Dinsmore&Shohl LLP
ATTORNEYS
Holly C. Wallace
(502) 540-2309 (Direct Dial)
holly.wallace@dinslaw.com

March 17, 2006

Beth O'Donnell
Executive Director
Public Service Commission
211 Sower Blvd.
P.O. Box 615
Frankfort, KY 40602-0615

RE: Application of Cumberland Cellular Partnership for Issuance of a Certificate of Public Convenience and Necessity to Construct a Cell Site (Alligator) in Rural Service Area #5 (Russell) of the Commonwealth of Kentucky - Case No. 2006-00052

Dear Ms O'Donnell:

I am enclosing with this letter an original and 10 copies of Cumberland Cellular Partnership's ("Cumberland Cellular") Motion to Substitute Exhibit "B" to the Application for a Certificate of Public Convenience and Necessity with respect to the above referenced matter.

If you have any questions with respect to this matter, please call me.

Thank you.

Very truly yours,

DINSMORE & SHOHL LLP

Holly C. Wallace

JES/kwi

Enclosures

108442v1
21965-13

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF CUMBERLAND CELLULAR PARTNERSHIP FOR ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A CELL SITE (ALLIGATOR) IN RURAL SERVICE AREA #5 (RUSSELL) OF THE COMMONWEALTH OF KENTUCKY

CASE NO. 2006-00052

MOTION TO SUBSTITUTE EXHIBIT "B" TO THE APPLICATION FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY (ALLIGATOR)

Cumberland Cellular Partnership ("Cumberland Cellular"), by counsel, hereby moves the Public Service Commission of the Commonwealth of Kentucky (the "Commission") for an order allowing Cumberland Cellular to substitute a new Exhibit "B" to its application for a certificate of public convenience and necessity ("Application for CPCN"). In support of its motion, Cumberland Cellular states as follows.

On March 3, 2006, Cumberland Cellular filed its Application for CPCN for the Alligator cell site. In accordance with 807 KAR 5:063 §1, Cumberland Cellular submitted the following four documents which were attached as Exhibit B to the application: 1) a geotechnical investigation report, 2) a survey of the Lease Area, 3) a vertical profile sketch of the tower, and 4) the tower and foundation design plans. Cumberland Cellular now moves to replace the original Exhibit B, in its entirety, with the revised Exhibit B attached hereto.

Cumberland Cellular has determined that it does not require a cell site of the size originally contemplated. Therefore, Cumberland Cellular is decreasing the size of the Alligator cell site **within** the boundaries of the Lease Area reflected in the original survey attached as part of Exhibit B to the Application for CPCN. This reduction in the size of the cell site does not affect the boundaries of the Lease Area nor does it affect the physical location/address of the cell tower and facilities. The

cell site will still be located within the Lease Area as originally contemplated. Therefore, the change in the cell site does not affect the notifications provided pursuant to 807 KAR 3:063 § (1) and KRS 278.665(2). Those notifications remain valid and in compliance with applicable statutes and regulations.

Given the change in the size of the cell site, Cumberland Cellular seeks to submit: 1) a revised survey showing the proposed location of the tower and all easements and existing structures within 500 feet of the proposed site on the property on which the tower will be located, and all easements and existing structures within 200 feet of the access drive, including the intersection with the public street system; and 2) revised tower and foundation design plans with a description of the standard according to which the tower was designed, signed and sealed by a professional engineer registered in Kentucky. Although these are the only two documents that have been revised, for the sake of clarity, and for the Commission's convenience, Cumberland Cellular has attached hereto a new Exhibit B, in its entirety, including the revised survey and design plans, along with the unchanged geotechnical investigation report and vertical profile sketch of the tower.

Accordingly, Cumberland Cellular respectfully requests that the Commission grant its motion and enter an order substituting the revised Exhibit B attached hereto for the original Exhibit B attached to the Application for CPCN.

Respectfully submitted,

John E. Selent
DINSMORE & SHOHL LLP
1400 PNC Plaza
500 West Jefferson Street
Louisville, KY 40202
(502) 540-2300
(502) 540-2207
Counsel to Cumberland Cellular Partnership

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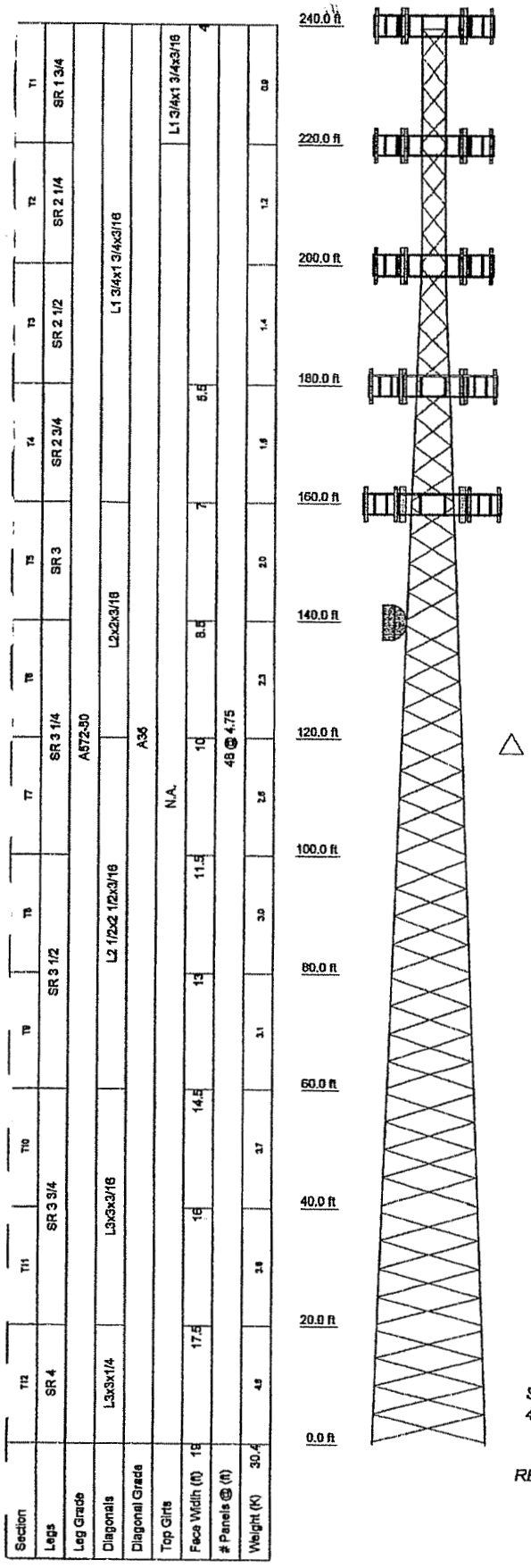


DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
(6) D100-0042-0041	240	(6) RWB 80014/120 (Future)	180
Lightning Rod 1"x10' (Initial)	240	(3) T frame sector Mount (Future Carrier 3)	180
Flash Beacon Lighting (Initial)	240	(6) RWB 80014/120 (Future)	160
(3) T frame sector Mount (Initial)	240	(3) T frame sector Mount (Future Carrier 4)	160
(6) RWB 80014/120 (Future)	220	HP6-122	140
(3) T frame sector Mount (Future Carrier 1)	220		
(6) RWB 80014/120 (Future)	200		
(3) T frame sector Mount (Future Carrier 2)	200		

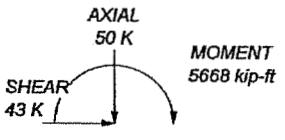
MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

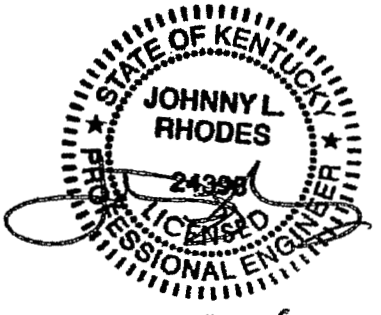
TOWER DESIGN NOTES

1. Tower designed for Exposure B to the TIA-222-G Standard.
2. Tower designed for a 90 mph basic wind in accordance with the TIA-222-G Standard.
3. Deflections are based upon a 60 mph wind.
4. Tower designed as Structure Class I
5. Tower designed as Topo Category 3 w/ Crest Height of 100 ft
6. In no case shall more than (6) lines be exposed to wind. Feedlines may be stacked in up to (2) rows on the inside and outside face of the tower.
7. TOWER RATING: 99.3%

