CASE NUMBER:

99-104

HISTORY INDEX FOR CASE: 1999-104
SPRINTCOM, INC.
Construct
CELL SITE - RR3 BOX 438 - BUTLER, PENDLETON

IN THE MATTER OF THE APPLICATION OF SPRINTCOM, INC., FOR
ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND
NECESSITY TO CONSTRUCT A PERSONAL COMMUNICATIONS SERVICES
FACILITY IN THE CINCINNATI BASIC TRADING AREA
(BUTLER FACILITY)

SEQ NBR	ENTRY DATE	REMARKS
M0001	05/18/1999	SANDRA KEENE-NOTICE OF INTENT TO FILE CELL SITE APPLICATION
0001	06/30/1999	Application.
0002	07/01/1999	Acknowledgement letter.
0003	07/08/1999	No deficiency letter.
M0002	08/04/1999	SPRINTCOM SANDRA KEENE-MOTION TO SUBMIT MATTER FOR APPROVAL ON THE RECORD
0004	08/17/1999	Final Order granting a Certificate to construct & operate the Butler site.
0005	12/22/1999	First Reminder Letter to Jeffrey M. Pfaff.
M0003	12/28/1999	SANDRA KEENE SPRINTCOM, INC.-APPROVALS FROM THE KY AIRPORT ZONING COMMISSION & FEDERAL AVIA

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of:

APPLICATION OF SPRINTCOM, INC.,	)	
FOR ISSUANCE OF A	)	
CERTIFICATE OF PUBLIC CONVENIENCE AND	)	
NECESSITY TO CONSTRUCT A PERSONAL	)	CASE NO. 99-104
COMMUNICATIONS SERVICES FACILITY	)	
IN THE CINCINNATI BASIC TRADING AREA	)	
[BUTLER FACILITY]	)	

NOTICE OF FILING SUPPLEMENTAL MATERIAL

Comes the Applicant, SprintCom, Inc., by counsel, and submits for filing the attached approvals from the Kentucky Airport Zoning Commission, attached hereto as Exhibit A, and the Federal Aviation Administration, attached hereto as Exhibit B, regarding the construction of the facility approved herein.

Respectfully submitted,

Mark W. Dobbins
Sandra F. Keene
TILFORD, DOBBINS, ALEXANDER
BUCKAWAY & BLACK, LLP
1400 One Riverfront Plaza
Louisville, Kentucky 40202
(502) 584-6137
Counsel for SprintCom, Inc.

G:\OFFICE\MWD\SPCOM3\023\MOTION.SUP

Federal Aviation Administration
Southern Region, ASO-520
P.O. Box 20636
Atlanta, GA 30320

AERONAUTICAL STUDY
No: 99-ASO-2763-OE

ISSUED DATE: 06/18/99

CI33XC023D

DAN KRUSE
SPRINTCOM, INC DBA SPRINT PCS
9801 HIGGINS RD, STE 220
ROSEMONT, IL 60018

** THIS IS NOT A DETERMINATION **

The Federal Aviation Administration has received your notice concerning:

Description:	NEW ANTENNA TOWER 1945-1950 MHZ/1000 WATTS
Location:	BUTLER KY
Latitude:	38-47-55.00 NAD 83
Longitude:	084-21-49.00
Heights:	260 feet above ground level (AGL) 933 feet above mean sea level (AMSL)

NOTE: If the coordinates of your notice were submitted in NAD 27 datum, they have been converted to NAD 83 datum as shown above. NAD 83 datum will be referenced on all future correspondence and will be used for the purpose of this study.

Your notice has been assigned Aeronautical Study Number 99-ASO-2763-OE and we are in the process of conducting an aeronautical study to determine the effect on air navigation. A determination or response will be forthcoming.

Please inform involved consultants of this correspondence.

If you have any questions, please contact MICHAEL A. BLAICH at 404-305-5580. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 99-ASO-2763-OE.

(REC)

Federal Aviation Administration
Southern Region, ASO-520
P.O. Box 20636
Atlanta, GA 30320

AERONAUTICAL STUDY
No: 99-ASO-2763-OE

CI33XC023D

ISSUED DATE: 07/13/99

DAN KRUSE
SPRINTCOM, INC DBA SPRINT PCS
9801 HIGGINS RD, STE 220
ROSEMONT, IL 60018

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has completed 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:

Description: NEW ANTENNA TOWER
1945-1950 MHZ/1000 WATTS
Location: BUTLER KY
Latitude: 38-47-55.00 NAD 83
Longitude: 084-21-49.00
Heights: 260 feet above ground level (AGL)
933 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 should be marked and/or lighted in accordance with FAA Advisory Circular 70/7460-1J, Obstruction Marking and Lighting, Chapters 4, 8(M-Dual), & 13.

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

N/A At least 10 days prior to start of construction (7460-2, Part I)

X Within 5 days after construction reaches its greatest height (7460-2, Part II)

This determination expires on 01/13/01 unless:

(a) extended, revised or terminated by the issuing office or
(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 on 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.

-As a result of this structure being critical to flight safety, it is

required that the FAA be kept apprised as to the status of this project. Failure to respond to periodic FAA inquiries could invalidate this determination.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, frequency(ies) or use of greater power will void this determination. Any future construction or alteration, including increase in 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 404-305-~~5614~~ 5381. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 99-ASO-2763-OE.

Wade Carpenter

Mary Z. Mc Burney (DNE)
Specialist, Airspace Branch

7460-2 Attached

Kentucky Airport Zoning Commiss
125 Holmes Street
Frankfort, KY 40622

(502) 564-4480
fax (502) 564-7953
No.: AS-096-K62-99-124

STV 24290
CT33XC023D

September 14, 1999

APPROVAL OF APPLICATION

APPLICANT:
SPRINTCOM INC DBA SPRINT PCS
DAN KRUSE, RF MANAGER
9801 HIGGINS ROAD
SUITE 220
ROSEMONT, IL 60018

SUBJECT: AS-096-K62-99-124

STRUCTURE: Antenna Tower
LOCATION: Butler, KY
COORDINATES: 38°47'55.0"N / 84°21'49.0"W
HEIGHT: 260'AGL/933'AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct (260'AGL/933'AMSL) Antenna Tower near Butler, KY 38°47'55"N, 84°21'49"W.

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

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

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

Ronald Bland, Administrator

COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
730 SCHENKEL LANE
POST OFFICE BOX 615
FRANKFORT, KENTUCKY 40602
www.psc.state.ky.us
(502) 564-3940
Fax (502) 564-1582

Paul E. Patton
Governor

Ronald B. McCloud, Secretary
Public Protection and
Regulation Cabinet

Helen Helton
Executive Director
Public Service Commission

December 22, 1999

Mr. Jeffrey M. Pfaff
Legal/Regulatory Department
SprintCom, Inc.
C/O Sprint PCS
4900 Main St., 11th Floor
Kansas City, MO 64112

Re: Case No. 99-104
SprintCom, Inc.
First Reminder Letter

Dear Mr. Pfaff:

The Commission entered its Final Order in this case on August 17, 1999. Among other things, the Commission ordered that SprintCom, Inc. shall file a copy of the final decisions regarding the pending FAA and KAZC applications for this cell site construction within 10 days of receiving these decisions. This must be filed to fully comply with the Commission's order. Please make this filing, referencing the case number 99-104.

If you have questions concerning this letter, please contact Howell Brady, Principal Assistant to the Executive Director at 502-564-3940, extension 265. Otherwise, please mail the required filing to Helen C. Helton, Executive Director, Public Service Commission, 730 Schenkel Lane, Post Office Box 615 Frankfort, Kentucky 40602.

Sincerely,

Stephanie Bell
Secretary to the Commission

SB/lc

C: The Honorable Sandra F. Keene

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of:

APPLICATION OF SPRINTCOM, INC.,	)	
FOR ISSUANCE OF A	)	
CERTIFICATE OF PUBLIC CONVENIENCE AND	)	
NECESSITY TO CONSTRUCT A PERSONAL	)	CASE NO. 99-104
COMMUNICATIONS SERVICES FACILITY	)	
IN THE CINCINNATI BASIC TRADING AREA	)	
[BUTLER FACILITY]	)	

APPLICANT'S MOTION TO SUBMIT MATTER FOR APPROVAL ON THE RECORD

Comes SprintCom, Inc., by counsel and moves to submit the application herein for approval on the record. In support of said motion, Applicant states that the required notices have been posted at the proposed site and at the nearest public road to the proposed site; that the required notice of proposed construction has been published in *The Falmouth Outlook*, a newspaper of general circulation in Pendleton County; and that Applicant has taken all reasonable steps in serving notice of the proposed construction by certified mail upon all owners of property within 500 feet of the proposed facility and upon the Pendleton County Judge Executive. Copies of the returned certified mail receipts and of the legal notice from *The Falmouth Outlook* are attached hereto as Exhibit A. Applicant relied upon the records of the Pendleton County Property Valuation Administrator in identifying property owner addresses.

To Applicant's knowledge, no opposition has been filed with the Commission. Applicant respectfully requests that the Commission issue a Certificate of Public Convenience and Necessity as applied for herein.

Respectfully submitted,

Mark W. Dobbins
Sandra F. Keene
TILFORD, DOBBINS, ALEXANDER
BUCKAWAY & BLACK
1400 One Riverfront Plaza
Louisville, Kentucky 40202
(502) 584-6137

G:\OFFICE\MWD\SPCOM\7023\MOTION.SUB

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Donald R. Mays
County Judge, Pendleton County
Courthouse
Main Street
Falmouth, Kentucky 41040

4a. Article Number: Z 009 667 802

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 7-2-99

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X Barbara Sidner

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Elizabeth Pettit
Rt. 3 Box 429
Butler, Kentucky 41006

4a. Article Number: Z 009 606 494

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 7/2/99

5. Received By: (Print Name)
JEAN L PETTIT

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X Jean L Pettit

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Thomas & Carolyn Edwards, II
Rt. 3 Box 438
Butler, Kentucky 41006

4a. Article Number: Z 009 606 493

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 7/2/99 S8

5. Received By: (Print Name)
Thomas D Edwards

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X Thomas D Edwards

PS Form **3811**, December 1994 102595-97-B-0179 Domestic

Thank you for using Return Receipt Service.

EXHIBIT

sign concepts the U.S. Mint

memorative Coin Advisory Committee and the U.S. Fine Arts Commission. The Secretary of the Treasury Department will give his approval of the remaining coin designs.

The committee should receive a minimum of three design representations by the end of November. The design must be chosen by Jan. 28, 2000, according to the Mint.

In no particular order the finalists are:

Tommy Turner, Judge Executive of Larue County; Entry: America's First Frontier, birthplace of Lincoln.

Benjamin Blair, University of Kentucky student from Campbellsville; Entry: My Old Kentucky Home with plank fences in front, horses grazing.

John Ward, engineering designer from Mt. Sterling; Entry: Thoroughbred running with jockey aboard; Entry: My Old Kentucky Home.

Charlotte Cash, art teacher at Cumberland County High School; Entry: Daniel Boone with a long rifle, dog under tree.

Ronald J. Inabit, graphic designer from Union; Entry: Horse behind plank fence in field, house in background.

Brian Orms, graphic artist from Louisville; Entry: My Old Kentucky Home.

Each state will submit a design for the back of the coin for the fifty States Commemorative Coin Program," established by federal legislation in 1997. Kentucky's quarter will be released 15th of all the state quarters, because it was the 15th state. Kentucky's quarter will be put into circulation in Oct. 2001, but commemorative versions of the coin will be available from the U.S. Mint earlier.

"Each community should be very proud of their entrants," Mrs. Patton said. "The state has truly rallied around this project, and the pride the response shows is the best representation of Kentucky."

Congressman Lucas backs school construction initiative

LEGISLATION WILL PROVIDE TAX INCENTIVES TO IMPROVE SCHOOLS

Congressman Ken Lucas today announced his support of legislation to spur school construction. The legislation could have a dramatic impact on Kentucky's education infrastructure.

Rep. Lucas stated,"As the school year ends, educators across the commonwealth are making plans for the next year and planning improvements in buildings and grounds. But they just don't have all the resources they need to accommodate a growing school population and the new challenges of a 21st century economy."

According to a recent Government Accounting Office (GAO) study, Kentucky's school facilities face significant challenges. Almost two-thirds (59%) of the Commonwealth's schools have at least one inadequate building feature, such as roofs, foundations or plumbing. 31 percent of Kentucky schools have a building that is entirely inadequate. And 63 percent of Kentucky schools have at least one unsatisfactory building feature, such as heating, cooling, or physical security. Over 350 schools in the commonwealth are in fair or poor condition.

The legislation cosponsored by Congressman Lucas, H.R. 1660. would address the needs of schools in Kentucky and across the nation, by providing tax credits on 15-year, zero-interest school modernization bonds issued by states and local school districts. The bonds would pay for new construction as well as repair and renovation of existing facilities. H.R. 1660 would open up to $345 million in new school construction bond issues for Kentucky.

Rep. Lucas stated,"This legislation just makes sense. Children can't learn in crowded, run-down classrooms. We need new school facilities, not a new Washington, big government, one-size-fits-all program. This is a tax cut that provides local school districts the flexibility to meet individual needs."

The Congressman concluded, "We have to prepare our children for the challenges of the 21st century economy. Kentucky can't afford to be left behind. We must provide our local school districts with tax credits to modernize classrooms, to improve the learning environment for students and end overcrowding. We owe it to our children and we owe it to our future."

INDEX FOR CASE: 99-104
SPRINTCOM, INC.
Construct
CELL SITE - RR3 BOX 438 - BUTLER, PENDLETON

IN THE MATTER OF THE APPLICATION OF SPRINTCOM, INC., FOR
ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND
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COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
730 SCHENKEL LANE
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

CERTIFICATE OF SERVICE

RE: Case No. 99-104
SPRINTCOM, INC.

I, Stephanie Bell, Secretary of the Public Service Commission, hereby certify that the enclosed attested copy of the Commission's Order in the above case was served upon the following by U.S. Mail on August 17, 1999.

Parties of Record:

Jeffrey M. Pfaff
Legal/Regulatory Department
SprintCom, Inc.
c/o Sprint PCS
4900 Main Street, 11th. Floor
Kansas City, MO. 64112

Honorable Sandra F. Keene
Attorney at Law
Tilford, Dobbins, Alexander
Buckaway & Black
1400 One Riverfront Plaza
Louisville, KY. 40202

Stephanie Bell
Secretary of the Commission

SB/hv
Enclosure

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF SPRINTCOM, INC. FOR ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A PERSONAL COMMUNICATIONS SERVICES FACILITY IN THE CINCINNATI BASIC TRADING AREA [BUTLER FACILITY]	))))))	CASE NO. 99-104

O R D E R

On June 30, 1999, SprintCom, Inc. ("SprintCom") filed an application seeking a Certificate of Public Convenience and Necessity to build and operate a cellular radio telecommunications system for the Cincinnati Basic Trading Area ("Cincinnati BTA"). SprintCom has requested authorization to construct a cell site in Pendleton County.

The proposed cell site consists of a 260-foot or less self-supporting lattice antenna tower to be located at RR3, Box 4, (Duckers Road), Butler, in Pendleton County, Kentucky ("the Butler site"). The coordinates for the Butler site are North Latitude 38° 47' 55" by West Longitude 84° 21' 49".

SprintCom has provided information regarding the structure of the tower, safety measures, and antenna design criteria for the Butler site. Based upon the application, the design of the tower and foundation conforms to applicable nationally recognized building standards, and a Registered Professional Engineer has certified the plans.

Pursuant to 807 KAR 5:063, Section 1, SprintCom notified the Pendleton County Judge/Executive of the pending construction. SprintCom has filed applications with the Federal Aviation Administration ("FAA") and the Kentucky Airport Zoning Commission ("KAZC") seeking approval for the construction and operation of the Butler site. Both applications are pending.

SprintCom has filed notices verifying that each person who owns property within 500 feet of the Butler site has been notified of the pending construction. The notice solicited any comments and informed the property owners of their right to intervene. In addition, notices were published in a newspaper of general circulation in Pendleton County and were posted in a visible location on the proposed site and on the nearest public road. The posted notices remained posted for at least two weeks after SprintCom's application was filed. To date, no intervention requests have been received.

Pursuant to KRS 278.280, the Commission is required to determine proper practices to be observed when it finds, upon complaint or on its own motion, that the facilities of any utility subject to its jurisdiction are unreasonable, unsafe, improper, or insufficient. To assist the Commission in its efforts to comply with this mandate, SprintCom should notify the Commission if it does not use this antenna tower to provide cellular radio telecommunications services in the manner set out in its application and this Order. Upon receipt of such notice, the Commission may, on its own motion, institute proceedings to consider the proper practices, including removal of the unused antenna tower, which should be observed by SprintCom.

The Commission, having considered the evidence of record and being otherwise sufficiently advised, finds that SprintCom should be granted a Certificate of Public Convenience and Necessity to construct and operate the Butler site in Cincinnati BTA under its previously approved tariff.

IT IS THEREFORE ORDERED that:

1. SprintCom is granted a Certificate of Public Convenience and Necessity to construct and operate the Butler site.

2. SprintCom shall file a copy of the final decisions regarding the pending FAA and KAZC applications for this cell site construction within 10 days of receiving these decisions.

3. SprintCom shall immediately notify the Commission in writing, if, after the antenna tower is built and utility service is commenced, the tower is not used for a period of 3 months in the manner authorized by this Order.

Done at Frankfort, Kentucky, this 17th day of August, 1999.

By the Commission

ATTEST:

Executive Director

Case file

COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
730 SCHENKEL LANE
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

July 8, 1999

Jeffrey M. Pfaff
Legal/Regulatory Department
SprintCom, Inc.
c/o Sprint PCS
4900 Main Street, 11th. Floor
Kansas City, MO. 64112

Honorable Sandra F. Keene
Attorney at Law
Tilford, Dobbins, Alexander
Buckaway & Black
1400 One Riverfront Plaza
Louisville, KY. 40202

RE: Case No. 99-104
SPRINTCOM, INC.

The Commission staff has reviewed your application in the above case and finds that it meets the minimum filing requirements. Enclosed please find a stamped filed copy of the first page of your filing. This case has been docketed and will be processed as expeditiously as possible.

If you need further assistance, please contact my staff at 502/564-3940.

Sincerely,

Stephanie D. Bell

Stephanie Bell
Secretary of the Commission

SB
Enclosure

ORIGINAL

FILED

JUN 30 1999

PUBLIC SERVICE COMMISSION

RECEIVED

JUN 30 1999

PUBLIC SERVICE COMMISSION

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of:

APPLICATION OF SPRINTCOM, INC., FOR ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A PERSONAL COMMUNICATIONS SERVICES FACILITY IN THE CINCINNATI BASIC TRADING AREA [BUTLER FACILITY]	)	CASE NO. 99-104

APPLICATION

SprintCom, Inc., ("SprintCom") applies for a Certificate of Public Convenience and Necessity to construct and operate a Personal Communications Services ("PCS") facility to complement the network which will serve the customers of the Cincinnati Major Trading Area ("BTA"). In support of this Application, SprintCom respectfully states the following.

1. The complete name and address of the Applicant is: SprintCom, Inc., 4801 W. Higgins Road, Suite 220, Rosemont, Illinois 60018.

2. SprintCom is a Kansas Corporation. The Kentucky Public Service Commission (the "Commission") has found that SprintCom has the technical, managerial and financial ability to operate a Commercial Mobile Radio Service ("CMRS") in the order dated September, 1997, Case Number 97-294. A copy of SprintCom's Articles of Incorporation were attached as an exhibit to the Application in those proceedings.

3. Applicant proposes to construct a self-supporting tower structure at RR3, Box 4, (Duckers Road), Butler, Pendleton County, Kentucky, an area located entirely within the

COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
730 SCHENKEL LANE
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

July 1, 1999

Jeffrey M. Pfaff
Legal/Regulatory Department
SprintCom, Inc.
c/o Sprint PCS
4900 Main Street, 11th. Floor
Kansas City, MO. 64112

Honorable Sandra F. Keene
Attorney at Law
Tilford, Dobbins, Alexander
Buckaway & Black
1400 One Riverfront Plaza
Louisville, KY. 40202

RE: Case No. 99-104
SPRINTCOM, INC.
(Construct) CELL SITE - RR3 BOX 438 - BUTLER, PENDLETON

This letter is to acknowledge receipt of initial application in the above case. The application was date-stamped received June 30, 1999 and has been assigned Case No. 99-104. In all future correspondence or filings in connection with this case, please reference the above case number.

If you need further assistance, please contact my staff at 502/564-3940.

Sincerely,

Stephanie Bell
Secretary of the Commission

SB/jc

ORIGINAL

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of:

APPLICATION OF SPRINTCOM, INC., FOR ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A PERSONAL COMMUNICATIONS SERVICES FACILITY IN THE CINCINNATI BASIC TRADING AREA [BUTLER FACILITY]	)	CASE NO. 99-104

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3. Applicant proposes to construct a self-supporting tower structure at RR3, Box 4, (Duckers Road), Butler, Pendleton County, Kentucky, an area located entirely within the

Cincinnati BTA. Applicant refers to the site of such tower, for shorthand purposes, as the "Butler" site.

4. The proposed PCS facility will consist of a 250 foot self-supporting lattice tower, with attached antennas extending upward for a maximum total height of 260' feet, and a concrete pad to accommodate two (2) base transceiver station (BTS) units. The BTS units will consist of one (1) current unit and one (1) future unit. The entire proposed PCS facility will be fenced with a secured access gate. Tower design information, including the vertical tower profile, is attached hereto as Exhibit "A."

5. The site development plan, signed and sealed by a professional engineer registered in Kentucky is included as Exhibit "B." A survey, signed and sealed by a professional land surveyor licensed in Kentucky, that shows the proposed location of the tower and all easements and existing structures within 500 feet of the proposed site and all of the easements and structures within 200 feet of the access drive (including the intersection with the public street system, is included in Exhibit "B." The site development plan and survey were prepared by Burgess & Niple, Ltd., 811 Race Street, Indianapolis, Indiana. Certification, by a professional surveyor licensed in Kentucky, that the proposed facility is not located within a 100 year flood plain is included in Exhibit "B." Thus, a detailed description of the manner is which the proposed facility will be constructed may be found in Exhibits "A" and "B."

6. According to the Public Service Commission website, the names of all public utilities, corporations, or persons with whom the proposed new construction is likely to compete are: Cincinnati, CMSA, L.P.; NewPar d/b/a Airtouch Cellular; GTE Mobilnet, Inc., and Cincinnati Bell Telephone Co.

7. Public convenience and necessity require the construction of this proposed PCS facility. The proposed PCS facility is essential to implement service to SprintCom's future customers. The Facility is also necessary in accordance with FCC mandates for SprintCom's license in the Cincinnati BTA.

The process that was used in selecting the site for the proposed PCS facility by the Applicants was consistent with the process used for selecting all other existing and proposed PCS facilities within the Cincinnati BTA. In its initial design phase, SprintCom utilized an FCC database which identifies all existing towers and attempted to position its search rings in such a way so as to maximize co-location opportunities. For search rings in which no existing telecommunications towers existed (or where said towers were not reasonably available for collocation), such as the site proposed herein, Applicant investigated said search rings to locate tall buildings, water tanks, and other suitable, co-locatable structures. No such co-locatable structures were identified within the search ring for the facility proposed herein. A map, drawn to scale, which clearly depicts SprintCom's search area is attached hereto as Exhibit "C."

The Applicant's engineers selected the optimum site in terms of elevation and location to provide the best quality service to its wireless communications customers in the service area. The search by the engineers for a proposed PCS facility included the measurement of signal levels from other proposed PCS facilities inside the Cincinnati BTA. The criteria used to identify uninterrupted service required the engineers to look for signal strengths above -100dBm. This particular level is determined to be the minimum signal for PCS phones to function adequately.

8. The proposed PCS facility will serve Kentucky customers in an area totally within Applicants' proposed service area in the Cincinnati BTA.

9. The proposed PCS facility design has been developed with consideration to severe wind load of 75 m.p.h., which conforms to standard EIA/TIA-222-F. The Electronic Industries Association Standards are accepted by the American National Standards Institute and the proposed facility is a nationally accepted tower design.

10. The soil boring and subsequent geotechnical engineering study were performed by Earth Exploration, Inc. Earth Exploration has performed hundreds of such studies for the cellular industry and others of similar interest. Earth Exploration's offices are located at 7770 West New York Street, Indianapolis, Indiana 46617-1419. The principal engineer for the site is Scott Ludlow, a registered Professional Engineer for the Commonwealth of Kentucky. A copy of the Report of Geotechnical Exploration dated April 20, 1999 is attached hereto as Exhibit "D" A copy of the Phase I Environmental Study, including a NEPA checklist, is attached as Exhibit "E."

The full legal description of the lease area is included in Exhibit "B."

11. The foundation design for this proposed tower and PCS facility has been developed with the information provided in Earth Exploration's geotechnical report. The final design for the foundation is included with Exhibit "B".

12. Personnel directly responsible for the design and construction of the proposed facility are qualified and experienced. The initial design of the tower and foundations was performed by PiRod,, Inc.. The engineer of the design is William B. Rettig. The construction of the proposed PCS facility will be performed by L.E. Myers Company, 6220 South Belmont, Indianapolis, Indiana. The construction superintendent is Norman Simms. L.E. Myers has extensive experience in the telecommunications construction industry, constructing cellular and/or similar facilities nationwide.

In the event the initial design of the tower and foundation is subsequently revised, the Applicants will amend this Application accordingly and will file with the Commission original and final drawings pursuant to applicable laws and regulations.

13. Copies of Applicant's Notice of Proposed Construction to the federal Aviation Administration (FAA) and to the Kentucky Airport Zoning Commission ("KAZC") are attached hereto as "Exhibit F."

14. Form 854 will be submitted to the FCC as required pending determination by the FAA. Since the proposed PCS facility will serve only the Cincinnati BTA, no further approvals by the FCC are required. See 47 C.F.R. 24.11 (b), "[b]lanket licenses are granted for each market and frequency block. Applications for individual sites are not required and will not be accepted."

15. The site for the proposed PCS facility is being leased from Thomas and Carolyn Edwards. A copy of the Lease Option and Agreement, with financial terms redacted, is attached as Exhibit "G."

16. The proposed PCS facility will be located at RR3 (Duckers Road), Butler, Pendleton County, Kentucky. Appropriate notices (in compliance with 807 KAR 5:063 Section 1(2)), 2' x 4' , with the word "TOWER" in letters at least 4" high, have been posted in a visible location on the proposed site and on the nearest public road and shall remain posted for at least two (2) weeks after the Application is filed. The location of the proposed facility has been published in a newspaper of general circulation in The Falmouth Outlook, a newspaper of general circulation in Pendleton County, Kentucky.

17. Clear directions to the proposed site are set forth in Exhibit "H."

A vicinity map, drawn to 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 included in Exhibit "B."

18. Applicant has notified the Pendleton County Judge Executive by certified mail, return receipt requested, of the proposed construction. Said County Judge Executive has been given the Commission docket number under which this application will be processed and has been informed of his right to request intervention. A copy of the notice so provided is included as Exhbit "I".

19. Applicant has notified every person who owns property within 500 feet of the proposed tower by certified mail, return receipt requested, of the proposed construction. Each such person has been given the docket number under which the proposed Application will be processed and has been informed of his or her right to request intervention.

20. A list of the property owners so notified is attached as Exhibit "J", together with copies of the certified letters sent to listed property owners. Copies of the return receipts will be filed with the Commission when received.

21. The area, as depicted on Exhibit "B", in which the proposed facility is to be constructed is zoned Agricultural. The site is located on a 200-acre parcel. The land use on all sides of the proposed site is rural residential. The nearest single-family residence is approximately 800 feet from the proposed tower site. The surrounding land is farmland, open fields, and wooded areas. Due to the rural and agricultural character of the area, the distance to the nearest residential structure, and that the structure will be situated on a hill at a greater elevation that the surrounding land, the impact of the proposed tower, if any, will be minimal.

22. Applicant 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 can be provided. The proposed tower is part of the Phase III network design for SprintCom. The Phase III tower sites are located at the outside fringe of the existing tower network. As a result, most of the search rings are located in rural and industrial areas of the county. As part of the total network design, co-location on existing towers was explored as the first option. However, there are no like facilities or other tall structures within the Applicant's search ring.

The rural Phase III design utilizes a 250' tower, which will allow for greater distances between towers, thus minimizing the total number of new facilities needed. Furthermore, the proposed tower has been designed to accommodate a minimum of three (3) carriers. Availability of co-locatable space further minimizes the need for construction of additional towers in the vicinity. SprintCom has notified other carriers in this market of the proposed tower location and has offered available mounting elevations.

23. Any response to this Application may be directed to Mr. Ted Clark, 100 Crisler Avenue, Suite 201, Crescent Springs, Kentucky 41017; or to Mark W. Dobbins or Sandra F. Keene at 1400 One Riverfront Plaza, Louisville, Kentucky 40222 or by calling (502)584-6137.

Respectfully submitted,

Sandra F. Keene

Mark W. Dobbins
Sandra F. Keene
TILFORD, DOBBINS, ALEXANDER
BUCKAWAY & BLACK
1400 One Riverfront Plaza
Louisville, Kentucky 40202
(502) 584-6137

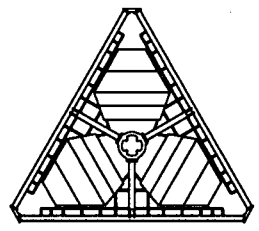
G:\OFFICE\MWD\SPCOM3\023\APPLICAT.1

EXHIBIT A

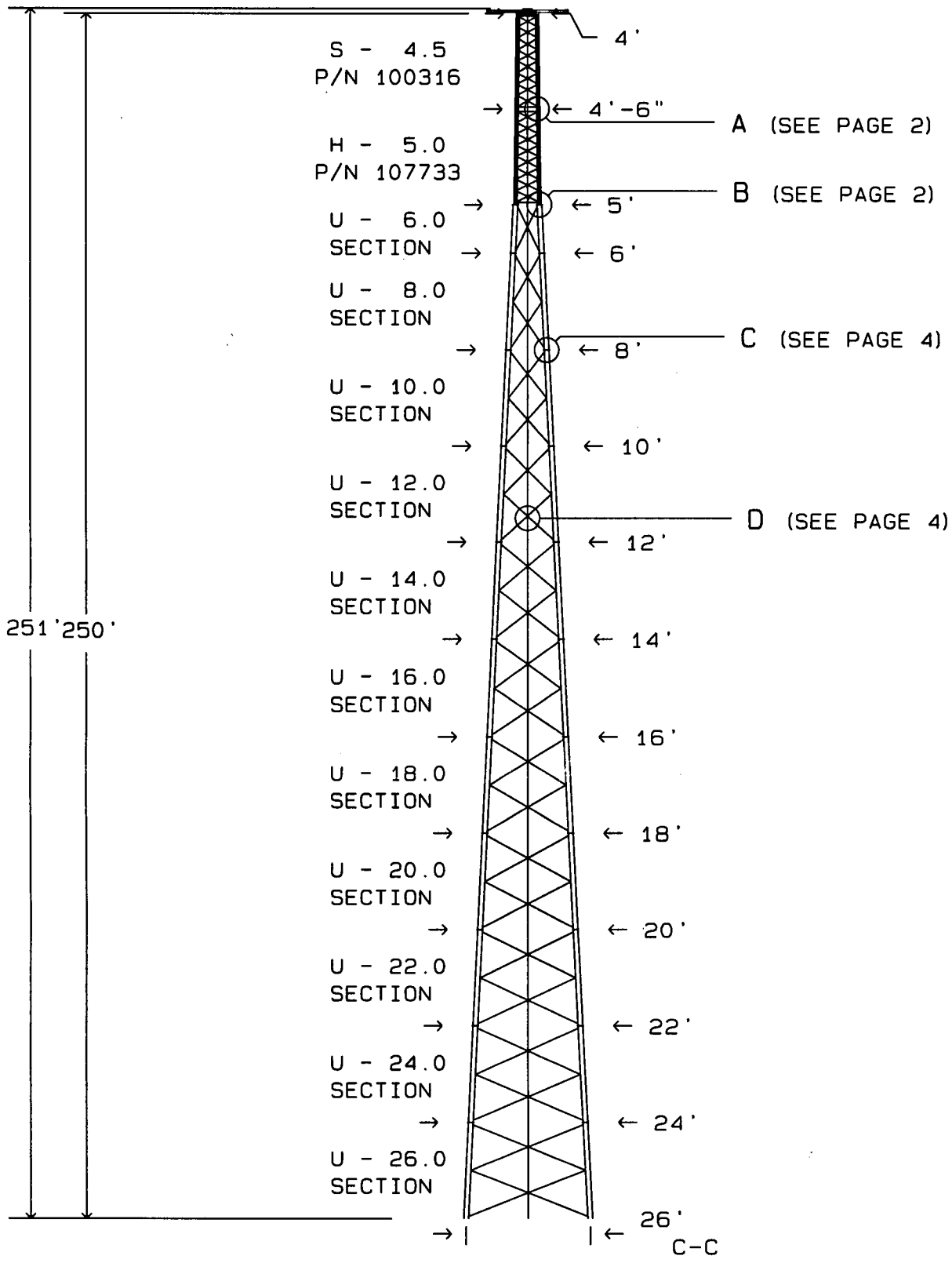
TOP VIEW
(ENLARGED)

ROTATABLE TOP
(REF ASSEMBLY
DWG # 130555)

SIDE VIEW
(ENLARGED)



SHOP WELD TOP PLATE P/N
121018 AT TOP OF TOP SECTION.



STATE OF KENTUCKY
WILLIAM B. RETTIG
19084
LICENSED PROFESSIONAL ENGINEER

APR 07 1999

SPRINT SPECTRUM
BUTLER C023D, KENTUCKY
U - 26.0 X 250' SELF-SUPPORTING TOWER

APPROVED/ENG.	MDB	04/07/1999
APPROVED/FOUND.	N/A	
DRAWN BY	MDB	

PIROD INC.
1545 Pidco Dr.
Plymouth, IN 46563-0128
219-936-4221

From: 82660.DFT - 04/07/1999 07:54
Printed from: 2048081@.DWG - 04/07/1999 07:46 @ 04/07/1999 09:39

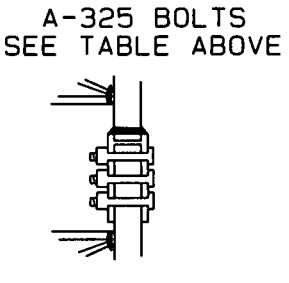
ENG. FILE NO. A-115585-
ARCHIVE Q-82660

DRAWING NO. 204808-B
PAGE 1 OF 7

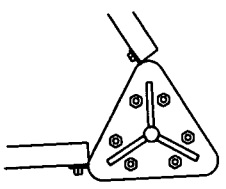
FABRICATED SECTION DATA 210' - 250' ELEVATION								
SECT LEN	SEC #	SECTION PART#	LEG SIZE	BRACE SIZE	SECT WT.*	BOLTS AT BOTTOM DIAM	LENGTH	#
20'	S- 4.5	100316+	1- 1/2 "	3/4 "	818#	5/8"	4-1/2"	15
20'	H- 5.0	107733	2 "	7/8 "	1273#	1 "	3-1/2"	18

*THE WEIGHTS LISTED ARE THEORETICAL. THE ACTUAL WEIGHTS WILL VARY. ALL WEIGHTS SHOULD BE CONFIRMED IN THE FIELD PRIOR TO ERECTION.

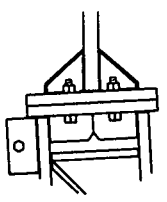
+WELD TOP PLATE P/N 121018 AT TOP OF TOP SECTION.



VIEW A
TYPICAL LEG CONNECTION
FOR FABRICATED SECTIONS

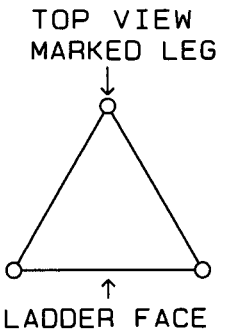


TOP VIEW @ B



VIEW B

LEG CONNECTION AT 210 FT.
USE 1 FLATWASHER UNDER EACH LOCKNUT,
FOR LEG CONNECTION ONLY.



THE MARKED LEG OF EACH SECTION IS STAMPED WITH THE 6 DIGITS OF THE TOWER SERIAL #. ASSEMBLE THE TOWER WITH MARKED LEGS TOGETHER. THE MARKED LEG MAY ALSO CONTAIN JOINT NUMBERS STARTING WITH 1 AT THE TOP OF THE BASE SECTION. IF SO, ASSEMBLE WITH JOINTS IN THE PROPER SEQUENCE.

APR 07 1999

SPRINT SPECTRUM
BUTLER C023D, KENTUCKY
U - 26.0 X 250' SELF-SUPPORTING TOWER

APPROVED/ENG.	MDB	04/07/1999
APPROVED/FOUND.	N/A	
DRAWN BY	MDB	

PiROD INC.
1545 Pidco Dr.
Plymouth, IN 46563-0128
219-936-4221

From: 82660.DFT - 04/07/1999 07:54
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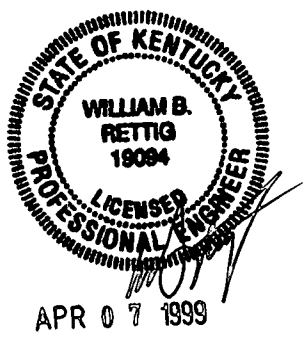
ARCHIVE Q-82660

DRAWING NO. 204808-B
PAGE 2 OF 7

BREAKDOWN SECTION DATA (12" LEG) 0' - 210' ELEVATION												
SEC #	SECTION LENGTH	LEG SIZE	LEG PART#	TOP DIAG PART#	BOT DIAG PART#	DIAGONAL ANGLE FACE	DIAGONAL ANGLE THICK	SECTION WEIGHT	LEG CONNECT+ DIAM	LEG CONNECT+ LENGTH	DIAG CONNECT DIAM	DIAG CONNECT LENGTH
U- 6.0	10'	1- 1/4"	105244		105556	2-1/2"	3/16"	870#	1 "	3-1/2"	1 "	2-1/4"
U- 8.0	20'	1- 1/4"	105216	105558	105561	2-1/2"	3/16"	1764#	1 "	3-1/2"	1 "	2-1/4"
U-10.0	20'	1- 1/2"	105217	105564	105567	2-1/2"	3/16"	2161#	1 "	3-1/2"	1 "	2-1/4"
U-12.0	20'	1- 1/2"	105217	105571	105574	3"	3/16"	2309#	1 "	3-1/2"	1 "	2-1/4"
U-14.0	20'	1- 3/4"	105218	105576	105579	3"	3/16"	2763#	1 "	3-1/2"	1 "	2-1/4"
U-16.0	20'	1- 3/4"	105218	105583	105588	3"	5/16"	3295#	1 "	3-1/2"	1 "	2-1/4"
U-18.0	20'	1- 3/4"	105218	127611	127612	3"	5/16"	3417#	1 "	4-1/2"	1 "	2-1/4"
U-20.0	20'	2 "	105219	105598	105601	3-1/2"	5/16"	4415#	1-1/4"	4-1/2"	1-1/4"	2-3/4"
U-22.0	20'	2 "	105219	127761	127762	3-1/2"	5/16"	4570#	1-1/4"	4-1/2"	1-1/4"	2-3/4"
U-24.0	20'	2- 1/4"	105220	113422	113423	4"	1/4"	5066#	1-1/4"	4-1/2"	1-1/4"	2-3/4"
U-26.0	20'	2- 1/4"	105220	106919	106920	4"	3/8"	6162#			1-1/4"	2-3/4"

* THE WEIGHTS LISTED ARE THEORETICAL. THE ACTUAL WEIGHTS WILL VARY. ALL WEIGHTS SHOULD BE CONFIRMED IN THE FIELD PRIOR TO ERECTION.

+ USE 1 FLATWASHER UNDER EACH LOCKNUT, FOR LEG CONNECTION ONLY. ALSO USE 1 FLATWASHER UNDER EACH BOLT HEAD WHERE BUSHINGS ARE REQUIRED.



APR 07 1999

SPRINT SPECTRUM
BUTLER C023D, KENTUCKY
U - 26.0 X 250' SELF-SUPPORTING TOWER

APPROVED/ENG.	MDB	04/07/1999
APPROVED/FOUND.	N/A	
DRAWN BY	MDB	

PiROD INC.
1545 Pidco Dr.
Plymouth, IN 46563-0128
219-936-4221

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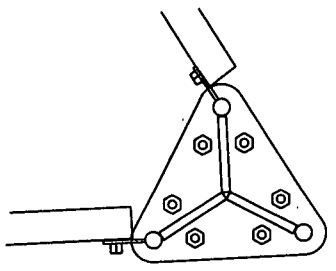
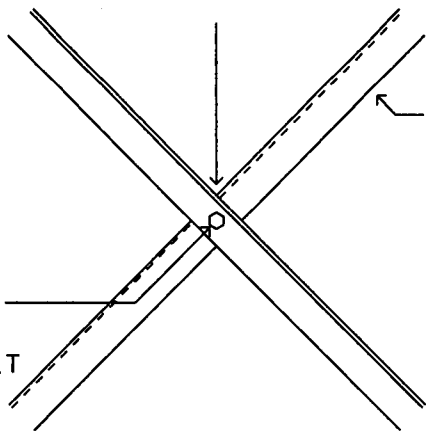
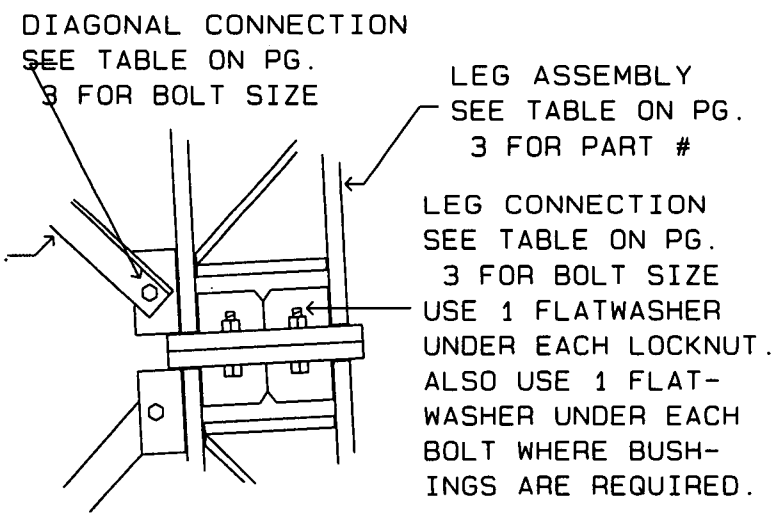
ENG. FILE NO. A-115585-
ARCHIVE Q-82660

DRAWING NO. 204808-B
PAGE 3 OF 7



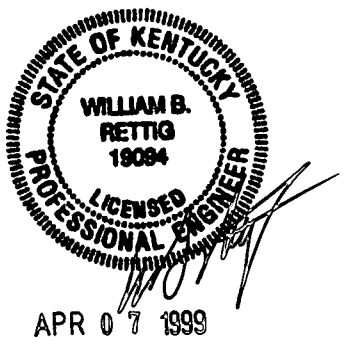
TOP VIEW @ C





VIEW D (SEE PAGE 1 FOR VIEW DEFINITION)
TYPICAL BRACE CONNECTION
#12 SECTIONS

VIEW C
TYPICAL LEG CONNECTION
#12 SECTIONS



APR 07 1999

SPRINT SPECTRUM
BUTLER C023D, KENTUCKY
U - 26.0 X 250' SELF-SUPPORTING TOWER

APPROVED/ENG.	MDB	04/07/1999
APPROVED/FOUND.	N/A	
DRAWN BY	MDB	

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1545 Pidco Dr.
Plymouth, IN 46563-0128
219-936-4221

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ARCHIVE Q-82660

DRAWING NO. 204808-B
PAGE 4 OF 7

GENERAL NOTES

1. TOWER DESIGN CONFORMS TO STANDARD EIA/TIA-222-F FOR 75 MPH BASIC WIND SPEED WITH 0.50" RADIAL ICE WITH LOAD DUE TO WIND REDUCED BY 25% WHEN CONSIDERED SIMULTANEOUSLY WITH ICE.
   TOWER DESIGN CONFORMS TO STANDARD EIA/TIA-222-F FOR 75 MPH BASIC WIND SPEED WITH NO ICE.

2. MATERIAL: (A) SOLID RODS CONFORM TO ASTM A-572 GRADE 50 REQUIREMENTS.
   (B) ANGLES CONFORM TO ASTM A-36 REQUIREMENTS.
   (C) PIPE CONFORMS TO ASTM A-53 TYPE E, GRADE B REQUIREMENTS. (MIN YIELD STRENGTH=42 KSI)
   (D) ALL STEEL PLATES CONFORM TO ASTM A-36 REQUIREMENTS.
   (E) ANCHOR BOLTS CONFORM TO ASTM A-687 REQUIREMENTS.

3. BASE REACTIONS PER EIA/TIA-222-F FOR 75 MPH BASIC WIND SPEED WITH 0.50" RADIAL ICE:

TOTAL WEIGHT =	81.7 KIPS.	MAXIMUM COMPRESSION =	390.2 KIPS PER LEG.
MOMENT =	8172.6 KIP-FT.	MAXIMUM UPLIFT =	335.7 KIPS PER LEG.
MAXIMUM SHEAR =	62.7 KIPS TOTAL.		

4. BASE REACTIONS PER EIA/TIA-222-F FOR 75 MPH BASIC WIND SPEED WITH NO ICE.

TOTAL WEIGHT =	49.3 KIPS.	MAXIMUM COMPRESSION =	302.6 KIPS PER LEG.
MOMENT =	6444.6 KIP-FT.	MAXIMUM UPLIFT =	269.8 KIPS PER LEG.
MAXIMUM SHEAR =	48.7 KIPS TOTAL.		

5. FINISH: HOT DIPPED GALVANIZED AFTER FABRICATION.

6. ANTENNAS: 250' - TWELVE ALP9212 ANTENNAS AND TWELVE TOWER TOP LOW NOISE AMPLIFIERS (CAAA = 0.83 SQ.FT. EACH) ON A LOW PROFILE PLATFORM WITH TWELVE 1-5/8" LINES.
   230' - TWELVE ALP9212 ANTENNAS ON THREE T-FRAMES WITH 1-5/8" LINES.
   210' - TWELVE ALP9212 ANTENNAS ON THREE T-FRAMES WITH 1-5/8" LINES.

7. ALL TRANSMISSION LINES MUST BE PLACED ON PIROD SUPPLIED LINE BRACKETS PART # 125495.

8. REMOVE FOUNDATION TEMPLATE PRIOR TO ERECTING TOWER. INSTALL BASE SECTION WITH MINIMUM OF 2" CLEARANCE ABOVE CONCRETE. GROUT NUTS BELOW BASE SECTION WITH NON-SHRINK GROUT AFTER LEVELING TOWER.

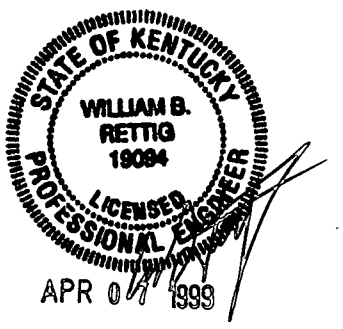
9. MIN. WELDS 5/16" UNLESS OTHERWISE SPECIFIED. ALL WELDING TO CONFORM TO AWS SPECIFICATIONS.

10. ALL BOLTS AND NUTS MUST BE IN PLACE BEFORE THE ADJOINING SECTION(S) ARE INSTALLED.

11. ALL A-325 BOLTS ARE TO BE TIGHTENED TO A SNUG TIGHT CONDITION AS DEFINED BY AISC SPECIFICATION UNLESS OTHERWISE NOTED. A MORE QUANTITATIVE ALTERNATIVE APPROACH TO ACHIEVING A SNUG TIGHT CONDITION IS TO TIGHTEN USING THE TORQUE VALUES FROM DRAWING 123107-A.

12. EIA GROUNDING FOR TOWER.

13. DUAL LIGHT KIT (151' - 350')



SPRINT SPECTRUM
BUTLER C023D, KENTUCKY
U - 26.0 X 250' SELF-SUPPORTING TOWER

APPROVED/ENG.	MDB	04/07/1999
APPROVED/FOUND.	N/A	
DRAWN BY	MDB	

PiROD INC.
1545 Pidco Dr.
Plymouth, IN 46563-0128
219-936-4221

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ARCHIVE

DRAWING NO. 204808-B
PAGE 5 OF 7

FOUNDATION NOTES

1. FOUNDATION DESIGN BY OTHERS.

APR 07 1999

SPRINT SPECTRUM
BUTLER C023D, KENTUCKY
U - 26.0 X 250' SELF-SUPPORTING TOWER

APPROVED/ENG.	MDB	04/07/1999
APPROVED/FOUND.		
DRAWN BY	MDB	

PiROD INC.
1545 Pidco Dr.
Plymouth, IN 46563-0128
219-936-4221

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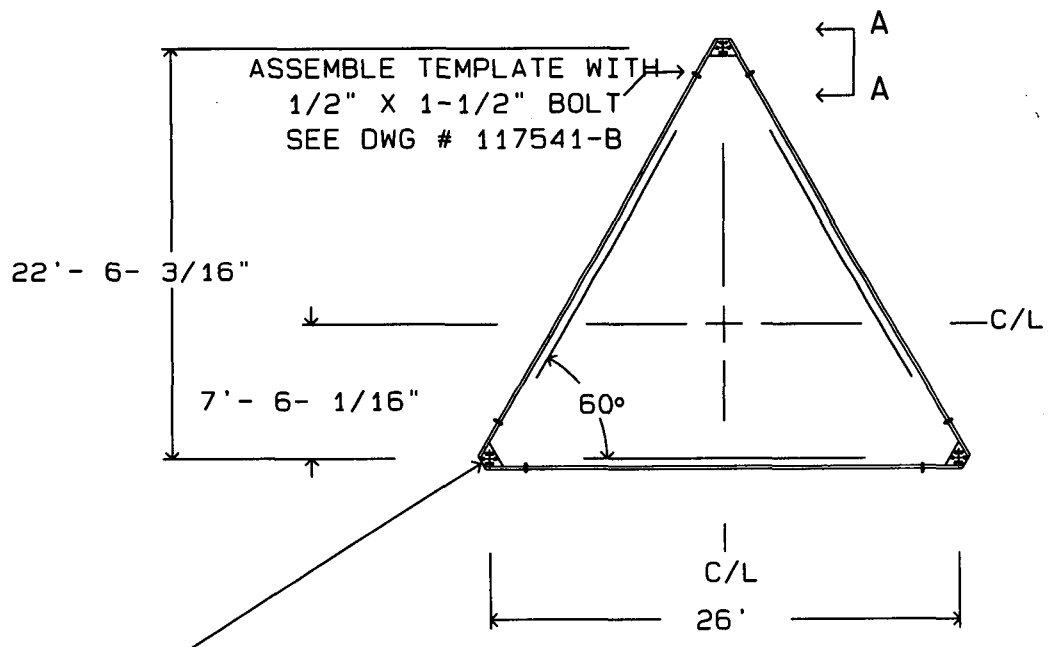
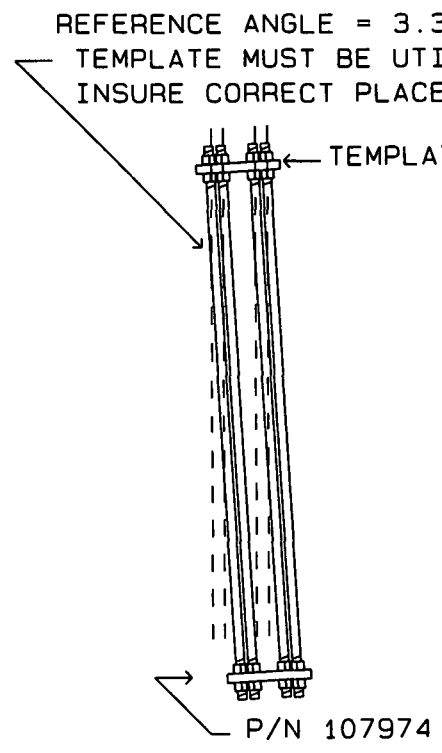
ENG. FILE NO. A-115585-
ARCHIVE Q-82660

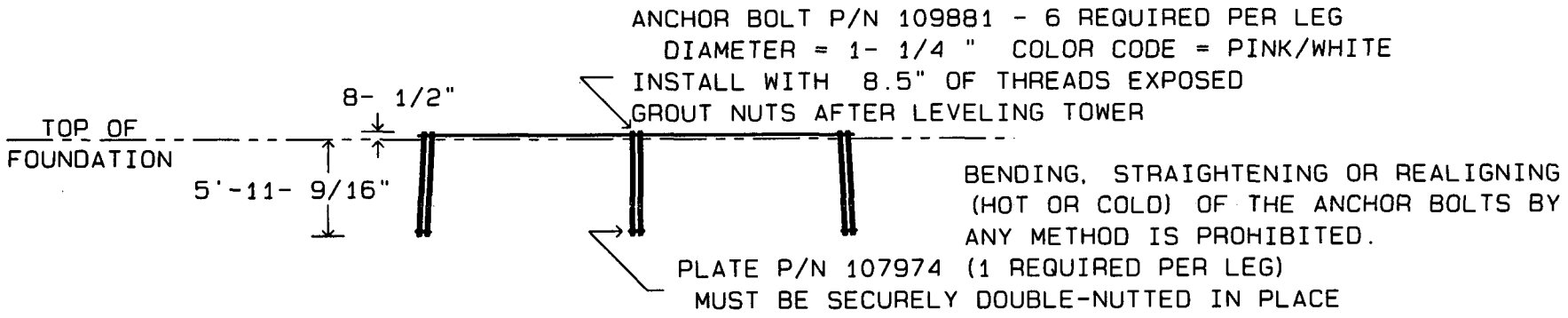
DRAWING NO. 204808-B
PAGE 6 OF 7





VIEW A - A

TEMPLATE P/N 117520 IS REQUIRED FOR INSTALLATION. COLOR CODE OF TEMPLATE MUST MATCH COLOR CODE OF ANCHOR BOLTS. TEMPLATE MUST BE SECURELY DOUBLE-NUTTED TO ANCHOR BOLTS DURING CONCRETE INSTALLATION AND MUST BE LEVEL +/- 1/2".
INSTALL TEMPLATE WITH LABEL "UP" FACING UPWARD.
INSTALL TEMPLATE WITH SUFFICIENT SPACE BENEATH TO PERMIT FINISHING OF CONCRETE. AND TO FACILITATE TEMPLATE REMOVAL PRIOR TO TOWER ERECTION.



ATTENTION INSTALLER

1-1/4" DIAMETER ANCHOR STEEL

THE ANCHOR BOLTS PROVIDED FOR THIS PROJECT ARE 1-1/4" DIA. AND COLOR CODED PINK & WHITE. THE CORNER TEMPLATE IS PART NUMBER 117520 FOR A TAPERED TOWER AND SHOULD HAVE SIX 1-9/32" DIA. HOLES ON AN 8" DIA. BOLT CIRCLE. EMBEDMENT PLATES ARE PART NUMBER 107974 WHICH ARE TRIANGULAR AND HAVE SIX 1-5/16" DIA. HOLES ON AN 8" DIA. BOLT CIRCLE.

IF THERE ARE ANY DISCREPANCIES, PLEASE NOTIFY PIROD, INC., PRIOR TO INSTALLATION.

TOWER ANCHOR STEEL PLACEMENT

STATE OF KENTUCKY
WILLIAM B. RETTIG
19094
LICENSED PROFESSIONAL ENGINEER
APR 07 1999

SPRINT SPECTRUM
BUTLER C023D, KENTUCKY
U - 26.0 X 250' ANCHOR INSTALLATION

APPROVED/ENG.	MDB	04/07/1999
APPROVED/FOUND.		
DRAWN BY	MDB	

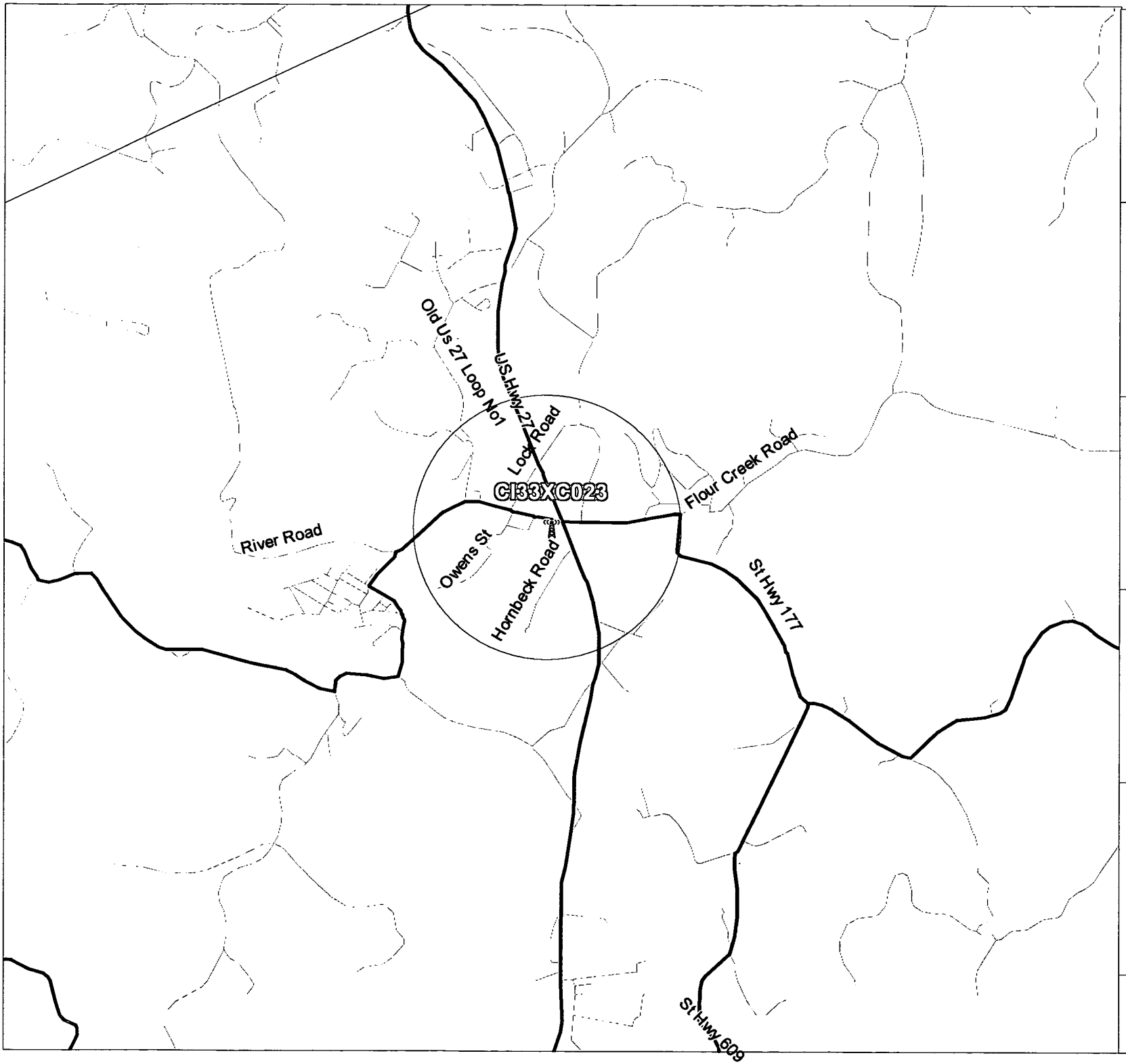
PiROD INC.
1545 Pidco Dr.
Plymouth, IN 46563-0128
219-936-4221

From: 82660.DFT - 04/07/1999 07:54
Printed from: 2048087@.DWG - 04/07/1999 07:46 @ 04/07/1999 09:39$$

ENG. FILE NO. A-115585-
ARCHIVE Q-82660

DRAWING NO. 204808-B
PAGE 7 OF 7

EXHIBIT B
IS OVERSIZED AND NOT INCLUDED WITHIN THIS PACKET.
IT HAS BEEN SUPPLIED AS A SEPARATE PART OF THIS APPLICATION.



Sprint PCS
Cincinnati BTA
RF Engineering

Site ID: CI33XC023
Site Name: Butler
City:Morning View
County: Pendleton

Site Type: Rural
Cell Radius: 4.0 Miles
Search Radius: .6 Miles
Antenna C/L: 250 Ft.
Ground Elevation: 518

Antenna Sectors:
Alpha 0 degrees
Beta 120 degrees
Gamma 240 degrees

NAD 83 Coordinates

Latitude N38-47-31
Longitude W84-21-13

Ring Issued: 03/12/99

April 20, 1999

Mr. Michael Oberholzer
Sprint PCS - Cincinnati Group
4605 Duke Drive, Suite 200
Mason, OH 45040
ATTN: Document Control - Implementation

EARTH EXPLORATION INC.

7770 West New York Street
Indianapolis, IN 46214-2988
317-273-1690 (FAX) 317-273-2250

1103 South Bend Avenue
South Bend, IN 46617-1419
219-233-6820 (FAX) 219-233-8242

Re: Geotechnical Evaluation
Proposed Communication Tower -
Site No. 023D (Butler)
Butler, Kentucky
EEI Project No. 1-5512

Dear Mr. Oberholzer

In accordance with your recent request, we have completed our geotechnical evaluation for the referenced project. This report presents the results of our subsurface exploratory program and provides recommendations from a geotechnical viewpoint for design and construction of the tower foundation. As you are aware, the work for this project was formally authorized by you on April 2, 1999. For your information, we are enclosing five copies of our report for your review and distribution and can provide additional copies if requested. Unless you notify us otherwise, we will retain the soil and rock samples from the exploratory program for 60 days and then discard them.

The opinions and recommendations expressed in this report are based, in part, on our interpretation of the subsurface information revealed by one exploratory test boring. Understandably, this report does not reflect the possible variations in subsurface conditions that may exist beyond this location. Therefore, variations in soil/rock conditions can be expected, and fluctuation of the groundwater level may occur with time. Other important limitations of this report are discussed in Appendix A.

PROJECT DESCRIPTION

We understand that Sprint PCS (Sprint) plans to construct a three-legged, self-supporting communication tower near Butler. Refer to Drawing No. 1-5512.A1 in Appendix C for the location of the project. From our understanding, the tower is planned to be 250 ft in height and be supported by a deep foundation scheme consisting of drilled piers. In addition, it is anticipated that site grades will remain relatively unchanged, and presently, the site is a parcel of undeveloped property. At this time, no other information such as the foundation reactions and construction schedule is known. Due to the somewhat preliminary nature of this evaluation, we recommend that Earth Exploration, Inc. (EEI) be retained to review the foundation design and specifications. In the event that the

Mr. Michael Oberholzer
Sprint PCS - Cincinnati Group

nature, design or location of the proposed construction changes, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the conclusions are modified or confirmed in writing by EEI.

SUBSURFACE EXPLORATORY AND LABORATORY TESTING PROGRAMS

Subsurface conditions for the tower were explored by performing one 30-ft deep test boring at the location shown on Drawing No. 1-5512.A2 in Appendix C. A single boring was requested by Sprint, while the depth and location were selected by EEI. Prior to performing the field activities, the boring was located near the center of the site by EEI personnel on April 13, 1999, via tape measurements referencing the corners of the lease area as staked in the field by others. In addition, Kentucky Underground Protection Services was contacted by EEI to locate and identify underground utilities in the vicinity of the boring location (i.e., Reference No. 991-503-577).

Exploratory activities were performed by EEI on April 13, 1999, using all-terrain mounted equipment and 3¼-in. I.D. hollow stem augers to advance the borehole. Relatively disturbed samples of the soil and rock strata were obtained at 2½-ft intervals to a depth of 10 ft and 5-ft intervals thereafter with a split-spoon sampler using Standard Penetration Test (SPT) procedures (ASTM D 1586). In addition, sampling of rock using diamond core drilling methods (ASTM D 2113) was performed. Following the completion of our exploratory activities, the borehole was backfilled with auger cuttings. Further details of the drilling and sampling procedures are provided in Appendix B.

Following the field activities, the soil and rock samples were visually classified by an engineering technician and were then reviewed by a geotechnical engineer. A final boring log was also prepared and is attached in Appendix C. Soil classifications on the boring log are according to the Unified Soil Classification System-USCS (ASTM D 2488). Further details regarding the classification system are provided in Appendix C. After classifying the samples, index property tests including natural moisture content (ASTM D 2216), Atterberg limits determinations (ASTM D 4318) and several hand penetrometer readings (q_p; which provides an indication of the shear strength characteristics of cohesive-type soils only) were performed on representative soil samples. The results of these tests are included on the test boring log. It should be noted that the final boring log represents our interpretation of the individual samples and field log. In addition, stratification lines on the boring log represent the approximate boundary between soil and rock types, although the transitions may actually be gradual.

Mr. Michael Oberholzer
Sprint PCS - Cincinnati Group

SUBSURFACE CONDITIONS

Soil and Rock Conditions

Within the depth explored, the subsurface profile generally consisted of cohesive-type soils overlying rock (i.e., shale) near a depth of 12 below the existing ground surface. In addition, an approximately 12-in. thick layer of topsoil and gravel was observed at the ground surface. From our laboratory observations, the consistency of the cohesive soils (i.e., lean) was typically very stiff to hard with hand penetrometer readings on the order 3¾ to in excess of 4½ tons/sq ft (tsf), and moisture contents varied from about 17 to 21 percent. A comparison of the natural moisture contents and results of the Atterberg limits determinations ($LL_{\%}$, $PL_{\%}$, $PI_{\%}$) suggests that these soils are overconsolidated, likely due to desiccation and/or their residual nature. For your information, residual soils exhibit "soil-like" characteristics, but are formed in place by mechanical and chemical weathering of their parental rock. It should also be noted that relatively little mechanical effort was required by the drilling equipment to penetrate the rock. Additionally, observations of the rock cores indicated RQD[1] values of 10 and 15 percent, suggesting a poor condition.

Groundwater Conditions

Groundwater level observations made during and shortly after sampling activities are noted at the bottom of the boring log. From our observations, groundwater was not encountered within the exploratory depth. Additionally, it should be mentioned that groundwater levels, in general, can fluctuate due to changes in precipitation, infiltration, run-off, and other hydrogeological factors.

DISCUSSION AND RECOMMENDATIONS

Foundation Design Considerations

Based upon our observations, it is our opinion that the tower can be supported on a deep foundation scheme consisting of drilled piers. However, given the presence of relatively shallow rock and anticipated difficulty in excavating, we also recommend that consideration be given to constructing a mat foundation which would encompass all three

[1] RQD refers to Rock Quality Designation and is often used as an index to define engineering characteristics of an intact rock mass. RQD is evaluated by determining the percentage of core recovered in lengths greater than twice the diameter (e.g., for NX core, lengths greater than 4 in.).

Mr. Michael Oberholzer
Sprint PCS - Cincinnati Group

legs. In our opinion, the mat would behave like a relatively-large single footing provided it was properly reinforced with steel. If considered to be viable, we recommend that the mat be established on soil or rock (i.e., near depths of 7 ft [for soil] or 12 ft [for rock]) and be proportioned such that the maximum bearing pressure (i.e., as a result of an overall moment due to wind) does not exceed 8,000 lbs/sq ft (psf) for the soil and 20,000 psf for the rock. For a sliding mechanism of failure, we recommend a coefficient of friction of 0.4 for soil and 0.57 for rock and an average allowable passive earth pressure of: 2,000 psf for a mat foundation established on soil; and 3,800 psf for a mat foundation established on rock.

If drilled piers are utilized, design of the foundation is anticipated to be based on the interaction of the soil, rock and structure as well as such characteristics as foundation reactions, pier diameter, and concrete and steel requirements. Therefore, the strength and deformational characteristics of both the structure and soil/rock must be accounted. For design purposes, we recommend the parameters provided in Table 1. These parameters assume that the design for lateral loading conditions will be completed using the solution of a beam-column equation and prescribed resistance values based on a "p-y" method. Additionally, uplift is anticipated to be controlled by the pier diameter and depth as well as the soil/rock resistance values. If resistance to uplift cannot be achieved within a reasonable depth (i.e., 12 ft) and/or pier diameter (i.e., less than 72 in.), belling or rock anchors may be necessary. If belling is necessary, we recommend a bell diameter no more than three times the shaft diameter and a slope on the bell of no greater than one horizonal to two vertical. We also recommend that the entire bell be located within the shale stratum and the top of the bell not be within 10 ft of the clay/shale interface (i.e., anticipated to be near a depth of 12 ft) to avoid collapse of the roof. For the design of a belled pier, we recommend that the uplift capacity be a function of the allowable bearing capacity (i.e., in uplift) of the rock and skin resistance along the entire shaft with the exception of the lowermost portion of the shaft, located within a distance of 1½ times the diameter of the bell. Additionally, If rock anchors are considered to be viable, it is suggested that EEI be contacted for further recommendations. Parameters for these conditions are provided in the table on the following page.

Mr. Michael Oberholzer
Sprint PCS - Cincinnati Group

TABLE 1. RECOMMENDED GEOTECHNICAL PARAMETERS FOR DESIGN

Depth Interval (ft)	Soil/ Rock	Variation of Horizontal Subgrade Modulus (lbs/cu in.)	Angle of Internal Friction (ϕ')	Cohesion (lbs/sq ft)	Allowable Skin Resistance (kips/sq ft)	Strain (ε_{50}) at 50 percent of the Ultimate Stress	Total Unit Weight (lb/cu ft)
0 - 3	Neglect						100
3 - 12	Clay	1,000	---	4,000	1.2	0.005	125
12 - 30	Rock	2,000	---	10,000	3.0	0.004	145

Considering that the diameter of the pier may be on the order of 60 to 72 in. and the nature of the applied loads, we recommend that consideration be given to placement of the reinforcement throughout the entire length of the pier. Additionally, a suitable allowable bearing pressure for soil conditions near depths of 7 and 12 ft are anticipated to be on the order 8,000 and 20,000 psf; however depending on foundation reactions, uplift may control. Where belling is performed, an allowable bearing capacity for uplift of 10,000 psf is recommended. Once information regarding the foundation reactions is known, it is recommended that EEI be retained to provide further recommendations for design.

Tower Foundation Construction Considerations

In our opinion, temporary casing for the pier will be necessary for safety precautions especially near the surface. We also recommend that concrete placed near the surface be in full contact with the natural-undisturbed soil to provide lateral stability of the pier. As a result of the weathered condition and bedding characteristics of the rock, it is also possible that blocks of the more competent layers (i.e., those layers which are anticipated to be relied upon for lateral stability and uplift) could become dislodged (yet not removed) during the excavation process. If this condition does occur, we recommend that the loosened blocks be removed or the rock mass be treated via pressure grouting with a cement following placement of concrete. We recommend that an EEI representative be present during all phases of foundation construction to observe that our recommendations are properly interpreted and implemented. In addition, all excavations should conform with Occupational Safety and Health Administration (OSHA) requirements.

Mr. Michael Oberholzer
Sprint PCS - Cincinnati Group

CONCLUDING REMARKS

In closing, we recommend that EEI be provided the opportunity to review the final design and project specifications to confirm that our foundation recommendations have been properly interpreted and implemented. We also recommend that EEI be retained to provide construction monitoring and materials testing services during the excavation and foundation phases of the project. This will allow us to verify that the construction proceeds in compliance with the design concepts, specifications and recommendations contained herein. It will also allow design changes to be made more expediently in the event that subsurface conditions differ from those anticipated.

We have enjoyed working with you on this project and trust that this report addresses your present needs. Within about a week, we will contact you to discuss the contents of this report. However, if you or others should have any questions or require further assistance in the interim, please contact us.

Sincerely,

EARTH EXPLORATION, INC.

Scott J. Ludlow, Ph.D., P.E.
Principal Engineer

f:\archive\geo\report99\1-5512.geo

Enclosures:
APPENDIX A - Important Information About your Geotechnical Engineering Report

APPENDIX B - Field Methods for Exploration and Sampling Soils

APPENDIX C - Vicinity Map - Drawing No. 1-5512.A1
Test Boring Location Sketch - Drawing No. 1-5512.A2
Unified Soil Classification System
Log of Test Boring - General Notes
Log of Test Boring (1)

APPENDIX A

IMPORTANT INFORMATION ABOUT YOUR
GEOTECHNICAL ENGINEERING REPORT

Important Information About Your

Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

The following information is provided to help you manage your risks.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. *No one except you* should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one—not even you*—should apply the report for any purpose or project except the one originally contemplated.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, *do not rely on a geotechnical engineering report* that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions *only* at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an *opinion* about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

A Geotechnical Engineering Report Is Subject To Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce such risks, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations", many of these provisions indicate where geotechnical engineers responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Rely on Your Geotechnical Engineer for Additional Assistance

Membership in ASFE exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your ASFE-member geotechnical engineer for more information.

ASFE PROFESSIONAL FIRMS PRACTICING IN THE GEOSCIENCES

8811 Colesville Road Suite G106 Silver Spring, MD 20910
Telephone: 301-565-2733 Facsimile: 301-589-2017
email: info@asfe.org www.asfe.org

EARTH EXPLORATION, INC.

IIGER06983.5M

APPENDIX B

FIELD METHODS FOR EXPLORATION AND SAMPLING SOILS

FIELD METHODS FOR EXPLORATION AND SAMPLING SOILS

A. Boring Procedures Between Samples

The boring is extended downward, between samples, by a hollow stem auger, continuous flight auger, driven and washed-out casing, or rotary boring with drilling mud or water.

B. Standard Penetration Test and Split-Barrel Sampling of Soils
(ASTM* Designation: D 1586)

This method consists of driving a 2-in. outside diameter split-barrel sampler using a 140-lb weight falling freely through a distance of 30 in. The sampler is first seated 6 in. into the material to be sampled and then driven 12 in. The number of blows required to drive the sampler the final 12 in. is recorded on the Log of Test Boring and known as the Standard Penetration Resistance or N-value. Recovered samples are first classified as to texture by the field personnel. Later in the laboratory, the field classification is reviewed by a geotechnical engineer who observes each sample.

C. Thin-walled Tube Sampling of Soils
(ASTM* Designation: D 1587)

This method consists of hydraulically pushing a 2-in. or 3-in. outside diameter thin wall tube into the soil, usually cohesive types. Relatively undisturbed samples are recovered.

D. Soil Investigation and Sampling by Auger Borings
(ASTM* Designation: D 1452)

This method consists of augering a hole and removing representative soil samples from the auger flight or bucket at 5-ft intervals or with each change in the substrata. Relatively disturbed samples are obtained and its use is therefore limited to situations where it is satisfactory to determine approximate subsurface profile.

E. Diamond Core Drilling for Site Investigation
(ASTM* Designation: D 2113)

This method consists of advancing a hole in rock or other hard strata by rotating downward a single tube or double tube core barrel equipped with a cutting bit. Diamond, tungsten carbide, or other cutting agents may be used for the bit. Wash water is used to remove the cuttings. Normally, a 3-in. outside diameter by 2-in. inside diameter coring bit is used unless otherwise noted. The rock or hard material recovered within the core barrel is examined in the field and laboratory. Cores are stored in partitioned boxes and the length of recovered material is expressed as a percentage of the actual distance penetrated.

