENERAL NOTES
SHEET NUMBER
C-4

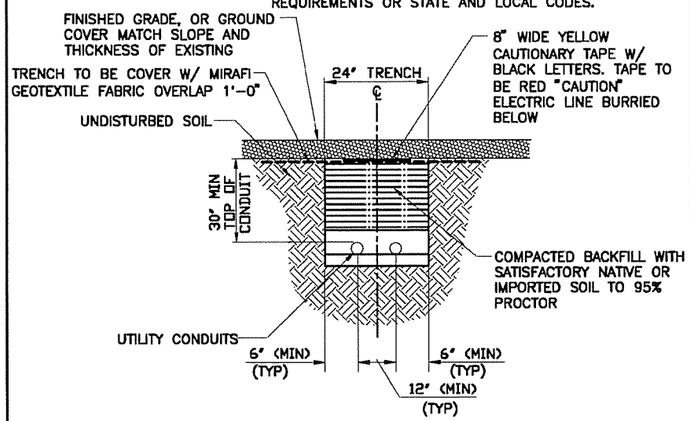
ELECTRICAL INSTALLATION NOTES:

1. 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.
2. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
3. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
4. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
5. 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" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA.
6. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH PLASTIC TAPE PER COLOR SCHEDULE. 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).
7. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
8. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
9. 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.
10. 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.
11. 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.
12. 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).
13. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
14. 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.
15. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
16. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
17. 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.
18. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
21. 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)

ELECTRICAL INSTALLATION NOTES (cont.):

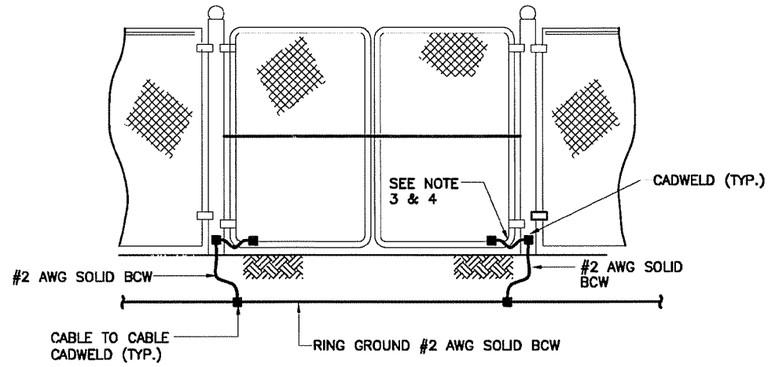
23. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS OR NEMA 3R (OR BETTER) OUTDOORS
24. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) BETTER INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
25. 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.
26. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
27. 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.

NOTES: 1. CONTRACTOR SHALL DETERMINE DEPTH "D" BASED UPON NATIONAL ELECTRICAL CODE, UTILITY REQUIREMENTS OR STATE AND LOCAL CODES.



* CONDUIT SIZE, TYPE, QUANTITY AND SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS

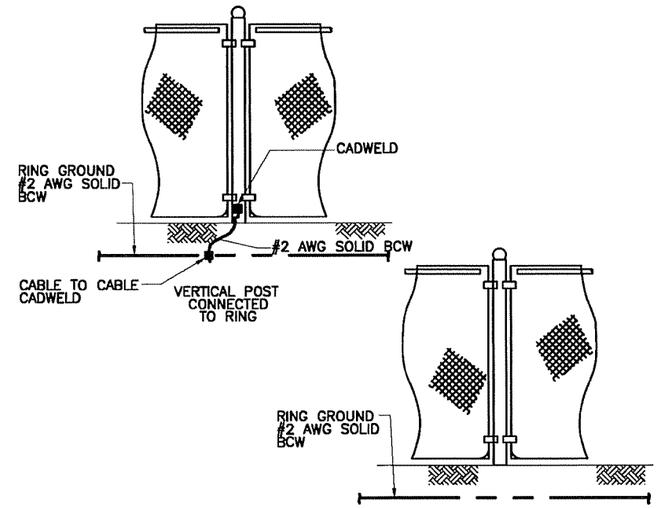
(2) TYPICAL TRENCH DETAILS
N.T.S.



NOTES:

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

(1) FENCE GATE GROUNDING DETAILS
N.T.S.



NOTE:

1. 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 TO FENCE.
2. HORIZONTAL POLES SHALL BE BONDED TO EACH OTHER.
3. BOND EACH HORIZONTAL POLE / BRACE TO EACH OTHER AND TO EACH VERTICAL POST THAT IS BONDED TO THE EXTERIOR GROUND RING

(3) FENCE GROUNDING DETAILS
N.T.S.

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SCALE: AS SHOWN | DESIGNED BY: EC | DRAWN BY: CM

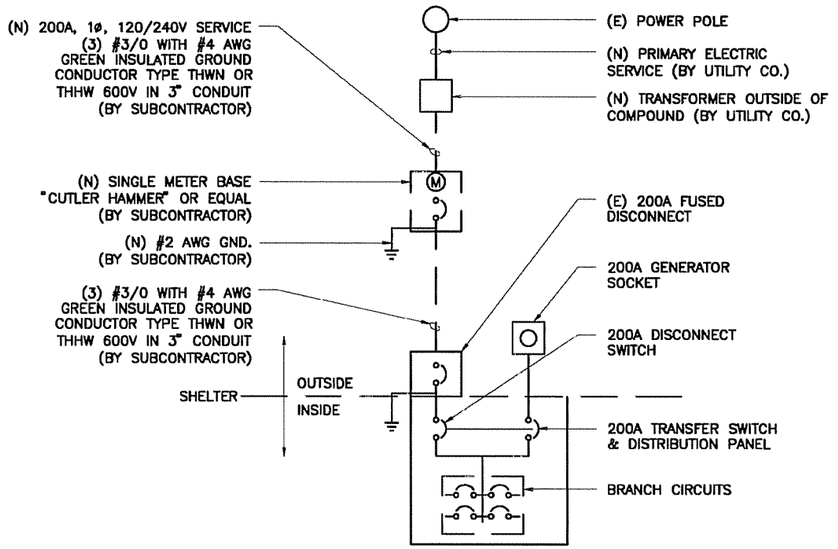
STATE OF KENTUCKY — HAK-FONG LAM — 07-23-08 — LICENSED PROFESSIONAL ENGINEER

SHEET TITLE
ELECTRICAL NOTES & DETAILS

SHEET NUMBER
E-1

ELECTRICAL NOTES:

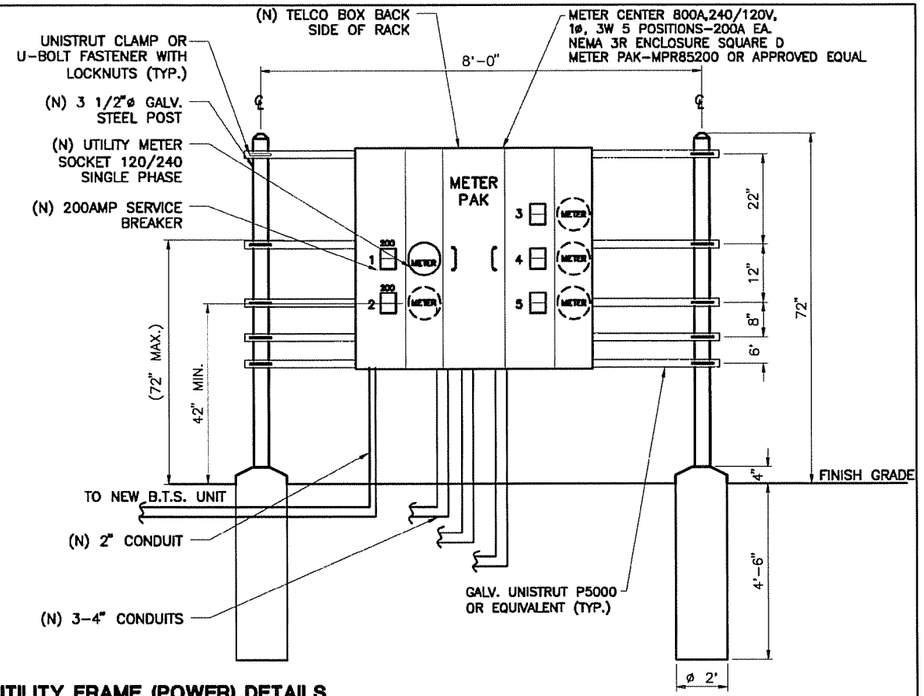
1. SUBCONTRACTOR SHALL PROVIDE 200AMP, SINGLE PHASE, 120/240 VAC, 60HZ SERVICE FOR SITE.
2. SUBCONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY BEFORE THE START OF CONSTRUCTION. POWER AND TELEPHONE CONDUIT SHALL BE PROVIDED AND INSTALLED PER UTILITY REQUIREMENTS.
3. FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT REFER TO DRAWINGS PROVIDED BY PANEL MANUFACTURER.
4. SUBCONTRACTOR SHALL INSTALL SUFFICIENT LENGTHS OF LFMC INCLUDING ALL CONDUIT FITTINGS (NUTS, REDUCING BUSHINGS, ELBOWS, COUPLINGS, ETC) NECESSARY FOR CONNECTION FROM IMC CONDUIT TO THE INTERIOR OF THE BTS CABINET.
5. SUBCONTRACTOR SHALL PROVIDE ELECTRICAL SERVICE EQUIPMENT WITH FAULT CURRENT RATINGS GREATER THAN THE AVAILABLE FAULT CURRENT FROM THE POWER UTILITY.
6. CUT, COIL, AND TAPE A 3 FOOT PIGTAIL FROM END OF LFMC FOR TERMINATING BY BTS EQUIPMENT MANUFACTURER.
7. SUBCONTRACTOR SHALL VERIFY THAT MAIN BONDING JUMPER AND GROUNDING ELECTRODE CONDUCTOR IS INSTALLED PROPERLY WHEN PANEL IS SERVICE ENTRANCE EQUIPMENT.



(1) 200 AMP SINGLE LINE DIAGRAM
N.T.S.

NOTE:

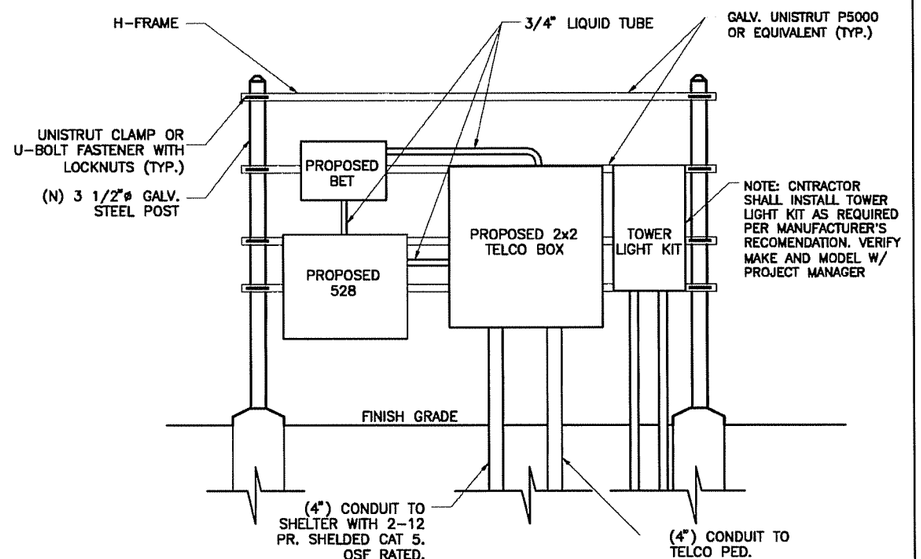
1. FROM THE TAP BOX: THE TWO (2) FOUR INCH (4") CONDUIT WILL RETURN TO THE LOCATION DETERMINED BY THE LOCAL UTILITY AND EXTENDED OUT OF THE FINISHED GRADE 12" AND 36" RESPECTIVELY. BOTH CONDUITS SHALL BE INSTALLED WITH PULL-STRINGS AND WATERPROOFING CAPS.
2. CABINET AND CONDUCTORS FURNISHED AND INSTALLED BY CUSTOMER, 350 KCMIL SERVICE CONDUCTORS FURNISHED AND INSTALLED BY UTILITY.
3. EQUIPMENT ASSEMBLY DRAWINGS AND RISER DIAGRAMS MUST BE SUBMITTED TO A UTILITY PLANNER FOR ACCEPTANCE PRIOR TO INSTALLATION.
4. CABINETS AND CONDUITS SHOWN SHALL CONTAIN ONLY UNMETERED LINE CONDUCTORS. CABINET SHALL BE SEALABLE WITH ACCEPTABLE SEALING HASP.
5. TRANSMISSION TOWER SERVICES WILL UTILIZE A STANDARD 200 AMP SERVICE W/ CONTINUOUS CONDUIT TO THE SOURCE.
6. SUBSTATION CELLULAR SERVICES WILL BE A SINGLE 200AMP SERVICE OR BUILT TO THIS SPECIFICATION. NO SERVICE SHALL BE TAKEN OUT OF THE SUBSTATION HOUSE SERVICE.
7. 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 BRUSHINGS.
8. FOR INACCESSIBLE LOCATIONS CONSULT WITH METER ENGINEERING FOR POSSIBLE ERT METER INSTALLATION.
9. ONLY ONE SERVICE ALLOWED PER LUG. ALL GROUNDING AND BONDING MUST COMPLY WITH NEC 250 REQUIRED.
10. ALL ELECTRICAL PLUMBING MUST BE VERIFIED PRIOR TO INSTALLATION BY CONTRACTOR AND MUST MEET GOVERNING CODES, NO EXCEPTIONS.



(2) NEW UTILITY FRAME (POWER) DETAILS
N.T.S.

NOTES:

1. COORDINATE WITH LOCAL TELCO UTILITY PRIOR TO PROCURING AND INSTALLATION OF BOX AND COMPONENTS.
2. ALL MATERIAL SHALL MEET REQUIREMENTS OF LOCAL TELCO UTILITY.
3. ITEM #4 SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR. BOND SURGE PROTECTION UNIT TO GROUND BAR WITH #6 AWG INSULATED WIRE.
4. COORDINATE SIZE, TYPE AND QUANTITY OF ITEM(S) #5 WITH LOCAL UTILITY.
5. INSTALL ITEM #6 ONLY IF REQUIRED BY UTILITY. RECEPTACLE POWERED FROM SPARE BREAKER IN DISTRIBUTION PANEL.
6. 1 20" x 20" x 8" NEMA 3R ENCLOSURE (HOFFMAN A-20R20BHCR OR SIMILAR).
7. NEW TOWER LIGHT KIT TO BE INSTALLED BY CONTRACTOR. VERIFY ALL REQUIREMENTS PRIOR TO INSTALLATION.



(3) NEW UTILITY FRAME (TELCO) DETAILS
N.T.S.

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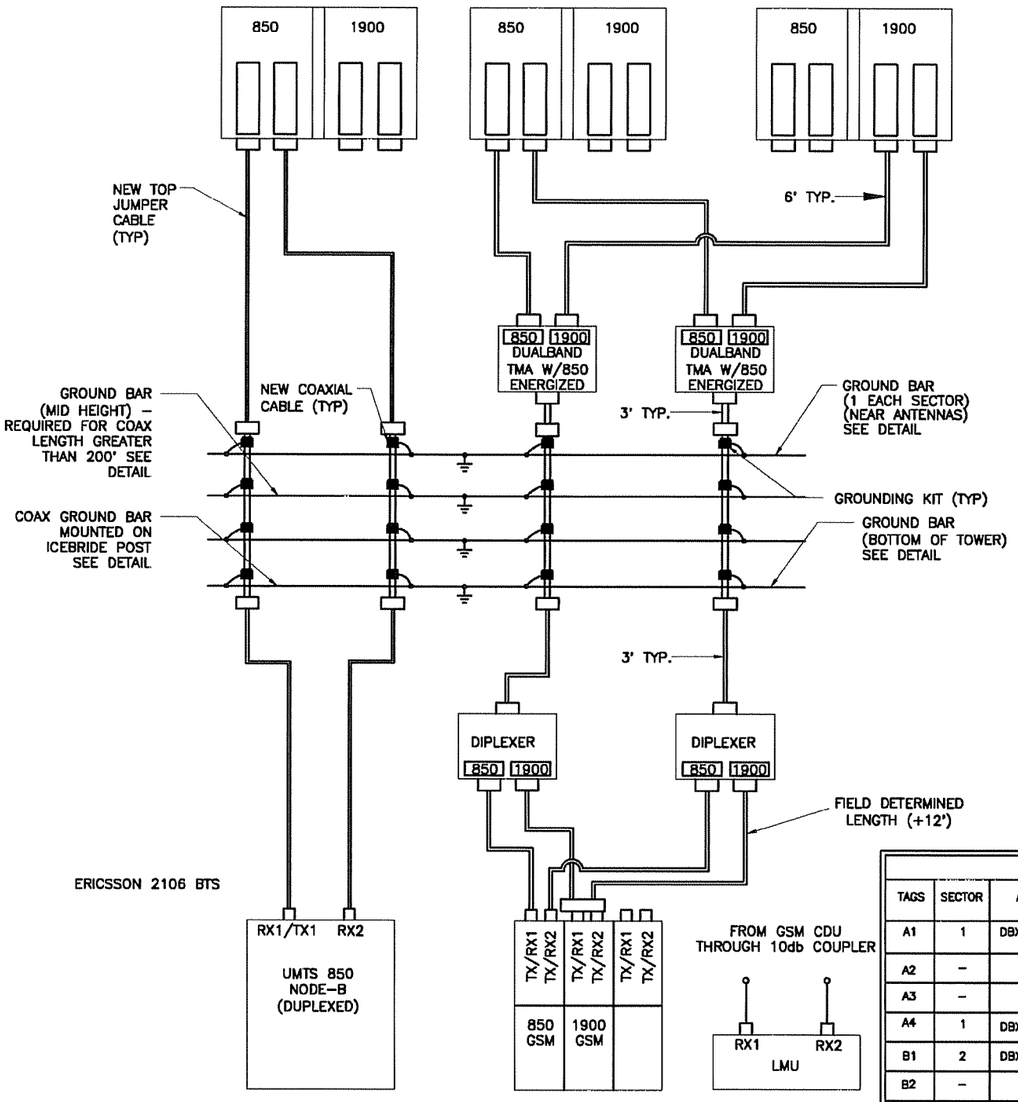
STATE OF KENTUCKY — HAK-FONG MA — 07-29-08 — LICENSED PROFESSIONAL ENGINEER