MAX PIER FORCES:
DOWN: 361 K
UPLIFT: -320 K
SHEAR: 26 K



TORQUE 9 kip-ft
REACTIONS - 90 mph WIND

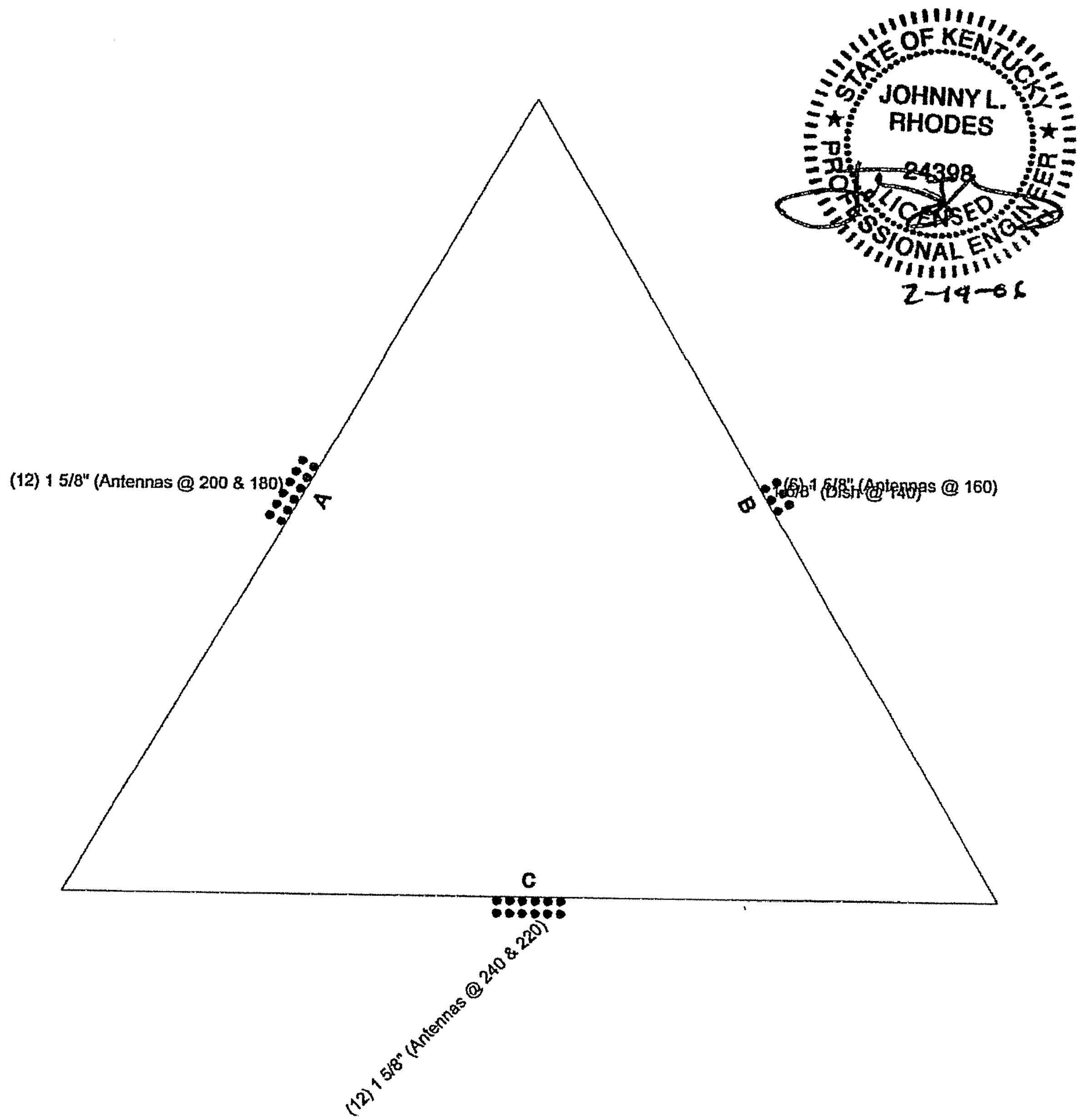


2-14-06

Eastpointe Engineering Group, LLC
4020 Tull Ave
Muskogee, OK
Phone: 918.683.2169
FAX: 918.682.7618

Job: Ell Job #2171-Alligator			
Project: 240' SST/Russell County, KY			
Client: Bluegrass Cellular	Drawn by: Johnny L. Rhodes, PE	App'd:	
Code: TIA-222-G	Date: 02/14/06	Scale: N	
Path: Z:\Drafting\Drawings\Jobs\2100-2199\2169\Final Tower Design\240tst.pd		Dwg No. E	

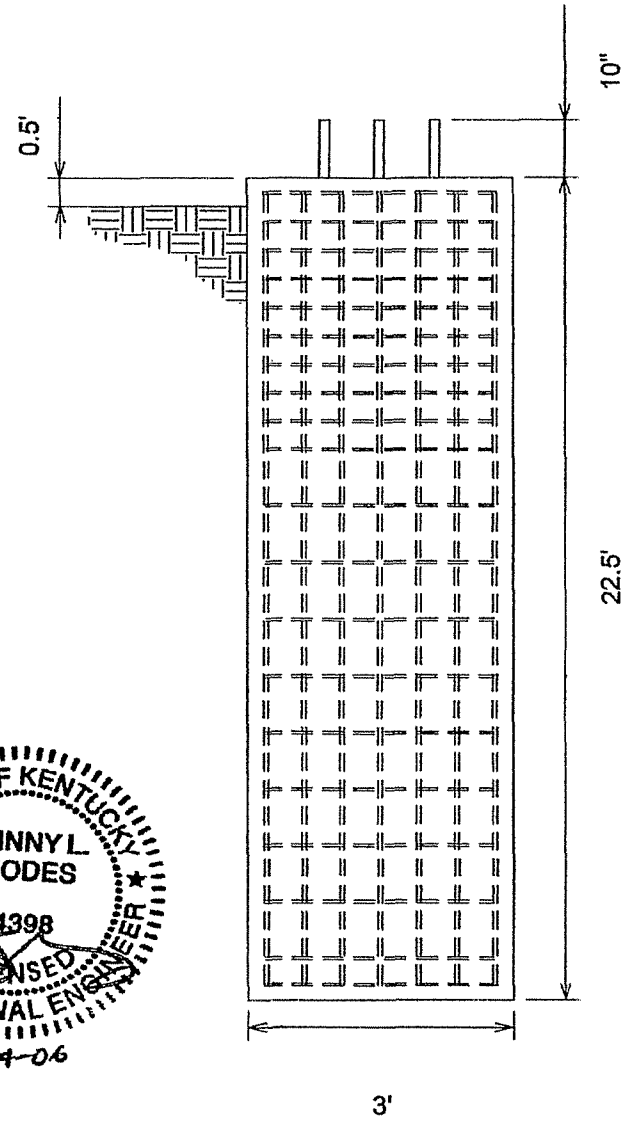
Feedline Plan



Eastpointe Engineering Group, LLC 4020 Tull Ave Muskogee, OK Phone: 918.683.2169 FAX: 918.682.7618	Job: *EII Job #2171-Alligator*		
	Project: *240' SST/Russell County, KY*		
	Client: Bluegrass Cellular	Drawn by: Johnny L. Rhodes, PE	App'd:
	Code: TIA-222-G	Date: 02/14/06	Scale: N
	Path: [illegible]		Dwg No. F

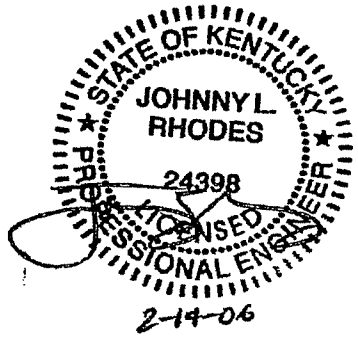
CAISSON DESIGN

Vertical Bars	(12) #9 bars, 22' long
Ties	#5 bars @ 6" c/c for the first 6.5' then 12" c/c thereafter



General Notes

1. Concrete shall be placed in accordance with ACI318-02, latest revision.
2. Concrete shall have a minimum 28 day compressive strength of 4000 PSI.
3. Rebar to conform to ASTM A615 grade 60.
4. Rebar used for ties may be A615 grade 40.
5. All rebar to have a minimum of 3" clear cover.
6. All exposed concrete corners to have 3/4" chamfer.
7. Bottom and side surfaces to rest on undisturbed soil.
8. Contractor shall be responsible to review and follow all recommendations of the geotechnical report.



Supplemental Notes

Soil values obtained from Terracon soils report #57057391G Dated 1/05/06
Use (6) 1 1/2" x 72" 50ksi anchor bolts

EASTPOINTE ENGINEERING GROUP, LLC
4020 Tull Ave. Muskogee, OK 74403--Phone 918.683.2169--Fax:918.682.7618

Client:	**Bluegrass Cellular**		
Site:	**Alligator**		
Job:	2171	Drawn by:	JLR
Scale:	NTS	Date:	02/14/06

January 5, 2006

Terracon
Consulting Engineers & Scientists

Terracon Consultants, Inc.
4545 Bishop Lane, Suite 101
Louisville, Kentucky 40218
Phone 502.456.1256
Fax 502.456.1278
www.terracon.com

RSB Design
6403 Mercury Drive
Louisville, Kentucky 40291

Attention: Mr. Robin Becker

Re: Geotechnical Engineering Report
Proposed Alligator Communication Tower
Missionary Drive
Indian Hills, Kentucky
Terracon Project No. 57057391G

Dear Mr. Becker:

We are submitting, herewith, the results of our subsurface exploration for the referenced project. The purpose of this exploration was to obtain information on subsurface conditions at the proposed project site and, based on this information, to provide recommendations regarding the design and construction of foundations for the proposed tower.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report, or if we may be of further service to you in any way, please feel free to contact us.