* American Society for Testing and Materials, Philadelphia, PA

APPENDIX C

VICINITY MAP
(Drawing No. 1-5512.A1)

TEST BORING LOCATION SKETCH
(Drawing No. 1-5512.A2)

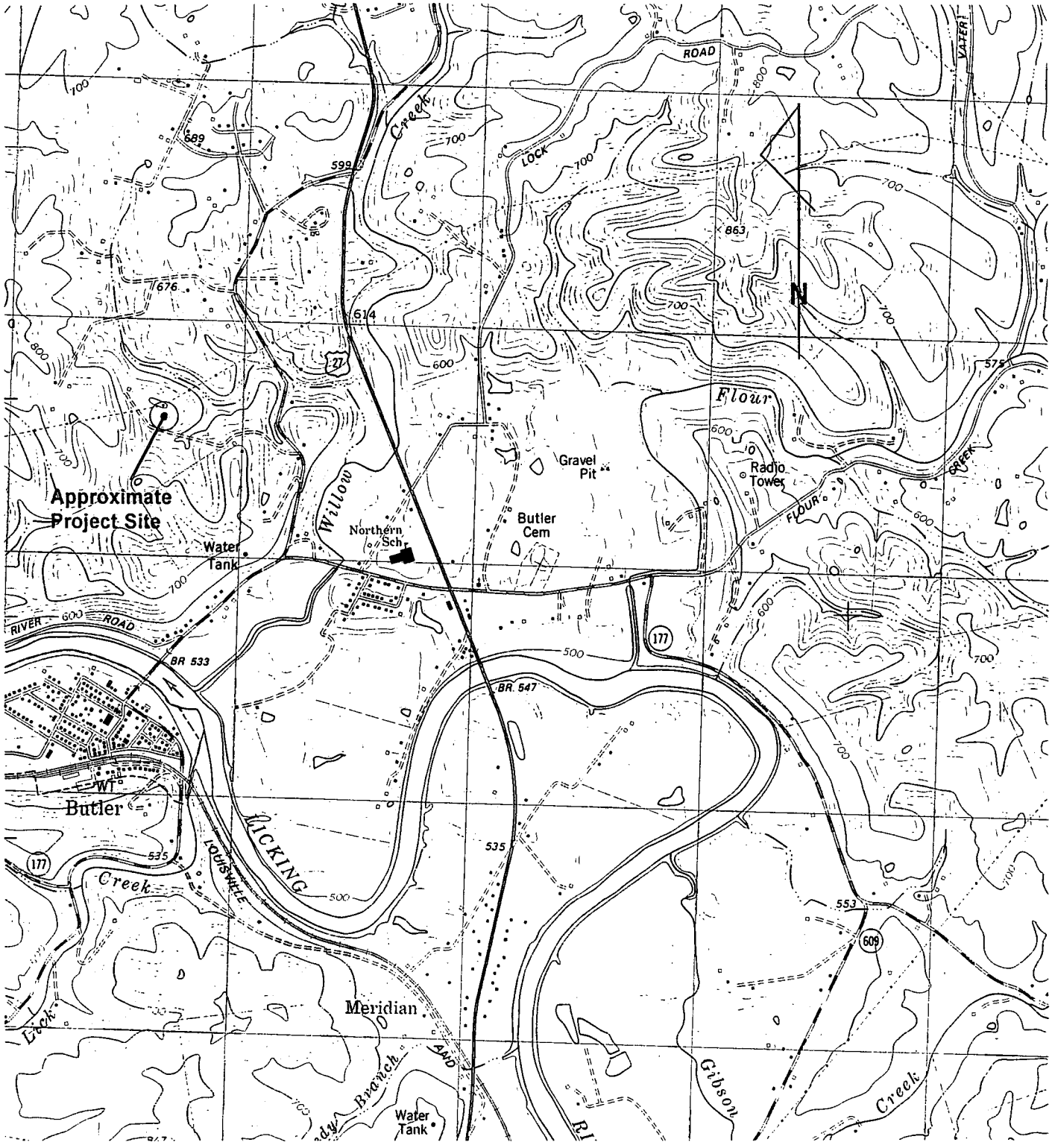
UNIFIED SOIL CLASSIFICATION SYSTEM

LOG OF TEST BORING - GENERAL NOTES

LOG OF TEST BORING (1)

VICINITY MAP

Drawing No. 1-5512.A1



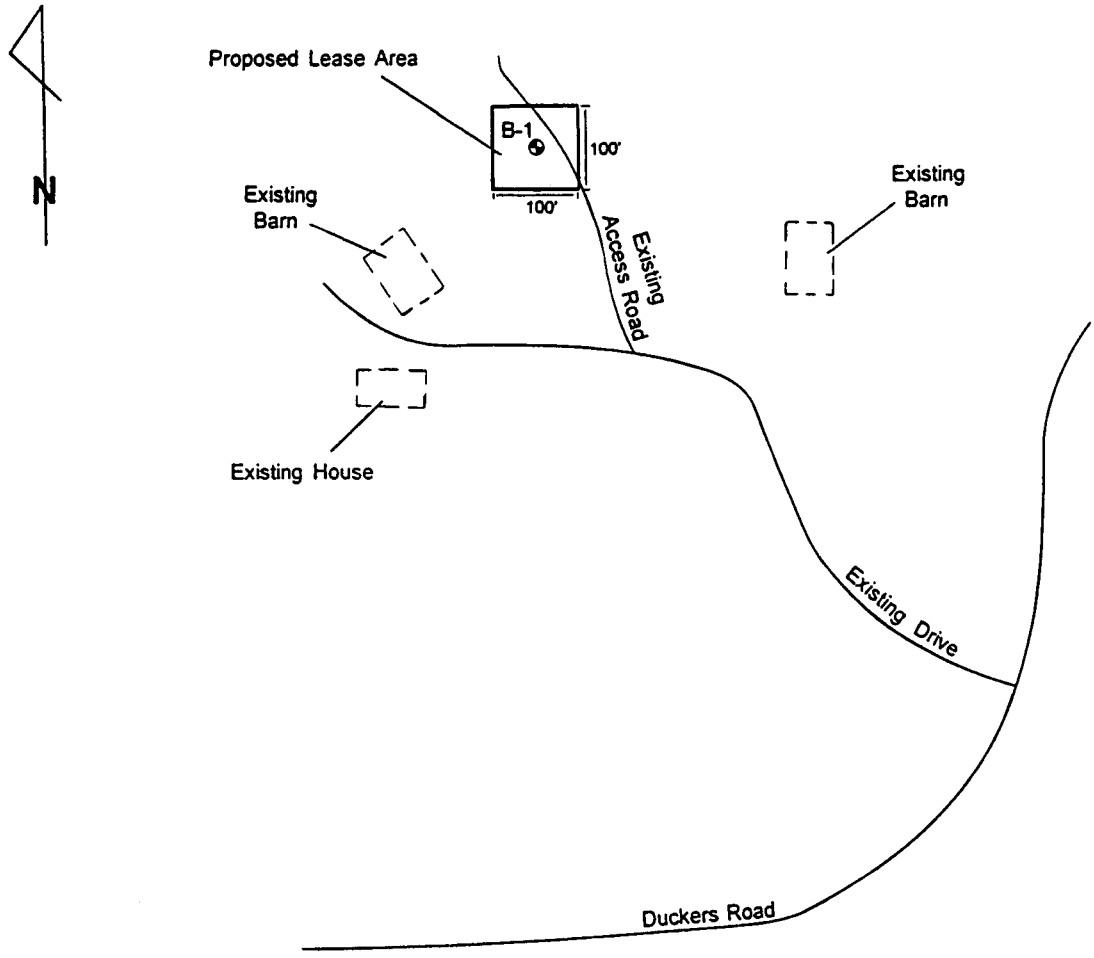
Based on the Geological Survey's 7.5-Minute Quadrangle Map (Butler, KY)

PROJECT: Proposed Communication Tower - Site No. 023D (Butler)
LOCATION: Butler, Kentucky
CLIENT: Sprint PCS
EEI PROJECT NO.: 1-5512
SCALE: 1" = 2000'

EARTH EXPLORATION
7770 West New York Street
Indianapolis, IN 46214-2988

TEST BORING LOCATION SKETCH

Drawing No. 1-5512.A2



NOTES

1. Base map developed from information provided by Sprint PCS on April 2, 1999.
2. Refer to the Log of Test Boring (1) in Appendix C for a description of the subsurface conditions encountered at the test boring location.
3. The boring was located near the center of the site by Earth Exploration, Inc. on April 13, 1999, via referencing the corners of the lease area as staked in the field by others.

LEGEND

B-1 Test Boring Location and Designation

PROJECT: Proposed Communication Tower - Site No. 023D (Butler)
LOCATION: Butler, Kentucky
CLIENT: Sprint PCS
EEI PROJECT NO.: 1-5512
SCALE: No Scale

EARTH EXPLORATION
7770 West New York Street
Indianapolis, IN 46214-2988

UNIFIED SOIL CLASSIFICATION SYSTEM

COARSE-GRAINED SOILS

(More than half of material is larger than No. 200 seive size.)

GRAVELS More than half of coarse fraction larger than No. 4 sieve size	**Clean Gravels** (Little or no fines)	
	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
	GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
	Gravels with Fines (Appreciable amount of fines)	
	GM^{d}_{u}	Silty gravels, gravel-sand-silt mixtures
	GC	Clayey gravels, gravel-sand-clay mixtures
SANDS More than half of coarse fraction smaller than No. 4 sieve size	**Clean Sands** (Little or no fines)	
	SW	Well-graded sands, gravelly sands, little or no fines
	SP	Poorly graded sands, gravelly sands, little or no fines
	Sands with Fines (Appreciable amount of fines)	
	SM^{d}_{u}	Silty sands, sand-silt mixtures
	SC	Clayey sands, sand-clay mixtures

FINE-GRAINED SOILS

(More than half of material is smaller than No. 200 sieve.)

SILTS AND CLAYS Liquid limit less than 50%	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
	OL	Organic silts and organic silty clays of low plasticity
SILTS AND CLAYS Liquid limit greater than 50%	MH	Inorganic silts, micaceous or diatomaceous 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

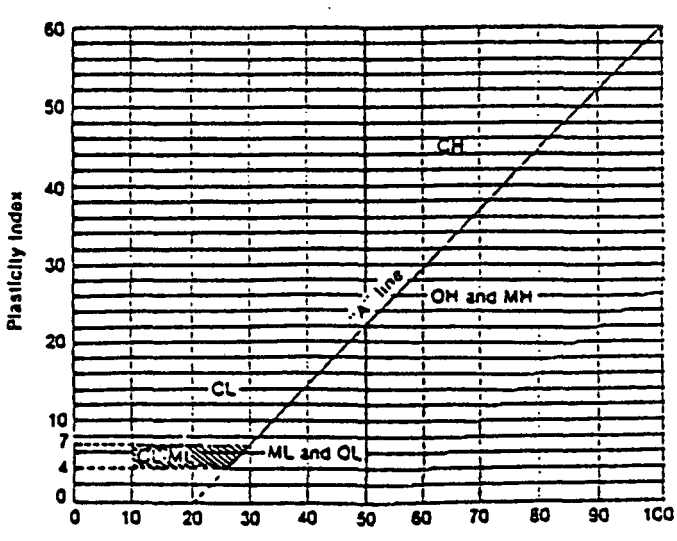
LABORATORY CLASSIFICATION CRITERIA

GW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3	
GP	Not meeting all gradation requirements for GW	
GM	Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols
GC	Atterberg limits above "A" line with P.I. greater than 7	
SW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3	
SP	Not meeting all gradation requirements for SW	
SM	Atterberg limits below "A" line or P.I. less than 4	Limits plotting in hatched zone with P.I. between 4 and 7 are borderline cases requiring use of dual symbols.
SC	Atterberg limits above "A" line with P.I. greater than 7	

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

Less than 5 per cent	GW, GP, SW, SP
More than 12 per cent	GM, GC, SM, SC
5 to 12 per cent	Borderline cases requiring dual symbols

PLASTICITY CHART



For classification of fine-grained soils and fine fraction of coarse-grained soils.

Atterberg Limits plotting in hatched area are borderline classifications requiring use of dual symbols.

Equation of A-line: PI = 0.73 (LL - 20)

EARTH EXPLORATION'S

LOG OF TEST BORING - GENERAL NOTES

DESCRIPTIVE SOIL CLASSIFICATION

GRAIN SIZE TERMINOLOGY

Soil Fraction		Particle Size	US Standard Sieve Size
Boulders		Larger than 12"	Larger than 12"
Cobbles		3" to 12"	3" to 12"
Gravel:	Coarse	3/4" to 3"	3/4" to 3"
	Small	4.76 mm to 3/4"	#4 to 3/4"
Sand:	Coarse	2.00 to 4.76 mm	#10 to #4
	Med	0.42 to 2.00 mm	#40 to #10
	Fine	0.074 to 0.42 mm	#200 to #40
Silt		0.005 to 0.074 mm	Smaller than #200
Clay		Smaller than 0.005 mm	Smaller than #200

Plasticity characteristics differentiate between silt and clay.

GENERAL TERMINOLOGY

Physical Characteristics
- Color, moisture, grain shape, fineness, etc.

Major Constituents
- Clay, silt, sand, gravel

Structure
- Laminated, varved, fibrous, stratified, cemented, fissured, etc.

Geologic Origin
- Glacial, alluvial, eolian, residual, etc.

RELATIVE PROPORTIONS OF COHESIONLESS SOILS

Term	Defining Range by % of Weight
Trace	0 - 5%
Little	5 - 12%
Some	12 - 35%
And	35 - 50%

ORGANIC CONTENT BY COMBUSTION METHOD

Soil Description	LOI
Trace Organic Matter	0 - 5%
Little Organic Matter	5 - 12%
Organic Silt/Clay	12 - 35%
Sedimentary Peat	35 - 50%
Fibrous and Woody Peat	50%+

RELATIVE DENSITY

Term	"N" Value
Very loose	0 - 4
Loose	4 - 10
Medium dense	10 - 30
Dense	30 - 50
Very Dense	50+

CONSISTENCY

Term	qu/qp - tsf
Very soft	0.0 - 0.25
Soft	0.25 - 0.5
Medium	0.5 - 1.0
Stiff	1.0 - 2.0
Very Stiff	2.0 - 4.0
Hard	4.0+

PLASTICITY

Term	Plastic Index
None to slight	0 - 4
Slight	5 - 7
Medium	8 - 22
High/Very High	22+

The penetration resistance, N, is the summation of the number of blows required to effect two successive 6" penetrations of the 2" O.D. split-barrel sampler. The sampler is driven with a 140 lb weight falling 30" and is seated to a depth of 6" before commencing the standard penetration test.

SYMBOLS

DRILLING AND SAMPLING

AS - Auger Sample
BS - Bag Sample
C - Casing: Size 2½", NW; 4", HW
COA - Clean-Out Auger
CS - Continuous Sampling
CW - Clear Water
DC - Driven Casing
DM - Drilling Mud
FA - Flight Auger
FT - Fish Tail
HA - Hand Auger
HSA - Hollow Stem Auger
NR - No Recovery
PMT - Borehole Pressuremeter Test
PT - 3" O.D. Piston Tube Sample
PTS - Peat Sample
RB - Rock Bit
RC - Rock Coring
REC - Recovery
RQD - Rock Quality Designation
RS - Rock Sounding
S - Soil Sounding
SS - 2" O.D. Split-Barrel Sample
2ST - 2" O.D. Thin-Walled Tube Sample
3ST - 3" O.D. Thin-Walled Tube Sample
VS - Vane Shear Test
WB - Wash Boring
WPT - Water Pressure Test

LABORATORY TESTS

qp - Penetrometer Reading, tsf
qu - Unconfined Strength, tsf
W - Moisture Content, %
LL - Liquid Limit, %
PL - Plastic Limit, %
PI - Plasticity Index
SL - Shrinkage Limit, %
LOI - Loss on Ignition, %
γ - Dry Unit Weight, pcf
pH - Measure of Soil Alkalinity/Acidity

WATER LEVEL MEASUREMENT

BF - Backfilled upon Completion
NW - No Water Encountered

Note: Water level measurements shown on the boring logs represent conditions at the time indicated and may not reflect static levels, especially in cohesive soils.

EARTH EXPLORATION, INC.

EARTH EXPLORATION Inc.

LOG OF TEST BORING

Project: Proposed Communication Tower
Location: Butler, Kentucky
Client: Sprint PCS

7770 West New York Street · Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. B-1
Elevation ---
Datum ---
EEI Proj. No. 1-5512
Sheet 1 of 1

Site No.	023D	Station	---	Weather	Sunny	Driller	J.M.
Site Name	Butler	Offset	---	Temp.	60 Deg F	Inspector	---

SAMPLE No.	Type	Rec %	N Value	Depth ft	Depth m	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
				0	0	TOPSOIL/GRAVEL							
SS-1	X	100	14			CL, LEAN CLAY, little sand, very stiff, brown, occasional rock fragments after 3'	3.75			20.8			
SS-2	X	20	24	5	1		--			--			
SS-3	X	100	25		2	CL, LEAN CLAY, trace sand, hard, brown to gray after 8-1/2' (residual)	>4.5			17.9	33	20	13
SS-4	X	55	26	10	3		>4.5			17.4			
					4								
SS-5	X	40	50/0.1	15	5	SHALE, weathered, gray							
SS-6	X	10	50/0.2*			*Seating Increment							
				20	6								
RC-1		100	RQD = 15		7	SHALE, weathered, low bedding angles, medium to soft, fine grained, dark gray, some non-weathered shale seams							
RC-2		100	RQD = 10	25	8								
					9								
				30		End of Boring at 30'							
					10	Rock core obtained from 20' to 25' and 25' to 30'.							
				35									

WATER LEVEL OBSERVATIONS

Depth ft	▽ While Drilling	▼ Upon Completion	▽ After Drilling
To Water	NW	NW	BF
To Cave-in		17	

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

GENERAL NOTES

Start 4/13/99 End 4/13/99 Rig D-120
Drilling Method 3-1/4" I.D. HSA ATV
Remarks Backfilled with auger cuttings.
Water introduced during rock coring.

SAGAMORE
ENVIRONMENTAL
SERVICES, INC.

April 21, 1999

Mr. Jason Caliento
Sprint PCS
9801 Higgins Road
Suite 200
Rosemont, Illinois 60018

RE: NEPA EVALUATION
SPRINT PCS SITE #CI33XC023D
R. R. 3 BOX 438, BUTLER, KENTUCKY
SAGAMORE ENVIRONMENTAL SERVICES PROJECT NUMBER 9230M

Dear Mr. Caliento :

Sagamore Environmental Services has performed a NEPA evaluation of the Sprint PCS Site #CI33XC023D located at R. R. 3 Box 438 in Butler, Kentucky. The NEPA evaluation included a site inspection and review of flood insurance maps. According to employees at the Pendleton County Farm Service Agency and Soil and Water Conservation District Office, National Wetlands Inventory (NWI) maps have not been published for the area of the site. The Sprint PCS Site #023D is situated on a hillside near the top of a steeply graded hill. Wetland characteristics were not observed on the day of the inspection. Based on this information, number 7 of the NEPA Land Use Screening Checklist was answered "negative."

According to the Kentucky Department of Natural Resources, State Nature Preserves Commission, 13 species of endangered mussels and one endangered fish which inhabit the Licking River were identified within one mile of the Sprint PCS Site #023D. The Licking River is located approximately one-half mile south of the site. Construction activities at the site are not likely to disrupt or impact the endangered species or their habitats. Based on this information, question number 3 on the NEPA Land Use Screening Checklist is answered negative.

8002 Castleway Drive ▫ Suite 104 ▫ Indianapolis, IN 46250 ▫ (317) 842-0510 ▫ Fax (317) 842-0547

We have attached a completed NEPA Checklist. All items on the NEPA checklist were answered "Negative" pending receipt of historic preservation data from the Kentucky Heritage Council. No significant areas of concern were found with the available data. Supporting data is provided in the Phase I Environmental Site Assessment Report for the Sprint PCS Site #CI33XC023D (Sagamore Project Number 9230M).

Sincerely,

Angela D. Reed
Project Scientist
Sagamore Environmental Services, Inc.

K. Stephen Mohr
President

Cc: Michael Oberholzer, Sprint PCS, Cincinnati Group

NEPA Land Use Screening Checklist

Table 7-1: Attachment B: NEPA Land Use Screening Checklist

Cascade Number: CI33XC023D	Site Name: R.R. 3 Box 438	TS&NO Field Team:

NEPA Category See Attachment A: 47 CFR § 1.1307 Subsection (#)	Expert Federal / State Jurisdictional Agencies	NEPA Practice Reference	Check either the right box below, if Negative or the left box, if Positive	
Note: Except for sites screening positive under Item 4. –Historic Places –Land Use EAs are not required for collocation sites (See 47 CFR § 1.1306 NOTE 1).			**Positive**	**Negative**
1. Wilderness Area	National Park Service, U.S. Forest Service, Bureau of Land Management	Attachment B, Figure 7-1		X
2. Wildlife Preserve	U.S. Dept. of Interior–Fish & Wildlife Service (Field Service)	Attachment B, Figure 7-2		X
3. Endangered Species	U.S. Dept. of Interior–Fish & Wildlife Service (Field Service)	Attachment B, Figure 7-2		X
4. Historic Place	State Historic Preservation Office (SHPO)	Attachment B, Figure 7-3 & Section 3.4.2.4		X
5. Indian Religious	SHPO, American Indian Tribes, Bureau of Indian Affairs	Attachment B, Figure 7-4		X
6. Floodplain	Federal Emergency Management Agency (FEMA)	Attachment B, Figure 7-5 & Sections 2.4.2.1 thru 3		X
7. Surface Features (e.g., Wetlands, Floodways)	Army Corps of Engineers (ACOE)	Attachment B, Figure 7-6 & Section 2.4.2.1		X
8. High Intensity White Lights	Federal Aviation Administration	Not Applicable		

If the screening investigation for any of the above categories results in a Positive screening, an Environmental Assessment must be prepared and filed with the FCC. Construction may not start on any positively screened site prior to receipt of a finding of no significant impact (FONSI) from the FCC. A copy of this checklist, any applicable federal, state or local determinations / permits, as well as any EAs, evaluations or corrective measures, shall be documented to the TS&NO field team project file on each site, and a FAX copy of each Positive checklist shall be sent immediately to Tony Traini–Sprint PCS External Affairs. The undersigned has reviewed and approved the completion of this NEPA checklist for the above referenced site.

Signed: TS&NO Regional Director / Manager_____

Date:_____ Print Name_____

PHASE I ENVIRONMENTAL SITE ASSESSMENT
INCLUDES:
NATIONAL ENVIRONMENTAL PROTECTION ACT (NEPA) REPORT
STATE HISTORICAL PRESERVATION OFFICE (SHPO) REPORT

SPRINT PCS SITE #CI33XC023D
R. R. 3 BOX 438
BUTLER, KENTUCKY

SAGAMORE
ENVIRONMENTAL
SERVICES, INC.

SAGAMORE ENVIRONMENTAL SERVICES, INC.

April 21, 1999

Mr. Jason Caliento
Sprint PCS
9801 Higgins Road
Suite 200
Rosemont, Illinois 60018

Re: PHASE I ENVIRONMENTAL SITE ASSESSMENT
SPRINT PCS SITE #CI33XC023D
R. R. 3 BOX 438, BUTLER, KENTUCKY
SAGAMORE ENVIRONMENTAL SERVICES PROJECT NUMBER 9230M

Dear Mr. Caliento:

Sagamore Environmental Services, Inc. has performed a Phase I environmental site assessment of the Sprint PCS Site #CI33XC023D located at R. R. 3 Box 438 in Butler, Kentucky. The site assessment included a facility inspection, a review of historical records, and a review of regulatory agency records. The attached report provides details of the site assessment.

Sagamore has completed this work according to generally accepted standards and practices of engineers and environmental consultants performing such work, and the statements contained in the report are true and accurate to the best of our knowledge. This report meets or exceeds requirements of the *American Standards for Testing Materials* (ASTM) designation E1527. This report has been prepared for the exclusive use of Sprint PCS.

Sincerely,

Angela D. Reed
Project Scientist
Sagamore Environmental Services, Inc.

K. Stephen Mohr
President

Cc: Michael Oberholzer, Sprint PCS, Cincinnati Group

8002 Castleway Drive ▫ Suite 104 ▫ Indianapolis, IN 46250 ▫ (317) 842-0510 ▫ Fax (317) 842-0547

PHASE I ENVIRONMENTAL SITE ASSESSMENT
INCLUDES:
NATIONAL ENVIRONMENTAL PROTECTION ACT (NEPA) REPORT
STATE HISTORICAL PRESERVATION OFFICE (SHPO) REPORT

Conducted on the facilities of:

Sprint PCS Site #CI33XC023D
R. R. 3 Box 438
Butler, Kentucky

Project Number 9230M

Prepared for:

Sprint PCS
9801 Higgins Road
Suite 200
Rosemont, Illinois 60018
Mr. Jason Caliento

Prepared by:

Sagamore Environmental Services, Inc.
8002 Castleway Drive, Suite 104
Indianapolis, Indiana 46250
(317) 842-0510

Executive Summary

Sagamore Environmental Services, Inc. (Sagamore) has completed a Phase I environmental site assessment of the Sprint PCS Site #CI33XC023D (#023D) located at R. R. 3 Box 438 in Butler, Kentucky. The site visit was performed by Ms. Angela D. Reed, Project Scientist of Sagamore. At the time of the inspection, weather conditions were cloudy and rainy with fair visibility and a temperature of 40 degrees Fahrenheit.

Sprint PCS Site #023D consists of a 75 foot by 75 foot area situated on a 35 acre parcel that is part of a 200 acre wooded and residential property northeast of Butler, Kentucky. Sprint PCS Site #023D was covered with weeds, shrubs, and trees on the day of the site visit. No environmental concerns were encountered at the site.

No UST sites, no hazardous waste generators, and no reported spill incidents were identified in the EcoSearch report within one-quarter mile of Sprint PCS Site #023D. According to the EcoSearch report and site reconnaissance, no LUST sites are located within one-half mile of the Sprint PCS Site #023D. No CERCLIS sites, no NPL sites, no MSL sites, no hazardous waste treatment, storage and disposal (TSD) facilities and no solid waste facilities were identified within one mile of the Sprint PCS Site #023D.

According to the Kentucky Department of Natural Resources, State Nature Preserves Commission, 13 species of endangered mussels and one endangered fish which inhabit the Licking River were identified within one mile of the Sprint PCS Site #023D. The Licking River is located approximately one-half mile south of the site. Construction activities at the site are not likely to disrupt or impact the endangered species or their habitats. Based on this information, question number 3 on the NEPA Land Use Screening Checklist is answered "negative."

According to employees of the Pendleton County Farm Service Agency and the Soil and Water Conservation District Office, National Wetlands Inventory Maps were not produced for this area (Appendix E). The Sprint PCS Site #023D is situated on a hillside near the top of a steeply graded hill. Wetland characteristics were not observed on the day of the inspection. Based on this information, number 7 of the NEPA Land Use Screening Checklist was answered "negative."

No further environmental investigations are recommended for Sprint PCS Site #023D.

This executive summary is provided as a convenience and should not be considered a substitute for technical documentation provided in the report.

Table of Contents

Introduction

The purpose of the Phase I environmental site assessment is to identify, to the extent feasible, recognized environmental conditions in connection with the site and its past and present operations. This is achieved by conducting a site inspection, reviewing available historical documents, and reviewing various local, state, and federal regulatory agency files which may disclose environmental concerns regarding the site and properties in the vicinity of the site.

Sagamore has completed this Phase I environmental site assessment of Sprint PCS Site #023D located at R. R. 3 Box 438 in Butler, Kentucky. The site inspection was conducted on April 16, 1999, by Ms. Angela D. Reed, Project Scientist of Sagamore. A map identifying the subject site is included in Figure 1.

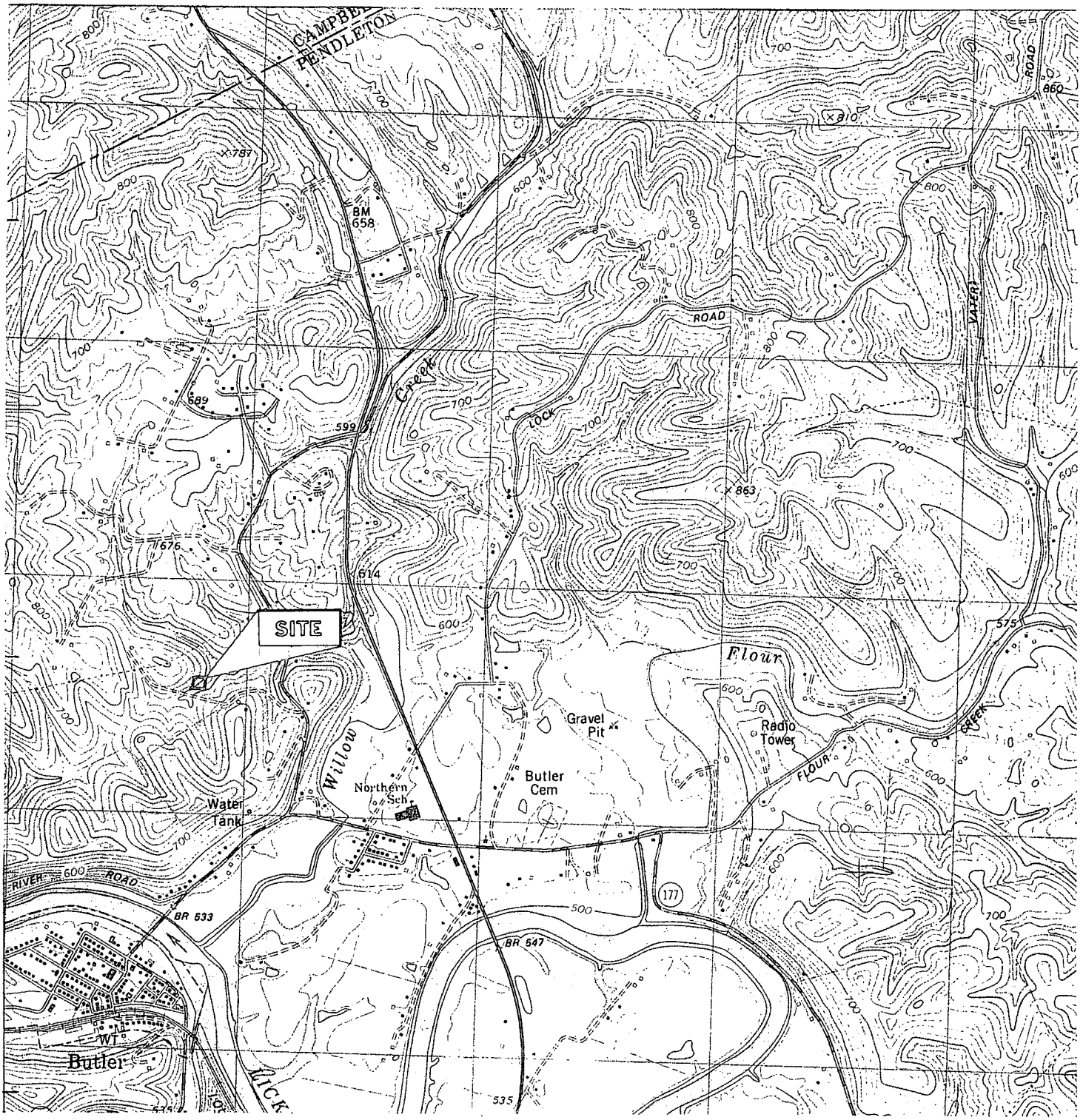
Legal Description

A legal description of the parcel on which Sprint PCS Site #023D is situated is as follows:

> Lying and being in Pendleton County, Kentucky, West of Old Route 27 and North of Butler and more particularly described as follows, to wit: Beginning at a 20" Locust being Southwest corner of James Pettit, in the line of Herman Hornbeck and said point also being the Northwest corner of Lot #3 a 33.53 acre tract of William J. Yelton; thence with the lines of Hornbeck, 37 degrees 21' east –1097.3 feet to an iron pin; thence north 63 degrees 20' east – 847.7 feet to a post a corner to Thomas Edwards; thence with said lines, North 29 degrees 14' east – 369 feet to a post; thence north 10 degrees 57' east – 246.3 feet to a post; thence with - 3 - new made lines partitioning the Grantors property, North 73 degrees 06' west – 298.1 feet to an iron pin; thence North 19 degrees 12' west – 696.9 feet to a 16" Maple thence North 79 degrees 21' west – 12.2 feet to an iron pin in the line of James Pettit; thence with said line, South 53 degrees 54' west – 1390.7 feet to the place of beginning containing 35.06 acres more or less exclusive of all right of way and easements of record.

The above description is in accordance with a survey made by Hicks and Mann, Inc. on September 17, 1986.

The above parcel is the parcel on which the Sprint PCS Site #023D is located and is only one of the parcels constituting the 200 acres of the parent property.



BUTLER, KENTUCKY QUADRANGLE 1981
PHOTOINSPECTED 1984
CONTOUR INTERVAL = 10 FEET
SCALE: 1:24,000

SAGAMORE ENVIRONMENTAL SERVICES, INC.

SITE LOCATION MAP
SPRINT PCS SITE #023D
R.R. 3 BOX 438
BUTLER, KENTUCKY
SAGAMORE PROJECT NO. 9230M

Historical Research

Historical documentation is reviewed to determine past uses of the subject site and surrounding properties. Review of historical data is performed to indicate if the site has been adversely affected by historical usage. Information compiled in this section was obtained from the Pendleton County Property Valuations Office, the Pendleton County Clerks Office, and the Pendleton County Soil and Water Conservation District Office located in Falmouth, Kentucky. These sources were reviewed to determine past uses of the property, and should not be considered a title review.

•Ownership History

According to records at the Pendleton County Clerks Office, the site is currently owned by Mr. Thomas Edwards, who acquired the property September 30, 1986. Prior ownership is as follows:

Owner	*Date of Transfer*
Yelton, William J. and Maggie	July 31, 1959
Shonemaker, Ina	July 30, 1959
Yelton, William J. and Maggie,	July 20, 1959
Yelton, Orpha	July 14, 1959
Yelton, Naomi	April 18, 1918
Yelton, Louis	Prior to 1918

•Aerial Photographs

Historical aerial photographs were reviewed at the Pendleton County Soil and Water Conservation District Office (1995, 1977). The site appears to be wooded surrounded by wooded areas in both the 1995 and 1977 photographs. A small drive or fence row cuts through the trees on the north portion of the site in both of the photographs. The site inspection concurred that the cut through the trees noted in the aerial photographs was a dirt road. A house is located further south of the site. Aerial photographs did not indicate environmental conditions associated with past use of the site. A copy of the 1995 photograph is located in Appendix A.

•Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps were produced by a private mapping company to determine property uses at specific dates. The Sprint PCS Site #023D lies outside the mapping area for Butler, Kentucky.

•City Directories

City directories are reviewed to determine past occupants and/or property usage. Historical city directory coverage is not available for Butler, Kentucky.

Facility Inspection

A facility inspection is performed to identify potential sources of environmental concern regarding the facility and surrounding properties which may adversely impact the site. The inspection was performed on April 16, 1999, by Ms. Angela D. Reed, Project Scientist of Sagamore. At the time of inspection, weather conditions were cloudy and rainy with fair visibility and a temperature of approximately 40 degrees Fahrenheit. Copies of photographs referenced in this section are included in Appendix B.

General Site Conditions

The Sprint PCS Site #023D consists of a 75 by 75 foot area situated on a 35 acre parcel that is part of a 200 acre property. The Sprint PCS Site #023D was covered with weeds, shrubs, and trees. (photographs 1 through 4). Figure 2 represents a detail map of the site.

•Topography and Drainage Patterns

The site has a moderately sloping gradient to the north. Surface runoff is suspected to flow north (downgradient). No apparent drainage patterns were observed on the day of the inspection. According to the U.S.G.S. topographic map (Butler, Kentucky quadrangle), the site has an elevation of approximately 600 feet above mean sea level (msl).

•Vegetation

Vegetation observed at the Sprint PCS Site #023D consists of weeds, shrubs, and trees. No unusually stained soil or stressed vegetation was observed on the proposed Sprint PCS Site #023D or adjacent areas.

•Building Description and Construction

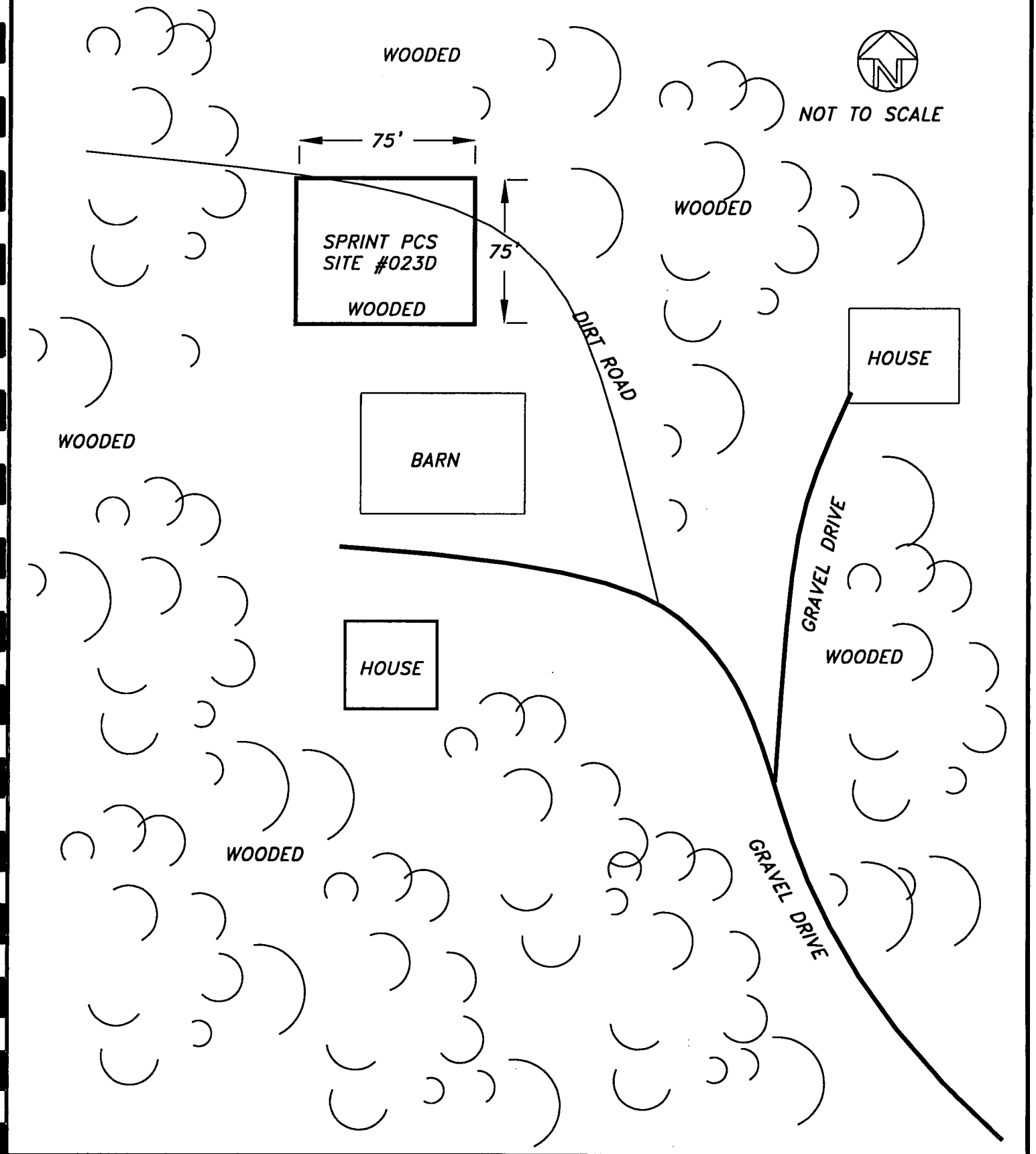
No buildings are present on the Sprint PCS Site #023D.

•Heating, Ventilating, and Air Conditioning

No heating, ventilating, or air conditioning systems are located on the Sprint PCS Site #023D.

•Manufacturing Processes

There are no manufacturing processes at the site at this time. No evidence of past manufacturing processes was observed.



SAGAMORE ENVIRONMENTAL SERVICES, INC.

SITE DETAIL MAP
SPRINT PCS SITE #023D
R.R. 3 BOX 438
BUTLER, KENTUCKY
SAGAMORE PROJECT NO. 9230M

•Chemical Use and Storage

No chemicals were observed on the Sprint PCS Site #023D, and no evidence of improper chemical use or disposal was noted.

•Public Utilities

No utilities are currently servicing the Sprint PCS Site #023D.

•Transformers and Other Potential Sources of PCBs

No transformers are present on the Sprint PCS Site #023D.

•Asbestos-Containing Materials (ACM)

No suspected asbestos-containing materials were observed at the site at the time of investigation.

•Water Wells

No water wells were observed on the Sprint PCS Site #023D.

•Oil and Gas Wells

No oil or gas wells were observed on the site.

•Underground Storage Tanks (USTs)

No evidence of USTs (such as vent lines, fill tubes, or pump islands) was observed on the Sprint PCS Site #023D.

•Above-ground Storage Tanks (ASTs)

No ASTs were observed on the Sprint PCS Site #023D.

•Waste Disposal Systems

No improper waste disposal was observed on the Sprint PCS Site #023D.

•Other Areas of Concern

No other areas of potential environmental concern such as pits, lagoons, waste discharge, land filling, etc. were noted at the time of investigation.

•Adjoining Properties

The site is directly surrounded by weeds, shrubs and trees of the parent property. South of the site is a barn followed by a house (upgradient). The north portion of the site is cut by a dirt drive that runs east and west across the site. Adjacent properties do not appear to warrant concern at this time.

Records Review

This section includes information from databases reviewed at the Commonwealth of Kentucky and local regulatory agencies. These records are reviewed to identify recognized environmental conditions on the site and at surrounding locations which may impact the site. EcoSearch Environmental Resources, Inc. (EcoSearch) was utilized to assist with the records review. Unless otherwise noted, the data was reviewed on April 7, 1999. A copy of the report is included as Appendix C. An Environmental Sites Map, showing the location of the sites mentioned in this section, is incorporated into the EcoSearch report.

•National Priorities List (NPL)

The NPL identifies uncontrolled hazardous waste sites that warrant further investigation to determine if long-term "remedial action" is necessary. The NPL is comprised of two sections, the Federal Section and the General Section. The sites in the General Superfund Section of the NPL are eligible for remedial action funded under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), enacted on December 11, 1980, and amended by the Superfund Amendments and Reauthorization Act (SARA). According to the NPL database reviewed by EcoSearch, there are no NPL sites within one mile of Sprint PCS Site #023D.

•Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)

The CERCLIS is an inventory of all potential uncontrolled hazardous waste sites, based upon state and federal investigation efforts, and notifications received as provided by CERCLA. According to the EcoSearch report, there are no CERCLIS sites located within one mile of the Sprint PCS Site #023D.

•Underground Storage Tanks (USTs)

The Commonwealth of Kentucky Underground Storage Tank List maintains files for all registered underground storage tanks in Kentucky. These files were reviewed for underground storage tanks within one-quarter mile of the Sprint PCS Site #023D. No UST facilities are listed within one-quarter mile of the site.

•Hazardous Waste Handlers

The U.S. EPA maintains information on all companies which have been assigned an Environmental Protection Agency identification number. These numbers are assigned to large quantity generators (LQG, generates more than 2,200 pounds per month), small quantity generators (SQG, generates 220 to 2,200 pounds per month), and transporters (TRN). Conditionally exempt generators (CEG, generates less than 220 pounds per month) are not required to obtain an EPA identification number. There are no facilities listed within one-quarter mile of the Sprint PCS Site #023D.

•Hazardous Waste Treatment, Storage, and Disposal (TSD) Facilities

The Commonweatlh of Kentucky Department for Environmental Protection publishes a list of all hazardous waste TSD facilities in Kentucky (Kentucky Lead List). According to this list, there are no TSD facilities within one mile of the Sprint PCS Site #023D.

•Solid Waste Facilities

The Commonwealth of Kentucky Solid Waste Facilities List maintains records of active and inactive solid waste disposal sites in the State of Kentucky. According to this list, there are no solid waste facilities (SWF) within one mile of the Sprint PCS Site #023D.

•Soils and Geology

According to the *Soil Survey of Grant and Pendleton Counties, Kentucky* the site is underlain by the Eden series soils (map symbols: EfE3, EdD). The Eden flaggy silty clay has 20 to 30 percent slopes and is steep, moderately deep, well-drained and sometimes droughty. It is found on hillsides. Permeability is slow and runoff is rapid. The seasonal high water table is greater than six feet below ground surface (bgs). The Eden silty clay loam has 6 to 20 percent slopes and is moderately steep, moderately deep, well-drained, and has a clayey, flaggy, subsoil. It is on narrow ridges and the upper part of hillsides. Permeability is slow and runoff is rapid. The seasonal high water table is greater than six feet bgs. A copy of the soil survey map is included in Appendix D.

•Wetlands

According to employees of the Pendleton County Farm Service Agency and the Soil and Water Conservation District Office, National Wetlands Inventory Maps were not produced for this area (Appendix E). The Sprint PCS Site #023D is situated on a hillside near the top of a steeply graded hill. Wetland characteristics were not observed on the day of the inspection. Based on this information, number 7 of the NEPA Land Use Screening Checklist was answered "negative."

•Flood Insurance Rate Maps

A Flood Hazard Boundary Map (FHBM) produced by the United States Housing for Urban Development and the Federal Insurance Administration was available from the Pendleton County Soil and Water Conservation District Office and was reviewed for the Sprint PCS Site #023D. The map indicates that the site does not lie within an area of flood hazard. A copy of the FHBM map is included in Appendix F.

•NEPA Checklist

The items on the NEPA Checklist have been reviewed for the Sprint PCS Site #023D. According to the Kentucky Department of Natural Resources, State Nature Preserves Commission, 13 species of endangered mussels and one endangered fish which inhabit the Licking River were identified within one mile of the Sprint PCS Site #023D. The Licking River is located approximately one-half mile south of the site. Construction activities at the site are not likely to disrupt or impact the endangered species or their

habitats. Based on this information, question number 3 on the NEPA Land Use Screening Checklist is answered negative.

Receipt of historic preservation data is pending. All items on the Environmental Assessment portion of this questionnaire were answered "Negative". A copy of the completed NEPA Checklist, as well as the data request, are provided in Appendix G.

•Radon

In 1993, the EPA Map of Radon Zones was published identifying general radon concentrations levels in Kentucky. In Pendleton County, eight (8) sites were evaluated for radon. Thirty-seven and one half percent (37.5%) of the sites were found to have radon concentrations over 4.0 picoCuries/liter of air (piC/l). The US EPA's recommended exposure limit is 4.0 piC/l, based on an assumed residential exposure of 16 hours per day. No actual on-site radon levels have been determined.

Conclusions

This section of the report is provided to summarize the findings and assist the client with any environmental concerns which are discovered during the historical research, facility inspection, and records review. It is not intended to be a substitute for reading the entire report. The following findings and conclusions were observed:

1) Sprint PCS Site #023D is situated on a 35 acre parcel that is part of a 200 acre property northeast of Butler, Kentucky. Weeds, shrubs, and trees covered the site at the time of the inspection. No environmental concerns were encountered at the site.

2) According to the Kentucky Department of Natural Resources, State Nature Preserves Commission, 13 species of endangered mussels and one endangered fish which inhabit the Licking River were identified within one mile of the Sprint PCS Site #023D. The Licking River is located approximately one-half mile south of the site. Construction activities at the site are not likely to disrupt or impact the endangered species or their habitats. Based on this information, question number 3 on the NEPA Land Use Screening Checklist is answered "negative."

3) According to employees of the Pendleton County Farm Service Agency and the Soil and Water Conservation District Office, National Wetlands Inventory Maps were not produced for this area (Appendix E). The Sprint PCS Site #023D is situated on a hillside near the top of a steeply graded hill. Wetland characteristics were not observed on the day of the inspection. Based on this information, number 7 of the NEPA Land Use Screening Checklist was answered "negative."

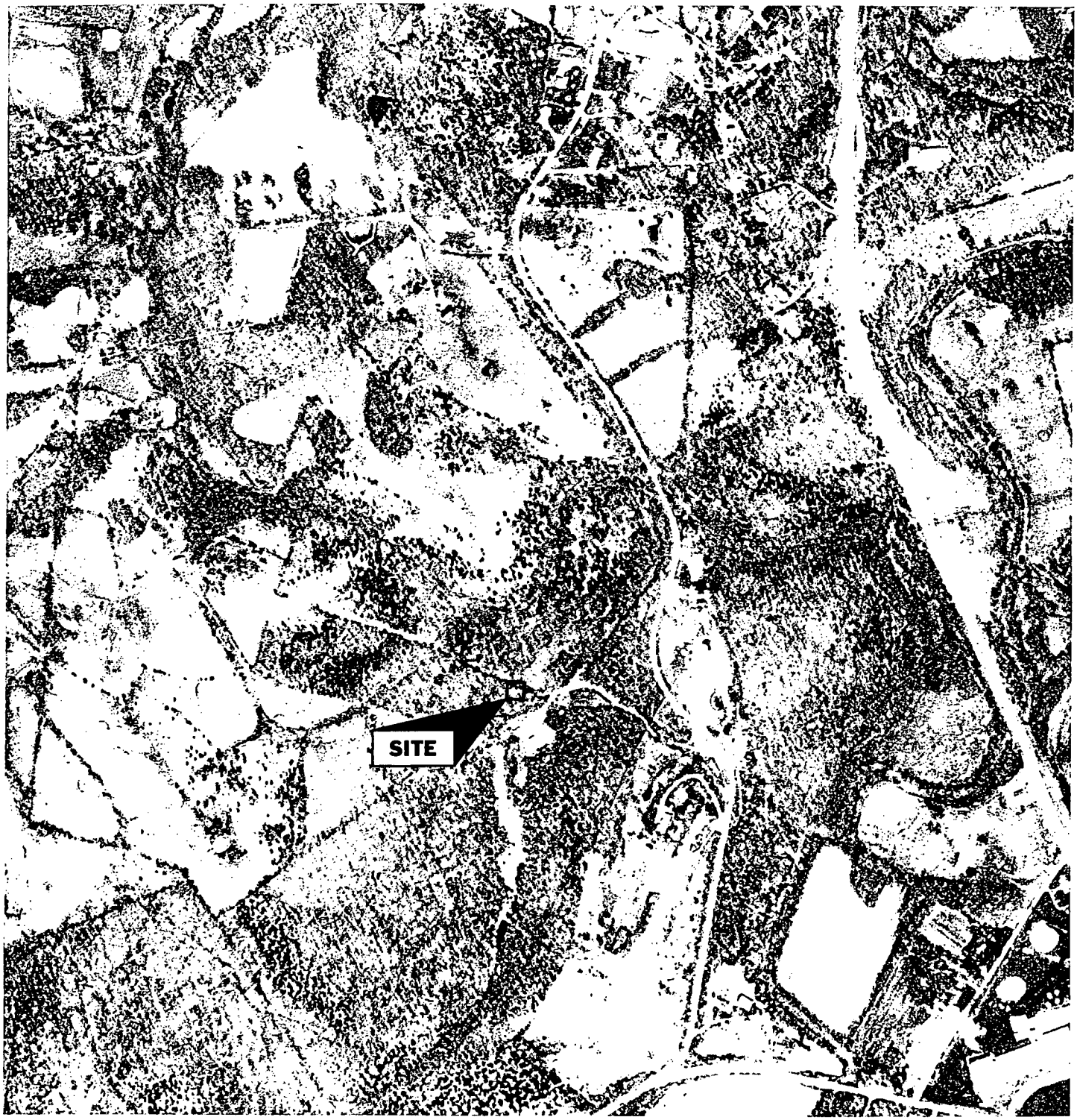
Recommendations

Based on the site inspection, records review, and historical review, no further environmental investigations are recommended for this site.

Appendices

APPENDIX A

AERIAL PHOTOGRAPHS

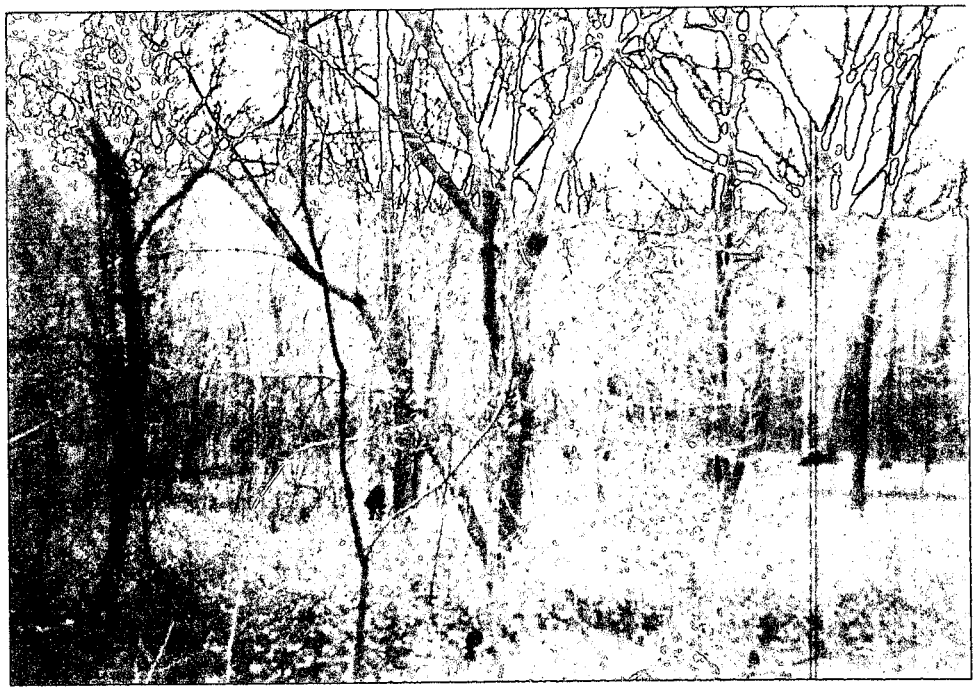


PENDLETON COUNTY, KENTUCKY
DATE: 1995
SCALE: 1"=660'
SOURCE: PENDLETON COUNTY SOIL AND WATER CONSERVATION DISTRICT OFFICE

N

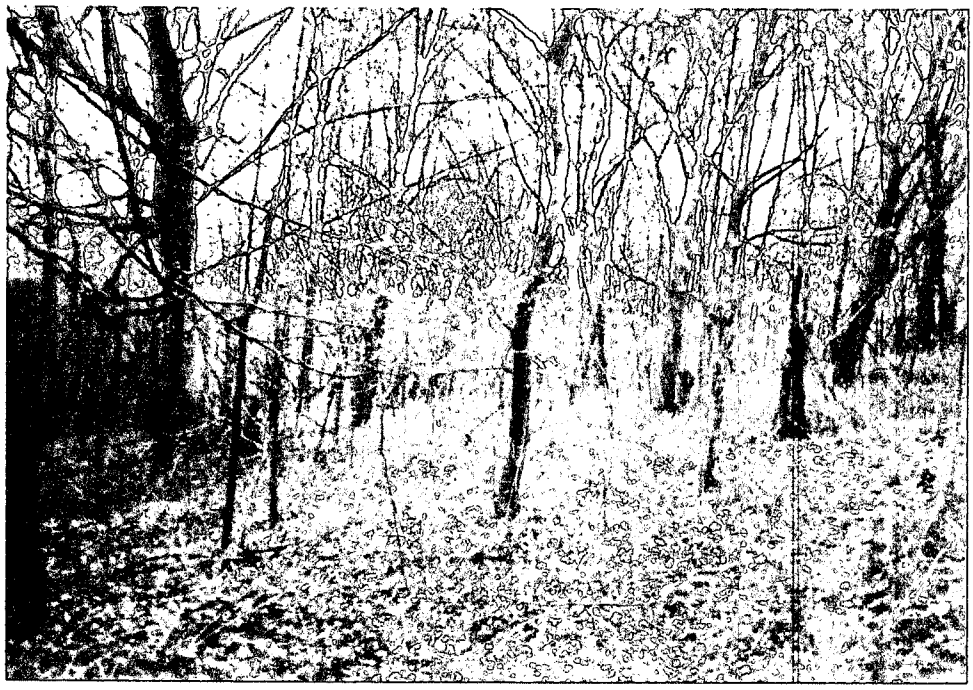
SAGAMORE ENVIRONMENTAL SERVICES, INC.

1995 AERIAL PHOTOGRAPH
SPRINT PCS SITE #023D
R. R. 3 BOX 438
BUTLER, KENTUCKY
SAGAMORE PROJECT NO. 9230M



1. VIEW OF SITE LOOKING NORTH

2. VIEW OF SITE LOOKING SOUTH



3. VIEW OF SITE LOOKING EAST

4. VIEW OF SITE LOOKING WEST

APPENDIX C

ECOSEARCH PRIORITY RISK REPORT

EcoSearch Environmental Resources, Inc.

9365 Counselors Row Suite 104
Indianapolis, Indiana 46240
ph: (317) 574-8830 fax: (317) 574-8840

EcoSearch Environmental Site Assessment

Type of Report:	Priority Risk Report
Site Location:	**Cin Sprint #023D** **RR 3 Box 438 Duckers Road** **Butler, KY 41006**
Date:	April 7, 1999
Report ID Number:	1705-5103
Especially Prepared For:	Mr. Kent Shadley Sagamore Environmental Service
PO Number:	9230M

Thank you for choosing EcoSearch.

Introduction

We want to thank you for your order requesting the enclosed site assessment.

EcoSearch makes every effort possible to combine the most accurate environmental data available into an understandable and easy-to-use format.

While every attempt has been made to ensure accuracy of the information presented, we cannot guarantee the accuracy of the data from the original sources, nor can we guarantee that no transcription or plotting errors have occurred.

If any concerns arise from your review of the databases in this report, please call the appropriate agency involved. As a service, we have included phone numbers in the database description section of this report to help you in your evaluation.

The enclosed maps present a working approximation of the location of surrounding environmental sites based primarily on available accurate site addresses. These maps should not be used for purposes more correctly handled by surveys.

EcoSearch is driven by its mission to present the most responsive, technically sound, and cost-effective environmental data services available to our customer.

Read Me First

The following suggestions are offered in an attempt to help you in using and understanding this site assessment from EcoSearch:

1. Skim over the entire report to familiarize yourself with its contents and layout.

2. You will notice that the information is presented following this general concept: we begin by giving sections that summarize data and then give detailed information about these summaries as you proceed further into the report.

3. Then refer to the section titled "Statistical Overview". You will need to take a moment to read the column headings and the data below them. Also, as you go down the first column (left side) you will probably need to look back at the preceeding section titled "Database Descriptions". Please pay particular attention to the radius searched as they vary according to the database. These are ASTM standards that we meet and exceed. Your site's datum is the third, shaded column. Also, the next column showing database hits within the first radius is important as it will include data about adjoining properties. The unmappable sites have their own section with a cover page explaining them.

4. The next section titled "Maps" is important as it gives a very clear visual presentation of the site, and which database(s) are at the site itself or within the study radii.

5. The site summary page(s) tells you by map ID# which database is at that location as well as the site's name and distance/direction from your study site. You will notice that the numbering corresponds to the distance from the subject site-- eg. #1 is your site itself or the site closest to it, #2 is further away. This continues until all database hits have been summarized within the largest study radius. Your report may extend further than one mile if you asked us to extend the radii.

6. As you will recall our format goes from summary-type pages to detailed information. Therefore, the next section is "Detailed Data". Here extensive data is given about each database hit. The map ID#, distance, and direction are in the top left corner. Further data follows.

7. The "Unmappable" section was referred to earlier. In this summary you will find those sites. Please read the cover page as it describes unmappable sites and our efforts to minimize and/or eliminate them from all of our site assessments.

8. The last two divisions -- "Radon" and "Glossary/Acronyms" are self-explanatory and often helpful to our customers.

If you would like further help in understanding our reports please call as our intention is to have this report helpful to you.

Database Descriptions -- Federal Databases

NPL

National Priorities List

US Environmental Protection Agency
Office of Solid Waste and Emergency Response
(703) 603-8881

Data Date: October 7, 1998
Release Date: November 18, 1998
Active Date: December 9, 1998

The NPL is a subset of the CERCLIS and lists over 1,150 of the nation's most dangerous sites of uncontrolled or hazardous waste which require cleanup. Also known as the Superfund List, the sites are scored according to the hazardous ranking system.

CERCLA (Active)

Comprehensive Environmental Response, Compensation, and Liability Information System (Active)

US Environmental Protection Agency
Office of Solid Waste and Emergency Response

Data Date: October 7, 1998
Release Date: November 18, 1998
Active Date: December 9, 1998

CERCLIS maintains information on over 15,000 sites nationally identified as hazardous or potentially hazardous which may require action. These sites are currently being investigated or an investigation has been completed regarding the release of hazardous substances. The most serious of this list as ranked by the hazardous ranking system are transferred to the NPL.

CERCLA (NFRAP Archive)

Comprehensive Environmental Response, Compensation, and Liability Information System (NFRAP Archive)

US Environmental Protection Agency
Office of Solid Waste and Emergency Response

Data Date: October 7, 1998
Release Date: November 18, 1998
Active Date: December 9, 1998

For more complete information purposes we include sites which have been reclassified as No Further Remedial Action Planned (NFRAP) by the EPA. This action was taken by the EPA beginning February 1995 as a part of the Brownfields Redevelopment Program. These former CERCLIS sites, also known as the CERCLIS Archive, have been delisted because a lack of significant contamination was found.

RCRA TSD

Resource Conservation and Recovery Information System -- Treatment, Storage, and Disposal Facilities

US Environmental Protection Agency
Office of Solid Waste and Emergency Response
(202) 260-4348

Data Date: January 1, 1999
Release Date: February 2, 1999
Active Date: April 5, 1999

RCRIS contains information on hazardous waste handlers regulated by the US Environmental Protection Agency under the Resource Conservation and Recovery Act (RCRA). It is a national system used to track events and activities which fall under RCRA. The TSD database is a subset of the complete RCRIS file which includes facilities which treat, store, dispose, or incinerate hazardous waste. Additionally, compliance and corrective action (CORRACTS) information is included.

RCRA LQ Generator

Resource Conservation and Recovery Information System -- Large Quantity Generator

US Environmental Protection Agency
Office of Solid Waste and Emergency Response
(202) 260-4348

Data Date: January 1, 1999
Release Date: February 2, 1999
Active Date: April 5, 1999

RCRIS contains information on hazardous waste handlers regulated by the US Environmental Protection Agency under the Resource Conservation and Recovery Act (RCRA). It is a national system used to track events and activities which fall under RCRA. The generators database is a subset of the complete RCRIS file which includes hazardous waste generators which create more than 100kg of hazardous waste per month or meet other requirements of RCRA.

RCRA SQ Generator

Resource Conservation and Recovery Information System -- Small Quantity Generator

US Environmental Protection Agency
Office of Solid Waste and Emergency Response
(202) 260-4348

Data Date: January 1, 1999
Release Date: February 2, 1999
Active Date: April 5, 1999

RCRIS contains information on hazardous waste handlers regulated by the US Environmental Protection Agency under the Resource Conservation and Recovery Act (RCRA). It is a national system used to track events and activities which fall under RCRA. The generators database is a subset of the complete RCRIS file which includes hazardous waste generators which create more than 100kg of hazardous waste per month or meet other requirements of RCRA.

ERNS

Emergency Response Notification System

US Environmental Protection Agency
Office of Solid Waste and Emergency Response
(202) 260-2342

Data Date: January 19, 1999
Release Date: January 19, 1999
Active Date: March 8, 1999

ERNS is a national database which contains information on specific notification of releases of oil and hazardous substances into the environment. The system stores data regarding the site of the spill, the material released, and the medium into which it occured. As a joint effort, the Department of Transportation and the Environmental Protection Agency have collaborated to compile more than 290,000 records.

Database Descriptions -- State Databases

LEAD (HWS)

Kentucky Lead (State Superfund) List

Kentucky Department for Environmental Protection
Waste Management / Superfund Branch
(800) 928-4273

Data Date: December 28, 1998
Release Date: December 28, 1998
Active Date: February 9, 1999

The Kentucky Lead list contains State Superfund sites that are under investigation or under remediation by the Commonwealth of Kentucky.

SWF

Kentucky Solid Waste Facilities List

Kentucky Department for Environmental Protection
Solid Waste Branch
(800) 928-4273

Data Date: November 15, 1998
Release Date: November 15, 1998
Active Date: January 21, 1999

The Kentucky Solid Waste Branch Landfill list contains information on permitted landfill operations in the Commonwealth of Kentucky.

UST

Kentucky Underground Storage Tank List

Kentucky Department for Environmental Protection
Underground Storage Tank Branch
(800) 928-4273

Data Date: February 23, 1999
Release Date: February 23, 1999
Active Date: March 25, 1999

The Kentucky Underground Storage Tank List includes information on facilities, tanks, and owners of UST sites in the Commonwealth of Kentucky.

EcoSearch Statistical Overview

Property Information

RR 3 Box 438 Duckers Road
Butler, KY 41006

Latitude: 38.795556 N Longitude: 84.369722 W

Search Parameters

Report: **Priority Risk Report**
Radii: **ASTM***
Zip Code(s): **41006**
City: **Butler**
County: **Pendleton**

FEDERAL DATABASES	Radius (miles)	Mappable Sites					Unmappable Sites		
		Total	Site	within 1/4mi	0.25 - 1.00mi	1.00 - 0.00mi	Zip Code	City	County
NPL	1.000	0	0	0	0	-	0	0	0
CERCLA (Active)	1.000	0	0	0	0	-	0	0	0
CERCLA (NFRAP Archive)	1.000	0	0	0	0	-	0	0	0
RCRA TSD	1.000	0	0	0	0	-	0	0	0
RCRA LQ Generator	0.250	0	0	0	-	-	0	0	0
RCRA SQ Generator	0.250	0	0	0	-	-	0	0	0
ERNS	0.250	0	0	0	-	-	-	-	-

STATE DATABASES	Radius (miles)	Mappable Sites					Unmappable Sites		
		Total	Site	within 1/4mi	0.25 - 1.00mi	1.00 - 0.00mi	Zip Code	City	County
LEAD (HWS)	1.000	0	0	0	0	-	0	0	0
SWF	1.000	0	0	0	0	-	1	0	0
UST	0.250	0	0	0	-	-	0	0	0

MANUAL GEOCODING:^ For this city/township, **24** sites were manually plotted by EcoSearch.

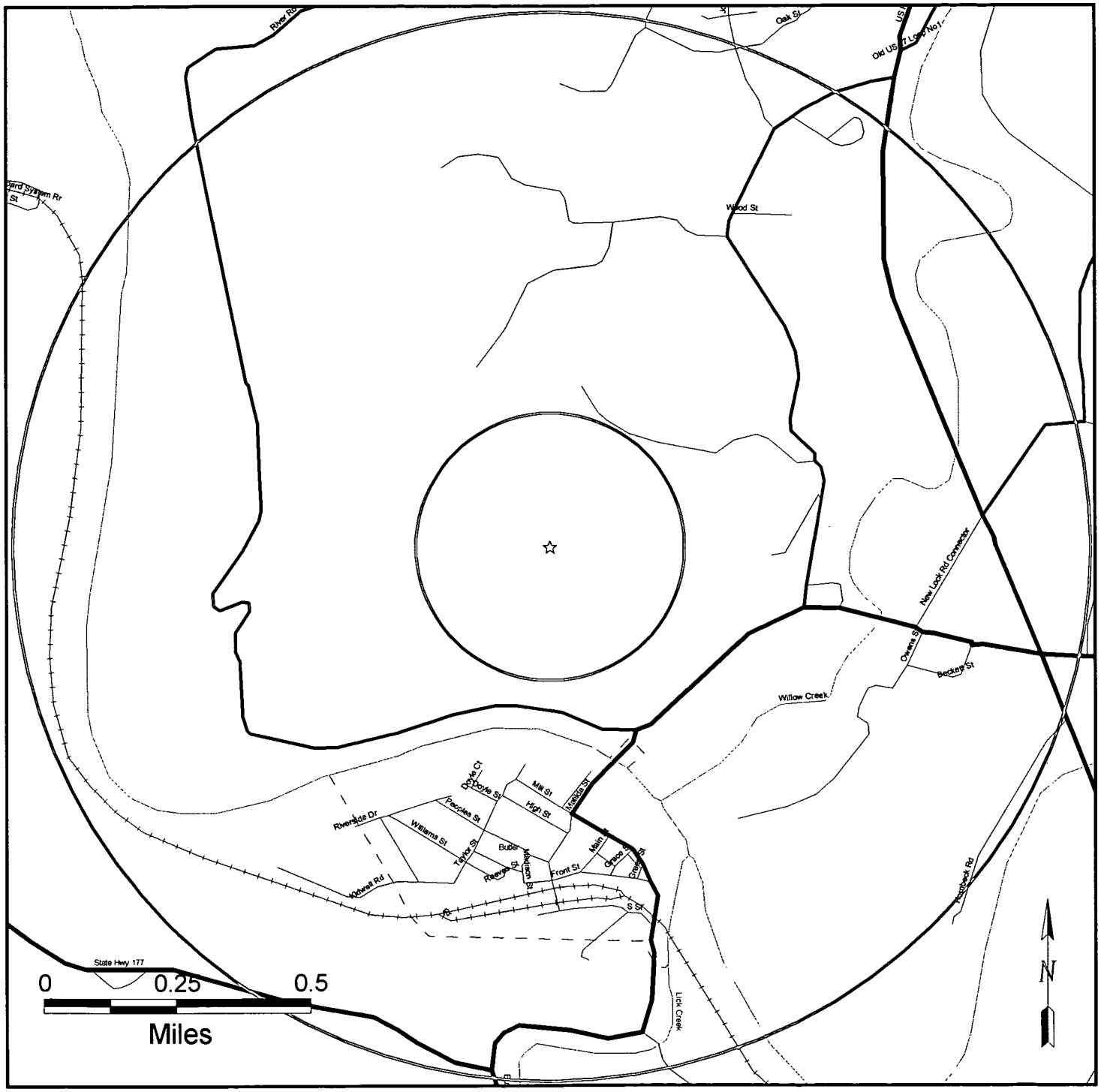
* This database search and study radii meets or exceeds the ASTM (American Society of Testing and Materials) standards for a government records review.

^ Manual Geocoding: Plotting environmental site data using paper maps and phone calls to properly place the information on the map.

Accurate street addresses are required for records to be found at the study property.

Mappable Sites are environmental sites which were located and appear on the enclosed EcoSearch Map, Site Summary, and Detailed Data sections of the report. These sites are summarized based on proximity to the study site.

Unmappable Sites are governmental records with incomplete or inaccurate address information. These sites could not be located on the street map, but have been searched by the Zip Codes, Cities, and County specified in the search parameters. Further investigation of these sites and their relationship to your study site is necessary.



EcoSearch Environmental Resources, Inc.

Priority Risk Report Map

Report ID: 1705-5103
Site: RR 3 Box 438 Duckers Road
Butler, KY 41006

☆ Study Site
⍟ Study Site Matches Database

FEDERAL DATABASES	Radius (mi)
NPL Sites	1.00
CERCLA (Active) Sites	1.00
CERCLA (NFRAP Archive) Sites	1.00
RCRA TSD Sites	1.00
RCRA LQ Generator Sites	0.25
RCRA SQ Generator Sites	0.25
ERNS Sites	0.25

STATE DATABASES	
LEAD (HWS) Sites	1.00
SWF Sites	1.00
UST Sites	0.25

MULTIPLE MATCHES / AREAS

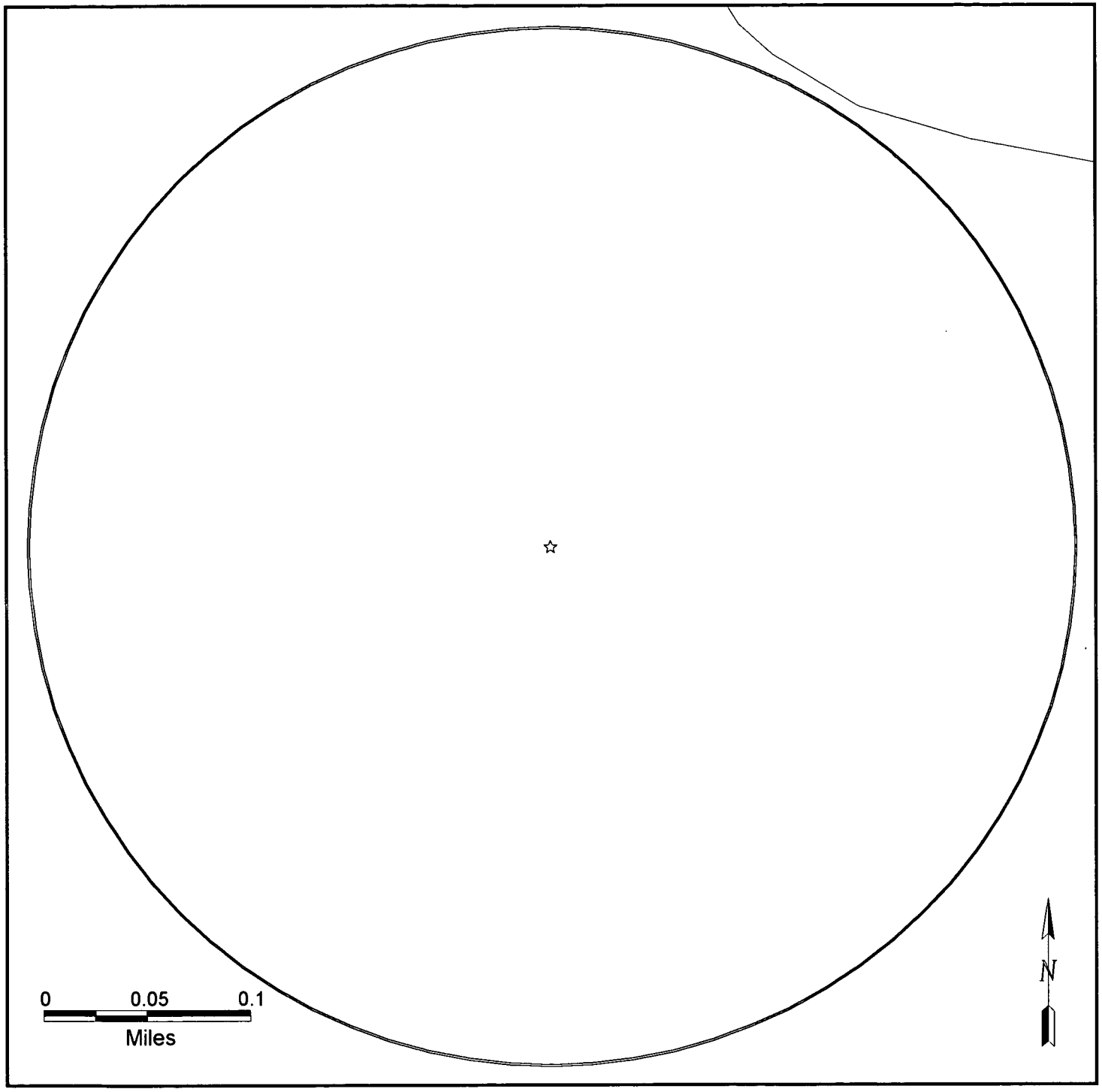
- Two Database Matches
- Three or More Matches
- Database Area Site

MAP LEGEND

- Parks
- Incorp. Areas
- Water
- Cemeteries
- Streets
- Secondary Roads
- Primary Roads
- Freeways
- Railroads
- Boundaries

Radii: 0.25 mile, 1.00 mile

Note: The information contained on this map is subject to the general disclaimer on the first page.



EcoSearch Environmental Resources, Inc.

Priority Risk Report Map

Report ID: 1705-5103
Site: RR 3 Box 438 Duckers Road
Butler, KY 41006

☆ Study Site
☆ Study Site Matches Database

FEDERAL DATABASES	Radius (mi)
NPL Sites	1.00
CERCLA (Active) Sites	1.00
CERCLA (NFRAP Archive) Sites	1.00
RCRA TSD Sites	1.00
RCRA LQ Generator Sites	0.25
RCRA SQ Generator Sites	0.25
ERNS Sites	0.25

STATE DATABASES	
LEAD (HWS) Sites	1.00
SWF Sites	1.00
UST Sites	0.25

MULTIPLE MATCHES / AREAS
Two Database Matches
Three or More Matches
Database Area Site

MAP LEGEND

Parks	Streets
Incorp. Areas	Secondary Roads
Water	Primary Roads
Cemeteries	Freeways
	Railroads
	Boundaries

Radii: 0.25 mile, 1.00 mile

Note: The information contained on this map is subject to the general disclaimer on the first page.

Source: United States Geological Survey, 7.5 minute Topographic Map (Digital Raster Graphics)

EcoSearch Environmental Resources, Inc.

USGS 7.5 Minute Topographical Map

Report ID: 1705-5103
Site: RR 3 Box 438 Duckers Road
Butler, KY 41006

○ Study Site

Map Features are Color Coded

Black -- Cultural features such as roads and buildings.

Blue -- Hydrographic features such as lakes and rivers.

Brown -- Hypsographic (elevation) features shown by contour lines.

Green -- Woodland cover, scrub, orchards, and vineyards.

Red -- Important roads and public land survey system.

Purple -- Features added from aerial photographs during map revision. The changes are not field checked.

A detailed Topographic Map Symbols pamphlet is available from EcoSearch free upon request.

Radii: 0.25 mile, 0.50 mile, 1.00 mile

Topographical Maps:

Butler, KY -- 1981
Photoinspected 1984
De Mossville, KY -- 1981

Site Summary

Map ID#	Database / Agency ID#	Site Name, Address, and County	Distance/Direction

No sites found within the study radii of your report.

---

* -- Manually Geocoded: Site plotted or corrected using paper maps, phone calls, and other resources to properly place the site on the map.

** -- Agency Provided Lat/Long: Site plotted using the latitude and longitude given by the federal or state government agency.

*** -- Area Manually Plotted: Area manually drawn using digital and paper maps.

Detailed Data

No environmental sites were found within the reported distances from your study site. There is no detailed data to report.

Unmappable Sites

A limitation of many records of governmental databases is incomplete or incorrect address information. Without proper addresses, it is more difficult to locate and map these sites.

Instead of leaving these potentially important sites out of the EcoSearch report, we implement a painstaking manual geocoding strategy aimed at plotting these unmappable sites by looking at zip codes, city names, and county names identified with the radius around your study site. The zip codes, cities, and counties searched are identified on the EcoSearch Statistical Overview page.

Our sophisticated mapping software, enhanced TIGER street maps, and address correction database processing methods find and plot most environmental sites. We then perform manual geocoding, plotting those sites the computer fails to find using a variety of resources. These include using our in-house collection of paper maps, directories, cross-referencing database information, and calling post offices, local government, or the sites themselves to accurately locate environmental records. We also correct obvious TIGER street map errors and omissions.

This effort at manual geocoding results in a short or non-existant orphan/unmappable list and increases accuracy and reliability of the data in our reports. We have elected not to computerize this part of our report due to the importance of presenting all data as completely and accurately as humanly possible. When this function is computerized it is impossible to produce a report as accurate as one where manual geocoding has taken place.

The limited number of sites which could not be reasonably found through our geocoding strategy are presented in this section for further review to assess their impact on your study site.

After the summary unmappable site information, detailed data follows.

Unmappable Sites

Database	Agency ID#	Site Name and Address	County
SWF Kentucky Solid Waste Facility	096-00005	GRIFFIN INDUSTRIES INC RR 2 BOX 69 BUTLER, KY 41006-9668	PENDLETON

Kentucky SWF Data

Kentucky Solid Waste Facilities Data

Map ID#: **1UN** Distance (mi): **0.00000**
Direction:

Permit ID: **096-00005**

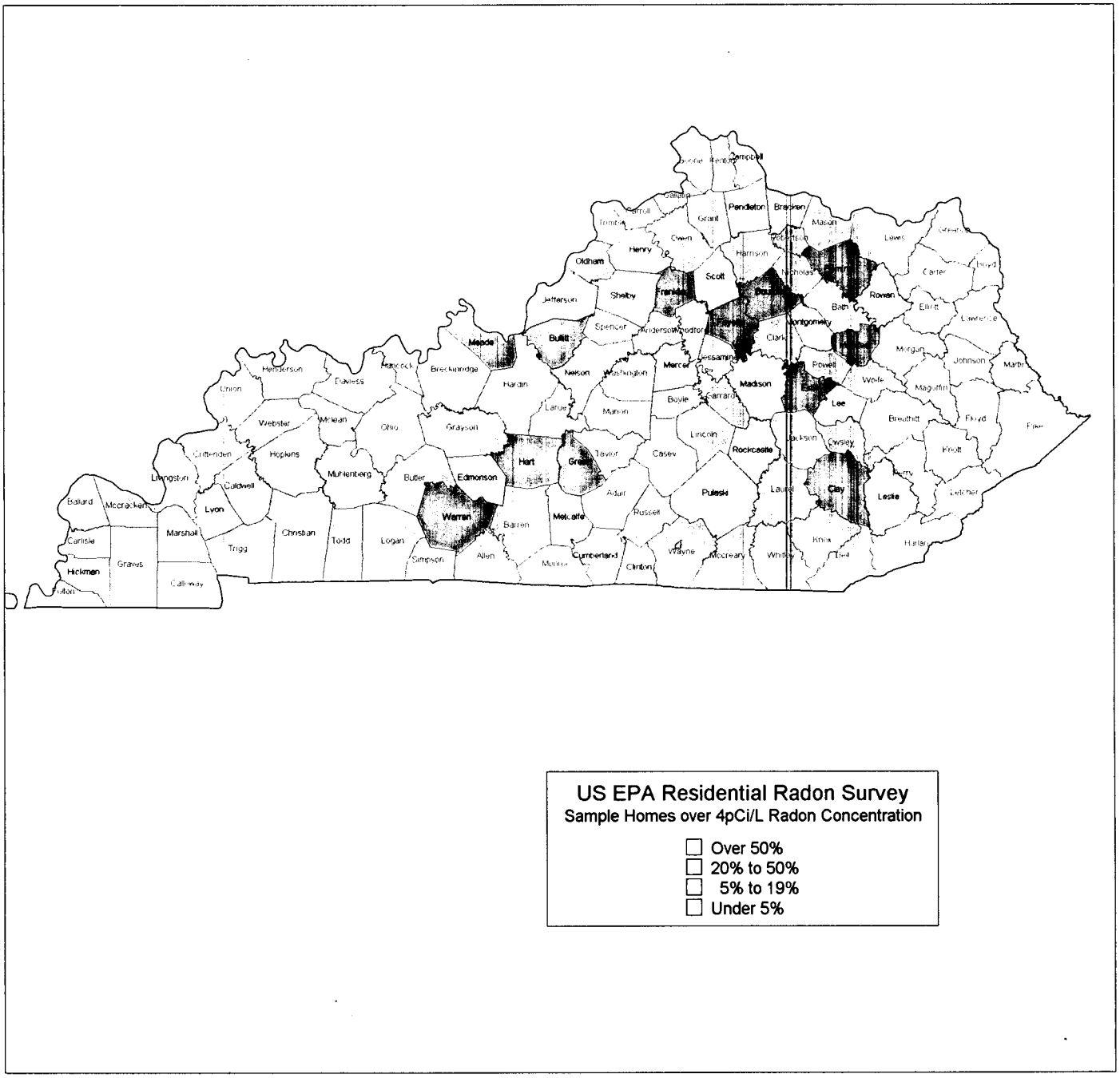
County: **PENDLETON**

Owner Name: **GRIFFIN INDUSTRIES INC**
Owner Address: **ROUTE 2 BOX 69**
Owner City, St, Zip: **BUTLER, KY 41006**
Owner Phone: **606-472-7361**

Facility Type	Facility Status	Activity Type	Activity Status	Contact	Phone
LANDFARM	APPLICATION APPROVED	ACTIVITY APPROVED	SOLID WASTE LANDFARM	DOUGLAS BUCKNER	606-472-7361

Note: The Kentucky SWF Database identifies its sites only by name and county. The locations are plotted manually by EcoSearch.