SHEET TITLE
SINGLE LINE DIAGRAM & DETAILS
SHEET NUMBER
E-2



(1) 2 - ANTENNAS PER SECTOR CONFIGURATION

NOTES:

1. ALL MATERIALS SHALL BE PROVIDED BY THE CONTRACTOR TO THE SUBCONTRACTOR FOR INSTALLATION.
2. SUBCONTRACTOR SHALL AS-BUILT CABLE LENGTHS AND PROVIDE ANTENNA SERIAL NUMBERS ON RED-LINED DRAWINGS.
3. ANTENNAS SHALL BE PROCURED AND INSTALLED WITH DOWNTILT BRACKETS AND HEAVY DUTY CLAMPS SUPPLIED BY ANTENNA MANUFACTURER.
4. FOLLOW DETAIL FOR AT&T COAX COLOR CODING.
5. COAX GROUND KITS, COAX WEATHER PROOFING, SNAP-IN HANGER CLAMPS AND HOISTING GRIPS SHALL BE PROVIDED BY THE CONTRACTOR TO THE SUBCONTRACTOR FOR INSTALLATION.
6. RF DATA IS TO BE VERIFIED BY CONTRACTOR

ANTENNA AND COAXIAL CABLE SCHEDULE

TAGS	SECTOR	ANTENNA TYPE	ANTENNA SERIAL NUMBER	ELEC. DOWN TILT	MECH DOWN TILT	AZIMUTH	ANTENNA RAD CTR	CABLE LENGTH	COAXIAL CABLE	TOP JUMPER	BOTTOM JUMPER	COLOR CODE	TMA TYPE	DIPLEXER	DC BLOCK Y/N
A1	1	DBXLH-8585A-VTM		2°	0°	25°	295	365	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	1 GREEN STRIPE	KRY112 75/1	LGP 21903	N
A2	–	–		–	–	–	–	–	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	2 GREEN STRIPES	–		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		2°	0°	25°	295	365	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		2°	0°	120°	295	365	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	1 BLUE STRIPE	KRY112 75/1	LGP 21903	N
B2	–	–		–	–	–	–	–	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	2 BLUE STRIPES	–		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		2°	0°	120°	295	365	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		2°	0°	225°	295	365	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	1 WHITE STRIPE	KRY112 75/1	LGP 21903	N
C2	–	–		–	–	–	–	–	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	2 WHITE STRIPES	–		N
C3	–	–		–	–	–	–	–	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	3 WHITE STRIPES	KRY112 75/1	LGP 21903	N
C4	3	DBXLH-8585A-VTM		2°	0°	225°	295	365	ANDREWS AVA7-50 1-5/8"	(6') 1/2" LDF4P	(6') 1/2" SF	4 WHITE STRIPES	KRY112 75/1	LGP 21903	N

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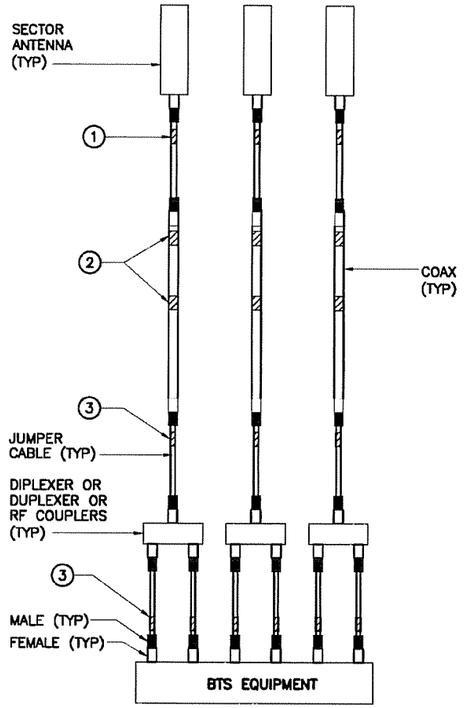
SCALE: AS SHOWN | DESIGNED BY: EC | DRAWN BY: CM

STATE OF KENTUCKY HAK-FONG MA 07-29-08 LICENSED PROFESSIONAL ENGINEER

SHEET TITLE
ANTENNA SCHEMATICS AND DETAILS
SHEET NUMBER
E-2A



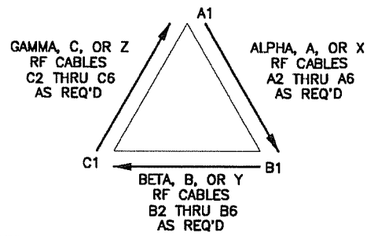
(1) CABLE MARKING LOCATIONS DIAGRAM GRAVEL DRIVE DETAILS

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

CABLE MARKING LOCATIONS TABLE

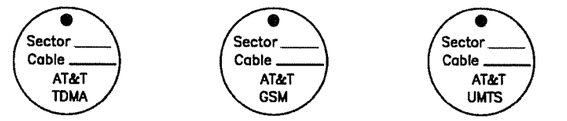
NO.	TAPE	TAG	LOCATIONS
1.	X		EACH TOP–JUMPER SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS.
2.	X		EACH MAIN COAX SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS NEAR THE TOP–JUMPER CONNECTION AND WITH (1) SET OF 3/4" WIDE COLOR BANDS JUST PRIOR TO ENTERING THE BTS OR TRANSMITTER BUILDING.
3.	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



TDMA LINE TAG GSM LINE TAG UMTS LINE TAG

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. PEFERRED TAG LABELING SHOULD BE AS SHOWN ABOVE "TDMA LINE TAG", "GSM LINE TAG" AND "UMTS LINE TAG".

(2) CABLE MARKING TAGS

FSA3 – CABLE MARKING COLOR CONVENTION TABLE

	850 TDMA/GSM	1900 TDMA/GSM	850 TDMA/GSM	1900 TDMA/GSM
SECTOR ALPHA, A, OR X	CABLE A1	CABLE A2	CABLE A3	CABLE A4
	ONE (1) 3/4" GRN	TWO (2) 3/4" GRN	THREE (3) 3/4" GRN	FOUR (4) 3/4" GRN
SECTOR BETA, B, OR Y	CABLE B1	CABLE B2	CABLE B3	CABLE B4
	ONE (1) 3/4" BLUE	TWO (2) 3/4" BLUE	THREE (3) 3/4" BLUE	FOUR (4) 3/4" BLUE
SECTOR GAMMA, C, OR Z	CABLE C1	CABLE C2	CABLE C3	CABLE C4
	ONE (1) 3/4" WHT	TWO (2) 3/4" WHT	THREE (3) 3/4" WHT	FOUR (4) 3/4" WHT
SECTOR DELTA, D, OR W	CABLE D1	CABLE D2	CABLE D3	CABLE D4
	ONE (1) 3/4" RED	TWO (2) 3/4" RED	THREE (3) 3/4" RED	FOUR (4) 3/4" RED

	850 UMTS (FUTURE)	1900 UMTS	850 UMTS (FUTURE)	1900 UMTS
	CABLE UMTS1	CABLE UMTS2	CABLE UMTS3	CABLE UMTS4
SECTOR ALPHA, A, OR X	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) 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) 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) 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

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

(3) COAX COLOR CODING AND IDENTIFICATION DETAIL FOR OVERLAY

MAX ENGINEERING, LLC
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Houston, Texas 77074
Phone (713) 773-2525
Fax (713) 773-2558

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

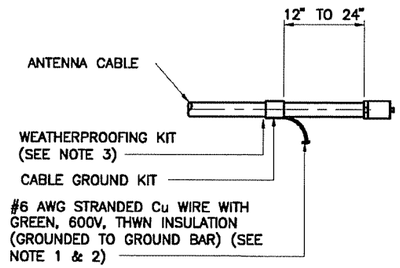
SITE No: KY-00-0818A
SITE NAME: OAKLAND
2511 OAKLAND RIDGE
OLIVE HILL, KY 41164

NO.	DATE	REVISIONS	BY	CHK	APP'D
			HD	VD	HM
0	05/06/08	FOR CONSTRUCTION	HD	VD	HM
A	04/22/08	FOR REVIEW	HD	VD	HM

SCALE: AS SHOWN | DESIGNED BY: EC | DRAWN BY: CM

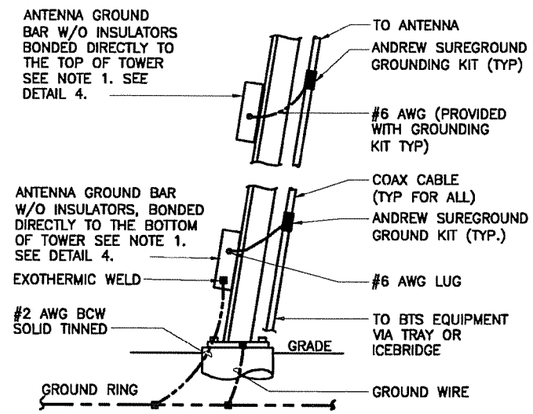
STATE OF KENTUCKY — HAK-FONG MA — 07-29-08 — LICENSED PROFESSIONAL ENGINEER

SHEET TITLE
COAX COLOR CODING
SHEET NUMBER
E-2B



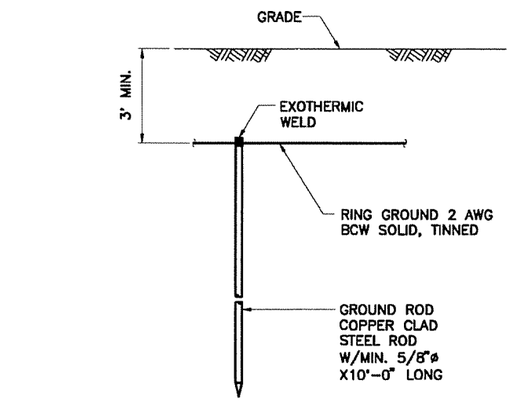
NOTES:
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE (TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.)

(1) CONNECTION OF CABLE GROUND KIT TO ANTENNA CABLE
N.T.S.



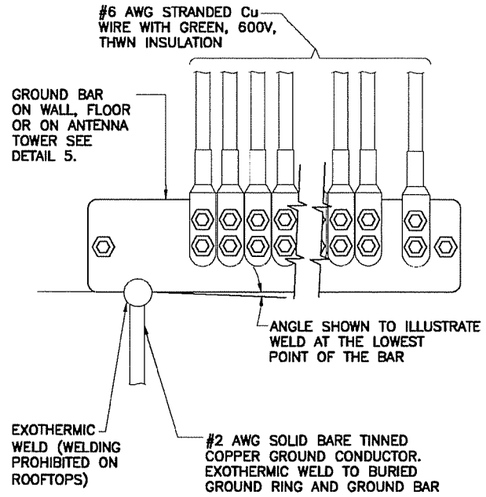
NOTE: 1. NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATIONS AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED.
2. AN ADDITIONAL GROUND BARS TO BE MOUNTED ON THE MIDDLE OF TOWER IF TOWER HEIGHT IS MORE THAN 200'.

(2) ANTENNA CABLE GROUNDING FOR A SELF SUPPORTING LATTICE TOWER
NTS



1. GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL.

(3) GROUND ROD DETAILS
N.T.S.



(4) INSTALLATION OF GROUND WIRE TO GROUND BAR DETAILS
N.T.S.

EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION.

SECTION "P" – SURGE PROTECTORS
CABLE ENTRY PORTS (HATCH PLATES) (#2)
GENERATOR FRAMEWORK (IF AVAILABLE) (#2)
TELCO GROUND BAR (#2)
COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2)
+24V POWER SUPPLY RETURN BAR (#2)
–48V POWER SUPPLY RETURN BAR (#2)
RECTIFIER FRAMES.
COAX SUPPRESSION

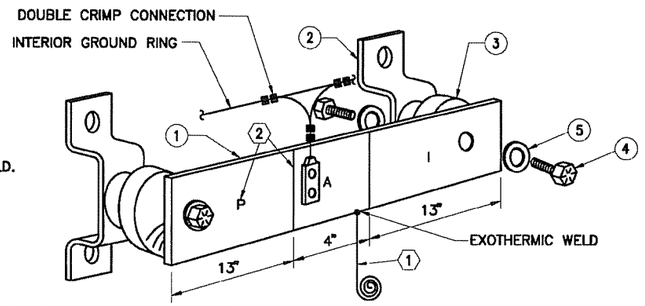
SECTION "A" – SURGE ABSORBERS
INTERIOR GROUND RING (#2)
EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2)
METALLIC COLD WATER PIPE (IF AVAILABLE) (#2)
BUILDING STEEL (IF AVAILABLE) (#2)

SECTION "I" – ISOLATED GROUND ZONE
ALL COMMUNICATIONS EQUIPMENT FRAMES.
ISOLATED GROUND BAR – IGB (#2)

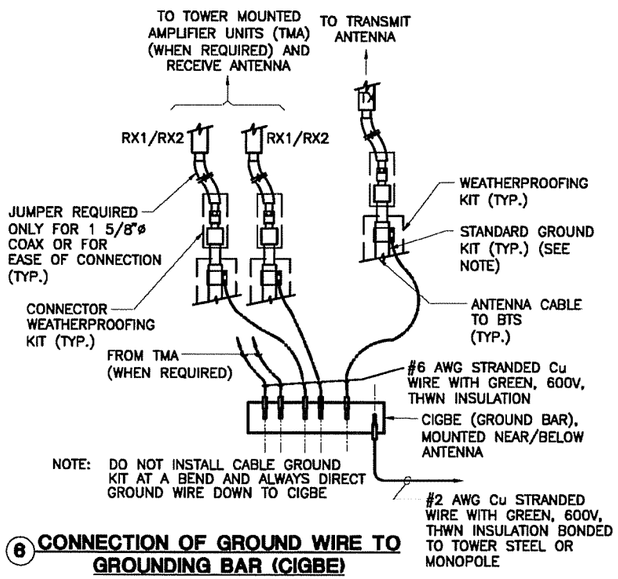
DETAIL NOTES:
1. EXOTHERMICALLY WELD #2 AWG BARE TINNED SOLID COPPER CONDUCTOR TO GROUND BAR. ROUTE CONDUCTOR TO BURIED GROUND RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
2. USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION ("P", "A", "I") WITH 1" HIGH LETTERS.

NEWTON INSTRUMENT COMPANY, INC.
BUTNER, N.C.

NO.	REQ.	PART NO.	DESCRIPTION
1	1	1/4"x4"x30"	SOLID GND. BAR
2	2	A–6056	WALL MTG. BRKT.
3	2	3061–4	INSULATORS
4	4	3012–1	5/8"–11x1" H.H.C.S.
5	4	3015–8	5/8 LOCKWASHER

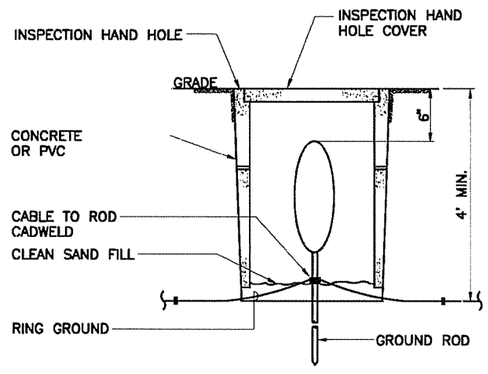


(5) (RGB) REFERENCE GROUND BAR DETAIL
N.T.S.



NOTE: DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE

(6) CONNECTION OF GROUND WIRE TO GROUNDING BAR (CIGBE) TOWER/MONOPOLE
N.T.S.



NOTE: INSPECTION HAND HOLE MAY BE CONCRETE OR PVC AND SHALL BE A MINIMUM OF 8" IN WIDTH/DIAMETER

(7) GROUND ROD WITH ACCESS AREA DETAILS
N.T.S.