Sincerely,
Terracon

Jason L. Thompson, EIT
Staff Engineer

Erich J. Hoehler
Project Engineer

STATE OF KENTUCKY
TIMOTHY G. LaGROW
17758
REGISTERED PROFESSIONAL ENGINEER

Timothy G. LaGrow, P.E.
Kentucky No. 17758

n:\projects\2005\towers\57057391Alligator\geo\geo57057391G.doc

Attachments: Geotechnical Engineering Report

Copies: (4) RSB Design

TABLE OF CONTENTS

GEOTECHNICAL ENGINEERING REPORT

PROPOSED ALLIGATOR COMMUNICATION TOWER
MISSIONARY DRIVE
INDIAN HILLS, KENTUCKY
TERRACON PROJECT NO. 57057391G
January 5, 2006

1.0 INTRODUCTION

The purpose of this report is to describe the subsurface conditions encountered in the boring, analyze and evaluate the test data, and provide recommendations regarding the design and construction of foundations and earthwork for the proposed tower. One boring extending to a depth of about 28½ feet below the existing ground surface was drilled at the site. An individual boring log and a boring location plan are included with this report.

2.0 PROJECT DESCRIPTION

Terracon understands the proposed project will consist of the construction of a 240-foot self supporting tower. Exact tower loads are not available, but based on our past experience are anticipated to be as follows:

Vertical Load:	600 kips
Horizontal Shear:	80 kips
Uplift:	500 kips

A small, lightly loaded equipment building will also be constructed. Wall and floor loads for this building are not anticipated to exceed 1 kip per linear foot and 100 pounds per square foot, respectively. At the time of the site visit, the property was a gently sloping, wooded hillside. A final grading plan was not available for our review, however based on the proposed tower construction, minimal grading operations are anticipated.

3.0 EXPLORATION PROCEDURES

3.1 Field Exploration

The subsurface exploration consisted of drilling and sampling one boring at the site to a depth of about 28½ feet below existing grade. The boring was advanced at the center of the tower, staked by the project surveyor. Ground surface elevations were not available at the time of this report and have been omitted from the boring log. The location of the boring should be considered accurate only to the degree implied by the means and methods used to define them.

The boring was drilled with a truck-mounted rotary drill rig using hollow stem augers to advance the borehole. Representative soil samples were obtained by the split-barrel

sampling procedure in general accordance with the appropriate ASTM standard. In the split-barrel sampling procedure, the number of blows required to advance a standard 2-inch O.D. split-barrel sampler the last 12 inches of the typical total 18-inch penetration by means of a 140-pound hammer with a free fall of 30 inches, is the standard penetration resistance (SPT) value (N-Value). This value is used to estimate the in-situ relative density of cohesionless soils and the consistency of cohesive soils. The sampling depths, penetration distance, and standard penetration resistance values are shown on the boring log. The samples were sealed and delivered to the laboratory for testing and classification.

Auger refusal was encountered at a depth of about 18½ feet below the existing ground surface. The boring was extended into the refusal materials using a diamond bit attached to the outer barrel of a double core barrel. The inner barrel collected the cored material as the outer barrel was rotated at high speeds to cut the rock. The barrel was retrieved to the surface upon completion of each drill run. Once the core samples were retrieved, they were placed in a box and logged. The rock was later classified by an engineer and the percent recovery and rock quality designation (RQD) were determined. Classification and descriptions of rock core samples are in accordance with the enclosed General Notes, and are based on visual and tactile observations. Petrographic analysis of thin sections may indicate other rock types. The percent recovery and RQD calculated for these samples are noted at their depths of occurrence on the boring log.

The percent recovery is the ratio of the sample length retrieved to the drilled length, expressed as a percent. An indication of the actual in-situ rock quality is provided by calculating the sample's RQD. The RQD is the percentage of the length of broken cores retrieved which have core segments at least 4 inches in length compared to each drilled length. The RQD is related to rock soundness and quality as illustrated below:

Table 1 – Rock Quality Designation (RQD)

Relation of RQD and In-situ Rock Quality	
RQD (%)	Rock Quality
90 - 100	Excellent
75 - 90	Good
50 - 75	Fair
25 - 50	Poor
0 -25	Very Poor

A field log of the boring was prepared by a subcontract driller. This log included visual classifications of the materials encountered during drilling as well as the driller's interpretation of the subsurface conditions between samples. The final boring log included

with this report represents an interpretation of the driller's field log and a visual classification of the soil samples made by the geotechnical engineer.

3.2 Laboratory Testing

The samples were classified in the laboratory based on visual observation, texture and plasticity. The descriptions of the soils indicated on the boring log are in accordance with the enclosed General Notes and the Unified Soil Classification System. Estimated group symbols according to the Unified Soil Classification System are given on the boring log. A brief description of this classification system is attached to this report.

The laboratory testing program consisted of performing water content tests and an Atterberg Limits test on representative soil samples. Information from these tests was used in conjunction with field penetration test data to evaluate soil strength in-situ, volume change potential, and soil classification. An unconfined compressive strength test was also performed on a sample of the refusal material Results of these tests are provided on the boring log.

Classification and descriptions of rock core samples are in accordance with the enclosed General Notes, and are based on visual and tactile observations. Petrographic analysis of thin sections may indicate other rock types. Percent recovery and rock quality designation (RQD) were calculated for these samples and are noted at their depths of occurrence on the boring log.

4.0 EXPLORATORY FINDINGS

4.1 Subsurface Conditions

Conditions encountered at the boring location are indicated on the boring log. Stratification boundaries on the boring log represent the approximate location of changes in soil types and the transition between materials may be gradual. Water levels shown on the boring log represent the conditions only at the time of our exploration. Based on the results of the boring, subsurface conditions on the project site can be generalized as follows.

In general, our boring encountered yellowish brown elastic silt (MH) below the ground surface to an auger refusal depth of about 18½ feet. The natural soil exhibited a soft stiff to very stiff consistency based on SPT N-Values ranging from 4 to over 30 blows per foot. Weathered shale fragments suspended in the soil matrix likely contributed to the higher SPT N-Values obtained below a depth of about 13½ feet.

Below a depth of about 18½ feet, rock coring techniques were used to advance the borehole. The core samples recovered consisted of shale from 18½ feet to 23 feet followed by limestone to a boring termination depth of 28½ feet. The dark gray shale and light gray

limestone encountered at the site were closely to moderately closely jointed and hard. Two 1 foot thick voids were encountered within the limestone at depths of about 25 and 27 feet. The percent recovery for the ten foot core run was 67 percent. The quality of the rock is rated at poor based on an RQD value of 48 percent. Considering the height of the tower and the quality of the bedrock, coring operations were terminated at a depth of 28½ feet below grade.

4.2 Site Geology

Based on a review of the Jabez Geologic Quadrangle map (published 1966), the site is underlain by the Salem and Warsaw Formations. The Salem and Warsaw Formations consist of limestone, sandstone, and shale. The limestone is sandy, olive gray to brownish gray, thin bedded and grades into tan, homogeneous silty mudstone. The sandstone is silty and limy, dark yellowish orange to moderate reddish brown, and very fine grained. The shale is silty, calcareous in upper part, dark purplish gray to olive gray, abundantly fossiliferous in places, and grades laterally in to and includes lenses of fossiliferous coarse grained sandy limestone. The formation is approximately 50 to 130 feet thick and underlain by the Fort Payne Formation.

4.3 Groundwater Conditions

No groundwater was encountered during the auger drilling portion of the borehole. Water was used to advance the borehole during rock coring operations. The introduction of water into the borehole precluded obtaining accurate groundwater level readings at the time of drilling operations. Long term observation of the groundwater level in monitoring wells, sealed from the influence of surface water, would be required to obtain accurate groundwater levels on the site.

It should be recognized that fluctuations of the groundwater table may occur due to seasonal variations in the amount of rainfall, runoff and other factors not evident at the time the boring was performed. Therefore, groundwater levels during construction or at other times in the life of the structure may be higher or lower than the levels indicated on the boring log. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

5.0 ENGINEERING RECOMMENDATIONS

5.1 Tower Foundation

Based on the encountered subsurface conditions, the proposed tower can be founded on drilled piers. The equipment building may be supported on shallow spread footings. Design recommendations for the tower drilled piers and shallow footings for the equipment building are presented in the following paragraphs.

Table 2 - Drilled Pier Foundation Design Parameters

Depth * (feet)	Description **	Allowable Skin Friction (psf)	Allowable End Bearing Pressure (psf)	Allowable Passive Pressure (psf)	Internal Angle of Friction (Degree)	Cohesion (psf)	Lateral Subgrade Modulus (pci)	Strain, $\&_{50}$ (in/in)
0 – 3	Topsoil and Elastic Silt	Ignore	Ignore	Ignore	-	-	Ignore	Ignore
3 – 18.5	Elastic Silt	375	Ignore	1000	0	1000	80	0.009
18.5 – 28.5	Shale and Limestone ***	5,000***	50,000	10,000***	0	70,000***	3,000	0.00001

* Pier inspection is recommended to adjust pier length if variable soil/rock conditions are encountered.
** A total unit weight of 120 and 150 pcf can be estimated for the lean clay and bedrock, respectively.
*** The pier should be embedded a minimum of 3 feet into the bedrock to mobilize these higher rock strength parameters. Furthermore, it is assumed the rock socket will be extended using coring techniques rather than blasting/shooting.