EcoSearch Radon Risk Map for Kentucky



SOURCE: EPA Map for Radon Zones (Kentucky), September 1993. The data is based on the State/EPA Residential Radon Survey which was conducted in Kentucky between 1986 and 1987. This map shows the percentage of homes in each county registering over 4 pCi/L (picocuries per liter) radon concentration. For additional information on this survey, consult the next page.

Note: The information provided on this map is subject to the disclaimer on the first page. This map is NOT intended to determine if a property in a given county should be tested for radon. Properties with elevated levels of radon have been found in all counties. If or when radon is a concern, all properties should be tested regardless of the county designation.

EPA Residential Radon Survey for Kentucky

County	Sample Size	Homes over 4pCi/L Number	Homes over 4pCi/L Percentage	Homes over 20pCi/L Number	Homes over 20pCi/L Percentage
Adair	1	0	0.00%	0	0.00%
Allen	4	0	0.00%	0	0.00%
Anderson	2	0	0.00%	0	0.00%
Ballard	8	0	0.00%	0	0.00%
Barren	7	0	0.00%	0	0.00%
Bath	7	1	14.29%	0	0.00%
Bell	4	0	0.00%	0	0.00%
Boone	13	0	0.00%	0	0.00%
Bourbon	10	6	60.00%	1	10.00%
Boyd	19	1	5.26%	0	0.00%
Boyle	2	0	0.00%	0	0.00%
Bracken	4	1	25.00%	0	0.00%
Breathitt	1	0	0.00%	0	0.00%
Breckinridge	4	0	0.00%	0	0.00%
Bullitt	11	6	54.55%	2	18.18%
Butler	14	0	0.00%	0	0.00%
Caldwell	5	0	0.00%	0	0.00%
Calloway	8	0	0.00%	0	0.00%
Campbell	25	3	12.00%	0	0.00%
Carlisle	4	0	0.00%	0	0.00%
Carroll	1	0	0.00%	0	0.00%
Carter	3	0	0.00%	0	0.00%
Casey	7	1	14.29%	0	0.00%
Christian	16	1	6.25%	0	0.00%
Clark	4	0	0.00%	0	0.00%
Clay	1	1	100.00%	0	0.00%
Clinton	3	1	33.33%	0	0.00%
Crittenden	6	0	0.00%	0	0.00%
Cumberland	3	1	33.33%	1	33.33%
Daviess	20	0	0.00%	0	0.00%
Edmonson	5	1	20.00%	0	0.00%
Elliott	2	0	0.00%	0	0.00%
Estill	4	3	75.00%	1	25.00%
Fayette	52	26	50.00%	1	1.92%
Fleming	2	1	50.00%	0	0.00%
Floyd	5	0	0.00%	0	0.00%
Franklin	17	9	52.94%	0	0.00%
Fulton	1	0	0.00%	0	0.00%
Gallatin	1	0	0.00%	0	0.00%
Garrard	5	0	0.00%	0	0.00%
Grant	1	0	0.00%	0	0.00%
Graves	12	0	0.00%	0	0.00%
Grayson	6	0	0.00%	0	0.00%
Green	2	1	50.00%	0	0.00%
Greenup	12	2	16.67%	0	0.00%
Hancock	1	0	0.00%	0	0.00%
Hardin	26	2	7.69%	0	0.00%
Harlan	1	0	0.00%	0	0.00%
Harrison	5	0	0.00%	0	0.00%
Hart	9	7	77.78%	2	22.22%
Henderson	8	0	0.00%	0	0.00%
Henry	3	1	33.33%	0	0.00%
Hickman	3	1	33.33%	0	0.00%
Hopkins	8	0	0.00%	0	0.00%
Jackson	4	0	0.00%	0	0.00%
Jefferson	111	28	25.23%	2	1.80%
Jessamine	11	2	18.18%	0	0.00%
Johnson	2	0	0.00%	0	0.00%
Kenton	40	1	2.50%	0	0.00%
Knott	2	0	0.00%	0	0.00%
Knox	4	0	0.00%	0	0.00%
Larue	3	0	0.00%	0	0.00%
Laurel	5	0	0.00%	0	0.00%
Lawrence	4	0	0.00%	0	0.00%
Lee	4	1	25.00%	0	0.00%
Leslie	4	1	25.00%	0	0.00%
Letcher	5	0	0.00%	0	0.00%
Lewis	2	0	0.00%	0	0.00%
Lincoln	0	0	0.00%	0	0.00%
Livingston	3	0	0.00%	0	0.00%
Logan	8	0	0.00%	0	0.00%
Lyon	3	1	33.33%	0	0.00%
Madison	5	1	20.00%	0	0.00%
Magoffin	1	0	0.00%	0	0.00%
Marion	3	0	0.00%	0	0.00%
Marshall	9	0	0.00%	0	0.00%
Martin	0	0	0.00%	0	0.00%
Mason	8	0	0.00%	0	0.00%
Mccracken	15	0	0.00%	0	0.00%
Mccreary	6	0	0.00%	0	0.00%
Mclean	5	0	0.00%	0	0.00%
Meade	4	2	50.00%	1	25.00%
Menifee	2	2	100.00%	0	0.00%
Mercer	10	3	30.00%	0	0.00%
Metcalfe	5	1	20.00%	0	0.00%
Monroe	3	0	0.00%	0	0.00%
Montgomery	5	1	20.00%	0	0.00%
Morgan	7	0	0.00%	0	0.00%
Muhlenberg	6	1	16.67%	0	0.00%
Nelson	13	5	38.46%	0	0.00%
Nicholas	5	0	0.00%	0	0.00%
Ohio	3	0	0.00%	0	0.00%
Oldham	2	1	50.00%	0	0.00%
Owen	1	0	0.00%	0	0.00%
Owsley	0	0	0.00%	0	0.00%
Pendleton	8	3	37.50%	0	0.00%
Perry	4	0	0.00%	0	0.00%
Pike	9	0	0.00%	0	0.00%
Powell	4	0	0.00%	0	0.00%
Pulaski	8	3	37.50%	0	0.00%
Robertson	2	0	0.00%	0	0.00%
Rockcastle	4	1	25.00%	1	25.00%
Rowan	3	1	33.33%	0	0.00%
Russell	2	0	0.00%	0	0.00%
Scott	8	2	25.00%	1	12.50%
Shelby	6	2	33.33%	0	0.00%
Simpson	8	1	12.50%	0	0.00%
Spencer	1	0	0.00%	0	0.00%
Taylor	4	0	0.00%	0	0.00%
Todd	6	0	0.00%	0	0.00%
Trigg	8	0	0.00%	0	0.00%
Trimble	1	0	0.00%	0	0.00%
Union	6	0	0.00%	0	0.00%
Warren	25	15	60.00%	2	8.00%
Washington	3	0	0.00%	0	0.00%
Wayne	1	0	0.00%	0	0.00%
Webster	3	0	0.00%	0	0.00%
Whitley	6	0	0.00%	0	0.00%
Wolfe	2	0	0.00%	0	0.00%
Woodford	6	1	16.67%	0	0.00%

SOURCE: US EPA Map of Radon Zones: Kentucky:

This EPA/State survey was conducted in Kentucky during the winters of 1986-87. 879 homes were tested with short-term (2-7 day) the lowest livable area of the home. These tests determine the radon concentration, measured in pCi/L (picocuries per liter). The measurement in the U.S. is between 1 and 2 pCi/L. The EPA has established the guideline of 4 pCi/L as an

NOTE: The sample size in each county may not be sufficient to show statistical significance. This information is NOT intended to a given county should be tested for radon. If or when radon is a concern, all properties should be tested regardless

Environmental Glossary

Acid
A large class of substances having a pH less than seven. An acid waste is considered hazardous when the pH is 2.0 or less.

Acute Effect
An adverse effect on a human or animal body, with severe symptoms developing rapidly and coming quickly to a crisis.

Acute Exposure
A dose that is delivered to the body in a single event or in a short period of time.

Aerobic
Occurring in the presence of free oxygen.

Alkaline
A substance with a pH between 7 and 14. An alkaline waste is considered hazardous when its pH is 12.5 or greater.

Ambient
Existing conditins of air, water, and other media at a particular time.

Anaerobic
Occurring in the absence of oxygen.

Assessment
An analysis or examination.

Background Environmental Sample
Samples that are considered to contain no contaminants or known concentrations of contaminants.

Base
A substance which forms a salt when reacted with an acid. Bases have a pH of greater than seven.

Buffer Zone
An area of land which surrounds a hazardous waste facility and on which certain land uses and activities are restricted to protect the public health and safety and the environment from existing or potential hazards caused by the migration of hazardous waste (CH&SC Sec. 25110.3).

Carcinogen
A substance or agent capable of causing or producing cancer in mammals.

Caustics
A large class of substances which form solutions having a high pH.

Chronic Effect
An adverse effect on a human or animal body, with symptoms which develop slowly over a long period of time or which reoccur frequently.

Chronic Exposure
Low doses repeatedly received by the body over a long period of time.

Combustible
A term used by the NFPA, DOT, and others to classify certain liquids that will burn, on the basis of flash points. Both the NFPA and DOT generally define "combustible liquids" as having a flash point of 100° F or higher.

Concentration
The relative amount of a substance when combined or mixed with other substances.

Contingency Plan
A document setting out an organized, planned, and coordinated course of action to be followed in case of a fire or explosion or release of a hazardous waste from a TSD or a generator's facility that could threaten human health or the environment (RCRA).

Corrosive
As defined by DOT, a corrosive material is a liquid or solid that causes visible destruction or irreversible alterations in human skin tissue at the site of contact or in the case of leakage from its packaging a liquid that has a severe corrosion rate on steel. A solid or liquid which exhibits these characteristics can be regulated as hazardous waste.

Decomposition
Breakdown of material or substance (by heat, chemical reaction, electrolysis, decay, or other processes) into elements or simpler compounds.

Decontamination
The process of removing contaminants from individuals and equipment.

Deep Well Injection
Disposal of wastes by injecting them into a geological formation deep in the ground, sometimes after pretreatment to avoid solidification.

EPA ID Number
This unique number assigned by EPA to each generator, transporter, or TSD.

Effluent
Waste material, either treated or untreated, discharged into the environment.

Environmental Assessment
The measurement or prediction of the transport, dispersion, and final location of a hazardous substance when released into the environment.

Environmental Emergencies
Incidents involving the release (or potential release) of hazardous materials into the environment which require immediate remedial action.

Environmental Hazard
A condition capable of posing risk of exposure to air, water, soil, plants, or wildlife.

Exception Report
A report that generators who transport waste off-site must submit if they do not receive a properly completed copy of their manifest within 45 days of the date on which the initial transporter accepted the waste.

Generator
The person or facility who, by nature or ownership, management or control, is responsible for causing or allowing to be caused, the creation of hazardous waste.

Glovebag
A device used to remove a section of pipe insulation without isolating the entire space or room.

Groundwater Hydrology
The study of the movement of water below the earth's surface.

Hazard
A circumstance or condition that can cause harm. Hazards are often categorized into four groups: biological, chemical, physical, and radiation.

Hazard Classes
A series of nine descriptive terms that have been established by the UN Committee of Experts to categorize the hazardous nature of chemical, physical, and biological materials. These categories are: flammable liquids, explosives, gases, oxidizers, radioactive materials, corrosives, flammable solids, poisonous and infectious substances, and dangerous substances.

Hazardous Waste
Any material that is subject to the hazardous waste manifest requirements of the EPA specified in the CFR, Title 40, Part 262 or would be subject to these requirements in the absence of an interim authorization to a State under CFR, Title 40, Part 123, Subpart F.

Heavy Metals

Certain metallic elements having a high density and generally toxic, e.g., lead, silver, mercury, and arsenic.

Immediate Removal

Actions undertaken to prevent or mitigate immediate and significant risk of harm to human life or health or the environment. As set forth in the National Contingency Plan, these actions shall be terminated after $1 million has been obligated or six months have elapsed from the date of initial response.

Incident

The release or potential release of a hazardous substance into the environment.

Inert

Exhibiting no chemical activity; totally unreactive.

Innocent Land Owner's Defense

The defense of a purchaser of real property that he or she exercised due diligence in having hazards assessed prior to purchase.

Interim Status

Allows owners and operators of TSDs that were in existence, or for which construction had commenced, prior to November 19, 1980 to continue to operate without a permit after this date pending final issuance from RCRA.

Joint and Several Liability

Under federal law each party that contributed to damages may be held liable for all damages, but each has the right to compel the others to contribute and indemnify.

Liability

Being subject to legal action for one's behavior.

MSDS Material Safety Data Sheet

Required by OSHA of owners to alert employees to hazards, their effect, and protective action.

Manifest

Form which indicates generator, quantity, and type of waste for each shipment of hazardous wastes disposed in off-site facilities.

National Contingency Plan

Policies and procedures that the Federal Government follows in implementing responses to incidents involving hazardous substances.

P Wastes

A federal waste list comprised of substances categorized as acutely hazardous.

Part A

The first part of a two part application that must be submitted by a TSD to receive a permit. It contains general facility information.

Part B

The second part of a two part application that must be submitted by a TSD to receive a permit. It contains highly technical and detailed information.

Planned Removal

The removal of released hazardous substances from the environment within a non-immediate, long term time period. Under CERCLA: Actions intended to minimize increases in exposure such that time and cost commitments are limited to six months and/or $1 million.

Poison, Class A

A DOT term for extremely dangerous poisons, that is, poisonous gases or liquids of such nature that a very small amount of the gas, or vapor of the liquid, mixed with air is dangerous to life. Some examples: phosgene, cyanogen, and hydrocyanic acid.

Poison, Class B

A DOT term for liquid, solid, paste, or semisolid substances, other than Class A poisons, which are known to be toxic to man as to afford a hazard to health during transportation.

Pollutant

A substance or mixture which after release into the environment and upon exposure to any organisms will or may reasonably be anticipated to cause adverse effects in such organisms and their offspring.

Priority Pollutants

A list of chemicals selected from the list of toxic pollutants by the EPA as priority toxic pollutants for regulation under the Clean Water Act.

Remedial Actions

Responses to releases of hazardous substances on the NPL that are consistent with a permanent remedy which would prevent or mitigate the migration of materials into the environment.

Risk

The probability that an unwanted event will occur.

Second Responders

Those personnel required to assist or relieve first responders at a hazardous material incident due to their specialized knowledge, equipment, or experience. These include State environmental protection or health officials, commercial response, cleanup companies, and appropriate industry representatives.

Strict Liability

Holds a party responsible for damages irrespective of the amount of care taken in handling a hazardous substance.

Subtitle C

The part of RCRA which pertains to the management of hazardous waste.

Subtitle I

The part of RCRA which pertains to the storage of petroleum products and hazardous substances, other than wastes, in USTs.

Superfund

See CERCLA.

Synergistic

The action of two materials together which is greater in effect than the sum of the individuals actions.

TIGER Files

The US Census Bureau's TIGER files provide a nationwide computerized map with address range information.

Tort

A legal wrong, sometimes referred to as negligence.

Toxicity

The ability of a substance to produce injury by non-mechanical means once it reaches a susceptible site in or on the body.

U Wastes

A federal list of hazardous wastes which consists of substances deemed to be hazardous for hazards other than acute hazards.

-- Adapted from Lincoln Graduate Center, 1993. Real Estate Environmental Screening. San Antonio, Texas.

Acronyms and Abbreviations

-AIRS	Aerometric Information Retrieval System
-AST	Aboveground Storage Tank
-ASTM	American Society for Testing and Materials
-BLM	Bureau of Land Management
-BNA	Bureau of National Affairs
-CAA	Clean Air Act
-CDC	Centers for Disease Control
-CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
-CERCLIS	CERCLA Information System
-CICIS	Chemicals in Commerce Information System
-COE	U.S. Army Corps of Engineers
-CWA	Clean Water Act
-DDT	Dicholoro-diphenyl-dichloroethane
-DOC	Department of Commerce
-DOCKET	Enforcement Docket System--Office of Enforcement and Compliance Monitoring
-DOE	Department of Energy
-DOT	Department of Transportation
-EPA	Environmental Protection Agency
-ERCS	Emergency Response Cleanup Services
-ERNS	Emergency Response Notification System
-ESA	Environmental Site Assessment
-FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
-FINDS	Facility Index System
-FOIA	Freedom of Information Act
-FWPCA	Federal Water Pollution Control Act
-HHS	Department of Health and Human Services
-HSWA	Hazardous and Solid Waste Amendments of 1984
-HUD	Department of Housing and Urban Development
-LUST	Leaking Underground Storage Tank
-MSDS	Material Safety Data Sheet
-NEPA	National Environment Policy Act
-NESHAP	National Emission Standards for Hazardous Air Pollutants
-NFRAP	No Further Remedial Action Planned (Delisted CERCLA Site)
-NOI	Notice of Intent
-NOV	Notice of Violation
-NPDES	National Pollution Discharge Elimination System
-NPL	National Priorities List
-NRC	Nuclear Regulatory Commission
-NRIS	Nuclear Regulatory Information System
-OSHA	Occupational Safety and Health Administration

Acronyms and Abbreviations

-PADS	PCB Activity Database System
-PCB	Polychlorinated Biphenyls
-POTW	Publicly-Owned Treatment Works
-PPM	Parts Per Million
-PRP	Potentially Responsible Parties
-RAATS	RCRA Administrative Action Tracking System
-RCRA	Resource Conservation and Recovery Act of 1976
-RCRIS	Resource Conservation and Recovery Information System
-RFA	RCRA Facility Assessment
-RFI	RCRA Facility Investigation
-RI	Remedial Investigation (CERCLA)
-SARA	Superfund Amendments and Reauthorization Act of 1986
-SCS	Soil Conservation Service
-SDWA	Safe Drinking Water Act
-SETS	Superfund Enforcement Tracking System
-SSTS	Section Seven Tracking System
-SWF/LF	Solid Waste Facilities / Landfills
-TIGER	Topologically Integrated Geographic Encoding and Referencing System
-TRI	Toxic Release Inventory
-TSCA	Toxic Substances Control Act
-TSD	Treatment, Storage, or Disposal Facility
-USDA	U.S. Department of Agriculture
-USGS	U.S. Geological Survey
-UST	Underground Storage Tank
-WWTP	Wastewater Treatment Plant

APPENDIX D

SOIL SURVEY MAP

SOIL SURVEY OF GRANT AND PENDLETON COUNTIES, KENTUCKY
ISSUED FEBRUARY, 1980
BASED ON CONDITIONS IN 1978
SCALE: 1:15,840

N

SAGAMORE
ENVIRONMENTAL
SERVICES, INC.

PENDLETON COUNTY SOIL SURVEY #8
SPRINT PCS SITE #023D
R.R. 3 BOX 438
BUTLER, KENTUCKY
SAGAMORE PROJECT NO. 9230M

APPENDIX E

NATIONAL WETLANDS INVENTORY MAP

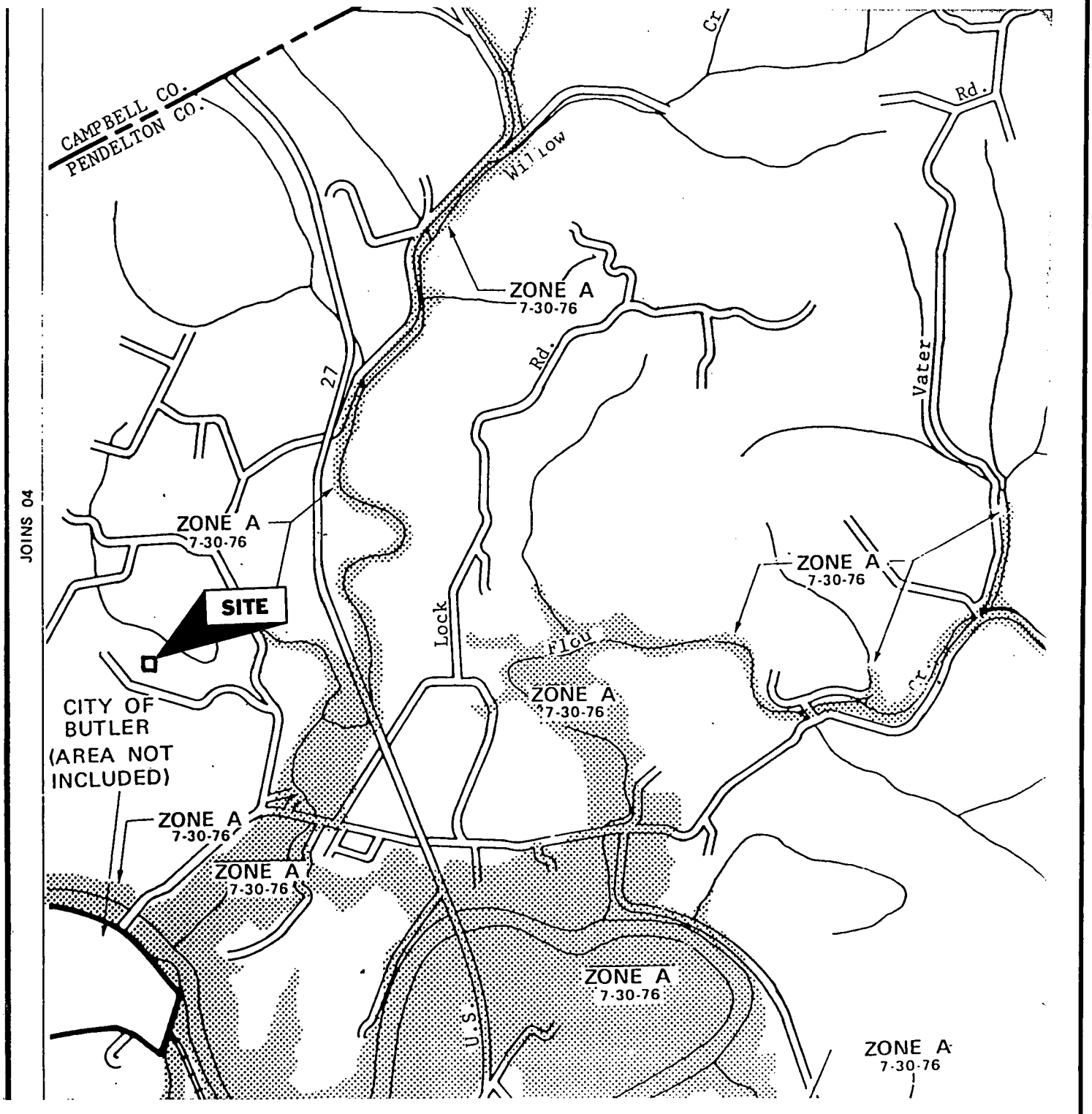
NATIONAL WETLANDS INVENTORY MAPS WERE NOT PRODUCED FOR THIS AREA

SAGAMORE ENVIRONMENTAL SERVICES, INC.

NATIONAL WETLANDS INVENTORY MAP
SPRINT PCS SITE #023D
R. R. 3 BOX 438
BUTLER, KENTUCKY
SAGAMORE PROJECT NO. 9230M

APPENDIX F

FLOOD INSURANCE RATE MAP



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION
EFFECTIVE DATE: JULY 30, 1976
SCALE: 1"=2,000'

N

SAGAMORE
ENVIRONMENTAL
SERVICES, INC.

FLOOD HAZARD BOUNDARY MAP
SPRINT PCS SITE #023D
R. R. 3 BOX 438
BUTLER, KENTUCKY
SAGAMORE PROJECT NO. 9230M

APPENDIX G

NEPA CHECKLIST & SHPO REQUESTS

NEPA Land Use Screening Checklist

Table 7-1: Attachment B: NEPA Land Use Screening Checklist

Cascade Number: CI33XC023D	Site Name: R.R. 3 Box 438	TS&NO Field Team:

NEPA Category See Attachment A: 47 CFR § 1.1307 Subsection (#)	Expert Federal / State Jurisdictional Agencies	NEPA Practice Reference	Check either the right box below, if Negative or the left box, if Positive	
Note: Except for sites screening positive under Item 4. –Historic Places –Land Use EAs are not required for collocation sites (See 47 CFR § 1.1306 NOTE 1).			**Positive**	**Negative**
1. Wilderness Area	National Park Service, U.S. Forest Service, Bureau of Land Management	Attachment B, Figure 7-1		X
2. Wildlife Preserve	U.S. Dept. of Interior–Fish & Wildlife Service (Field Service)	Attachment B, Figure 7-2		X
3. Endangered Species	U.S. Dept. of Interior–Fish & Wildlife Service (Field Service)	Attachment B, Figure 7-2		X
4. Historic Place	State Historic Preservation Office (SHPO)	Attachment B, Figure 7-3 & Section 3.4.2.4		X
5. Indian Religious	SHPO, American Indian Tribes, Bureau of Indian Affairs	Attachment B, Figure 7-4		X
6. Floodplain	Federal Emergency Management Agency (FEMA)	Attachment B, Figure 7-5 & Sections 2.4.2.1 thru 3		X
7. Surface Features (e.g., Wetlands, Floodways)	Army Corps of Engineers (ACOE)	Attachment B, Figure 7-6 & Section 2.4.2.1		X
8. High Intensity White Lights	Federal Aviation Administration	Not Applicable		

If the screening investigation for any of the above categories results in a Positive screening, an Environmental Assessment must be prepared and filed with the FCC. Construction may not start on any positively screened site prior to receipt of a finding of no significant impact (FONSI) from the FCC. A copy of this checklist, any applicable federal, state or local determinations / permits, as well as any EAs, evaluations or corrective measures, shall be documented to the TS&NO field team project file on each site, and a FAX copy of each Positive checklist shall be sent immediately to Tony Traini–Sprint PCS External Affairs. The undersigned has reviewed and approved the completion of this NEPA checklist for the above referenced site.

Signed: TS&NO Regional Director / Manager_____

Date: _____ Print Name_____

DONALD S. DOTT, JR.
DIRECTOR

PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
KENTUCKY STATE NATURE PRESERVES COMMISSION
801 SCHENKEL LANE
FRANKFORT, KENTUCKY 40601-1403
(502) 573-2886 VOICE
(502) 573-2355 FAX

April 19, 1999

Angela Reed
Sagamore Environmental Services, Inc.
8002 Castleway Drove, Suite 104
Indianapolis, IN 46250

Data Request 99-163

Dear Ms. Reed:

This letter is in response to your data request of April 15, 1999 for the Sprint PCS Site #023D project. We have reviewed our Natural Heritage Program Database to determine if any of the endangered, threatened, or special concern plants and animals or exemplary natural communities monitored by the Kentucky State Nature Preserves Commission occur within one mile of the project site. Based on our most current information, we have determined that fourteen occurrences of the plants or animals and no occurrences of the exemplary natural communities that are monitored by KSNPC are reported as occurring in the specified area. A data report is attached to this response.

Please note that the quantity and quality of data collected by the Kentucky Natural Heritage Program are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Kentucky have never been thoroughly surveyed, and new plants and animals are still being discovered. For these reasons, the Kentucky Natural Heritage Program cannot provide a definitive statement on the presence, absence, or condition of biological elements in any part of Kentucky. Heritage reports summarize the existing information known to the Kentucky Natural Heritage Program at the time of the request regarding the biological elements or locations in question. They should never be regarded as final statements on the elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. We would greatly appreciate receiving any pertinent information obtained as a result of on-site surveys.

If you have any questions or if I can be of further assistance, please do not hesitate to contact me.

Sincerely,

Amy L Covert

Amy Covert
Acting Data Manager

NCD/ALC

Enclosures: Data Report and Interpretation Key
Endangered, Threatened, and Special Concern Plants and Animals of Kentucky
Plants and Animals Presumed Extinct or Extirpated from Kentucky

Standard Occurrence Report
Endangerd, Threatened, and Special Concern Plants, Animals, and Natural Communities
Reported within One Mile of Sprint PCS Site 023D

EOCODE	SNAME	SCOMNAME	GRANK	SRANK	SPROT	USESA	IDENT	LASTOBS	PREC	EORANK	COUNTY	7.5 MINUTE QUADRANGLE	LAT	LONG	EPA WATERBODY	DIRECTIONS	HABITAT
***Gastropod																	
IMGASK5100*010*KY	LEPTOXIS PRAEROSA	ONYX ROCKSNAIL	G1G3	S3S4	S		Y	1992-10-25	S	D	Pendleton	BUTLER, KY.	384723N	842201W	LICKING RIVER,M,D OF SOUTH FK LICKING-DECOURSEY	LICKING RIVER AT KY 177 BRDG AT BUTLER.	CALL (1895) INDICATED THAT IN THE OHIO RIVER AT THE FALLS IT OCCURRED IN THE GREATEST PROFUSION WHERE THE BOTTOM IS CLEAN ROCK OR ROCK WITH ABUNDANT "CONFERVOID" VEGETATION.
***Bivalves																	
IMBIV02040*038*KY	ALASMIDONTA MARGINATA	ELKTOE	G4	S2	T		Y	1963-07-09	S	H	Pendleton	BUTLER, KY.	384722N	842105W	LICKING RIVER,M,D OF SOUTH FK LICKING-DECOURSEY	LICKING RIVER AT RT 27 BRIDGE, AT BUTLER.	OCCURS IN LARGE TO MEDIUM SIZE STREAMS BUT MORE TYPICAL OF SMALLER STREAMS (BUCHANAN 1980, GOODRICH AND VAN DER SCHALIE 1944, OESCH 1984, PARMALEE 1967, WILSON AND CLARK 1914). SOMETIMES FOUND IN LAKES CONNECTED TO RIVERS. PARMALEE (1967) REPORTED THE PREFERRED HABITAT TO BE SMALL STREAMS WITH GOOD CURRENT SAND OR GRAVEL BOTTOMS, AND DEPTH OF SEVERAL INCHES TO TWO FEET. BUCHANAN (1980) FOUND THIS SPECIES TO BE COMMON IN GRAVEL AND COBBLE SUBSTRATE IN 2 TO 18 INCHES OF WATER, NEEL AND ALLEN (1964) FOUND THIS SPECIES TO BE MORE ABUNDANT IN THE MAINSTREAM CUMBERLAND RIVER THAN IN SMALL STREAMS.

Standard Occurrence Report
Endangerd, Threatened, and Special Concern Plants, Animals, and Natural Communities
Reported within One Mile of Sprint PCS Site 023D

EOCODE	SNAME	SCOMNAME	GRANK	SRANK	SPROT	USESA	IDENT	LASTOBS	PREC	EORANK	COUNTY	7.5 MINUTE QUADRANGLE	LAT	LONG	EPA WATERBODY	DIRECTIONS	HABITAT
IMBIV02040*049*KY	ALASMIDONTA MARGINATA	ELKTOE	G4	S2	T		Y	1992-10-25	S	C	Pendleton	BUTLER, KY.	384723N	842201W	LICKING RIVER,M,D OF SOUTH FK LICKING-DECOURSEY	LICKING RIVER 1.0 KM DOWNSTREAM OF KY 177 BRIDGE AT BUTLER, 1.9 KM W JCT US 27 AND KY 177 (384724N, 842228W BUT PLOTTED AT BUTLER).	OCCURS IN LARGE TO MEDIUM SIZE STREAMS BUT MORE TYPICAL OF SMALLER STREAMS (BUCHANAN 1980, GOODRICH AND VAN DER SCHALIE 1944, OESCH 1984, PARMALEE 1967, WILSON AND CLARK 1914). SOMETIMES FOUND IN LAKES CONNECTED TO RIVERS. PARMALEE (1967) REPORTED THE PREFERRED HABITAT TO BE SMALL STREAMS WITH GOOD CURRENT SAND OR GRAVEL BOTTOMS, AND DEPTH OF SEVERAL INCHES TO TWO FEET. BUCHANAN (1980) FOUND THIS SPECIES TO BE COMMON IN GRAVEL AND COBBLE SUBSTRATE IN 2 TO 18 INCHES OF WATER, NEEL AND ALLEN (1964) FOUND THIS SPECIES TO BE MORE ABUNDANT IN THE MAINSTREAM CUMBERLAND RIVER THAN IN SMALL STREAMS.
IMBIV10020*024*KY	CYPROGENIA STEGARIA	FANSHELL	G1	S1	E	LE	Y	1905-06-16	S	C	Pendleton	BUTLER, KY.	384723N	842201W	LICKING RIVER,M,D OF SOUTH FK LICKING-DECOURSEY	LICKING RIVER AT HWY 177 CROSSING AT BUTLER.	MEDIUM TO LARGE STREAMS AND RIVERS WITH MODERATE TO STRONG CURRENT IN COARSE SAND AND GRAVEL AND DEPTH RANGING FROM SHALLOW TO DEEP (GOODRICH AND VAN DER SCHALIE 1944, NEEL AND ALLEN 1964, PARMALEE 1967, JOHNSON 1980, GORDON AND LAYZER 1989).
IMBIV10020*026*KY	CYPROGENIA STEGARIA	FANSHELL	G1	S1	E	LE	Y	1988-07-10	M	C	Pendleton	BUTLER, KY.	384715N	842155W	LICKING RIVER,M,D OF SOUTH FK LICKING-DECOURSEY	LICKING RIVER AT BUTLER.	MEDIUM TO LARGE STREAMS AND RIVERS WITH MODERATE TO STRONG CURRENT IN COARSE SAND AND GRAVEL AND DEPTH RANGING FROM SHALLOW TO DEEP (GOODRICH AND VAN DER SCHALIE 1944, NEEL AND ALLEN 1964, PARMALEE 1967, JOHNSON 1980, GORDON AND LAYZER 1989).

Endangerd, Threatened, and Special Concern Plants, Animals, and Natural Communities
Reported within One Mile of Sprint PCS Site 023D

EOCODE	SNAME	SCOMNAME	GRANK	SRANK	SPROT	USESA	IDENT	LASTOBS	PREC	EORANK	COUNTY	7.5 MINUTE QUADRANGLE	LAT	LONG	EPA WATERBODY	DIRECTIONS	HABITAT
IMBIV10020*056*KY	CYPROGENIA STEGARIA	FANSHELL	G1	S1	E	LE	Y	1991-08-14	S	D	Pendleton	BUTLER, KY.	384721N	842039W	LICKING RIVER,M,D OF SOUTH FK LICKING-DECOURSEY	LICKING RIVER JUST ABOVE THE MOUTH OF FLOUR CREEK.	MEDIUM TO LARGE STREAMS AND RIVERS WITH MODERATE TO STRONG CURRENT IN COARSE SAND AND GRAVEL AND DEPTH RANGING FROM SHALLOW TO DEEP (GOODRICH AND VAN DER SCHALIE 1944, NEEL AND ALLEN 1964, PARMALEE 1967, JOHNSON 1980, GORDON AND LAYZER 1989).
IMBIV10020*057*KY	CYPROGENIA STEGARIA	FANSHELL	G1	S1	E	LE	Y	1972-07-30	S	O	Pendleton	BUTLER, KY.	384722N	842105W	LICKING RIVER,M,D OF SOUTH FK LICKING-DECOURSEY	LICKING RIVER AT RT 27 BRIDGE AT BUTLER.	MEDIUM TO LARGE STREAMS AND RIVERS WITH MODERATE TO STRONG CURRENT IN COARSE SAND AND GRAVEL AND DEPTH RANGING FROM SHALLOW TO DEEP (GOODRICH AND VAN DER SCHALIE 1944, NEEL AND ALLEN 1964, PARMALEE 1967, JOHNSON 1980, GORDON AND LAYZER 1989).
IMBIV35060*011*KY	PLEUROBEMA CLAVA	CLUBSHELL	G2	S1	E	LE	Y	1984-07-15	S	O	Pendleton	BUTLER, KY.	384723N	842201W	LICKING RIVER,M,D OF SOUTH FK LICKING-DECOURSEY	LICKING RIVER AT HWY 177 CROSSING AT BUTLER.	THIS SPECIES IS AN INHABITANT OF SMALL STREAMS AND RIVERS (GOODRICH AND VAN DER SCHALIE 1944; ORTMANN 1919,1925), ALTHOUGH IN KENTUCKY IT IS KNOWN FROM MODERATLY LARGE RIVERS. OFTEN DEEPLY BURIED IN THE SUBSTRATE AND CONSEQUENTLY DIFFICULT TO FIND (WATTERS 1987).
IMBIV35240*030*KY	PLEUROBEMA PLENUM	ROUGH PIGTOE	G1	S1	E	LE	Y	1963-07-09	S	H	Pendleton	BUTLER, KY.	384722N	842105W	LICKING RIVER,M,D OF SOUTH FK LICKING-DECOURSEY	LICKING RIVER AT RT 27 BRIDGE AT BUTLER.	MEDIUM TO LARGE RIVERS IN SAND, GRAVEL, AND COBBLE SUBSTRATES (AHLSTEDT 1984, BOGAN AND PARMALEE 1983, CLARKE 1981, NEEL AND ALLEN 1964).
IMBIV35250*026*KY	PLEUROBEMA PYRAMIDATUM	PYRAMID PIGTOE	G2	S1	E		Y	1984-07-15	S	O	Pendleton	BUTLER, KY.	384723N	842201W	LICKING RIVER,M,D OF SOUTH FK LICKING-DECOURSEY	LICKING RIVER AT HWY 177 CROSSING AT BUTLER.	INHABITS MEDIUM TO LARGE RIVERS AND USUALLY OCCURS IN SAND OR GRAVEL BOTTOMS IN DEEP WATERS (AHLSTEDT 1984, MURRAY AND LEONARD 1962, PARMALEE ET AT. 1982).

Endangerd, Threatened, and Special Concern Plants, Animals, and Natural Communities
Reported within One Mile of Sprint PCS Site 023D

EOCODE	SNAME	SCOMNAME	GRANK	SRANK	SPROT	USESA	IDENT	LASTOBS	PREC	FORANK	COUNTY	7.5 MINUTE QUADRANGLE	LAT	LONG	EPA WATERBODY	DIRECTIONS	HABITAT
IMBIV39041*036*KY	QUADRULA CYLINDRICA CYLINDRICA	RABBITSFOOT	G3T3	S2	T		Y	1963-07-09	M	H	Pendleton	BUTLER, KY.	384722N	842105W	LICKING RIVER,M,D OF SOUTH FK LICKING-DECOURSEY	LICKING RIVER AT RT 27 BRDG, CITY OF BUTLER.	SMALL TO LARGE RIVERS WITH SAND, GRAVEL, AND COBBLE AND MODERATE TO SWIFT CURRENT, SOMETIMES IN DEEP WATER (PARMALEE 1967, BOGAN AND PARMALEE 1983).
IMBIV41010*043*KY	SIMPSONAIAS AMBIGUA	SALAMANDER MUSSEL	G3	S2S3	T		Y	1992-10-25	S	D	Pendleton	BUTLER, KY.	384723N	842201W	LICKING RIVER,M,D OF SOUTH FK LICKING-DECOURSEY	LICKING RIVER AT KY 177 BRDG AT BUTLER.	OFTEN FOUND BURIED IN SUBSTRATE SUCH AS SOFT MUD AND/OR GRAVEL, AND/OR UNDER FLAT STONES IN SHALLOW WATER IN SMALL STREAMS WHERE THE CURRENT MAY BE SWIFT (BAKER 1928, BUCHANAN 1980, GOODRICH AND VAN DER SCHALIE 1944).

***Fishes

Endangerd, Threatened, and Special Concern Plants, Animals, and Natural Communities
Reported within One Mile of Sprint PCS Site 023D

EOCODE	SNAME	SCOMNAME	GRANK	SRANK	SPROT	USESA	IDENT	LASTOBS	PREC	EORANK	COUNTY	7.5 MINUTE QUADRANGLE	LAT	LONG	EPA WATERBODY	DIRECTIONS	HABITAT
AFCQC01060*009*KY	AMMOCRYPTA PELLUCIDA	EASTERN SAND DARTER	G3	S2	S		Y	1995-09-30	S	D	Pendleton	BUTLER, KY.	384723N	842201W	LICKING RIVER,M,D OF SOUTH FK LICKING-DECOURSEY	LICKING RIVER, AT BUTLER, HWY 609 (177).	GENERALLY PREFERS LOTIC HABITATS FROM SMALL CREEKS TO LARGE RIVERS, WITH SLOW TO MEDIUM CURRENT, AND LAKES AND LAKE-LIKE EXPANSIONS OF RIVERS OVER SAND OF VARIOUS DESCRIPTIONS (TRAUTMAN 1981, SCOTT AND CROSSMAN 1973, WILLIAMS 1975, AND MANY OTHERS). BURROWS INTO SAND BOTTOM. EGGS ARE BURIED IN THE SUBSTRATE. SIMON ET AL. (1992) REPORTED COLLECTING EGGS AND LARVAE FROM THE TIPPECANOE RIVER (INDIANA) FROM SAND AND GRAVEL IN SLIGHT TO MODERATE CURRENT AT TEMPERATURES OF 20-23 C. ^OHIO: WAS MOST ABUNDANT IN LARGER, SANDY AREAS OF SECTIONS OF MODERATE OR LARGE-SIZED STREAMS WHERE SILTING-OVER OF SAND WAS AT A MINIMUM AND CURRENT WAS NOT STRONG ENOUGH TO WASH AWAY THE SAND (TRAUTMAN 1981). PENNSYLVANIA: TAKEN OVER SANDY RIFFLES (LACHNER, WESLTAKE AND HANDWERK 1950). KENTUCKY: CAPTURED OVER CLEAN SAND ALONG THE MARGINS OF A DIANTHERA RIFFLE (BRANSON AND BATCH 1974). QUEBEC: VLADYKOV (1942) REPORTED UNUSUAL CAPTURES OVER LIMESTONE WITH A THIN LAYER OF MUD, AND CLAY MIXED WITH SOME SAND. SAND AT ONE FRENCH CREEK SITE WAS APPROXIMATELY 2-4 DM DEEP (CRISWELL 1992), AND BARNES (197
AFCKA02220*026*KY	NOTURUS STIGMOSUS	NORTHERN MADTOM	G3	S1	S		Y	1992-10-25	S	D	Pendleton	BUTLER, KY.	384723N	842201W	LICKING RIVER,M,D OF SOUTH FK LICKING-DECOURSEY	LICKING RIVER DOWNSTREAM FROM KY 177 BRDG AT BUTLER.	LARGE STREAMS AND RIVERS IN MODERATE TO SWIFT CURRENT OVER GRAVEL AND SAND, AND SOMETIMES DEBRIS OR PONDWEED FOR COVER (BURR AND WARREN 1986, ETNIER AND STARNES 1993).

Provided to Angela Reed
Sagamore Environmental Services, Inc.

Endangerd, Threatened, and Special Concern Plants, Animals, and Natural Communities
Reported within One Mile of Sprint PCS Site 023D

EOCODE	SNAME	SCOMNAME	GRANK	SRANK	SPROT	USESA	IDENT	LASTOBS	PREC	EORANK	COUNTY	7.5 MINUTE QUADRANGLE	LAT	LONG	EPA WATERBODY	DIRECTIONS	HABITAT

14 Records Processed.

Provided to Angela Reed
Sagamore Environmental Services, Inc.

Data Key for Element and Occurrence Reports (v. 3.98)
Kentucky State Nature Preserves Commission
Natural Heritage Program Data Services

Many of the data fields on the enclosed report are easily understood. Other fields, however, use abbreviations and formats that are not always self-explanatory. A key to these fields follows. Your report may contain some or all of the following data fields.

BEARING:	Bearing in degrees from a center point to an occurrence's latitude and longitude. This field is masked for sensitive occurrences; contact KSNPC in these cases. Omitted for G, U, and Q precision occurrence records.
BESTSOURCE:	Best available reference to the occurrence: literature citation, collector, collection number, museum or herbarium code, etc.
COMMENTS:	Additional information about the occurrence including identification, taxonomy, or date of occurrence.
DIRECTIONS:	Directions to an occurrence. This field is masked for sensitive occurrences; contact KSNPC in these cases.
DISTANCE:	Distance from a center point to an occurrence's latitude and longitude. Units coded as M (miles), K (kilometers), and F (feet). This field is masked for sensitive occurrences; contact KSNPC in these cases. Omitted for G, U, and Q precision occurrence records.
ELCODE:	Element (species) code.
EOCODE:	Element (species) code, occurrence number (last three digits), and state.
EODATA:	Occurrence population data: date of observation, number of individuals, health, size of colony, flowering data, etc.
EORANK:	Judgement of occurrence quality: A = excellent, B = good, C = marginal, D = poor, E = verified extant but quality not judged, O = obscure (not found at reported site but more searching needed), H = historically known from site but no known observation or collection since 1975, X = extirpated from site.
FIRSTOBS:	Year of first known observation or collection.
GENDESC:	Description of an occurrence's habitat.
GRANK:	Estimate of element abundance on a global scale: G1 = extremely rare, G2 = rare, G3 = uncommon, G4 = common, G5 = very common, GH = historically known and expected to be rediscovered, GU = uncertain, GX = extinct. Subspecies and variety abundances are coded with a 'T' suffix; the 'G' portion of the rank then refers to the entire species.
HABITAT:	General description of the element's habitat across its range.
IDENT:	Whether the identification has been checked by a reliable individual and is believed to be correctly identified: Y = identification confirmed and believed correct, N = No, identification determined to be wrong despite reports to the contrary, ? = Whether identification is correct or not is confusing or disputed, blank or U = unknown whether identification correct or not, assumed correct.
KSNPC:	Kentucky State Nature Preserves Commission status: N or blank = none, E = endangered, T = threatened, S = special concern, H = historic, X = extirpated.
LASTOBS:	Year(-month-date) of most recent known observation or collection.
LAT:	Latitude. This field is masked for sensitive occurrences; contact KSNPC in these cases. Omitted for G, U and Q precision occurrences.
LONG:	Longitude. This field is masked for sensitive occurrences; contact KSNPC in these cases. Omitted for G, U and Q precision occurrences.
MAP NUMBER:	Number used to location the element on KSNPC Heritage maps.
MARGNUM:	See MAP NUMBER.
PREC:	See PRECISION.
PRECISION:	Precision of the latitude, longitude, directions, and plotted location: S = location accurate to within three seconds of latitude-longitude, M = location accurate to within

SAGAMORE
ENVIRONMENTAL
SERVICES, INC.

April 12, 1999

Mr. David Morgan
Kentucky Heritage Council
300 Washington Street
Frankfort, Kentucky 40601

RE: DATA REQUEST

Dear Mr. Morgan:

Sagamore Environmental Services is requesting information regarding historical structures, archeological sites, and Indian burial grounds or religious sites for the following locations in Kentucky:

Sprint PCS site #023D	Butler Quadrangle
Sprint PCS site #009B	Verona Quadrangle

Details regarding these sites are shown in the attached table. Maps are also attached.

This information will be used to meet the NEPA requirements for cellular tower installation. Information used will credit the Kentucky Heritage Council as the source of the material.

Sincerely,

Angela D. Reed
Project Scientist
Sagamore Environmental Services

8002 Castleway Drive • Suite 104 • Indianapolis, IN 46250 • (317) 842-0510 • Fax (317) 842-0547

Sprint PCS site	Address	City	County	Topo Map	Remarks
023D	R.R. 3 Box 438 (Duckers Road)	Butler	Pendleton	Butler	The site is wooded and grass covered
009B	2885 Verona-Mud Lick Pike	Verona	Boone	Verona	The site is grass-covered

APPENDIX H

BIBLIOGRAPHY

BIBLIOGRAPHY

National Priorities List - Environmental Protection Agency, November 18, 1998

CERCLIS - Comprehensive Environmental Response, Compensation, and Liability Inventory System, United States Environmental Protection Agency, List-8: State/Event Listing, November 18, 1998

Emergency Response Notification System - U.S.E.P.A., Office of Solid Waste and Emergency Response, January 19, 1999

Hazardous Waste Handlers - Commonweatlh of Kentucky Lead (State Superfund) List, Updated to September 15, 1998

UST Data - Commonwealth of Kentucky Underground Storage Tank List Regulations, December 1, 1998

U.S.E.P.A. Map of Radon Zones - Conducted during the Winters of 1986-1987, U.S.E.P.A. and State of Kentucky Department of Natural Resources Division of Geological Survey, 1993

Soil Survey of Grant and Pendleton Counties, Kentucky - United States Department of Agriculture, February 1980

Solid Waste Landfills - Commonwealth of Kentucky Solid Waste Landfill List, Division of Solid and Infectious Waste Management, October 15, 1998

Please Type or Print on This Form

Form Approved OMB No. 2120-0001

U.S. Department of Transportation
Federal Aviation Administration

Failure To Provide All Requested Information May Delay Processing of Your Notice

Notice of Proposed Construction or Alteration

FOR FAA USE ONLY
Aeronautical Study Number
FILE COPY

1. **Sponsor** (person, company, etc. proposing this action):
Attn. of: Dan Kruse
Name: SprintCom, Inc. dba Sprint PCS
Address: 9801 Higgins Road
Suite 220
City: Rosemont State: IL Zip: 60018
Telephone: (847) 384-2852 Fax:

2. **Sponsor's Representative** (if other than #1): Site #CI33XC0023D
Attn. of: Kenneth R. Patterson
Name: Airspace Safety Analysis Corporation
Address: Two Crown Center
1745 Phoenix Boulevard, Suite 120
City: Atlanta State: GA Zip: 30349
Telephone: (770) 994-1557 Fax: (770) 994-1637

3. **Notice of:** ☒ New Construction ☐ Alteration ☐ Existing

4. **Duration:** ☒ Permanent ☐ Temporary (___ months, ___ days)

5. **Work Schedule:** Beginning After FAA Approval End Within 18 Month

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 and Medium Intensity White
☐ White - Medium Intensity ☐ Dual - Red and High Intensity White
☐ White - High Intensity ☐ Other

8. **FCC Antenna Structure Registration Number** (if applicable):

9. **Latitude:** 38 ° 47 ' 55 . " N

10. **Longitude:** 084 ° 21 ' 49 . " W

11. **Datum:** ☒ NAD 83 ☐ NAD 27 ☐ Other

12. **Nearest:** City: Butler State: KY

13. **Nearest Public-use** (not private-use) or Military Airport or Heliport:
GENE SNYDER

14. **Distance from #13. to Structure:** 5.50 NM

15. **Direction from #13. to Structure:** 12.28° True Bearing

16. **Site Elevation** (AMSL): 673 ft.

17. **Total Structure Height** (AGL): 260 ft.

18. **Overall Height (#16. + #17.)** (AMSL): 933 ft.

19. **Previous FAA Aeronatical Study Number** (if applicable):
- OE

20. **Description of Location:** (Attach a USGS 7.5 minute Quadrangle Map with the precise site marked and any certfied survey.)
The proposed site is located 3,200' Northwest from the intersection of U.S. Route 27 and State Route 177 (chart attached). The site is located 5.81 NM on a True Bearing of 13.07° from the ARP of GENE SNYDER.

21. **Complete Description of Proposal:**
This proposed personal communications installation will operate in the 1945.0 - 1950.0 MHz band with 1000.0 Watts ERP.

Frequency/Power (kW)	

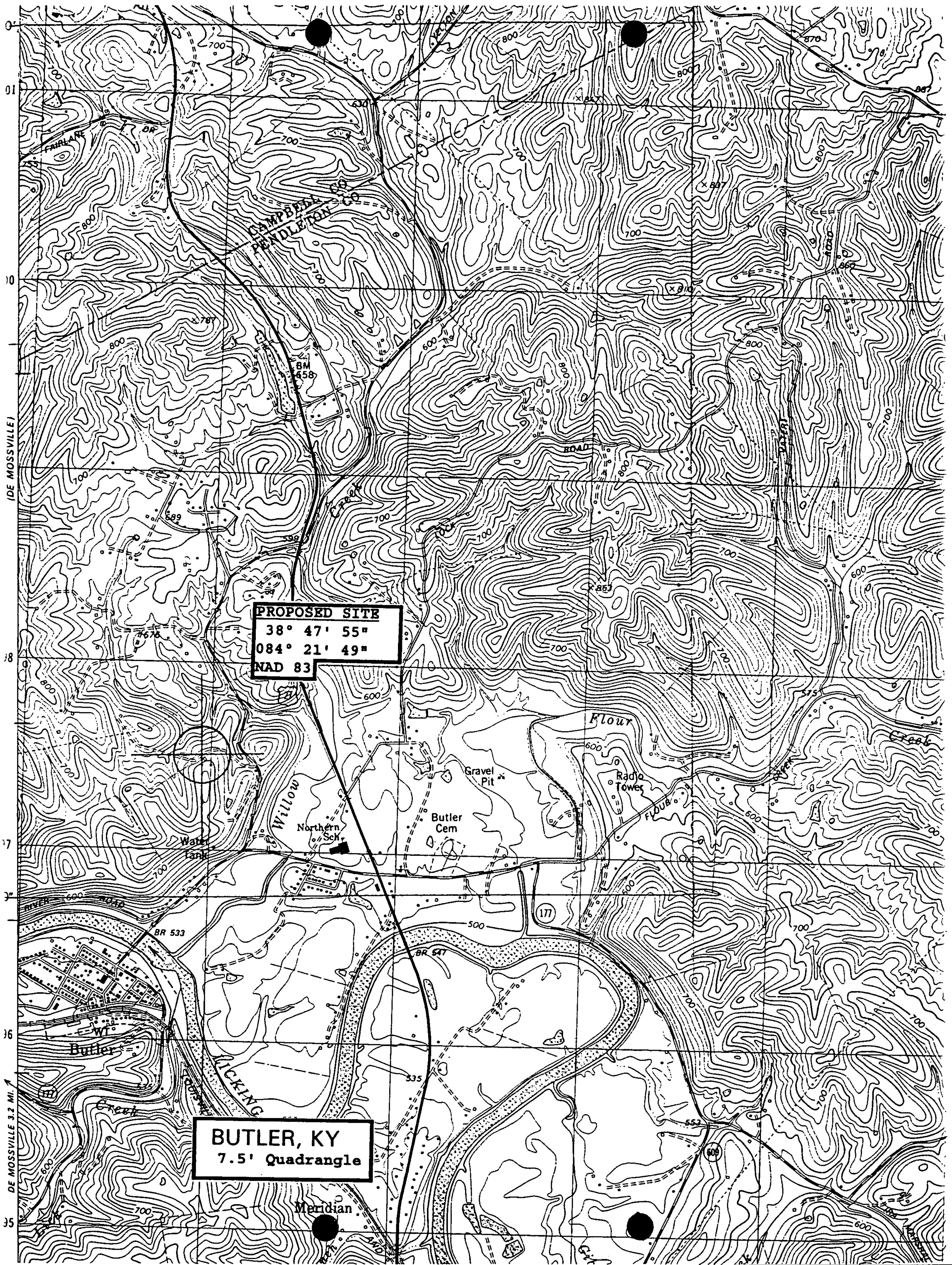
S
6
8
99

2
4
2
9
0

Notice is required by 14 Code of Federal Regulations, part 77 pursuant to 49 U.S.C., Section 44718. Persons who knowingly and willingly violate the notice requirements of part 77 are subject to civil penalty of $1,000 per day until the notice is received, pursuant to 49 U.S.C., Section 46301 (a).

I hereby certify that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to mark and/or light the structure in accordance with established marking & lighting standards necessary.

Date	Typed or Printed Name and Title of Person Filing Notice	Signature
	Dan Kruse, Wireless Implementation Manager	FILE COPY


PROPOSED SITE
38° 47' 55"
084° 21' 49"
NAD 83
BUTLER, KY
7.5' Quadrangle
CAMPBELL CO
PENDLETON CO
(DE MOSSVILLE)
DE MOSSVILLE 3.2 MI.
FAIRLANE DR
BM 658
Willow Creek
Flour Creek
Gravel Pit
Radio Tower
Butler Cem
Northern Sch
Water Tank
RIVER ROAD
BR 533
BR 547
177
609
WT
Butler
Creek
LICKING
Meridian

KAZC FORM TC 56-50 (01/96)

KENTUCKY TRANSPORTATION CABINET, DIVISION OF AERONAUTICS, 125 HOLMES STREET, FRANKFORT, KY 40622

APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE

– INSTRUCTIONS ON REVERSE SIDE OF FORM –

AERONAUTICAL STUDY NUMBER

FILE COPY

1. NATURE OF PROPOSAL

A. TYPE	B. CLASS	C. WORK SCHEDULE
X NEW CONSTRUCTION	X PERMANENT	BEGIN After FAA Approval
___ ALTERATION	___ TEMPORARY	END Within 18 Month

2. DESCRIPTION OF STRUCTURE

This proposed personal communications installation will operate in the 1945.0 - 1950.0 MHz band with 1000.0 Watts ERP.

The proposed site is located 3,200' Northwest from the intersection of U.S. Route 27 and State Route 177 (chart attached). The site is located 5.81 NM on a True Bearing of 13.07° from the ARP of GENE SNYDER.

3A. APPLICANT - NAME, ADDRESS & TELEPHONE

Dan Kruse
SprintCom, Inc. dba Sprint PCS
9801 Higgins Road
Suite 220
Rosemont, Illinois 60018

(847) 384-2852

B. REPRESENTATIVE OF APPLICANT - NAME, ADDRESS & TELEPHONE

Kenneth R. Patterson
Airspace Safety Analysis Corporation
1745 Phoenix Boulevard, Suite 120
Atlanta, Georgia 30349

(770) 994-1557

4. LOCATION OF STRUCTURE

A. GEOGRAPHIC COORDINATES (NEAREST SECOND)	B. NEAREST KY CITY	C. NEAREST KY AIRPORT
LATITUDE 38° 47" 55'	(1) DISTANCE TO 4B .66	(1) DISTANCE TO RUNWAY 5.50 NM
LONGITUDE 084° 21" 49'	(2) DIRECTION TO 4B Southwest	(2) DIRECTION TO AIRPORT 193.09° True Bearing

5. HEIGHT & ELEVATION

A. SITE ELEVATION (ABOVE MEAN SEA LEVEL)	673'
B. HEIGHT OF STRUCTURE, INCLUDING APPURTENANCES AND LIGHTS (ABOVE GROUND LEVEL)	260'
C. OVERALL HEIGHT (AMSL) (A+B)	933'

6. OBSTRUCTION MARKING & LIGHTING

	YES	NO
A. MARKED FOR THE PROTECTION OF AIR NAVIGATION (FLAGS, SPHERES, ETC.)		X
B. OBSTRUCTION MARKED IN ACCORDANCE WITH 602KAR50:100 (FAA AC 70/7460-1H)		X
C. OBSTRUCTION LIGHTED IN ACCORDANCE WITH 602KAR50:100 (FAA AC 70/7460-1H)	X	

7. HAS "NOTICE OF CONSTRUCTION OR ALTERATION" (FORM 7460-1) BEEN FILED WITH THE FEDERAL AVIATION ADMINISTRATION? IF SO, WHEN?

24290

8. 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.

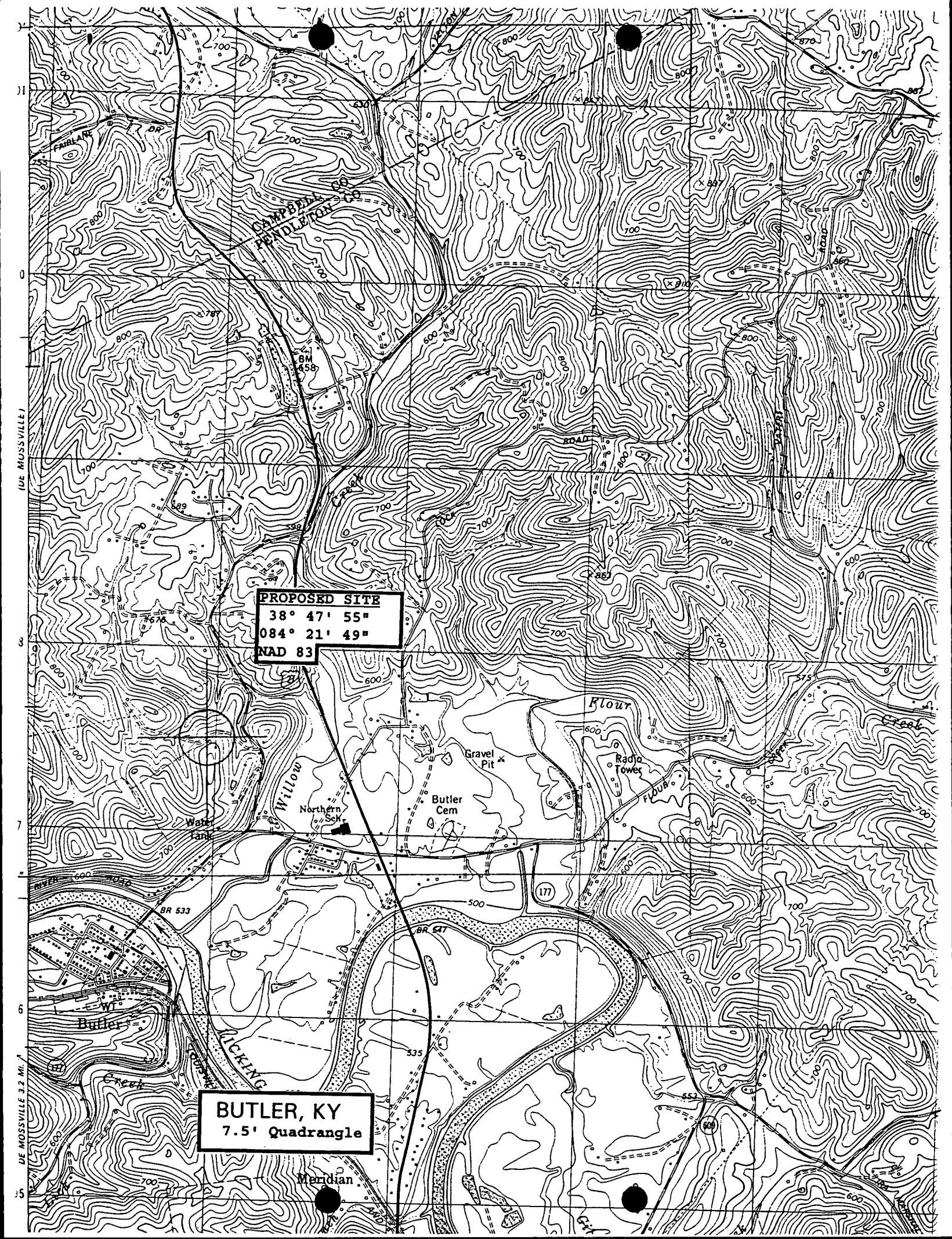
FILE COPY

BY Dan Kruse
Wireless Implementation Manager
NAME (PRINTED). SIGNATURE & TITLE

DATE _____

PENALTIES. PERSONS FAILING TO COMPLY WITH KENTUCKY REVISED STATUTES AND KENTUCKY AIRPORT ZONING COMMISSION ADMINISTRATIVE REGULATIONS ARE LIABLE FOR FINES OR IMPRISONMENT AS SET FORTH IN KRS 183.990(3). NON-COMPLIANCE WITH FEDERAL AVIATION ADMINISTRATION REGULATIONS MAY RESULT IN FURTHER PENALITIES.

COMMISSION ACTION	CHAIRMAN, KAZC (OR) ADMINISTRATOR, KAZC
APPROVED	DATE
DISAPPROVED	


PROPOSED SITE
38° 47' 55"
084° 21' 49"
NAD 83
BUTLER, KY
7.5' Quadrangle
CAMPBELL-PENDLETON CO
Willow Creek
Flour Creek
Gravel Pit
Radio Tower
Butler Cem
Northern Sch
Water Tank
BR 533
BR 547
177
Butler
Licking
Meridian
DE MOSSVILLE 3.2 MI.

Version 1

OPTION AGREEMENT

March 97

Site Name: Butler – EDWARDS 2

Site ID: CI33XC023-D

Owner and SprintCom, Inc. a Kansas corporation ("SprintCom"), agree as follows:

1. OPTION: Owner grants to SprintCom the option to lease certain real property/space ("Site") described in Exhibit A to that PCS Site Agreement attached hereto as Exhibit 1 and incorporated herein by reference. The lease of the Site upon exercise of this option will be on the terms and conditions set forth in Exhibit 1. Owner will execute the PCS Site Agreement concurrently with its execution of this Option Agreement.

2. CONSIDERATION. On full execution of this Option Agreement, SprintCom will pay to Owner the sum of [redacted] as consideration for the option. Owner will retain all option consideration upon expiration of the option term. If the option is exercised, then the consideration will be credited against the first payment of annual rent that is due under the PCS Site Agreement.

3. TERM: The term of this option will commence on March 29, 1999 and will terminate at 12:01 a.m. (eastern standard time) on April 28, 2000. The term of the option may be extended by mutual agreement in writing,

4. EXERCISE: Notice of the exercise of this option will be given by SprintCom to Owner by SprintCom delivering an executed PCS Site Agreement in the form and upon the terms and conditions set forth in Exhibit 1, to Owner at Owner's address set forth in the attached PCS Site Agreement. Notice will be given by either certified mail, return receipt requested, or by overnight carrier. Notice will be deemed effective on the date that it is postmarked or received by overnight carrier, as the case may be. The term of the PCS Site Agreement will commence on the effective date of such notice.

5. ACCESS: Owner agrees to permit SprintCom, during the term of this option, free ingress and egress to the Site to conduct such surveys, structural strength analysis, subsurface boring tests and other activities of a similar nature as SprintCom may deem necessary at the sole cost of SprintCom.

6. PERMITS: SprintCom will have the right to seek governmental permits and approvals for installation of its communications facility during the term of this Option Agreement. Owner agrees to cooperate with SprintCom (without the obligation to incur any expense) and agrees to take all actions and join in all applications and execute all documents reasonably necessary to allow SprintCom to pursue applications and obtain such governmental permits and authorizations.

7. MEMORANDUM: On execution of this Option Agreement, Owner and SprintCom will execute and record in the official records of the county in which the Site is located a Memorandum of Option Agreement in the form of Exhibit 2 attached hereto and incorporated herein by reference. SprintCom will pay the recording cost. If SprintCom does not exercise its option, then SprintCom agrees to execute and deliver to Owner a quitclaim deed or other appropriate instrument in recordable form releasing and reconveying to Owner all rights of SprintCom in the Site.

8. ASSIGNMENT: Assignment of this Option Agreement by SprintCom may be made to its general partner(s) or to any party controlling, controlled by or under common control with SprintCom, or to any party that acquires substantially all of the assets of SprintCom.

9. ATTORNEYS' FEES: The prevailing party in any action or proceeding in court to enforce the terms of this Option Agreement will be entitled to receive its reasonable attorneys' fees and other reasonable enforcement costs and expenses from the non-prevailing party.

10. ENTIRE AGREEMENT: This Option Agreement contains all agreements, promises and understandings between Owner and SprintCom pertaining to the subject matter. This Option Agreement and the performance hereof will be governed and interpreted by the laws of the state in which the Site is located.

OWNER: Thomas D Edwards
By: Thomas D. Edwards
Its: Owner
S.S./Tax No.: 491-40-3061
Address: Box 438 RR3, Butler, Kentucky 41006
Date:

OWNER: Carolyn J Edwards
By: Carolyn J. Edwards
Its: Owner
S.S./Tax No.: 400-56-0055
Address: Box 438 RR3, Butler, Kentucky 41006
Date:

SprintCom, Inc., a Kansas corporation

By: James G. Meyers
Its: ~~DIRECTOR OF SITE DEVELOPMENT~~
Address: 9801 W. HIGGINS RD.
Rosemont, IL 60018
Date: 4/22/99

Version 1

OPTION AGREEMENT

March 97

Site Name: Butler – EDWARDS 2

Site ID: CI33XC023-D

EXHIBIT 2

Memorandum of Option Agreement

This memorandum evidences that an option was made and entered into by written Option Agreement dated Mar 29, 1999 between Thomas D. Edwards and Carolyn J. Edwards ("Owner") and SprintCom, Inc., a Kansas corporation ("SprintCom"), the terms and conditions of which are incorporated herein by reference.

Such Agreement provides in part that Owner grants to SprintCom an option to lease a certain site ("Site") located at 437 A RR3, City of Butler, County of Pendleton, State of Kentucky, within the property of Owner which is described on Exhibit A attached hereto, pursuant to a PCS Site Agreement. The term of the option commenced on March 29, 1999 and will terminate at 12:01 a.m. (eastern standard time) on April 28, 2000.

IN WITNESS WHEREOF, the parties have executed this Memorandum as of the day and year first above written.

"OWNER"

By: Thomas D Edwards

Name: Thomas D. Edwards

Title: Owner

Address: Box 438 RR3, Butler, Kentucky 41006

By: Carolyn J Edwards

Name: Carolyn J. Edwards

Title: Owner

Address: Box 438 RR3, Butler, Kentucky 41006

"SprintCom"

SPRINTCOM, INC., a Kansas corporation

By:

Name: James G. Meyers

Title: DIRECTOR OF SITE DEVELOPMENT

Address: 9801 W. HIGGINS RD.
Rosemont, IL 60018

Owner Initials TE

Owner Initials CE

SprintCom Initials

Version 1

OPTION AGREEMENT

March 97

Site Name: Butler – EDWARDS 2

Site ID: CI33XC023-D

OWNER NOTARY BLOCK:

STATE OF Kentucky

COUNTY OF Campbell

The foregoing instrument was acknowledged before me this 25 day of March, 1999,
☐ by THOMAS D. EDWARDS, ☒ by CAROLYN J. EDWARDS, as _____
of _____, a _____ corporation, on behalf of the corporation,
by _____, partner (or agent) on behalf of _____, a partnership.

(AFFIX NOTARIAL SEAL)

Thomas W. Arnold
(OFFICIAL NOTARY SIGNATURE)
NOTARY PUBLIC—STATE OF _____

THOMAS W. ARNOLD
Notary Public, State at Large, Kentucky
My Commission Expires June 25, 2001

My commission expires:

(PRINTED, TYPED OR STAMPED NAME OF NOTARY)
COMMISSION NUMBER: _____

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 19____,
☐ by _____, ☐ by _____, as _____
of _____, a _____ corporation, on behalf of the corporation,
by _____, partner (or agent) on behalf of _____, a partnership.

(AFFIX NOTARIAL SEAL)

(OFFICIAL NOTARY SIGNATURE)
NOTARY PUBLIC—STATE OF _____

My commission expires:

(PRINTED, TYPED OR STAMPED NAME OF NOTARY)
COMMISSION NUMBER: _____

Version 1

OPTION AGREEMENT

March 97

Site Name: Butler – EDWARDS 2

Site ID: CI33XC023-D

SPRINTCOM NOTARY BLOCK:

STATE OF ILLINOIS

COUNTY OF COOK

The foregoing instrument was acknowledged before me this 22nd day of April, 1999, by James G. Meyers, DIRECTOR OF SITE DEVELOPMENT of SprintCom, Inc., a Kansas corporation, who executed the foregoing instrument on behalf of such limited partnership.

(AFFIX NOTARIAL SEAL)

OFFICIAL SEAL
TAMMY L ROGAN
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES:02/17/03

My commission expires:

Tammy L. Rogan
(OFFICIAL NOTARY SIGNATURE)
NOTARY PUBLIC—STATE OF IL

TAMMY L. ROGAN
(PRINTED, TYPED OR STAMPED NAME OF NOTARY)

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____.

(AFFIX NOTARIAL SEAL)

My commission expires:

_____
(OFFICIAL NOTARY SIGNATURE)
NOTARY PUBLIC—STATE OF _____

_____
(PRINTED, TYPED OR STAMPED NAME OF NOTARY)

Version 1

PCS SITE AGREEMENT

March 97

Site Name Butler – EDWARDS 2

Site I. D. CI33XC023-D

1. Premises and Use. Owner leases to SprintCom, Inc., a Kansas corporation ("SprintCom"), the site described below:
[*Check appropriate box(es)*]
☒ Land consisting of approximately 10,000 square feet upon which SprintCom will construct its ☒ equipment base station and ☒ antenna structure;
☐ Building interior space consisting of approximately _____ square feet;
☐ Building exterior space for attachment of antennas;
☐ Building exterior space for placement of base station equipment;
☐ Tower antenna space between the ____ foot and ____ foot level on the Tower;
☐ Space required for cable runs to connect PCS equipment and antennas,

in the location(s) ("Site") shown on Exhibit A, together with a non-exclusive easement for reasonable access thereto and to the appropriate, in the discretion of SprintCom, source of electric and telephone facilities. The Site will be used by SprintCom for the purpose of installing, removing, replacing, modifying, maintaining and operating, at its expense, a personal communications service system facility ("PCS"), including, without limitation, antenna equipment, cable wiring, back-up power sources (including generators and fuel storage tanks), related fixtures and, if applicable to the Site, an antenna structure. SprintCom will use the Site in a manner which will not unreasonably disturb the occupancy of Owner's other tenants. SprintCom will have access to the Site 24 hours per day, 7 days per week.

2. Term. The term of this Agreement (the "Initial Term") is 5 years, commencing on the date ("Commencement Date") both SprintCom and Owner have executed this Agreement. This Agreement will be automatically renewed for four additional terms (each a "Renewal Term") of 5 years each, unless SprintCom provides Owner notice of intention not to renew not less than 90 days prior to the expiration of the Initial Term or any Renewal Term.

3. Rent. Until the earlier of (a) that date which is 30 days after the issuance of a building permit, or (b) the first day of the month following the commencement of the physical preparation of the Site, the rent will be a one-time aggregate payment of [redacted] the receipt of which Owner acknowledges. Thereafter, rent will be paid in equal [redacted] installments of [redacted] (until increased as set forth herein), partial months to be prorated, in advance. [redacted]

[redacted] E 3/29/99

4. Title and Quiet Possession. Owner represents and agrees (a) that it is the Owner of the Site; (b) that it has the right to enter into this Agreement; (c) that the person signing this Agreement has the authority to sign; (d) that SprintCom is entitled to access to the Site at all times and to the quiet possession of the Site throughout the Initial Term and each Renewal Term so long as SprintCom is not in default beyond the expiration of any cure period; and (e) that Owner shall not have unsupervised access to the Site or to the PCS equipment.

5. Assignment/Subletting. Tenant shall have the right to sublease or assign its rights under this Agreement without notice to or consent of Owner.

6. Notices. All notices must be in writing and are effective only when deposited in the U.S. mail, certified and postage prepaid, or when sent via overnight delivery. Notices to SprintCom are to be sent to: SprintCom, Inc., Attention: Director-Network Real Estate, 1200 Main Street, Kansas City, Missouri 64105, with a copy to Sprint Spectrum L.P., 9801 West Higgins Road, Suite 220, Rosemont, Illinois 60018. Notices to Owner must be sent to the address shown underneath Owner's signature.

7. Improvements. SprintCom may, at its expense, make such improvements on the Site as it deems necessary from time to time for the operation of the PCS system. Owner agrees to cooperate with SprintCom with respect to obtaining any required zoning approvals for the Site and such improvements. Upon termination or expiration of this Agreement, SprintCom shall remove its equipment and improvements and will restore the Site to substantially the condition existing on the Commencement Date, except for ordinary wear and tear and casualty loss.

8. Compliance with Laws. Owner represents that Owner's property (including the Site), and all improvements located thereon, are in substantial compliance with building, life/safety, disability and other laws, codes and regulations of applicable governmental authorities. SprintCom will substantially comply with all applicable laws relating to its possession and use of the Site.

9. Interference. SprintCom will resolve technical interference problems with other equipment located at the Site on the Commencement Date or any equipment that becomes attached to the Site at any future date when SprintCom desires to add additional equipment to the Site. Likewise, Owner will not permit or suffer the installation of any future equipment which (a) results in technical interference problems with SprintCom's then existing equipment or (b) encroaches onto the Site.

10. Utilities. Owner represents that utilities adequate for SprintCom's use of the Site are available. SprintCom will pay for all utilities used by it at the Site. Owner will cooperate with SprintCom in SprintCom's efforts to obtain utilities from any location provided by Owner or the servicing utility, including signing any easement or other instrument reasonably required by the utility company.

11. Termination. SprintCom may terminate this Agreement at any time by notice to Owner without further liability if SprintCom does not obtain all permits or other approvals (collectively, "approval") required from any governmental authority or any easements required from any third party to operate the PCS system, or if any such approval is canceled, expires or is withdrawn or terminated, or if Owner fails to have proper ownership of the Site or authority to enter into this Agreement, or if SprintCom, for any other reason, in its sole discretion, determines that it will be unable to use the Site. Upon termination, all prepaid rent will be retained by Owner unless such termination is due to Owner's failure of proper ownership or authority, or such termination is a result of Owner's default.

12. Default. If either party is in default under this Agreement for a period of (a) 10 days following receipt of notice from the non-defaulting party with respect to a default which may be cured solely by the payment of money, or (b) 30 days following receipt of notice from the non-defaulting party with respect to a default which may not be cured solely by the payment of money, then, in either event, the non-defaulting party may pursue any remedies available to it against the defaulting party under applicable law, including, but not limited to, the right to terminate this Agreement. If the non-monetary default may not reasonably be cured within a 30-day period, this Agreement may not be terminated if the defaulting party commences action to cure the default within such 30-day period and proceeds with due diligence to fully cure the default.

13. Indemnity. Owner and SprintCom each indemnifies the other against and holds the other harmless from any and all costs (including reasonable attorneys' fees) and claims of liability or loss which arise out of the ownership, use and/or occupancy of the Site by the indemnifying party. This indemnity does not apply to any claims arising from the sole negligence or intentional misconduct of the indemnified party. The indemnity obligations under this Paragraph will survive termination of this Agreement.