MAX ENGINEERING, LLC
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323 SOUTH HALE STREET
SUITE 100
WHEATON, IL 60187

SITE No: KY-00-0818A
SITE NAME: OAKLAND
2511 OAKLAND RIDGE
OLIVE HILL, KY 41164

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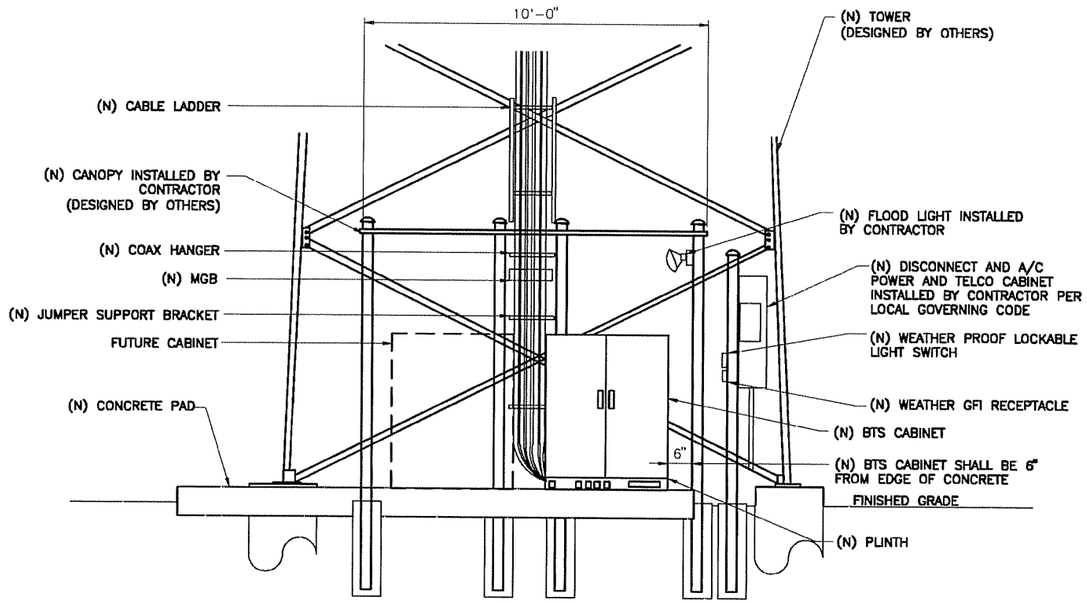
0	05/06/08	FOR CONSTRUCTION	HD	VD	HM
A	04/22/08	FOR REVIEW	HD	VD	HM

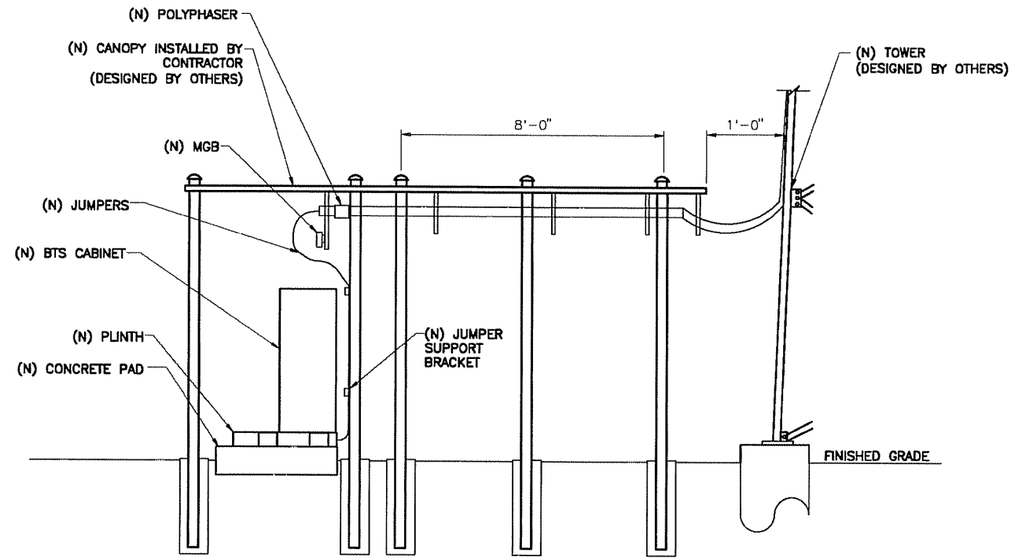
SCALE: AS SHOWN | DESIGNED BY: EC | DRAWN BY: CM

STATE OF KENTUCKY
HAK-FONG MA
07-29-08
LICENSED PROFESSIONAL ENGINEER

SHEET TITLE
GROUNDING DETAILS
SHEET NUMBER
E-3

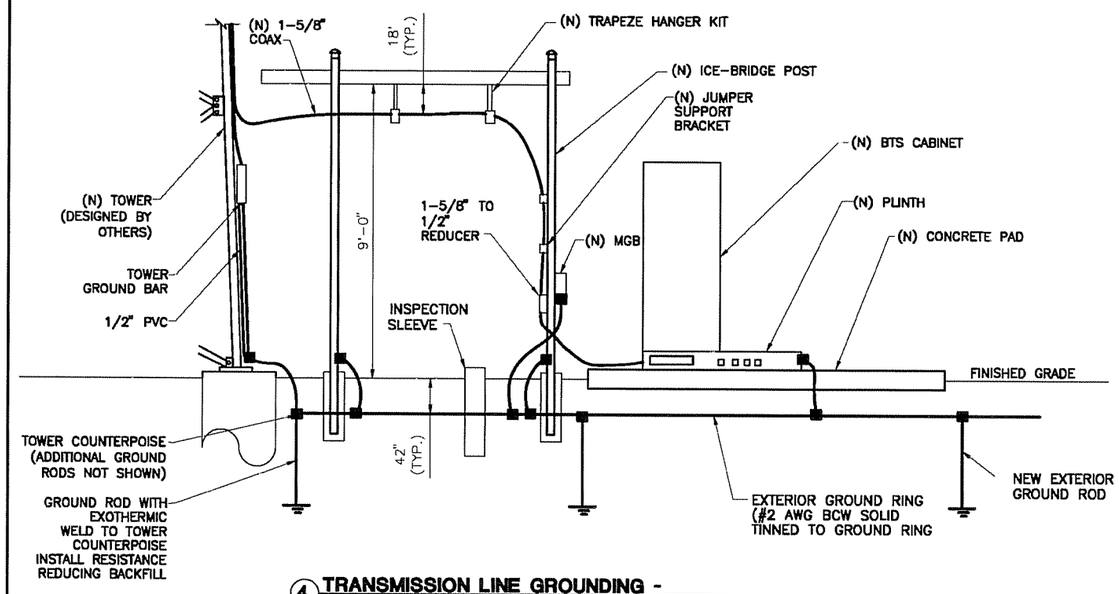


1 CABINET FRONT ELEVATION
N.T.S.



2 CABINET SIDE ELEVATION
N.T.S.

NOT USED



4 TRANSMISSION LINE GROUNDING - EQUIPMENT AND SERVICE (SIDE ELEVATION)
N.T.S.

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Fax (713) 773-2558

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

SITE No: KY-00-0818A
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2511 OAKLAND RIDGE
OLIVE HILL, KY 41164

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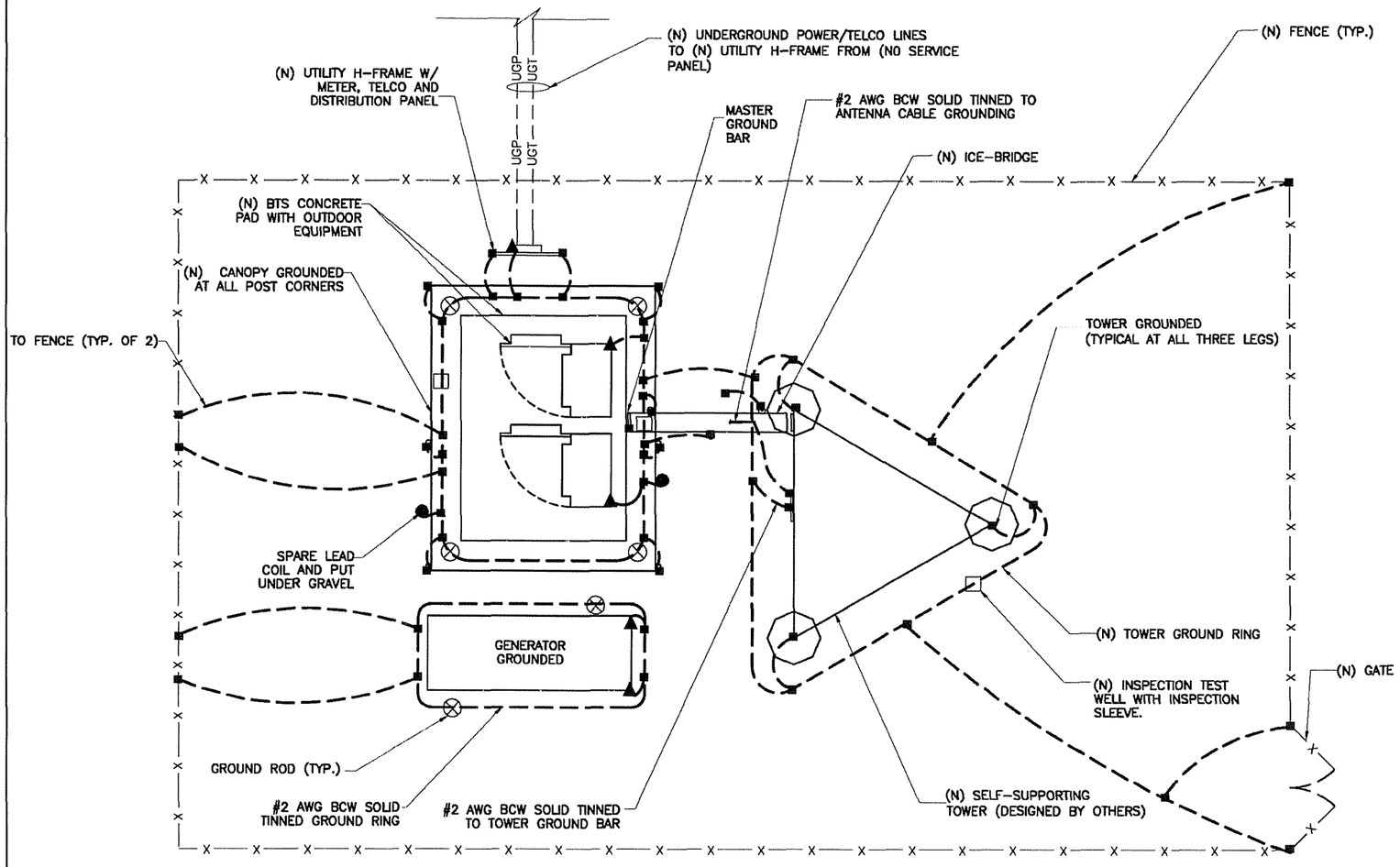
A	04/22/08	FOR REVIEW	HD	VD	HM

SCALE: AS SHOWN | DESIGNED BY: EC | DRAWN BY: CM

STATE OF KENTUCKY
HAK-FONG MA
07-29-08
LICENSED PROFESSIONAL ENGINEER

SHEET TITLE
GROUNDING AND ELEVATION DETAILS
SHEET NUMBER
E-4



1 TYPICAL SELF-SUPPORTING TOWER GROUNDING PLAN

N.T.S. (SCHEMATIC ONLY)

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 SUB-CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 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 & PROVIDE TESTING RESULTS.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDED 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 OF 90± BENDS IS PROHIBITED. MAXIMUM BENDING IN THE PROTECTION GROUNDING CONDUCTORS IS 45°.
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 AT LEAST TWO SEPARATE PLACES.

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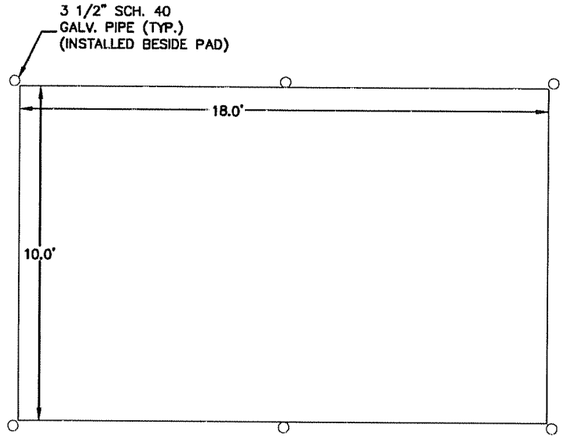
SCALE: AS SHOWN | DESIGNED BY: EC | DRAWN BY: CM

STATE OF KENTUCKY
HAK-FONG MA
07-29-08
LICENSED PROFESSIONAL ENGINEER

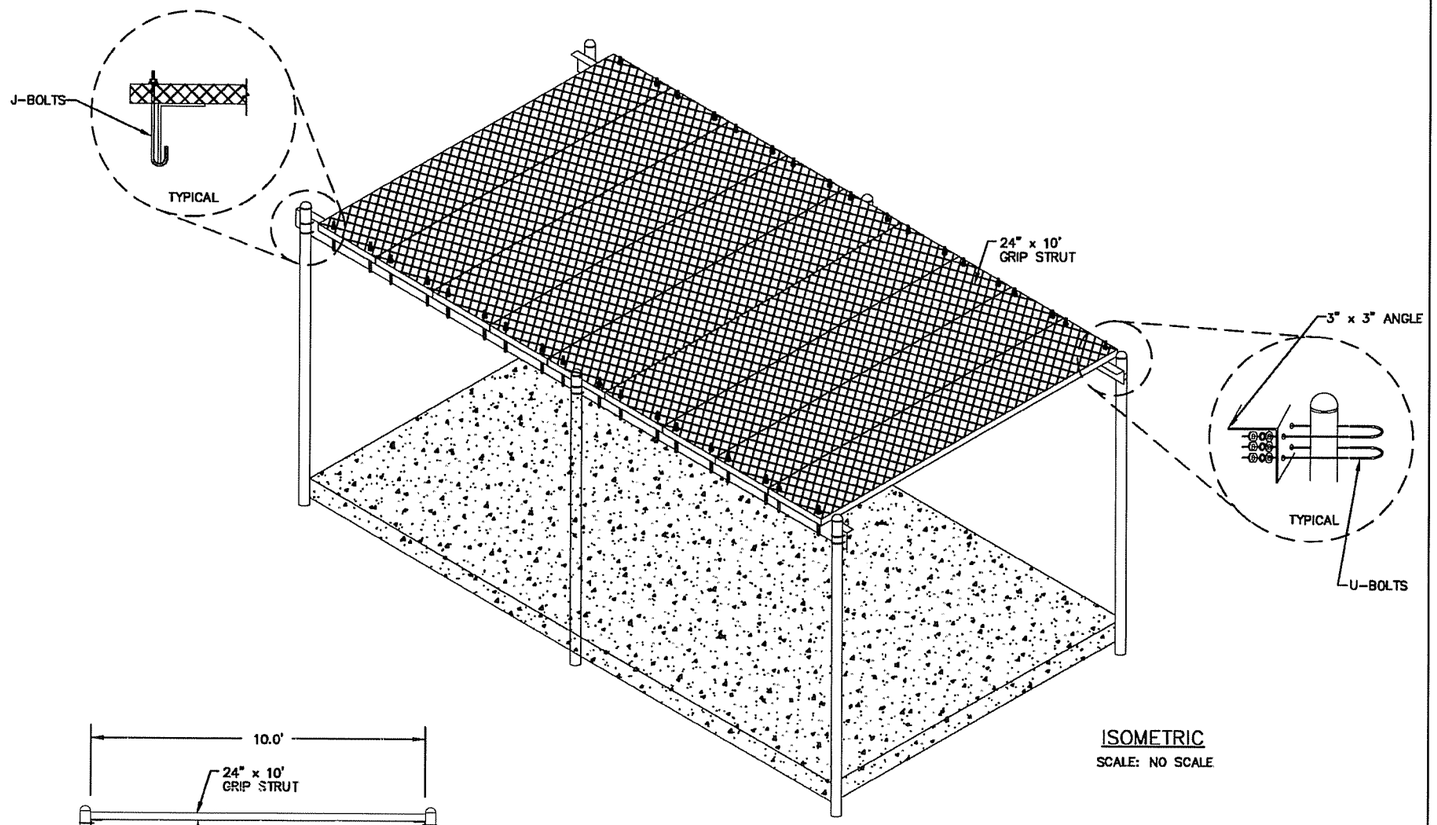
SHEET TITLE
GROUNDING NOTES & DETAILS

SHEET NUMBER
E-5

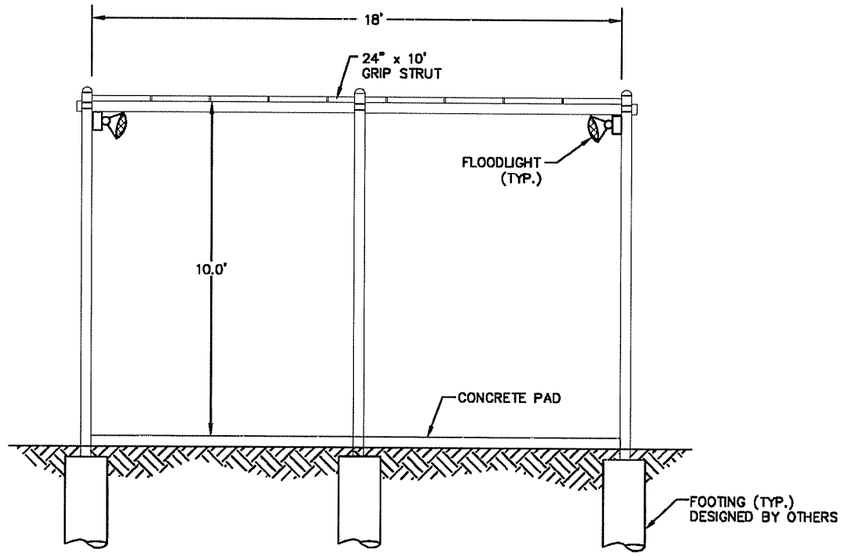
NOTE:
CANOPY SHALL BE SITE PRO 1
PART #COV1018 OR EQUAL



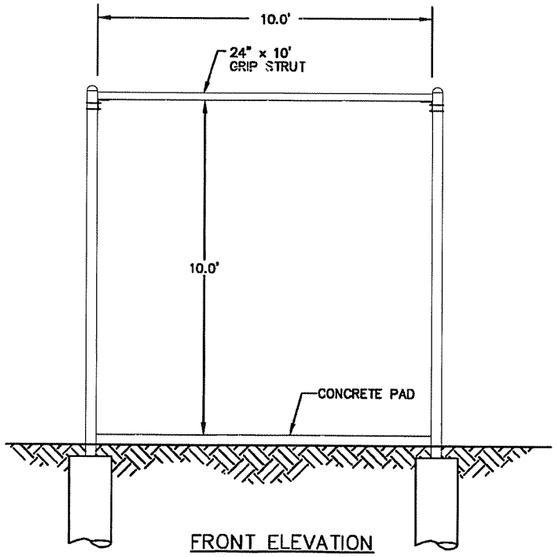
PLAN VIEW
SCALE: NO SCALE



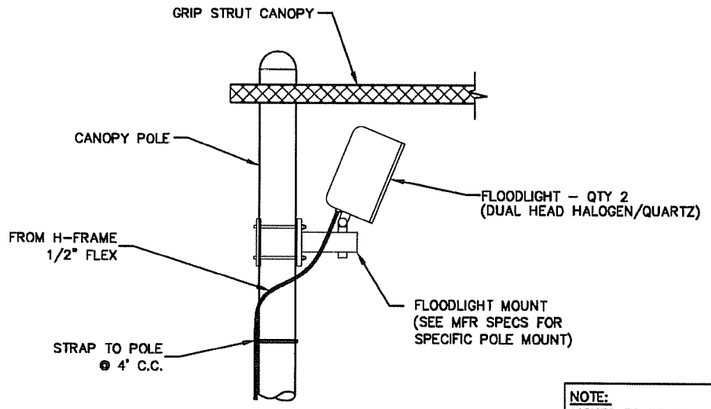
ISOMETRIC
SCALE: NO SCALE



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.