The above indicated cohesion, friction angle, lateral subgrade modulus and strain values have no factors of safety, and the allowable skin friction and the passive resistances have factors of safety of 2. The cohesion, internal friction angle, lateral subgrade modulus and strain values given in the above table are based on the boring, published correlation values and Terracon's past experience with similar soil/rock types. These values should, therefore, be considered approximate. The allowable end bearing pressure provided in the table has an approximate factor of safety of at least 3. Total settlement of drilled piers designed using the above parameters is not anticipated to exceed ½ inch.

The upper 3 feet of topsoil and silt should be ignored due to the potential affects of frost action and construction disturbance. To avoid a reduction in uplift and lateral resistance caused by variable bedrock depths and bedrock quality, it is recommended that a minimum pier length and minimum bedrock socket length be stated on the design drawings. Bedrock was encountered in our boring below a depth of about 18½ feet, but could vary between tower legs, or if the tower is moved from the location of our boring. Considering the site geology, variable rock depths should be anticipated if the tower location is moved from the location of the boring. If the tower center is moved from the planned location, Terracon should be notified to review the recommendations and determine whether an additional boring is required. To facilitate pier length adjustments that may be necessary because of variable rock conditions, it is recommended that a Terracon representative observe the drilled pier excavation.

Although the boring was able to penetrate the highly weathered shale fragments encountered below a depth of about 13½ feet, there is a possibility that larger diameter drilled pier equipment will refuse on this material or at higher elevations than shown in our boring. The contractor should recognize the hardness of the material and be prepared to use rock teeth or other means to extend through these layers.

A drilled pier foundation should be designed with a minimum shaft diameter of 30 inches to facilitate clean out and possible dewatering of the pier excavation. Temporary casing may be required during the pier excavation in order to control possible groundwater seepage and support the sides of the excavation in weak soil zones. Care should be taken so that the sides and bottom of the excavations are not disturbed during construction. The bottom of the shaft should be free of loose soil or debris prior to reinforcing steel and concrete placement.

A concrete slump of at least 6 inches is recommended to facilitate temporary casing removal. It should be possible to remove the casing from a pier excavation during concrete placement provided that the concrete inside the casing is maintained at a sufficient level to resist any earth and hydrostatic pressures outside the casing during the entire casing removal procedure.

Due to the voids encountered in the rock core samples, it is imperative that Terracon be retained to observe the drilled pier prior to concrete placement.

5.2 Equipment Building Foundations

The proposed equipment shed may be supported on shallow footings bearing on stiff natural soils. The equipment building foundations should be dimensioned using a net allowable soil bearing pressure of 2,000 pounds per square foot (psf). In using net allowable soil pressures for footing dimensioning, the weight of the footings and backfill over the footings need not be considered. Furthermore, the footings should be at least 12 inches wide and a minimum of 2.0 feet square.

The geotechnical engineer or a qualified representative should observe the foundation excavations to verify that the bearing materials are suitable for support of the proposed loads. If, at the time of such observation, any soft soils are encountered at the design foundation elevation, the excavations should be extended downward so that the footings rest on stiff soils. If it is inconvenient to lower the footings, the proposed footing elevations may be re-established by backfilling after the undesirable material has been removed.

The recommended soil bearing value should be considered an upper limit, and any value less than that listed above would be acceptable for the foundation system. Using the value given, total settlement would be about 1 inch or less with differential settlements being less than 75 percent of total settlement. Footings should be placed at a depth of 2.0 feet, or greater, below finished exterior grade for protection against frost damage.

5.3 Parking and Drive Areas

The drive that accesses the site will be surfaced with crushed stone. Parking and drive areas that are surfaced with crushed stone should have a minimum thickness of 6 inches

and be properly placed and compacted as outlined herein. The crushed stone should meet Kentucky Transportation Cabinet specifications and applicable local codes.

A paved section consisting only of crushed graded aggregate base course should be considered a high maintenance section. Regular care and maintenance is considered essential to the longevity and use of the section. Site grades should be maintained in such a manner as to allow for adequate surface runoff. Any potholes, depressions or excessive rutting that may develop should be repaired as soon as possible to reduce the possibility of degrading the soil subgrade.

5.4 Site Preparation

Site preparation should begin with the removal of any topsoil, loose, soft or otherwise unsuitable materials from the construction area. The geotechnical engineer should evaluate the actual stripping depth, along with any soft soils that require undercutting at the time of construction.

Any fill and backfill placed on the site should consist of approved materials that are free of organic matter and debris. Suitable fill material should consist of either granular material or low-plasticity cohesive soil. Low-plasticity cohesive soil should have a liquid limit of less than 45 percent and a plasticity index of less than 25 percent. Based on our limited testing to date, the onsite soils are not considered suitable for re-use as structural fill. It is recommended that during construction any off-site soils should be further tested and evaluated prior to use as fill. Fill should not contain frozen material and it should not be placed on a frozen subgrade.

The fill should be placed and compacted in lifts of 9 inches or less in loose thickness. Fill placed below structures or used to provide lateral resistance should be compacted to at least 98 percent of the material's maximum standard Proctor dry density (ASTM D-698). Fill should be placed, compacted, and maintained at moisture contents within minus 1 to plus 3 percent of the optimum value determined by the standard Proctor test.

The geotechnical engineer should be retained to monitor fill placement on the project and to perform field density tests as each lift of fill is placed in order to evaluate compliance with the design requirements. Standard Proctor and Atterberg limits tests should be performed on the representative samples of fill materials before their use on the site.

5.5 Resistivity Analysis

Resistivity of the subsurface soils was measured at the site using a Nilsson Model 400 soil resistivity meter. The Wenner Vertical Profiling Method was used. With this array, potential electrodes are centered on a traverse line between the current electrodes and an equal "A" spacing between electrodes is maintained. Resistivity measurements were taken along 2 traverses located along the perimeter of the proposed tower compound. Individual resistivity

values at 5, 10, 15, 20, 30, 40, 50 and 60 foot spacings are presented on the soil resistivity test sheet in the Appendix.

6.0 GENERAL COMMENTS

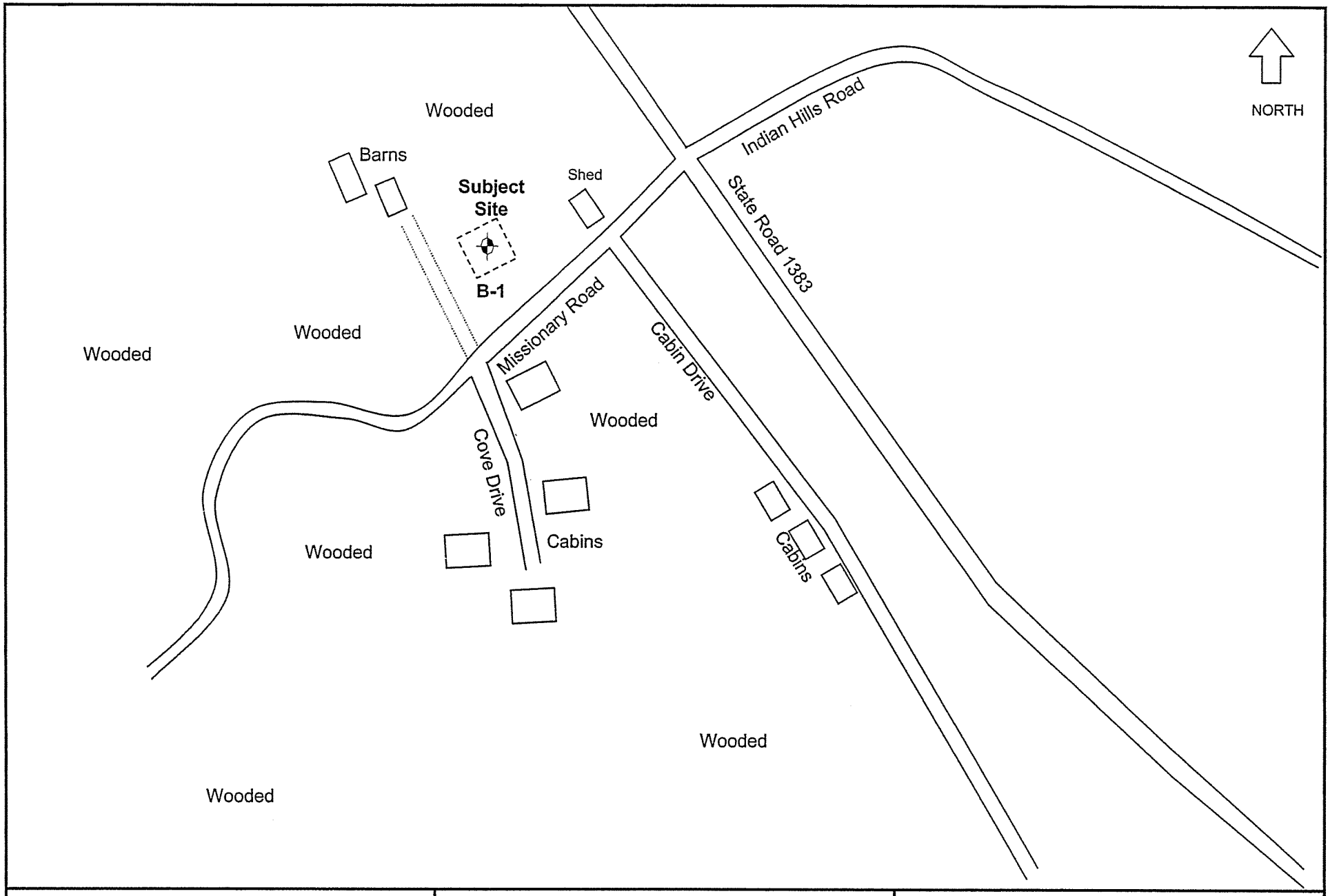
Terracon should be retained to review the final design plans and specifications so comments can be made regarding interpretation and implementation of our geotechnical recommendations in the design and specifications. Terracon also should be retained to provide testing and observation during excavation, grading, foundation and construction phases of the project.