14. Hazardous Substances. Owner represents that it has no knowledge of any substance, chemical or waste (collectively, "substance") on the Site that is identified as hazardous, toxic or dangerous in any applicable federal, state or local law or regulation. SprintCom will not introduce or use any such substance on the Site in violation of any applicable law.

15. Subordination and Non-Disturbance. This Agreement is subordinate to any mortgage or deed of trust now of record against the Site. However, promptly after the Agreement is fully executed, Owner will use diligent efforts to obtain a non-disturbance agreement reasonably acceptable to SprintCom from the holder of any such mortgage or deed of trust.

16. Taxes. SprintCom will be responsible for payment of all personal property taxes assessed directly upon and arising solely from its use of the communications facility on the Site. SprintCom will pay to Owner any increase in real property taxes attributable solely to any improvements to the Site made by SprintCom within 60 days after receipt of satisfactory documentation indicating calculation of SprintCom's share of such real estate taxes and payment of the real estate taxes by Owner. Owner will pay when due all other real estate taxes and assessments attributable to the property of Owner of which the Site is a part.

17. Insurance. SprintCom will procure and maintain commercial general liability insurance, with limits of not less than $1,000,000 combined single limit per occurrence for bodily injury and property damage liability, with a certificate of insurance to be furnished to Owner within 30 days of written request. Such policy will provide that cancellation will not occur without at least 15 days prior written notice to Owner. Each party hereby waives its right of recovery against the other for any loss or damage covered by any

Site Name Butler – EDWARDS 2 Site I. D. CI33XC023-D

insurance policies maintained by the waiving party. Each party will cause each insurance policy obtained by it to provide that the insurance company waives all rights of recovery against the other party in connection with any damage covered by such policy.

18. Maintenance. SprintCom will be responsible for repairing and maintaining the PCS system and any other improvements installed by SprintCom at the Site in a proper operating and reasonably safe condition; provided, however if any such repair or maintenance is required due to the acts of Owner, its agents or employees, Owner shall reimburse SprintCom for the reasonable costs incurred by SprintCom to restore the damaged areas to the condition which existed immediately prior thereto. Owner will maintain and repair all other portions of the property of which the Site is a part in a proper operating and reasonably safe condition.

19. Miscellaneous. (a) This Agreement applies to and binds the heirs, successors, executors, administrators and assigns of the parties to this Agreement; (b) this Agreement is governed by the laws of the state in which the Site is located; (c) If requested by SprintCom, Owner agrees promptly to execute and deliver to SprintCom a recordable Memorandum of this Agreement in the form of Exhibit B; (d) this Agreement (including the Exhibits) constitutes the entire agreement between the parties and supersedes all prior written and verbal agreements, representations, promises or understandings between the parties. Any amendments to this Agreement must be in writing and executed by both parties; (e) if any provision of this Agreement is invalid or unenforceable with respect to any party, the remainder of this Agreement or the application of such provision to persons other than those as to whom it is held invalid or unenforceable, will not be affected and each provision of this Agreement will be valid and enforceable to the fullest extent permitted by law; and (f) the prevailing party in any action or proceeding in court or mutually agreed upon arbitration proceeding to enforce the terms of this Agreement is entitled to receive its reasonable attorneys' fees and other reasonable enforcement costs and expenses from the non-prevailing party.

20. Non-Binding Until Fully Executed. This Agreement is for discussion purposes only and does not constitute a formal offer by either party. This Agreement is not and shall not be binding on either party until and unless it is fully executed by both parties.

The following Exhibits are attached to and made a part of this Agreement: Exhibits A, A-1 and B.

Selection of final specific site shall be agreed upon by owners and SprintCom Inc.

TE 3/29/99

OWNER: Thomas D Edwards

By: Thomas D. Edwards

Its: Owner

S.S./Tax No.: 491-40-3061

Address: Box 438 RR3, Butler, Kentucky 41006

Date: _____

OWNER: Carolyn J Edwards

By: Carolyn J. Edwards

Its: Owner

S.S./Tax No.: 400-56-0055

Address: Box 438 RR3, Butler, Kentucky 41006

Date: _____

SPRINTCOM, INC., a Kansas corporation

_____

By: _____

Its: _____

Date: _____

Site Name Butler – EDWARDS 2 Site I. D. CI33XC023-D

EXHIBIT A

Site Description

Site situated in the City of Butler, County of Pendleton, State of Kentucky commonly described as follows:

Legal Description:

Owner Initials TE

Owner Initials CE

SprintCom Initials _____

Note: Owner and SprintCom may, at SprintCom's option, replace this Exhibit with an exhibit setting forth the legal description of the property on which the Site is located and/or an as-built drawing depicting the Site.

WARRANTY DEED

This Indenture, made and entered into this 2nd day of April, 1987 between MAGGIE LEE YELTON, an unmarried woman, grantor, and TOM EDWARDS and CAROLYN EDWARDS, husband and wife, of R. R. #2, Butler, Kentucky 41006, grantees,

WITNESSETH: That the grantor, in consideration of Thirty Thousand and 00/100 ($30,000.00) Dollars in hand paid, the receipt whereof is hereby acknowledged, does hereby bargain, sell and convey unto said grantees, TOM EDWARDS and CAROLYN EDWARDS, husband and wife, equally and jointly for life, with remainder in fee simple to the survivor of them, his or her heirs and assigns, the following described real estate in Pendleton County, Kentucky:

Lot No. 3: BEGINNING at a stone corner to Alex Yelton; thence S 34-45 E 21 1/2 poles to stone corner to Dave Hornback and with his line S 36-45 E 45.11 poles to a stone; thence N 64-10 E 51.20 poles to a stone; thence N 30 E 36.72 poles to a stone corner to Louis Yelton's land; thence N 41-15 W 11½ poles to stone corner to the Dower Tract; thence N 61-15 W 15.62 poles to stone on ridge; thence N 45-30 W 35½ poles to stone in Alex Yelton's line and with same S 55-15 W 71.6 poles to the beginning, containing 33.53 Acres of land.

Lot No. 4: Lot No. 4 on said plat which is bounded and described as follows, to-wit: BEGINNING at the Dunaway corner; thence S 40-40 W 38 poles to stone; thence S 39-45 W 41.00 poles to the Butler and Grants Lick pike and with same S 28-45 E 10.44 poles; thence S 25-15 W 12 poles; thence S 28-45 W 12 poles; thence S 6 W 12.88 poles; thence S 7-15 E 13.00 poles corner to Louis Yelton's land and with same S 20-45 W 46½ poles; thence N 61-15 W 15.62 poles to stone; thence N 45-30 W 35½ poles to stone in Alex Yelton's line land with same N 55-15 E 12.4 poles to the beginning, containing 15 acres of land which last named tract was allotted to said Maggie Yelton as her dower and subject thereto, and then to Naomie Yelton (now Whitaker), William J. Yelton, Orphia Yelton, and Margaret Yelton.

N 40-40 E 38

N 39-45 E 41

PASSWAY: A passway is provided 20 feet wide, running from the mansion house on Lot No. 1 and barn on Lot No. 2 over Lots Nos. 2 and 4 of Lot 3 to the Butler and Grants Lick turnpike road for the benefit of and for an out-let and in-let for the owners of Lots Nos. 1 and two (2) to be located and be upon the same location where the road is now located.

EXCEPTION: There is excepted from and out of the foregoing tracts a parcel of land containing 35.06 acres, more or less, conveyed by William J. Yelton, et ux. to Tom Edwards, et ux., dated September 30, 1986, and recorded at Deed Book 159, page 417, Pendleton County Records, and more specifically described as follows:

Lying and being in Pendleton County, Kentucky West of Old Route #27 and North of Butler and more particularly described as follows, to wit: BEGINNING at a 20"

Locust being Southwest corner of James Pettit in the line of Herman Hornbeek and said point also being the Northwest corner of Lot #3 a 33.53 acre tract of William J. Yelton; thence with the lines of Hornbeek, S 37° 21' -- E 1097.3 feet to an iron pin; thence N 63° 20' E -- 847.4 feet to a post a corner to Thomas Edwards; thence with said lines, N 29° 14' E -- 369.4 feet to a post; thence N 10° 57' E -- 24[illegible].3 feet to a post; thence with -3- new made lines partitioning the Grantors property, N 73° 06' W -- 198.1 feet to an iron pin; thence N 19° 12' W -- 696.[illegible] feet to a 16" Maple; thence N 79° 21' W -- 12.2 feet to an iron pin in the line of James Pettit; thence with said line, S 53° 54' W - 1390.7 feet to the place of beginning containing 35.06 Acres, more or less, exclusive of all right of ways and easements of record.

The above description is in accordance with a survey made by Hicks & Mann Inc. on September 17, 1986.

SOURCE OF TITLE: Being part of the same property acquired by William J. Yelton and Maggie Lee Yelton, husband and wife, by survivorship deed from Ina Shoemaker, dated July 31, 1959, and recorded at Deed Book 102, page 353, and all of said property that grantor still owns.

The said William J. Yelton died on or about December 16, 1986 and by virtue of the survivorship provisions in the aforementioned deed, fee simple title is now vested in the grantor, Maggie Lee Yelton.

All references are to records in the Pendleton County Clerk's Office, Falmouth, Kentucky.

To Have and to Hold said premises, together with the privileges and appurtenances to the same belonging unto said grantees, TOM EDWARDS and CAROLYN EDWARDS, husband and wife, equally and jointly for life, with remainder in fee simple to the survivor of them, his or her heirs and assigns forever, including all rights to dower and homestead exemption, with covenant of general warranty.

IN WITNESS WHEREOF, the grantor has hereunto set her hand.

Maggie Lee Yelton

Tax Paid $30.00 MAGGIE LEE YELTON

STATE OF KENTUCKY
COUNTY OF PENDLETON

The foregoing Warranty Deed was this 2nd day of April, 1987, signed and acknowledged before me by Maggie Lee Yelton, an unmarried woman.

My commission expires: July 20, 1988.

Charles Donald Webb

NOTARY PUBLIC, STATE AT LARGE

STATE OF KENTUCKY
COUNTY OF PENDLETON

I, CAROL W. OCKERMAN, Clerk of the County and State aforesaid, do certify that the foregoing Warranty Deed was this day lodged for record in my office at 3:25 o'clock P .m., whereupon the same, the foregoing and this certificate have been duly recorded.

GIVEN under my hand, this the 2 day of April, 1987.

Fee Pd. $10.50

2 Lots with exception, Pend. Co.

CAROL W. OCKERMAN
PENDLETON COUNTY CLERK
By Carol W. Ockerman D.C.

This Instrument
Prepared By:
C. Donald Wells
WELLS & BARRICKMAN
Attorneys at Law
Falmouth, Kentucky

C. Donald Wells

Recorded in DEED Book # 161 at Page 53, Pendleton County records at Falmouth, KY.

MAIL TO: C. DONALD WELLS, ATTY.
Chapel Street
Falmouth, KY 41040

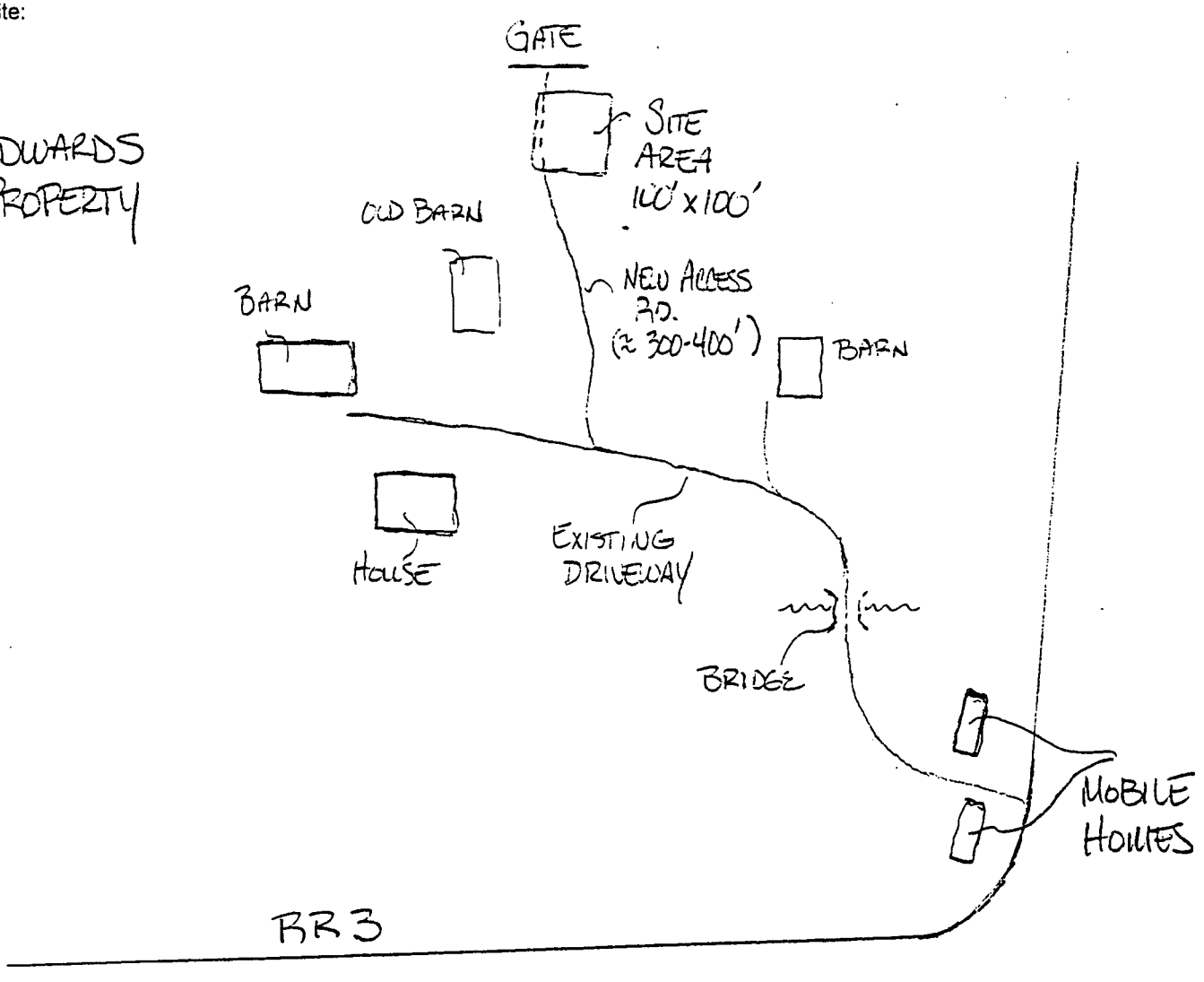
Site Name Butler – EDWARDS 2 Site I. D. CI33XC023-D

EXHIBIT A-1

Site Description

Site situated in the City of Butler; County of Pendleton, State of Kentucky commonly described as follows:

Sketch of Site:



Owner Initials VE

Owner Initials CE

SprintCom Initials _____

Note: Owner and SprintCom may, at SprintCom's option, replace this Exhibit with an exhibit setting forth the legal description of the property on which the Site is located and/or an as-built drawing depicting the Site.

Version 1

PCS SITE AGREEMENT

March 97

Site Name Butler – EDWARDS 2

Site I. D. CI33XC023-D

EXHIBIT B

Memorandum of PCS Site Agreement

This memorandum evidences that a lease was made and entered into by written PCS Site Agreement dated Mar 27, 1997 between Thomas D. Edwards and Carolyn J. Edwards ("Owner") and SprintCom, Inc., a Kansas corporation ("SprintCom").

Such Agreement provides in part that Owner leases to SprintCom a certain site ("Site") located at 437 A RR3, City of Butler, County of Pendleton, State of Kentucky, within the property of Owner which is described in Exhibit A attached hereto, with grant of easement for unrestricted rights of access thereto and to electric and telephone facilities for a term of five (5) years commencing on _____, 19__, which term is subject to four (4) additional five (5) year extension periods by SprintCom.

IN WITNESS WHEREOF, the parties have executed this Memorandum as of the day and year first above written.

"OWNER"

By: Thomas D Edwards

Name: Thomas D. Edwards

Title: Owner

Address: Box 438 RR3, Butler, Kentucky 41006

By: Carolyn J Edwards

Name: Carolyn J. Edwards

Title: Owner

Address: Box 438 RR3, Butler, Kentucky 41006

"SprintCom"

SprintCom, Inc., a Kansas corporation

By: _____

Name: _____

Title: _____

Address: _____

_____

Owner Initials TE

Owner Initials CE

SprintCom Initials _____

Version 1

PCS SITE AGREEMENT

March 97

Site Name Butler – EDWARDS 2

Site I. D. CI33XC023-D

OWNER NOTARY BLOCK:

STATE OF Kentucky

COUNTY OF Campbell

The foregoing instrument was acknowledged before me this 29 day of March, 1999,
☒ by THOMAS D. EDWARDS, ☒ by CAROLYN J. EDWARDS, as _____
of _____, a _____ corporation, on behalf of the corporation,
by _____, partner (or agent) on behalf of _____, a partnership.

(AFFIX NOTARIAL SEAL)

Thomas W. Arnold
(OFFICIAL NOTARY SIGNATURE)
NOTARY PUBLIC—STATE OF _____

THOMAS W. ARNOLD
Notary Public, State at Large, Kentucky
My Commission Expires June 25, 2001
(PRINTED, TYPED OR STAMPED NAME OF NOTARY)
COMMISSION NUMBER: _____

My commission expires:

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 19____,
☐ by _____, ☐ by _____, as _____
of _____, a _____ corporation, on behalf of the corporation,
by _____, partner (or agent) on behalf of _____, a partnership.

(AFFIX NOTARIAL SEAL)

(OFFICIAL NOTARY SIGNATURE)
NOTARY PUBLIC—STATE OF _____

My commission expires:

(PRINTED, TYPED OR STAMPED NAME OF NOTARY)
COMMISSION NUMBER: _____

Site Name Butler – EDWARDS 2 Site I. D. CI33XC023-D

SPRINTCOM, INC. NOTARY BLOCK:

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by

_____, _____ of

SprintCom, Inc., a Kansas corporation, who executed the foregoing instrument on behalf of such corporation.

(AFFIX NOTARIAL SEAL)

_____
(OFFICIAL NOTARY SIGNATURE)
NOTARY PUBLIC—STATE OF_____

My commission expires:

_____
(PRINTED, TYPED OR STAMPED NAME OF NOTARY)

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by

_____.

(AFFIX NOTARIAL SEAL)

_____
(OFFICIAL NOTARY SIGNATURE)
NOTARY PUBLIC—STATE OF_____

My commission expires:

_____
(PRINTED, TYPED OR STAMPED NAME OF NOTARY)

023

Sprint PCS
9801 W. Higgins Road
Suite 220
Rosemont, IL 60018

June 9, 1999

Tom Edwards
RR3 Box 438 (Duckers Road)
Butler, KY. 41006

RE: Amendment of Paragraph 7 of the PCS Site Agreement

Dear Sir or Madam:

I would like to take this opportunity to thank you for joining the landowners that make up Sprint PCS' digital network. Sprint PCS is genuinely pleased to be doing business with you in Northern Kentucky.

As in any venture however, change is a regular part of business. In our particular arrangement this change is the Amendment of Paragraph 7 of the PCS Site Agreement. In order for Sprint PCS to apply for zoning approval in the state of Kentucky, the Kentucky Public Service Commission (KPSC) imposes a series of regulations. The KPSC has a new regulation that requires Sprint PCS to:

> "Include in any contract with an owner of property upon which a cellular antenna tower is to be constructed, a provision that specifies, in the case of abandonment, a method that the utility will follow in dismantling and removing a cellular antenna tower including a timetable for removal." KRS 100.987 (2) (b)

To comply with this regulation, Sprint PCS has amended the language of Paragraph 7 of the PCS Site Agreement you previously signed. Please review the language, initial the change at the bottom of each of the four copies and return the copies in the envelope provided.

If you have any questions or concerns, please contact our SpectraSite office at (606) 426-9100. SpectraSite's agents can answer all of your questions. Thank you for your prompt attention to this matter, and I look forward to doing business with you in the future.

Sincerely,

Dan Kruse
Site Development Manager
Cincinnati BTA

KY Requirement

EXHIBIT __

Site Name _____ **PCS Site Agreement** Site I. D. _____

Improvements

This Paragraph is in lieu of Paragraph 7 of the foregoing Agreement:

"**7. Improvements.** SprintCom may, at its expense, make such improvements on the Site as are necessary for the operation of the PCS System. Owner agrees to cooperate with SprintCom with respect to obtaining any required zoning approvals for the Site and such improvements. Upon termination or expiration of this Agreement, or upon abandonment of the PCS facility by SprintCom, SprintCom shall remove its equipment and improvements and will restore the Site to substantially the condition existing on the Commencement Date, within six (6) months of the cessation of use except for ordinary wear and tear and casualty loss."

Owner Initials _____

SprintCom Initials _____

EXHIBIT I

DIRECTIONS TO SITE (99-104)

From the county seat of Falmouth: go south on State Route 22 to u.S. Highway 27. Turn north on U.S. Highway 27, leaving Falmouth, Ky., and passing through Boston, Kentucky, to Old U.S. Highway 27 (Duckers Road). Proceed north on Old U.S. Highway 27 to box 438, being the site address.

Directions prepared by L. Edward Smith, Smith & Associates, 119 West Main Street, Amelia, Ohio. (513) 752-7925.

G:\OFFICE\MWD\SPCOM3\023\EXHIBIT.I

TILFORD, DOBBINS, ALEXANDER
BUCKAWAY & BLACK

ATTORNEYS AT LAW
1400 ONE RIVERFRONT PLAZA
LOUISVILLE, KENTUCKY 40202

(502) 584-6137

STUART E. ALEXANDER, JR.
WILLIAM A. BUCKAWAY, JR.
CHARLES W. DOBBINS, JR.
TERRELL L. BLACK
JOHN M. NADER[3]
MARK W. DOBBINS
STUART E. ALEXANDER, III
JOHN A. WILMES
SANDRA F. KEENE
THOMAS J. B. HURST
H. KEVIN EDDINS[1]

CAROLYN K. BALLEISEN*[2]

RANDOLPH NOE*[1]
MICHAEL G. KAREM*[4]
* *Of Counsel*

HENRY J. TILFORD (1880-1968)
CHARLES W. DOBBINS (1916-1992)
DONALD H. BALLEISEN (1924-1993)
LAWRENCE W. WETHERBY (1908-1994)

TELECOPIERS
(502) 584-2318
(502) 587-1806
[1] *Also admitted in Indiana*
[2] *Also admitted in New York*
[3] *Also admitted in District of Columbia and Maryland*
[4] *Also admitted in District of Columbia*

June 30, 1999

Donald R. Mays
County Judge, Pendleton County
Courthouse
Main Street
Falmouth, Kentucky 41040

Re: Public Notice - Kentucky Public Service Commission
Docket No. 99-104

Dear County Judge Mays:

SprintCom, Inc. has applied to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide Personal Communications telecommunications service ("PCS"). The facility will include a 250 foot lattice tower, with attached antennas extending upward for a total height of 260 feet, and an equipment shelter to be located at RR3, Box 4, (Duckers Road), Butler, Pendleton County, Kentucky. This notification letter (and the information contained herein) is required by the Commission's Administrative Regulations which govern construction of wireless telecommunications facilities.

The Commission invites your comments regarding the proposed construction. You also have the right to intervene in this matter. Your initial communication to the Commission must be received by the Commission within twenty (20) days of the date of this letter as shown above.

Your comments and request for intervention should be addressed to: Executive Director, Public Service Commission, P.O. Box 615, Frankfort, Kentucky 40502. Please refer to **Docket No. 99-104** in your correspondence.

Sincerely,

Sandra F. Keene

Mark W. Dobbins
Sandra F. Keene

Z 009 667 802

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

Donald R. Mays
County Judge, Pendleton County
Courthouse
Main Street
Falmouth, Kentucky 41040

Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form **3800**, April 1995

Fold at line over top of envelope to the right of the return address

CERTIFIED

Z 009 667 802

MAIL

PROPERTY OWNERS

Elizabeth Pettit
Rt. 3 Box 429
Butler, Kentucky 41006

Thomas & Carolyn Edwards, II
Rt. 3 Box 438
Butler, Kentucky 41006

TILFORD, DOBBINS, ALEXANDER
BUCKAWAY & BLACK

ATTORNEYS AT LAW
1400 ONE RIVERFRONT PLAZA
LOUISVILLE, KENTUCKY 40202

(502) 584-6137

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LAWRENCE W. WETHERBY (1908-1994)

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(502) 584-2318
(502) 587-1806
[1] *Also admitted in Indiana*
[2] *Also admitted in New York*
[3] *Also admitted in District of Columbia and Maryland*
[4] *Also admitted in District of Columbia*

June 30, 1999

Thomas & Carolyn Edwards, II
Rt. 3 Box 438
Butler, Kentucky 41006

Re: Public Notice - Kentucky Public Service Commission
Docket No. 99-104

Dear Mr. and Mrs. Edwards:

SprintCom, Inc. has applied to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide Personal Communications telecommunications service ("PCS"). The facility will include a 250 foot lattice tower, with attached antennas extending upward for a total height of 260 feet, and an equipment shelter to be located at RR3, Box 4, (Duckers Road), Butler, Pendleton County, Kentucky. This notification letter (and the information contained herein) is required by the Commission's Administrative Regulations which govern construction of wireless telecommunications facilities.

The Commission invites your comments regarding the proposed construction. You also have the right to intervene in this matter. Your initial communication to the Commission must be received by the Commission within twenty (20) days of the date of this letter as shown above.

Your comments and request for intervention should be addressed to: Executive Director, Public Service Commission, P.O. Box 615, Frankfort, Kentucky 40502. Please refer to **Docket No. 99-104** in your correspondence.

Sincerely,

Sandra F. Keene

Mark W. Dobbins
Sandra F. Keene

Z 009 667 793

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Thomas & Carolyn Edwards, II
Rt. 3 Box 438
Butler, Kentucky 41006

Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form **3800**, April 1995

Fold at line over top of envelope to the right of the return address

CERTIFIED

Z 009 667 793

MAIL

TILFORD, DOBBINS, ALEXANDER
BUCKAWAY & BLACK

ATTORNEYS AT LAW
1400 ONE RIVERFRONT PLAZA
LOUISVILLE, KENTUCKY 40202

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JOHN M. NADER[3]
MARK W. DOBBINS
STUART E. ALEXANDER, III
JOHN A. WILMES
SANDRA F. KEENE
THOMAS J. B. HURST
H. KEVIN EDDINS[1]

CAROLYN K. BALLEISEN*[2]

RANDOLPH NOE*[1]
MICHAEL G. KAREM*[4]
* *Of Counsel*

HENRY J. TILFORD (1880-1968)
CHARLES W. DOBBINS (1916-1992)
DONALD H. BALLEISEN (1924-1993)
LAWRENCE W. WETHERBY (1908-1994)

TELECOPIERS
(502) 584-2318
(502) 587-1806
[1] *Also admitted in Indiana*
[2] *Also admitted in New York*
[3] *Also admitted in District of Columbia and Maryland*
[4] *Also admitted in District of Columbia*

June 30, 1999

Elizabeth Pettit
Rt. 3 Box 429
Butler, Kentucky 41006

Re: Public Notice - Kentucky Public Service Commission
Docket No. 99-104

Dear Ms. Pettit:

SprintCom, Inc. has applied to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide Personal Communications telecommunications service ("PCS"). The facility will include a 250 foot lattice tower, with attached antennas extending upward for a total height of 260 feet, and an equipment shelter to be located at RR3, Box 4, (Duckers Road), Butler, Pendleton County, Kentucky. This notification letter (and the information contained herein) is required by the Commission's Administrative Regulations which govern construction of wireless telecommunications facilities.

The Commission invites your comments regarding the proposed construction. You also have the right to intervene in this matter. Your initial communication to the Commission must be received by the Commission within twenty (20) days of the date of this letter as shown above.

Your comments and request for intervention should be addressed to: Executive Director, Public Service Commission, P.O. Box 615, Frankfort, Kentucky 40502. Please refer to **Docket No. 99-104** in your correspondence.

Sincerely,

Sandra F. Keene

Mark W. Dobbins
Sandra F. Keene

Z 009 667 794

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Elizabeth Pettit
Rt. 3 Box 429
Butler, Kentucky 41006

Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form **3800**, April 1995

Fold at line over top of envelope to the right of the return address

CERTIFIED

Z 009 667 794

MAIL

TILFORD, DOBBINS, ALEXANDER,
BUCKAWAY & BLACK

ATTORNEYS AT LAW
1400 ONE RIVERFRONT PLAZA
LOUISVILLE, KENTUCKY 40202

(502) 584-6137

STUART E. ALEXANDER, JR.
WILLIAM A. BUCKAWAY, JR.
CHARLES W. DOBBINS, JR.
TERRELL L. BLACK
JOHN M. NADER[3]
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[2] *Also admitted in New York*
[3] *Also admitted in District of Columbia and Maryland*
[4] *Also admitted in District of Columbia*

AMENDED NOTICE OF INTENT TO FILE A CELL SITE APPLICATION

May 17, 1999

Stephanie Bell
Secretary of the Commission
Public Service Commission
730 Schenkel Lane
P.O. Box 615
Frankfort, Kentucky 40602

RE: Case No. 99-104 UAC

Dear Ms. Bell:

Due to technical difficulties in preparing necessary surveys, construction drawings, etc., needed to file the above-referenced application, SprintCom requests a short extension of the May 14 filing date stated in my letter of March 24, 1999. We intend to file the application no later than June 15, 1999. All other information previously submitted to you remains unchanged. If there are any questions, you may contact Mark Dobbins, Sandra Keene, or Heather Kuhn at 502-584-6137.

Thank you for your attention is this matter.

Sincerely,

Sandra F. Keene

Sandra F. Keene

G:\OFFICE\MWD\SPCOM3\023\BELL.2

TILFORD, DOBBINS, ALEXANDER,
BUCKAWAY & BLACK

ATTORNEYS AT LAW

1400 ONE RIVERFRONT PLAZA
LOUISVILLE, KENTUCKY 40202

(502) 584-6137

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(502) 587-1806
[1]*Also admitted in Indiana*
[2]*Also admitted in New York*
[3]*Also admitted in District of Columbia and Maryland*
[4]*Also admitted in District of Columbia*

NOTICE OF INTENT TO FILE A CELL SITE APPLICATION

March 24, 1999

Stephanie Bell
Secretary of the Commission
Public Service Commission
730 Schenkel Lane
P.O. Box 615
Frankfort, Kentucky 40602

RE: Case No. 99-104 UAC

Dear Ms. Bell:

This letter is to confirm my request for a case number on March 19, 1999. The Application is on behalf of SprintCom, Inc., for a cell site located at RR3 Box 438 (Duckers Road), Butler, Pendleton County, Kentucky. I was given Case Number 99-104 UAC. We intend to file the Application no later than May 14, 1999, and we understand that the Case Number assigned to us in this matter may be reassigned if we have not submitted an Application by this date. If there are any questions, you may contact Mark Dobbins, Sandra Keene, or Heather Kuhn at 502-584-6137.

Thank you for your attention is this matter.

Sincerely,

Sandra F. Keene

Sandra F. Keene

G:\OFFICE\MWD\SPCOM3\023\BELL.1

Sprint PCS

4605 DUKE DRIVE, SUITE 200
MASON, OHIO 45040

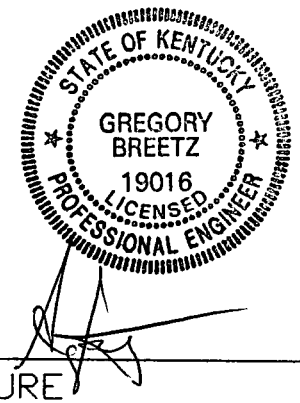
BURGESS & NIPLE

BURGESS & NIPLE, LIMITED
811 RACE STREET
CINCINNATI, OHIO 45202
OFFICE: (513) 579-0042
FAX: (513) 579-0321

SEAL

STATE OF KENTUCKY
GREGORY BREETZ
19016
LICENSED PROFESSIONAL ENGINEER

SIGNATURE



SIGNATURE

DATE:	MAY 13, 1999
PROJECT NUMBER:	24628
DRAWN BY:	TAC
CHECKED BY:	GB

△	REVISIONS		
*	5-19-99	FINAL PRINT	TAC
NO.	DATE	DESCRIPTION	BY
REVIEW DATE:	5-13-99		

NDEX

SITE# CI33XC023 D

EDWARDS 2

RR3 BOX 438

BUTLER, KY

41006

SHEET TITLE

TITLE SHEET

EXHIBIT
99-104
B

NOTE:

FOR EQUIPMENT DETAILS
SEE PLANS PROVIDED
BY SPRINT PCS

SHEET NUMBER

T-1

C-2	SITE LAYOUT & ELEVATIONS
C-2A	ROAD GRADING PLAN
C-3	MISCELLANEOUS DETAILS
C-4	MISCELLANEOUS DETAILS
C-5	GROUNDING PLAN & DETAILS
C-6	GROUNDING DETAILS
E-1	ELECTRICAL DETAILS

SHEET IND

IE SPRINT PCS

RESS 4605 DUKE DRIVE, SUITE 200
, ST. MASON, OH 45040

38-30

NG : N.A.

S2

T.: 5B

OJECT SUMMARY

ANCE

MANNED AND NOT FOR HUMAN HABITATION.
ACCESS REQUIREMENTS NOT REQUIRED.

PCS

E 200

S 2

10

S 2

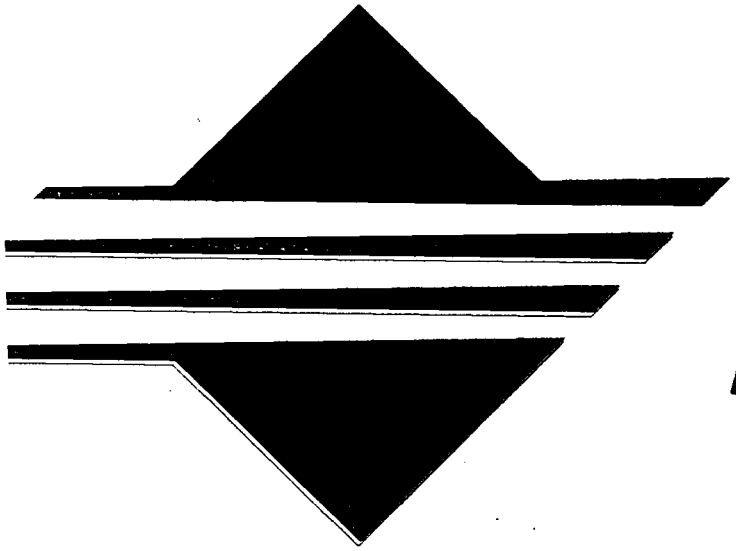
LATTICE TOWER

EDWARDS 2

CI33XC023 D

RR3 BOX 438

SHT. NO.	DESCRIPTION
T-1	TITLE SHEET
C-1	SITE PLAN



SPRINT

4605 DUKE DRIVE, SUIT
MASON, OH 45040

MASON, OH 45040

E D W A R D

SITE NUMBEF

CI33XC023 D

PROPOSED 250' SELF SUPPORTING

CIVIL ENGINEER:
ARCHITECT:

SITE NAME:
SITE NUMBER:
SITE ADDRESS:

BURGESS & NIPLE, LIMITED
811 RACE STREET
CINCINNATI, OH 45202
(513) 579-0042

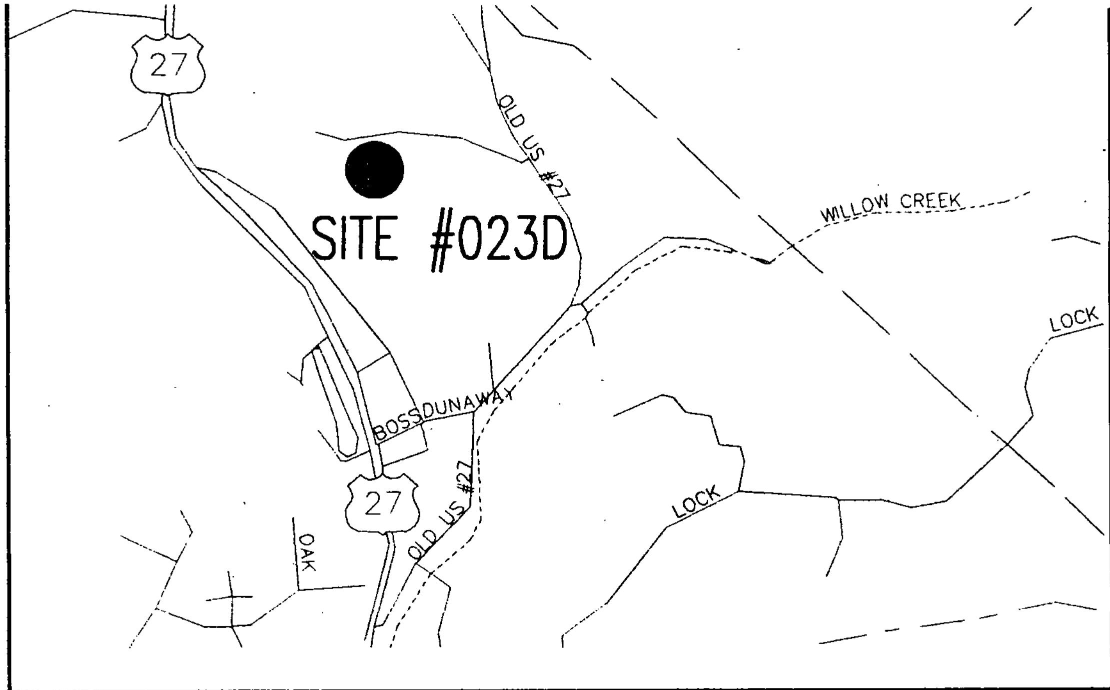
GEOTECHNICAL SERVICES:	SURVEYOR:
BY: N.A.	BY: SMITH & ASSOCIATES
	119 WEST MAIN STREET
	AMELIA, OH 45102
	(513) 752-7925

CONSULTANT TEAM

APPLICANT: N
A
C
A.P.N. :
CURRENT ZO
OCCUPANCY:
TYPE OF CO
NOTES:

PF

A.D.A. COMP
FACILITY IS
HANDICAPPE

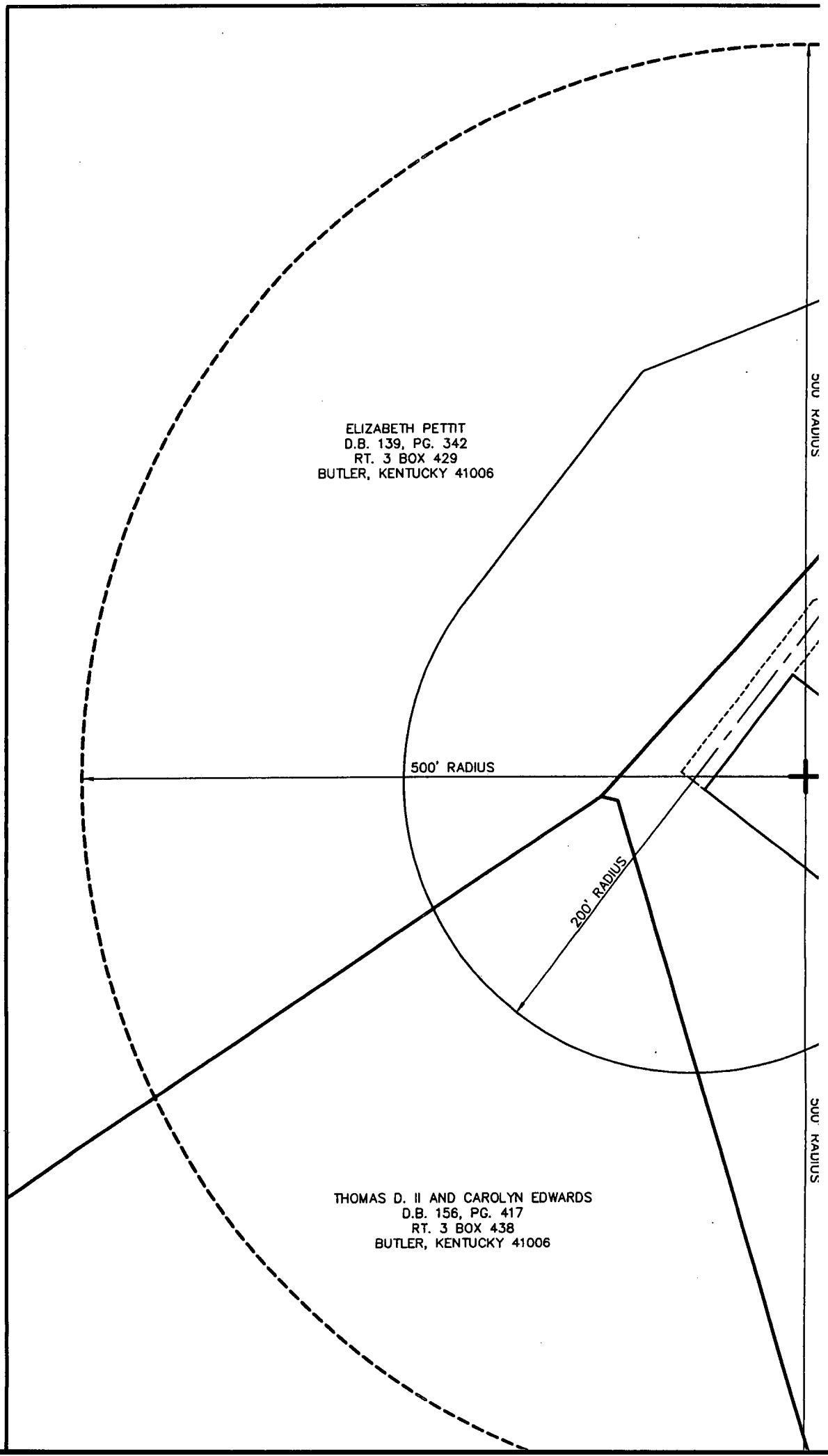


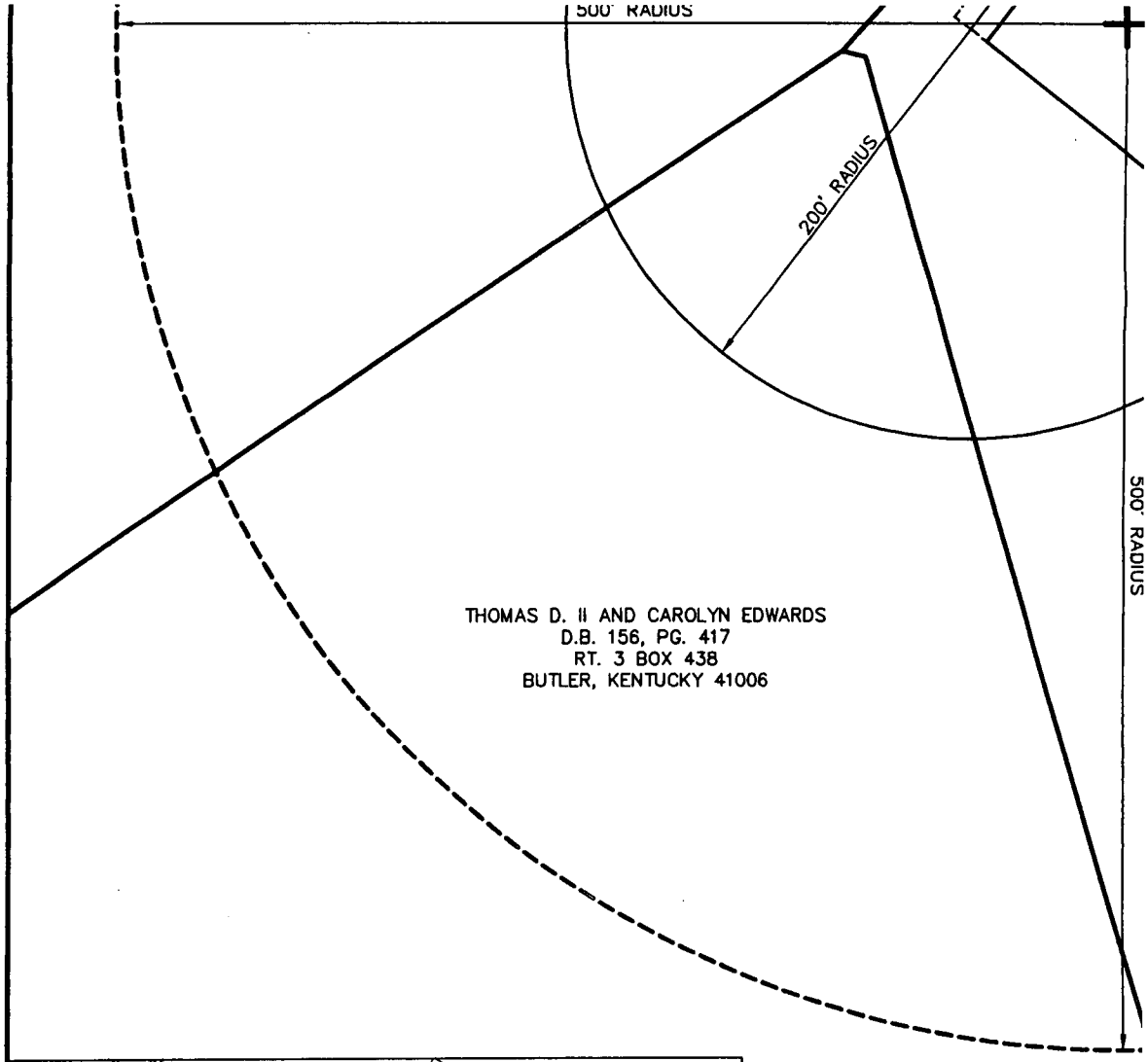
VICINITY MAP (NO SCALE)

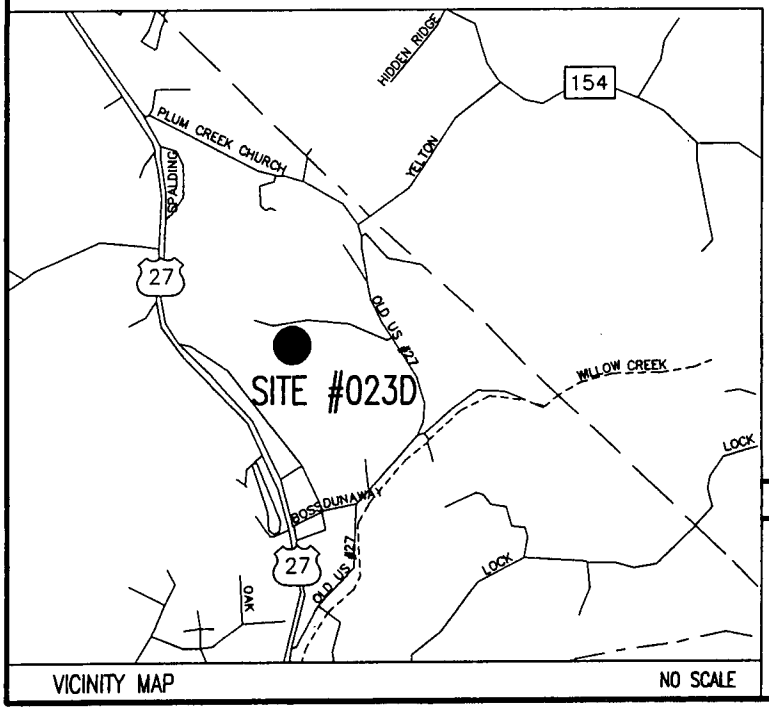
DIRECTIONS TO SITE:

FROM CINCINNATI; TAKE I–471 SOUTH TO U.S. 27, FOLLOW US 27 SOUTH THROUGH ALEXANDRIA INTO BUTLER AREA. TURN RIGHT ON 177, PASS SCHOOL THEN TURN RIGHT AGAIN ON RR3/DUCKERS RD. FOLLOW UP HILL AND LOOK FOR TWO MOBILE HOMES AS ROAD BEARS LEFT. TURN INTO DRIVE BETWEEN MOBILE HOMES AND PROCEED UP THE HILL, THE ACCESS ROAD TO THE SITE IS ON THE RIGHT SIDE JUST BEFORE THE TOP OF THE HILL.

HIDDEN RIDGE


ELIZABETH PETTIT
D.B. 139, PG. 342
RT. 3 BOX 429
BUTLER, KENTUCKY 41006
500' RADIUS
500' RADIUS
200' RADIUS
THOMAS D. II AND CAROLYN EDWARDS
D.B. 156, PG. 417
RT. 3 BOX 438
BUTLER, KENTUCKY 41006

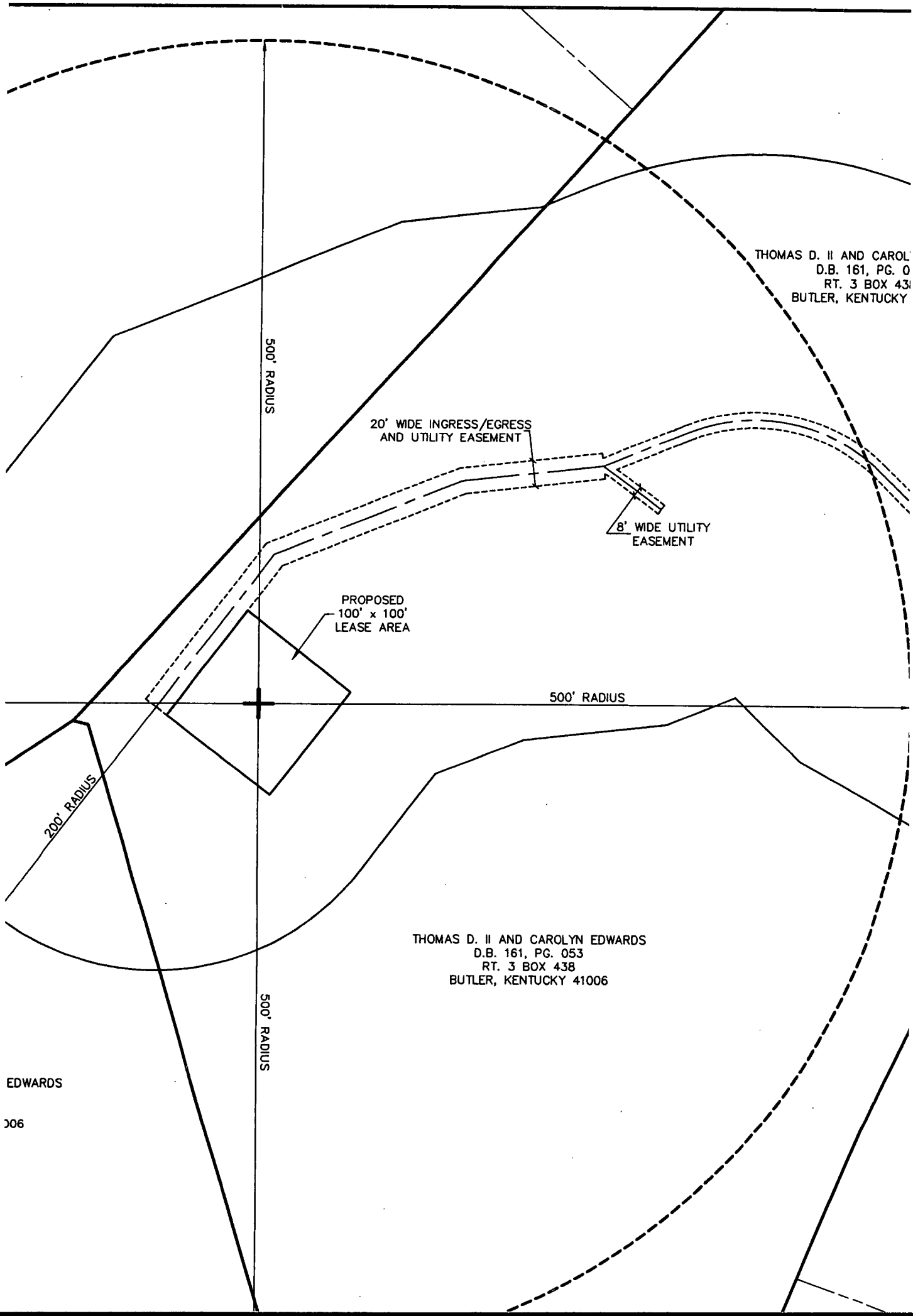


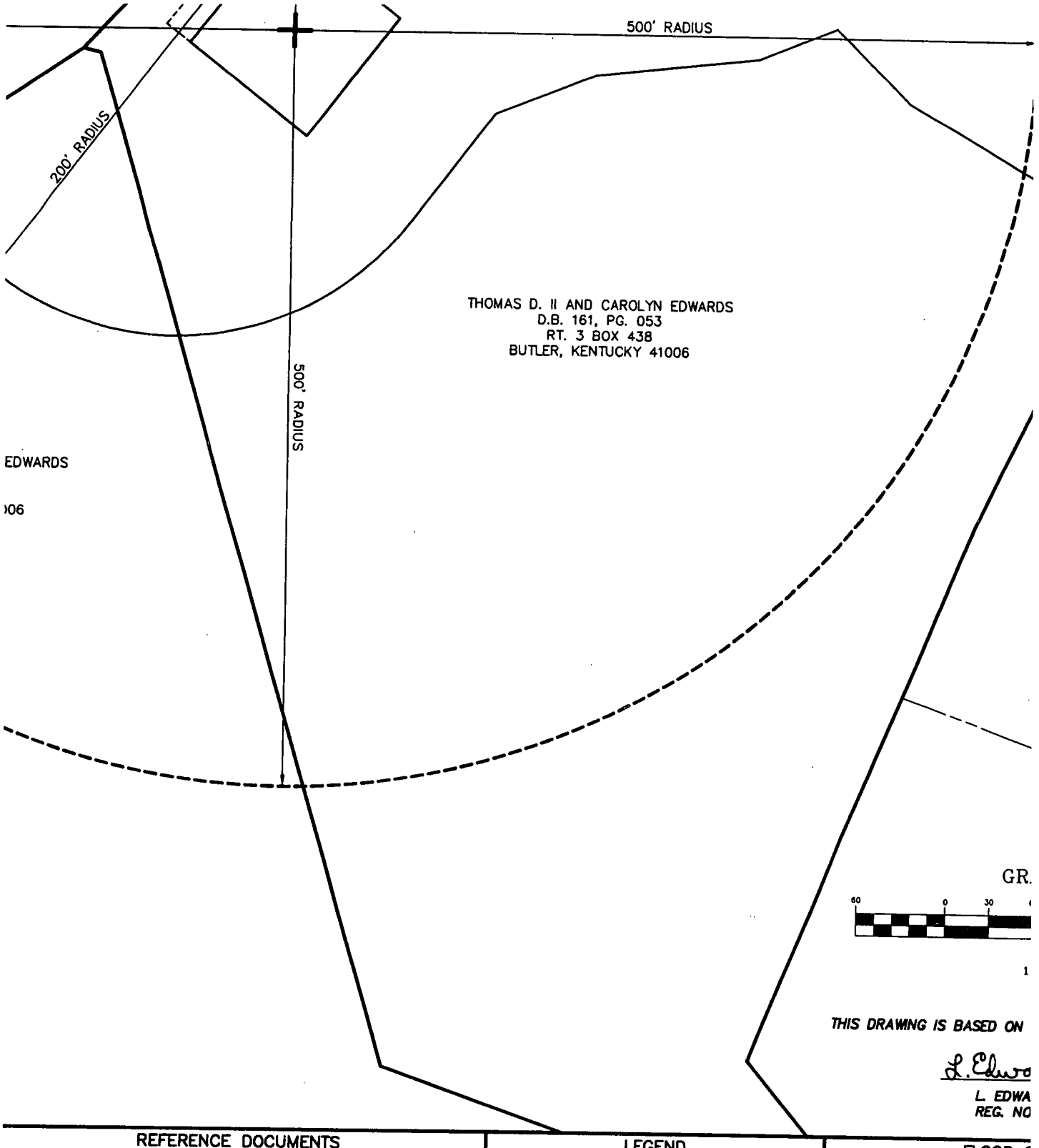


VICINITY MAP NO SCALE

REFERENCE DOCU

D.B. 161, PG. 053
D.B. 156, PG. 417
D.B. 107, PG. 393
D.B. 173, PG. 406
D.B. 088, PG. 407


THOMAS D. II AND CAROL
D.B. 161, PG. 0
RT. 3 BOX 43
BUTLER, KENTUCKY
500' RADIUS
20' WIDE INGRESS/EGRESS
AND UTILITY EASEMENT
8' WIDE UTILITY
EASEMENT
PROPOSED
100' x 100'
LEASE AREA
500' RADIUS
200' RADIUS
THOMAS D. II AND CAROLYN EDWARDS
D.B. 161, PG. 053
RT. 3 BOX 438
BUTLER, KENTUCKY 41006
500' RADIUS
EDWARDS
006



REFERENCE DOCUMENTS	LEGEND	FLOOD S
D.B. 161, PG. 053 D.B. 156, PG. 417 D.B. 107, PG. 393 D.B. 173, PG. 406 D.B. 088, PG. 407	PROPOSED CENTER OF LEASE AREA UTILITY POLE(ELEC.) UTILITY POLE(ELEC.,TELE.) UTILITY POLE(TELE.) 5/8" IRON PIN WITH CAP SET LOCUS STUMP POST FOUND IRON PIN FOUND GATE TREE — X — WIRE FENCE —OHW— OVERHEAD WIRES	NO PART OF THE PROPOSE ACCESS EASEMENT LIE WIT HAZARD ZONE AS SHOWN RATE MAP, CITY OF BUTLE COMMUNITY PANEL NUMBEF HAVING AN EFFECTIVE DAT FEDERAL EMERGENCY MAN/

TAX I.D. # 38-30

DIRECTIONS TO SI

Commencing at the County Seat Falmou
233 Main Street. Proceed South on State Route #2
proceed North on U.S. Highway #27, leaving Falmout
Boston, Kentucky, to Old U.S. Highway #27 (Duckers
on Old U.S. Highway #27 (Duckers Road) to Box 43

Directions Prepared By: Chris Hatfield
Contact Phone Number: (513) 752-7925

SITUATED
IN
PENDLETON CO
BUTLER, COMMONWEALTH

THOMAS D. II AND CAROLYN EDWARDS
D.B. 161, PG. 053
RT. 3 BOX 438
BUTLER, KENTUCKY 41006

12' WIDE INGRESS/
EGRESS EASEMENT

Y

R/W

R/W

JOHN L
D

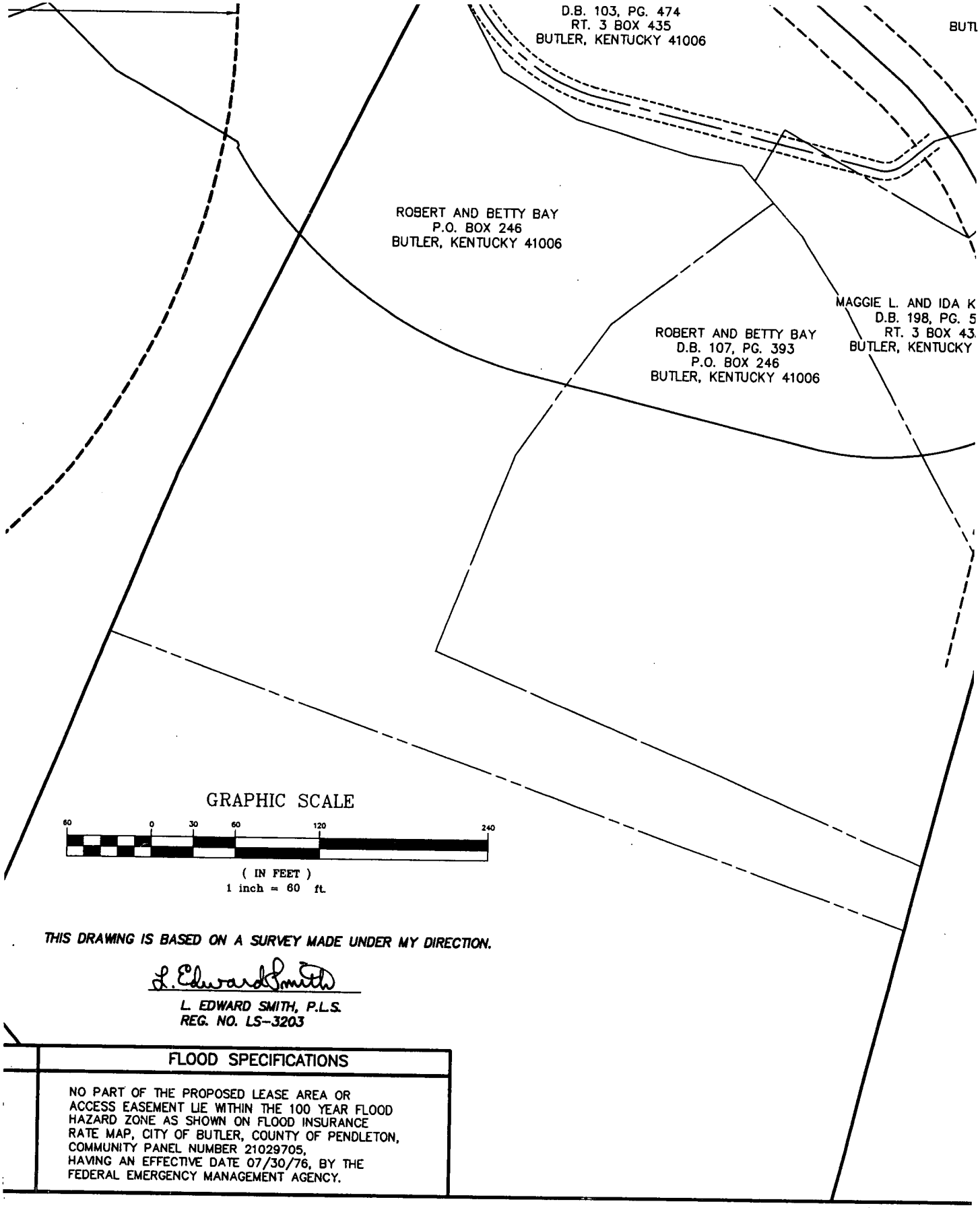
BUTLI

MAGGIE L. AND IDA K. YELTON
D.B. 103, PG. 474
RT. 3 BOX 435
BUTLER, KENTUCKY 41006

ROBERT AND BETTY BAY
P.O. BOX 246
BUTLER, KENTUCKY 41006

MAGGIE L. AND IDA K.
D.B. 198, PG. 5
RT. 3 BOX 43
BUTLER, KENTUCKY

ROBERT AND BETTY BAY
D.B. 107, PG. 393
P.O. BOX 246
BUTLER, KENTUCKY 41006



GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

THIS DRAWING IS BASED ON A SURVEY MADE UNDER MY DIRECTION.

L. Edward Smith

L. EDWARD SMITH, P.L.S.
REG. NO. LS-3203

FLOOD SPECIFICATIONS

NO PART OF THE PROPOSED LEASE AREA OR ACCESS EASEMENT LIE WITHIN THE 100 YEAR FLOOD HAZARD ZONE AS SHOWN ON FLOOD INSURANCE RATE MAP, CITY OF BUTLER, COUNTY OF PENDLETON, COMMUNITY PANEL NUMBER 21029705, HAVING AN EFFECTIVE DATE 07/30/76, BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

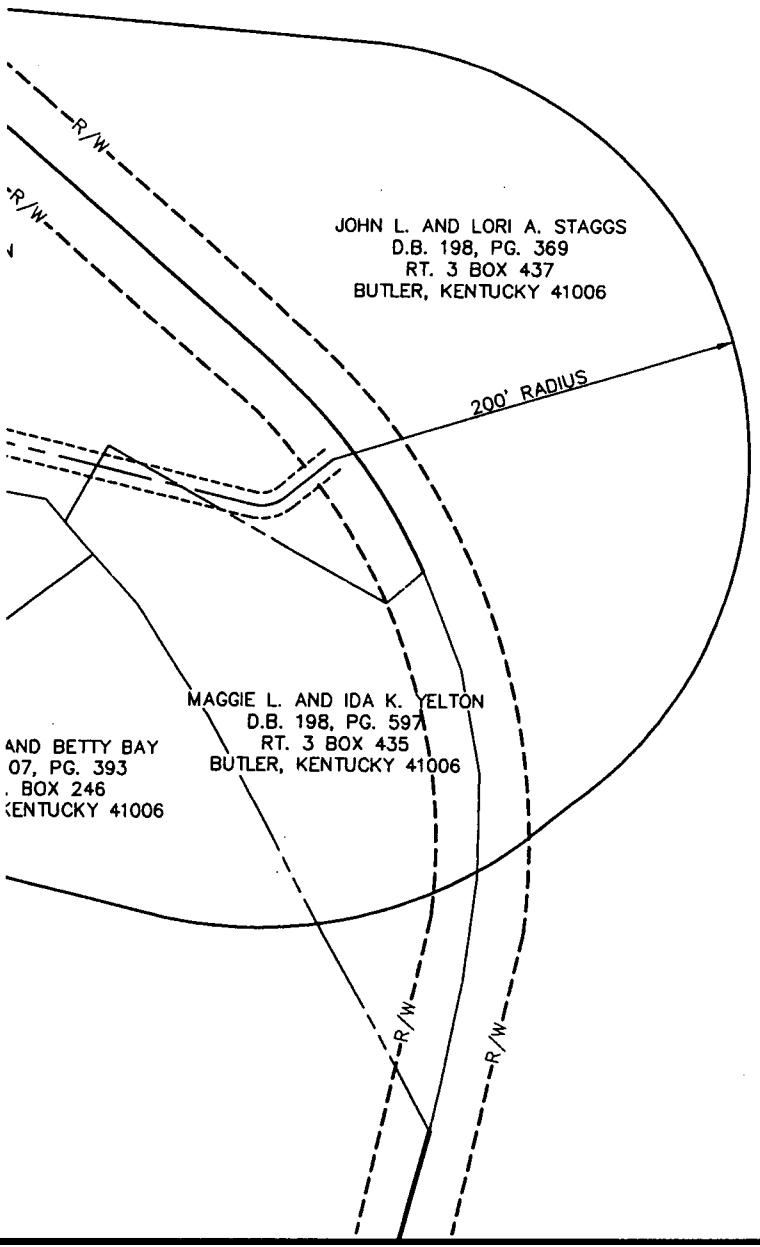
TAX I.D. # 38-30

DIRECTIONS TO SITE

:ommencing at the County Seat Falmouth, Kentucky, being located at
·eet. Proceed South on State Route #22 to U.S. Highway #27. Thence
h on U.S. Highway #27, leaving Falmouth, Kentucky and passing through
ucky, to Old U.S. Highway #27 (Duckers Road). Thence proceed North
Highway #27 (Duckers Road) to Box 438, being the site address.

epared By: Chris Hatfield
ıe Number: (513) 752-7925

SITUATED
IN
PENDLETON COUNTY
', COMMONWEALTH OF KENTUCKY



Sprint PCS

4605 DUKE DRIVE, SUITE 200
MASON, OHIO 45040

BURGESS & NIPLE
ENGINEERS
ARCHITECTS

BURGESS & NIPLE, LIMITED
811 RACE STREET
CINCINNATI, OHIO 45202
OFFICE: (513) 579-0042
FAX: (513) 579-0321

SEAL

STATE of KENTUCKY
L. EDWARD SMITH
3203
LICENSED PROFESSIONAL LAND SURVEYOR

L. Edward Smith
SIGNATURE

DATE: April 23, 1999

PROJECT NUMBER: BS106R-1

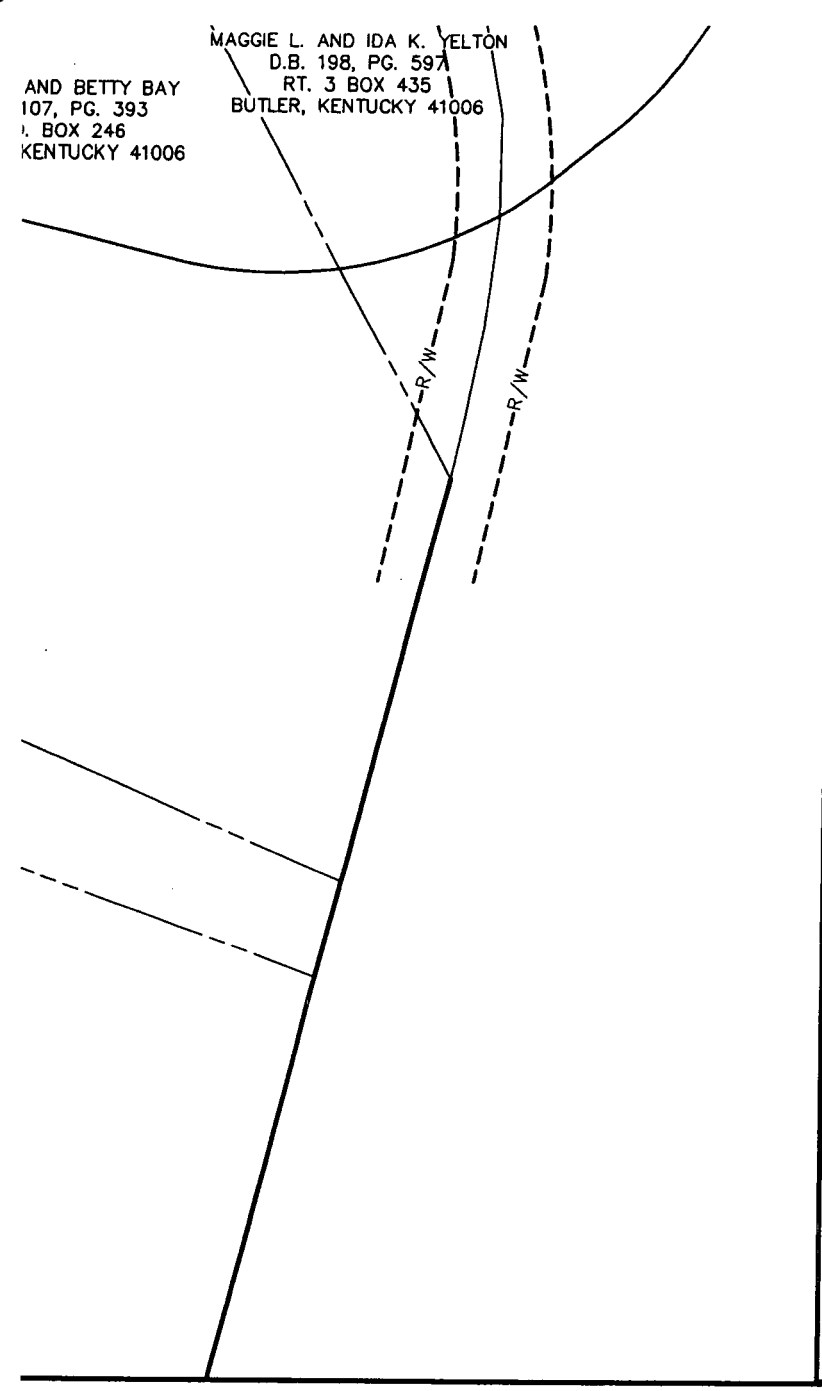
DRAWN BY: C.W.H.

CHECKED BY: _____

REVISIONS			
1	04/23/99	ISSUE FOR COMMENT	CH
2	05/11/99	ISSUE FOR COMMENT	CH
3	05/17/99	ISSUE FOR FINAL	MES
NO.	DATE	DESCRIPTION	BY

SMITH & ASSOCIATES
SURVEYING AND MAPPING
119 WEST MAIN STREET
AMELIA, OHIO 45102

OFFICE: (513) 752-7925 FAX: (513) 752-4766
EMAIL: SMITHANDASSOC@FUSE.NET



NO.	DATE	DESCRIPTION	BY

SMITH & ASSOCIATES
SURVEYING AND MAPPING
119 WEST MAIN STREET
AMELIA, OHIO 45102

OFFICE: (513) 752-7925 FAX: (513) 752-4766
EMAIL: SMITHANDASSOC@FUSE.NET

SITE #CI33XC023D
EDWARDS
R.R. 3 BOX 438
BUTLER, KENTUCKY
41006

SHEET TITLE
500' TOWER RADIUS AND 200' ACCESS RADIUS

SHEET NUMBER
C-1B

TAX I.D. # 38-30

LEGAL DESCRIPTION

Situated in Pendleton County, Commonwealth of Kentucky and being part of a tract of lying on the West side of Old U.S. Highway #27 (Duckers Road), conveyed by deed to ıas D. II and Carolyn Edwards as recorded in Deed Book 161, Page 053 of the Pendleton ty, Kentucky Clerk of Courts Record's Office; being more particularly described as follows;

LEASE AREA

Commencing at an iron pin found being a common corner to the said tract of land eyed by deed to Thomas D. II and Carolyn Edwards as recorded in Deed Book 161, Page of the Pendleton County, Kentucky Clerk of Courts Record's Office and a tract of land eyed to the same as recorded in Deed Book 156, Page 417 of the Pendleton County, ucky Clerk of Courts Record's Office; thence from said point of commencement North 9'25" East a distance of 60.26' to a 5/8" iron pin with cap set being the westerly corner real point of beginning for this herein described Lease Area;

Thence from said real point of beginning North 35°05'28" East a distance of 100.00' 5/8" iron pin with cap set; thence South 54°54'32" East a distance of 100.00' to a 5/8" pin with cap set; thence South 35°05'28" West a distance of 100.00' to a 5/8" iron pin cap set; thence North 54°54'32" West a distance of 100.00' to the point of beginning aining 10000 square feet of land subject to all legal highways, easements, and restrictions of d.

CENTERLINE OF A 20' WIDE INGRESS/EGRESS AND UTILITY EASEMENT

Commencing at an iron pin found being a common corner to the said tract of land eyed by deed to Thomas D. II and Carolyn Edwards as recorded in Deed Book 161, Page of the Pendleton County, Kentucky Clerk of Courts Record's Office and a tract of land eyed to the same as recorded in Deed Book 156, Page 417 of the Pendleton County, ucky Clerk of Courts Record's Office; thence from said point of commencement North 9'25" East a distance of 60.26' to a 5/8" iron pin with cap set being the westerly corner ıe aforementioned Lease Area; thence North 54°54'32" West a distance of 10.00' to a being the centerline and real point of beginning for this herein described 20' Ingress/Egress Utility Easement;

Thence from said real point of beginning with said centerline North 35°05'28" East a nce of 145.92' to a point; thence North 66°03'08" East a distance of 153.66' to a point; ce North 81°00'55" East a distance of 108.38' to a point being hereon known as ence point "A"; said point being the terminus for this easement.

CENTERLINE OF A 12' WIDE INGRESS/EGRESS EASEMENT

Commencing at the herein above described reference point "A" being the centerline and point of beginning for this herein described 12' Wide Ingress/Egress Easement;

Thence from said real point of beginning with said centerline North 65°17'20" East a ınce of 69.58' to a point; thence with an arc curving to the right having a radius of 138.07', a th of 159.53' and being subtended by a chord bearing South 81°36'35" East a distance of 81; to a point; thence South 48°30'29" East a distance of 84.18' to a point; thence South 7'17" East a distance of 64.56' to a point; thence with an arc curving to the right having dius of 192.26', a length of 59.22' and being subtended by a chord bearing South 0'46" East a distance of 58.99' to a point; thence South 28°34'11" East a distance 0.22' to a point; thence with an arc curving to the left having a radius of 139.99', a length of 21' and being subtended by a chord bearing South 52°17'35" East a distance of 111.99' point; thence South 79°18'59" East a distance of 212.41' to a point; thence with an arc ng to the left having a radius of 20.00', a length of 18.00' and being subtended by a chord ing North 74°53'45" East a distance of 17.40' to a point; thence North 49°06'29" a distance of 28.25'ñ to a point being on the westerly edge of pavement of Old U.S. way #27 (Duckers Road); said point being the terminus for this easement.

CENTERLINE OF A 8' WIDE UTILITY EASEMENT

Commencing at the herein above described reference point "A" being the centerline and point of beginning for this herein described 8' Wide Utility Easement;

Thence from said real point of beginning with said centerline and South 56°12'04" a distance of 55.04' to a point being the terminus for this easement.

Sprint PCS

4605 DUKE DRIVE, SUITE 200
MASON, OHIO 45040

BURGESS & NIPLE
ENGINEERS
ARCHITECTS

BURGESS & NIPLE, LIMITED
811 RACE STREET
CINCINNATI, OHIO 45202
OFFICE: (513) 579-0042
FAX: (513) 579-0321

SEAL

STATE of KENTUCKY
L. EDWARD SMITH
3203
LICENSED PROFESSIONAL LAND SURVEYOR

L. Edward Smith
SIGNATURE

DATE: April 23, 1999

PROJECT NUMBER: BS106R-1

DRAWN BY: C.W.H.

CHECKED BY:

REVISIONS

NO.	DATE	DESCRIPTION	BY
2	04/23/99	ISSUE FOR COMMENT	CH
1	05/11/99	ISSUE FOR COMMENT	CH
0	05/17/99	ISSUE FOR FINAL	MES

e aforementioned Lease Area, thence North 34°54'52" West a distance of 10.00' to a being the centerline and real point of beginning for this herein described 20' Ingress/Egress Utility Easement;

Thence from said real point of beginning with said centerline North 35°05'28" East a nce of 145.92' to a point; thence North 66°03'08" East a distance of 153.66' to a point; e North 81°00'55" East a distance of 108.38' to a point being hereon known as ence point "A"; said point being the terminus for this easement.

CENTERLINE OF A 12' WIDE INGRESS/EGRESS EASEMENT

Commencing at the herein above described reference point "A" being the centerline and point of beginning for this herein described 12' Wide Ingress/Egress Easement;

Thence from said real point of beginning with said centerline North 65°17'20" East a nce of 69.58' to a point; thence with an arc curving to the right having a radius of 138.07', a h of 159.53' and being subtended by a chord bearing South 81°36'35" East a distance of 11; to a point; thence South 48°30'29" East a distance of 84.18' to a point; thence South '17" East a distance of 64.56' to a point; thence with an arc curving to the right having dius of 192.26', a length of 59.22' and being subtended by a chord bearing South '46" East a distance of 58.99' to a point; thence South 28°34'11" East a distance).22' to a point; thence with an arc curving to the left having a radius of 139.99', a length of 1' and being subtended by a chord bearing South 52°17'35" East a distance of 111.99' point; thence South 79°18'59" East a distance of 212.41' to a point; thence with an arc ng to the left having a radius of 20.00', a length of 18.00' and being subtended by a chord ng North 74°53'45" East a distance of 17.40' to a point; thence North 49°06'29" a distance of 28.25'ñ to a point being on the westerly edge of pavement of Old U.S. ay #27 (Duckers Road); said point being the terminus for this easement.

CENTERLINE OF A 8' WIDE UTILITY EASEMENT

Commencing at the herein above described reference point "A" being the centerline and point of beginning for this herein described 8' Wide Utility Easement;

Thence from said real point of beginning with said centerline and South 56°12'04" a distance of 55.04' to a point being the terminus for this easement.