CENTRAL STATES TOWER, INC.
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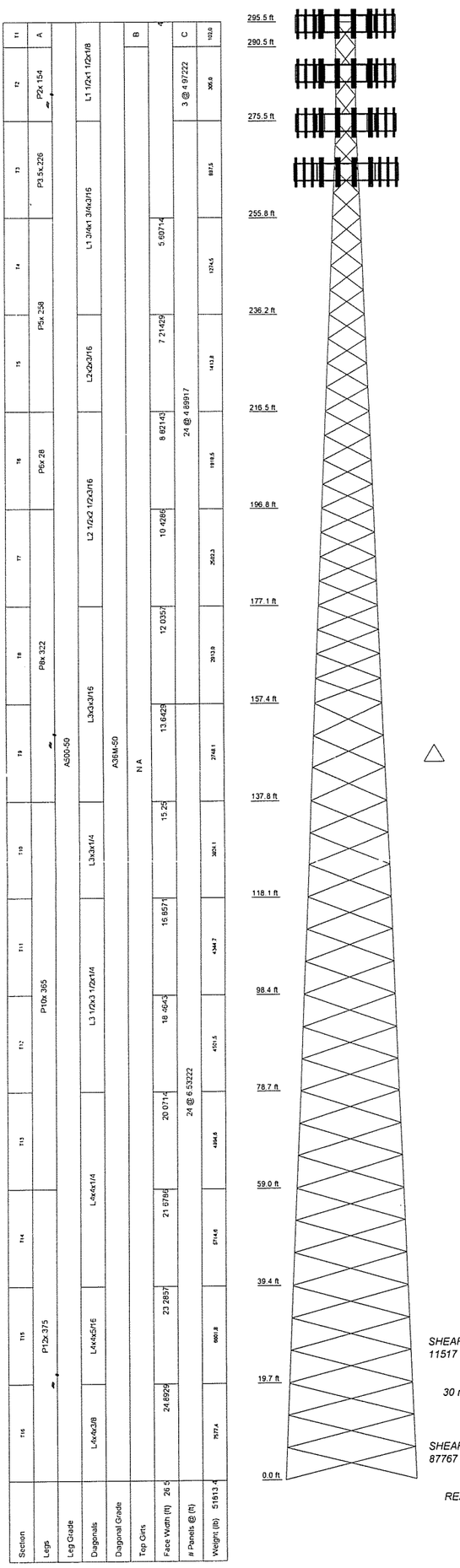
NO.	DATE	REVISIONS	BY	CHK	APP'D

SCALE: AS SHOWN | DESIGNED BY: | DRAWN BY:

SHEET TITLE
CANOPY
SHEET NUMBER
REF



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

AXIAL
283856 lb
SHEAR
11517 lb
MOMENT
1944241 lb-ft
TORQUE 0 lb-ft
30 mph WIND - 0.7500 in ICE
AXIAL
89157 lb
SHEAR
87767 lb
MOMENT
13948876 lb-ft
TORQUE 43 lb-ft
REACTIONS - 90 mph WIND

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
BM-1207	295	BM-1207	275
(4)1'x6' Antenna	295	(4)1'x6' Antenna	275
(4)1'x6' Antenna	295	(4)1'x6' Antenna	275
(4)1'x6' Antenna	295	(4)1'x6' Antenna	275
BM-1207	285	BM-1207	265
(4)1'x6' Antenna	285	(4)1'x6' Antenna	265
(4)1'x6' Antenna	285	(4)1'x6' Antenna	265
(4)1'x6' Antenna	285	(4)1'x6' Antenna	265

SYMBOL LIST

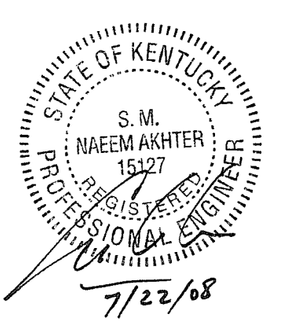
MARK	SIZE	MARK	SIZE
A	P1.5x.145	C	1 @ 4.91667
B	L1 1/2x1 1/2x1/8		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A500-50	50 ksi	62 ksi	A36M-50	50 ksi	65 ksi

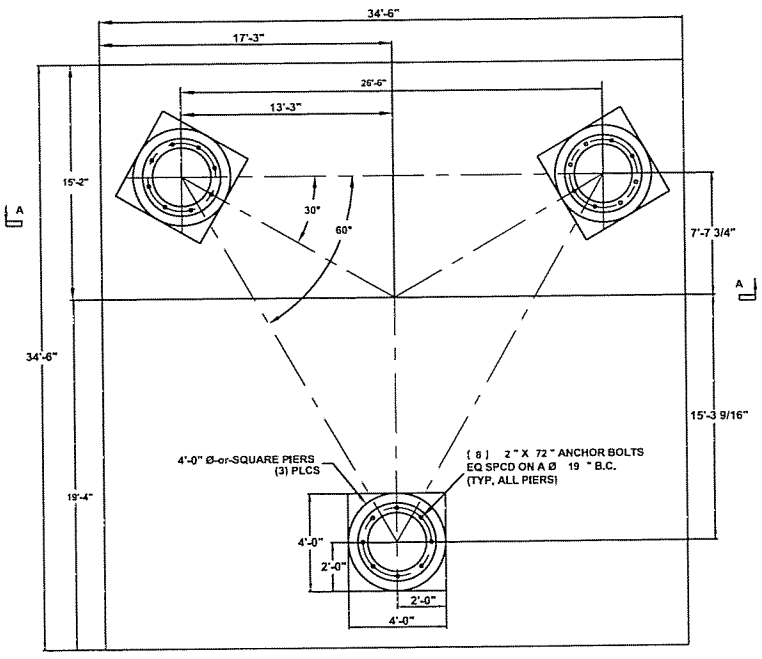
TOWER DESIGN NOTES

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



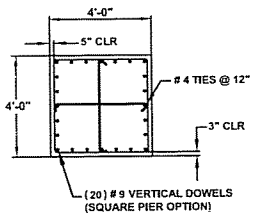
GLENMARTIN
13620 Old Hwy 40
Boonville, Mo 65233
Phone: (660) 882-2734
FAX: (660) 882-7200

Job: Site: Oakland SO: 18927
Project: 295' HS 90mph-G (18754 model)
Client: Cellere | Drawn by: GM | App'd:
Code: TIA-222-G | Date: 07/15/08 | Scale: NTS
Path: C:\Documents and Settings\Owner\Desktop\18927\295 HS 90mph-G (18754 model).eri | Dwg No: E-1



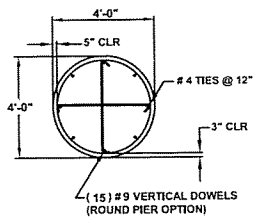
FOUNDATION PLAN

SCALE: N.T.S.



SECTION B-B

SCALE: N.T.S.
(OPTIONAL SQUARE PIER)



SECTION B-B

SCALE: N.T.S.
(OPTIONAL ROUND PIER)

GENERAL NOTES:

1) CONCRETE:

A CONCRETE SHALL CONFORM TO SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 318-05.

B ALL CONCRETE SHALL BE MADE WITH STONE AGGREGRATE AND SHALL DEVELOPE 4000 PSI MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS.

CONCRETE MIX DESIGN:

6-1/2 SACKS MINIMUM PER CUBIC YARD, 5 INCH MIN. / 7 INCH MAX, SLUMP 3/4 INCH MAXIMUM AGGREGRATE

C ALL REINFORCING SHALL BE HIGH STRENGTH DEFORMED BARS, GD 60, ASTM A615-87, WITH 60 KSI MINIMUM YIELD POINT

D REINFORCEMENT PROTECTION: CONCRETE POURED AGAINST EARTH.

E ALL BAR LENGTHS ARE NOT DRAWN TO SCALE UNLESS NOTED. NO SPLICING OF REINFORCEMENT SHALL BE MADE EXCEPT AS DETAILED OR AS AUTHORIZED BY THE STRUCTURAL ENGINEER. LAP SPACES WHERE PERMITTED SHALL BE A MINIMUM OF 40 BAR DIAMETERS UNLESS NOTED.

F DETAILED BARS IN ACCORDANCE WITH ACI DETAILING MANUL AND ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE. FIVE INCHES CLEARANCE FOR ALL REINFORCEMENT.

G PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING AT THE POSITIONS SHOWN ON THE PLANS.

H FORMED PIERS MY BE CONSTRUCTED IN TUBE DIAMETER FORM OR SQUARE FORM.

2) FOUNDATIONS:

A MAT & PIER FOUNDATIONS DESIGN BASED ON
REPORT#: 25036.00004.09
BY: WILCOX PROFESSIONAL SERVICES,LLC
OF: N/A
DATED: April,29 2008
GEOTECHNICAL ENGINEER SHALL OBSERVE AND APPORVE IN WRITING THE ADEQUACY OF FOOTING BOTTOM AND PLACEMENT OF CONCRETE. COPIES OF WRITTEN APPROVAL SHALL BE SENT TO THE TOWER MANUFACTURE (GME), AND TO THE ENGINEERING COMPANY IF REQUIRED. THE CONTRACTOR SHALL BE PROVIDED ADEQUATE ASSISTANCE AND NOTIFICATIONS TO ACCOMPLISH THIS REQUIREMENT.

B PIER/MAT FOUNDATION SHOULD BEAR ENTIRELY ON COMPONET SOILS PER GEOTECHNICAL REPORT.

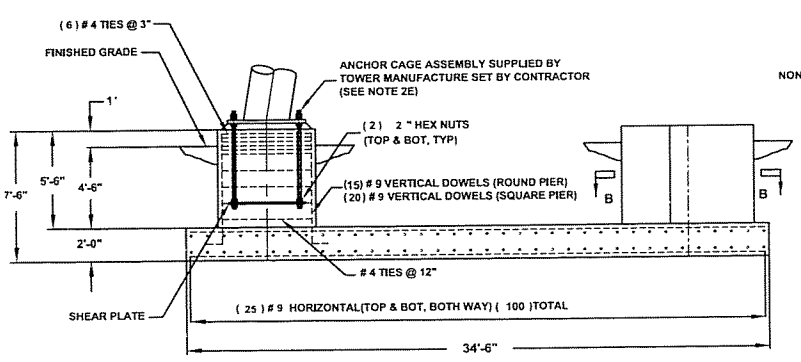
C ALL STRUCTURAL BACKFILL AT SITE TO BE COMPOSED OF SOIL WITH A MINUMUM DENSITY IN EXCESS OF 110 PCF, WITH LIFTS NOT EXCEEDING 8 INCH-TO-12 INCH. AREA AND EXTENT OF BACKFILL TO BE IN ACCORDANCE WITH RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT.

D FOUNDATION SUBGRADE SHOULD BE MEET A MINIMUM 95% COMPACTION. IF LEAN CONCRETE IS UTILIZIED TO LEVEL FOUNDATIONS SUBGRADE, IT SHOULD BE PLACED PRIOR TO ANCHOR BOLT INSTALLATIONS AND ALLOWED TO CURE FOR SUFFICIENT STRENGTH RESISTANCE TO PRESTESS ANCHOR LOADS.

E CONTRACTOR IS TO VERIFY ANCHOR BOLT PATTERN PRIOR TO CONSTRUCTION AND TO USE SUPPLIED TEMPLATE IN SETTING ANCHOR BOLTS.

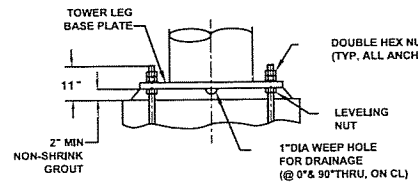
F CONTRACTOR SHALL BE RESPONSIBLE FOR JOB SAFETY AND PROTECTION OF PUBLIC PERSONAL WHEN PRESENT.

G FOOTING DESIGN BASED ON ULTIMATE SOIL PRESSURE OF 12000 PSF AND ALLOWABLE BEARING PRESSURE 6000 PSF PER SOIL REPORT RECOMMENDATION



SECTION "A-A"

SCALE: N.T.S.



BASE DETAIL

SCALE: N.T.S.

REACTION LOADS:

DESIGN CONCRETE VOLUME:

MAT VOLUME:	88.17	CUBIC YARDS
PIER VOLUME:	9.78	CUBIC YARDS
TOTAL VOLUME:	97.94	CUBIC YARDS

MAX SHEAR/LEG:	54.743	KIPS
MAX UPLIFT:	554.233	KIPS
MAX COMPRESSION:	637.522	KIPS
AXIAL LOAD:	89.157	KIPS
STRUCTURAL OTM:	13948.876	FT-KIPS
TOTAL SHEAR @ BASE:	87.767	KIPS

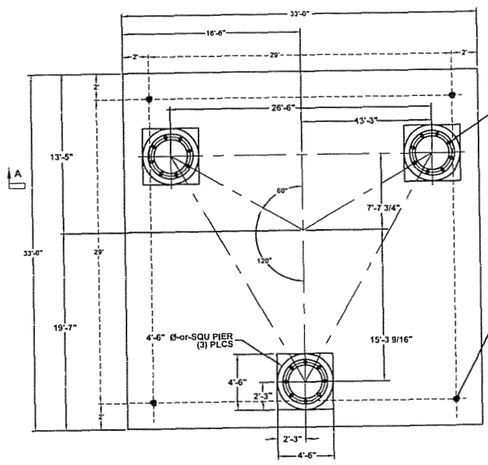
REVISIONS

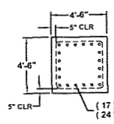
PROFFESIONAL ENGINEER
STAMPED APPROVAL

STATE OF KENTUCKY
S. M.
REGISTERED
PROFESSIONAL ENGINEER

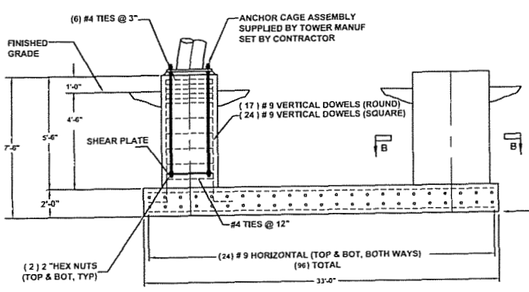
REVIEWED
By Xinguo Cai at 10:57 am, Jul 17, 2008

CELLERE			
PROJECT: SO:18927			
SITE NUMBER: KY-00-0818A – OAKLAND			
SITE NAME : OAKLAND			
SITE ADDRESS : OLIVE HILL, CARTER, KENTUCKY			
DRAWN: JHW	DATE: 7/17/2008	DRW.#: GM-10100	REV. # 0
CHECKED: MHK	DATE: 7/17/2008		

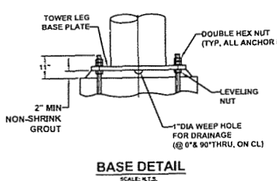




SECTION B-B
SCALE: N.T.S.
(OPTIONAL SQUARE PIER)



SECTION "A-A"
SCALE: N.T.S.



BASE DETAIL
SCALE: N.T.S.

GENERAL NOTES:

1) CONCRETE:

A CONCRETE SHALL CONFORM TO SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 318-05.

B ALL CONCRETE SHALL BE MADE WITH STONE AGGREGRATE AND SHALL DEVELOPE 4000 PSI MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS.

CONCRETE MIX DESIGN:
6-1/2 SACKS MINIMUM PER CUBIC YARD, 5 INCH MIN. / 7 INCH MAX. SLUMP 3/4 INCH MAXIMUM AGGREGRATE

C ALL REINFORCING SHALL BE HIGH STRENGTH DEFORMED BARS, GD 60, ASTM A615-87. WITH 60 KSI MINIMUM YIELD POINT

D REINFORCEMENT PROTECTION: CONCRETE POURED AGAINST EARTH.

E ALL BAR LENGTHS ARE NOT DRAWN TO SCALE UNLESS NOTED. NO SPLICING OF REINFORCEMENT SHALL BE MADE EXCEPT AS DETAILED OR AS AUTHORIZED BY THE STRUCTURAL ENGINEER. LAP SPACES WHERE PERMITTED SHALL BE A MINIMUM OF 40 BAR DIAMETERS UNLESS NOTED.