The analysis and recommendations presented in this report are based upon the data obtained from the boring performed at the indicated location and from other information discussed in this report. This report does not reflect variations that may occur across the site, between the tower legs or due to the modifying effects of weather. The nature and extent of such variations may not become evident until during or after construction. If variations appear, we should be immediately notified so that further evaluation and supplemental recommendations can be provided.

The scope of services for this project does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either express or implied, are intended or made. Site safety, excavation support, and dewatering requirements are the responsibility of others. In the event that changes in the nature, design, or location of the project as outlined in this report are planned, the conclusions and recommendations contained in this report shall not be considered valid unless Terracon reviews the changes and either verifies or modifies the conclusions of this report in writing.

APPENDIX



BORING LOCATION DIAGRAM

SCALE: NTS

Terracon

RSB Design
Alligator Communication Tower
Indian Hills, Kentucky
PROJECT NO. 57057391G

LOG OF BORING NO. B-1

CLIENT: **RSB DESIGN**

SITE: **INDIAN HILLS, KENTUCKY**

PROJECT: **ALLIGATOR COMMUNICATION TOWER**

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - N BLOWS / ft.	TESTS WATER CONTENT, %	TESTS DRY UNIT WT pcf	TESTS UNCONFINED STRENGTH, psf	ATTERBERG LIMITS
	ELASTIC SILT, yellowish brown, soft, stiff and very stiff		MH	1	SS	14	10	34			
			MH	2	SS	14	15	23			LL=61 PL=32 PI=29
		5	MH	3	SS	16	11	39			
			MH	4	SS	18	4	51			
		10									
	-with shale fragments below 13.5 feet		MH	5	SS	16	70	21			
		15									
	18.5 **Auger Refusal at 18.5 feet, Began Coring**										
	SHALE, closely to moderately closely jointed, dark gray, hard	20		6	DB	68%	RQD 48%			5800 psi	
	23 **LIMESTONE,** closely to moderately closely jointed, light gray, hard -void from 25 to 26 feet	25									
	-void from 27 to 28 feet										
	28.5 **BORING TERMINATED AT 28.5 FEET**										

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

WATER LEVEL OBSERVATIONS, ft		
WL	▽	▼
WL	▼	▼
WL	Dry upon auger completion	

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BORING STARTED	12-28-05		
BORING COMPLETED	12-28-05		
RIG	B-61	FOREMAN	JS
APPROVED	JLT	JOB #	57057391G

Terracon

Project: Alligator
Project No.: 57057391G
Perfomed By: MT
Checked By: JLT

Soil Resistivity

ASTM G57 Test Method for Field Measurement of Soil Resistivity Using Wenner Four - Electrode Method

At-Grade Measurements (equal rod spacing)

Location	Depth of Interest (feet)	Electrode Spacing from Center (feet)		Resistance (ohms)		Resistivity (ohm-cm)
		Inner	Outer	Dial Reading	Range Switch	
A- A'	5	2.5	7.5	5.2	10.0	49790
	10	5	15	3.0	10.0	57450
	15	7.5	22.5	1.6	10.0	45960
	20	10	30	1.3	10.0	49790
	30	15	45	0.2	10.0	11490
	40	20	60	4.2	1.0	32172
	60	30	90	1.2	1.0	13788
	80	40	120			
	100	50	150			
B-B'	5	2.5	7.5	7.0	10.0	67025
	10	5	15	3.2	10.0	61280
	15	7.5	22.5	1.8	10.0	51705
	20	10	30	7.2	1.0	27576
	30	15	45	4.1	1.0	23555
	40	20	60	2.8	1.0	21448
	60	30	90	1.0	1.0	11490
	80	40	120			
	100	50	150			

Resisitivity (ohm-cm) = $2*\pi*a*R*30.48$
R = resistivity (dial reading*range switch)
a = electrode spacing

Equipent Usage: Nilsson Soil Resistance Meter - Model 400

Additional Notes: General site layout limited length and number of traverses

GENERAL NOTES

DRILLING & SAMPLING SYMBOLS:

SS:	Split Spoon - 1-3/8" I.D., 2" O.D., unless otherwise noted	HS:	Hollow Stem Auger
ST:	Thin-Walled Tube - 2" O.D., unless otherwise noted	PA:	Power Auger
RS:	Ring Sampler - 2.42" I.D., 3" O.D., unless otherwise noted	HA:	Hand Auger
DB:	Diamond Bit Coring - 4", N, B	RB:	Rock Bit
BS:	Bulk Sample or Auger Sample	WB:	Wash Boring or Mud Rotary

The number of blows required to advance a standard 2-inch O.D. split-spoon sampler (SS) the last 12 inches of the total 18-inch penetration with a 140-pound hammer falling 30 inches is considered the "Standard Penetration" or "N-value".

WATER LEVEL MEASUREMENT SYMBOLS:

WL:	Water Level	WS:	While Sampling	N/E:	Not Encountered
WCI:	Wet Cave in	WD:	While Drilling		
DCI:	Dry Cave in	BCR:	Before Casing Removal		
AB:	After Boring	ACR:	After Casing Removal		

Water levels indicated on the boring logs are the levels measured in the borings at the times indicated. Groundwater levels at other times and other locations across the site could vary. In pervious soils, the indicated levels may reflect the location of groundwater. In low permeability soils, the accurate determination of groundwater levels may not be possible with only short-term observations.

DESCRIPTIVE SOIL CLASSIFICATION: Soil classification is based on the Unified Classification System. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse-grained soils are defined on the basis of their in-place relative density and fine-grained soils on the basis of their consistency.

CONSISTENCY OF FINE-GRAINED SOILS

Unconfined Compressive Strength, Qu, psf	Standard Penetration or N-value (SS) Blows/Ft.	Consistency
< 500	<2	Very Soft
500 – 1,000	2-4	Soft
1,001 – 2,000	5-7	Medium Stiff
2,001 – 4,000	8-15	Stiff
4,001 – 8,000	16-30	Very Stiff
8,000+	30+	Hard

RELATIVE DENSITY OF COARSE-GRAINED SOILS

Standard Penetration or N-value (SS) Blows/Ft.	Relative Density
0 – 3	Very Loose
4 – 9	Loose
10 – 29	Medium Dense
30 – 49	Dense
50+	Very Dense

RELATIVE PROPORTIONS OF SAND AND GRAVEL

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	< 15
With	15 – 29
Modifier	> 30

GRAIN SIZE TERMINOLOGY

Major Component of Sample	Particle Size
Boulders	Over 12 in. (300mm)
Cobbles	12 in. to 3 in. (300mm to 75 mm)
Gravel	3 in. to #4 sieve (75mm to 4.75 mm)
Sand	#4 to #200 sieve (4.75mm to 0.075mm)
Silt or Clay	Passing #200 Sieve (0.075mm)

RELATIVE PROPORTIONS OF FINES

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	< 5
With	5 – 12
Modifiers	> 12

PLASTICITY DESCRIPTION

Term	Plasticity Index
Non-plastic	0
Low	1-10
Medium	11-30
High	30+

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GENERAL NOTES

Description of Rock Properties

WEATHERING

Fresh	Rock fresh, crystals bright, few joints may show slight staining. Rock rings under hammer if crystalline.
Very slight	Rock generally fresh, joints stained, some joints may show thin clay coatings, crystals in broken face show bright. Rock rings under hammer if crystalline.
Slight	Rock generally fresh, joints stained, and discoloration extends into rock up to 1 in. Joints may contain clay. In granitoid rocks some occasional feldspar crystals are dull and discolored. Crystalline rocks ring under hammer.
Moderate	Significant portions of rock show discoloration and weathering effects. In granitoid rocks, most feldspars are dull and discolored; some show clayey. Rock has dull sound under hammer and shows significant loss of strength as compared with fresh rock.
Moderately severe	All rock except quartz discolored or stained. In granitoid rocks, all feldspars dull and discolored and majority show kaolinization. Rock shows severe loss of strength and can be excavated with geologist's pick.
Severe	All rock except quartz discolored or stained. Rock "fabric" clear and evident, but reduced in strength to strong soil. In granitoid rocks, all feldspars kaolinized to some extent. Some fragments of strong rock usually left.
Very severe	All rock except quartz discolored or stained. Rock "fabric" discernible, but mass effectively reduced to "soil" with only fragments of strong rock remaining.
Complete	Rock reduced to "soil". Rock "fabric" not discernible or discernible only in small, scattered locations. Quartz may be present as dikes or stringers.