DIRECTIONS TO SITE

Commencing at the County Seat Falmouth, Kentucky, being located at Main Street. Proceed South on State Route #22 to U.S. Highway #27. Thence eed North on U.S. Highway #27, leaving Falmouth, Kentucky and passing through on, Kentucky, to Old U.S. Highway #27 (Duckers Road). Thence proceed North Old U.S. Highway #27 (Duckers Road) to Box 438, being the site address.

ctions Prepared By: Chris Hatfield
act Phone Number: (513) 752-7925

SITUATED IN PENDLETON COUNTY TLER, COMMONWEALTH OF KENTUCKY

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

CONTOUR INTERVAL = 2.0'

SEAL

STATE of KENTUCKY
L. EDWARD SMITH
3203
LICENSED PROFESSIONAL LAND SURVEYOR

L. Edward Smith
SIGNATURE

DATE: April 23, 1999

PROJECT NUMBER: BS106R-1

DRAWN BY: C.W.H.

CHECKED BY: _____

REVISIONS			
1	04/23/99	ISSUE FOR COMMENT	CH
2	05/11/99	ISSUE FOR COMMENT	CH
3	05/17/99	ISSUE FOR FINAL	MES
NO.	DATE	DESCRIPTION	BY

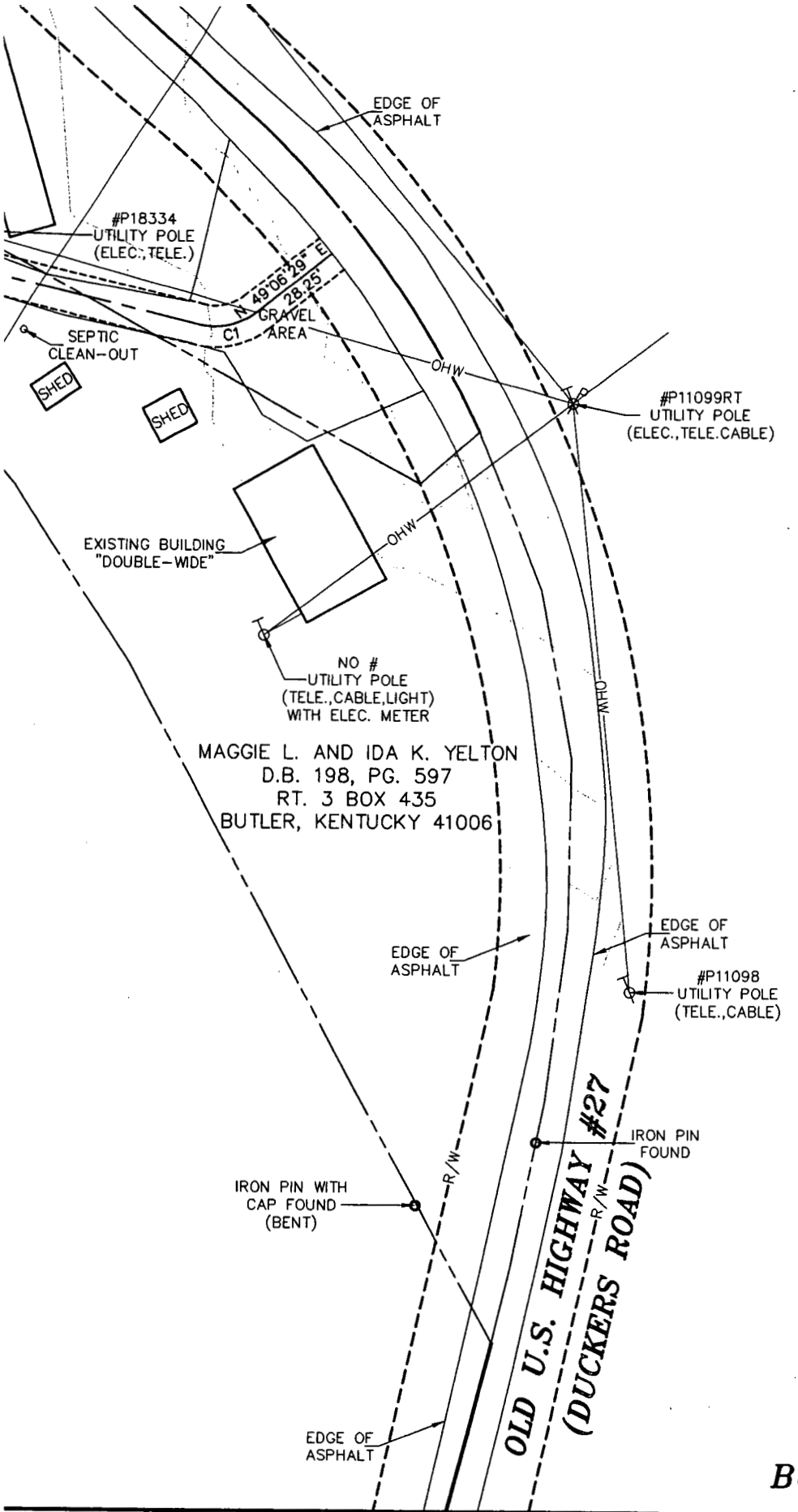
SMITH & ASSOCIATES
SURVEYING AND MAPPING
119 WEST MAIN STREET
AMELIA, OHIO 45102

OFFICE: (513) 752-7925 FAX: (513) 752-4766
EMAIL: SMITHANDASSOC@FUSE.NET

SITE #CI33XC023D
EDWARDS
R.R. 3 BOX 438
BUTLER, KENTUCKY
41006

SHEET TITLE
SITE PLAN

SHEET NUMBER
C-1A



of the aforementioned Lease Area; thence No
point being the centerline and real point of b
and Utility Easement;

Thence from said real point of be
distance of 145.92' to a point; thence North
thence North 81°00'55" East a distance of 10
reference point "A"; said point being the terr

CENTERLINE OF A 12' WI

Commencing at the herein above
real point of beginning for this herein describ

Thence from said real point of be
distance of 69.58' to a point; thence with ar
length of 159.53' and being subtended by a
150.81; to a point; thence South 48°30'29" E
63°17'17" East a distance of 64.56' to a poin
a radius of 192.26', a length of 59.22' and b
47°10'46" East a distance of 58.99' to a poir
of 10.22' to a point; thence with an arc curv
115.21' and being subtended by a chord beari
to a point; thence South 79°18'59" East a di
curving to the left having a radius of 20.00',
bearing North 74°53'45" East a distance of 1
East a distance of 28.25'± to a point being
Highway #27 (Duckers Road); said point being

CENTERLINE OF A 8

Commencing at the herein above
real point of beginning for this herein describ

Thence from said real point of be
East a distance of 55.04' to a point being th

DIRECTIONS T

Commencing at the County Seat F
233 Main Street. Proceed South on State Rou
proceed North on U.S. Highway #27, leaving F
Boston, Kentucky, to Old U.S. Highway #27 (D
on Old U.S. Highway #27 (Duckers Road) to B

Directions Prepared By: Chris Hatfield
Contact Phone Number: (513) 752-7925

SITUAT
IN
PENDLETON
BUTLER, COMMONWEAI

GRAPHIC S

30 0 15 30

(IN FEET
1 inch = 30

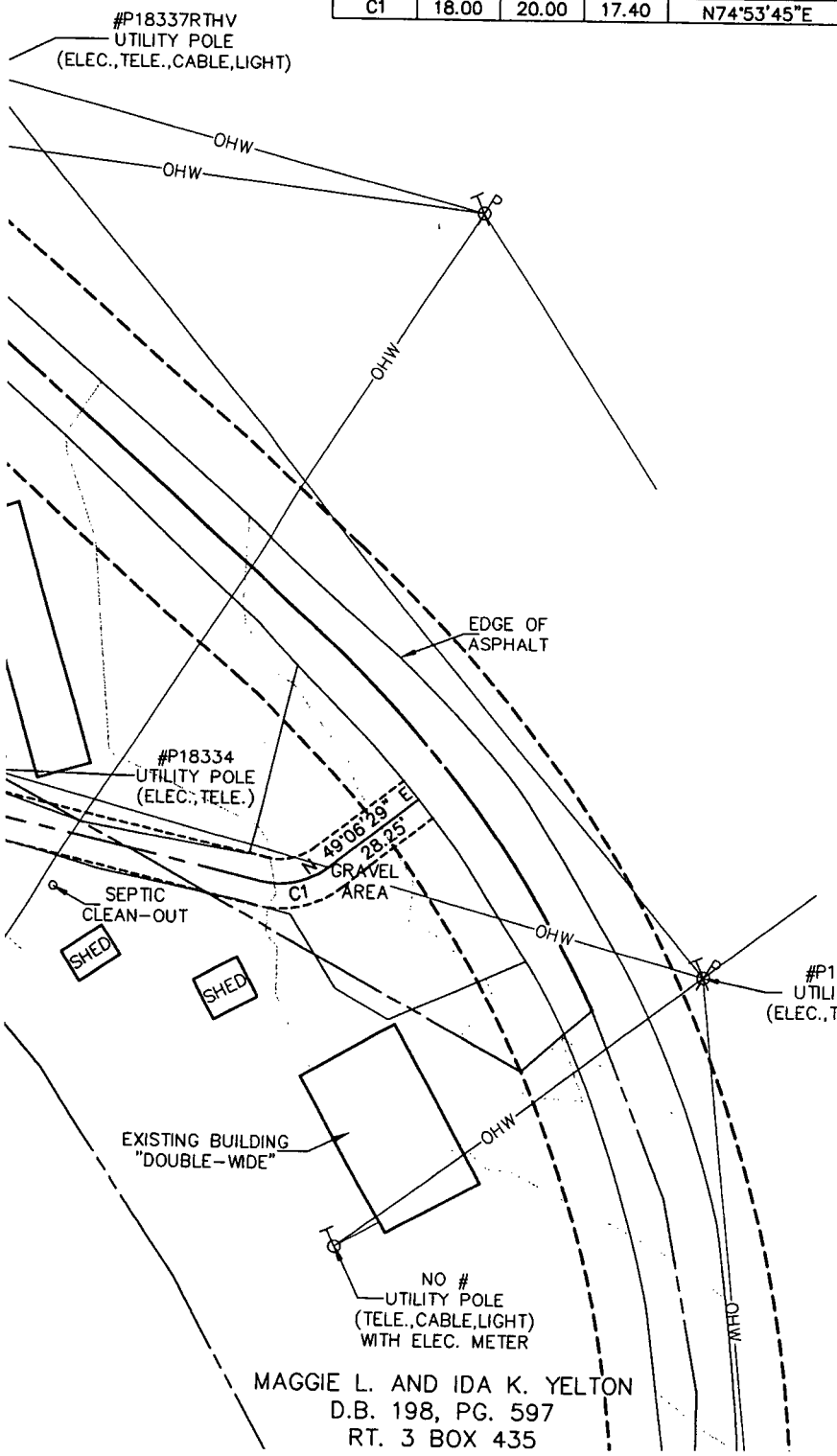
CONTOUR INTERVAI

	FLOOD SPECIFICATIONS
POST FOUND IRON PIN FOUND GATE TREE WIRE FENCE OVERHEAD WIRES	NO PART OF THE PROPOSED LEASE AREA OR ACCESS EASEMENT LIE WITHIN THE 100 YEAR FLOOD HAZARD ZONE AS SHOWN ON FLOOD INSURANCE RATE MAP, CITY OF BUTLER, COUNTY OF PENDLETON, COMMUNITY PANEL NUMBER 21029705, HAVING AN EFFECTIVE DATE 07/30/76, BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

TAX I.D

LINE TABLE		
LINE	LENGTH	BEARING
L1	10.22	N28°34'11"W

CURVE TABLE				
CURVE	LENGTH	RADIUS	CHORD	BEARING
C1	18.00	20.00	17.40	N74°53'45"E



LEG

Situated in Pendleton County, land, lying on the West side of Old U.S. H Thomas D. II and Carolyn Edwards as reco County, Kentucky Clerk of Courts Record's

Commencing at an iron pin fou conveyed by deed to Thomas D. II and Ca 053 of the Pendleton County, Kentucky Cl conveyed to the same as recorded in Dee Kentucky Clerk of Courts Record's Office; 80°09'25" East a distance of 60.26' to a and real point of beginning for this herein

Thence from said real point of to a 5/8" iron pin with cap set; thence S iron pin with cap set; thence South 35°05' with cap set; thence North 54°54'32" West containing 10000 square feet of land subje record.

CENTERLINE OF A 20' WIDE I

Commencing at an iron pin fou conveyed by deed to Thomas D. II and Car 053 of the Pendleton County, Kentucky Cle conveyed to the same as recorded in Deec Kentucky Clerk of Courts Record's Office; t 80°09'25" East a distance of 60.26' to a of the aforementioned Lease Area; thence point being the centerline and real point o and Utility Easement;

Thence from said real point of distance of 145.92' to a point; thence Nor thence North 81°00'55" East a distance of reference point "A"; said point being the t

CENTERLINE OF A 12'

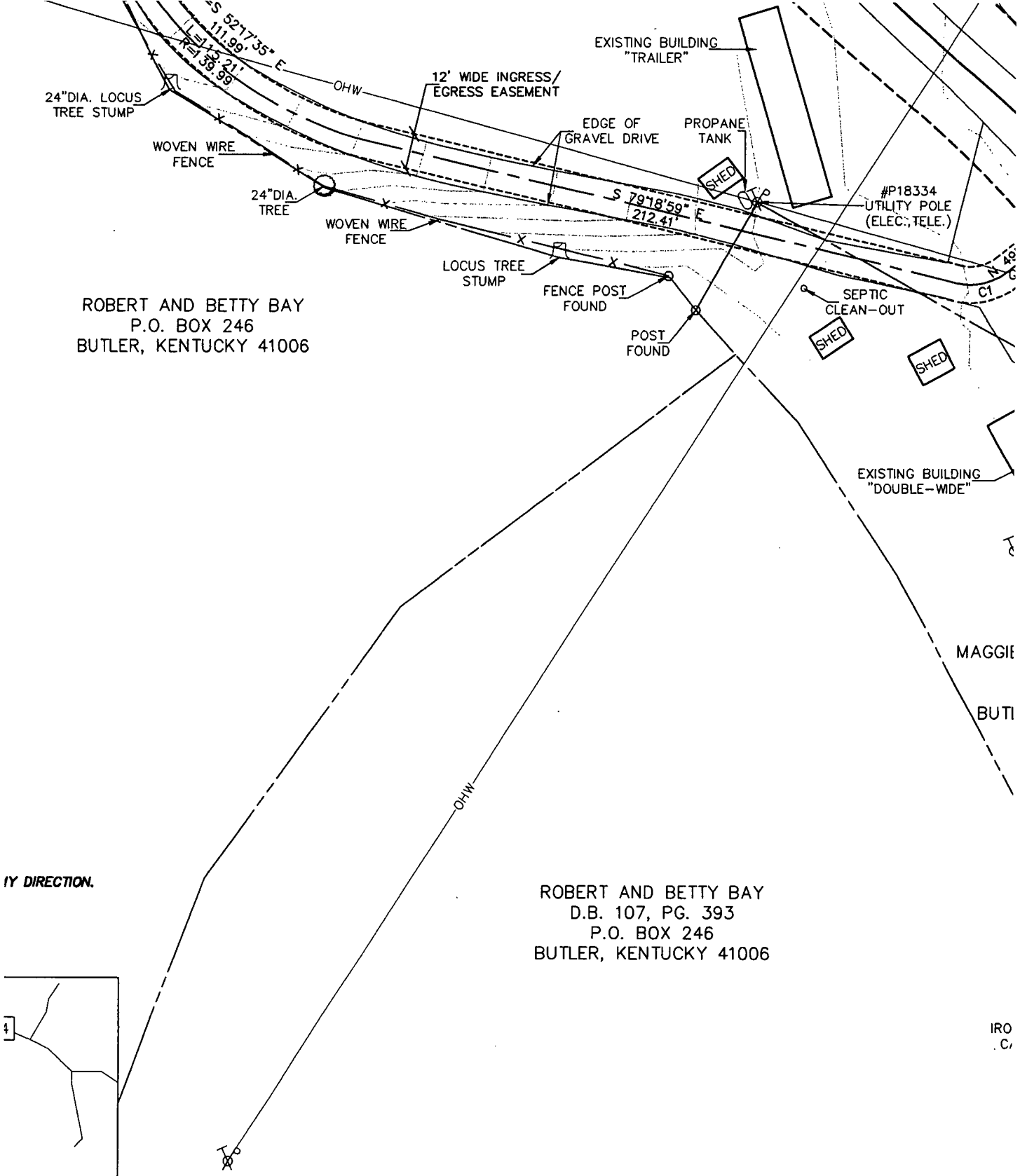
Commencing at the herein abov real point of beginning for this herein desc

Thence from said real point of distance of 69.58' to a point; thence with length of 159.53' and being subtended by 150.81; to a point; thence South 48°30'29" 63°17'17" East a distance of 64.56' to a p a radius of 192.26', a length of 59.22' and 47°10'46" East a distance of 58.99' to a p of 10.22' to a point; thence with an arc c 115.21' and being subtended by a chord be to a point; thence South 79°18'59" East a curving to the left having a radius of 20.0 bearing North 74°53'45" East a distance of East a distance of 28.25'ñ to a point being Highway #27 (Duckers Road); said point bei

CENTERLINE OF A

Commencing at the herein abov real point of beginning for this herein descr

Thence from said real point of t East a distance of 55.04' to a point being



IY DIRECTION.

IRO
C/

OW CREEK

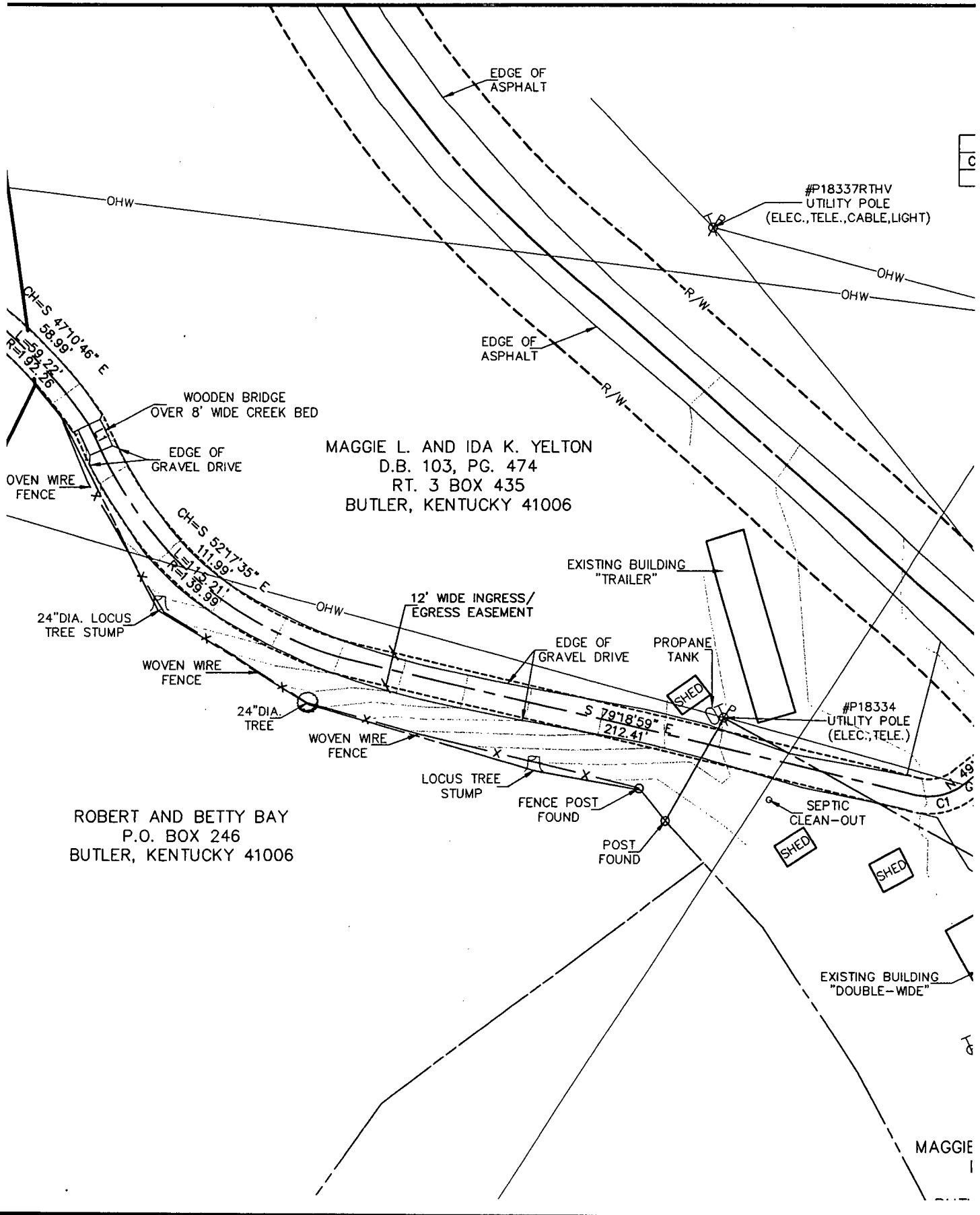
LOCK

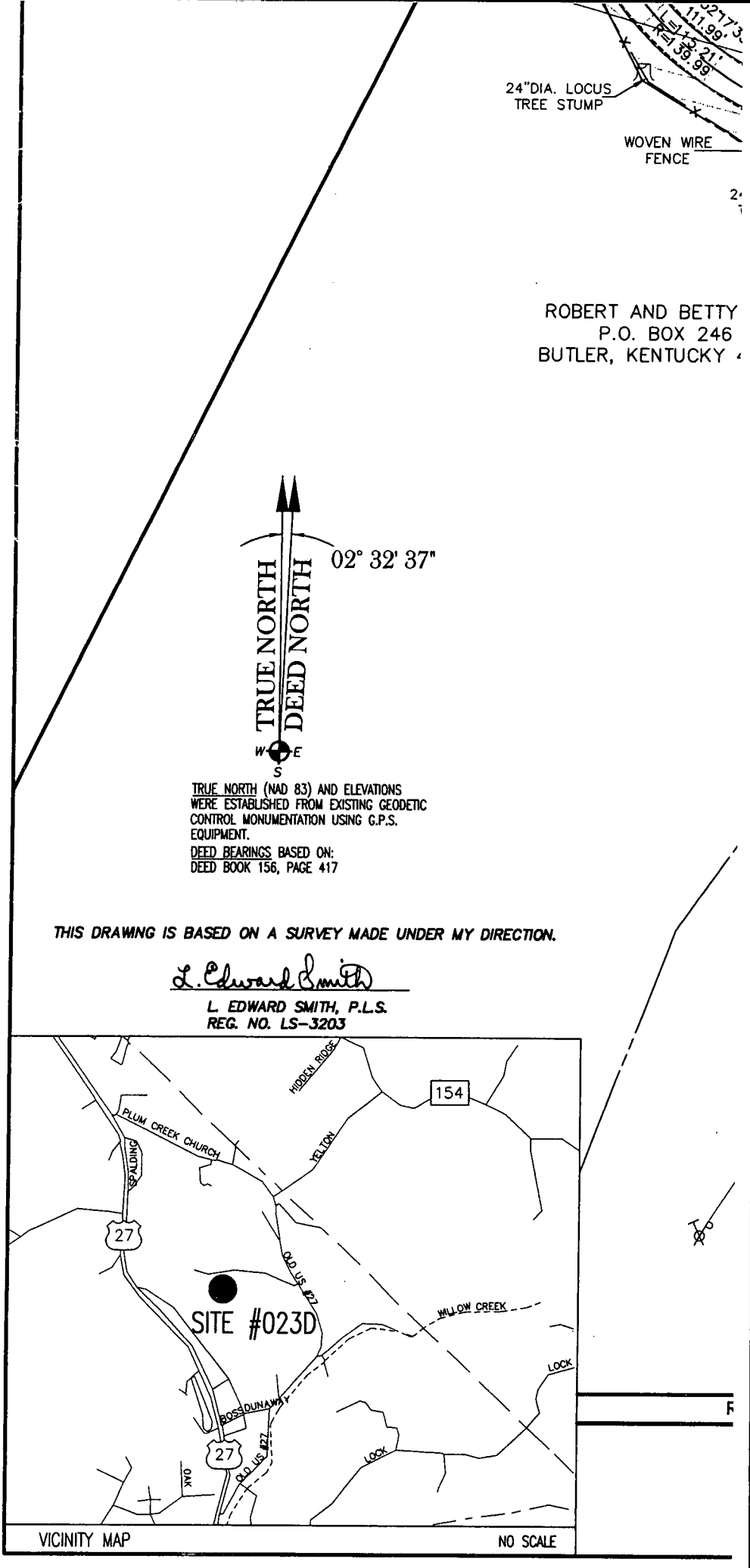
NO SCALE

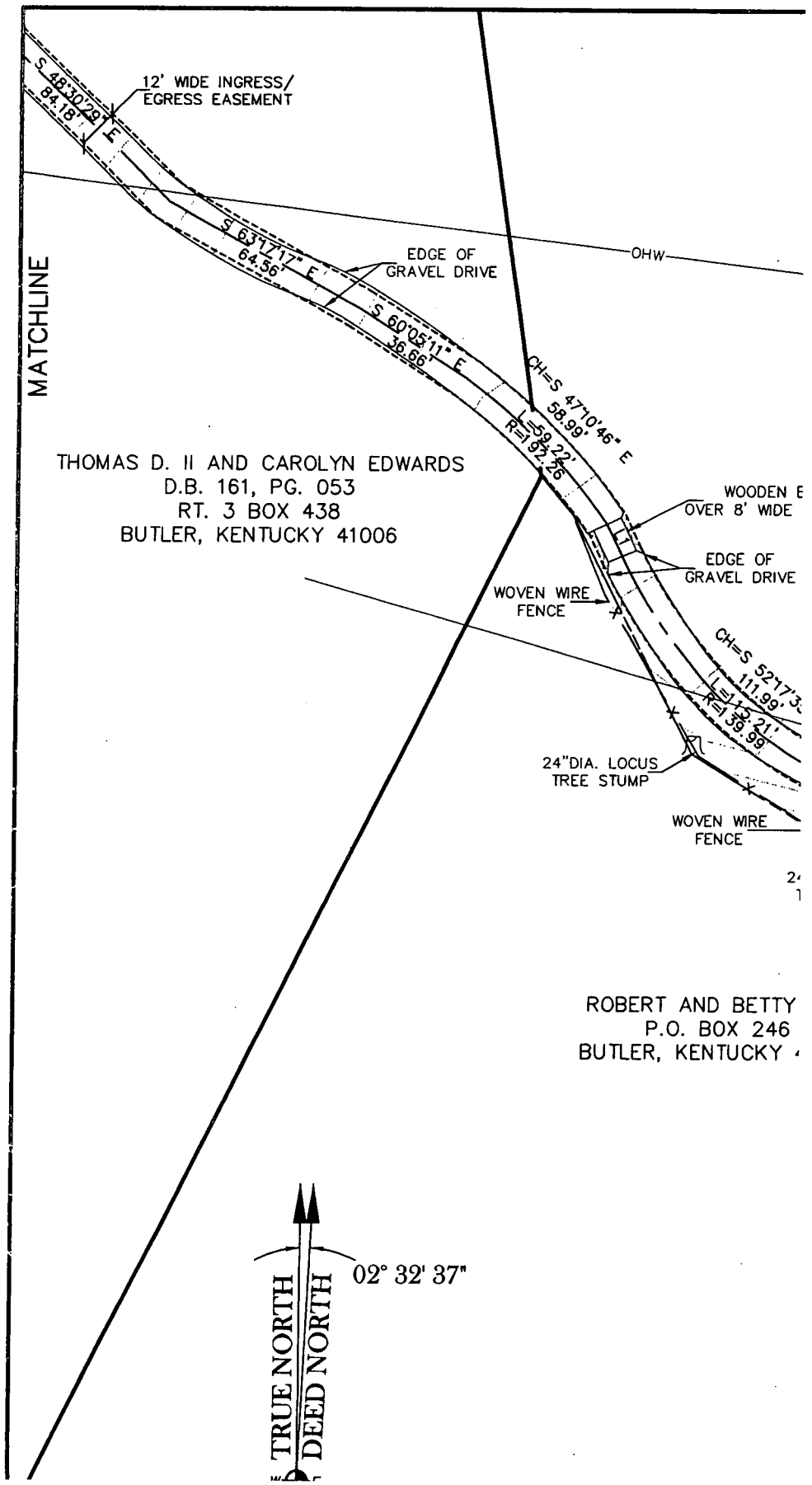
REFERENCE DOCUMENTS
D.B. 161, PG. 053
D.B. 156, PG. 417
D.B. 107, PG. 393
D.B. 173, PG. 406
D.B. 088, PG. 407

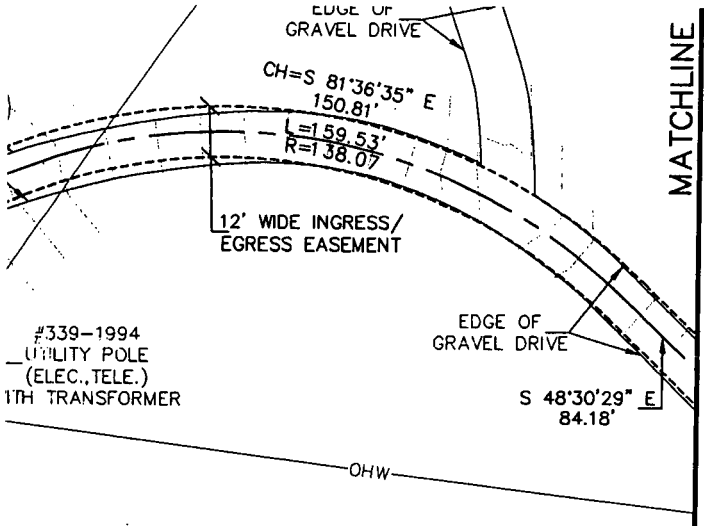
LEGEND	
PROPOSED CENTER OF LEASE AREA	POST FOUND
UTILITY POLE(ELEC.)	IRON PIN FOUND
UTILITY POLE(ELEC.,TELE.)	GATE
UTILITY POLE(TELE.)	TREE
5/8" IRON PIN WITH CAP SET	WIRE FENCE
LOCUS STUMP	OVERHEAD WIRES

NO PAR
ACCESS
HAZARD
RATE M
COMMUN
HAVING
FEDERAI


EDGE OF ASPHALT
#P18337RTHV
UTILITY POLE
(ELEC.,TELE.,CABLE,LIGHT)
OHW
OHW
OHW
R/W
EDGE OF ASPHALT
R/W
CH=S 47°10'46" E
58.99'
L=59.22'
R=192.56
WOODEN BRIDGE
OVER 8' WIDE CREEK BED
EDGE OF
GRAVEL DRIVE
OVEN WIRE
FENCE
MAGGIE L. AND IDA K. YELTON
D.B. 103, PG. 474
RT. 3 BOX 435
BUTLER, KENTUCKY 41006
CH=S 52°17'35" E
111.99'
L=112.21'
R=139.99
EXISTING BUILDING
"TRAILER"
12' WIDE INGRESS/
EGRESS EASEMENT
OHW
24"DIA. LOCUS
TREE STUMP
EDGE OF
GRAVEL DRIVE
PROPANE
TANK
WOVEN WIRE
FENCE
SHED
24"DIA.
TREE
S 79°18'59" E
212.41'
#P18334
UTILITY POLE
(ELEC.,TELE.)
WOVEN WIRE
FENCE
LOCUS TREE
STUMP
FENCE POST
FOUND
SEPTIC
CLEAN-OUT
POST
FOUND
SHED
SHED
ROBERT AND BETTY BAY
P.O. BOX 246
BUTLER, KENTUCKY 41006
EXISTING BUILDING
"DOUBLE-WIDE"
MAGGIE


L=112.21'
R=139.99'
24"DIA. LOCUS
TREE STUMP
WOVEN WIRE
FENCE
ROBERT AND BETTY
P.O. BOX 246
BUTLER, KENTUCKY
TRUE NORTH
DEED NORTH
02° 32' 37"
W
E
S
TRUE NORTH (NAD 83) AND ELEVATIONS
WERE ESTABLISHED FROM EXISTING GEODETIC
CONTROL MONUMENTATION USING G.P.S.
EQUIPMENT.
DEED BEARINGS BASED ON:
DEED BOOK 156, PAGE 417
THIS DRAWING IS BASED ON A SURVEY MADE UNDER MY DIRECTION.
L. EDWARD SMITH, P.L.S.
REG. NO. LS-3203
HIDDEN RIDGE
154
PLUM CREEK CHURCH
YELTON
SPALDING
27
OLD US #27
SITE #023D
WILLOW CREEK
LOCK
BOSS DUNAWAY
27
OLD US #27
OAK
LOCK
VICINITY MAP
NO SCALE


12' WIDE INGRESS/
EGRESS EASEMENT
S 48°30'29" E
84.18'
S 63°17'17" E
64.56'
S 60°05'11" E
36.66'
EDGE OF
GRAVEL DRIVE
OHW
MATCHLINE
CH=S 47°10'46" E
58.99'
L=59.22'
R=192.26'
THOMAS D. II AND CAROLYN EDWARDS
D.B. 161, PG. 053
RT. 3 BOX 438
BUTLER, KENTUCKY 41006
WOODEN E
OVER 8' WIDE
EDGE OF
GRAVEL DRIVE
WOVEN WIRE
FENCE
CH=S 52°17'3
111.99'
L=112.21'
R=139.99'
24"DIA. LOCUS
TREE STUMP
WOVEN WIRE
FENCE
ROBERT AND BETTY
P.O. BOX 246
BUTLER, KENTUCKY
02° 32' 37"
TRUE NORTH
DEED NORTH



MATCHLINE

MATCHLINE

SIGNATURE

DATE: April 23, 1999

PROJECT NUMBER: BS106R-1

DRAWN BY: C.W.H.

CHECKED BY:

REVISIONS			
1	04/23/99	ISSUE FOR COMMENT	CH
2	05/11/99	ISSUE FOR COMMENT	CH
3	05/17/99	ISSUE FOR FINAL	MES
NO.	DATE	DESCRIPTION	BY

SMITH & ASSOCIATES
SURVEYING AND MAPPING
119 WEST MAIN STREET
AMELIA, OHIO 45102

OFFICE: (513) 752-7925 FAX: (513) 752-4766
EMAIL: SMITHANDASSOC@FUSE.NET

. II AND CAROLYN EDWARDS
D.B. 161, PG. 053
RT. 3 BOX 438
.ER, KENTUCKY 41006

UATED
IN
ON COUNTY
'EALTH OF KENTUCKY

HIC SCALE

60 120

N FEET)
1 = 30 ft.

NTERVAL = 2.0'

SITE #CI33XC023D

EDWARDS

R.R. 3 BOX 438

BUTLER, KENTUCKY

41006

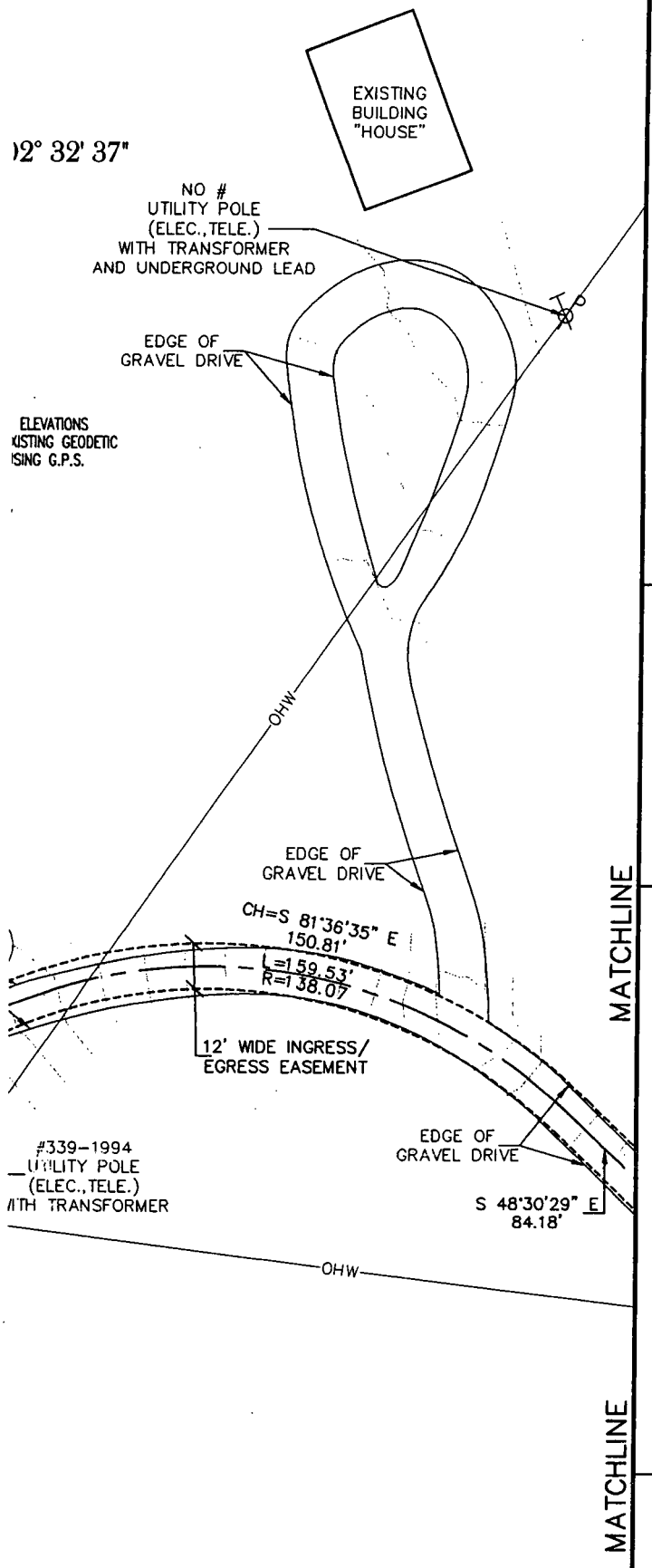
SHEET TITLE

SITE PLAN

SHEET NUMBER

C-1

AX I.D. # 38-30



. II AND CAROLYN EDWARDS
D.B. 161, PG. 053
RT. 3 BOX 438
LER, KENTUCKY 41006

Sprint PCS

4605 DUKE DRIVE, SUITE 200
MASON, OHIO 45040

BURGESS & NIPLE
ENGINEERS
ARCHITECTS

BURGESS & NIPLE, LIMITED
811 RACE STREET
CINCINNATI, OHIO 45202
OFFICE: (513) 579-0042
FAX: (513) 579-0321

SEAL

STATE of KENTUCKY
L EDWARD SMITH
3203
LICENSED PROFESSIONAL LAND SURVEYOR

L. Edward Smith
SIGNATURE

DATE: April 23, 1999

PROJECT NUMBER: BS106R-1

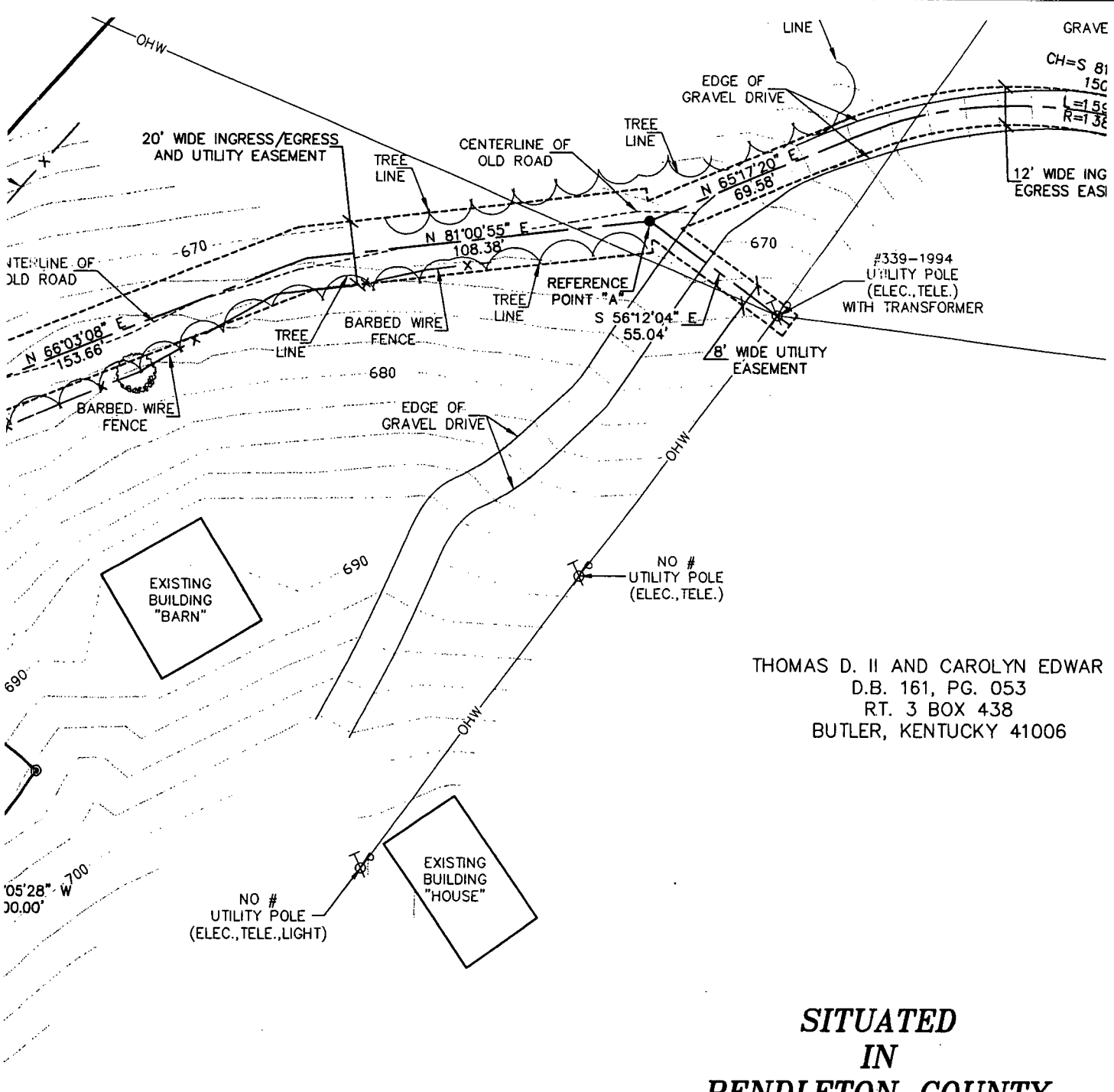
DRAWN BY: C.W.H.

CHECKED BY:

REVISIONS			
1	04/23/99	ISSUE FOR COMMENT	CH
2	05/11/99	ISSUE FOR COMMENT	CH
3	05/17/99	ISSUE FOR FINAL	MES
NO.	DATE	DESCRIPTION	BY

SMITH & ASSOCIATES
SURVEYING AND MAPPING
119 WEST MAIN STREET
AMELIA, OHIO 45102

OFFICE: (513) 752-7925 FAX: (513) 752-4766
EMAIL: SMITHANDASSOC@FUSE.NET



THOMAS D. II AND CAROLYN EDWAR
D.B. 161, PG. 053
RT. 3 BOX 438
BUTLER, KENTUCKY 41006

SITUATED
IN
PENDLETON COUNTY
BUTLER, COMMONWEALTH OF KEN

GRAPHIC SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30 ft.

CONTOUR INTERVAL = 2.0'

FLOOD SPECIFICATIONS

NO PART OF THE PROPOSED LEASE AREA OR ACCESS EASEMENT LIE WITHIN THE 100 YEAR FLOOD HAZARD ZONE AS SHOWN ON FLOOD INSURANCE RATE MAP, CITY OF BUTLER, COUNTY OF PENDLETON, COMMUNITY PANEL NUMBER 21029705, HAVING AN EFFECTIVE DATE 07/30/76, BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

TAX I.D. # 38-30

TO SITE

Falmouth, Kentucky, being located at
oute #22 to U.S. Highway #27. Thence
Falmouth, Kentucky and passing through
(Duckers Road). Thence proceed North
Box 438, being the site address.

DOUGLAS V. AND LINDA BEZOLD
D.B. 141, PG. 490
RT. 1 BOX 710
BUTLER, KENTUCKY 41006

TRUE NORTH
DEED NORTH
02° 32' 37"

NO #
UTILITY POLE
(ELEC., TELE.)
WITH TRANSFORMER
AND UNDERGROUND LEAD

EDGE OF
GRAVEL DRIVE

TRUE NORTH (NAD 83) AND ELEVATIONS WERE ESTABLISHED FROM EXISTING GEODETIC CONTROL MONUMENTATION USING G.P.S. EQUIPMENT.
DEED BEARINGS BASED ON:
DEED BOOK 156, PAGE 417

OHW

TREE
LINE

EDGE OF
GRAVEL DRIVE

CH=S 8
15(
L=15
R=13

12' WIDE INC
EGRESS EAS

20' WIDE INGRESS/EGRESS
AND UTILITY EASEMENT

TREE
LINE

CENTERLINE OF
OLD ROAD

TREE
LINE

N 65°17'20" E
69.58'

N 81°00'55" E
108.38'

670

NTERLINE OF
OLD ROAD

670

#339-1994
UTILITY POLE
(ELEC., TELE.)
WITH TRANSFORMER

REFERENCE
POINT "A"

TREE
LINE

S 56°12'04" E
55.04'

N 66°03'08" E
153.66

TREE
LINE

BARBED WIRE
FENCE

8' WIDE UTILITY
EASEMENT

680

BARBED WIRE
FENCE

EDGE OF
GRAVEL DRIVE

OHW

690

EXISTING
BUILDING
"BARN"

NO #
UTILITY POLE
(ELEC., TELE.)

690

OHW

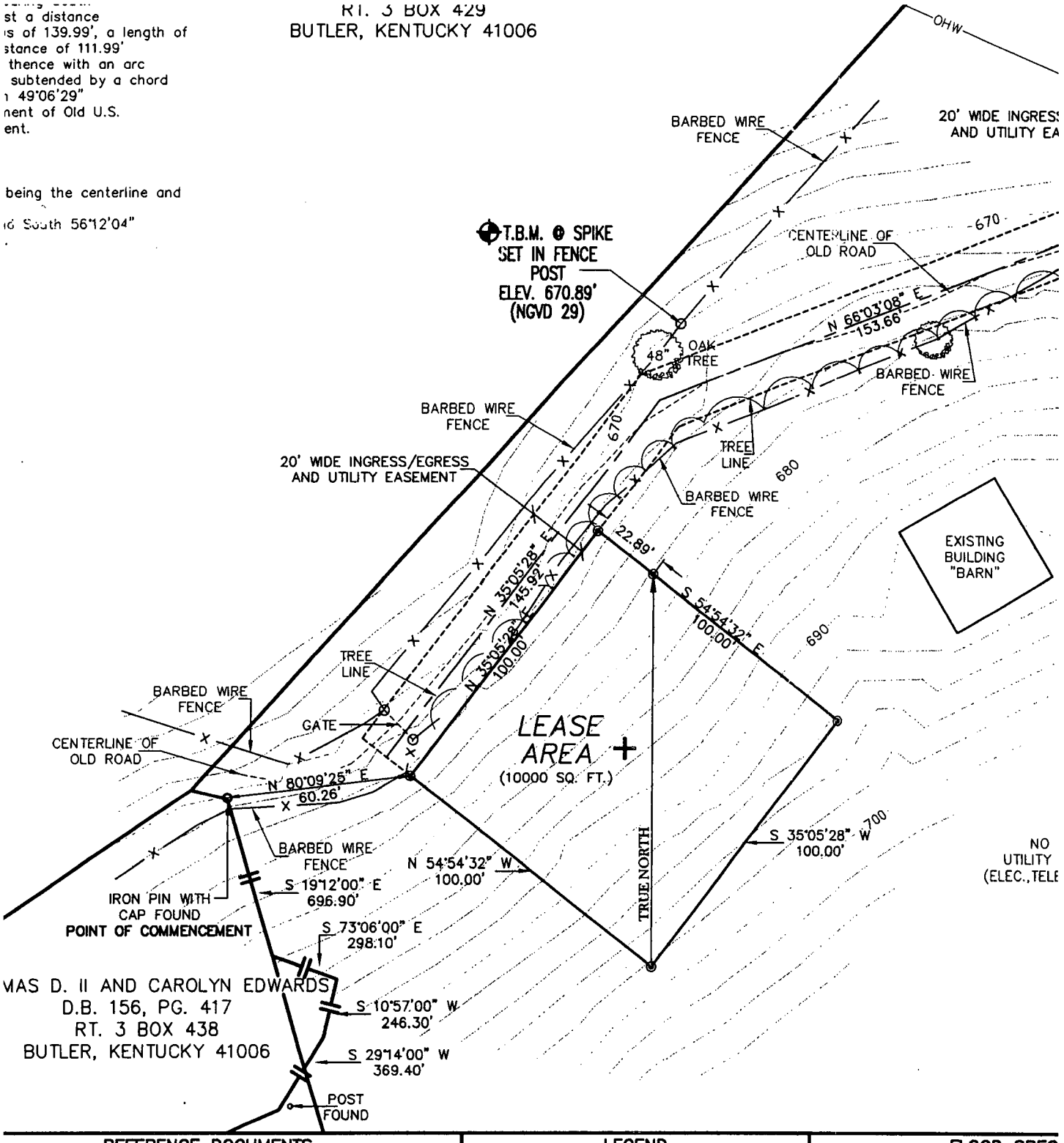
THOMAS D. II AND CAROLYN EDWAR
D.B. 161, PG. 053
RT. 3 BOX 438
BUTLER, KENTUCKY 41006

st a distance
is of 139.99', a length of
stance of 111.99'
thence with an arc
subtended by a chord
1 49°06'29"
nent of Old U.S.
ent.

being the centerline and

id South 56°12'04"

RT. 3 BOX 429
BUTLER, KENTUCKY 41006



THOMAS D. II AND CAROLYN EDWARDS
D.B. 156, PG. 417
RT. 3 BOX 438
BUTLER, KENTUCKY 41006

REFERENCE DOCUMENTS	LEGEND	FLOOD SPEC
D.B. 161, PG. 053 D.B. 156, PG. 417 D.B. 107, PG. 393 D.B. 173, PG. 406 D.B. 088, PG. 407	PROPOSED CENTER OF LEASE AREA UTILITY POLE(ELEC.) UTILITY POLE(ELEC.,TELE.) UTILITY POLE(TELE.) 5/8" IRON PIN WITH CAP SET LOCUS STUMP POST FOUND IRON PIN FOUND GATE TREE WIRE FENCE OVERHEAD WIRES	NO PART OF THE PROPOSED LE/ ACCESS EASEMENT LIE WITHIN TI HAZARD ZONE AS SHOWN ON FI RATE MAP, CITY OF BUTLER, CO COMMUNITY PANEL NUMBER 210: HAVING AN EFFECTIVE DATE 07/ FEDERAL EMERGENCY MANAGEME

being part of a tract of
veyed by deed to
53 of the Pendleton
described as follows;

the said tract of land
ed Book 161, Page
d a tract of land
endleton County,
nencement North
g the westerly corner

a distance of 100.00'
of 100.00' to a 5/8"
to a 5/8" iron pin
point of beginning
ents, and restrictions of

ASEMENT

the said tract of land
ed Book 161, Page
d a tract of land
endleton County,
nencement North
g the westerly corner
e of 10.00' to a
ribed 20' Ingress/Egress

lorth 35°05'28" East a
f 153.66' to a point;
n known as

IT

being the centerline and
asement;
lorth 65°17'20" East a
ving a radius of 138.07', a
" East a distance of
a point; thence South
g to the right having
earing South
ast a distance
us of 139.99', a length of
istance of 111.99'
thence with an arc
g subtended by a chord
th 49°06'29"
ment of Old U.S.
nent.

being the centerline and

nd South 56°12'04"
t.

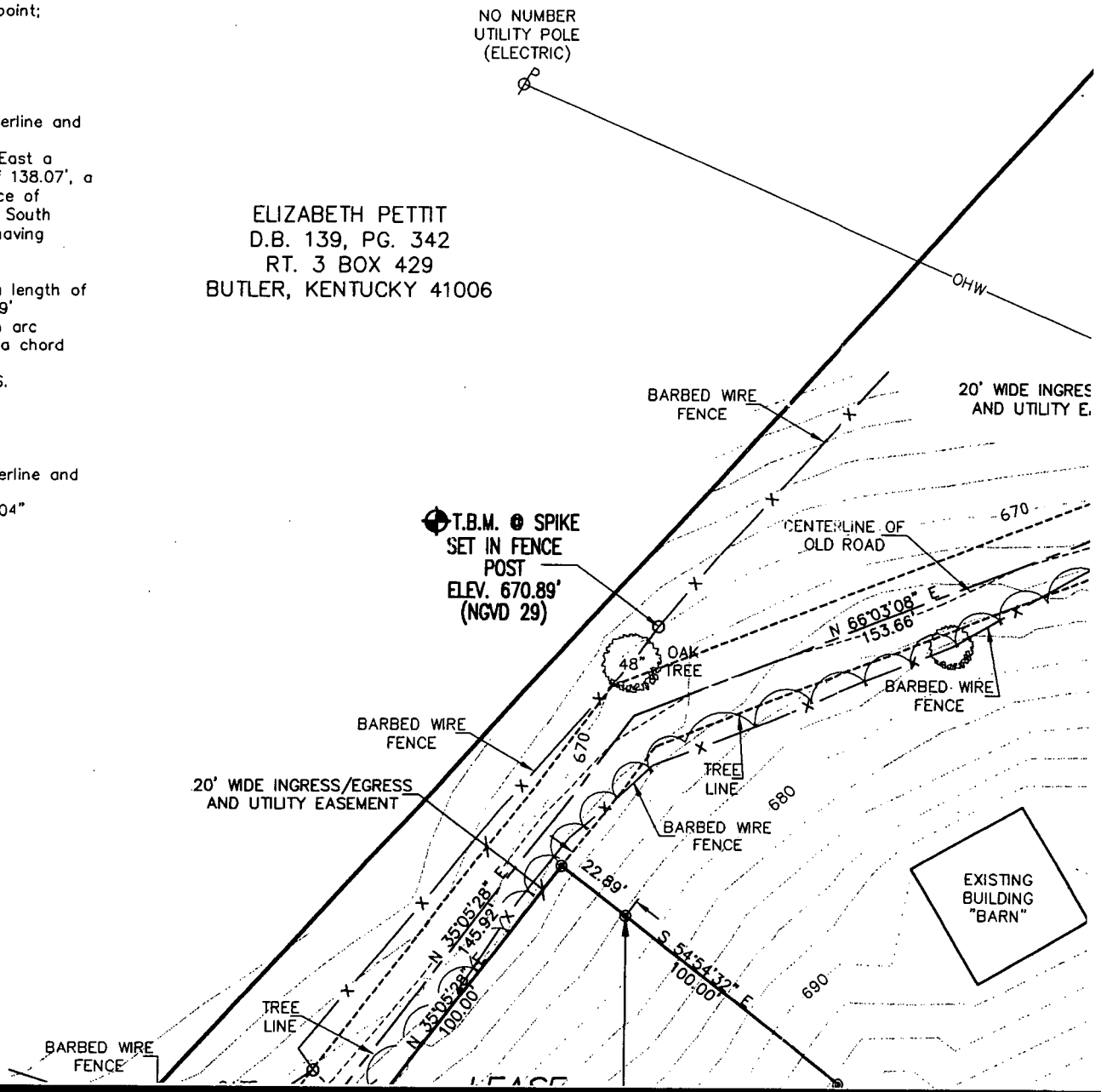
DIRECTIONS TO SITE

Commencing at the County Seat Falmouth, Kentucky, being locate
233 Main Street. Proceed South on State Route #22 to U.S. Highway #27. Th
proceed North on U.S. Highway #27, leaving Falmouth, Kentucky and passing
Boston, Kentucky, to Old U.S. Highway #27 (Duckers Road). Thence proceed N
on Old U.S. Highway #27 (Duckers Road) to Box 438, being the site address.

Directions Prepared By: Chris Hatfield
Contact Phone Number: (513) 752-7925

DOUGL

BUT



53'17'17" East a distance of 64.56' to a point; thence with an arc curving to the right having a radius of 192.26', a length of 59.22' and being subtended by a chord bearing South 47°10'46" East a distance of 58.99' to a point; thence South 28°34'11" East a distance of 10.22' to a point; thence with an arc curving to the left having a radius of 139.99', a length of 115.21' and being subtended by a chord bearing South 52°17'35" East a distance of 111.99' to a point; thence South 79°18'59" East a distance of 212.41' to a point; thence with an arc curving to the left having a radius of 20.00', a length of 18.00' and being subtended by a chord bearing North 74°53'45" East a distance of 17.40' to a point; thence North 49°06'29" East a distance of 28.25'ñ to a point being on the westerly edge of pavement of Old U.S. Highway #27 (Duckers Road); said point being the terminus for this easement.

CENTERLINE OF A 8' WIDE UTILITY EASEMENT

Commencing at the herein above described reference point "A" being the centerline and real point of beginning for this herein described 8' Wide Utility Easement;

Thence from said real point of beginning with said centerline and South 56°12'04" East a distance of 55.04' to a point being the terminus for this easement.

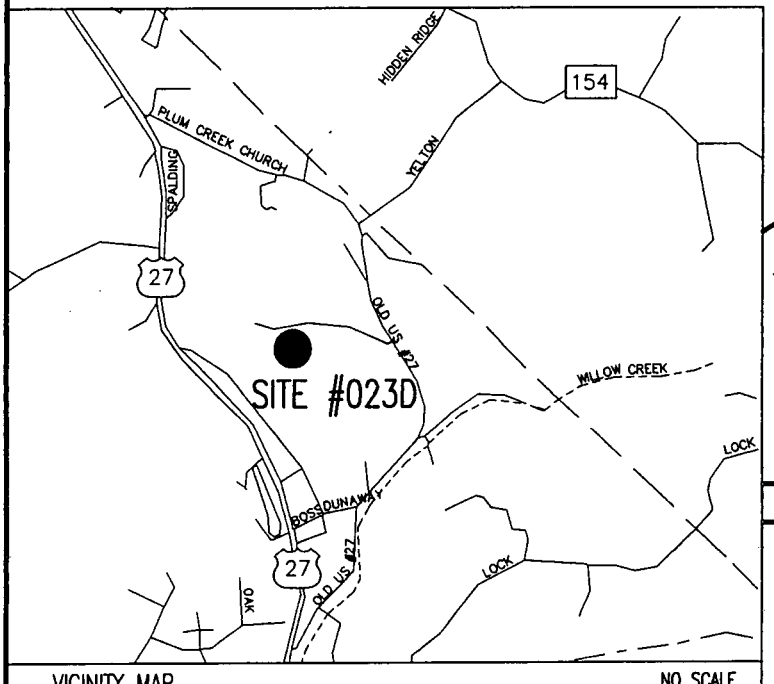
CENTER OF PROPOSED LEASE AREA
LATITUDE 38° 47' 54"
LONGITUDE 84° 21' 50"
(NAD 83)
GROUND ELEVATION 684.9'
(NGVD 29)

LATITUDE 38° 47' 53"
LONGITUDE 84° 21' 50"
(NAD 27)

THIS DRAWING IS BASED ON A SURVEY MADE UNDER MY DIRECTION.

L. Edward Smith

L. EDWARD SMITH, P.L.S.
REG. NO. LS-3203



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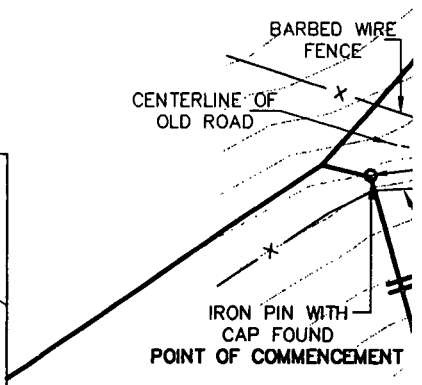


THOMAS D. II AND CAROLYN EI
D.B. 156, PG. 417
RT. 3 BOX 438
BUTLER, KENTUCKY 4100

REFERENCE DOCU

D.B. 161, PG. 053
D.B. 156, PG. 417
D.B. 107, PG. 393
D.B. 173, PG. 406
D.B. 088, PG. 407

LEGAL DESCRIPTION

Situated in Pendleton County, Commonwealth of Kentucky and being part of a tract of land, lying on the West side of Old U.S. Highway #27 (Duckers Road), conveyed by deed to Thomas D. II and Carolyn Edwards as recorded in Deed Book 161, Page 053 of the Pendleton County, Kentucky Clerk of Courts Record's Office; being more particularly described as follows;

LEASE AREA

Commencing at an iron pin found being a common corner to the said tract of land conveyed by deed to Thomas D. II and Carolyn Edwards as recorded in Deed Book 161, Page 053 of the Pendleton County, Kentucky Clerk of Courts Record's Office and a tract of land conveyed to the same as recorded in Deed Book 156, Page 417 of the Pendleton County, Kentucky Clerk of Courts Record's Office; thence from said point of commencement North 80°09'25" East a distance of 60.26' to a 5/8" iron pin with cap set being the westerly corner and real point of beginning for this herein described Lease Area;

Thence from said real point of beginning North 35°05'28" East a distance of 100.00' to a 5/8" iron pin with cap set; thence South 54°54'32" East a distance of 100.00' to a 5/8" iron pin with cap set; thence South 35°05'28" West a distance of 100.00' to a 5/8" iron pin with cap set; thence North 54°54'32" West a distance of 100.00' to the point of beginning containing 10000 square feet of land subject to all legal highways, easements, and restrictions of record.

CENTERLINE OF A 20' WIDE INGRESS/EGRESS AND UTILITY EASEMENT

Commencing at an iron pin found being a common corner to the said tract of land conveyed by deed to Thomas D. II and Carolyn Edwards as recorded in Deed Book 161, Page 053 of the Pendleton County, Kentucky Clerk of Courts Record's Office and a tract of land conveyed to the same as recorded in Deed Book 156, Page 417 of the Pendleton County, Kentucky Clerk of Courts Record's Office; thence from said point of commencement North 80°09'25" East a distance of 60.26' to a 5/8" iron pin with cap set being the westerly corner of the aforementioned Lease Area; thence North 54°54'32" West a distance of 10.00' to a point being the centerline and real point of beginning for this herein described 20' Ingress/Egress and Utility Easement;

Thence from said real point of beginning with said centerline North 35°05'28" East a distance of 145.92' to a point; thence North 66°03'08" East a distance of 153.66' to a point; thence North 81°00'55" East a distance of 108.38' to a point being hereon known as reference point "A"; said point being the terminus for this easement.

CENTERLINE OF A 12' WIDE INGRESS/EGRESS EASEMENT

Commencing at the herein above described reference point "A" being the centerline and real point of beginning for this herein described 12' Wide Ingress/Egress Easement;

Thence from said real point of beginning with said centerline North 65°17'20" East a distance of 69.58' to a point; thence with an arc curving to the right having a radius of 138.07', a length of 159.53' and being subtended by a chord bearing South 81°36'35" East a distance of 150.81; to a point; thence South 48°30'29" East a distance of 84.18' to a point; thence South 63°17'17" East a distance of 64.56' to a point; thence with an arc curving to the right having a radius of 192.26', a length of 59.22' and being subtended by a chord bearing South 47°10'46" East a distance of 58.99' to a point; thence South 28°34'11" East a distance of 10.22' to a point; thence with an arc curving to the left having a radius of 139.99', a length of 115.21' and being subtended by a chord bearing South 52°17'35" East a distance of 111.99' to a point; thence South 79°18'59" East a distance of 212.41' to a point; thence with an arc curving to the left having a radius of 20.00', a length of 18.00' and being subtended by a chord bearing North 74°53'45" East a distance of 17.40' to a point; thence North 49°06'29" East a distance of 28.25'ñ to a point being on the westerly edge of pavement of Old U.S. Highway #27 (Duckers Road); said point being the terminus for this easement.

CENTERLINE OF A 8' WIDE UTILITY EASEMENT

Commencing at the herein above described reference point "A" being the centerline and real point of beginning for this herein described 8' Wide Utility Easement;

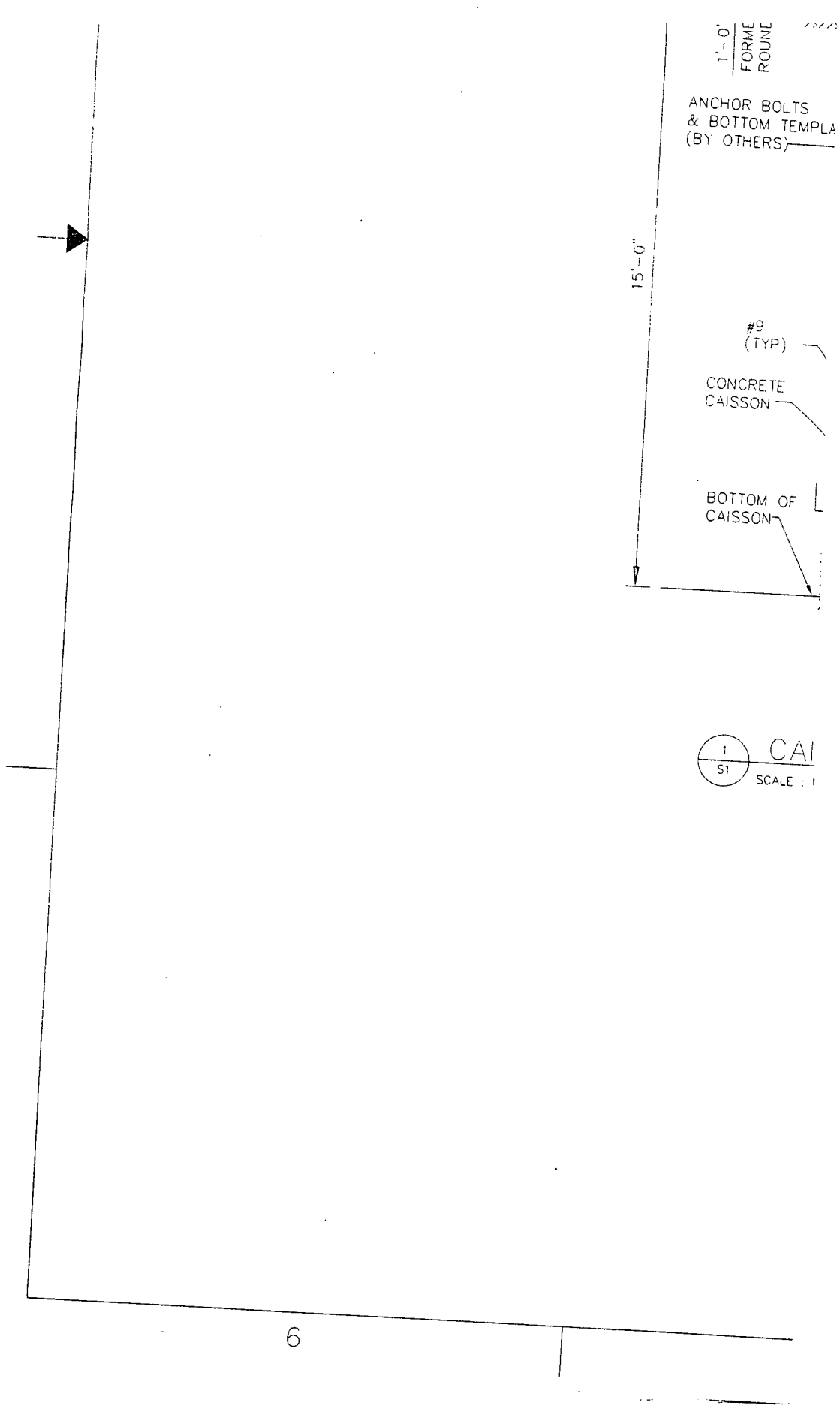
Thence from said real point of beginning with said centerline and South 56°12'04" East a distance of 55.04' to a point being the terminus for this easement.

CENTER OF PROPOSED LEASE AREA
LATITUDE 38° 47' 54"
LONGITUDE 84° 21' 50"
(NAD 83)
GROUND ELEVATION 684.9'
(NGVD 29)

LATITUDE 38° 47' 53"
LONGITUDE 84° 21' 50"
(NAD 27)

THIS DRAWING IS BASED ON A SURVEY MADE UNDER MY DIRECTION.

BARBED WIRE FENCE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ANCHOR BOLTS
& BOTTOM TEMPLA
(BY OTHERS)
15'-0"
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CONCRETE
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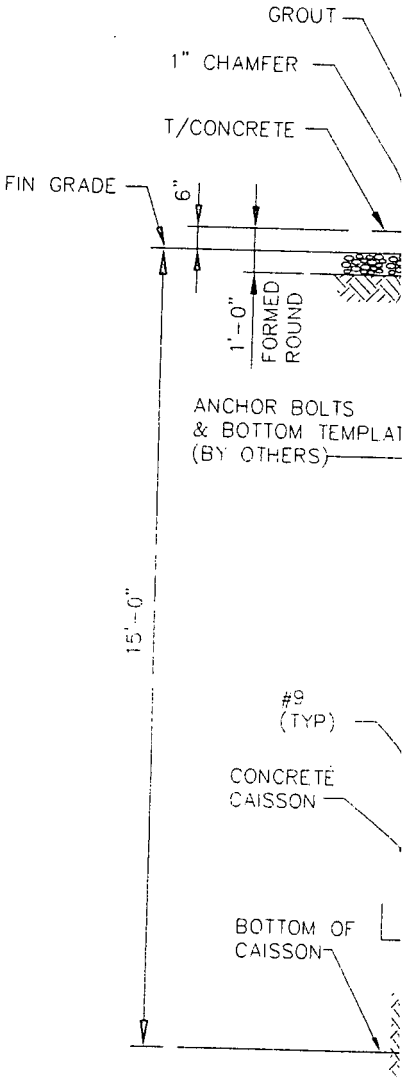
GROUT
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FIN GRADE
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FORMED
ROUND
ANCHOR BOLTS
& BOTTOM TEMPLAT
(BY OTHERS)
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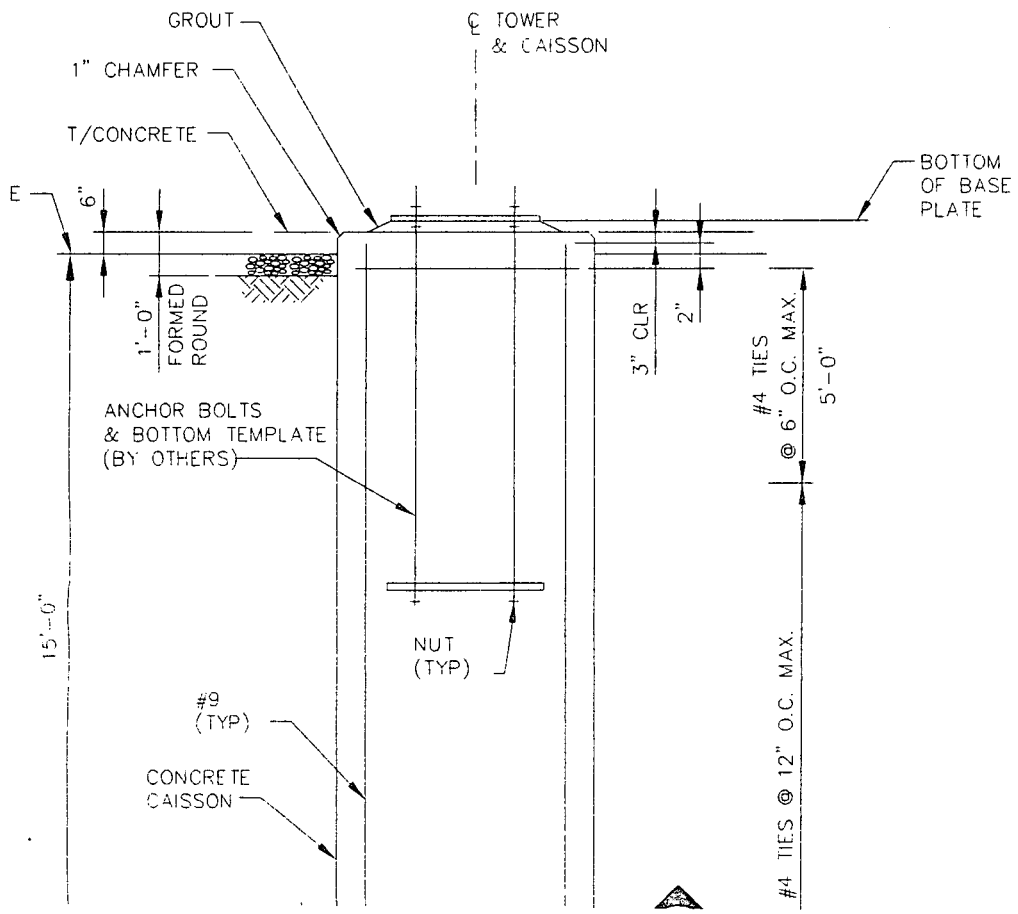
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& CAISSON
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2"
#4 TIES
@ 6" O.C. MAX.
5'-0"
ANCHOR BOLTS
& BOTTOM TEMPLATE
(BY OTHERS)
15'-0"
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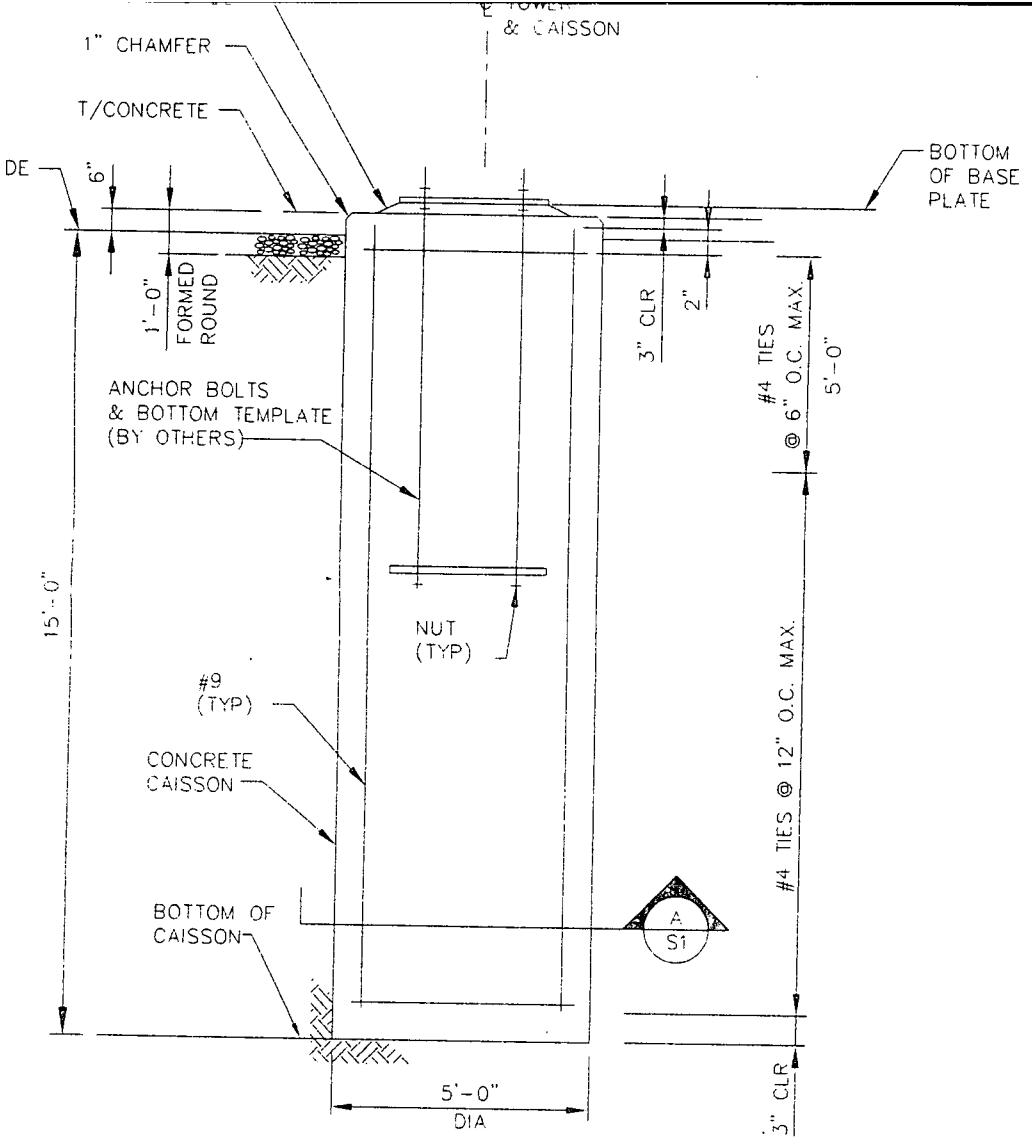
CONCRETE
CAISSON
#4 TIES @ 12" O.C. MAX.