F DETAILED BARS IN ACCORDANCE WITH ACI DETAILING MANUAL AND ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE. FIVE INCHES NOMINAL, 5 INCHES MINIMUM CLEARANCE FOR ALL REINFORCEMENT.

G PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING AT THE POSITIONS SHOWN ON THE PLANS.

2) FOUNDATIONS:

A MAT & PIER & ROCK ANCHOR FOUNDATION DESIGN BASED ON
REPORT#: 25036.00004.09
BY: WILCOX PROFESSIONAL SERVICES,LLC
OF: N/A
DATED: April,29 2008
GEOTECHNICAL ENGINEER SHALL OBSERVE AND APPORVE IN WRITING THE ADEQUACY OF FOOTING BOTTOM AND PLACEMENT OF CONCRETE. COPIES OF WRITTEN APPROVAL SHALL BE SENT TO THE TOWER MANUFACTURE (GME), AND TO THE ENGINEERING COMPANY IF REQUIRED. THE CONTRACTOR SHAL

B FOUNDATION MAT SHOULD BEAR ENTIRELY ON COMPETENT ROCK PER GEOTECHNICAL REPORT.

C FOOTING DESIGN BASED ON ROCK ULTIMATE SOIL BEARING PRESSURE 12000 PSF AND ALLOWABLE BEARING PRESSURE 6000 PSF

D ALL STRUCTURAL BACKFILL AT SITE TO BE COMPOSED OF SOIL WITH A MINUMUM DENSITY IN EXCESS OF 110 PCF, WITH LIFTS NOT EXCEEDING 8 INCH-TO-12 INCH. AREA AND EXTENT OF BACKFILL TO BE IN ACCORDANCE WITH RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT.

E FOUNDATION SUBGRADE SHOULD BE MEET A MINIMUM 95% COMPACTION. IF LEAN CONCRETE IS UTILIZED TO LEVEL FOUNDATIONS SUBGRADE, IT SHOULD BE PLACED PRIOR TO ANCHOR BOLT INSTALLATIONS AND ALLOWED TO CURE FOR SUFFICIENT STRENGTH RESISTANCE TO PRESTESS ANCHOR LOA

F CONTRACTOR IS TO VERIFY ANCHOR BOLT PATTERN PRIOR TO CONSTRUCTION AND TO USE SUPPLIED TEMPLATE IN SETTING ANCHOR BOLTS.

3) ROCK ANCHOR:

A ROCK ANCHOR DESIGN GRADE 60KSI, 40% OF SHEAR STRENGTH OF 24000 PSI

B TOTAL QTY (4) ROCK ANCHOR PLACED FOUR CORNER UNDERNEATH MAT AND SHALL AVOID PIER LOCATION

C ADDITIONAL 1' OF ANCHOR BOLT SHALL BE SUPPLIED. AFTER SUCCESFULL INSTALATION, LENGTH MAY BE CUT TO APPROXIMATELY 2" ABOVE HEAD OF NUT, PER DETAIL A.

D ROCK ANCHOR DESIGNED BASED ON ROCK ULTIMATE SKIN FRICTION 1000 PSF AND ROCK UNIT WEIGHT 150 PCF.

E ALLOWABLE BOND STRENGTH BETWEEN ROCK AND GROUT BASED ON 100 PSI PER GEOTECHNICAL RECOMMENDATION.

F GROUT BOND STRENGTH AT GROUT-ANCHOR DESIGNED TO BE 2/3 OF GROUT COMPRESSIVE STRENGTH 1200 PSI.

G ROCK ANCHOR REQUIRED PRE-TENSION TO MINIMUM 34 KIPS, WHICH IS THE DESIGNED ROCK CONE MASS WEIGHT.

H TUBULAR FORM SHOULD BE DESIGNED TO PROVIDE CLEARANCE FOR ROCK ANCHOR. AS ALTERNATIVE MAT CAN BE DRILLED DIRECTLY. HOWEVER, VERIFICATION MUST BE MADE TO PREVENT POSSIBLE DAMAGE TO REBAR. TUBULAR FORM SHOULD BE DESIGNED TO PROVIDE CLEARANCE FOR ROCK ANCHOR.

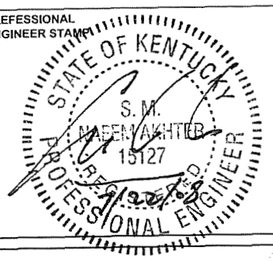
DESIGN CONCRETE VOLUME

MAT VOLUME:	80.67	CUBIC YARDS
PIER VOLUME:	12.38	CUBIC YARDS
TOTAL VOLUME:	93.04	CUBIC YARDS

REACTION LOADS

MAX COMPRESSION:	637.522	KIPS
MAX UPLIFT:	554.233	KIPS
MAX SHEAR/LEG:	54.743	KIPS
AXIAL LOAD:	89.157	KIPS
STRUCTURAL OTM:	13948.876	FT-KIPS
TOTAL SHEAR @ BASE:	87.767	KIPS

PREFESSIONAL ENGINEER STAMP

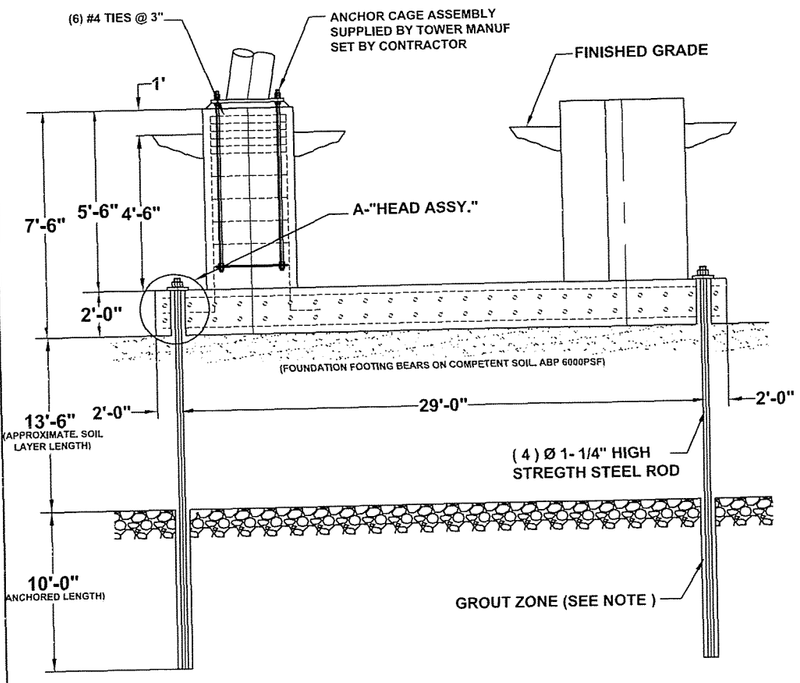


REVIEWED
By Xinguo Cai at 3:07 pm, Jul 18, 2008

CELLERE
SO:18927
SITE NAME: OAKLAND
SITE LOCATION: KY-00-0818A – OAKLAND

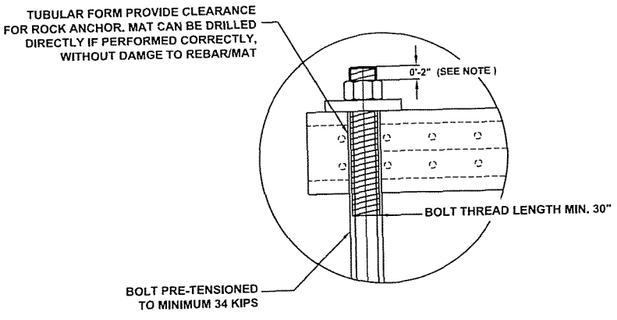
SCALE:		DRW. #:	REV:
DRAWN: ZCX	DATE: 7/18/2008	GM-10110	0
CHECKED: XIN	DATE: 7/18/2008		
	DATE:		

REVISIONS



FOUNDATION SIDE VIEW

SCALE: N.T.S.



DETAIL A-"HEAD ASSY."

SCALE: N.T.S.

ROCK ANCHOR DESIGN:

A ROCK ANCHOR DESIGN GRADE 60KSI, 40% OF SHEAR STRENGTH OF 24000 PSI
B TOTAL QTY (4) ROCK ANCHOR PLACED FOUR CORNER UNDERNEATH MAT AND SHALL AVOID PIER LOCATION
C ADDITIONAL 1' OF ROCK ANCHOR SHALL BE SUPPLIED. AFTER SUCCESFULL INSTALATION, LENGTH MAY BE APPROXIMATELY 2' ABOVE HEAD OF NUT. PER DETAIL A.
D ROCK ANCHOR DESIGNED BASED ON ROCK ULTIMATE SKIN FRICTION 1000 PSF AND ROCK UNIT WEIGHT
E ALLOWABLE BOND STRENGTH BETWEEN ROCK AND GROUT BASED ON 100 PSI.
F GROUT BOND STRENGTH AT GROUT-ANCHOR DESIGNED TO BE 2/3 OF GROUT COMPRESSIVE STRENGTH
G ROCK ANCHOR REQUIRED PRE-TENSION TO MINIMUM 34 KIPS, WHICH IS THE DESIGNED ROCK CONE MASS
H TUBULAR FORM SHOULD BE DESIGNED TO PROVIDE CLEARANCE FOR ROCK ANCHOR. AS ALTERNATIVE MAT DRILLED DIRECTLY, HOWEVER, VERIFICATION MUST BE MADE TO PREVENT POSSIBLE DAMAGE TO REBAR. TUBULAR FORM SHOULD BE DESIGNED TO PROVIDE CLEARANCE FOR ROCK ANCHOR.

ROCK ANCHOR DESIGN (SLIDING & UPLIFT)

REQUIRED LATERAL FROM ROCK ANCHOR	87767	lb
REQUIRED UPLIFT FROM ROCK ANCHOR	-119985	lb
(* Tower does not need up lift from rock anchors. Concrete and backfi enough to resist up lift)		
SHEAR OF STEEL	24000	psi
SELECT ROCK ANCHOR SIZE	10	#
ROCK LEVEL AT TOWER CENTER	20	ft (BGL)
ROCK ANCHOR BONDED LENGTH	10	ft
ROCK ANCHOR TOTAL LENGTH	26	ft
(* Per s ope stabi ity study, anchor has to be min 10ft into rock, rock shows 20ft BGL at tower center)		
DESIGN SHEAR PER ROCK ANCHOR	22089	lb
DESIGN UPLIFT PER ROCK ANCHOR	8345	lb
DESIGN TOTAL ROCK ANCHOR SHEAR	88357	lb
DESIGN TOTAL ROCK ANCHOR UPLIFT	33379	lb
REQUIRED ANCHOR QTY	4	Qty
RESULT:		
ANALYSIS OK IN HORIZONTAL MOVEMENT		

PREFESSIONAL ENGINEER STAMP

STATE OF KENTUCKY
S.M.
NAEEM AKHTER
15121
REGISTERED
PROFESSIONAL ENGINEER

REVIEWED
By Xingyu Cai at 4:00 pm, Jul 18, 2008

CELLERE
SO:18927
SITE NAME: OAKLAND
SITE LOCATION: OLIVE HILL, CARTER, KENTUCKY

SCALE:		DWG. #	REV:
DRAWN: ZCX	DATE: 7/18/2008	GM-10110-A	0
CHECKED: XIN	DATE: 7/18/2008		
	DATE:		

REVISIONS

GLENMARTIN	Job	Page
	Site: Oakland SO: 18927	1 of 10
GLENMARTIN *13620 Old Hwy 40* *Boonville, Mo 65233* *Phone: (660) 882-2734* *FAX: (660) 882-7200*	**Project** 295' HS 90mph-G (18754 model)	**Date** 12:21:10 07/15/08
	Client Cellere	**Designed by** GM

SITE NAME: Oakland
SITE #: KY-00-0818A
SALES ORDER: 18927
SITE ADDRESS: Carter County, Kentucky

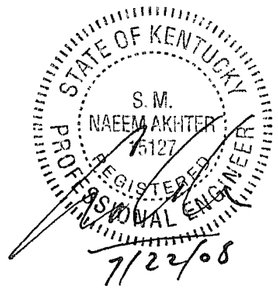
Purchaser: Cellere
Project Contact: Braxton Dougherty
231-929-4555
bdougherty@cellere.us

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: 7-22-08



GLENMARTIN

GLENMARTIN
13620 Old Hwy 40
Boonville, Mo 65233
Phone: (660) 882-2734
FAX. (660) 882-7200

Job Site: Oakland SO: 18927	**Page** 2 of 10
Project 295' HS 90mph-G (18754 model)	**Date** 12:21:10 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.

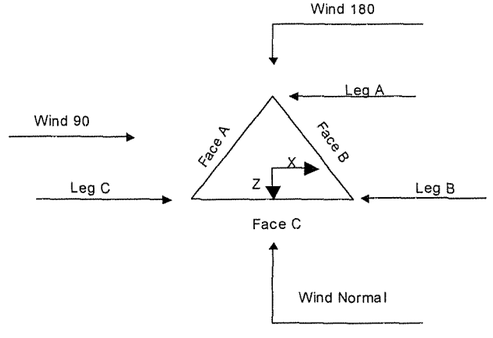
Options

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

GLENMARTIN
13620 Old Hwy 40
Boonville, Mo 65233
Phone: (660) 882-2734
FAX: (660) 882-7200

Job Site: Oakland SO: 18927		**Page** 3 of 10
Project 295' HS 90mph-G (18754 model)		**Date** 12:21:10 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	Job	Page
	Site: Oakland SO: 18927	4 of 10
GLENMARTIN *13620 Old Hwy 40* *Boonville, Mo 65233* *Phone: (660) 882-2734* *FAX: (660) 882-7200*	**Project** 295' HS 90mph-G (18754 model)	**Date** 12:21:10 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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	Client: Cellere	Designed by: GM

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	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $P_u / \phi P_n$
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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Project	**Date**
295' HS 90mph-G (18754 model)	12:21:10 07/15/08
Client	**Designed by**
Cellere	GM

Section No	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
	236 16				K=1 00				✓
T5	236 16 - 216 48	P5x 258	19 70	4 90	31 3 K=1 00	4 2999	-182415 00	180083 00	**1.013** [1] ✗
		4 9-3 (1 01 CR) - 88							
T6	216 48 - 196 8	P6x 28	19 70	4 90	26 2 K=1 00	5 5813	-223048 00	238856 00	0 934 [1] ✓
T7	196 8 - 177 12	P8x 322	19 70	4 90	20 0 K=1 00	8 3993	-262624 00	367036 00	0 716 [1] ✓
T8	177 12 - 157 44	P8x 322	19 70	4 90	20 0 K=1 00	8 3993	-302407 00	367036 00	0 824 [1] ✓
T9	157 44 - 137 76	P8x 322	19 70	6 54	26 7 K=1 00	8 3993	-340120 00	358753 00	0 948 [1] ✓
T10	137 76 - 118 08	P10x 365	19 70	6 54	21 4 K=1 00	11 9083	-380056 00	518292 00	0 733 [1] ✓
T11	118 08 - 98 4	P10x 365	19 70	6 54	21 4 K=1 00	11 9083	-420567 00	518292 00	0 811 [1] ✓
T12	98 4 - 78 72	P10x 365	19 70	6 54	21 4 K=1 00	11 9083	-461484 00	518292 00	0 890 [1] ✓
T13	78 72 - 59 04	P10x 365	19 70	6 54	21 4 K=1 00	11 9083	-503025 00	518292 00	0 971 [1] ✓
T14	59 04 - 39 36	P12x 375	19 70	6 54	17 9 K=1 00	14 5790	-545112 00	640815 00	0 851 [1] ✓
T15	39 36 - 19 68	P12x 375	19 70	6 54	17 9 K=1 00	14 5790	-587980 00	640815 00	0 918 [1] ✓
T16	19 68 - 0	P12x 375	19 70	6 54	17 9 K=1 00	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	123 3 K=1 00	0 3594	-1771 86	5338 98	0 332 [1] ✓
T2	290 52 - 275 52	L1 1/2x1 1/2x1/8	6 38	3 03	122 9 K=1 00	0 3594	-4924 84	5377 19	0 916 [1] ✓
T3	275 52 - 255 84	L1 3/4x1 3/4x3/16	7 30	3 56	124 3 K=1 00	0 6211	-6273 35	9075 09	0 691 [1] ✓
T4	255 84 - 236 16	L1 3/4x1 3/4x3/16	8 56	4 12	143 9 K=1 00	0 6211	-5805 27	6779 15	0 856 [1] ✓
T5	236 16 - 216 48	L2x2x3/16	9 92	4 81	146 4 K=1 00	0 7150	-5912 06	7536 18	0 784 [1] ✓
T6	216 48 - 196 8	L2 1/2x2 1/2x3/16	11 34	5 48	132 7 K=1 00	0 9020	-6381 53	11563 90	0 552 [1] ✓
T7	196 8 - 177 12	L2 1/2x2 1/2x3/16	12 81	6 12	148 5 K=1 00	0 9020	-6976 47	9244 29	0 755 [1] ✓
T8	177 12 - 157 44	L3x3x3/16	14 31	6 88	138 5 K=1 00	1 0900	-7797 43	12840 00	0 607 [1] ✓

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Project 295' HS 90mph-G (18754 model)	**Date** 12:21:10 07/15/08
Client Cellere	**Designed by** GM

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
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] $P_u / \phi P_n$ 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 $\frac{P_u}{\phi P_n}$
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] $P_u / \phi P_n$ 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 $\frac{P_u}{\phi P_n}$
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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Designed by	GM

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								
		4 9-3 (1 01 CR) - 88							
T6	216 48 - 196 8	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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Date	12:21:10 07/15/08
Client	Cellere
Designed by	GM