HARDNESS (for engineering description of rock – not to be confused with Moh's scale for minerals)

Very hard	Cannot be scratched with knife or sharp pick. Breaking of hand specimens requires several hard blows of geologist's pick.
Hard	Can be scratched with knife or pick only with difficulty. Hard blow of hammer required to detach hand specimen.
Moderately hard	Can be scratched with knife or pick. Gouges or grooves to ¼ in. deep can be excavated by hard blow of point of a geologist's pick. Hand specimens can be detached by moderate blow.
Medium	Can be grooved or gouged 1/16 in. deep by firm pressure on knife or pick point. Can be excavated in small chips to pieces about 1-in. maximum size by hard blows of the point of a geologist's pick.
Soft	Can be gouged or grooved readily with knife or pick point. Can be excavated in chips to pieces several inches in size by moderate blows of a pick point. Small thin pieces can be broken by finger pressure.
Very soft	Can be carved with knife. Can be excavated readily with point of pick. Pieces 1-in. or more in thickness can be broken with finger pressure. Can be scratched readily by fingernail.

Joint, Bedding and Foliation Spacing in Rock[a]

Spacing	Joints	Bedding/Foliation
Less than 2 in.	Very close	Very thin
2 in. – 1 ft.	Close	Thin
1 ft. – 3 ft.	Moderately close	Medium
3 ft. – 10 ft.	Wide	Thick
More than 10 ft.	Very wide	Very thick

Rock Quality Designator (RQD)[b]		Joint Openness Descriptors	
RQD, as a percentage	Diagnostic description	Openness	Descriptor
Exceeding 90	Excellent	No Visible Separation	Tight
90 – 75	Good	Less than 1/32 in.	Slightly Open
75 – 50	Fair	1/32 to 1/8 in.	Moderately Open
50 – 25	Poor	1/8 to 3/8 in.	Open
Less than 25	Very poor	3/8 in. to 0.1 ft.	Moderately Wide
		Greater than 0.1 ft.	Wide

a. Spacing refers to the distance normal to the planes, of the described feature, which are parallel to each other or nearly so.
b. RQD (given as a percentage) = length of core in pieces 4 in. and longer/length of run.

References: American Society of Civil Engineers. Manuals and Reports on Engineering Practice - No. 56. Subsurface Investigation for Design and Construction of Foundations of Buildings. New York: American Society of Civil Engineers, 1976.
U.S. Department of the Interior, Bureau of Reclamation, Engineering Geology Field Manual.

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UNIFIED SOIL CLASSIFICATION SYSTEM

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests[A]					Soil Classification	
					Group Symbol	Group Name[B]
Coarse Grained Soils More than 50% retained on No. 200 sieve	Gravels More than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels Less than 5% fines[C]	$Cu \geq 4$ and $1 \leq Cc \leq 3$[E]		GW	Well-graded gravel[F]
			$Cu < 4$ and/or $1 > Cc > 3$[E]		GP	Poorly graded gravel[F]
		Gravels with Fines More than 12% fines[C]	Fines classify as ML or MH		GM	Silty gravel[F,G,H]
			Fines classify as CL or CH		GC	Clayey gravel[F,G,H]
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean Sands Less than 5% fines[D]	$Cu \geq 6$ and $1 \leq Cc \leq 3$[E]		SW	Well-graded sand[I]
			$Cu < 6$ and/or $1 > Cc > 3$[E]		SP	Poorly graded sand[I]
		Sands with Fines More than 12% fines[D]	Fines classify as ML or MH		SM	Silty sand[G,H,I]
			Fines Classify as CL or CH		SC	Clayey sand[G,H,I]
Fine-Grained Soils 50% or more passes the No. 200 sieve	Silts and Clays Liquid limit less than 50	inorganic	PI > 7 and plots on or above "A" line[J]		CL	Lean clay[K,L,M]
			PI < 4 or plots below "A" line[J]		ML	Silt[K,L,M]
		organic	Liquid limit - oven dried / Liquid limit - not dried	< 0.75	OL	Organic clay[K,L,M,N] / Organic silt[K,L,M,O]
	Silts and Clays Liquid limit 50 or more	inorganic	PI plots on or above "A" line		CH	Fat clay[K,L,M]
			PI plots below "A" line		MH	Elastic Silt[K,L,M]
		organic	Liquid limit - oven dried / Liquid limit - not dried	< 0.75	OH	Organic clay[K,L,M,P] / Organic silt[K,L,M,Q]
Highly organic soils	Primarily organic matter, dark in color, and organic odor				PT	Peat

[A] Based on the material passing the 3-in. (75-mm) sieve

[B] If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

[C] Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

[D] Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay

[E] $Cu = D_{60}/D_{10}$ $\quad Cc = \dfrac{(D_{30})^2}{D_{10} \times D_{60}}$

[F] If soil contains ≥ 15% sand, add "with sand" to group name.

[G] If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

[H] If fines are organic, add "with organic fines" to group name.

[I] If soil contains ≥ 15% gravel, add "with gravel" to group name.

[J] If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

[K] If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

[L] If soil contains ≥ 30% plus No. 200 predominantly sand, add "sandy" to group name.

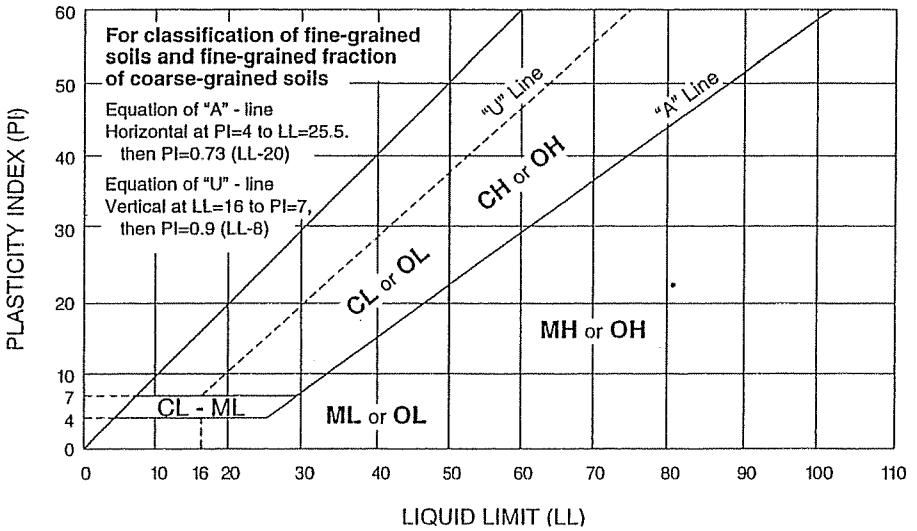
[M] If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.

[N] PI ≥ 4 and plots on or above "A" line.

[O] PI < 4 or plots below "A" line.

[P] PI plots on or above "A" line.

[Q] PI plots below "A" line.



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SHEET 1

S1/1 – VICINITY AND 500' STRUCTURAL MAP

S1/2 – ABUTTING PROPERTY OWNERS

S1/3 – U.S.G.S. QUAD MAP

SHEET 2

S2/1 – PROPOSED LEASE AREA

S2/2 – LEGAL DESCRIPTIONS

S2/3 – FLOOD ZONE DATA

COORDINATE POINT LOCATION

NAD 1983
LATITUDE: 36° 59' 34.14"
LONGITUDE: 84° 56' 03.72"
NAVD 1988
ELEVATION: 957'
KENTUCKY STATE PLANE COORDINATE SOUTH ZONE (BLUE MARBLE GEOGRAPHIC CALCULATOR VERSION 3.0)
NORTHING: 1831556.66
EASTING: 1878622.59

POWER POLE

UTILITY COMPANY: SOUTH KY RECC
IDENTIFICATION #: 155229

PROJECT BENCHMARK

NORTH: 1831491.4049
EAST: 1878616.9557
ELEVATION: 957.98' AMSL
LOCATION: BEING A SET IPC STAMPED "FSTAN #3282" LOCATED 25'± EAST OF A GRAVEL ROAD & 23'± NORTHWEST OF MISSIONARY DRIVE.