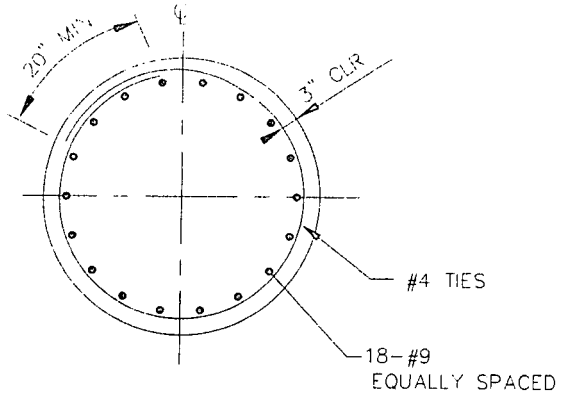


1/S1 CAISSON FOUNDATION

SCALE : NONE

Sprint

SPRINT PCS
4605 DUKE DRIVE
SUITE 200
MASON, OHIO 45040



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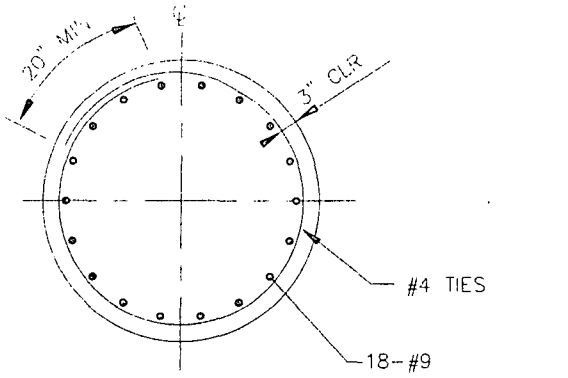

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SCALE : NONE

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4605 DUKE DRIVE
SUITE 200
MASON, OHIO 45040

No.	Date	Revisions	By	Ch
0	5/12/99	ISSUED FOR CONSTRUCTION	CS	EE

CONCRETE NOTES

1. DESIGN AND CONSTRUCTION SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE "DESIGN AND CONSTRUCTION OF DRILLED PIERS" ACI 336.3R, LATEST EDITION.
2. ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS SHALL BE 4000 PSI.
3. CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150 – TYPE II.
4. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615–GR 60, "DEFORMED AND PLAIN BILLET STEEL BARS FOR CONCRETE REINFORCEMENT", LATEST EDITION.
5. MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE 3 INCHES.
6. LAP SPLICES FOR REINFORCING SHALL BE 40 BAR DIAMETERS, UNLESS OTHERWISE NOTED.
7. ALL REINFORCING STEEL SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
8. THE TOP OF ALL CONCRETE SURFACES SHALL BE TRUE AND LEVEL WITH A SMOOTH FLOAT FINISH, UNLESS OTHERWISE NOTED.
9. PROVIDE 5% ± 1% AIR ENTRAINMENT IN EXTERIOR EXPOSED CONCRETE, AIR ENTRAINMENT TO BE IN ACCORDANCE WITH ACI 301. NO OTHER ADMIXTURES SHALL BE USED UNLESS APPROVED BY THE DESIGN ENGINEER.
10. GROUT SHALL BE NON METALLIC, NON SHRINK, PREPACKAGED GROUT WITH A MINIMUM STRENGTH OF 5,000 PSI AT 28 DAYS. GROUT SHALL BE FIVE STAR GROUT AS MANUFACTURED BY U.S. GROUT CORP., FAIRFIELD, CT OR APPROVED EQUAL.
11. CONCRETE SHALL BE SUFFICIENTLY CONSOLIDATED BY VIBRATION TO REMOVE AIR VOIDS. VIBRATION SHALL BE IN ACCORDANCE WITH ACE 309 "STANDARD PRACTICE FOR CONSOLIDATION OF CONCRETE".

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4. SLURRY, IF USED, SHALL BE MAINTAINED AT A LEVEL OF 10 FEET MINIMUM ABOVE THE GROUND WATER TABLE. SLURRY SHALL BE COLLECTED AND DISPOSED OF OFF SITE BY THE CONTRACTOR PRIOR TO DEMOBILIZATION.
5. THE DRILLED SHAFT SHALL BE WITHIN 2 PERCENT OF PLUMB FOR THE TOTAL LENGTH OF THE SHAFT, WITH PLUMBNESS MEASURED FROM THE AS-CONSTRUCTED POSITION OF THE TOP OF THE EXCAVATION.
6. CENTERING DEVICES SHALL BE PROVIDED TO MAINTAIN THE ALIGNMENT OF REBAR CAGE WITHIN THE SHAFT AND TO ENSURE ADEQUATE COVER OF THE CAGE WITH CONCRETE. DEVICES SHALL BE THE SHAFTSPACER & BARBOOT AS MANUFACTURED BY FOUNDATION TECHNOLOGIES, INC., TUCKER, GA (1–800–773–2368)

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7. REBAR CAGE SHALL BE INTERNALLY BRACED AND FASTENED WITHIN THE CAISSON HOLE TO PREVENT LATERAL AND VERTICAL MOVEMENT DURING PLACEMENT OF CONCRETE.
8. CONCRETE PLACEMENT SHALL BEGIN AS SOON AS POSSIBLE AFTER THE EXCAVATION HAS BEEN COMPLETED AND INSPECTED. UNCASED EXCAVATIONS SHALL NOT BE LEFT OPEN OVERNIGHT. CONCRETE SHALL BE PLACED IN ONE CONTINUOUS OPERATION.
9. IF WATER IS ENCOUNTERED, CONCRETE SHALL BE PLACED BY THE TREMIE METHOD.

DESIGN DATA

MAX. SHEAR = 31.4 KIPS
MAX. AXIAL COMPRESSION = 390.2 KIPS
MAX. UPLIFT = 335.7 KIPS

SOIL INFORMATION REFERENCED FROM GEOTECHNICAL REPORT #1-5512 BY EARTH EXPLORATION, INC. DATED 4/20/99.

TECTONIC *ENGINEERING CONSULTANTS P.C.*

7681 Tylers Place Blvd., Suite 3
West Chester, Ohio 45069

Phone: (513) 759-9500
Fax. (513) 759-9523

	CS	EES	LHF
	By	Chk	App'd

STATE OF KENTUCKY
LANCE H. FRANCIS
18558
REGISTERED PROFESSIONAL ENGINEER

BUTLER
CI33XC023D
BUTLER, KY

FOUNDATION PLAN AND DETAILS

Date	Work Order	Drawing No.	Rev
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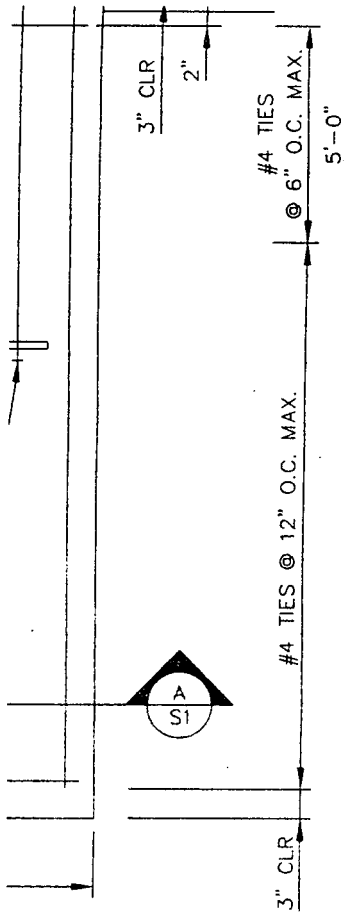
Scale: NONE			



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4605 DUKE DRIVE
SUITE 200
MASON, OHIO 45040

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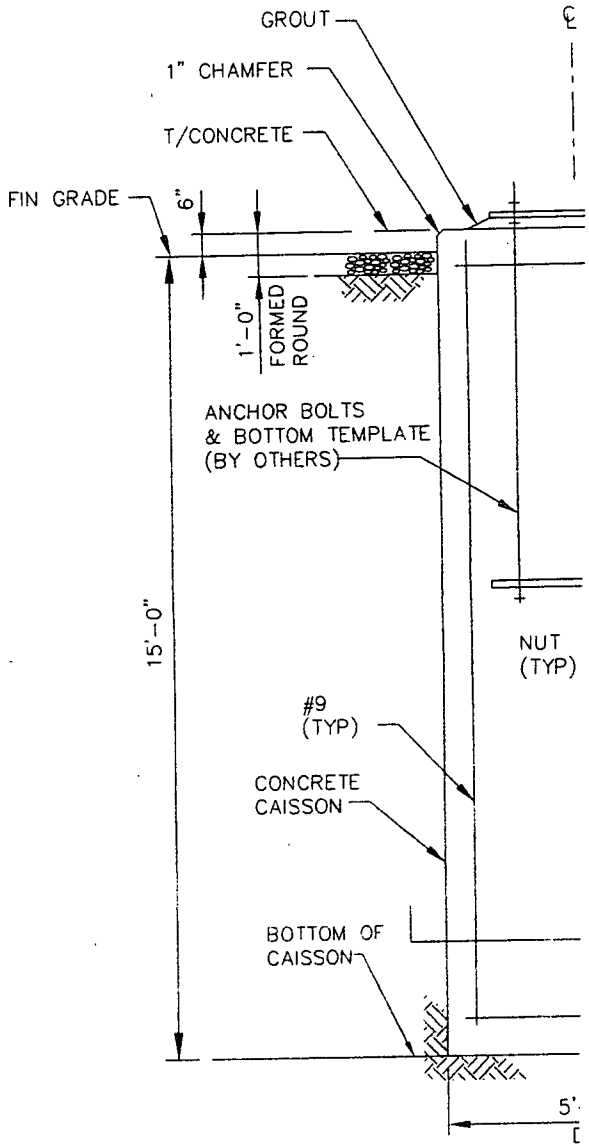

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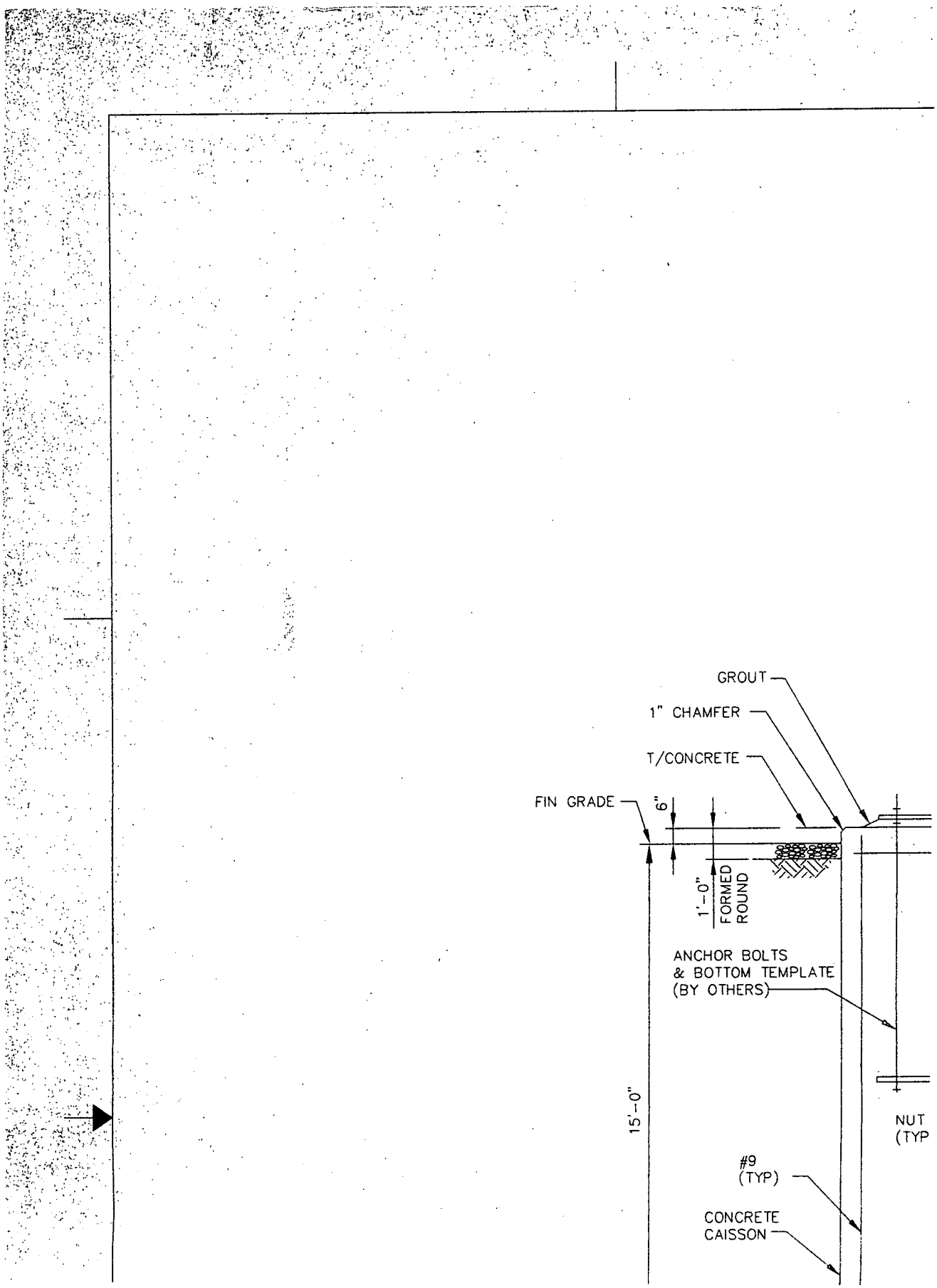
GROUT
1" CHAMFER
T/CONCRETE
FIN GRADE
6"
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FORMED
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ANCHOR BOLTS
& BOTTOM TEMPLATE
(BY OTHERS)
15'-0"
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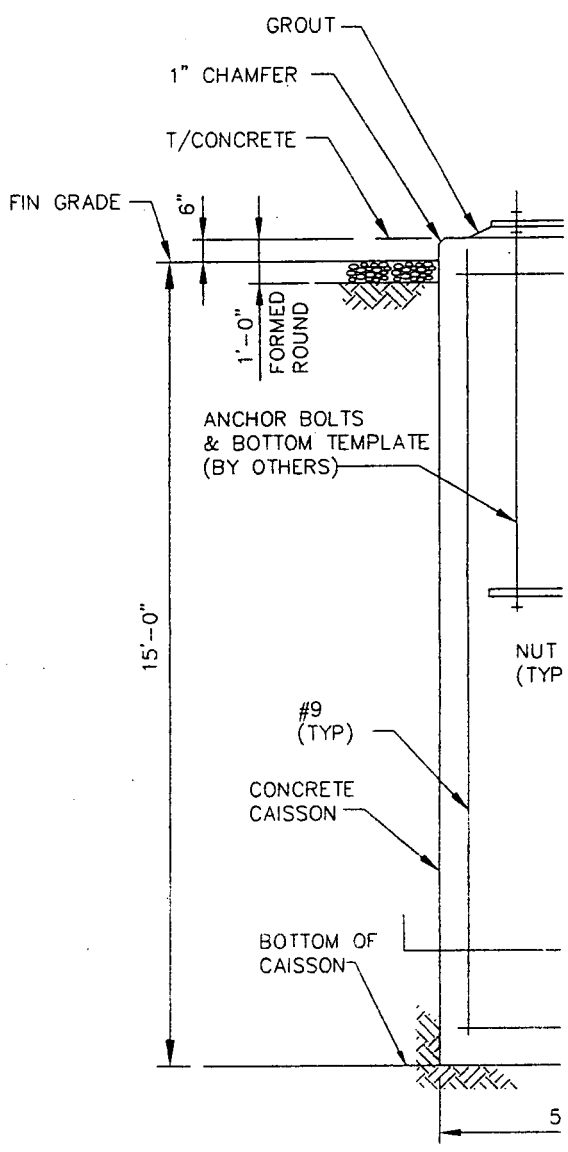
(TYP)
CONCRETE
CAISSON



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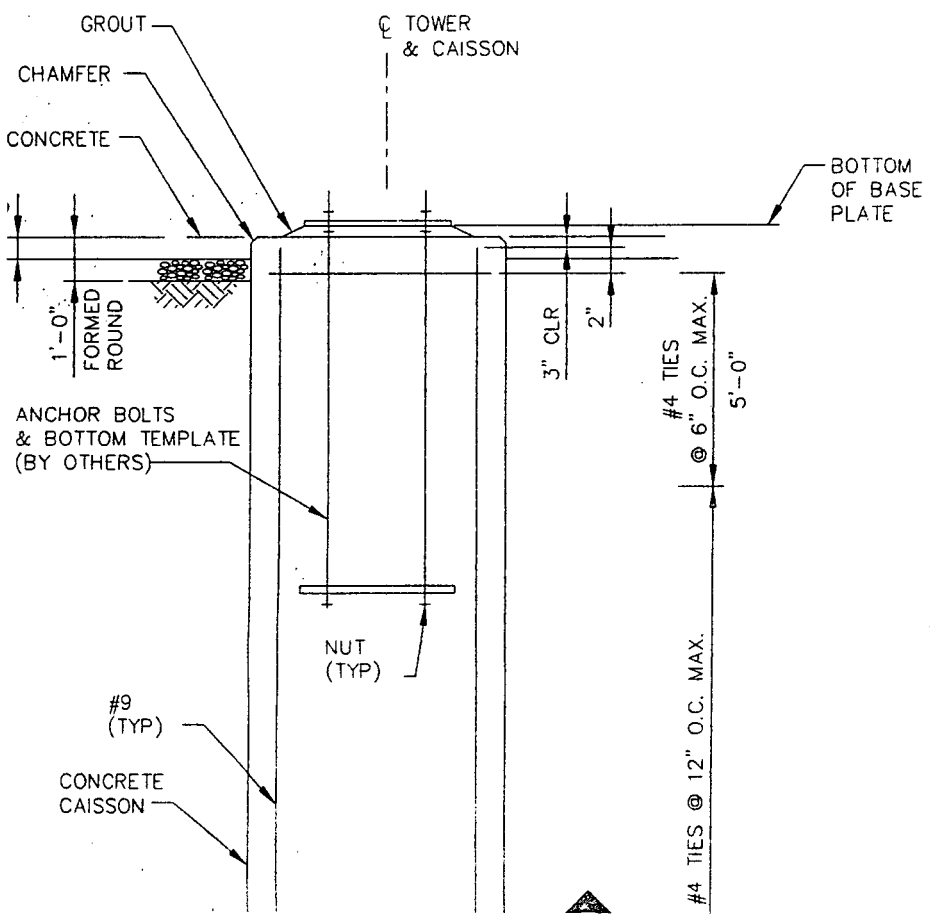
GROUT
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& CAISSON
CHAMFER
CONCRETE
BOTTOM
OF BASE
PLATE
1'-0"
FORMED
ROUND
3" CLR
2"
#4 TIES
@ 6" O.C. MAX.
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ANCHOR BOLTS
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(BY OTHERS)
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(TYP)
#9
(TYP)
CONCRETE
CAISSON
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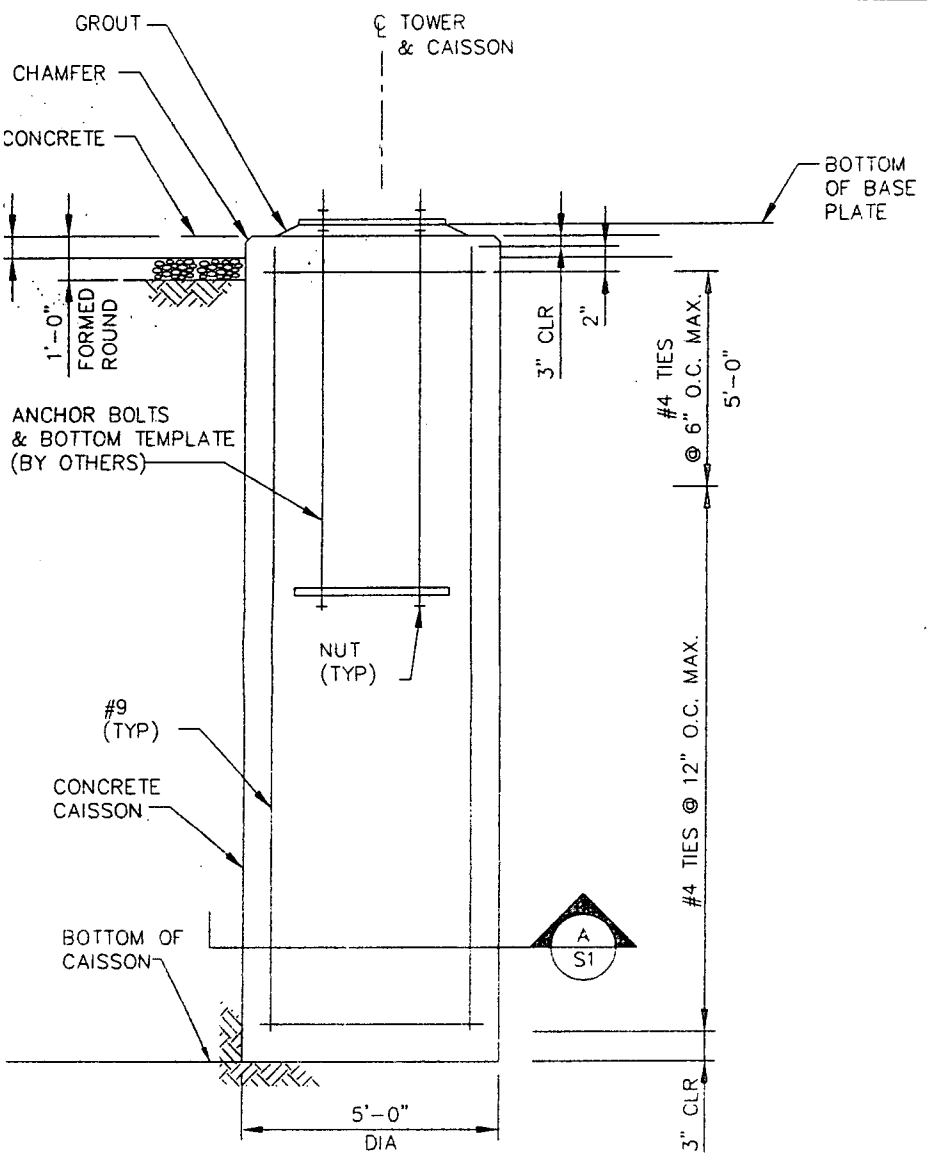

1/S1 CAISSON FOUNDATION

SCALE : NONE

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4605 DUKE DRIVE
SUITE 200
MASON, OHIO 45040

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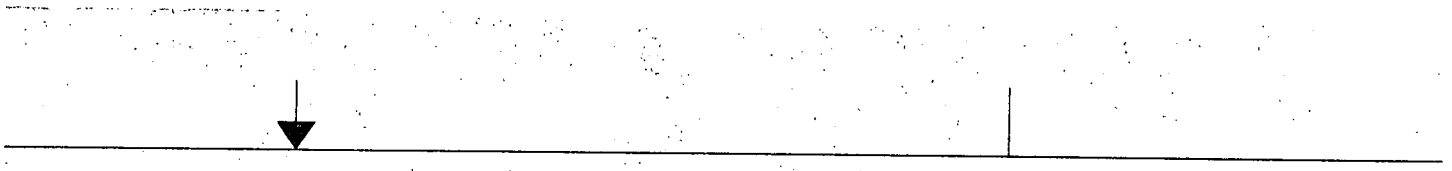

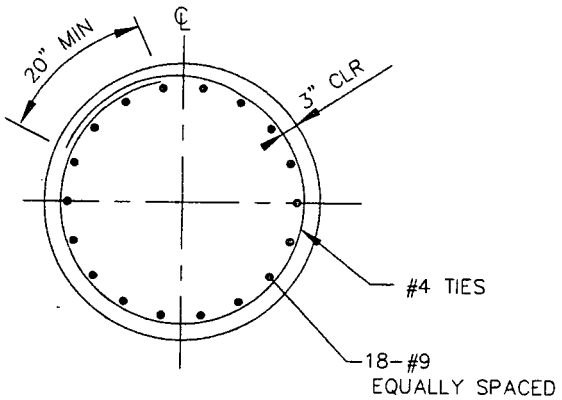

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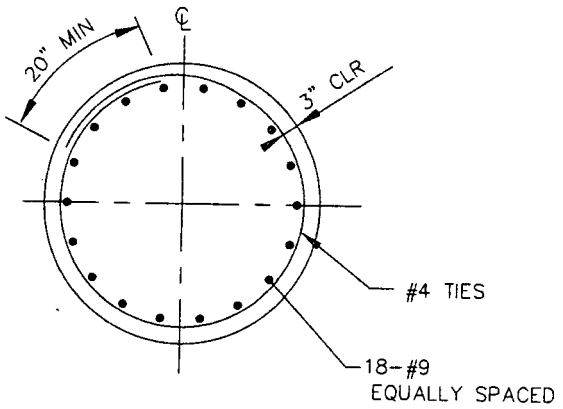

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I, OHIO 45040

No.	Date	Revisions	By	Chk	App'd
0	5/12/99	ISSUED FOR CONSTRUCTION	CS	EES	LHF

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3. TEMPORARY CASING, WHEN EMPLOYED, SHALL BE OF AN AMPLE STRENGTH TO WITHSTAND HANDLING STRESSES AND EXTERNAL PRESSURES OF THE SOIL AND SHALL BE WATER TIGHT. THE CASING SHALL BE SMOOTH AND ITS INTERIOR CLEAN. THE OUTSIDE DIAMETER OF THE CASING SHALL NOT BE LESS THAN THE SPECIFIED DIAMETER OF THE CAISSON. THE LENGTH OF THE CASING SHOULD BE SUFFICIENT TO PROVIDE ADEQUATE PROTECTION AND SAFETY AGAINST ANY CAVING SOIL AND WATER. AT CONTRACTORS OPTION, TEMPORARY CASING MAY BE LEFT IN PLACE AS APPROVED BY THE GEOTECHNICAL ENGINEER.
4. SLURRY, IF USED, SHALL BE MAINTAINED AT A LEVEL OF 10 FEET MINIMUM ABOVE THE GROUND WATER TABLE. SLURRY SHALL BE COLLECTED AND DISPOSED OF OFF SITE BY THE CONTRACTOR PRIOR TO DEMOBILIZATION.
5. THE DRILLED SHAFT SHALL BE WITHIN 2 PERCENT OF PLUMB FOR THE TOTAL LENGTH OF THE SHAFT, WITH PLUMBNESS MEASURED FROM THE AS-CONSTRUCTED POSITION OF THE TOP OF THE EXCAVATION.
6. CENTERING DEVICES SHALL BE PROVIDED TO MAINTAIN THE ALIGNMENT OF REBAR CAGE WITHIN THE SHAFT AND TO ENSURE ADEQUATE COVER OF THE CAGE WITH CONCRETE. DEVICES SHALL BE THE SHAFTSPACER & BARBOOT AS MANUFACTURED BY FOUNDATION TECHNOLOGIES, INC., TUCKER, GA (1-800-773-2368) OR APPROVED EQUAL. INSTALL IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS & REQUIREMENTS.
7. REBAR CAGE SHALL BE INTERNALLY BRACED AND FASTENED WITHIN THE CAISSON HOLE TO PREVENT LATERAL AND VERTICAL MOVEMENT DURING PLACEMENT OF CONCRETE.
8. CONCRETE PLACEMENT SHALL BEGIN AS SOON AS POSSIBLE AFTER THE EXCAVATION HAS BEEN COMPLETED AND INSPECTED. UNCASED EXCAVATIONS SHALL NOT BE LEFT OPEN OVERNIGHT. CONCRETE SHALL BE PLACED IN ONE CONTINUOUS OPERATION.
9. IF WATER IS ENCOUNTERED, CONCRETE SHALL BE PLACED BY THE TREMIE METHOD.

DESIGN DATA

MAX. SHEAR = 31.4 KIPS
MAX. AXIAL COMPRESSION = 390.2 KIPS
MAX. UPLIFT = 335.7 KIPS

SOIL INFORMATION REFERENCED FROM GEOTECHNICAL REPORT #1-5512 BY EARTH EXPLORATION, INC. DATED 4/20/99.

TECTONIC *ENGINEERING CONSULTANTS P.C.*

7681 Tylers Place Blvd., Suite 3
West Chester, Ohio 45069

Phone: (513) 759-9500
Fax: (513) 759-9523

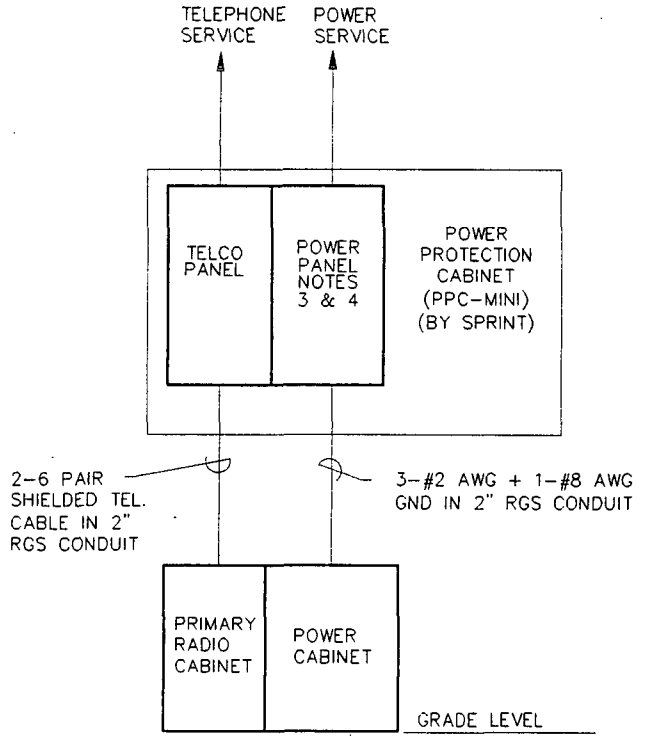
	CS	EES	LHF
	By	Chk	App'd

STATE OF KENTUCKY
LANCE H. FRANCIS
19558
REGISTERED PROFESSIONAL ENGINEER

BUTLER
CI33XC023D
BUTLER, KY

FOUNDATION PLAN AND DETAILS

Date	Work Order	Drawing No.	Rev
5/12/99	2309.023D	S1	0
Scale: NONE			



POWER AND TELEPHONE RISER DIAGRAM

NOT TO SCALE

1. ALL CONDUCTORS SHALL BE STRANDED COPPER WITH THWN INSULATION UNLES CONDUCTORS FROM FUSED DISCONNECT SWITCH TO THE ATS AND FROM THE ATS ALL BE INSTALLED IN ONE 1-1/2' CONDUIT WHEN THE FUSED DISCONNECT SWITC NEAR THE PPC.

2. IF FUSED DISCONNECT IS NOT EXISTING, INSTALL ONE WHERE SHOWN. FUSED SWITCH SHALL BE SERVICE RATED NEMA 3R, 100A, 2 POLE WITH SOLID NEUTR LPN-RK-100 FUSES.

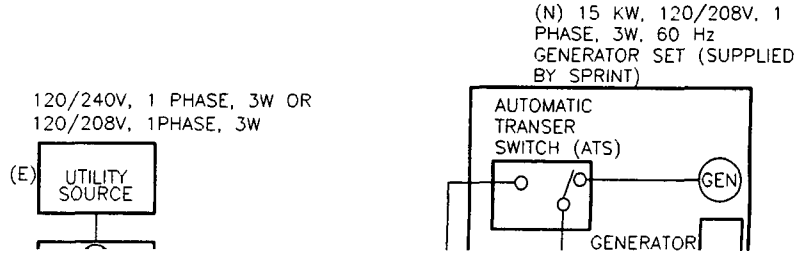
3. POWER PROTECTION CABINET (PPC) IS EXISTING AND ALL COMPONENTS SHOWN PPC. ARE ALSO EXISTING.

4. REMOVE EXISTING FEEDER FROM FUSED DISCONNECT SWITCH (OR METER) TO TRANSFER SWICH.

5. SIGNAL CONDUCTORS SHALL BE RATED 300V. PROVIDE 36 INCHES OF CONDUC AND TAGGED INSIDE THE GENERATOR CONTROL PANEL AND THE PPC CABINET. TEI SHALL BE PERFORMED BY SPRINT.

6. GROUND ELECTRODE CONDUCTOR SHALL TERMINATE ON NEUTRAL ASSEMBLY.

7. IF A #6AWG NEUTRAL GROUND BONDING JUMPER IS INSTALLED IN THE PPC, T JUMPER SHALL BE REMOVED.



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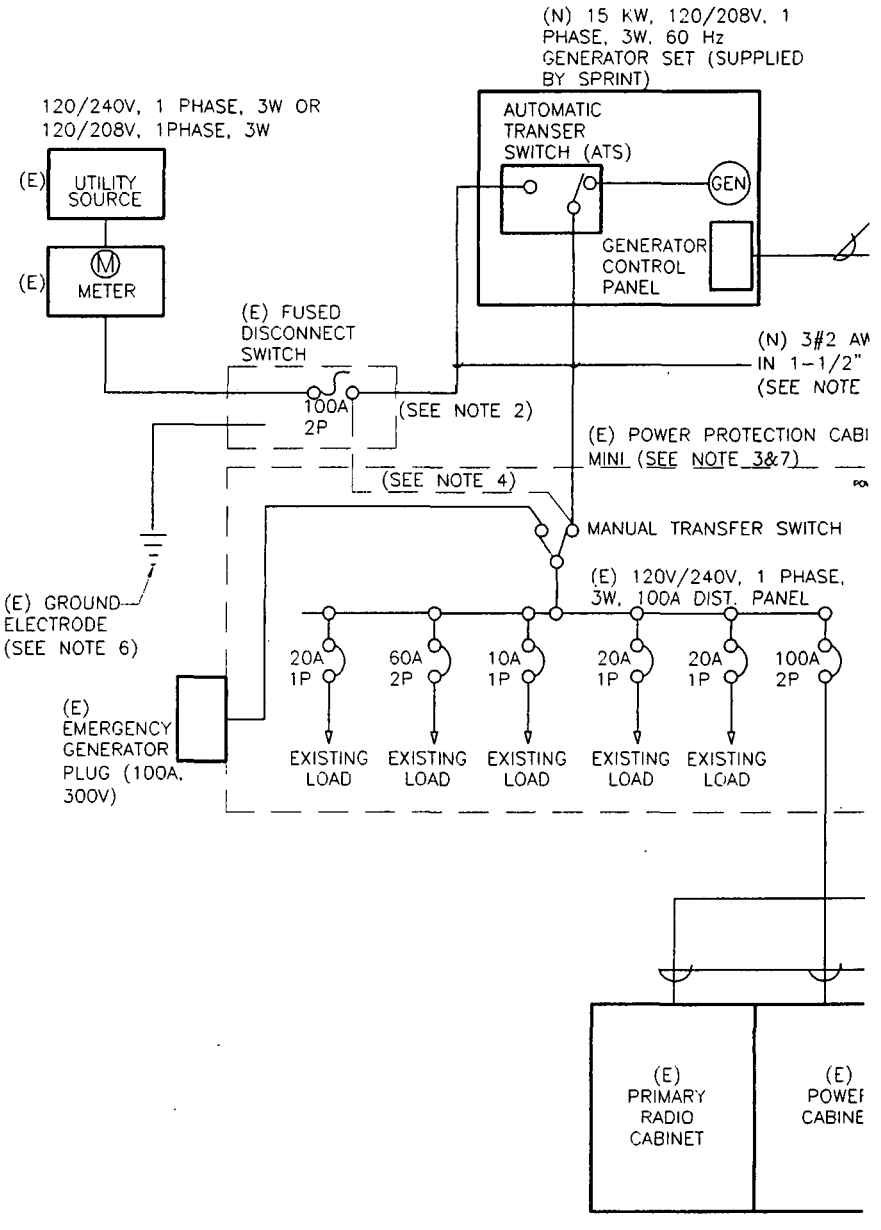
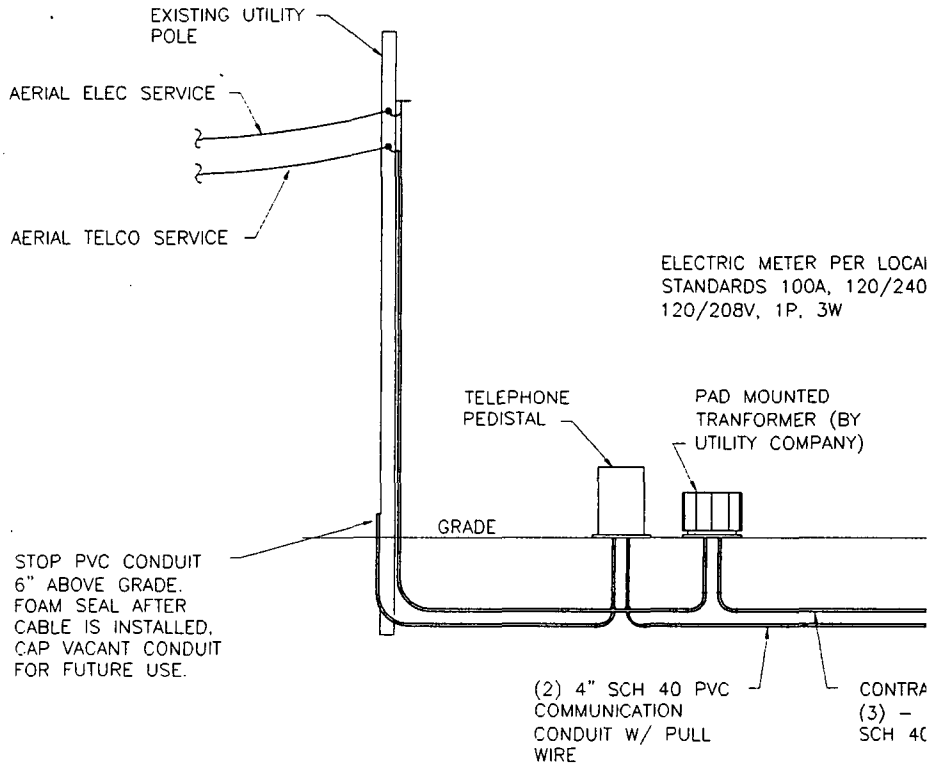


ONE LINE DIAGRAM FOR ADDING AUTOMATIC TR

NOT TO SCALE

'R
TION
ET
IINI)
:INT)

: + 1–#8 AWG
RGS CONDUIT



.EVEL

ER DIAGRAM

NOTE:
ALL METERING
INSTALLED PER

COPPER WITH THWN INSULATION UNLESS NOTED OTHERWISE.
/ITCH TO THE ATS AND FROM THE ATS TO THE PPC SHALL
T WHEN THE FUSED DISCONNECT SWITCH IS LOCATED ON OR

INSTALL ONE WHERE SHOWN. FUSED DISCONNECT
3R, 100A, 2 POLE WITH SOLID NEUTRAL AND

:XISTING AND ALL COMPONENTS SHOWN INSIDE THE

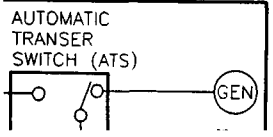
DISCONNECT SWITCH (OR METER) TO THE PPC MANUAL

300V. PROVIDE 36 INCHES OF CONDUCTORS COILED, TAPED
ROL PANEL AND THE PPC CABINET. TERMINATION OF CONDUCTORS

TERMINATE ON NEUTRAL ASSEMBLY.

JUMPER IS INSTALLED IN THE PPC. THIS BONDING

(N) 15 KW, 120/208V, 1
PHASE, 3W, 60 Hz
GENERATOR SET (SUPPLIED
BY SPRINT)



(N) 6 SHIELDED TWISTED
PAIR #22 AWG IN 3/4"
PVC CONDUIT (SEE NOTE 5)

NOTE:
ALL METERING EQU
INSTALLED PER UT

PPER WITH THWN INSULATION UNLESS NOTED OTHERWISE.
:H TO THE ATS AND FROM THE ATS TO THE PPC SHALL
WHEN THE FUSED DISCONNECT SWITCH IS LOCATED ON OR

STALL ONE WHERE SHOWN. FUSED DISCONNECT
:, 100A, 2 POLE WITH SOLID NEUTRAL AND

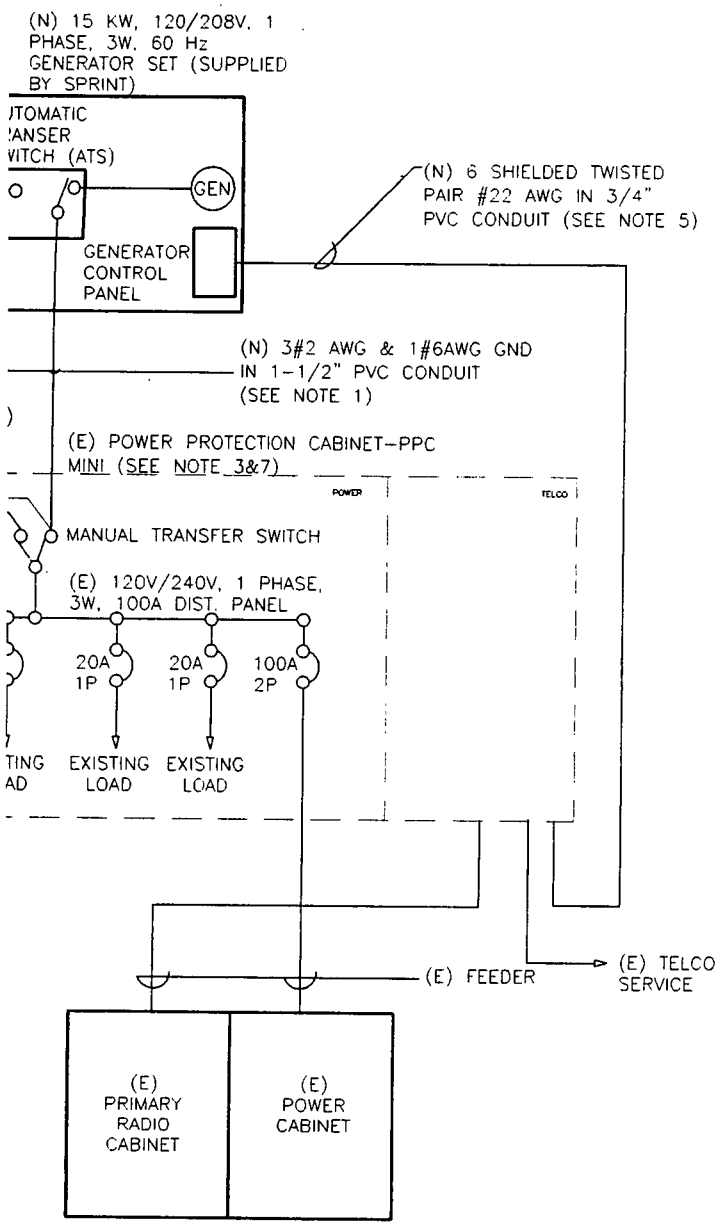
;TING AND ALL COMPONENTS SHOWN INSIDE THE

;CONNECT SWITCH (OR METER) TO THE PPC MANUAL

V. PROVIDE 36 INCHES OF CONDUCTORS COILED, TAPED
PANEL AND THE PPC CABINET. TERMINATION OF CONDUCTORS

RMINATE ON NEUTRAL ASSEMBLY.

MPER IS INSTALLED IN THE PPC. THIS BONDING

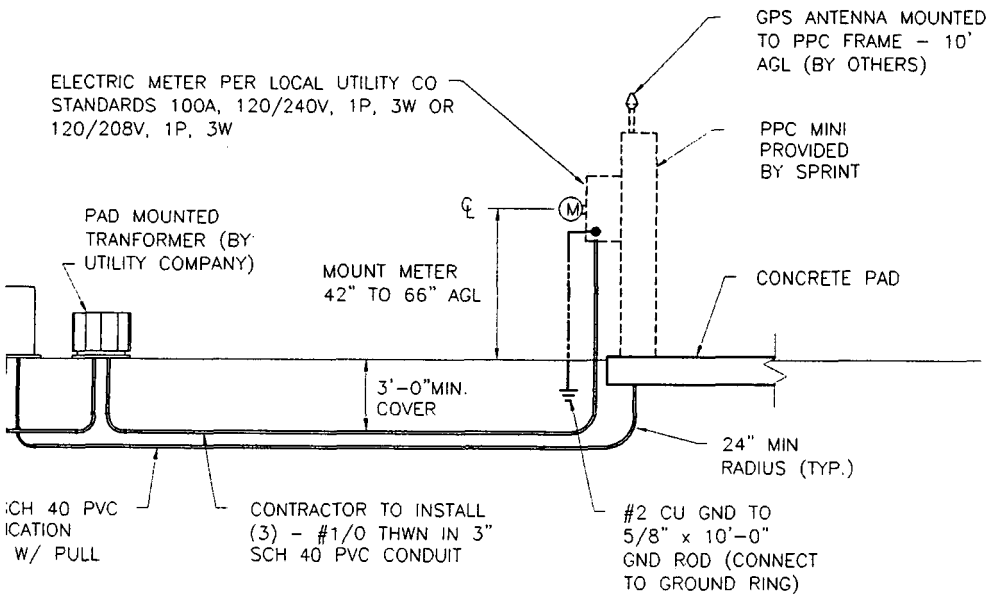


LOAD SCHEDU

LOAD DESCRIPTION	QTY	UN KV
MTBS 1 (ANCILLARY EQUIPMENT)		1.!
SPACE		
SPACE		
GENERATOR CHARGER		
FAN		
SUBTOTAL LEFT		
VOLTAGE: 120/240 CYCLE: 60Hz PHASE		
SOLID NEUTRAL: 100 AMPS		
MAIN BREAKER: 100 AMPS		
MAIN LUGS: 100 AMPS	MAIN COPPER	

)ING AUTOMATIC TRANSFER SWITCH AND GENERATOR TO SYSTEM

:ST



NOTE:
ALL METERING EQUIPMENT SHALL BE APPROVED AND INSTALLED PER UTILITY COMPANY REQUIREMENTS

ELECTRICAL NOTES

1. THE ENTIRE INSTALLATION SHALL COMPANY. CONTRACTOR SHALL B COORDINATION OF THE ELECTRIC/ COMPANY AND SHALL PAY ALL F
2. COORDINATE THE INSTALLATION C COMMUNICATION SERVICE, INCLUD COORDINATE WITH AND MEET THE THE N.E.C., AND ALL APPLICABLE
3. WHERE APPLICABLE, PROVIDE LIGI ETC. AS REQUIRED FOR A COMPL UTILITY COMPANY STANDARDS.

NOTES:

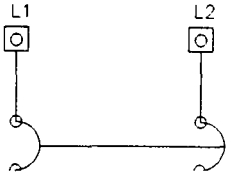
1. SERVICE POWER SHALL BE 240VAC, 100A, 1P, 3W, OR 208VAC, 100A, 1P, 3W.
2. A 100 AMP METER BASE SHALL BE INSTALLED AT THE BACK OF PPC POWER PANEL. SEE VENDOR DWG FOR EXACT LOCATION. THE NUMBER OF JAWS IN THE METER SOCKET AND THEIR ARRANGEMENT DEPENDS ON THE VOLTAGE SERVICE. CONSULT UTILITY COMPANY FOR VOLTAGE SERVICE AVAILABILITY.

UTILITY CONTACTS

TELEPHONE COMPANY

COMPANY NAME: CINCINNATI BELL TELEPI
ADDRESS: 201 EAST FOURTH STRI
CITY, STATE, ZIP CINCINNATI, OH 45202
PHONE NUMBER: (513) 397-9900
CONTACT: GENERAL OFFICE

2 W
BEF
CALL TOLL F
KENTUCKY U



NOTE:
ALL METERING EQUIPMENT SHALL BE APPROVED AND INSTALLED PER UTILITY COMPANY REQUIREMENTS

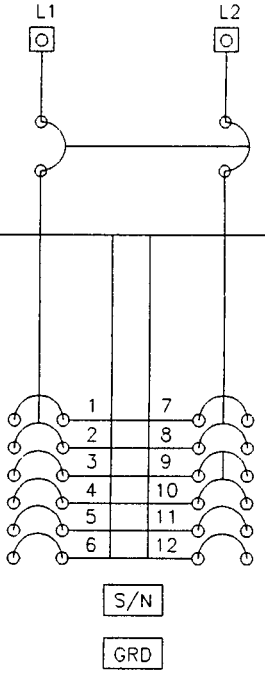
SERVICE AVAILABILITY.

UTILITY CONTACTS

TELEPHONE COMPAN

COMPANY NAME: CINCINNATI BELL TEL
ADDRESS: 201 EAST FOURTH S
CITY, STATE, ZIP CINCINNATI, OH 45:
PHONE NUMBER: (513) 397-9900
CONTACT: GENERAL OFFICE

2
E
CALL TOL
KENTUC



LOAD SCHEDULE

LOAD DESCRIPTION	QTY	UNIT KVA	PHASE LOAD UNIT A	PHASE LOAD UNIT B	TRIP	POLES	NO.
1 LLARY EQUIPMENT)		1.5	0.75	0.75	60	2	CB1
RATOR CHARGER					20	1	CB2
			0.03		20	1	CB3
SUBTOTAL LEFT			0.78	0.75			

AGE: 120/240 CYCLE: 60Hz PHASE: 1 WIRES: 3
NEUTRAL: 100 AMPS
BREAKER: 100 AMPS
LUGS: 100 AMPS | MAIN COPPER BUS: 100 AMPS

SERVICE: AC POWER 120/24
DESIGNATION: PPC MINI
LOCATION: SPRINT PCS SITE

NO.	POLES	TRIP	PHASE LOAD PHASE A	PHASE LOAD PHASE B	UNIT KVA	
CB4	2	60	5.75	5.75	11.5	
CB5	2	60	0.75	0.75	1.5	
CB6	1	20		0.10		
			6.50	6.52	SUBTO	
			7.28	7.27	SUBTO	

MANUFACTURER: NORTHERN TELE(
DEMAND: 100%

PPC-MINI PANEL SCHEDULE

NOT TO SCALE

STEM

ELECTRICAL NOTES

1. THE ENTIRE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF LOCAL UTILITY COMPANY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND COORDINATION OF THE ELECTRICAL & COMMUNICATION SERVICE WITH THE UTILITY COMPANY AND SHALL PAY ALL FEES, ETC. FOR COMPLETE INSTALLATION.
2. COORDINATE THE INSTALLATION OF AN UNDERGROUND SECONDARY ELECTRIC & COMMUNICATION SERVICE, INCLUDING, SUPPORTS, AND ACCESSORIES AS INDICATED. COORDINATE WITH AND MEET THE REQUIREMENTS OF THE LOCAL UTILITY COMPANY, THE N.E.C., AND ALL APPLICABLE LOCAL AND STATE CODES.
3. WHERE APPLICABLE, PROVIDE LIGHTNING ARRESTORS, CUT-OUTS, GUY WIRES, GUARDS, ETC. AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM AND AS REQUIRED PER UTILITY COMPANY STANDARDS.

NOTES:

1. SERVICE POWER SHALL BE 240VAC, 100A, 1P, 3W, OR 208VAC, 100A, 1P, 3W.
2. A 100 AMP METER BASE SHALL BE INSTALLED AT THE BACK OF PPC POWER PANEL. SEE VENDOR DWG FOR EXACT LOCATION. THE NUMBER OF JAWS IN THE METER SOCKET AND THEIR ARRANGEMENT DEPENDS ON THE VOLTAGE SERVICE. CONSULT UTILITY COMPANY FOR VOLTAGE SERVICE AVAILABILITY.
3. FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT REFER TO VENDOR PRINTS PROVIDED BY PPC MANUFACTURER.
4. METER AND ADAPTER PLATE CAN BE RELOCATED, IF NECESSARY, WHERE ACCESS IS A PROBLEM.

UTILITY CONTACTS

TELEPHONE COMPANY:

COMPANY NAME: CINCINNATI BELL TELEPHONE
ADDRESS: 201 EAST FOURTH STREET
CITY, STATE, ZIP CINCINNATI, OH 45202
PHONE NUMBER: (513) 397-9900
CONTACT: GENERAL OFFICE

POWER COMPANY:

COMPANY NAME: CINERGY\ULH&P
ADDRESS: 139 EAST FOURTH STREET
CITY, STATE, ZIP CINCINNATI, OH 45202
PHONE NUMBER: (513) 421-9500
CONTACT: CUSTOMER SERVICE

2 WORKING DAYS BEFORE YOU DIG
CALL TOLL FREE 800-752-6007
KENTUCKY UNDERGROUND PROTECTION INC.

Sprint PCS
4605 DUKE DRIVE, SUITE 200
MASON, OHIO 45040

BURGESS & NIPLE
BURGESS & NIPLE, LIMITED
811 RACE STREET
CINCINNATI, OHIO 45202
OFFICE: (513) 579-0042
FAX: (513) 579-0321

SEAL

STATE OF KENTUCKY
GREGORY BREETZ
19016
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

DATE: MAY 13, 1999
PROJECT NUMBER: 24628
DRAWN BY: TAC
CHECKED BY: GB

△	REVISIONS		
*	5-19-99	FINAL PRINT	TAC
NO.	DATE	DESCRIPTION	BY

UTILITY CONTACTS

TELEPHONE COMPANY:

COMPANY NAME: CINCINNATI BELL TELEPHONE
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PHONE NUMBER: (513) 397-9900
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CITY, STATE, ZIP CINCINNATI, OH 45202
PHONE NUMBER: (513) 421-9500
CONTACT: CUSTOMER SERVICE

2 WORKING DAYS BEFORE YOU DIG
CALL TOLL FREE 800-752-6007
KENTUCKY UNDERGROUND PROTECTION INC.

SERVICE: AC POWER 120/240 V, 1ø, 3W, 10,000 A/C
DESIGNATION: PPC MINI
LOCATION: SPRINT PCS SITE

NO.	POLES	TRIP	PHASE LOAD A	PHASE LOAD B	LOAD UNIT KVA	LOAD QTY	LOAD DESCRIPTION
CB4	2	60	5.75	5.75	11.5	2	AC SURGE PROTECTION (CELL LOAD)
CB5	2	60	0.75	0.75	1.5	2	TOWER LIGHTS
CB6	1	20		0.10		1	TELCO GFI
							SPACE
			6.50	6.52	SUBTOTAL RIGHT		TOTAL LOAD: 14.5kW
			7.28	7.27	SUBTOTAL		

MANUFACTURER: NORTHERN TELECOM
DEMAND: 100%

E

NOTE:

FOR EQUIPMENT DETAILS SEE PLANS PROVIDED BY SPRINT PCS

STATE OF KENTUCKY
GREGORY BREETZ
19016
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

DATE: MAY 13, 1999

PROJECT NUMBER: 24628

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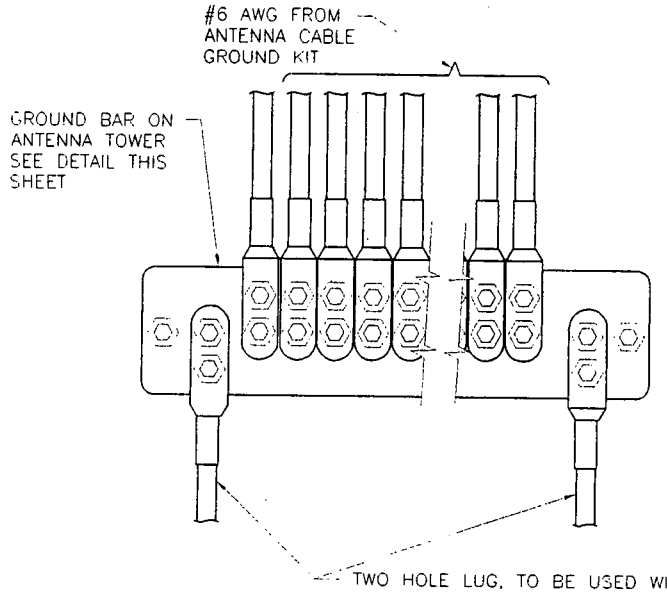
△	REVISIONS		
*	5-19-99	FINAL PRINT	TAC
NO.	DATE	DESCRIPTION	BY
REVIEW DATE:	5-13-99		

SITE# CI33XC023 D
EDWARDS 2
RR3 BOX 438
BUTLER, KY
41006

SHEET TITLE
ELECTRICAL DETAILS

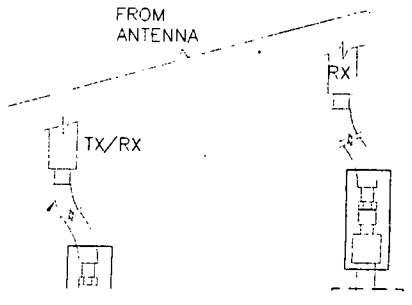
SHEET NUMBER
E-1



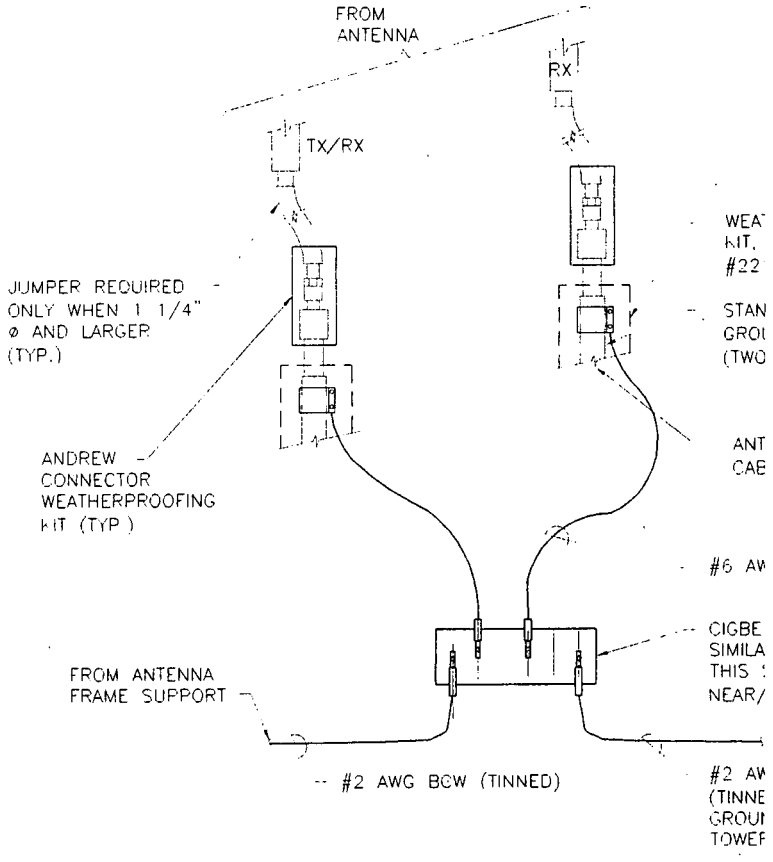
INSTALLATION OF GROUND WIRE TO GROUND BAR DETAIL

NOT TO SCALE

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

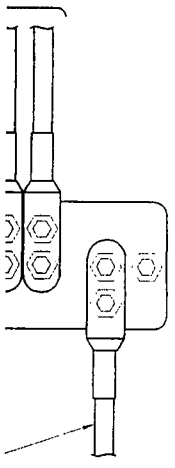


NOTE: DO NOT INSTALL CABLE GF
KIT AT A BEND AND ALWAYS DIREC
GROUND WIRE DOWN TO CIGBE



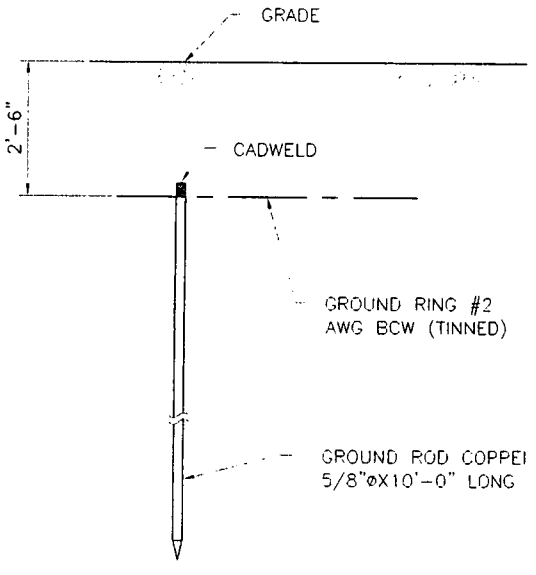
CONNECTION OF GROUND WIRES
BAR (CIGBE) AT 2 ANTENNAS DETA

NOT TO SCALE



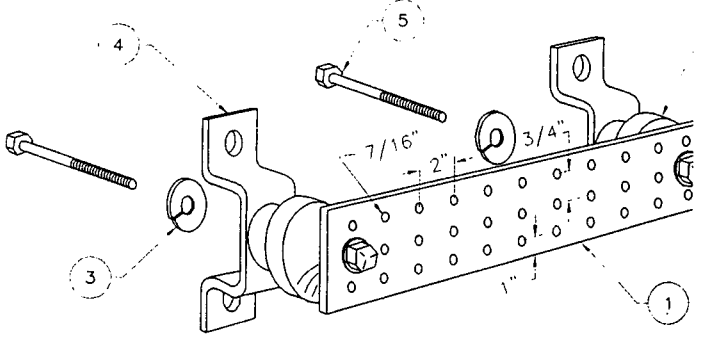
G. TO BE USED WITH
TO BUILDING OR

GROUND WIRE DETAIL



GROUND ROD DETAIL

NOT TO SCALE



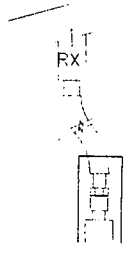
LEGEND

1- COPPER GROUND BAR, ¼"X 4"X 20", NEWTON INSTRUMENT CO. B-6142. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURA
2- INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4
3- 5/8" LOCKWASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-
4- WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT NO. A
5- 5/8-11 X 1" H.H.C.S.BOLTS, NEWTON INSTRUMENT CO. CAT NO

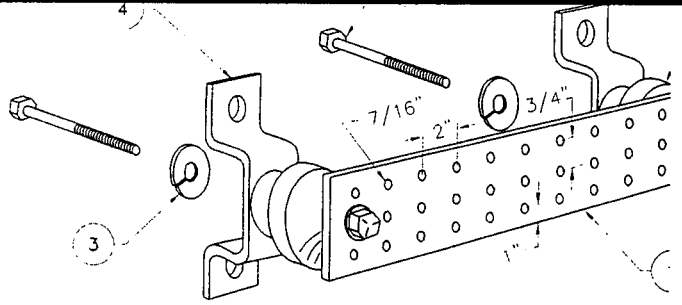
GROUND BAR DETAIL

NOT TO SCALE

DO NOT INSTALL CABLE GROUND
A BEND AND ALWAYS DIRECT
D WIRE DOWN TO CIGBE



WEATHERPROOFING
KIT, ANDREW



LEGEND

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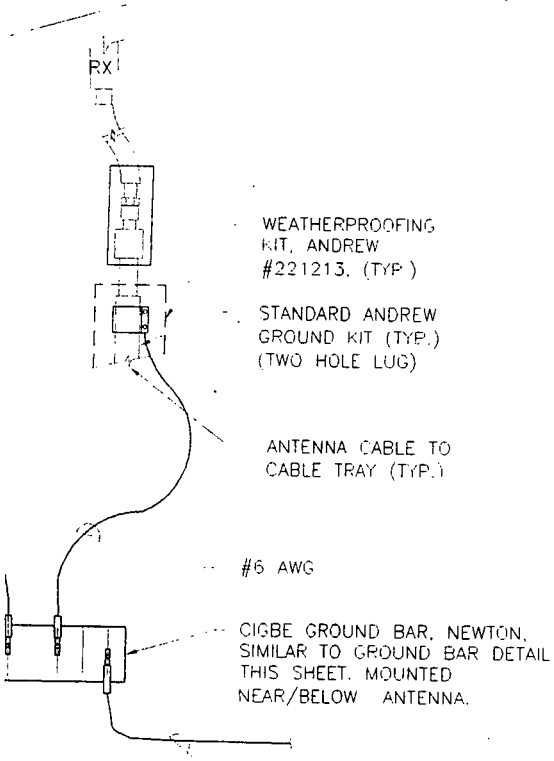
2- INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4
3- 5/8" LOCKWASHERS, NEWTON INSTRUMENT CO. CAT. NO. 30
4- WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT NO
5- 5/8-11 X 1" H.H.C.S.BOLTS, NEWTON INSTRUMENT CO. CAT

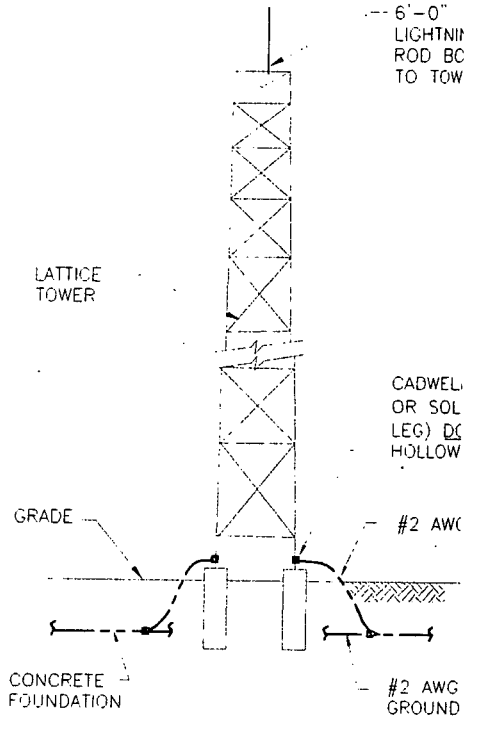
GROUND BAR DETAIL

NOT TO SCALE

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



ROUND WIRES TO GROUND ANTENNAS DETAIL



LATTICE TOWER LIGHTNING PROTECT

NOT TO SCALE

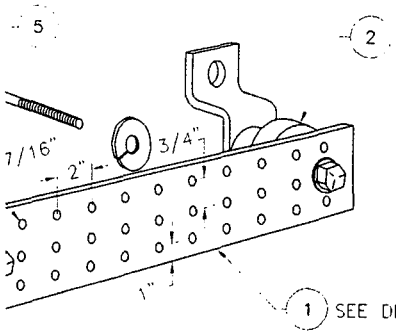
GRADE

CADWELD

GROUND RING #2
AWG BCW (TINNED)

GROUND ROD-COPPERWELD
5/8"øX10'-0" LONG

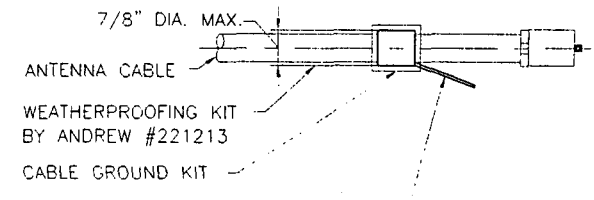
D ROD DETAIL



EGEND

'X 20", NEWTON INSTRUMENT CO. CAT. NO.
H NEMA DOUBLE LUG CONFIGURATION
4ENT CAT. NO. 3061-4
INSTRUMENT CO. CAT. NO. 3015-8
WTON INSTRUMENT CO. CAT NO. A-6056
NEWTON INSTRUMENT CO. CAT NO. 3012-1

3AR DETAIL



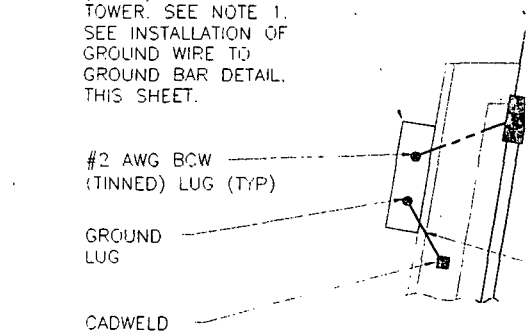
CONNECTION OF CABLE GROUND KIT
TO GPS ANTENNA CABLE

NOTE: DO NOT INSTALL CABL
BEND AND ALWAYS DIRECT G
GROUND BAR.

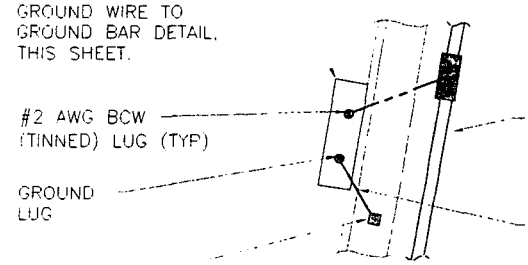
CONNECTION OF KIT TO ANTENNA

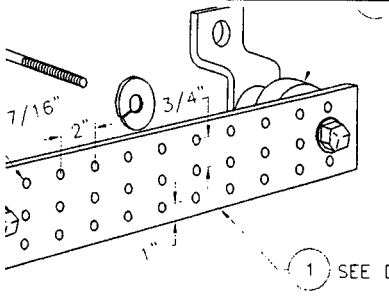
NOT TO SCALE

ANTENNA GROUND BAR -
(CIGBE) TOP OF
TOWER. SEE NOTE 1.
SEE INSTALLATION OF
GROUND WIRE TO
GROUND BAR DETAIL,
THIS SHEET.



ANTENNA GROUND BAR -
(CIGBE) MIDDLE OF
TOWER. SEE NOTE 1.
SEE INSTALLATION OF
GROUND WIRE TO
GROUND BAR DETAIL,
THIS SHEET.



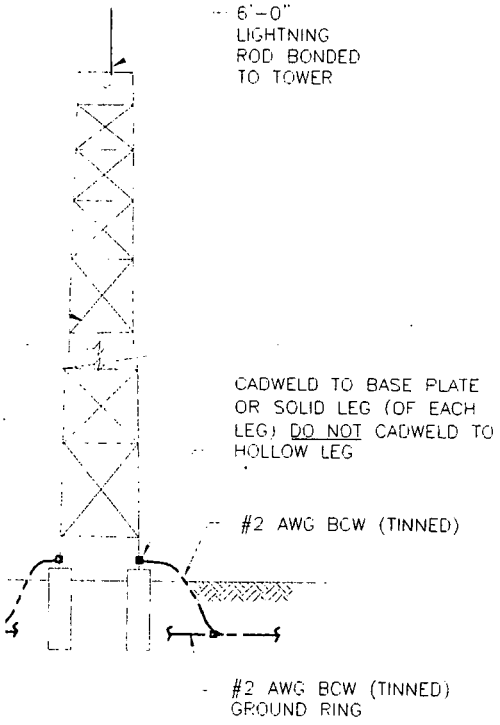


SEE DETAIL THIS SHEET

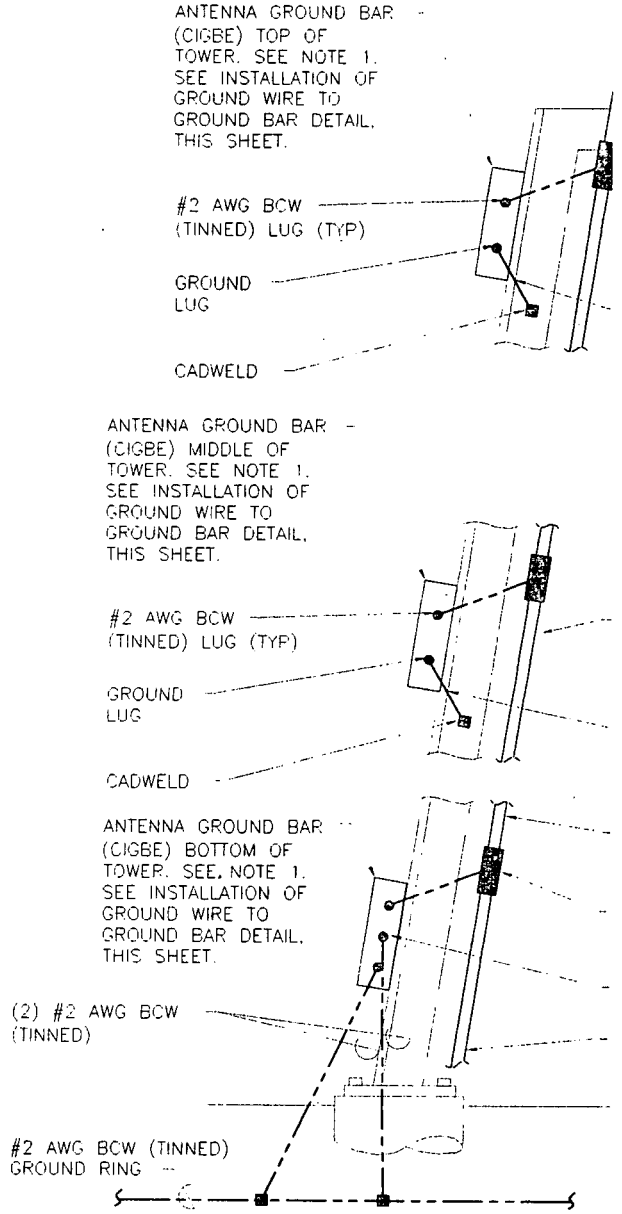
EGEND

"X 20", NEWTON INSTRUMENT CO. CAT. NO.
:H NEMA DOUBLE LUG CONFIGURATION
MENT CAT. NO. 3061-4
INSTRUMENT CO. CAT. NO. 3015-8
WTON INSTRUMENT CO. CAT NO. A-6056
NEWTON INSTRUMENT CO. CAT NO. 3012-1

BAR DETAIL



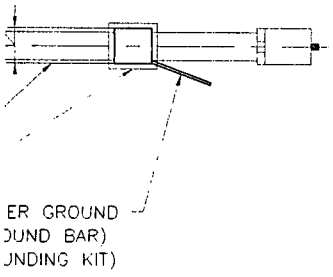
:HTNING PROTECTION DETAIL



NOTE:
1. NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON TH ANTENNA LOCATIONS, AND CONNECTION ORIENTATION. PROVIDE .
2. A SEPARATE GROUND BAR TO BE USED FOR GPS ANTENNA

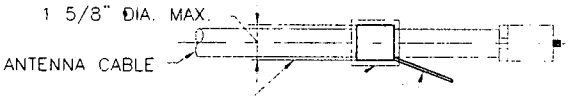
LATTICE TOWER ANTENNA CABLE GROUNDING DETAIL

NOT TO SCALE



ER GROUND
OUND BAR)
JNDING KIT)

.E GROUND KIT
3LE



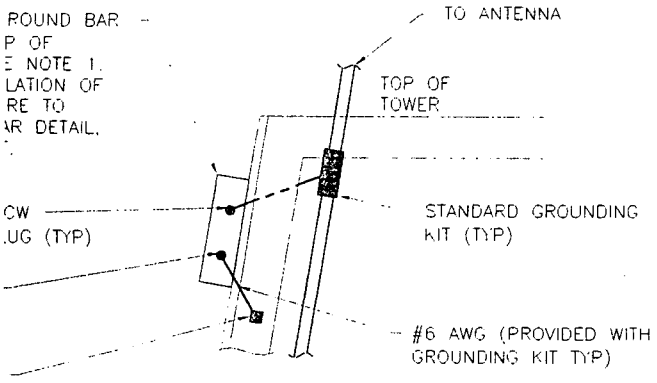
CONNECTION OF CABLE GROUND KIT
TO ANTENNA CABLE

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

CONNECTION OF CABLE GROUND KIT TO ANTENNA CABLE DETAIL

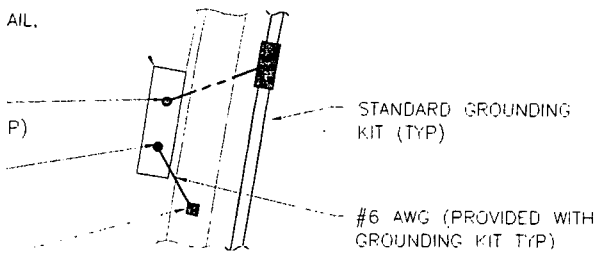
NOT TO SCALE

ROUND BAR
P OF
E NOTE 1.
LATION OF
RE TO
AR DETAIL.



BAR
F
1.
OF

AIL.



Sprint PCS

4605 DUKE DRIVE, SUITE 200
MASON, OHIO 45040

BURGESS & NIPLE

BURGESS & NIPLE, LIMITED
811 RACE STREET
CINCINNATI, OHIO 45202
OFFICE: (513) 579-0042
FAX: (513) 579-0321

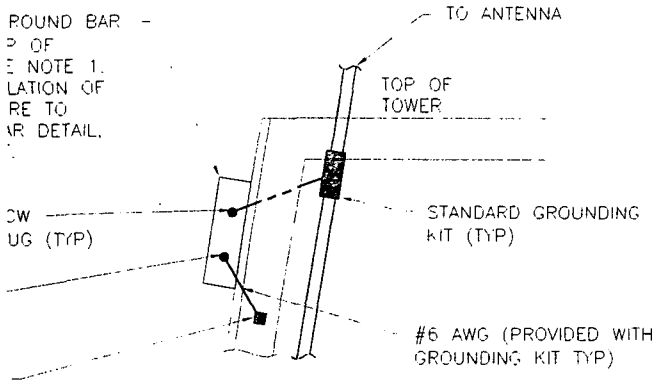
SEAL

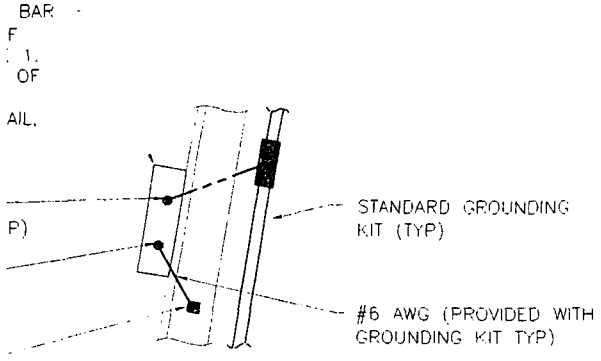
STATE OF KENTUCKY
GREGORY BREETZ
19016
LICENSED
PROFESSIONAL ENGINEER

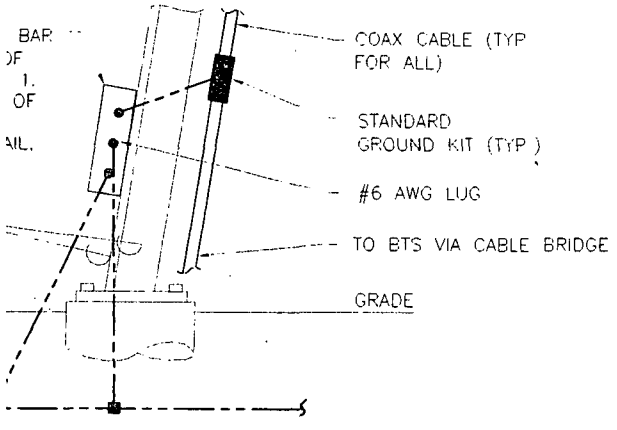
SIGNATURE

DATE:	MAY 13, 1999
PROJECT NUMBER:	24628
DRAWN BY:	TAC
CHECKED BY:	GB

△	REVISIONS		
*	5-19-99	FINAL PRINT	TAC
NO.	DATE	DESCRIPTION	BY







BARS MAY VARY DEPENDING ON THE TYPE OF TOWER.
ONNECTION ORIENTATION. PROVIDE AS REQUIRED.
TO BE USED FOR GPS ANTENNA IF REQUIRED.

TOWER ANTENNA GROUNDING DETAIL

NOTE:

FOR EQUIPMENT DETAILS
SEE PLANS PROVIDED
BY SPRINT PCS

STATE OF KENTUCKY
GREGORY BREETZ
19016
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

DATE: MAY 13, 1999

PROJECT NUMBER: 24628

DRAWN BY: TAC

CHECKED BY: GB

△	REVISIONS		
*	5-19-99	FINAL PRINT	TAC
NO.	DATE	DESCRIPTION	BY

REVIEW DATE: 5-13-99

SITE# CI33XC023 D

EDWARDS 2

RR3 BOX 438

BUTLER, KY

41006

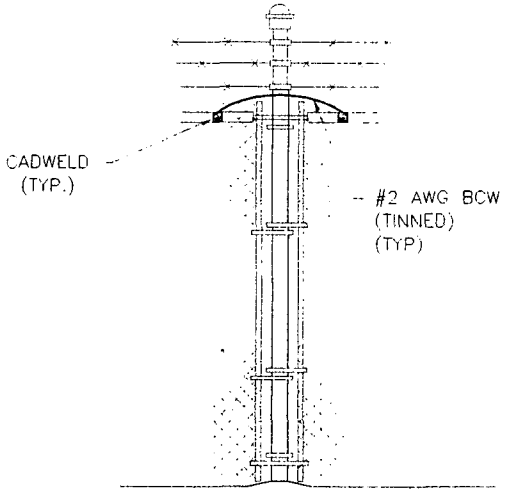
SHEET TITLE

GROUNDING DETAILS

SHEET NUMBER

C-6

EMT	ELECTRICAL METALLIC TUBING
DWG	DRAWING
IGR	INTERIOR GROUND RING (HALO)
ACCA	ANTENNA CABLE COVER ASSEMBLY
MIGB	MASTER ISOLATED GROUND BAR
CIGBE	COAX ISOLATED GROUND BAR EXTERNAL
BTS	BASE TRANSMISSION SYSTEM
GEN	GENERATOR
GR	GROWTH
SSLP	SPRINT SPECTRUM LIMITED PARTNERSHIP



/2 AWG BCW
TINNED)
TYP)

CADWELD

WG BCW
ED)

ST

TS SHALL BE BONDED TO THE RING AT EACH CORNER AND
POST AS A MINIMUM ONE VERTICAL POST SHALL BE BONDED
RING IN EVERY 100 FOOT STRAIGHT RUN OF FENCE.