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 5x 145	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	P2x.154	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
							71 0 (b)	
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
							72 2 (b)	
T7	196 8 - 177 12	Leg	P8x 322	143	-262624 00	367036 00	71 6	Pass

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	Client: Cellere	Designed by: GM

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 79 0 (b)	Pass
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 61 6 (b)	Pass
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 85 6 (b)	Pass
		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 92 0 (b)	Pass
		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 98 4 (b)	Pass
		Diagonal	L4x4x3/8	347	-15955 20	16216 80	98 4	Pass

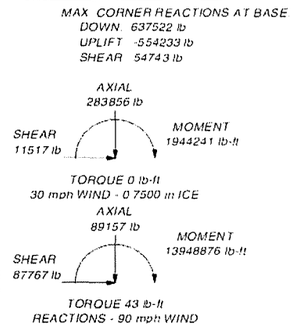
Summary

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**

Program Version 5 1 1 4 - 2/24/2008 File.C./Documents and Settings/Scott H/Desktop/temp/18927/295' HS 90mph-G (18754 model) eri

SST TOWER PIER/MAT FOUNDATION DESIGN WORK SHEET:

REVIEWED
By Xinguo Cai at 4:13 pm, Jul 18, 2008



Site Name:	**OAKLAND**		
Project #:	**SO:18927**		
DRW. #:	**GM-10110**		
Site #:	**KY-00-0818A – OAKLAND**		
Site Location:	**OLIVE HILL, CARTER, KENTUCKY**		
Client:	**CELLERE**		
Revision:	**0**		
Geotech Report #:	**25036.00004.09**		
Report By:	**WILCOX PROFESSIONAL SERVICES,LL(**		
Of:	**N/A**		
Report Date:	**April,29 2008**		
Allowable bearing pressure	**6000** psf		
Concrete Compressive Strength:	**4000** psi		
Sack Mix:			
Minimum Slump:			
Maximum Slump:			
Ultimate Bearing Pressure	**12000** 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	**26'-6"/12**	ft
1/3 Distance:	**7'-7 3/4"**	**7'-8"/12**	ft
2/3 Distance:	**15'-3 9/16"**	**15'-4"/12**	ft
1/2 Face Distance:	**13'-3"** ft	**13'-3"/12**	ft
Pier Diameter (Pad Width):	**4'-6"** ft	**4'-6"/12**	ft
1/2 Pier Diameter (1/2 Pad width)	**2'-3"**	**2'-3"/12**	ft
Total PIER HEIGHT:	**4'-0"** ft	**5'-6"/12**	ft
Finished Height Above Grade:	**1** ft	**1**	ft
Total Mat Width:	**33'-0"** ft	**33**	ft
1/2 Total Mat Width	**16'-6"**	**16'-6"/12**	ft
Mat Thickness:	**2'-0"** ft	**2**	ft
Tower height	**295.5** ft		
Total height	**6'-0"**	**7'-6"/12**	ft
Volume of Concrete Pier:			
Total Volume of Concrete:			
Pier height below grade	**3'-0"**	**4'-6"/12**	ft
PIER BAR SIZE	**9** # Rebar		
PIER BAR NUMBER	**17**		
Size of Horizontal Ties:	**4** 12" Spacing		
MAT BAR SIZE	**9** # Rebar		
MAT BAR NUMBER	**24**		
TOTAL MAT BAR NUMBER	**96**		
Anchor Bolt Diameter:	**2** in	**2**	inch
Quanity of Anchor Bolts:	**8**		
Bolt Circle Diameter:	**19** in	**19**	inch
Anchor Bolt Projection:	**11** in	**11**	inch
Anchor bolt length:	**72** in	**72**	inch
Distance Base Plate & Pad:	in		
Thickness Base Plate:	in		
DRAWN	**MHK**		
DATE	**7/18/2008**		
CHECKED	**XIN**		
DATE	**7/18/2008**		
SQUARE BAR SIZE	**9**		
SQUARE BAR NUMBER	**24**		
PIERS MOVE UP DIMENSION	**3.05** ft		
MAT LARGER HALF DIMENSION	**19'-7"** ft	**19'-7"/12**	ft
MAT SMALLER HALF DIMENSION	**13'-5"** ft	**13'-5"/12**	ft

INPUT DATA AND DESIGN PARAMETERS

MAT WIDTH	**33**	ft	**CONCRETE DENSITY**	150	pcf		
MAT THICKNESS	**2**	ft	**BACKFILL DENSITY**	110	pcf		
PIER DIAMETER	**4.5**	ft	**MINSOIL DENSITY**	110	pcf		
PIER TOTAL HEIGHT	**5.5**	ft	**AXIAL LOAD**	**89157**	lb		
PIER HEIGHT AGL	**1**	ft	***UPLIFT LOAD***	***554233***	lb		
MAT LENGTH	**33**	ft	**BASE SHEAR FORCE**	**87767**	lb	BASE SHEAR	
ρ (PIER)	0 007		**OTM**	**13948876**	ft-lb		
ρ (MAT)	0 005		**CONCRETE STRENGTH**	**4000**	psi		
COHESION	500	psf	**ULTIMATE BEAR PRESSURE**	**12000**	psf	SOIL PROPERTIES	
COFRICTION	0 45	base footing	**TOWER SPREAD**	**26.5**			
			LOCAL OTM	120000	ft-lb		

BAR SIZING MODULE

PIER BAR SIZE	**9**	**#**	**SPACING OK FOR PIER BAR SIZING**	**REBAR UP. CAP.**	**721419.629**	lb
PIER BAR NUMBER	**17**		***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	**24**					
MAT BAR SIZE	**9**	**#**	**PIER HEIGHT DESIGN OK**			
MAT BAR NUMBER	**48**					

ECENTRICITY CHECKING

SOIL HEIGHT	4 5	ft	**MAT WEIGHT**	326700	
PIER VOLUME	273 375	ft^3	**PIER WEIGHT**	50118 75	
TOTAL VOLUME	4900 5	ft^3	***SOIL WEIGHT***	508983 75	
ECENTRICITY	**14.3071338**		**Qo**	974959 5	
ECENTRICITY FACTOR	**5.5**		**PIER TO CENTER**	**15.30**	
RESULT	**ECENTRICITY ANALYSIS OK**				
SDIE EDGE CHECK	**SIDE EDGE OK**		**N/A**	ft	
BOTTOM EDGE CHECK	**MOVE PIERS UP AT LEAST**		**3.05**	ft	

DOWN, UPLIFT, AND OVERTURNING MOMENT CHECKING

ACTUAL AREA WIDTH	22	ft	**WEIGHT OF SOIL**	593811 405	lb		
ACTUAL AREA LENGTH	22	ft	***WEIGHT OF CONCRETE***	376818 75	lb		
INVERSE SOIL HEIGHT	2 5965	ft	**DESIGN UPLIFT**	**727972.6163**	lb	(WR/2)+(WC/1 25)	(WR+WC)/1 5
FOOTING PERIMETER	132	ft	**REQUIRED UPLIFT**	**607988.0828**	lb		
INVERSE SOIL VOLUME	771 1605	ft^3	**DESIGN DOWN**	**6534000**	lb	0 75	Φs EIA-222-G
INVERSE SOIL WEIGHT	84827 655	lb	**REQUIRED DOWN**	**2127079.5**	lb		
RESULT	**UPLIFT ANALYSIS OK**						
	DOWN ANALYSIS OK						

ROCK ANCHOR DESIGN (SLIDING & UPLIFT)

REQUIRED LATERAL FROM ROCK ANCHOR	**87767**	lb	
REQUIRED UPLIFT FROM ROCK ANCHOR	**-119985**	lb (* Tower does not need uplift from rock anchors. Concrete and backfill enough to resist uplift)
SHEAR OF STEEL	**24000**	psi
SELECT ROCK ANCHOR SIZE	**10**	#
ROCK LEVEL AT TOWER CENTER	**20**	ft (BGL)
ROCK ANCHOR BONDED LENGTH	**10**	ft
ROCK ANCHOR TOTAL LENGTH	**26**	ft (* Per slope stability study, anchor has to be min. 10ft into rock, rock shows 20ft BGL at tower ce
DESIGN SHEAR PER ROCK ANCHOR	**22089**	lb
DESIGN UPLIFT PER ROCK ANCHOR	**8345**	lb
DESIGN TOTAL ROCK ANCHOR SHEAR	**88357**	lb
DESIGN TOTAL ROCK ANCHOR UPLIFT	**33379**	lb
REQUIRED ANCHOR QTY	**4**	Qty
RESULT	**ANALYSIS OK IN HORIZONTAL MOVEMENT**	

PUNCHING SHEAR IN FOOTING

ONE WAY PUNCHING SHEAR-ASSUMED SQUARE BASE FOOTING

TWO WAY PUNCHING SHEAR-ASSUMED SQUARE BASE FOOTING WITH COLUMN LOCATED IN CE

PU1	1152120	lb				
d	21	in	**ϕ**	**0.85**		
e1	150	in	**vc**	126 4911064	psi	
vu1	***52.4782457***	psi	**SH1**	**107.5174404**	psi	
PU2	98072 7	lb	**JF**	6022012 5		
MU2	1584000	lb-in	**R2**	93 80997475		
b2	75	in	**v2**	0 4		
AREAP	6300	in^2	**AREAF**	156816	in^2	
vu2	**19.4977296**	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					

EXHIBIT C

Directions to Site from County Seat

Cellere

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

Oakland Site
Carter County, Kentucky

From the Carter County Courthouse in Grayson, Kentucky, begin heading East on US-60/ W. Main Street toward Hillview Street for 0.2 miles. Turn LEFT onto KY-1/KY-7/ Railroad Street. Continue on KY-1/ KY-7 for 1 mile. Merge onto I-64 West via ramp on the LEFT for 15.1 miles. Take the KY-2 exit, EXIT 156, toward KY-59/ Olive Hill/ Vanceburg for 0.3 miles. Turn RIGHT onto KY-2 for 3.4 miles. Turn RIGHT onto Erwin Ridge for 1.4 miles. Turn LEFT onto Oakland Ridge. End at 2511 Oakland Ridge, Olive Hill, Kentucky 41164.

Sandee L. Yagle, Cellere

7-29-08
Date

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

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-00-0818A; Cell Site Name: Oakland

State: Kentucky
County: Carter

This Memorandum of Lease is entered into on this 28th day of Dec., 2007, by and between John Buckler and Alice Joy Gee Buckler, a his wife, having a mailing address of 2511 Oakland Ridge, 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.

Carter County
OR 211 PG 217

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

WITNESSES:

Brenda Burchett
Print Name: Brenda Burchett

Brenda Burchett
Print Name: Brenda Burchett

"LANDLORD"

By: John Buckler
Print Name: John Buckler
Its: Owner
Date: 12-14-07

By: Alice Joy Buckler
Print Name: Alice Joy Gee Buckler
Its: Owner
Date: 12-14-07

WITNESSES:

Marianne Grant
Print Name: MARIANNE GRANT

"TENANT"

Central States Tower Holdings, LLC
a Delaware limited liability company

By:
Print Name: Brian P. Meier
Its: C.O.O.
Date: 12-28-2007

[ACKNOWLEDGMENTS APPEAR ON THE NEXT PAGE]

Carter County
OR 211 PG 218

LANDLORD ACKNOWLEDGMENT

INDIVIDUAL ACKNOWLEDGMENT

STATE OF Kentucky)
) ss:
COUNTY OF Carter)

BE IT REMEMBERED, that on this 14th day of Dec., 2007 before me, the subscriber, a person authorized to take oaths in the State of Kentucky, personally appeared John Buckler and Alice Joy Gee Buckler, his wife, 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: Cindy A. Sparks
My Commission Expires: 4-12-11

PARTNERSHIP (consisting of corporations) ACKNOWLEDGMENT

STATE OF)
) ss:
COUNTY OF)

I CERTIFY that on _____ _____, _____, _____ 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: _____

Site Name: Oakland
Site Number: KY-00-0818A

CORPORATE ACKNOWLEDGMENT

STATE OF)
) ss:
COUNTY OF)

I CERTIFY that on _____ _____, 2007, [name of representative] personally came before me and acknowledged under oath that he or she:

(a) is the [title] of [name of corporation] the corporation named in the attached instrument,

(b) was authorized to execute this instrument on behalf of the corporation and

(c) executed the instrument as the act of the corporation.

Notary Public: _____
My Commission Expires: _____

TENANT ACKNOWLEDGMENT

STATE OF ILLINOIS)
) ss:
COUNTY OF DuPage)

On the 28th day of Dec, 2007, before me personally appeared Brian P. Meier, its C.O.O, and acknowledged under oath that he is duly authorized to sign on behalf of Central States Tower Holding, LLC , the Tenant named in the attached instrument, and as such was authorized to execute this instrument on behalf of the Limited Liability Company.

Notary Public: Barbara Meindl
BARBARA MEINDL
My Commission Expires: JAN. 22, 2011

OFFICIAL SEAL
BARBARA MEINDL
NOTARY PUBLIC, STATE OF ILLINOIS
My Commission Expires 01/22/2011

Site Name: Oakland
Site Number: KY-00-0818A

EXHIBIT A

DESCRIPTION OF PROPERTY
Page 1 of 1

to the Memorandum of Lease dated Dec. 28th, 2007, by and between John Buckler and Alice Joy Gee Buckler, a his wife, as Landlord, and Central States Tower Holdings, LLC, a Delaware limited liability company, as Tenant.

The Property is described and/or depicted as follows:

All that certain tract or parcel of land, situate, laying and being in Carter County Kentucky and on the Buffalo fork of Tygart Creek and bounded and described as follows:

Beginning at a white oak, corner to John W. Burton's land; thence a northwest course with said Burton's line to J. M. Cartee line; thence with said Cartee line to Pat McGlone's line; thence S 13 W to a poplar; thence S. 29 W. to the top of the cliff; thence around the top of the cliff with J. M. Cartee's line to Denise Stallard's line; then with said Stallard's line to A. E. Kiser's corner at foot of cliff; thence S. 27 E. with A. B. Kiser's line 135 poles to Andrew Brown's line and corner; thence S. 44 E. with Brown's line to the beginning containing 140 acres plus or minus.

There is excluded from this conveyance the following described tract of land now owned by the estate of A. W. McGlone – Beginning at a hickory 3.27 W. 37 poles to an elm standing by a rock; S. 66 ½ W. 5 poles to a stone; N 16 W 3 3/5 poles to a stone; N 40 E 27 poles to a poplar and beech at the branch; N 19 E. 21 poles to a white oak on top of a cliff; S 43 E 26 poles to a poplar; N 73 E 32 -2/5 poles to the beginning containing 14 13/16 ares, plus or minus.

Also, the following described strip of land on the waters of Buffalo Creek in Carter County Kentucky, to-wit:

Starting at a small spotted oak and set stone on top of cliff in A. B. Kiser and Wayman Buckler line, the said spooted oak being 11 rods and 10 feet from the A.B. Kisser and Stellard Corner, thence running south with cliff 60 rods to a cedar and set stone and a spotted oak at top of cliff; thence running east 30 rods to a set stone and a cedar with the cliff line; thence running north west 75 rods with the old line back to the beginning corner of the cliff, Being a part of the same land conveyed to first parties by deed dated and Recorded in Deed Book No. 83, Page 540-41, Carter County Deed Records.

Also, the following described property, to-wit:

A certain tract of land laying and being on the waters of Buffalo Fork of Tygart's Creek in Carter County, Ky. And bounded as follows: Beginning at a large white oak, a corner to Frazier and in the original A.B. Kiser survey, thence with Kiser's line, S. 27 E – Va. 2- 52 poles to a stone on said Kiser's line, a spotted oak bears N. 6 W. 18 links- thence leaving said Kiser's line on new lines S. 58 E. 20 ½ poles to a small white oak and mulbury bush on east side of the County Road at the low-gap, thence N. 69 E. 32 ½ poles to a small poplar near forks of the branch, thence N. ¼ W. 45 1/5 poles to an X on the "Buzzard Rock" by a sourwood and sassafras, thence N. 19 E. 16 4/5 poles to a black oak, N. 12 E. 14 4/5 poles to a small locust at the road, thence with the road N. 74 ½ W. 12 ½ poles to a small hickory by the road N. 24 ¼ W. 32 3/5 poles to a black oak in Frasier line, thence with said Frasier's line S 44 W. 113 poles to the beginning containing 53 acres, and being the same property conveyed to Earl Frazier by J. W. Frazier by deed records in Deeb Book # 57 page 152-53, Carter County Deed Records.

Site Name: Oakland
Site Number: KY-00-0818A

Carter County
OR 211 PG 221

304347
Filed on:2/14/2008 11:35:46 AM
Book: OR Number: 211
Pages: 217 - 221
Mike D. Johnston ,Carter County
DC: SHANNA BRADLEY

EXHIBIT E

Site Plan – 500' Radius Map with
Flood Plain Information

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-00-0818A OAKLAND) in Olive Hill Kentucky

Case No. 2008-00260

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, with the exception of the individual identified in paragraph 4, 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 (all of whom could be located to respond): (1) Sy Berry; (2) Carl and Janet Burge; (3) Carter Caves State Park; (4) Jennifer Evans; (5) James and Louise McGlone; (6) William E. Ramey; and John Buckler. (See Exhibit1)

4. Attached as Exhibit 3 is a copy of the United States Certified Mail return receipt indicating that the USPS attempted to deliver the certified mail to two different addresses and was rejected as "moved, left no address" and "attempted, not known". The tax assessor has only this address to send tax bills: 1911 Oakland Ridge, Olive Hill, KY 41164. The address of 720 State Highway 986, Olive Hill, KY 41164 appears as the address in the phone register. No other address could be located for Dana Adkins at this time, therefore she cannot be served by the United States Certified Mail in compliance with 807 KAR 5:063 § 1(l) and (m).