SYMBOL LEGEND

- WOOD POWER POLE
- LIGHT POLE
- TELEPHONE PEDESTAL
- GUY ANCHOR
- MANHOLE
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- ELECTRIC BOX
- F.P. FENCE POST
- SET #5 REBAR (UNLESS OTHERWISE NOTED)
- EXISTING #5 REBAR (UNLESS OTHERWISE NOTED)

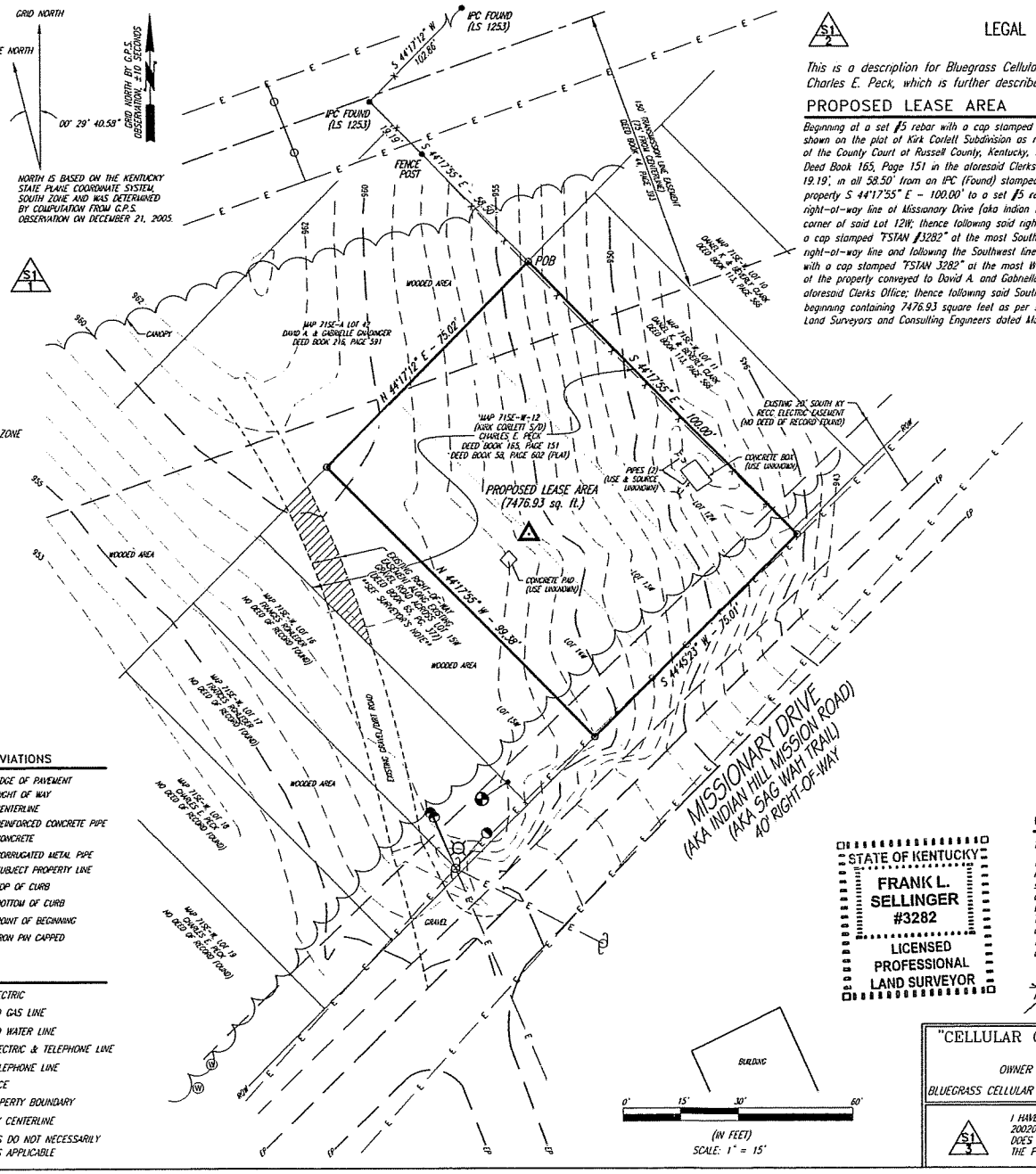
ABBREVIATIONS

EP	EDGE OF PAVEMENT
ROW	RIGHT OF WAY
℄	CENTERLINE
RCP	REINFORCED CONCRETE PIPE
CONC	CONCRETE
CMP	CORRUGATED METAL PIPE
PL	SUBJECT PROPERTY LINE
TC	TOP OF CURB
BC	BOTTOM OF CURB
POB	POINT OF BEGINNING
IPC	IRON PIN CAPPED

LINE LEGEND

- E—E—E— OVERHEAD ELECTRIC
- G—G—G— UNDERGROUND GAS LINE
- W—W—W— UNDERGROUND WATER LINE
- E/T—E/T—E/T— OVERHEAD ELECTRIC & TELEPHONE LINE
- T—T— OVERHEAD TELEPHONE LINE
- X—X—X— EXISTING FENCE
- SUBJECT PROPERTY BOUNDARY
- RIGHT OF WAY CENTERLINE

NOTE: SYMBOLS, ABBREVIATIONS, AND LINESTYLES DO NOT NECESSARILY APPEAR ON DRAWING(S). USE ONLY AS APPLICABLE



LEGAL DESCRIPTIONS:

S1/2

This is a description for Bluegrass Cellular, of an area to be leased from the property of Charles E. Peck, which is further described as follows:

PROPOSED LEASE AREA

Beginning at a set #5 rebar with a cap stamped "FSTAN #3282" at the most Northerly corner of Lot 12W as shown on the plat of Kirk Corlett Subdivision as recorded in Deed Book 58, Page 602 in the Office of the Clerk of the County Court of Russell County, Kentucky, said property being conveyed to Charles E. Peck as recorded in Deed Book 165, Page 151 in the aforesaid Clerks Office, said point being S 44°17'55" E passing a fence post at 19.19', in all 58.50' from an IPC (Found) stamped "LS1253"; thence following the Northeast line of said Peck property S 44°17'55" E – 100.00' to a set #5 rebar with a cap stamped "FSTAN #3282" on the Northwest right-of-way line of Missionary Drive (aka Indian Hill Mission Road and Sag Wah Trail) at the most Easterly corner of said Lot 12W; thence following said right-of-way line S 44°45'23" W – 75.01' to a set #5 rebar with a cap stamped "FSTAN #3282" at the most Southerly corner of Lot 14W of said subdivision; thence leaving said right-of-way line and following the Southwest line of said Lot 14W N 44°17'55" W – 99.38' to a set #5 rebar with a cap stamped "FSTAN 3282" at the most Westerly corner of said Lot 14W, which is on the Southeast line of the property conveyed to David A. and Gabrielle Gnadinger as recorded in Deed Book 216, Page 591 in the aforesaid Clerks Office; thence following said Southeast line N 44°17'12" E – 75.02' to the true point of beginning containing 7476.93 square feet as per survey by Frank L. Sellinger, II, PLS No. 3282 with F.S./Tan Land Surveyors and Consulting Engineers dated March 7, 2006.

UNDERGROUND UTILITIES
CALL 2 WORKING DAYS
BEFORE YOU DIG
INDIANA 1-800-382-5544
KENTUCKY 1-800-752-6007
UTILITIES PROTECTION SERVICE
NON-MEMBERS MUST CALL DIRECTLY

The utility information shown on this plat, prepared by FSTAN was obtained from existing records and or by field locations. It is the contractor's responsibility to verify their existence and location, and to contact the appropriate utility company for field locations.

SURVEYORS NOTES

SOURCE OF BEARING IS A G.P.S. OBSERVATION ON DECEMBER 21, 2005.

SITE SHOWN SUBJECT TO RIGHT OF WAYS AND EASEMENTS SHOWN HEREON OR NOT.

NO SEARCH OF PUBLIC RECORDS HAS BEEN PERFORMED BY THIS FIRM TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE PARENT TRACT.

THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY.

EXISTING CONTOURS ARE AT ONE FOOT INTERVALS.

THE ALLIGATOR CELL SITE IS NOT WITHIN THE CITY LIMITS OF RUSSELL SPRINGS, KY AND THEREFORE IS NOT UNDER THE JURISDICTION OF THE RUSSELL SPRINGS PLANNING AND ZONING COMMISSION.

** THIS EASEMENT IS ONLY FOR THE SECTION OF THE REAL PROPERTY ON LOT 15W THAT THE EXISTING ROAD CROSSES. **

LAND SURVEYOR'S CERTIFICATE

TYPE "A" SURVEY: UNADJUSTED TRAVERSE CLOSURE BETTER THAN 1 IN 10,000.

TO ALL PARTIES INTERESTED IN TITLE TO PREMISES SURVEYED
I hereby certify that this plat and survey were made under my supervision, and that the angular and linear measurements, as witnessed by monuments shown hereon, are true and correct to the best of my knowledge and belief.
This survey and plat meets or exceeds the minimum standards of the governing authorities.
This property is subject to any recorded easements or right of ways not shown hereon.

STATE OF KENTUCKY
FRANK L. SELLINGER
#3282
LICENSED PROFESSIONAL LAND SURVEYOR

3-7-06
Frank L. Sellinger, II Ky. Reg. No. 3282

"CELLULAR COMMUNICATION TOWER SITE SURVEY"
REFERENCED AS "EXHIBIT B"

OWNER APPROVAL: _____ DATE: _____

BLUEGRASS CELLULAR APPROVAL: _____ DATE: _____

S1/3 I HAVE REVIEWED THE FLOOD INSURANCE RATE MAPS (FIRM) MAP NO. 21207C 0075 B DATED 9-28-1990 AND THE PROPOSED LEASE AREA DOES NOT APPEAR TO BE IN A FLOOD PRONE AREA. THE PROPOSED LEASE AREA IS LOCATED IN ZONE X.