POLES SHALL BE BONDED TO EACH OTHER.

HORIZONTAL POLE / BRACE TO EACH OTHER AND TO EACH
THAT IS BONDED TO THE EXTERIOR GROUND PING.

GROUNDING DETAIL

CALE

NOTE:

FOR EQUIPMENT DETAILS
SEE PLANS PROVIDED
BY SPRINT PCS

DATE: MAY 13, 1999

PROJECT NUMBER: 24628

DRAWN BY: TAC

CHECKED BY: GB

△	REVISIONS		
*	5-19-99	FINAL PRINT	TAC
NO.	DATE	DESCRIPTION	BY
REVIEW DATE. 5-13-99			

SITE# CI33XC023 D

EDWARDS 2

RR3 BOX 438

BUTLER, KY

41006

SHEET TITLE

GROUNDING
PLAN & DETAILS

SHEET NUMBER

C-5

JNDING NOTES

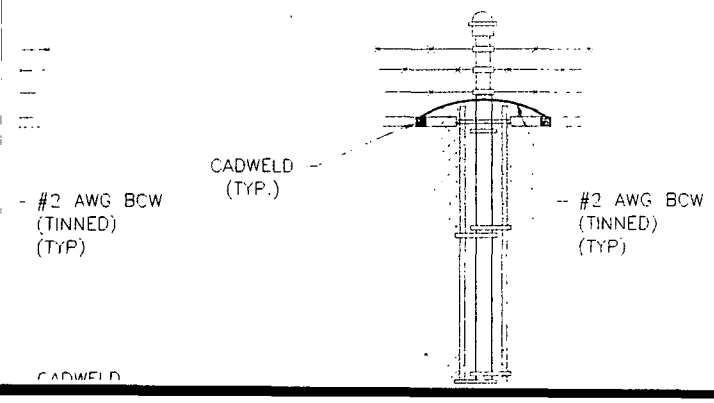
JTION!: AT ALL SITES THE CONTRACTOR MUST VERIFY THAT THE SYSTEM EFFECTIVELY GROUNDED AND MEETS THE NEC ARTICLE 250 REQUIREMENTS) ACCEPTABLE TO THE LOCAL INSPECTOR/AUTHORITY. NEC ARTICLE 250-84 ECIFIES GROUND RESISTANCE OF 25 OHMS OR LESS FOR THE GROUNDING STEM. THE PROJECT REQUIREMENT IS FIVE (5) OHMS.

CTRICAL/GROUNDING SYMBOLS

	GROUND ROD WITH ACCESS
	XIT GROUND ROD
	GROUND ROD
	DISCONNECT SWITCH
M	METER ON METER/BREAKER UNIT
	CIRCUIT BREAKER
GEN	GENERATOR
	CADWELD TYPE CONNECTION
	COMPRESSION TYPE CONNECTION
	GROUNDING WIRE

REVIATIONS

AWG	AMERICAN WIRE GAUGE
BCW	BARE COPPER WIRE
GPS	GLOBAL POSITIONING SYSTEM
PCS	PERSONAL COMMUNICATION SYSTEM
PPC	POWER PROTECTION CABINET
PRC	PRIMARY RADIO CABINET
RWY	RACEWAY
TYP.	TYPICAL
RGS	RIGID GALVANIZED STEEL
EMT	ELECTRICAL METALLIC TUBING
DWG	DRAWING
IGR	INTERIOR GROUND RING (HALO)
ACCA	ANTENNA CABLE COVER ASSEMBLY
MIGB	MASTER ISOLATED GROUND BAR
CIGBE	COAX ISOLATED GROUND BAR EXTERNAL
BTS	BASE TRANSMISSION SYSTEM
GEN	GENERATOR
GR	GROWTH
SSLP	SPRINT SPECTRUM LIMITED PARTNERSHIP



CADWELD

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GREGORY BREETZ
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△	REVISIONS		
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REVIEW DATE: 5-13-99			

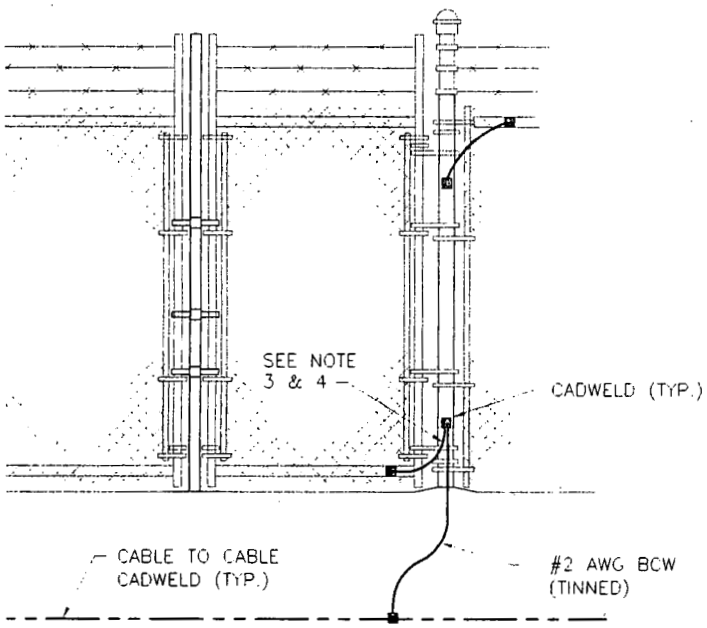
EMT	ELECTRICAL METALLIC
DWG	DRAWING
IGR	INTERIOR GROUND RIN
ACCA	ANTENNA CABLE COVE
MIGB	MASTER ISOLATED GR
CIGBE	COAX ISOLATED GROU
BTS	BASE TRANSMISSION S
GEN	GENERATOR
GF	GROWTH
SSLP	SPRINT SPECTRUM LIN

: ORIENTATION SEE PLAN

ARGED MIGB IS SHOWN FOR CLARITY TO DEPICT THE REQUIRED CTORS TO THE BAR.

)VIDE GROUND LEADS WITH SUFFICIENT SLACK (PIGTAIL ENDS) FOR). & BOE. INSTALLATION WILL BE AT A LATER DATE.

ENT ON CONCRETE PAD GROUNDING DETAIL



RING #2 AWG BCW (TINNED) (MIN 30" BELOW ROUGH GRADE)

ROM THE GROUND RING SHALL BE GRADE.

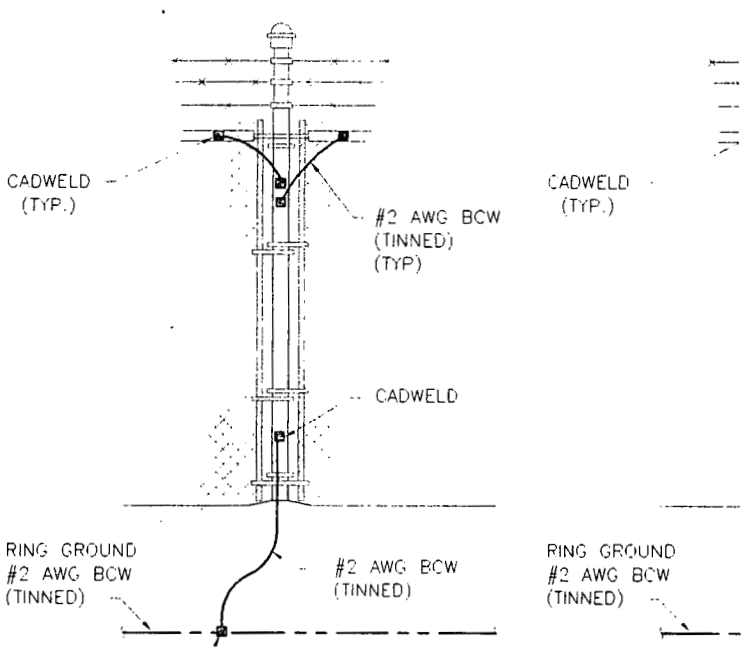
E/BRACE TO EACH OTHER AND TO EACH EXTERIOR GROUND RING

) AWG WELDING CABLE OR FLEXIBLE B WITH SLEEVES ON EACH END)ING.

ALLED SO THAT IT WILL NOT BE WHEN GATE IS FULLY OPEN IN EITHER

CE GATE GROUNDING DETAIL

) SCALE



NOTE:

1. VERTICAL POSTS SHALL BE BONDED TO THE RING AT EACH GATE POST. AS A MINIMUM ONE VERTICAL P TO THE GROUND RING IN EVERY 100 FOOT STRAIGHT

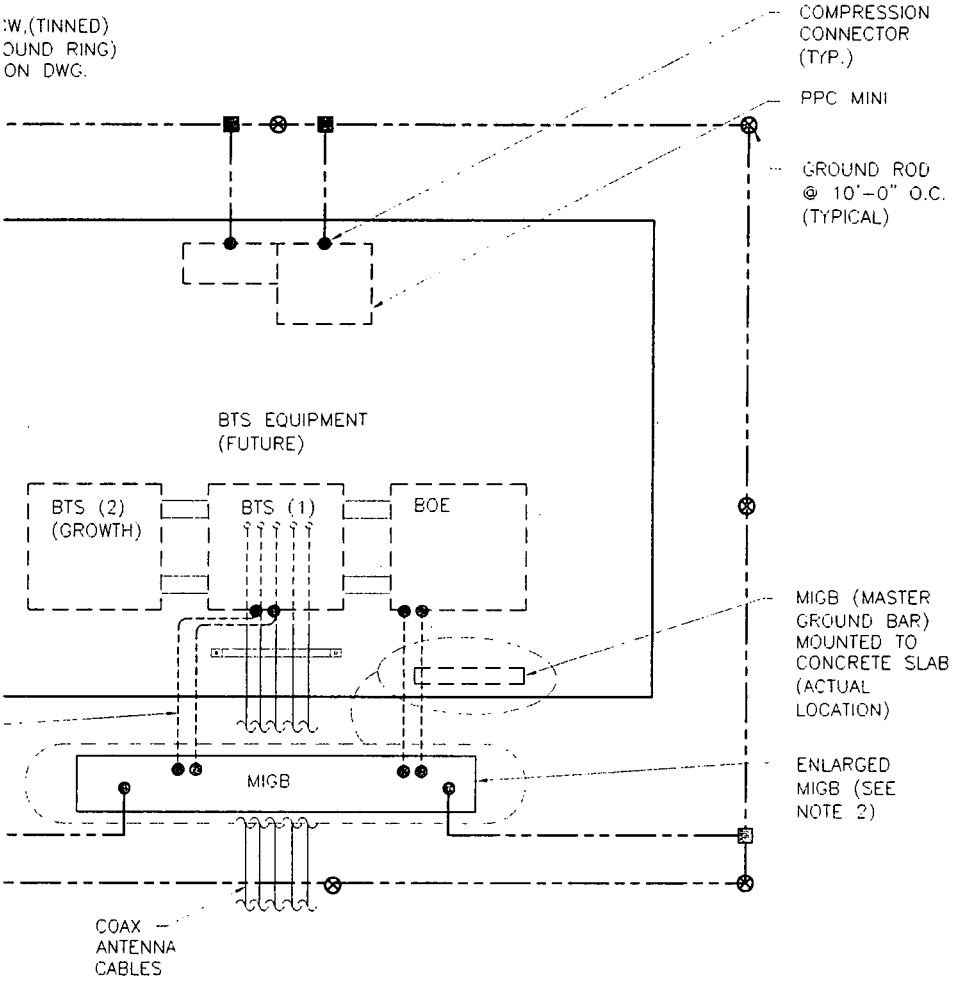
2. HORIZONTAL POLES SHALL BE BONDED TO EACH C

3. BOND EACH HORIZONTAL POLE / BRACE TO EACH VERTICAL POST THAT IS BONDED TO THE EXTERIOR

FENCE GROUNDING DETAIL

NOT TO SCALE

:W,(TINNED)
OUND RING)
ON DWG.



ORIENTATION SEE PLAN

ARGED MIGB IS SHOWN FOR CLARITY TO DEPICT THE REQUIRED
CTORS TO THE BAR.

VIDE GROUND LEADS WITH SUFFICIENT SLACK (PIGTAIL ENDS) FOR
), & BOE. INSTALLATION WILL BE AT A LATER DATE.

ENT ON CONCRETE PAD GROUNDING DETAIL

GROUNDING NOTES

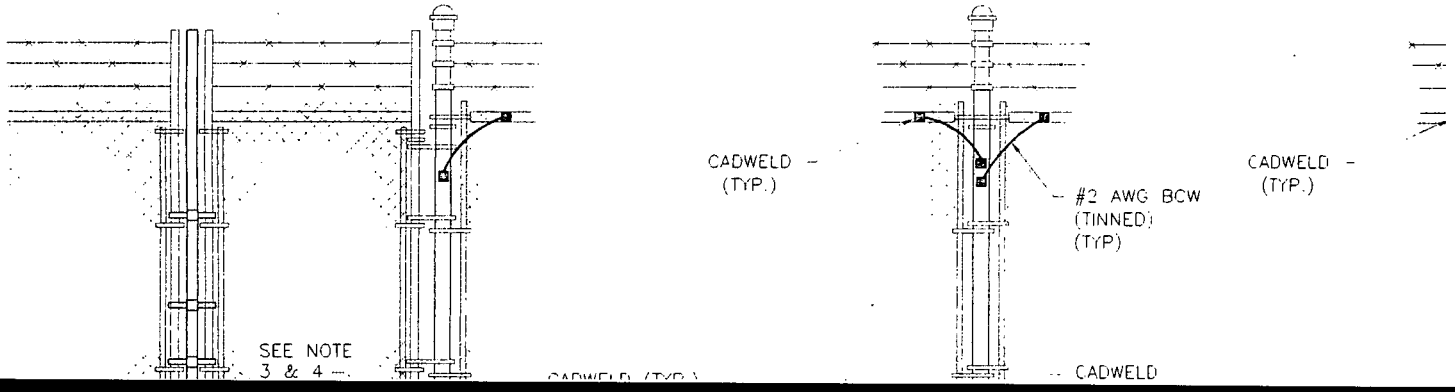
1. CAUTION!: AT ALL SITES THE CONTRACT
IS EFFECTIVELY GROUNDED AND MEETS T
AND ACCEPTABLE TO THE LOCAL INSPEC
SPECIFIES GROUND RESISTANCE OF 25 O
SYSTEM. THE PROJECT REQUIREMENT IS

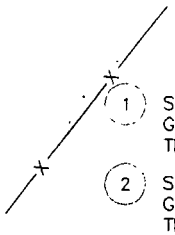
ELECTRICAL/GROUNDING

	GROUND ROD WITH ACC
	XIT GROUND ROD
	GROUND ROD
	DISCONNECT SWITCH
M	METER ON METER/BREA
	CIRCUIT BREAKER
GEN	GENERATOR
	CADWELD TYPE CONNEC
	COMPRESSION TYPE CO
	GROUNDING WIRE

ABBREVIATIONS

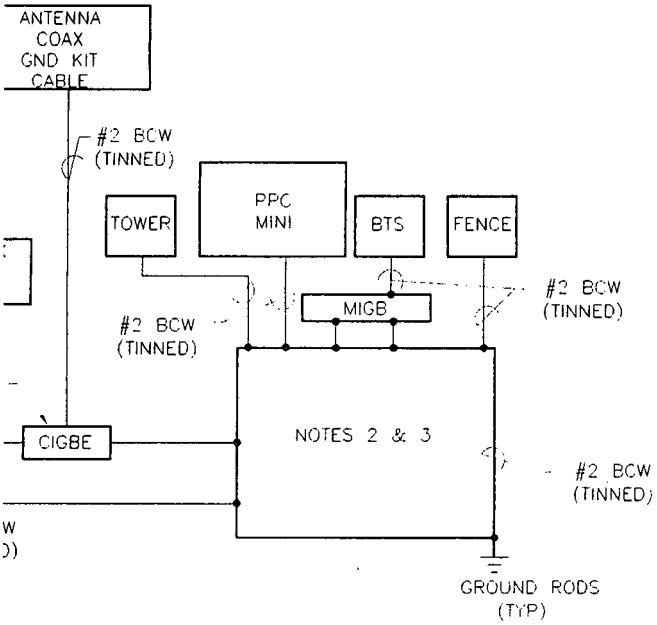
AWG	AMERICAN WIRE GAUGE
BCW	BARE COPPER WIRE
GPS	GLOBAL POSITIONING S
PCS	PERSONAL COMMUNICA
PPC	POWER PROTECTION C.
PRC	PRIMARY RADIO CABINI
RWY	RACEWAY
TYP.	TYPICAL
RGS	RIGID GALVANIZED STEI
EMT	ELECTRICAL METALLIC
DWG	DRAWING
IGR	INTERIOR GROUND RIN
ACCA	ANTENNA CABLE COVEF
MIGB	MASTER ISOLATED GRO
CIGBE	COAX ISOLATED GROUN
BTS	BASE TRANSMISSION S
GEN	GENERATOR
GR	GROWTH
SSLP	SPRINT SPECTRUM LIM





1. SEE TYPICAL FENCE GROUNDING DETAIL THIS SHEET.
2. SEE FENCE GATE GROUNDING DETAIL THIS SHEET.
3. GROUND ROD. SEE DETAIL SHEET C-6.
4. LIGHTNING PROTECTION GROUNDING. SEE DETAIL SHEET C-6.
5. SEE PCS EQUIPMENT ON CONCRETE PAD GROUNDING DETAIL THIS SHEET.
6. CABLE BRIDGE GROUNDING. SEE DETAIL SHEET C-3.
7. SEE LATTICE TOWER ANTENNA GROUNDING DETAIL SHEET C-6.
8. SEE GROUND BAR AND CABLE GROUND KIT DETAILS SHEET C-6.
9. GROUND PROPOSED TOWER TO PROPOSED TOWER GROUND RING (TYP.).
10. GROUND PROPOSED TOWER GROUND RING TO PROPOSED SLAB GROUND RING IN (2) PLACES (TYP.).

G PLAN



NOTES:
1. BOND ANTENNA GROUNDING KIT CABLE TO GROUND BAR.

2. RING GROUND FOR EQUIPMENT.

3. FOR GROUNDING CONNECTION & DETAILS SEE LAYOUT DWGS

STEM DIAGRAM – LAND SITE

NOTES:

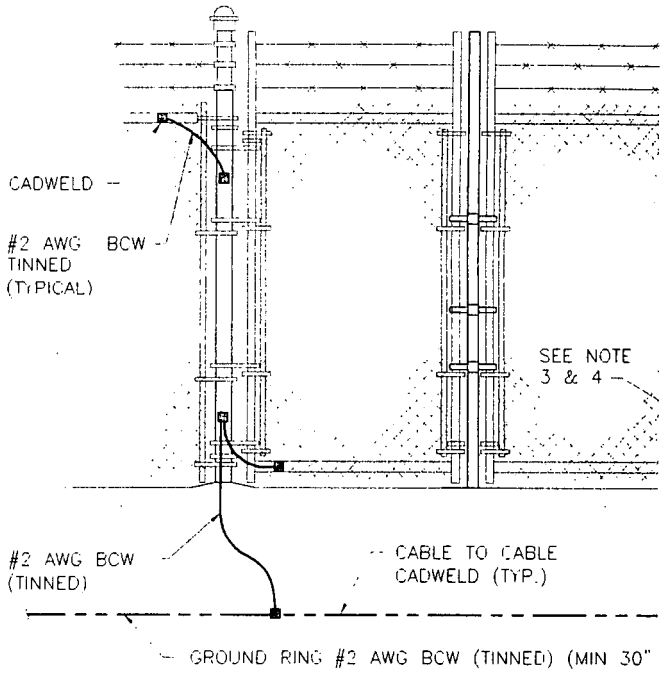
1. FOR ORIENTATION SEE PLAN

2. ENLARGED MIGB IS SHOWN FOR CLARITY T CONDUCTORS TO THE BAR.

3. PROVIDE GROUND LEADS WITH SUFFICIENT BTS (1), & BOE. INSTALLATION WILL BE AT A

PCS EQUIPMENT ON CONCRETE P

NOT TO SCALE



NOTE:

1. THE #2 AWG, BCW,(TINNED) FROM THE GROUND RING SHALL BE CADWELDED TO THE POST ABOVE GRADE.

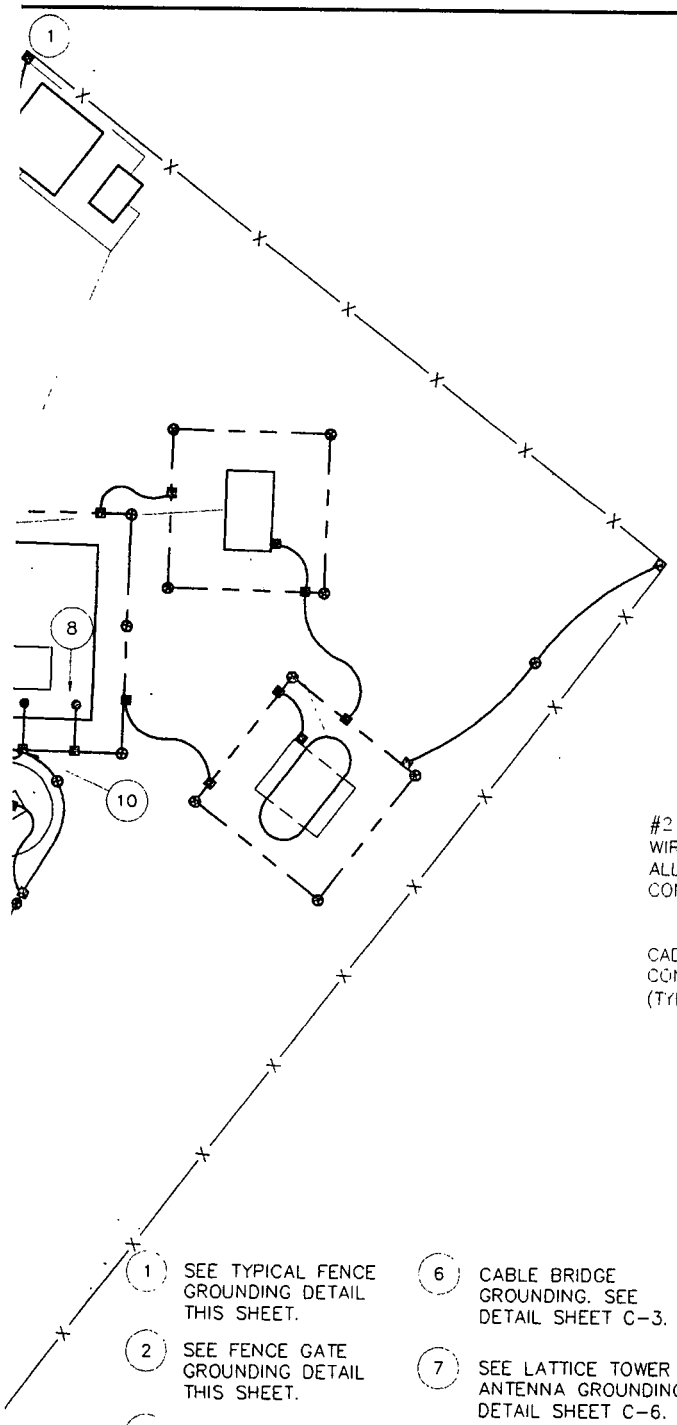
2. BOND EACH HORIZONTAL POLE/BRACE TO EACH OTHER AND TO EAC VERTICAL POLE BONDED TO THE EXTERIOR GROUND RING

3. GATE JUMPER SHALL BE #4/0 AWG WELDING CABLE OR FLEXIBLE COPPER 1" 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 EITHE DIRECTION.

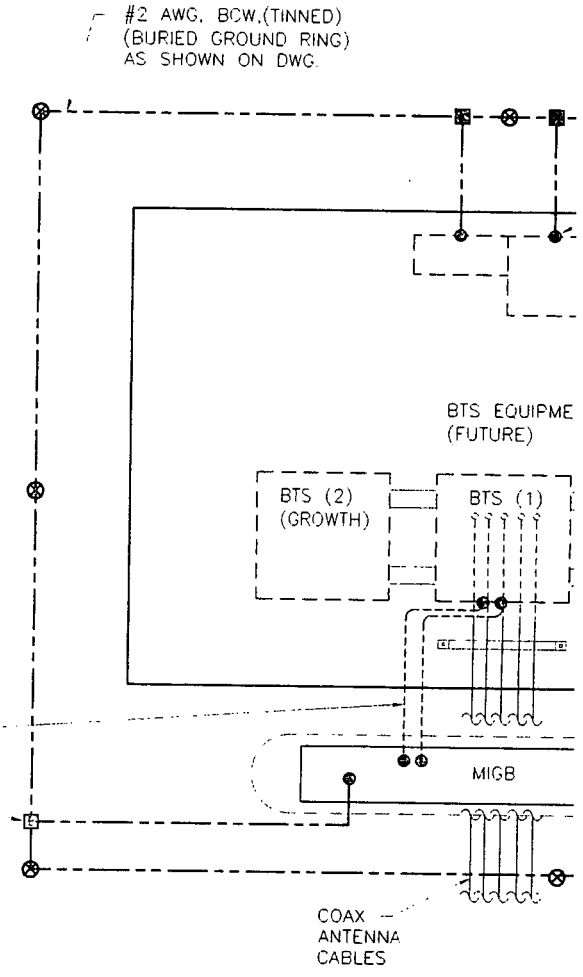
FENCE GATE GROUNDING

NOT TO SCALE



NG PLAN

1. SEE TYPICAL FENCE GROUNDING DETAIL THIS SHEET.
2. SEE FENCE GATE GROUNDING DETAIL THIS SHEET.
3. GROUND ROD. SEE DETAIL SHEET C-6.
4. LIGHTNING PROTECTION GROUNDING. SEE DETAIL SHEET C-6.
5. SEE PCS EQUIPMENT ON CONCRETE PAD GROUNDING DETAIL THIS SHEET.
6. CABLE BRIDGE GROUNDING. SEE DETAIL SHEET C-3.
7. SEE LATTICE TOWER ANTENNA GROUNDING DETAIL SHEET C-6.
8. SEE GROUND BAR AND CABLE GROUND KIT DETAILS SHEET C-6.
9. GROUND PROPOSED TOWER TO PROPOSED TOWER GROUND RING (TYP.).
10. GROUND PROPOSED TOWER GROUND RING TO PROPOSED SLAB GROUND RING IN (2) PLACES (TYP.).

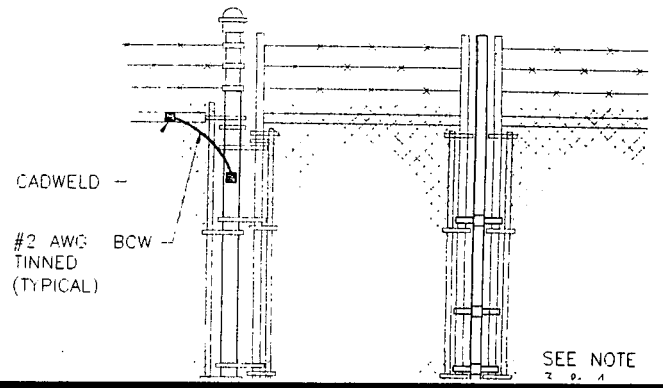


NOTES:

1. FOR ORIENTATION SEE PLAN
2. ENLARGED MIGB IS SHOWN FOR CLARITY CONDUCTORS TO THE BAR.
3. PROVIDE GROUND LEADS WITH SUFFICIEN BTS (1). & BOE. INSTALLATION WILL BE AT

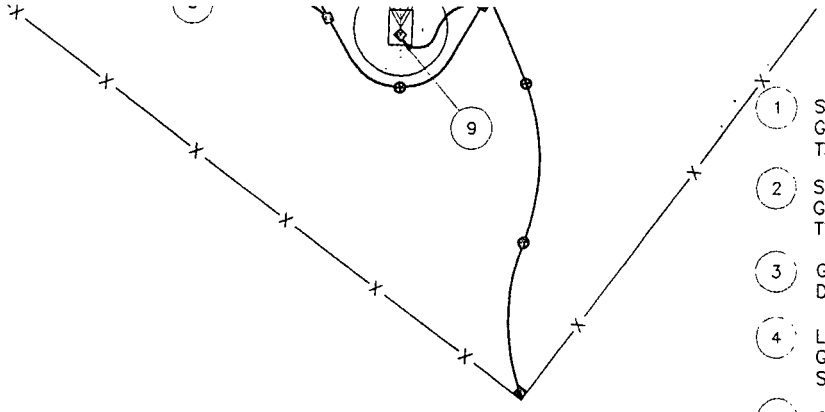
PCS EQUIPMENT ON CONCRETE

NOT TO SCALE



ANTENNA
COAX
GND KIT
CABLE

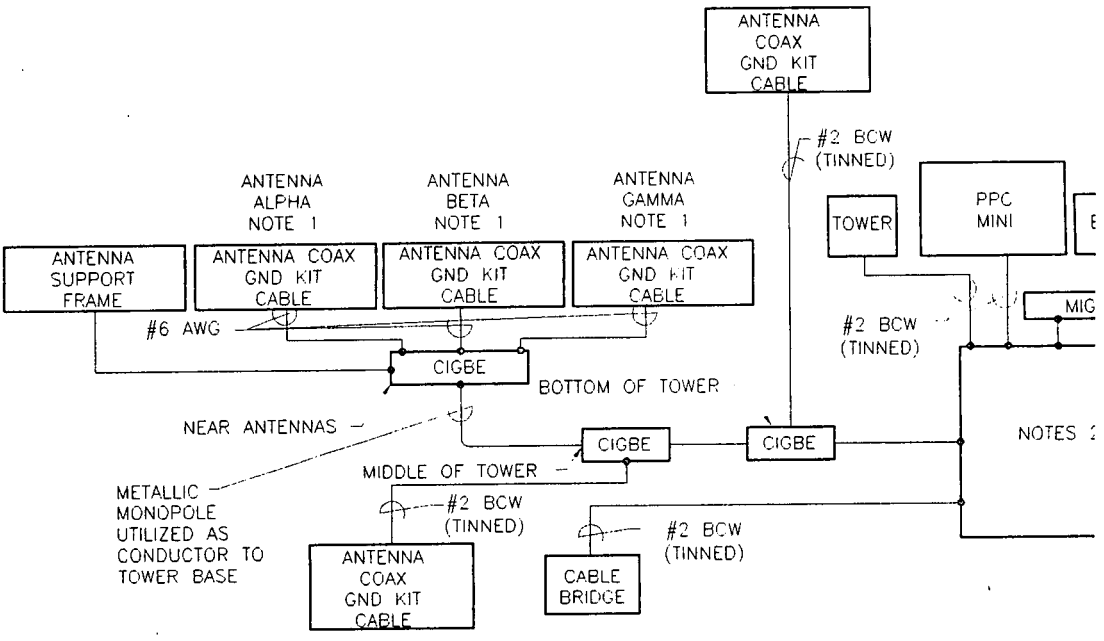
#2 BCW
(TINNED)



1. SEE TYPICAL FENCE GROUNDING DETAIL THIS SHEET.
2. SEE FENCE GATE GROUNDING DETAIL THIS SHEET.
3. GROUND ROD. SEE DETAIL SHEET C-6.
4. LIGHTNING PROTECTION GROUNDING. SEE DETAI SHEET C-6.
5. SEE PCS EQUIPMENT ON CONCRETE PAD GROUNDING DETAIL THIS SHEET.

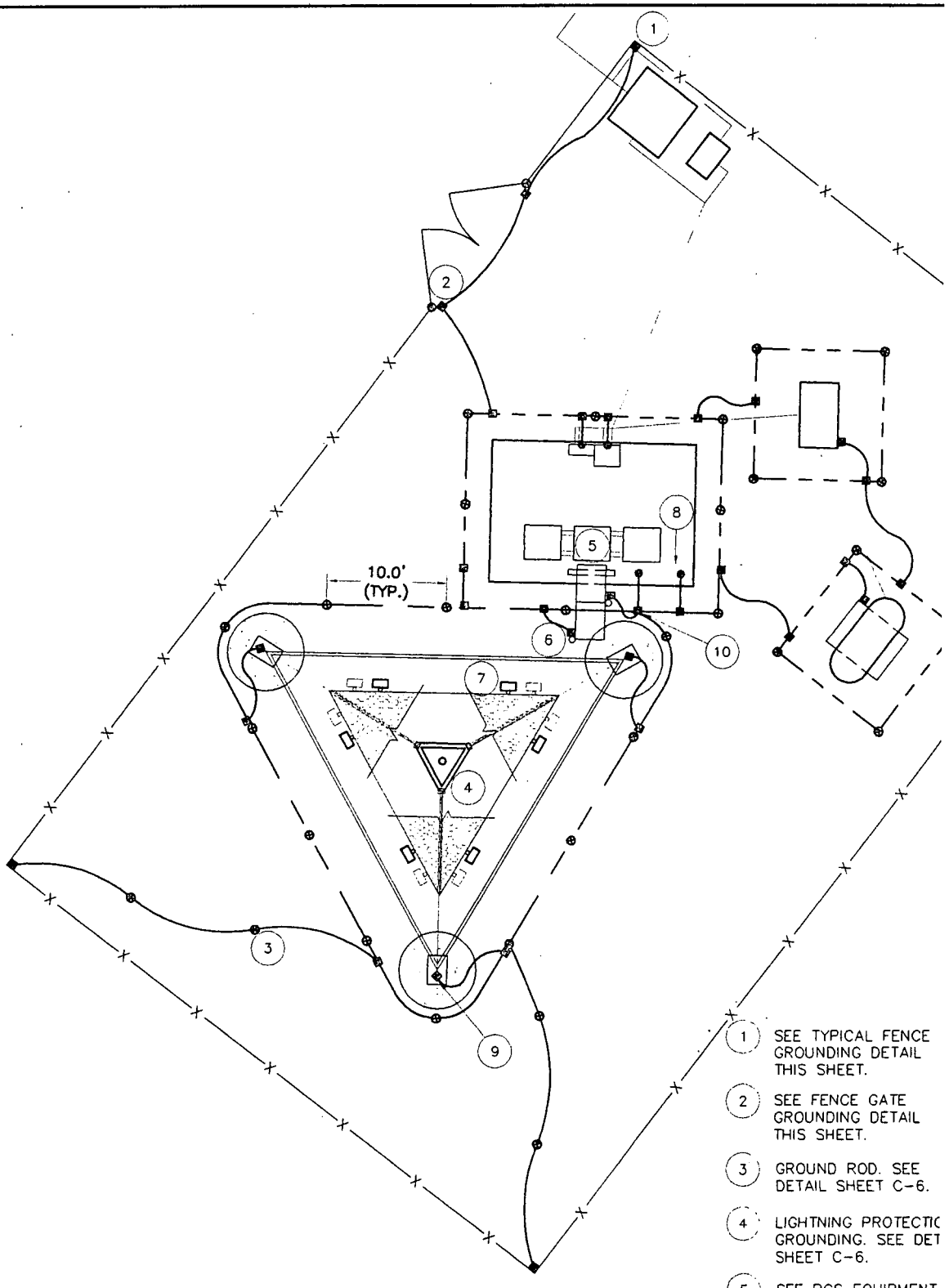
SITE DIAGRAMMATIC GROUNDING PLAN

NOT TO SCALE



NOTES:
1. BOND ANTENNA GR KIT, CABLE TO GROUNI
2. RING GROUND FOR
3. FOR GROUNDING C & DETAILS SEE LAYOU

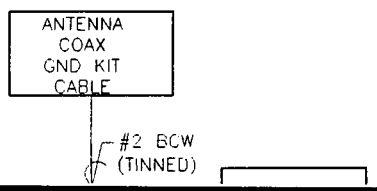
SCHEMATIC GROUNDING SYSTEM DIAGRAM – LA

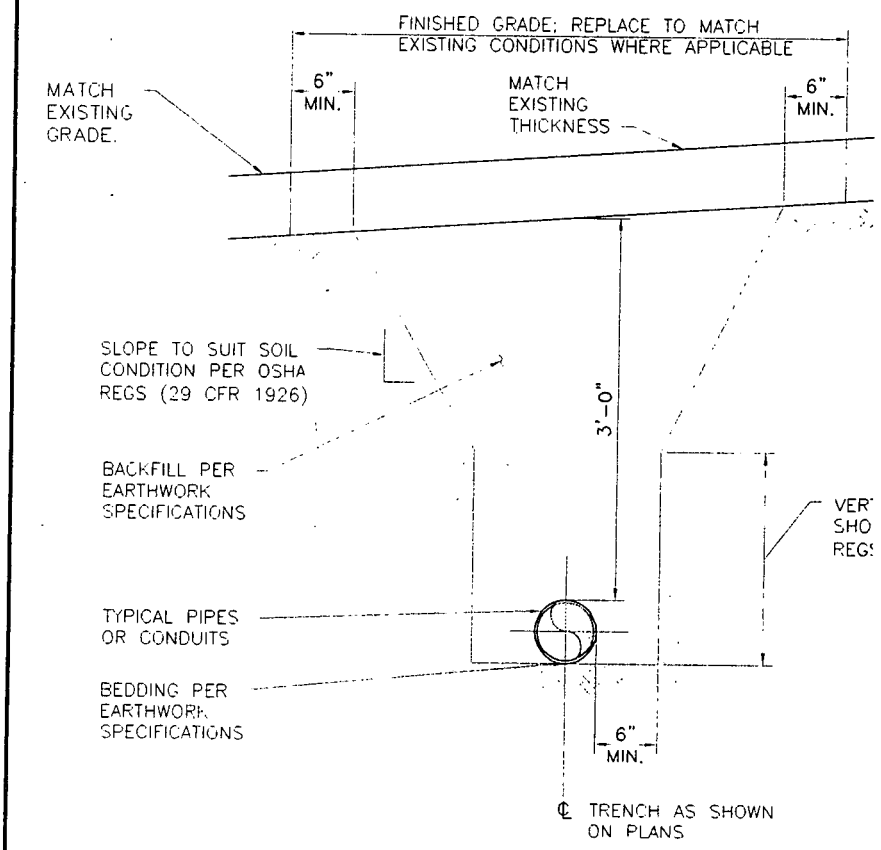


1. SEE TYPICAL FENCE GROUNDING DETAIL THIS SHEET.
2. SEE FENCE GATE GROUNDING DETAIL THIS SHEET.
3. GROUND ROD. SEE DETAIL SHEET C-6.
4. LIGHTNING PROTECTIC GROUNDING. SEE DET SHEET C-6.
5. SEE PCS EQUIPMENT ON CONCRETE PAD GROUNDING DETAIL THIS SHEET.

SITE DIAGRAMMATIC GROUNDING PLAN

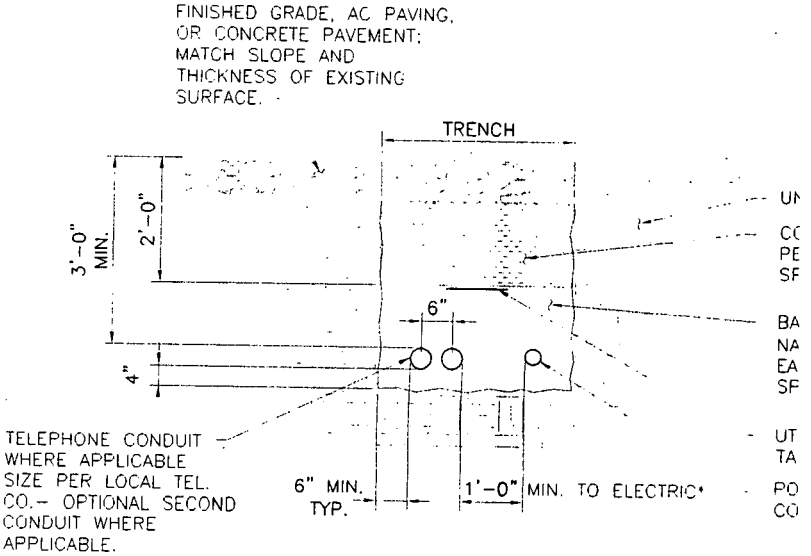
NOT TO SCALE





TYPICAL TRENCH DETAIL

NOT TO SCALE

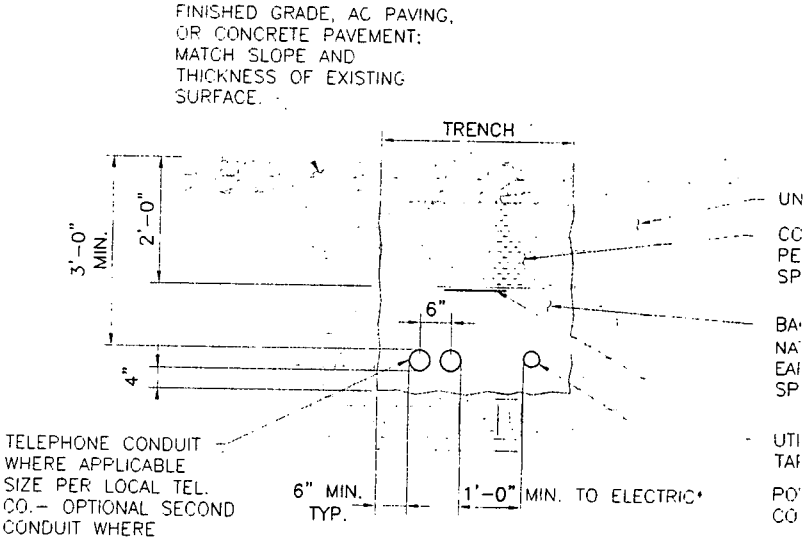


FOR TRENCHING, SEE TYPICAL TRENCH DETAIL, THIS SHEET.

ON PLANS

TYPICAL TRENCH DETAIL

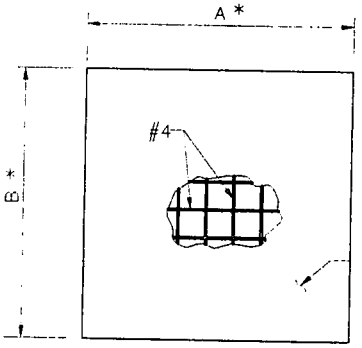
NOT TO SCALE



*SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS

JOINT UTILITY TRENCH FOR BURIED ELEC/T CONDUIT (REV. 2)

NOT TO SCALE

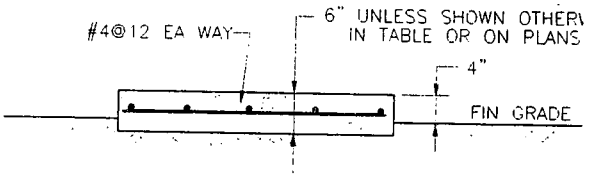


250 GALLON	
A	B
5'-0"	4'-(

	GEN
A	B
5'-0"	3'-(

CONCRETE PA (CAST-IN-PLA OR PRECAST)

* UNLESS SHOW OTHERWISE O PLANS

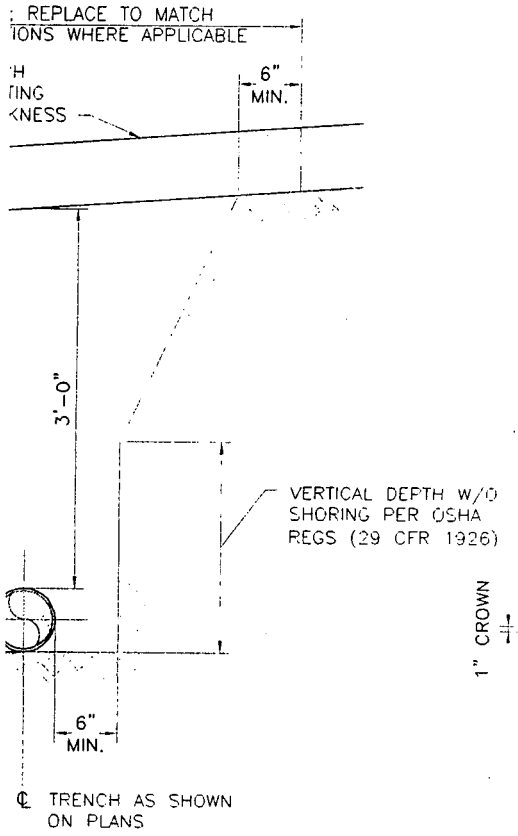


NOTE:

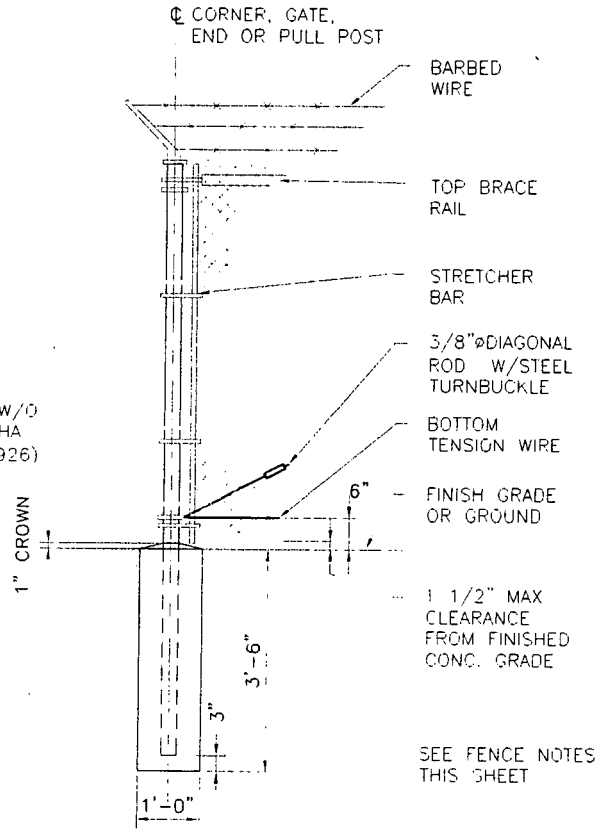
1. USE GALVANIZED HILTI EXPANSION ANCHORS OR APPRO EQUAL FOR EQUIPMENT ANCHORAGE.
2. VERIFY THE SIZE OF THE LEASED SPRINT PROPANE TAN AND FAA WARNING LIGHT EMERGENCY GENERATOR WITH THE SUPPLIER.
3. FOR SIZE AND LOCATION OF ANCHORS AND OTHER REQUIREMENT, SEE EQUIPMENT VENDOR DRAWINGS.

OUTDOOR PAD FOR MINOR EQUIPME

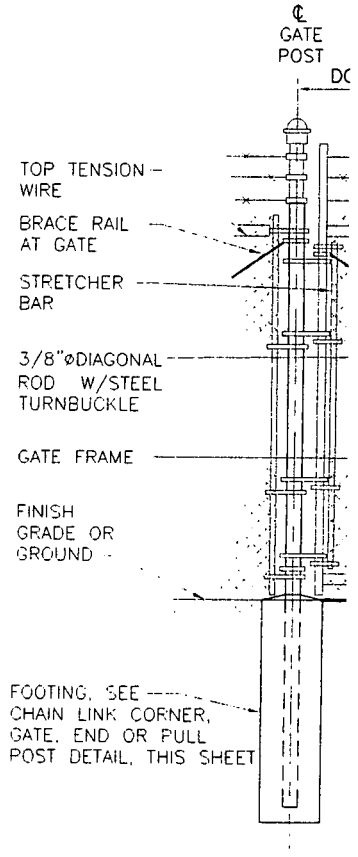
NOT TO SCALE



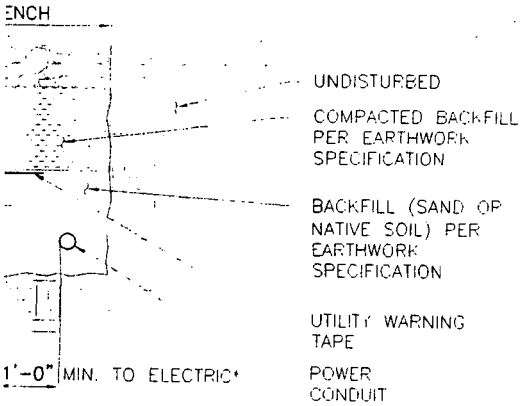
:ENCH DETAIL



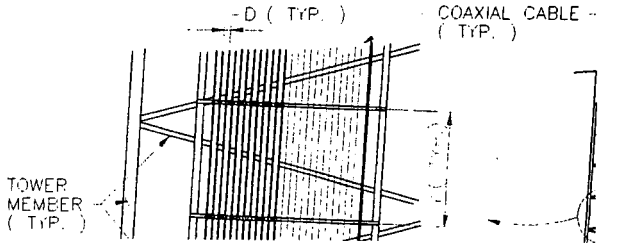
CHAIN LINK CORNER, GATE,
END OR PULL POST
NOT TO SCALE



CHAIN LIN
NOT TO SCALE

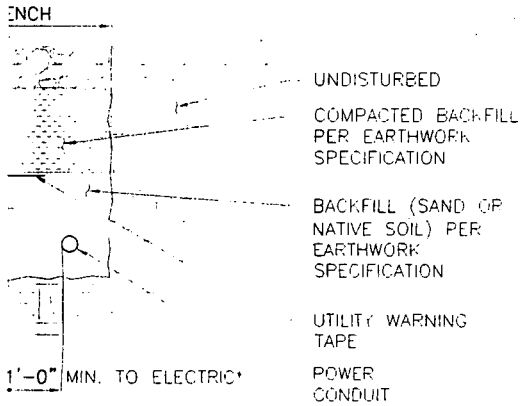


DESIGNER NOTE 1:
SELECT & SHOW ONLY THE CABLE M
THAT IS TO BE USED AT THE SPECIF



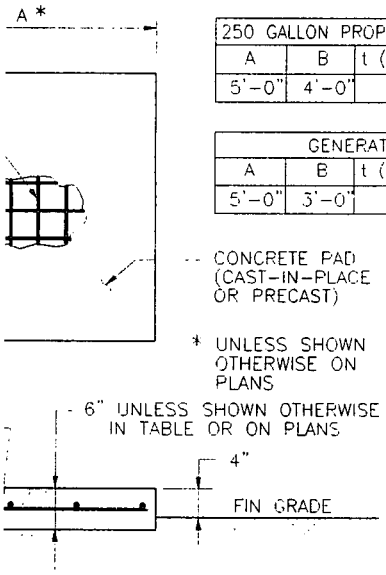
℄ TRENCH AS SHOWN ON PLANS

ENCH DETAIL



N TO BE VERIFIED
OMPANY REQUIREMENTS

FOR BURIED ELEC/TELE (REV. 2)



250 GALLON PROPANE TANK		
A	B	t (THICKNESS)
5'-0"	4'-0"	6"

GENERATOR		
A	B	t (THICKNESS)
5'-0"	3'-0"	8"

EXPANSION ANCHORS OR APPROVED
IT ANCHORAGE.

THE LEASED SPRINT PROPANE TANK
GHT EMERGENCY GENERATOR WITH

ON OF ANCHORS AND OTHER
QUIPMENT VENDOR DRAWINGS.

FOR MINOR EQUIPMENT

SEE FENCE NOTES THIS SHEET

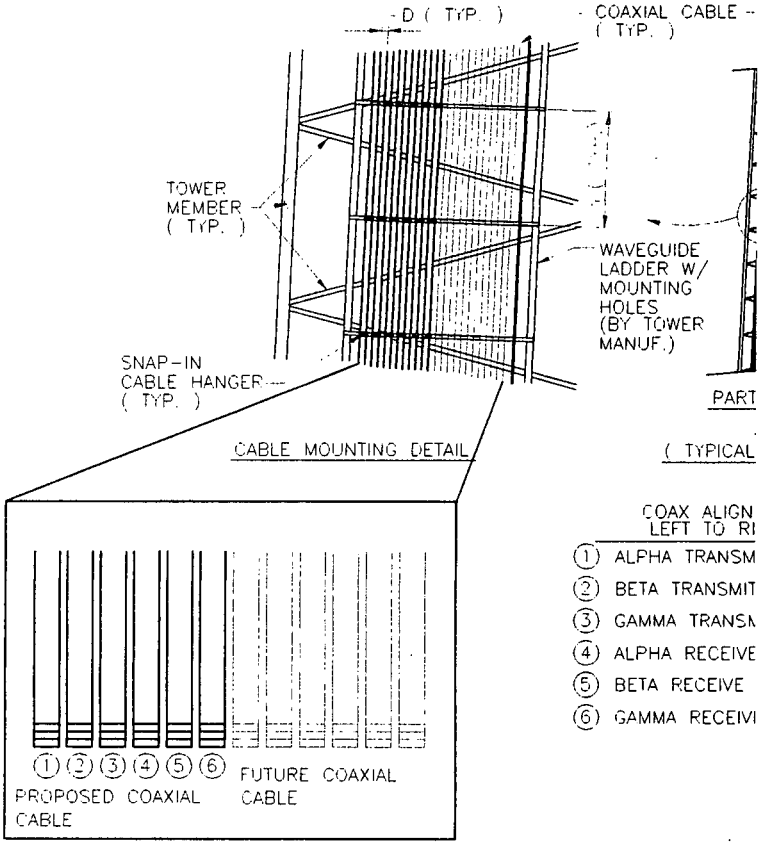
CHAIN LINK CORNER, GATE, END OR PULL POST

NOT TO SCALE

CHAIN LIN

NOT TO SCALE

DESIGNER NOTE 1:
SELECT & SHOW ONLY THE CABLE M
THAT IS TO BE USED AT THE SPECIF

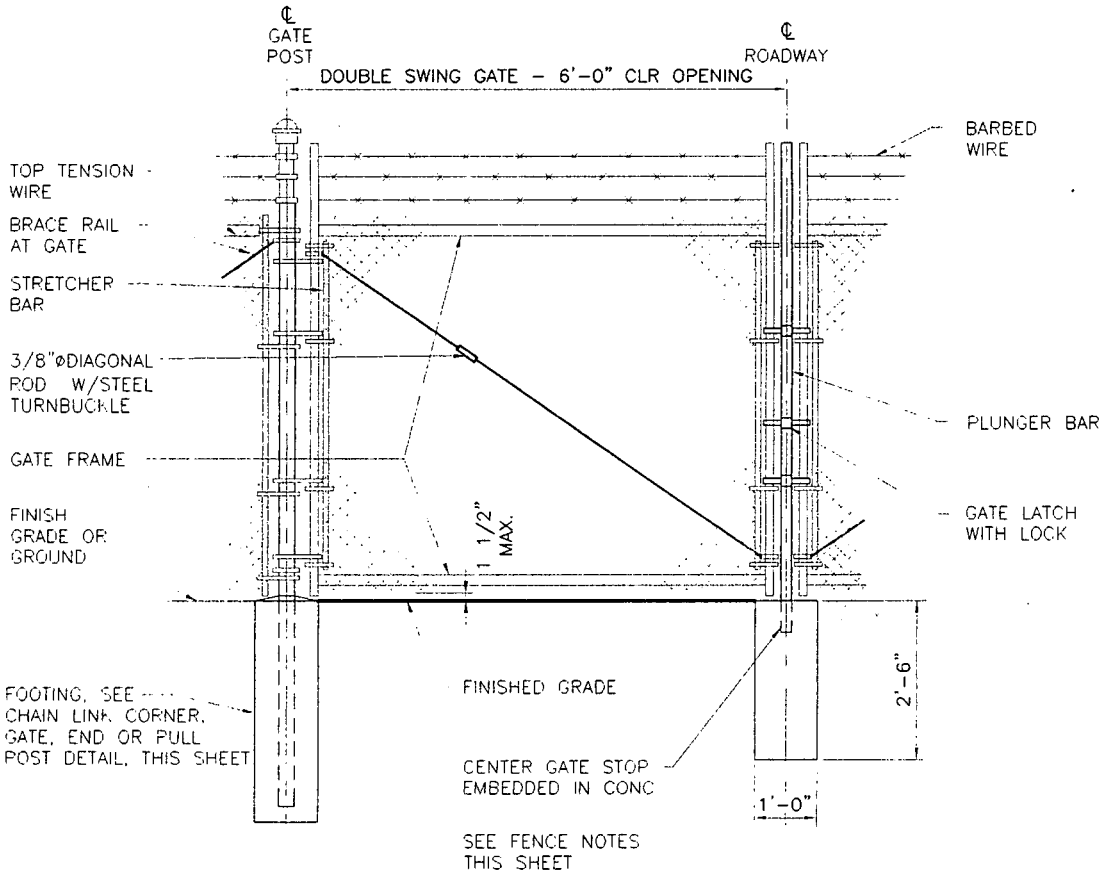


TOWER LEG SIZE	PIROD BANJO LINE BRACKET PART #	HA SF
7/8" TO 1 1/2"	802181	3
1 3/4" TO 3"	802182	3
3 1/4" TO 4"	802183	3
4 1/2" TO 5 1/2"	802184	3
KNOCKDOWN LEGS	802185	3

CABLES SUPPORT ON ANTENNA TOW

CABLE SUPPORT ON ANTENNA T

NOT TO SCALE



CHAIN LINK SWING GATE, DOUBLE DETAIL

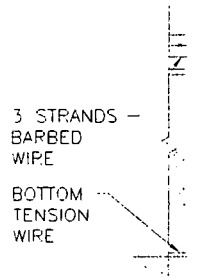
NOT TO SCALE

FENCE NOTES

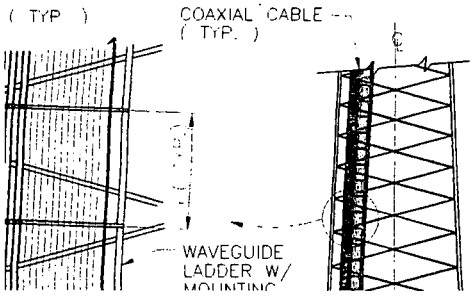
TYPICAL CHAIN LIN

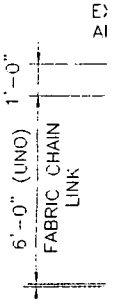
(INSTALL FENCING PER ASTI

1. GATE POST, CORNER, TE FOR GATE WIDTHS UP TI GATE PER ASTM–F1083.
2. LINE POST: 2 1/2" O.D.
3. GATE FRAME: 1 7/8"ø S
4. TOP RAIL & BRACE RAIL
5. FABRIC: 11 1/2 GA. CO CLASS 2. TWISTED SELVA
6. TIE WIRE: ALUMINUM BAI A SINGLE WRAP OF FABI RINGS SPACED MAX 24"
7. TENSION WIRE: 7 GA. GA
8. BARBED WIRE: TRIPLE S W/ FABRIC 14 GA., 4 F
9. GATE LATCH: 1–3/8" (TO ENGAGE THE GATE S
10. FABRIC HEIGHT = 6' VE



SIGNER NOTE 1:
LECT & SHOW ONLY THE CABLE MANUFACTURE AT IS TO BE USED AT THE SPECIFIC SITE





1 1/2" MAX – CLEARANCE FROM GRADE

EMBEDDED IN CONC

1'-0"

SEE FENCE NOTES
THIS SHEET

CHAIN LINK SWING GATE, DOUBLE DETAIL

NOT TO SCALE

3 STRANDS – BARBED WIRE

BOTTOM TENSION WIRE

SIGNER NOTE 1.
ECT & SHOW ONLY THE CABLE MANUFACTURE
T IS TO BE USED AT THE SPECIFIC SITE

TYP)

COAXIAL CABLE – (TYP.)

WAVEGUIDE LADDER W/ MOUNTING HOLES (BY TOWER MANUF.)

PARTIAL ELEVATION OF TOWER

(TYPICAL FOR OPPOSITE SIDE)

TAIL

	COAX ALIGNMENT LEFT TO RIGHT	COLOR CODES
(1)	ALPHA TRANSMIT/RECEIVE	(YELLOW–BROWN–WHITE)
(2)	BETA TRANSMIT/RECEIVE	(RED–BROWN–WHITE)
(3)	GAMMA TRANSMIT/RECEIVE	(GREEN–BROWN–WHITE)
(4)	ALPHA RECEIVE	(YELLOW–WHITE–WHITE)
(5)	BETA RECEIVE	(RED–WHITE–WHITE)
(6)	GAMMA RECEIVE	(GREEN–WHITE–WHITE)

EXT
ARI

1'-0"

6'-0" (UNO) FABRIC CHAIN LINK

1 1/2" MAX – CLEARANCE FROM GRADE

SEE FENCE NOTES
THIS SHEET

CHAIN

NOT TO

LEG SIZE	PIROD BANJO LINE BRACKET PART #	MAX HANGER SPACING
TO 1 1/2"	802181	3'-0"
4" TO 3"	802182	3'-0"
4" TO 4"	802183	3'-0"
TO 5 1/2"	802184	3'-0"
OWN LEGS	802185	3'-0"

SUPPORT ON ANTENNA TOWER

ORT ON ANTENNA TOWER DETAIL

GENERATOR CASE

FACTORY GAS FITTING

SCHI
TO (

CON

GRAI

SCHEDULE 80 STEEL CONDUIT (90° WIDE SWEEP ELBOW)

SCHEDULE 80 STEEL CONDUIT TO PVC ADAPTOR

3/
PIP

3"

PROPANE GAS CONDUIT TO GENER

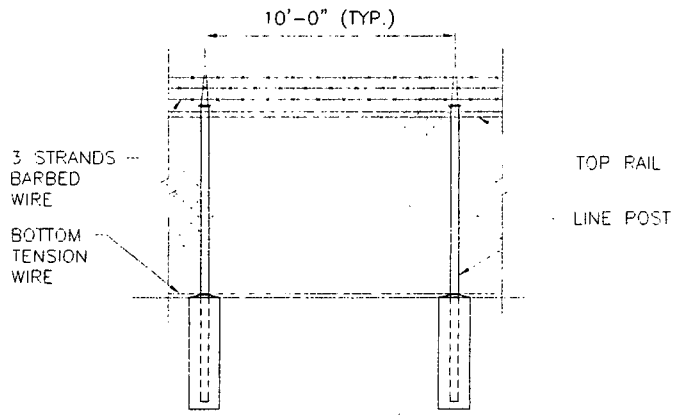
NOT TO SCALE

FENCE NOTES

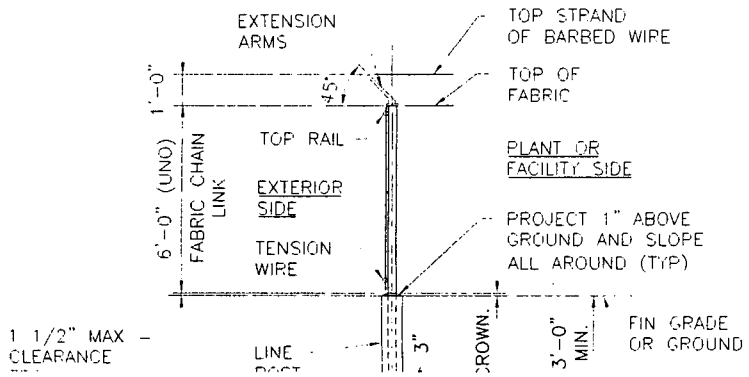
TYPICAL CHAIN LINK FENCING NOTES

(INSTALL FENCING PER ASTM F-567, SWING GATES PER ASTM F- 900)

1. GATE POST, CORNER, TERMINAL OR PULL POST 2 7/8" O.D. SCHEDULE 40 FOR GATE WIDTHS UP THRU 6 FEET OR 12 FEET FOR DOUBLE SWING GATE PER ASTM-F1083.
2. LINE POST: 2 1/2" O.D., 16 GA PER ASTM-F1083.
3. GATE FRAME: 1 7/8"ø SCHEDULE 40 PIPE PER ASTM-F1083.
4. TOP RAIL & BRACE RAIL: 1 5/8" O.D., 17 GA PIPE PER ASTM-F1083.
5. FABRIC: 11 1/2 GA. CORE WIRE SIZE 2 1/4" MESH, CONFORMING TO ASTM-A392, CLASS 2. TWISTED SELVAGE ON TOP. KNUCKLED SELVAGE ON BOTTOM.
6. TIE WIRE: ALUMINUM BANDS OR WIRES AT POSTS AND RAILS A SINGLE WRAP OF FABRIC TIE AND AT TENSION WIRE BY HOG RINGS SPACED MAX 24" INTERVALS.
7. TENSION WIRE: 7 GA. GALVANIZED STEEL.
8. BARBED WIRE: TRIPLE STRAND 14 GA GALVANIZED STEEL TWISTED WIRE TO MATCH W/ FABRIC 14 GA., 4 PT. BARBS SPACED ON APPROXIMATELY 4" CENTERS.
9. GATE LATCH: 1-3/8" O.D. PLUNGER ROD, FULL GATE HEIGHT, ARRANGED TO ENGAGE THE GATE STOP. LATCH SHALL BE ARRANGED FOR PAD LOCKING.
10. FABRIC HEIGHT = 6' VERTICAL + 1' BARBED WIRE VERTICAL DIMENSION.



TYPICAL ELEVATION



Sprint PCS

4605 DUKE DRIVE, SUITE 200
MASON, OHIO 45040

BURGESS & NIPLE

BURGESS & NIPLE, LIMITED
811 RACE STREET
CINCINNATI, OHIO 45202
OFFICE: (513) 579-0042
FAX: (513) 579-0321

SEAL

STATE OF KENTUCKY
GREGORY BREETZ
19016
LICENSED PROFESSIONAL ENGINEER

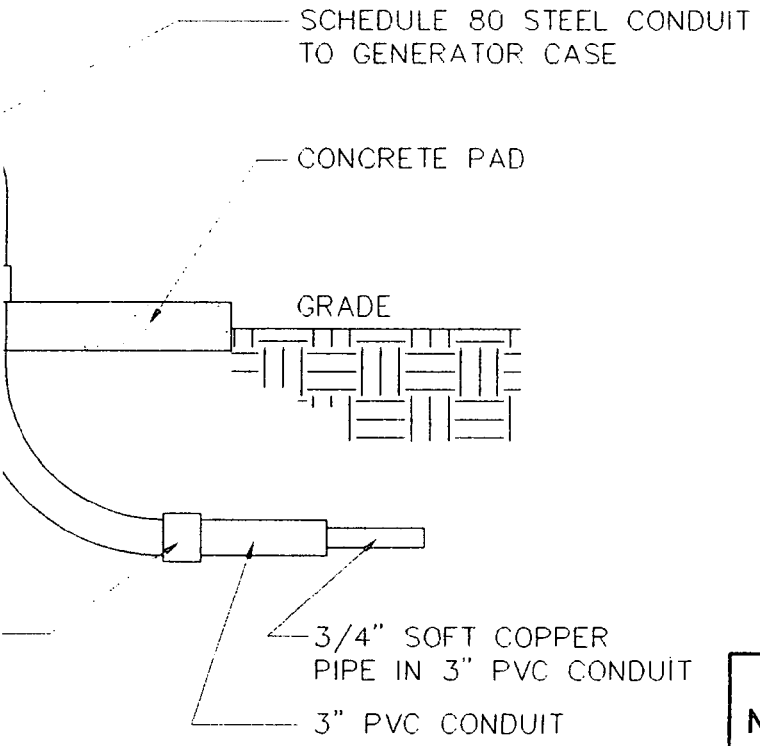
SIGNATURE

DATE:	MAY 13, 1999
PROJECT NUMBER:	24628
DRAWN BY:	TAC
CHECKED BY:	GB

△	REVISIONS		
*	5-19-99	FINAL PRINT	TAC

CHAIN LINK FENCE DETAIL

NOT TO SCALE



IIT TO GENERATOR

NOTE:

FOR EQUIPMENT DETAILS
SEE PLANS PROVIDED
BY SPRINT PCS

SITE# CI33XC023 D

EDWARDS 2

RR3 BOX 438

BUTLER, KY

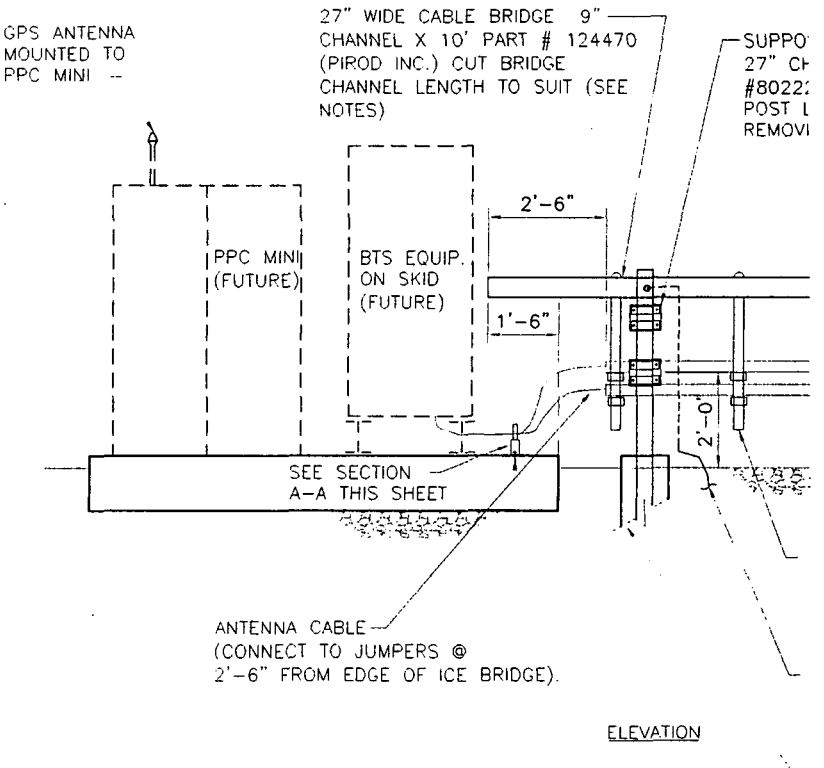
41006

SHEET TITLE

MISCELLANEOUS DETAILS

SHEET NUMBER

C-4



ELEVATION

NOTES :

1. WHEN USING PIROD COMPONENTS AS SHOWN IN STANDARD DETAILS; BETWEEN SUPPORTS ON A CONTINUOUS SINGLE SECTION OF BRIDGE FOR THE 6"-9"x20' LONG BRIDGE CHANNEL. SIMILARLY, FOR THE 6' THE MAXIMUM ALLOWABLE SPAN IS 9'.
2. WHEN USING PIROD COMPONENTS FOR SPLICING BRIDGE CHANNEL SE BE PROVIDED AT THE SUPPORT, IF POSSIBLE, OR AT A MAXIMUM OF
3. WHEN USING PIROD COMPONENTS, SUPPORT SHOULD BE PROVIDED A ENDS OF CABLE BRIDGES, WITH A MAXIMUM CANTILEVER DISTANCE (THE FREE END OF THE CABLE BRIDGE.
4. CUT BRIDGE CHANNEL SECTIONS SHOULD HAVE RAW EDGES TREATEI THESE EDGES TO THE ORIGINAL CHANNEL, OR EQUIVALENT, FINISH.
5. CABLE BRIDGES MAY BE CONSTRUCTED WITH COMPONENTS FROM MA PROVIDED THE MANUFACTURER'S INSTALLATION GUIDELINES ARE FOL
6. DEVIATIONS FROM STANDARDS FOR COMPONENT INSTALLATIONS ARE MANUFACTURER'S APPROVAL.
7. DEVIATIONS FROM CABLE BRIDGE FOUNDATIONS SHOWN ON SITE SPE REQUIRE ENGINEERING APPROVAL.

SPRINT CABLE BRIDGE FOR SELF S

NTS

ELEVATION

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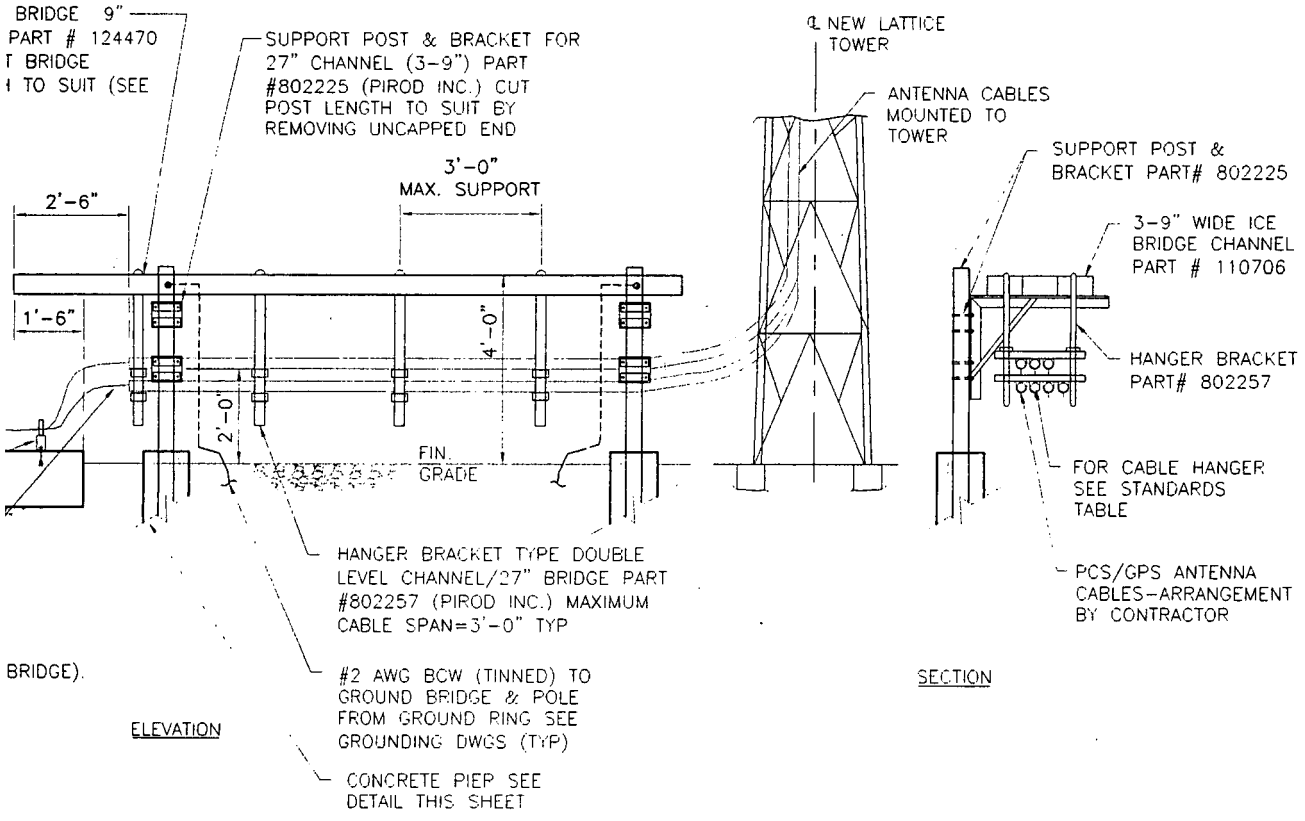
SPRINT CABLE BRIDGE FOR SELF S

NTS



AS SHOWN IN STANDARD DETAILS; MAXIMUM ALLOWABLE SPAN
UOUS SINGLE SECTION OF BRIDGE CHANNEL SHALL BE 19 FEET.
CHANNEL. SIMILARLY, FOR THE 6"-9"x10' LONG BRIDGE CHANNEL,
S 9'.

FOR SPLICING BRIDGE CHANNEL SECTIONS. THE SPLICE SHOULD
F POSSIBLE, OR AT A MAXIMUM OF 2 FEET FROM THE SUPPORT.

SUPPORT SHOULD BE PROVIDED AS CLOSE AS POSSIBLE TO THE
MAXIMUM CANTILEVER DISTANCE OF 2 FEET FROM THE SUPPORT TO
DGE.

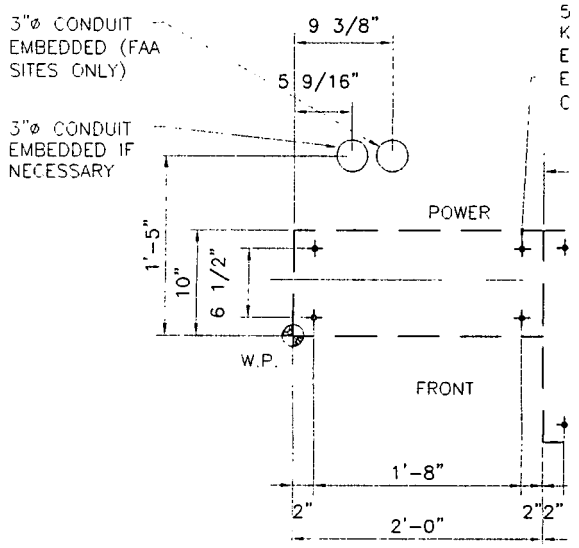
HOULD HAVE RAW EDGES TREATED WITH A MATERIAL TO RESTORE
HANNEL, OR EQUIVALENT, FINISH.

CTED WITH COMPONENTS FROM MANUFACTURERS OTHER THAN PIROD,
NSTALLATION GUIDELINES ARE FOLLOWED.