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 GR. TRAVERSE

Landowner and Adjacent Landowner List

Central States Tower Holdings, LLC
Oakland Site
Olive Hill, Kentucky

John Buckler
2511 Oakland Ridge
Olive Hill, KY 41164

Carter Caves State Park
344 Caveland Drive
Olive Hill, KY 41164

William E. Ramey
6596 Carter Caves Road
Olive Hill, KY 41164

Sy Berry
16282 Karin
Taylor, MI 48180

Jennifer Evans
2540 Oakland Ridge
Olive Hill, KY 41164

Dana Adkins
1911 Oakland Ridge
Olive Hill, KY 41164

Carl and Janet Burge
9695 St. Hwy 2
Olive Hill, KY 41164

James and Louise McGlone
9180 St. Hwy 2
Olive Hill, KY 41164

Sandee L. Yagle, Cellere

7-29-08
Date

July 2, 2008

Sy Berry
16282 Karin
Taylor, MI 48180

Public Notice

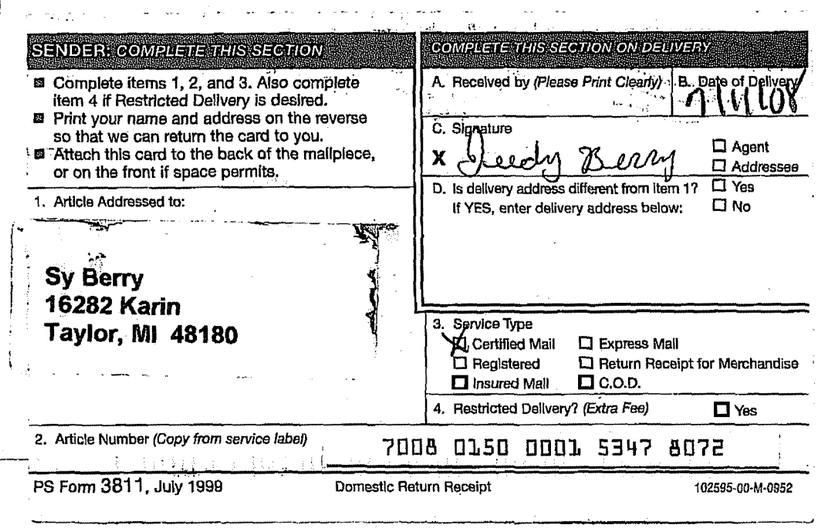
Cellere, LLC, a Michigan limited liability company as agent for Central States Tower Holdings, LLC is applying to the Public Service Commission of the Commonwealth of Kentucky (the "Commission") for a Certificate of Public Convenience and Necessity to construct a new cellular tower facility to provide cellular telephone service. This facility will include a 300 foot tower to be located at +/- 2511 Oakland Ridge, Olive Hill, KY 41164. 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 2008-00260 in your correspondence.

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



SENDER: COMPLETE THIS SECTION

- 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.

1. Article Addressed to:

Sy Berry
16282 Karin
Taylor, MI 48180

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery 7/11/08

C. Signature
X Sandy Berry ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Copy from service label) 7008 0150 0001 5347 8072

PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

July 2, 2008

Carl and Janet Burge
9695 St. Hwy 2
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 +/- 2511 Oakland Ridge, Olive Hill, KY 41164. A map showing the location is attached.

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

Please refer to case number 2008-00260 in your correspondence.

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

SENDER: COMPLETE THIS SECTION

- 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.

1. Article Addressed to:

Carl and Janet Burge
9695 St. Hwy 2
Olive Hill, KY 41164

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)*: Kelly Webb — B. Date of Delivery: 7-12-08

C. Signature: x Kelly Webb — ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)* 7008 0150 0001 5347 8065

PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

July 2, 2008

Carter Caves State Park
344 Caveland Drive
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 +/- 2511 Oakland Ridge, Olive Hill, KY 41164. A map showing the location is attached.

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

Please refer to case number 2008-00260 in your correspondence.

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

SENDER: COMPLETE THIS SECTION

- 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.

1. Article Addressed to:

Carter Caves State Park
344 Caveland Drive
Olive Hill, KY 41164

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly): Charlotte Gilliam
B. Date of Delivery: 7-12-08
C. Signature: X Charlotte Gilliam ☐ Agent ☐ Addressee
D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Copy from service label): 7008 0150 0001 5347 8058

PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

July 2, 2008

Jennifer Evans
2540 Oakland Ridge
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 +/- 2511 Oakland Ridge, Olive Hill, KY 41164. 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 2008-00260 in your correspondence.

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

SENDER: COMPLETE THIS SECTION

- 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.

1. Article Addressed to:

Jennifer Evans
2540 Oakland Ridge
Olive Hill, KY 41164

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)*: Jennifer Evans
B. Date of Delivery: 7-12-08
C. Signature: X Jennifer Evans ☐ Agent ☐ Addressee
D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)* 7008 0150 0001 5347 8041

PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

July 2, 2008

James and Louise McGlone
9180 St. Hwy 2
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 +/- 2511 Oakland Ridge, Olive Hill, KY 41164. 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:

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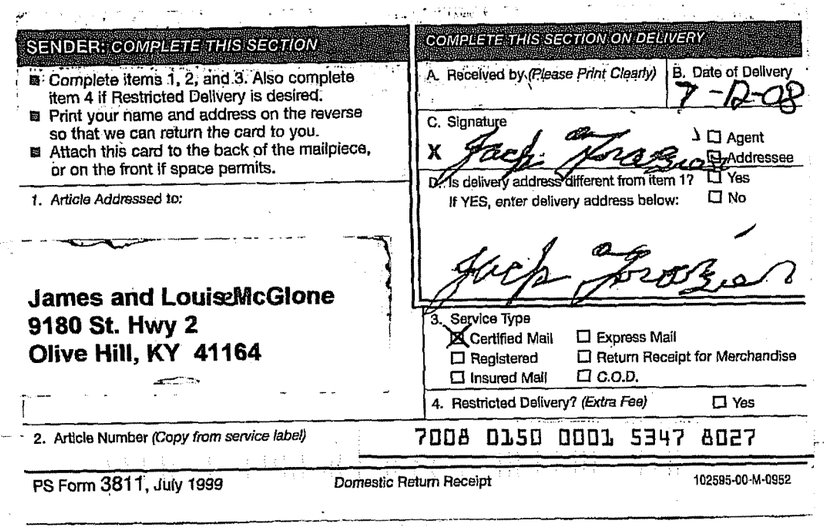
Public Service Commission of Kentucky
P.O. Box 615
Frankfort, Kentucky 40602

Please refer to case number 2008-00260 in your correspondence.

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



SENDER: COMPLETE THIS SECTION

- 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.

1. Article Addressed to:

James and Louise McGlone
9180 St. Hwy 2
Olive Hill, KY 41164

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) | B. Date of Delivery 7-12-08

C. Signature
X [signature] ☐ Agent ☒ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

[signature]

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Copy from service label) 7008 0150 0001 5347 8027

PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

July 2, 2008

William E. Ramey
6596 Carter Caves Road
Olive Hill, KY 41164

Public Notice

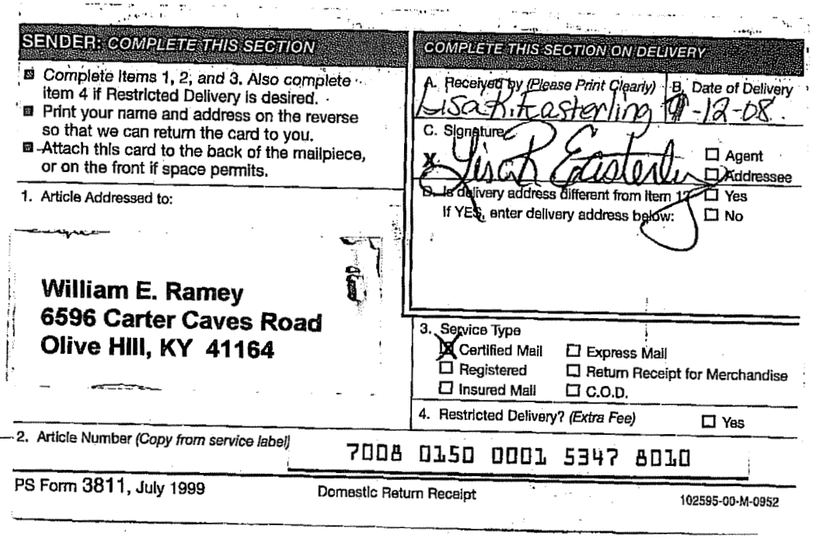
Cellere, LLC, a Michigan limited liability company as agent for Central States Tower Holdings, LLC is applying to the Public Service Commission of the Commonwealth of Kentucky (the "Commission") for a Certificate of Public Convenience and Necessity to construct a new cellular tower facility to provide cellular telephone service. This facility will include a 300 foot tower to be located at +/- 2511 Oakland Ridge, Olive Hill, KY 41164. 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 2008-00260 in your correspondence.

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



SENDER: COMPLETE THIS SECTION

- 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.

1. Article Addressed to:

William E. Ramey
6596 Carter Caves Road
Olive Hill, KY 41164

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) Lisa R. Easterling B. Date of Delivery 9-12-08

C. Signature X Lisa R Easterling ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Copy from service label) 7008 0150 0001 5347 8010

PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

July 2, 2008

John Buckler
2511 Oakland Ridge
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 +/- 2511 Oakland Ridge, Olive Hill, KY 41164. 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 2008-00260 in your correspondence.

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

SENDER: COMPLETE THIS SECTION

- 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.

1. Article Addressed to:

John Buckler
2511 Oakland Ridge
Olive Hill, KY 41164

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* Jennifer Evans — B. Date of Delivery 7-2-08

C. Signature
X Jennifer Evans — ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)* 7008 0150 0001 5347 8034

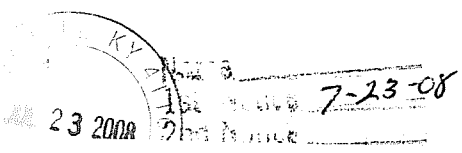
PS Form 3811, July 1999 — Domestic Return Receipt — 102595-00-M-0952

Cellere

4110 Copper Ridge Drive, Suite 204
Traverse City, MI 49684

7008 0150 0001 5348 2512

Dana Adkins
720 State Highway 986
Olive Hill, KY 41164



4NK
3/BO

NIXIE 403 DE 1 00 07/26/08
RETURN TO SENDER
ATTEMPTED - NOT KNOWN
UNABLE TO FORWARD
BC: 49684672154 *2785-04373-21-36

41184884400 RDD
49684@6721

CERTIFIED MAIL™

7008 0150 0001 5347 8089

Cellere

4110 Copper Ridge Drive, Suite 204
Traverse City, MI 49684

Dana Adkins
1911 Oakland Ridge
Olive Hill, KY

403 NFE 1 208C 00 07/13/08
RETURN TO SENDER
ADKINS'DANA
MOVED LEFT NO ADDRESS
UNABLE TO FORWARD
RETURN TO SENDER
BC: 49684672154 *2785-05395-09-38

41184884400 RDD
49684@6721

July 2, 2008

Dana Adkins
1911 Oakland Ridge
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 +/- 2511 Oakland Ridge, Olive Hill, KY 41164. A map showing the location is attached.

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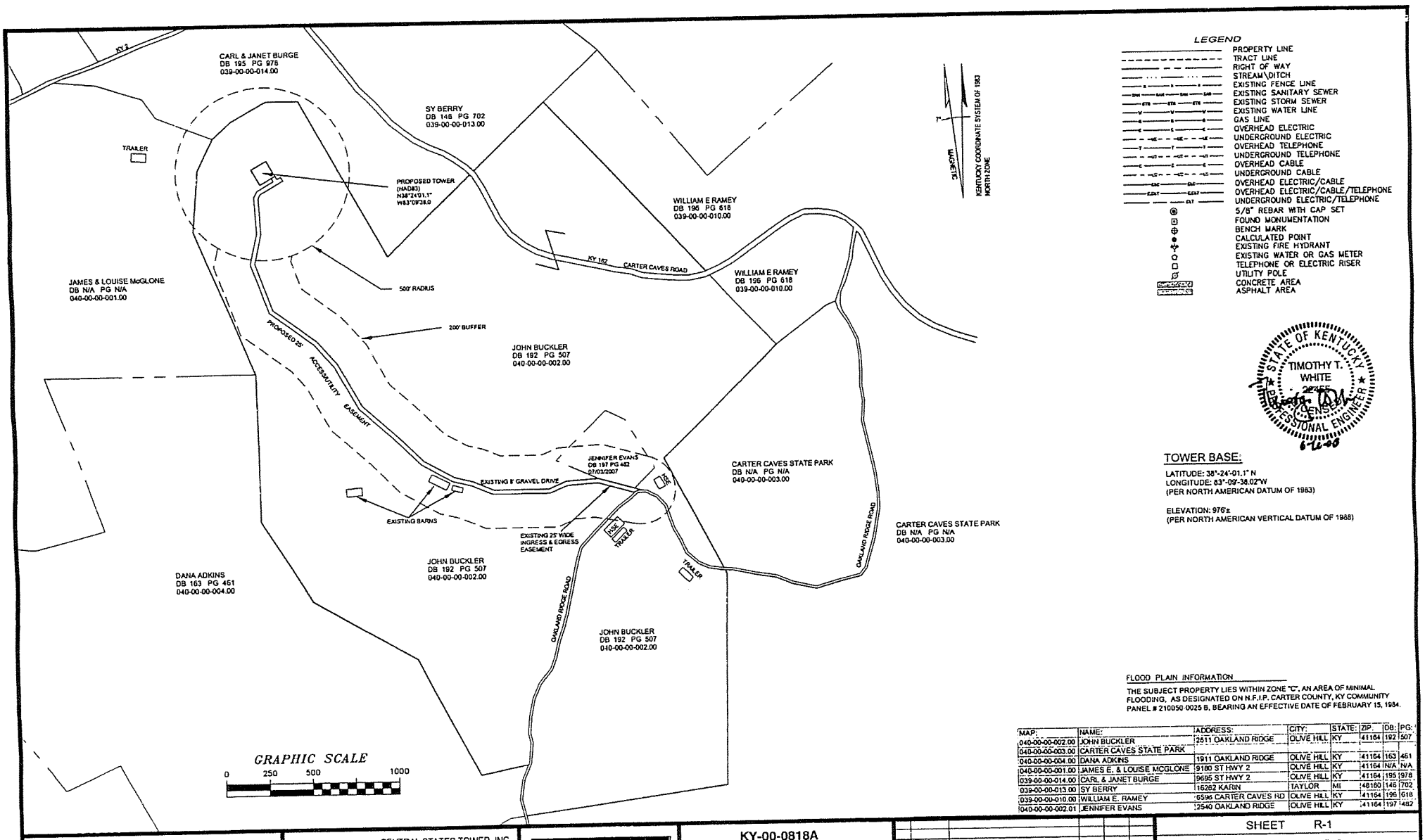
Executive Director's Office
Public Service Commission of Kentucky
P.O. Box 615
Frankfort, Kentucky 40602

Please refer to case number 2008-00260 in your correspondence.

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



LEGEND

- PROPERTY LINE
- TRACT LINE
- RIGHT OF WAY
- STREAM\DITCH
- EXISTING FENCE LINE
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING WATER LINE
- GAS LINE
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- OVERHEAD TELEPHONE
- UNDERGROUND TELEPHONE
- OVERHEAD CABLE
- UNDERGROUND CABLE
- OVERHEAD ELECTRIC/CABLE
- OVERHEAD ELECTRIC/CABLE/TELEPHONE
- 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

STATE OF KENTUCKY
TIMOTHY T. WHITE
20405
LICENSED PROFESSIONAL ENGINEER
6-12-08

TOWER BASE:

LATITUDE: 38°-24'-01.1" N
LONGITUDE: 83°-09'-38.02"W
(PER NORTH AMERICAN DATUM OF 1983)

ELEVATION: 976±
(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 0025 B, BEARING AN EFFECTIVE DATE OF FEBRUARY 15, 1984.