R COMPONENT INSTALLATIONS ARE PERMITTED WITH THE RESPECTIVE

OUNDATIONS SHOWN ON SITE SPECIFIC DRAWINGS OR STANDARD DETAILS

RIDGE FOR SELF SUPPORTING TOWER



PPC MINI MOUN

NOT TO SCALE

ELEVATION

GROUNDING DWGS (TYP)

CONCRETE PIER SEE DETAIL THIS SHEET

AS SHOWN IN STANDARD DETAILS; MAXIMUM ALLOWABLE SPAN
NUOUS SINGLE SECTION OF BRIDGE CHANNEL SHALL BE 19 FEET.
E CHANNEL. SIMILARLY, FOR THE 6"–9"x10' LONG BRIDGE CHANNEL,
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, SUPPORT SHOULD BE PROVIDED AS CLOSE AS POSSIBLE TO THE
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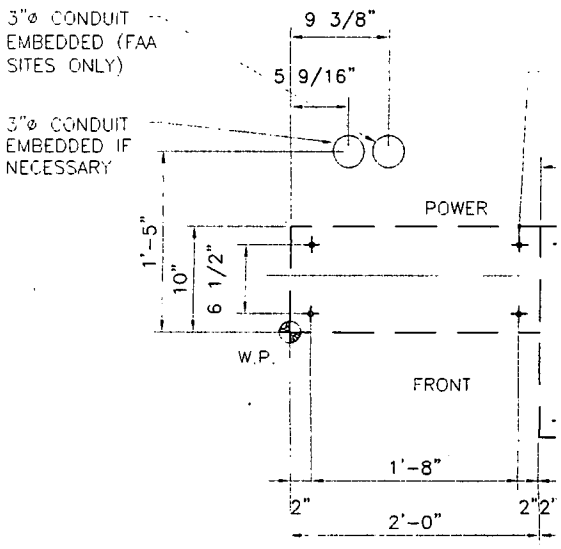
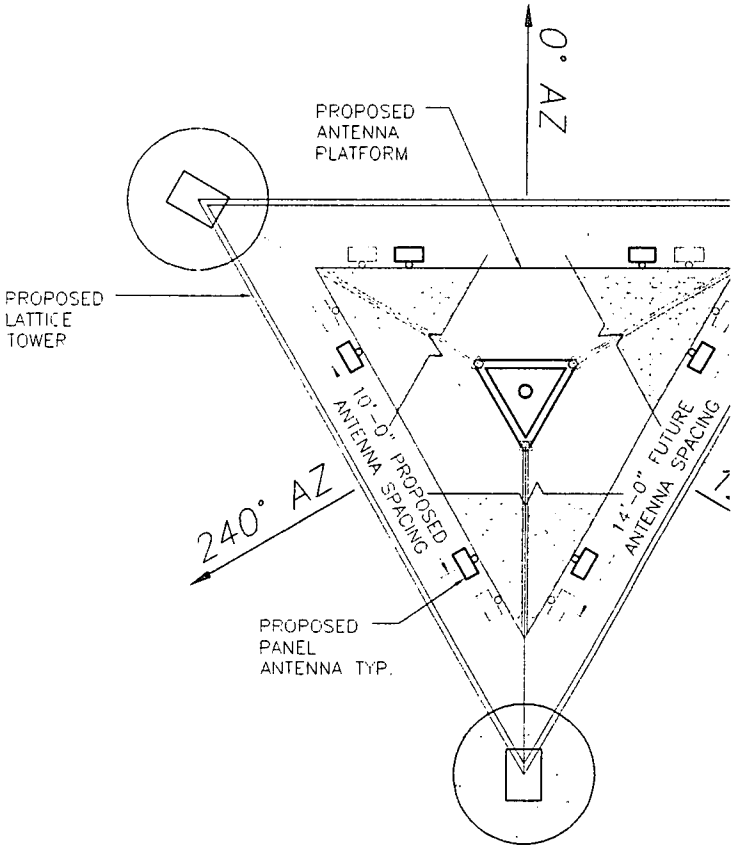
FOUNDATIONS SHOWN ON SITE SPECIFIC DRAWINGS OR STANDARD DETAILS

RIDGE FOR SELF SUPPORTING TOWER



PPC MINI MOUN
NOT TO SCALE



ANTENNA MOUNTING PL
NOT TO SCALE

EST

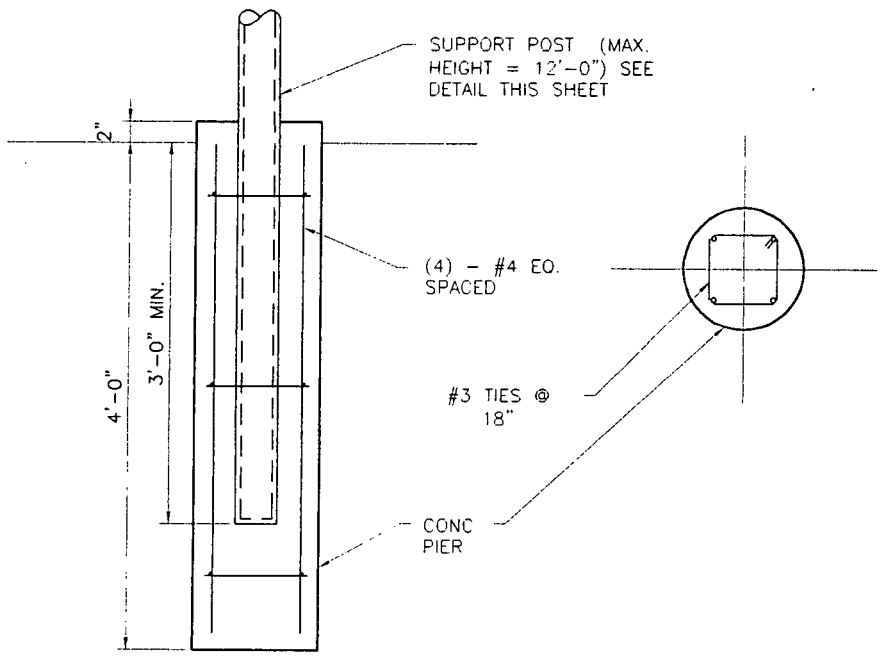
'PPORT POST &
ICKET PART# 802225

3-9" WIDE ICE
BRIDGE CHANNEL
PART # 110706

HANGER BRACKET
PART# 802257

OR CABLE HANGER
EE STANDARDS
ABLE

'CS/GPS ANTENNA
ABLES-ARRANGEMENT
Y CONTRACTOR



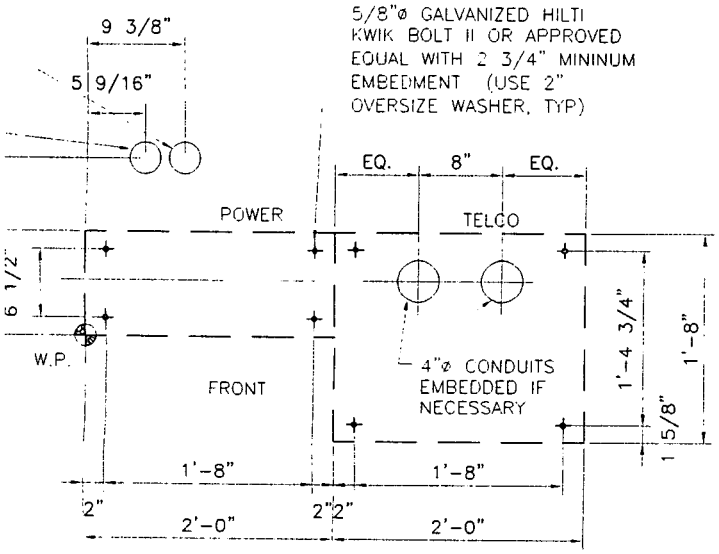
CABLE BRIDGE EQUIPMENT SUPPORT FOUNDATION PIER

NOT TO SCALE

CONCRETE N

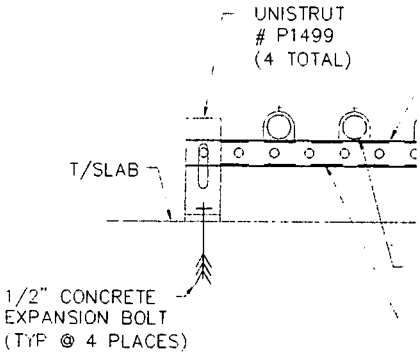
CONCRETE AND

1. ALL CONCRETE WORK SH ACI 318 AND THE SPECI
2. ALL CONCRETE SHALL H 4000 PSI AT 28 DAYS,
3. REINFORCING STEEL SHA UNLESS NOTED OTHERWI A 185 WELDED STEEL W SHALL BE CLASS "B" AI
4. THE FOLLOWING MINIMUN REINFORCING STEEL UNL
   CONCRETE CAST A
   CONCRETE EXPOSE
   #6 AND LARGE
   #5 AND SMALL
   CONCRETE NOT EX AGAINST THE GRO
   SLAB AND WAI BEAMS AND C
5. A CHAMFER 3/4" SHALI UNO, IN ACCORDANCE W
6. INSTALLATION OF CONCF MANUFACTURER'S WRITTI OR ROD SHALL CONFORI DEPTH OR AS SHOWN O ENGINEERING APPROVAL



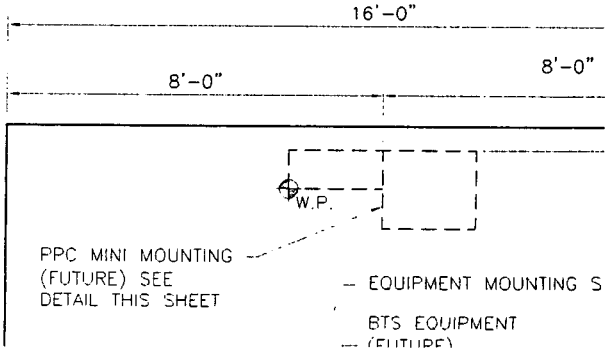
PPC MINI MOUNTING DETAIL

NOT TO SCALE

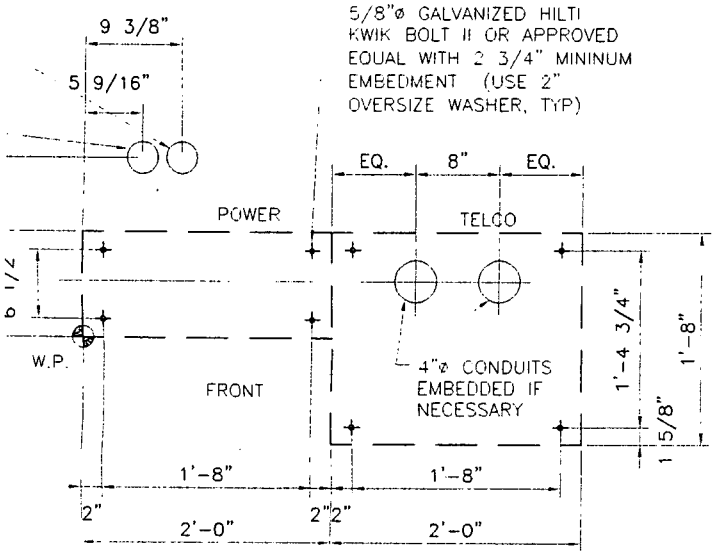


SECT

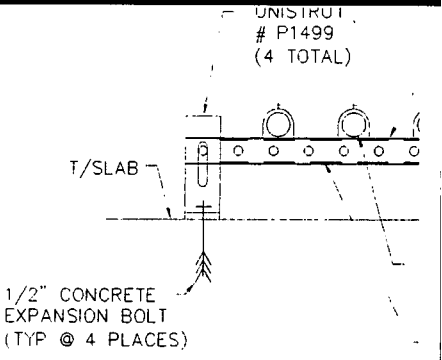
NOT TO



CABLE BRIDGE EQUIPMENT
SUPPORT FOUNDATION PIER
NOT TO SCALE



PPC MINI MOUNTING DETAIL
NOT TO SCALE



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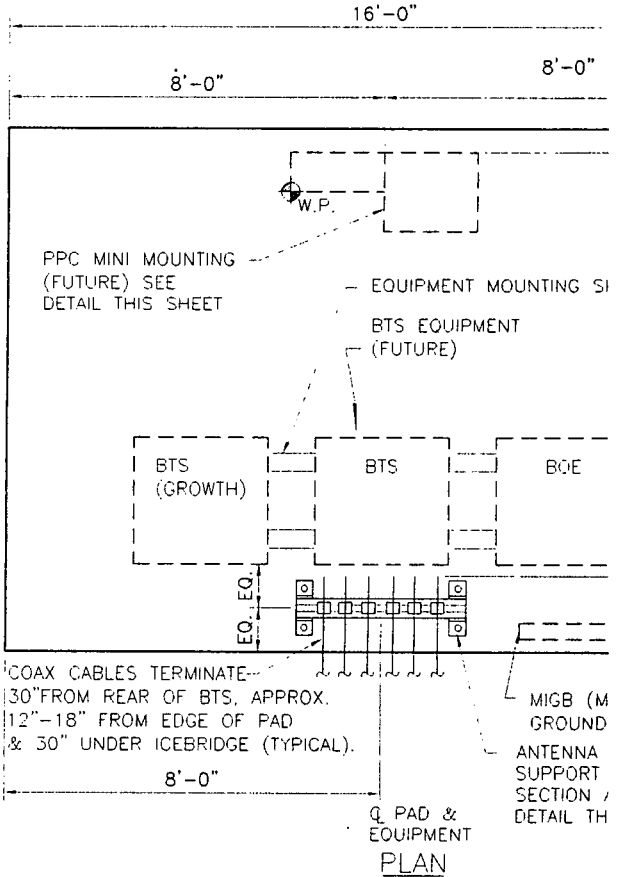
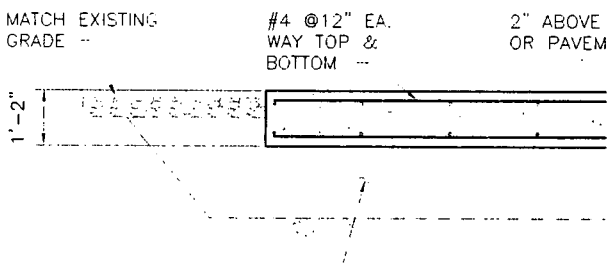


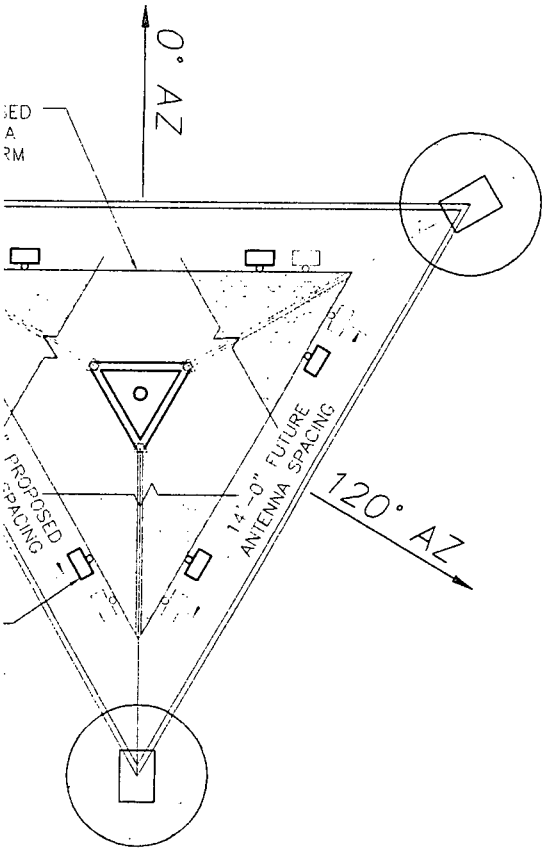
PLAN



COMPACTED SOIL TO MIN. 95% MODIFIED MAX. DENSITY PER ASTM D1557 METHOD C (TO BE VERIFIED WITH SITE SPECIFIC SOIL REPORT WHEN AVAILABLE).

NOTES:
1. FOR CONCRETE
2. GRAVEL SHALL
02210 OF SPECIFIC

SECTION



ENNA MOUNTING PLAN
) SCALE

EQUIPMENT PAD DETAI
NOT TO SCALE

CONCRETE NOTES

CONCRETE AND REINFORCING STEEL NOTES: (REV. 0)

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318 AND THE SPECIFICATION CAST-IN-PLACE CONCRETE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

   CONCRETE CAST AGAINST EARTH.....3 IN.

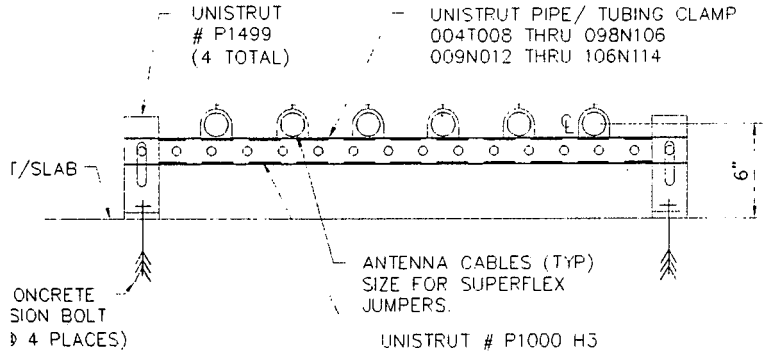
   CONCRETE EXPOSED TO EARTH OR WEATHER:

   #6 AND LARGER.....2 IN.
   #5 AND SMALLER & WWF.....1 1/2 IN.

   CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:

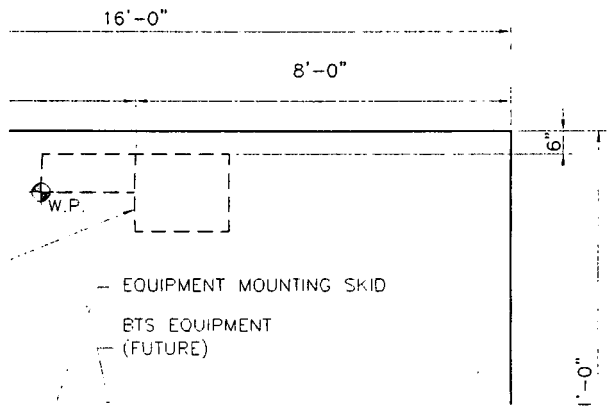
   SLAB AND WALL.....3/4 IN.
   BEAMS AND COLUMNS.. .....1 1/2 IN.

5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE.



SECTION A-A

NOT TO SCALE



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4605 DUKE DRIVE, SUITE 200
MASON, OHIO 45040

BURGESS & NIPLE

BURGESS & NIPLE, LIMITED
811 RACE STREET
CINCINNATI, OHIO 45202
OFFICE: (513) 579-0042
FAX: (513) 579-0321

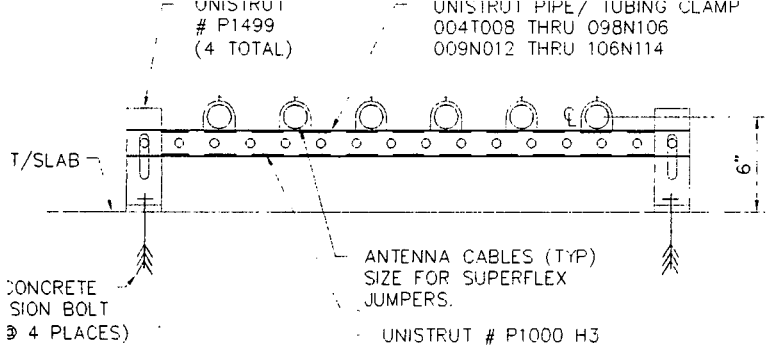
SEAL

STATE OF KENTUCKY
GREGORY BREETZ
19016
LICENSED
PROFESSIONAL ENGINEER

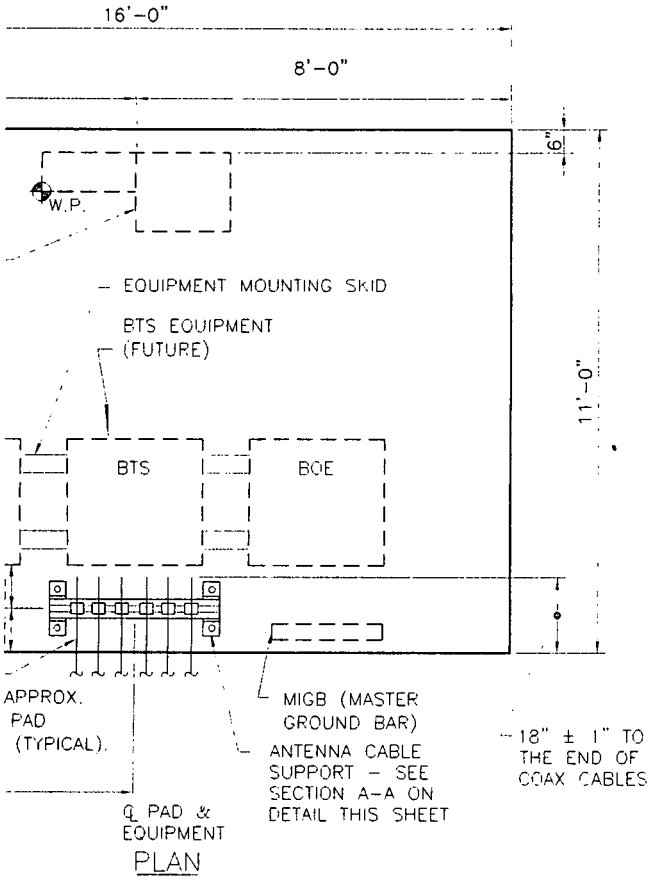
SIGNATURE

DATE:	MAY 13, 1999
PROJECT NUMBER:	24628
DRAWN BY:	TAC
CHECKED BY:	GB

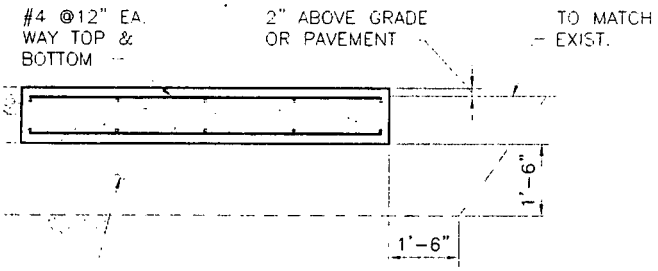
△	REVISIONS		
*	5-19-99	FINAL PRINT	TAC
NO.	DATE	DESCRIPTION	BY



SECTION A–A
NOT TO SCALE



PLAN



95%
PER
(TO BE
IFIC
LABLE).

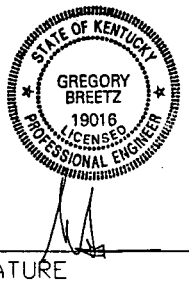
NOTES:
1. FOR CONCRETE NOTES SEE ABOVE
2. GRAVEL SHALL CONFORM TO SECTION 02210 OF SPECIFICATIONS.

SECTION

QUIPMENT PAD DETAIL
T TO SCALE

NOTE:

FOR EQUIPMENT DETAILS
SEE PLANS PROVIDED
BY SPRINT PCS



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REVIEW DATE:	5-13-99		

SITE# CI33XC023 D

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RR3 BOX 438

BUTLER, KY

41006

SHEET TITLE

MISCELLANEOUS DETAILS

SHEET NUMBER

C–3

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MASON, OHIO 45040

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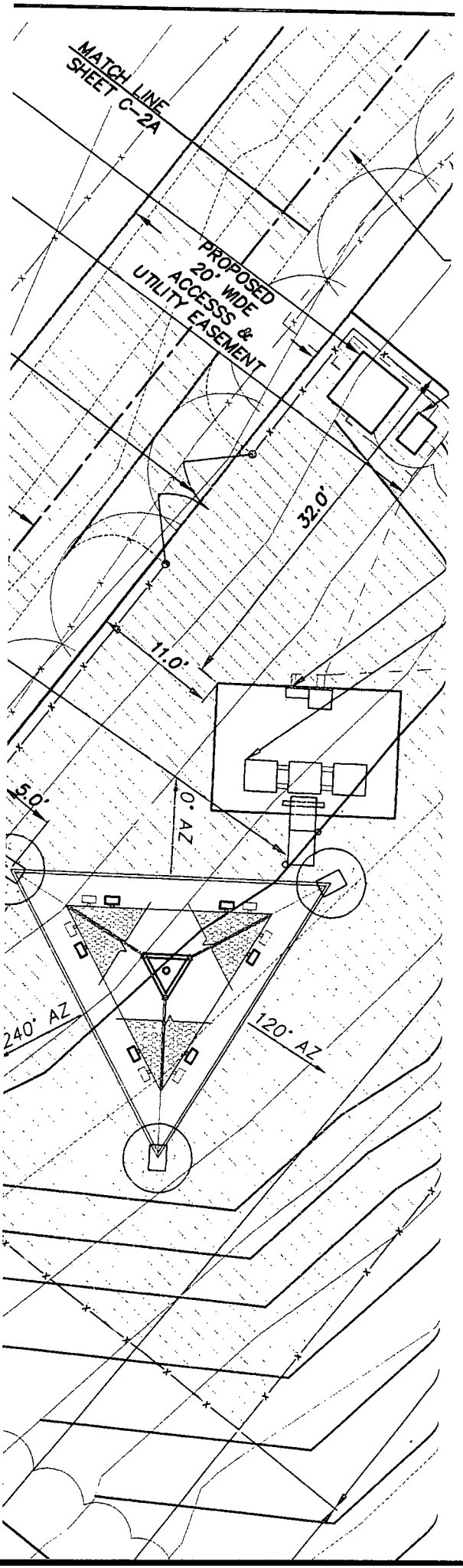

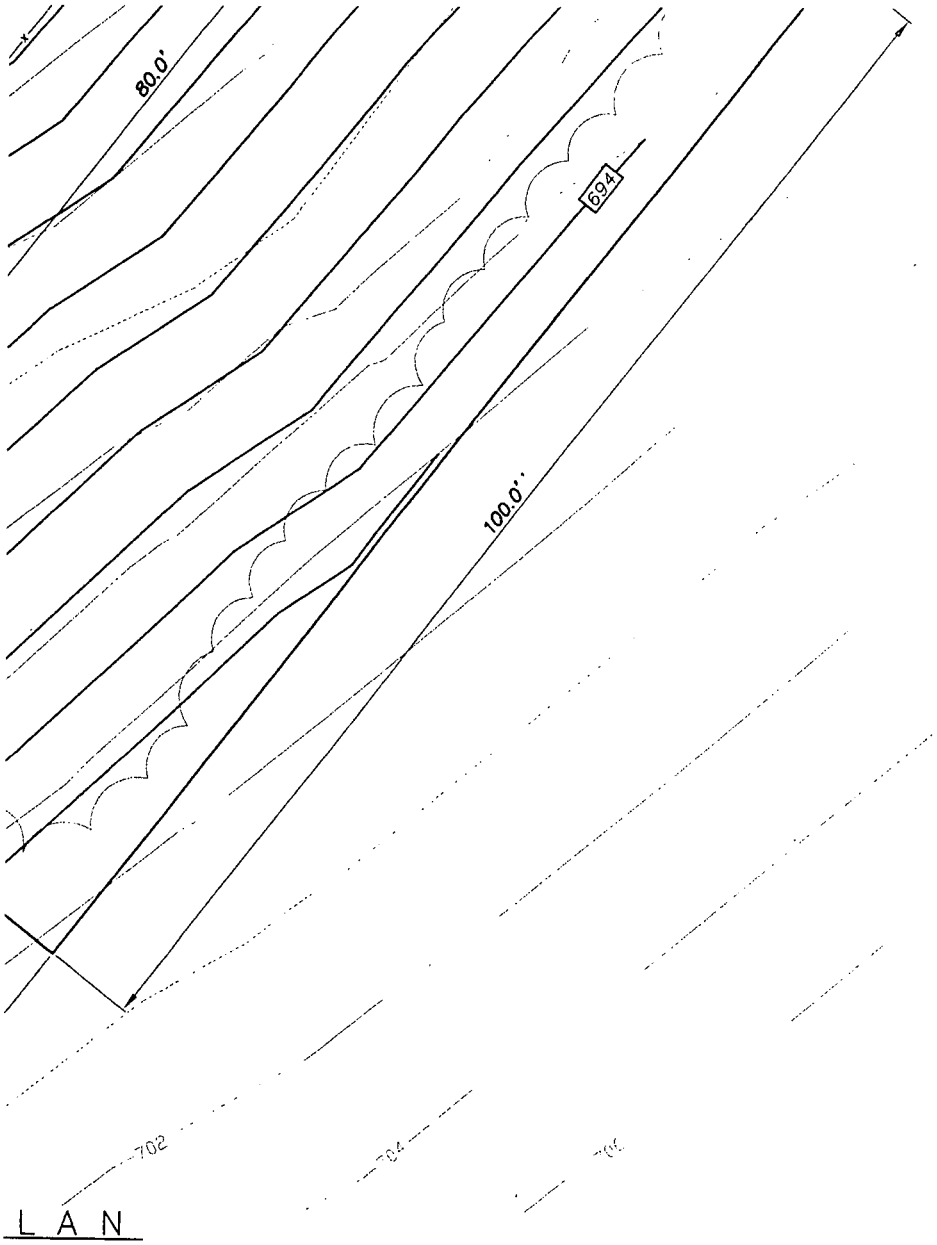

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SITE# CI33XC023 D

EDWARDS 2

RR3 BOX 438

BUTLER, KY

41006

SHEET TITLE

SITE LAYOUT & ELEVATIONS

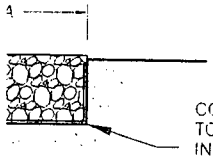
SHEET NUMBER

C-2

L A N

N LEASE AREA:

:UT SUBGRADE TO
IN LEASE AREA
)F ROLL TO THE
RUCTION MANAGER
#4 CRUSHED

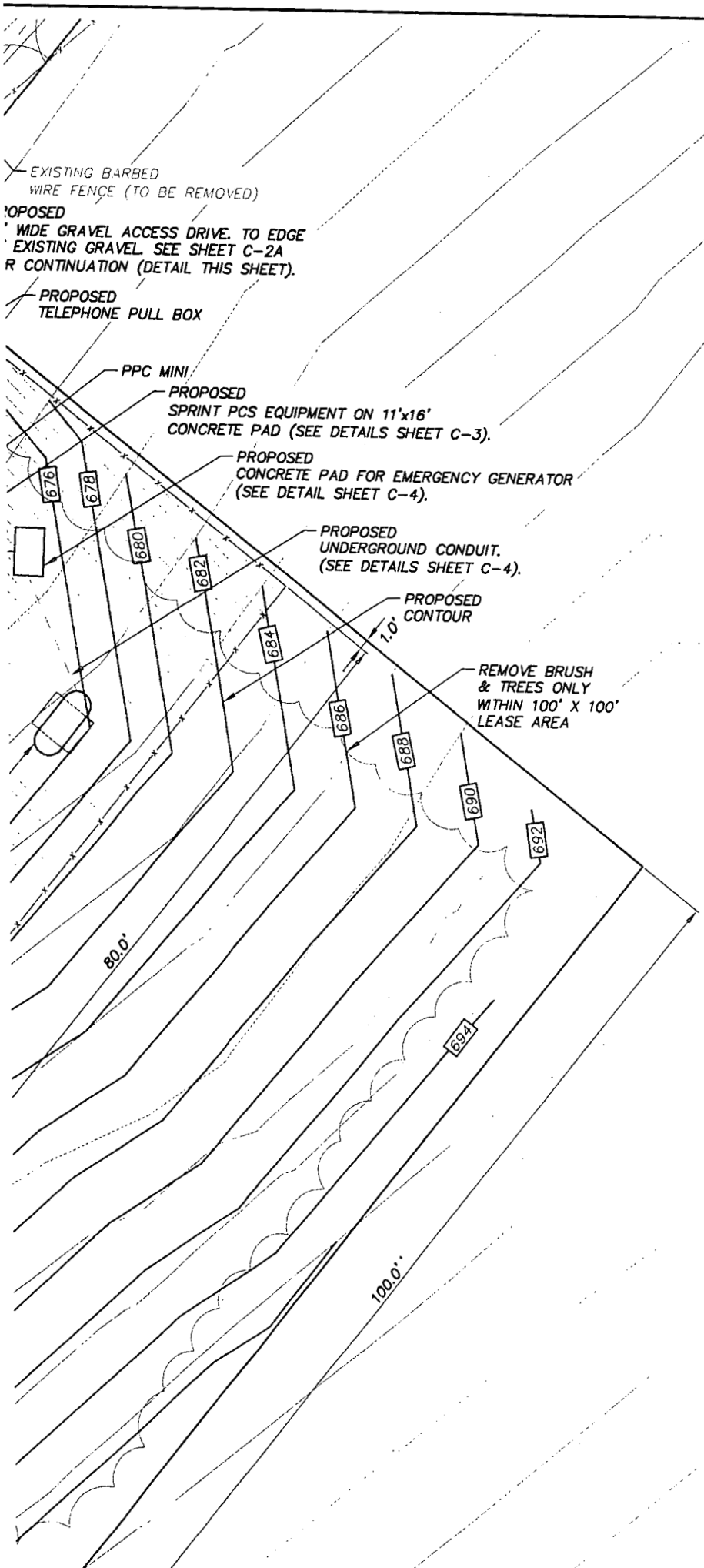


COMPACT SUBGRADE
TO 98% DENSITY &
INSTALL WEED BARRIER
(MIRRAFI FABRIC 500X)
ON SUBGRADE
(SEE GENERAL NOTES #14)

ECTION DETAIL

NOTE:

FOR EQUIPMENT DETAILS
SEE PLANS PROVIDED
BY SPRINT PCS



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STATE OF KENTUCKY
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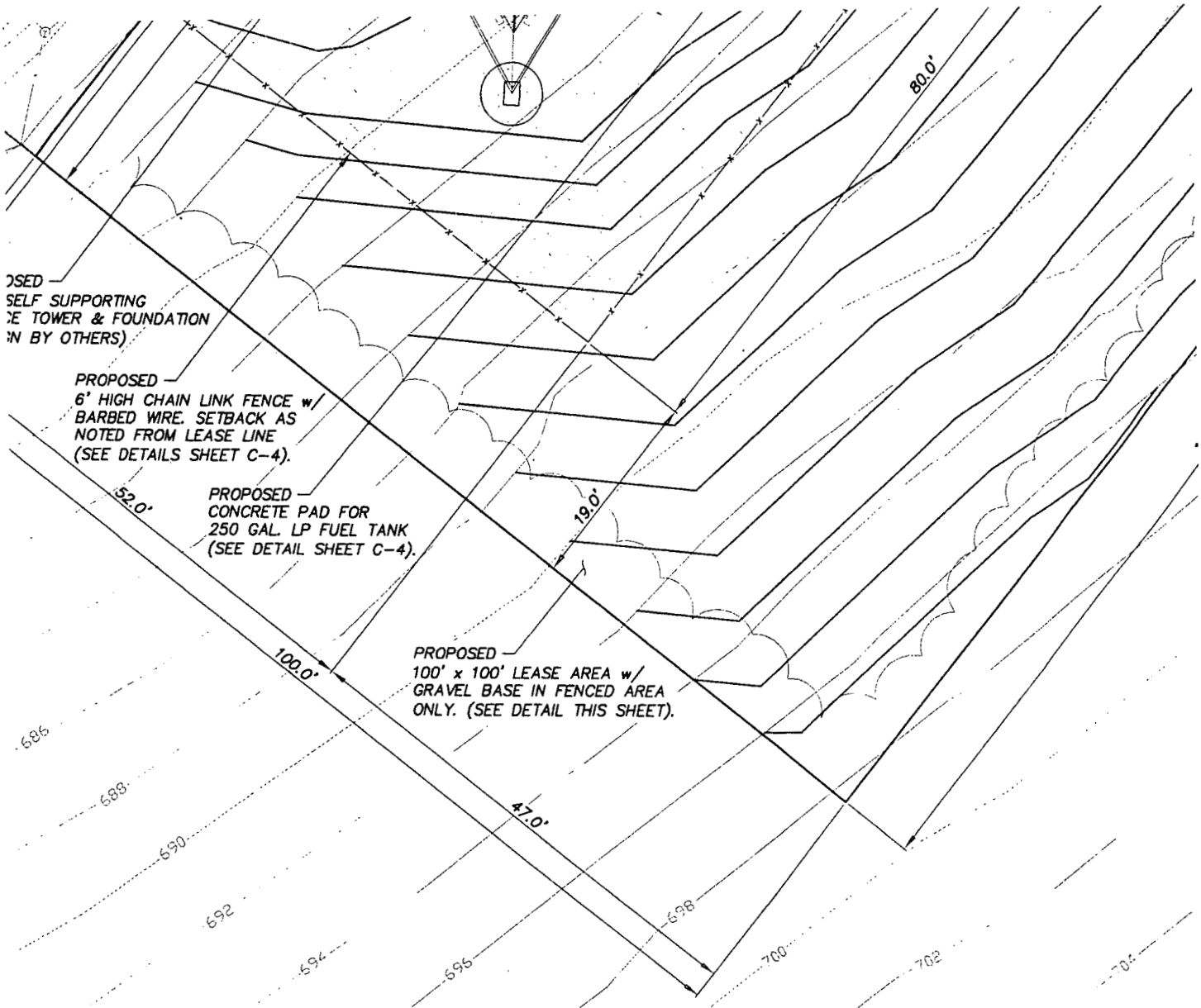
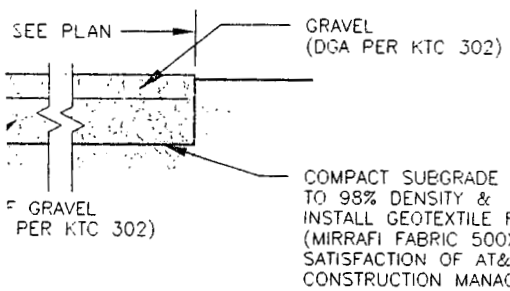


ENLARGED SITE PLAN

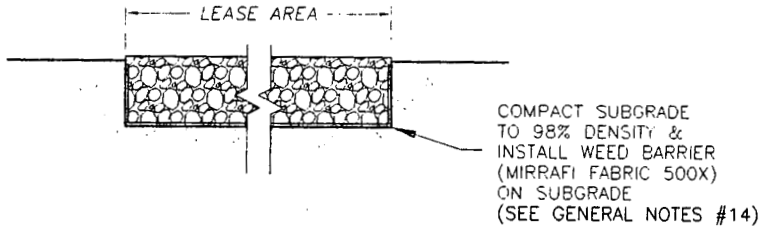
1" = 10'-0"

NOTES FOR GRAVEL BASE WITHIN LEASE AREA:

- PROVIDE FILL MATERIAL OR CUT SUBGRADE TO 6" BELOW PROPOSED GRADE IN LEASE AREA
- COMPACT SUBGRADE & PROOF ROLL TO THE SATISFACTION OF THE CONSTRUCTION MANAGER
- REPLACE/COMPACT w/ 6" OF #4 CRUSHED AGGREGATE

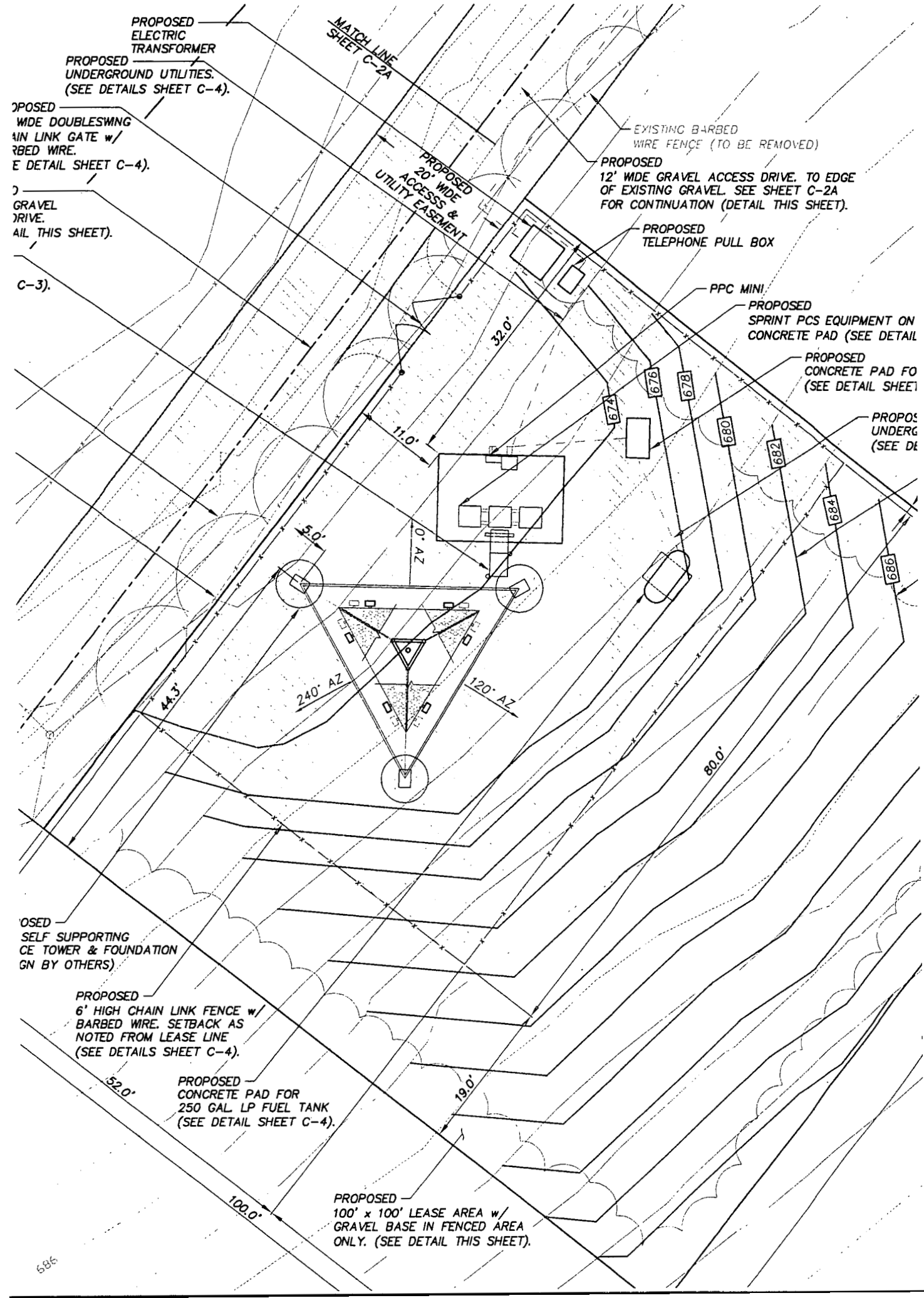


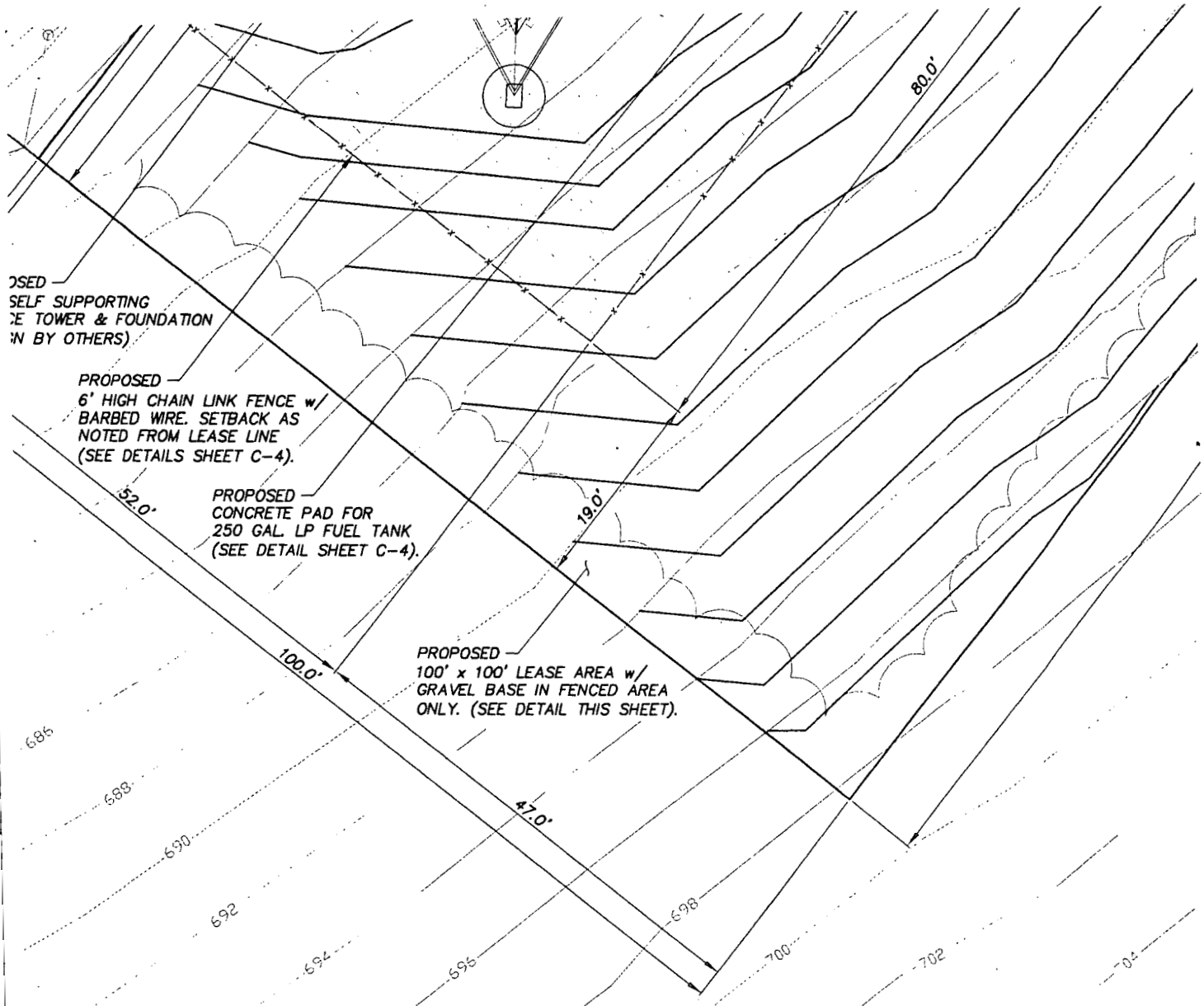
ACCESS DRIVE SECTION DETAIL



GRAVEL BASE SECTION DETAIL

NOT TO SCALE


PROPOSED ELECTRIC TRANSFORMER
PROPOSED UNDERGROUND UTILITIES. (SEE DETAILS SHEET C-4).
OPOSED
WIDE DOUBLESWING
AIN LINK GATE w/
RBED WIRE.
E DETAIL SHEET C-4).
GRAVEL
DRIVE.
AIL THIS SHEET).
C-3).
MATCH LINE SHEET C-2A
PROPOSED 20' WIDE ACCESSS & UTILITY EASEMENT
EXISTING BARBED WIRE FENCE (TO BE REMOVED)
PROPOSED 12' WIDE GRAVEL ACCESS DRIVE. TO EDGE OF EXISTING GRAVEL. SEE SHEET C-2A FOR CONTINUATION (DETAIL THIS SHEET).
PROPOSED TELEPHONE PULL BOX
PPC MINI
PROPOSED SPRINT PCS EQUIPMENT ON CONCRETE PAD (SEE DETAIL
PROPOSED CONCRETE PAD FO (SEE DETAIL SHEE
PROPOS UNDERG (SEE DE
32.0'
11.0'
5.0'
0° AZ
240° AZ
120° AZ
44.3'
80.0'
674
676
678
680
682
684
686
OSED SELF SUPPORTING CE TOWER & FOUNDATION GN BY OTHERS)
PROPOSED 6' HIGH CHAIN LINK FENCE w/ BARBED WIRE. SETBACK AS NOTED FROM LEASE LINE (SEE DETAILS SHEET C-4).
52.0'
PROPOSED CONCRETE PAD FOR 250 GAL. LP FUEL TANK (SEE DETAIL SHEET C-4).
19.0'
100.0'
PROPOSED 100' x 100' LEASE AREA w/ GRAVEL BASE IN FENCED AREA ONLY. (SEE DETAIL THIS SHEET).
686



ENLARGED SITE PLAN

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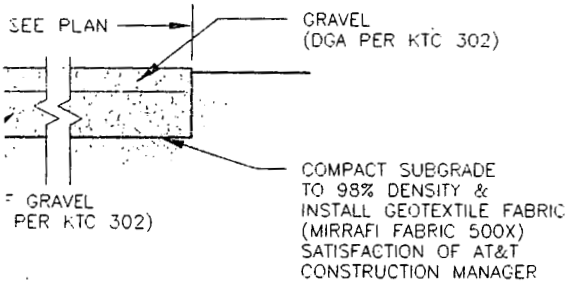
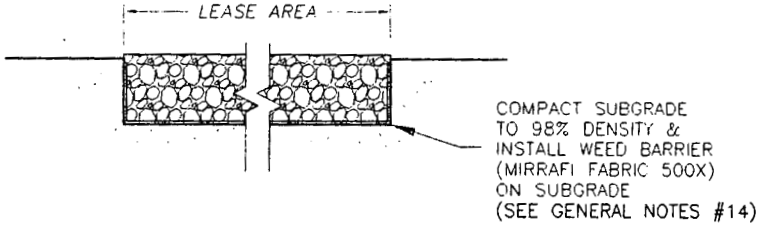
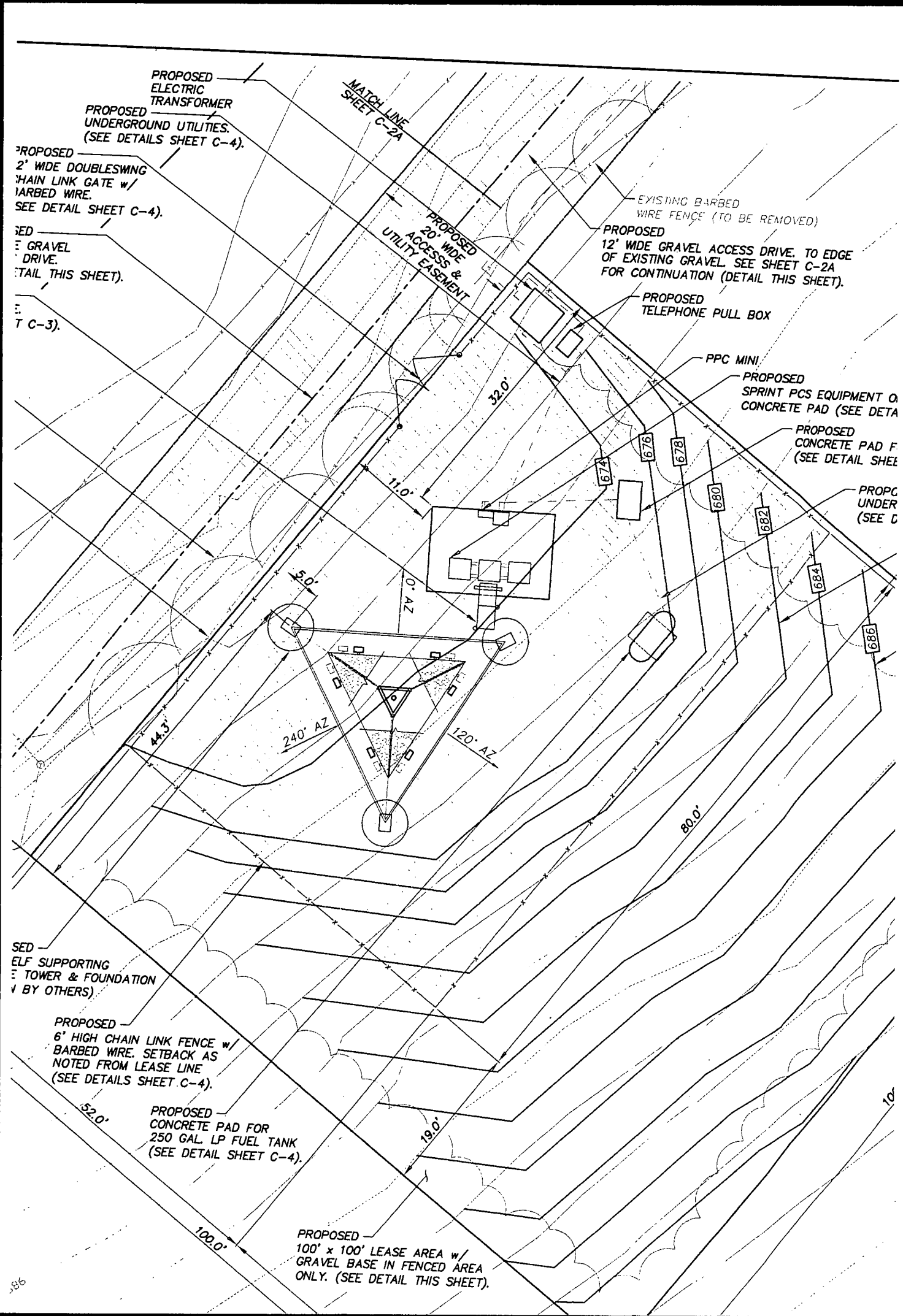


ACCESS DRIVE SECTION DETAIL



GRAVEL BASE SECTION DETAIL

NOT TO SCALE


PROPOSED ELECTRIC TRANSFORMER
PROPOSED UNDERGROUND UTILITIES. (SEE DETAILS SHEET C-4).
PROPOSED 2' WIDE DOUBLESWING CHAIN LINK GATE w/ BARBED WIRE. SEE DETAIL SHEET C-4).
ED GRAVEL DRIVE. TAIL THIS SHEET).
T C-3).
MATCH LINE SHEET C-2A
PROPOSED 20' WIDE ACCESS & UTILITY EASEMENT
EXISTING BARBED WIRE FENCE (TO BE REMOVED)
PROPOSED 12' WIDE GRAVEL ACCESS DRIVE. TO EDGE OF EXISTING GRAVEL. SEE SHEET C-2A FOR CONTINUATION (DETAIL THIS SHEET).
PROPOSED TELEPHONE PULL BOX
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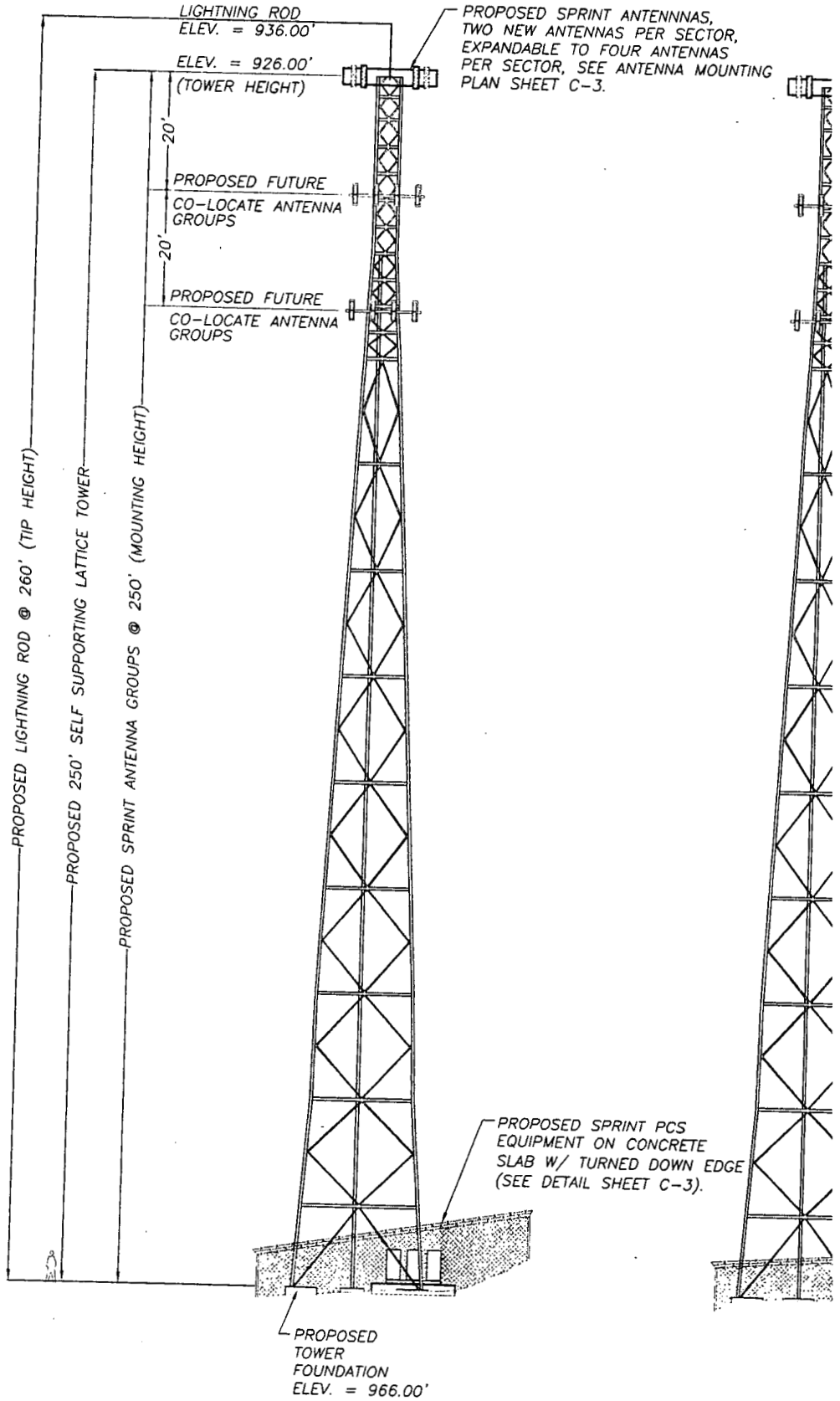
19.0'
100.0'
PROPOSED 100' x 100' LEASE AREA w/ GRAVEL BASE IN FENCED AREA ONLY. (SEE DETAIL THIS SHEET).

W/ THE PROJECT MANAGER AND WITH LANDLORD'S AUTHORIZED REPRESENTATIVE.



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NOT TO SCALE

P: PR24628 CADD C2-24628.DWG 5-19-99 12:05:27 pm EST

PROJECT GENERAL NOTES

1. THE FACILITY IS AN UNOCCUPIED TELECOMMUNICATIONS FACILITY.

2. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER.

4. THE CONTRACTOR SHALL RECEIVE IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.

5. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES, OR REGULATIONS TAKE PRECEDENCE.

6. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AURHORITY BEARING ON THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

7. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION W/THE PROJECT MANAGER AND WITH LANDLORD'S AUTHORIZED REPRESENTATIVE.

8. PROVIDE A PORTABLE FIRE
THAN 2-A OR 2-A10BC WITHI
PORTIONS OF THE PROJECT AF

9. THE CONTRACTOR SHALL VE
THE SITE AND NOTIFY THE PRC
BEFORE STARTING ANY WORK.

10. DETAILS ARE INTENDED TO
MODIFICATIONS MAY BE REQUIR
CONDITIONS, AND SUCH MODIFI
THE WORK.

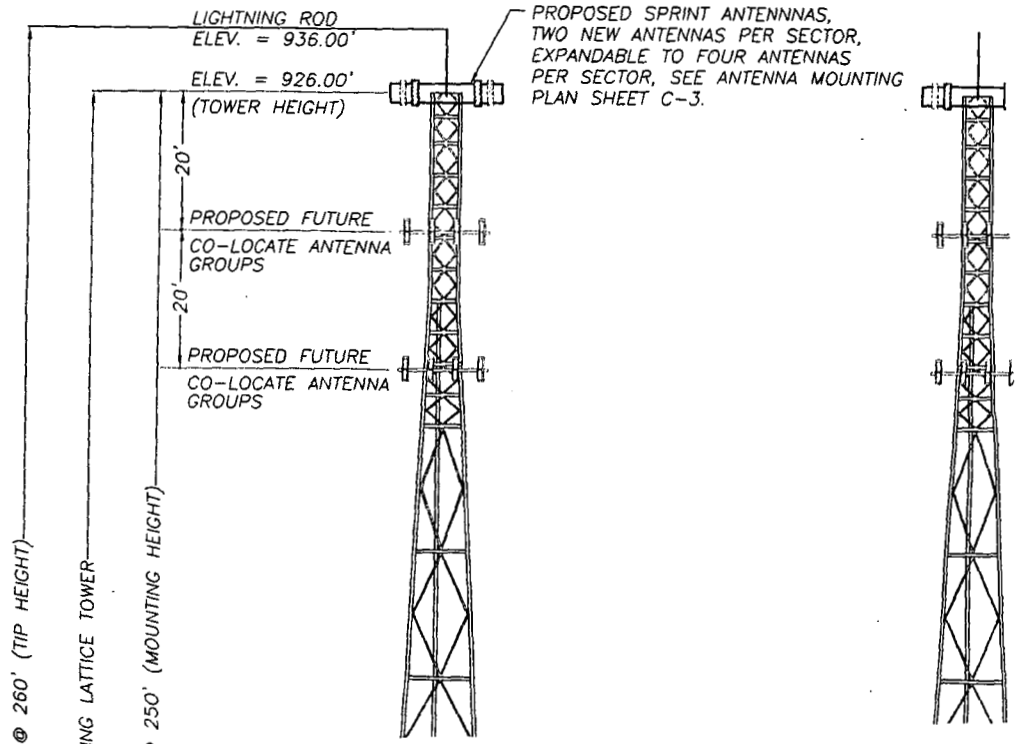
11. THE CONTRACTOR SHALL M
EXISTING IMPROVEMENTS, PAVIN
UPON COMPLETION OF WORK, F
DURING CONSTRUCTION TO THE

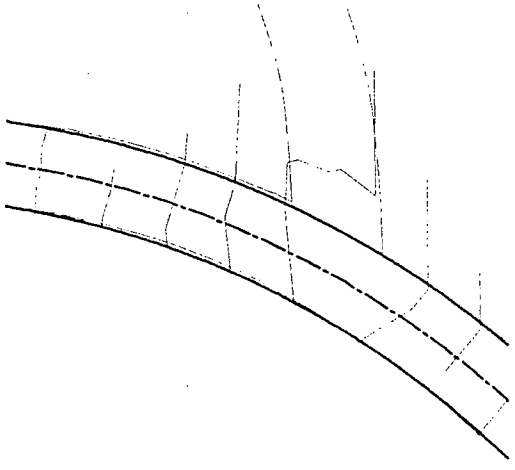
12. KEEP GENERAL AREA CLEAN
DEBRIS, RUBBISH AND REMOVE
ON THE PROPERTY. LEAVE PREM
PAINT SPOTS, DUST, OR SMUDGI

13. CONTRACTOR TO PROVIDE C
WITHIN 10 WORKING DAYS OF P

14. CONTRACTOR SHALL FIELD V
UNDERGROUND UTILITIES PRIOR T

15. IN AREAS WHICH ARE DISTUR
AREAS WHICH ARE WITHIN THE LI
GRAVEL THE CONTRACTOR SHALL:
TOPSOIL, SEED WITH A MIX OF 4
RED FESCUE AND 20% ANNUAL F
1000 SQUARE FEET, MULCH WITH
ACRE.





? SHALL PROVIDE TEMPORARY
ISTRUCTION TRAFFIC ON EXISTING
: SHEET C-1 FOR CONTINUATION).

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MASON, OHIO 45040

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SEAL

STATE OF KENTUCKY
GREGORY BREETZ
19016
LICENSED PROFESSIONAL ENGINEER

SIGNATURE

DATE:	MAY 13, 1999
PROJECT NUMBER:	24628
DRAWN BY:	TAC
CHECKED BY:	GB

△ REVISIONS

NO.	DATE	DESCRIPTION	BY
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REVIEW DATE: 5-13-99

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EDWARDS 2

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BUTLER, KY

41006

SHEET TITLE

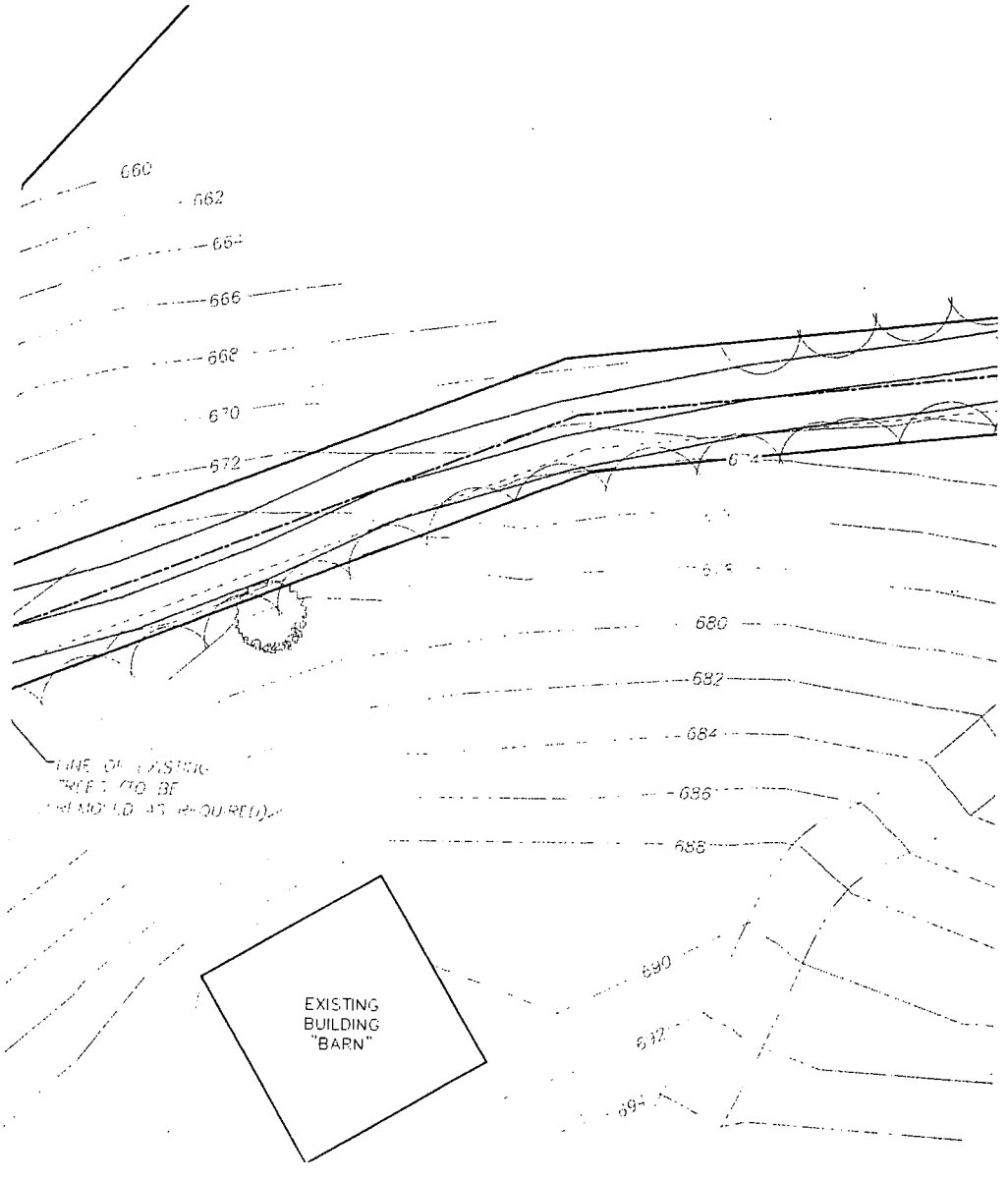
ROAD GRADING PLAN

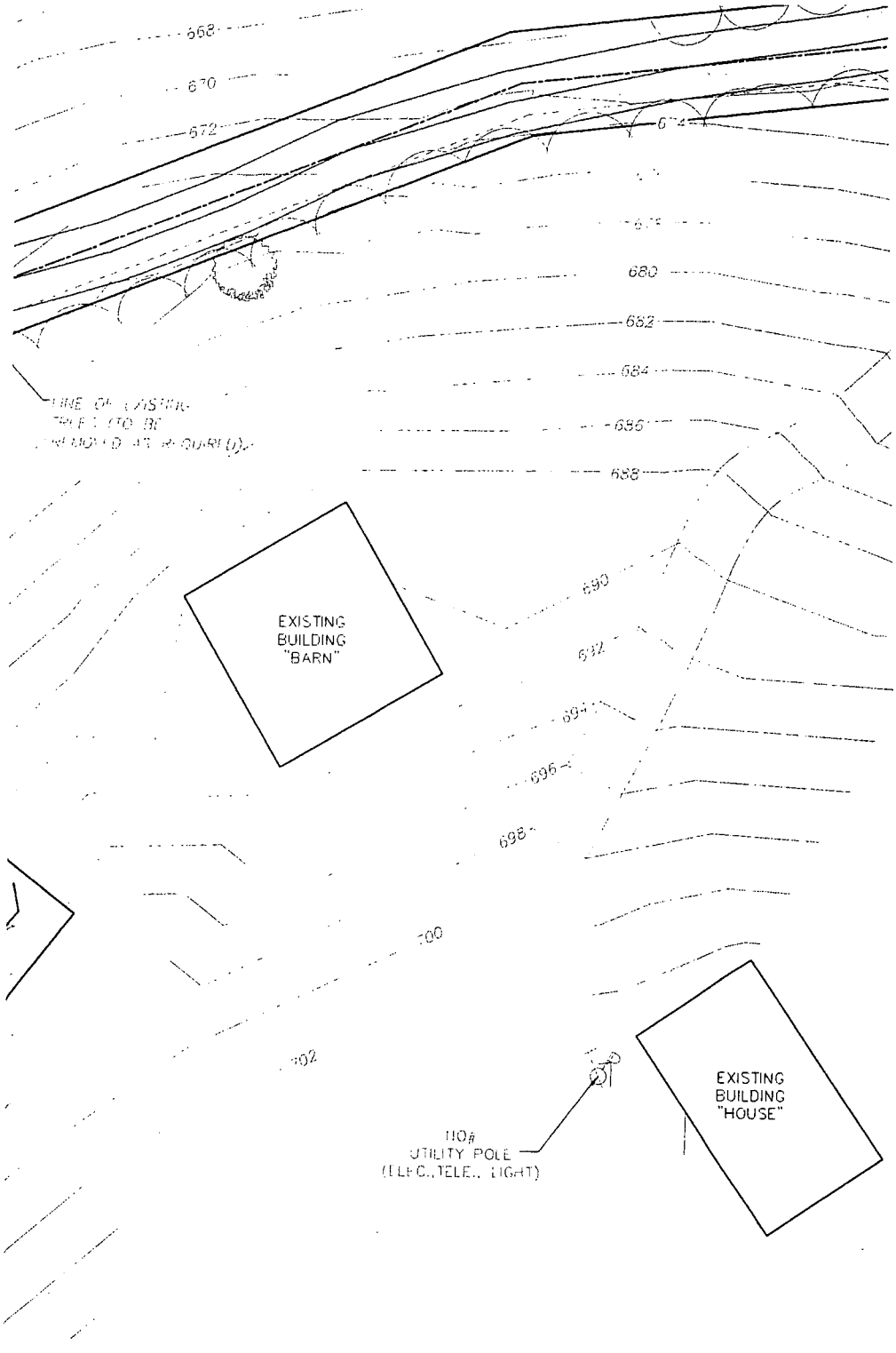
SHEET NUMBER

C-2A

NOTE:

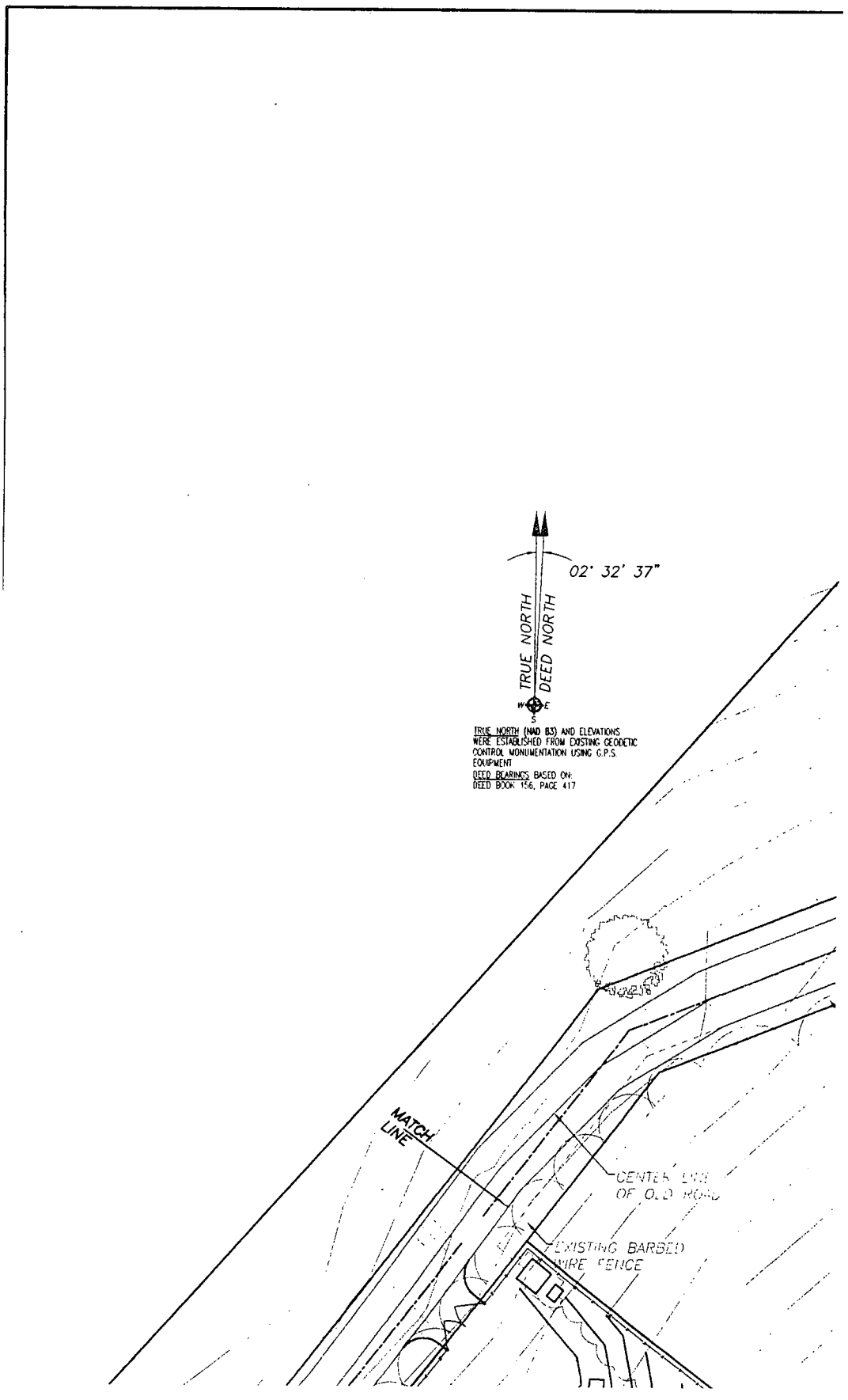
FOR EQUIPMENT DETAILS
SEE PLANS PROVIDED
BY SPRINT PCS

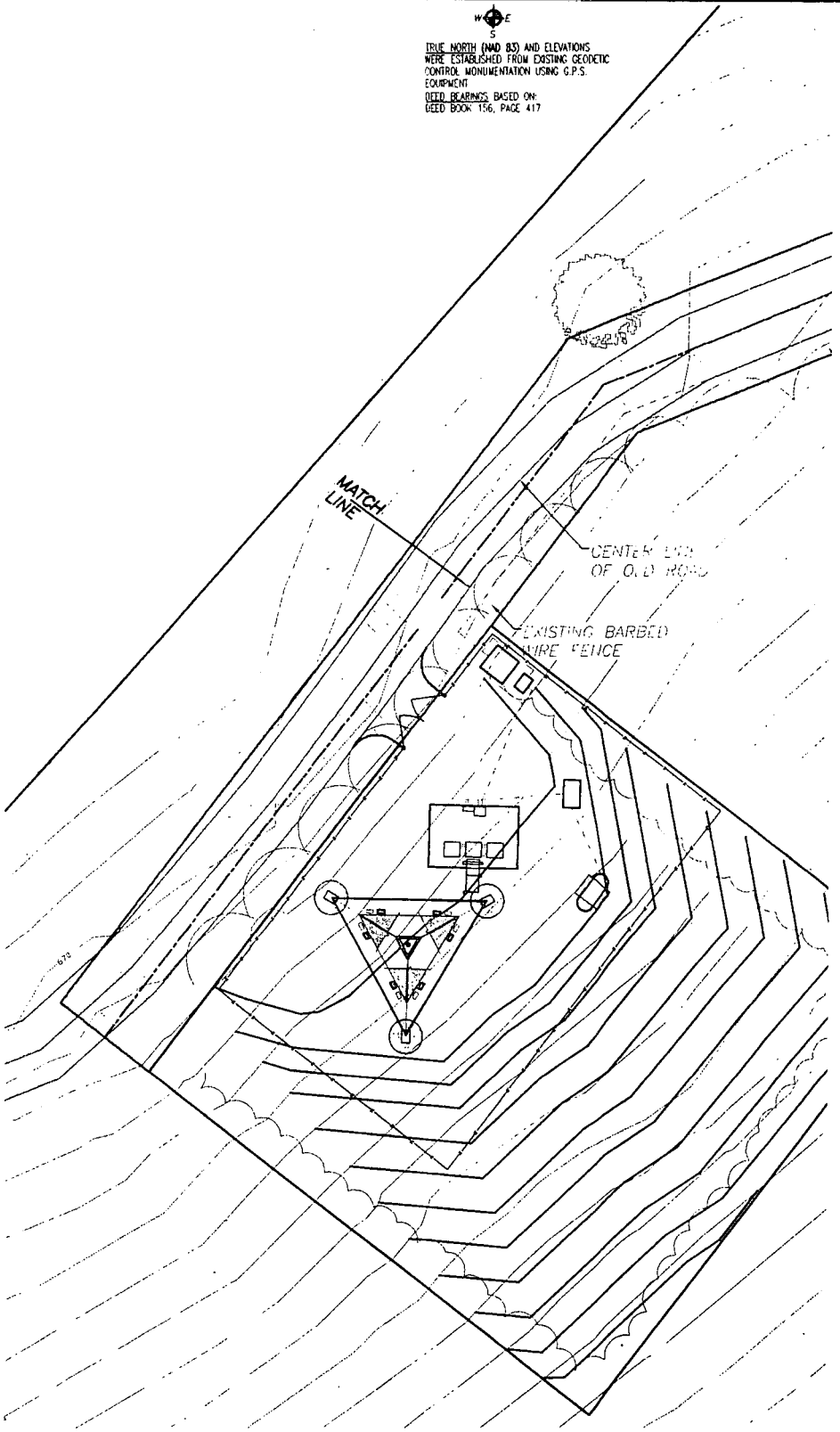

660
662
664
666
668
670
672
674
680
682
684
686
688
690
692
694
EXISTING
BUILDING
"BARN"



ROAD GRADING P

1" = 20'-0"


02° 32' 37"
TRUE NORTH
DEED NORTH
W
E
S
TRUE NORTH (NAD 83) AND ELEVATIONS WERE ESTABLISHED FROM EXISTING GEODETIC CONTROL MONUMENTATION USING G.P.S. EQUIPMENT
DEED BEARINGS BASED ON:
DEED BOOK 156, PAGE 417
MATCH LINE
CENTER LINE OF OLD ROAD
EXISTING BARBED WIRE FENCE


W E
S
TRUE NORTH (NAD 83) AND ELEVATIONS WERE ESTABLISHED FROM EXISTING GEODETIC CONTROL MONUMENTATION USING G.P.S. EQUIPMENT
DEED BEARINGS BASED ON: DEED BOOK 156, PAGE 417
MATCH LINE
EXISTING BARBED WIRE FENCE