MAP:	NAME:	ADDRESS:	CITY:	STATE:	ZIP:	DB:	PG:
040-00-00-002.00	JOHN BUCKLER	2511 OAKLAND RIDGE	OLIVE HILL	KY	41164	192	507
040-00-00-003.00	CARTER CAVES STATE PARK						
040-00-00-004.00	DANA ADKINS	1911 OAKLAND RIDGE	OLIVE HILL	KY	41164	163	461
040-00-00-001.00	JAMES E. & LOUISE MCGLONE	9180 ST HWY 2	OLIVE HILL	KY	41164	N/A	N/A
039-00-00-014.00	CARL & JANET BURGE	9695 ST HWY 2	OLIVE HILL	KY	41164	195	678
039-00-00-013.00	SY BERRY	16282 KARIN	TAYLOR	MI	48180	146	702
039-00-00-010.00	WILLIAM E. RAMEY	6596 CARTER CAVES RD	OLIVE HILL	KY	41164	196	618
040-00-00-002.01	JENNIFER EVANS	2540 OAKLAND RIDGE	OLIVE HILL	KY	41164	197	482

Wilcox Professional Services
ONE MADISON AVENUE
CADILLAC, MI 49601
(231) 775-7784 OFFICE
(231) 775-3135 FAX
www.wilcox.us

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 755-2638

KY-00-0818A
OAKLAND
2511 OAKLAND RIDGE
OLIVE HILL, KY 41164

NO.	DATE	REVISIONS	BY	CHK	APP'D

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

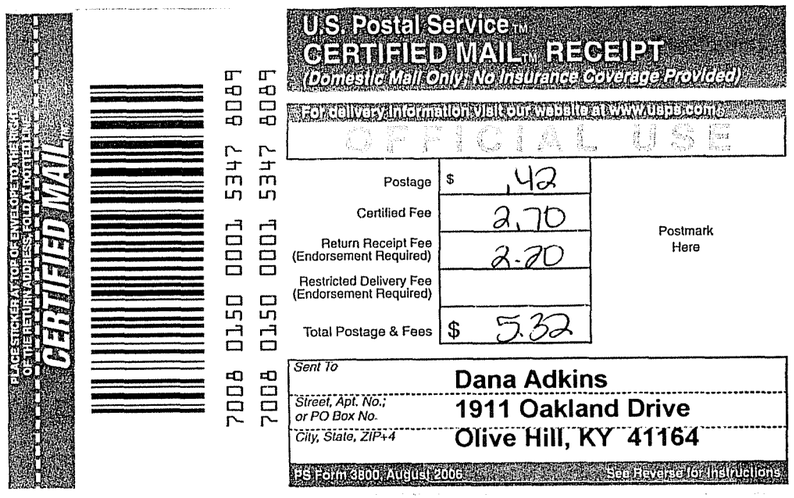
SHEET R-1

500' RADIUS MAP &
FLOOD PLAIN INFORMATION

DRAWING NUMBER
KY-00-0818A

Cellere
4110 Copper Ridge Drive, Suite 204
Traverse City, MI 49684

Dana Adkins
1911 Oakland Ridge
Olive Hill, KY 41164



U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com®
OFFICIAL USE

Postage	$ .42
Certified Fee	2.70
Return Receipt Fee (Endorsement Required)	2.70
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 5.82

Postmark Here

7008 0150 0001 5347 8089

Sent To: Dana Adkins
Street, Apt. No.; or PO Box No.: 1911 Oakland Drive
City, State, ZIP+4: Olive Hill, KY 41164

PS Form 3800, August 2006 — See Reverse for Instructions

SENDER: *COMPLETE THIS SECTION*

- 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.

1. Article Addressed to:

Dana Adkins
1911 Oakland Drive
Olive Hill, KY 41164

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* | B. Date of Delivery

C. Signature
X ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)* 7008 0150 0001 5347 8089

PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

ere
e Drive, Suite 204
9684

Dana Adkins
720 State Highway 986
Olive Hill, KY 41164

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS. FOLD AT DOTTED LINE

CERTIFIED MAIL™

7008 0150 0001 5348 2512

7008 0150 0001 5348 2512

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To	**Dana Adkins**
Street, Apt. No.; or PO Box No.	**720 State Highway 986**
City, State, ZIP+4	**Olive Hill, KY 41164**

PS Form 3800, August 2006 — See Reverse for Instructions

SENDER: ***COMPLETE THIS SECTION***

- 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.

1. Article Addressed to:

Dana Adkins
720 State Highway 986
Olive Hill, KY 41164

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A. Received by *(Please Print Clearly)* | B. Date of Delivery

C. Signature
X ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)* 7008 0150 0001 5348 2512

PS Form 3811, July 1999 — Domestic Return Receipt — 102595-00-M-0952

EXHIBIT G

Certified letter to Judge Executive

Cellere

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. 2008-00260

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 +/- 2511 Oakland Ridge, Olive Hill, Kentucky 41164. 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 2008-00260 in your correspondence.

Sincerely,

Benjamin Meredith
Cellere, LLC

Enclosure

sly

SENDER: COMPLETE THIS SECTION

- 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.

1. Article Addressed to:

Carter County Judge Executive
Charles Wallace
300 W. Main St., Rm. 227
Grayson, KY 41143

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly): Charles Wallace — B. Date of Delivery: 7-12-08

C. Signature: X Charles Wallace ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Copy from service label) 7008 0150 0001 5347 7792

PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

EXHIBIT H

Public Notice Signs
(Photos)


PUBLIC NO
Central States Tower Holding
proposes to
construct a cellular
communication
TOWER
on this site. If you have any
questions please contact
Please refer to P.S.C.
Case #2008-00260


PUBLIC NOTICE
TOWER
Case #2008-00260

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
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.

Chinda Hargett
Notary Public, State at Large, Kentucky

My Commission Expires: _____

210 Legal Notices

Book 98, page 775); thence with the Gallion line South 79° 17' 00" West, a distance of 100.00 feet to an iron post found a corner to Kenneth Kelley (OR Book 134, Page 860); thence with the Kelley line North 20° 07' 38" West, a distance of 45 feet to an iron pin set; thence North 20° 07' 38" West a distance of 5.00 feet to a point in a creek; thence [illegible] 32' East a distance of 132.50 [illegible] feet to an iron pin set; thence [illegible] distance [illegible] 29.00 feet [illegible] iron pin [illegible] ner to Kim[illegible] low (OR Book [illegible] Page [illegible]; thence with the Harlow line South [illegible] East [illegible] iron pin [illegible] Damron Mayo Road; thence with the [illegible] way line South 14° 00' 00" East a distance of 132.40 feet to an iron pin set a corner to parcel 1; thence with the line of Parcel 1 South 80° 43' 69" West, a distance of 100.18 feet to the point of beginning. Said described tract containing 0.84 acre.

Subject to all legal right of ways and easements being of record or not of record.

The tract is more fully shown on map or plat as surveyed, drawn and dated November 01, 2006 by Markus Johnson Johnsons Land Surveying Professional Land Surveyor No. 3303 and attached hereto and made apart thereof by reference.

Subject to all easements and restrictions of record. More commonly known as 89 Damron Mayo Road, Grayson, KY 41143.

Being the same property conveyed to Ronnie Burke and Lisa Burke, husband and wife, from Dennis Harlow and Kimberly J. Harlow, husband and wife, by [illegible]

210 Legal Notices

bearing interest at the rate of twelve (12%) percent per annum from the date of the sale until paid. Additionally, a lien shall be retained upon the real estate to be sold herein to secure the payment of the balance of the purchase price within thirty (30) days of the date of sale upon which execution may be levied by the Master Commissioner of this court.

In the event that the successful bidder is the Plaintiff in this action which has been adjudged to have a lien on the particular tract or parcel of real or personal property sold, upon then and in that event said party [illegible] required to make any cash deposit or bond [illegible] cash payment or execute a bond, then the Commissioner shall declare the next highest bidder the purchaser of the real estate.

Upon default of said deposit or posting a bond by the purchaser or purchasers, the Master Commissioner shall immediately resell the property upon the same terms and conditions set out herein.

The hereinabove described real property shall be sold free and clear of the claims, interests, liens and encumbrances of all parties herein, except restrictions and easements appearing of record, in the Carter County Court Clerk's Office.

The risk of loss for the subject property shall pass to the purchaser on the date of sale. Possession of the premises shall pass to the purchaser upon payment of the purchase price and delivery of deed. The Purchaser shall be required to purchase fire and extended coverage insurance on any improvements to the real property, from the date of sale [illegible]

210 Legal Notices

HON. ROBERT L. CAUMISAR

MASTER COMMISSIONER

CARTER CIRCUIT COURT
300 WEST MAIN STREET
GRAYSON KY 41143

212 Public Notices

NOTICE TO CONSTRUCT

Cellere, LLC on behalf of Central States Tower Holdings, LLC, is applying to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide cellular telecommunications service in Olive Hill, Kentucky (Oakwood Site). The facility is a 300 foot tower and an equipment shelter to be located at [illegible] Olive Hill, KY. Your comments and requests for intervention should be addressed to: Executive Director's Office, Public Service Commission, P.O. Box 615, 211 Sower Blvd., Frankfort, KY 40602. Please refer to Case No. 2008-00259 in your correspondence.

NOTICE TO CONSTRUCT

Cellere, LLC on behalf of Central States Tower Holdings, LLC, is applying to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide cellular telecommunications service in Grayson, Kentucky (Stumps Run Site). The facility is a 300 foot tower and an equipment shelter to be located at 220 Kees Branch, Grayson, KY. Your comments and requests for intervention should be addressed to: Executive Director's Office, Public Service Commission, P.O. Box 615, 211 Sower Blvd., Frankfort, KY 40602. Please refer to Case No. 2008-00262 in your correspondence.

212 Public Notices

NOTICE TO CONSTRUCT

Cellere, LLC on behalf of Central States Tower Holdings, LLC, is applying to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide cellular telecommunications service in Olive Hill, Kentucky (Hour Creek Site). The facility is a 300 foot tower and an equipment shelter to be located at [illegible] Sutton Road, Olive Hill, KY. Your comments and requests for intervention should be addressed to: Executive Director's Office, Public Service Commission, P.O. Box 615, 211 Sower Blvd., Frankfort, KY 40602. Please refer to Case No. 2008-00258 in your correspondence.

Public Auction Notice

The Commercial Bank of Grayson will offer at Public Sale the following items to satisfy the indebtedness due under the terms of a security agreement.

2005 Yamaha Dirt Bike YZ125, Serial #JYACE13C55A003724
2004 Pontiac Grand AM GT-V6, 4dr, White, Mileage 144,523 Serial #1G2NV52E94C160001
2002 Pontiac Grand Prix 6cyl, Serial #1G2WP12K02F139936 (WRECKED)
1997 Ford Crown Victoria, 4dr, Silver, Serial #2FALP74W3VX114024 (WRECKED)

Public Auction will be held on Friday, August 8, 2008 at 3:00 PM at the COMMERCIAL BANK OF GRAYSON, Olive Hill Office, Railroad Street, Olive Hill, KENTUCKY.

Seller reserves the right to reject any or all bids.
Announcements made the day of the sale will take precedence over any printed material.
Terms will be cash.
For more information, please contact

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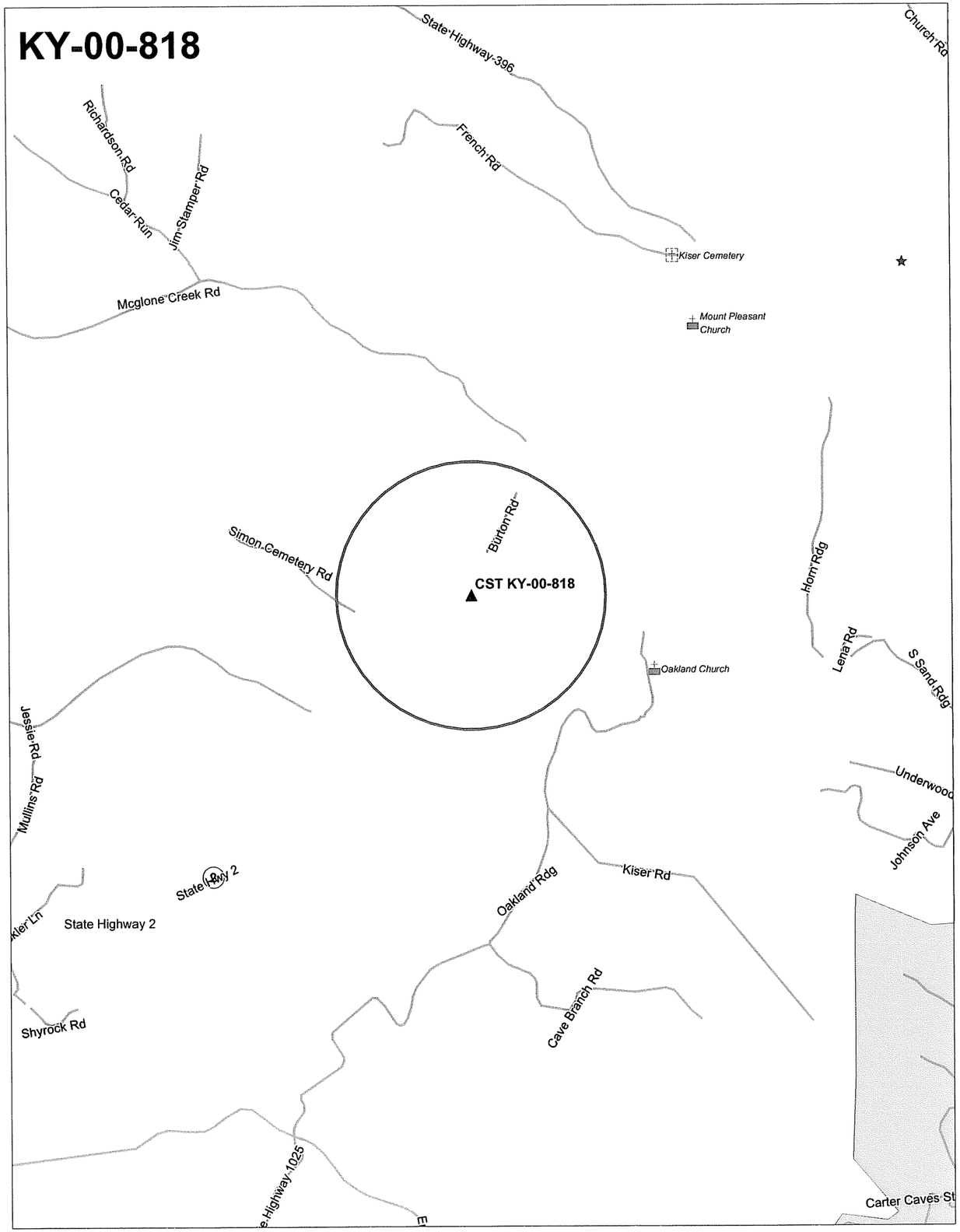
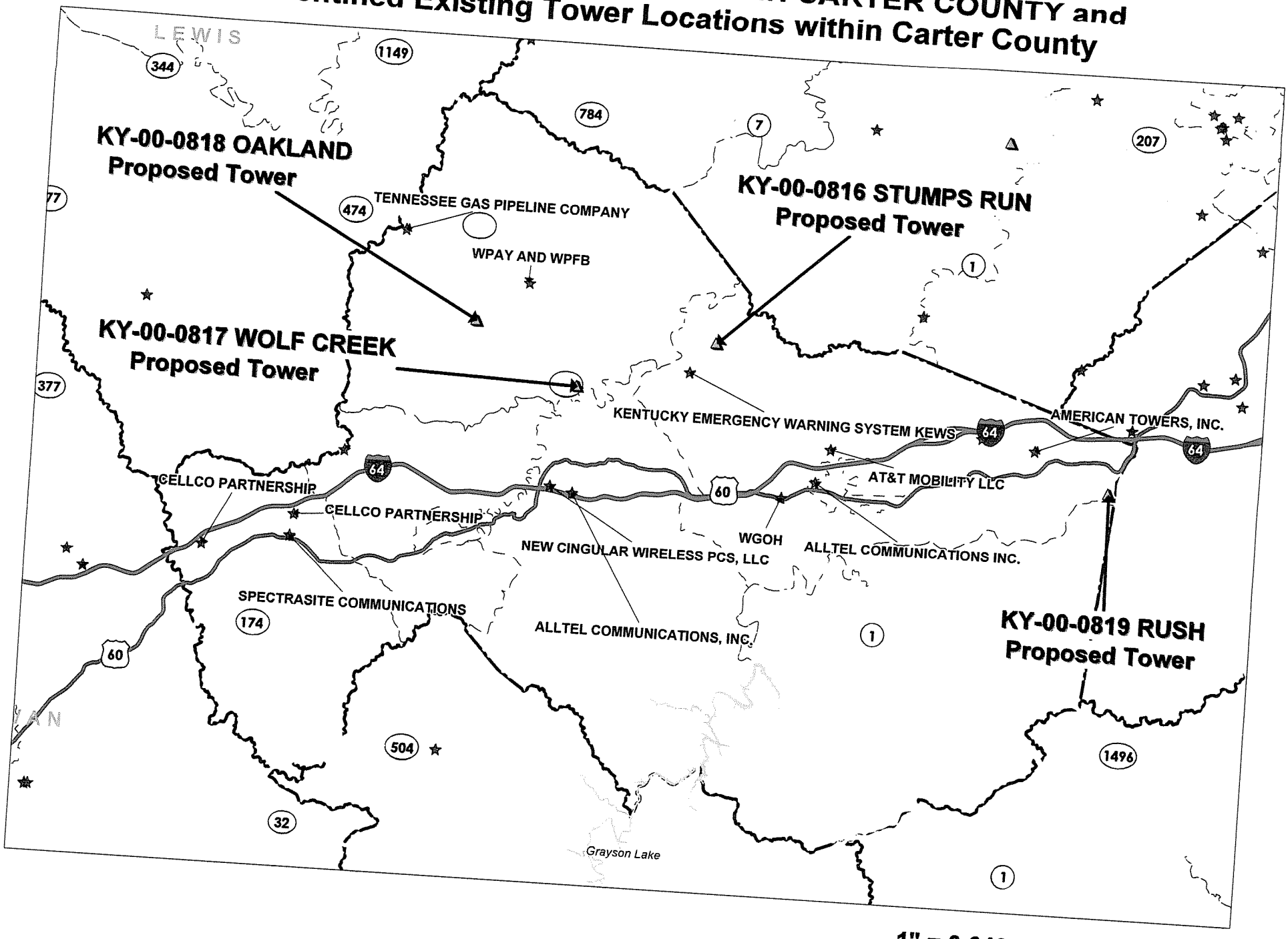
EXHIBIT J

Map of Search Area

KY-00-818


State Highway 396
Church Rd
Richardson Rd
Cedar Run
Jim Stamper Rd
French Rd
Kiser Cemetery
Mcglone Creek Rd
Mount Pleasant Church
Simon Cemetery Rd
Burton Rd
CST KY-00-818
Horn Rdg
Lena Rd
S Sand Rdg
Oakland Church
Underwood
Johnson Ave
Jessie Rd
Mullins Rd
State Hwy 2
State Highway 2
Oakland Rdg
Kiser Rd
Kler Ln
Shyrock Rd
Cave Branch Rd
Carter Caves St

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



1" = 3.643 miles