BLUEGRASS CELLULAR
2902 RING ROAD
ELIZABETHTOWN, KY 42702

FSTAN
F.S. Land Company
T. Alan Neal Company
Land Surveyors and Consulting Engineers
PO Box 17546 2313/2315 Crittenden Drive
Louisville, KY 40217
Phone: (502) 635-5866 (502) 635-5111
Fax: (502) 636-5283

SITE NUMBER:

SITE NAME:
ALLIGATOR

SITE ADDRESS:
57 MISSIONARY DRIVE
RUSSELL SPRINGS, KY 42642

PROPOSED LEASE AREA:
AREA = 7476.93 sq. ft.

PROPERTY OWNER:
CHARLES E. PECK
203 DOWELL ROAD
RUSSEL SPRINGS, KY 42642

MAP NUMBER:
71SE-W

PARCEL NUMBER:
12-15

SOURCE OF TITLE:
DEED BOOK 165, PAGE 151

DWG BY:	CHKD BY:	DATE:
JMW	FSII	02.01.06

FSTAN PROJECT NO.:
05-3758

SHEET 2 OF 2

REVISIONS:
EXISTING EASEMENT - 03.02.06
LEASE AREA - 03.07.06

C2

BLUEGRASS CELLULAR

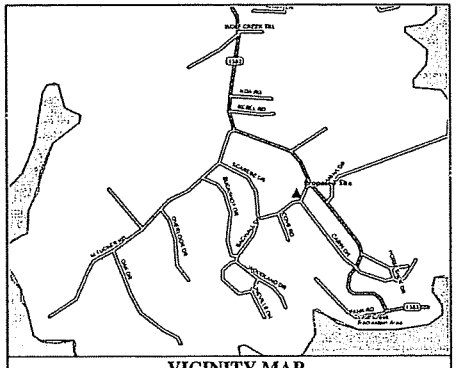
APPROVAL SIGNATURES	
BLUEGRASS CELLULAR CONSTRUCTION SUPERVISOR:	
DATE:	
CITY REPRESENTATIVE:	
TITLE:	
DATE:	
PROPERTY OWNER/OWNERS:	
DATE:	
TOWER OWNER/OWNERS:	
DATE:	

SITE NAME: **ALLIGATOR**

911 ADDRESS: **57 MISSIONARY DRIVE RUSSELL SPRINGS, KY. 42642**

COUNTY: **RUSSELL**

TOWER LATITUDE & LONGITUDE
N 36* 59' 34.14" W 84* 56' 03.72"



VICINITY MAP
NOT TO SCALE

DIRECTIONS TO SITE

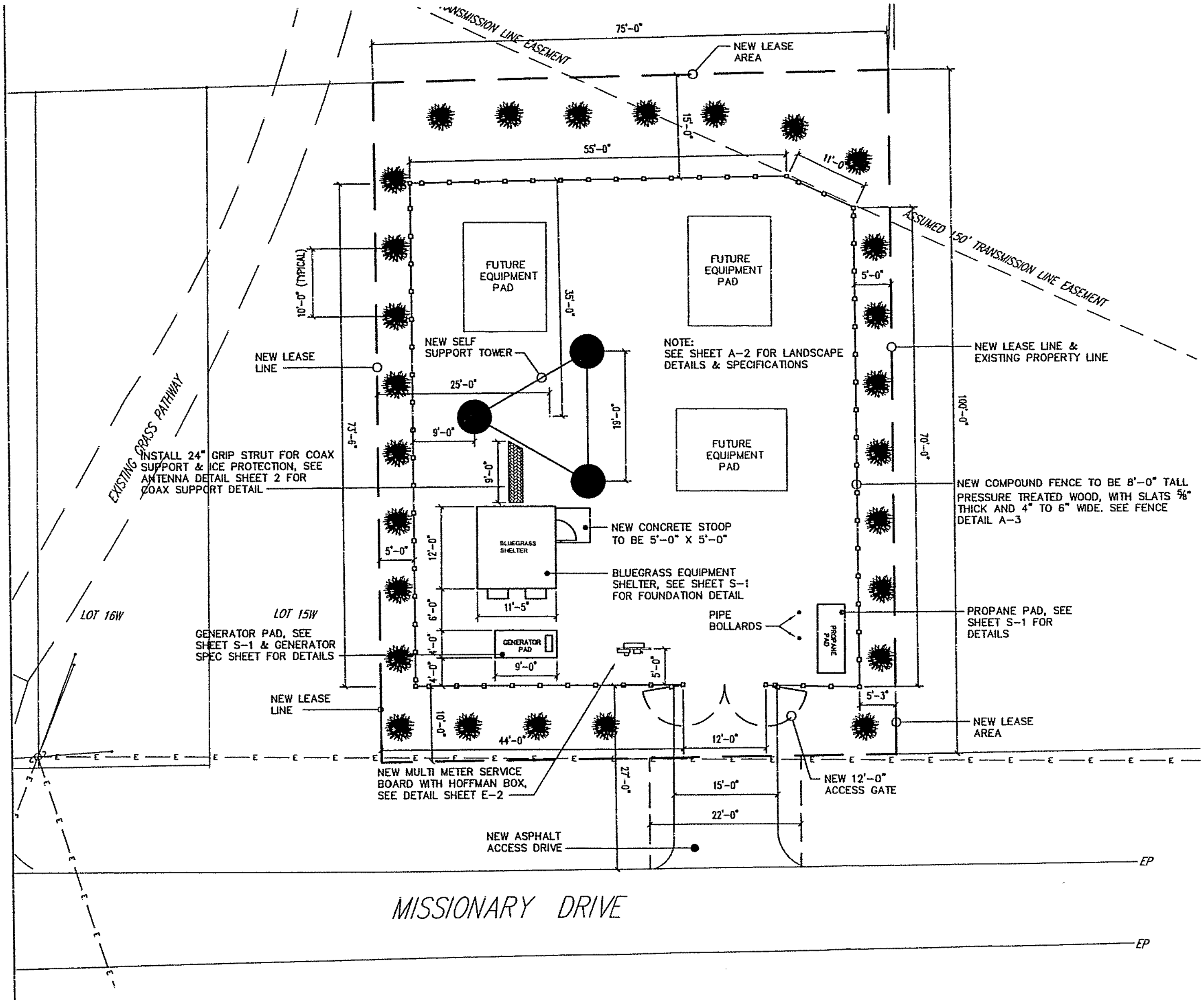
From Elizabethtown, Kentucky, Take Hwy. 61 south towards Hodgenville, Kentucky. Go through Hodgenville and stay on Hwy. 61 south through Greensburg, KY. and travel to Columbia, KY. In Columbia, take Hwy. 80 east through Russell Springs, KY. Stay on Hwy. 80 East until you get to the Junction S.R. 80 & S.R. 76. Turn right on S.R. 76 and travel south to S.R. 1383 on the right. Turn right on S.R. 1383 and follow back to a street on the right called Missionary Drive. After turning right on Missionary Drive watch for site on right side of road at crest of the hill.

SHEET INDEX

SHEET NO.	DESCRIPTION	REVISION
TITLE SHEET	TITLE SHEET	
SITE SURVEY	SITE SURVEY	
A-1	SITE PLAN	
A-2	LANDSCAPE PLAN	
A-3	FENCE DETAILS	
ANTENNA DETAILS 1	ANT.SPECS/TOWER ELEV.	
ANTENNA DETAILS 2	ANTENNA DETAILS 2	
E-1	SITE PLAN - ELECTRICAL	
E-2	ELECTRICAL DETAILS	
E-3	ELEC. PLAN - GROUNDING	
E-4	GROUNDING DETAILS	
S-1	FOUNDATION DETAILS	
GENERATOR DETAIL	GENERATOR DETAIL	
GENERAL NOTES	GENERAL NOTES	

SITE DATA

PROPERTY OWNER:	MR. DR. CHARLES PECK
TOWER OWNER:	BLUEGRASS CELLULAR (270) 789-0339
POWER COMPANY:	SOUTH KY. RECC (606) 875-5736
TELEPHONE COMPANY:	N.A.
BLUEGRASS CONSTRUCTION SUPERVISOR:	LEE HILL (270)734-1028


75'-0"
NEW LEASE AREA
TRANSMISSION LINE EASEMENT
15'-0"
55'-0"
11'-0"
ASSUMED 150' TRANSMISSION LINE EASEMENT
10'-0" (TYPICAL)
FUTURE EQUIPMENT PAD
FUTURE EQUIPMENT PAD
35'-0"
5'-0"
NEW SELF SUPPORT TOWER
NOTE: SEE SHEET A-2 FOR LANDSCAPE DETAILS & SPECIFICATIONS
NEW LEASE LINE
NEW LEASE LINE & EXISTING PROPERTY LINE
25'-0"
19'-0"
100'-0"
73'-6"
9'-0"
70'-0"
EXISTING GRASS PATHWAY
FUTURE EQUIPMENT PAD
INSTALL 24" GRIP STRUT FOR COAX SUPPORT & ICE PROTECTION, SEE ANTENNA DETAIL SHEET 2 FOR COAX SUPPORT DETAIL
9'-0"
NEW COMPOUND FENCE TO BE 8'-0" TALL PRESSURE TREATED WOOD, WITH SLATS ⅝" THICK AND 4" TO 6" WIDE. SEE FENCE DETAIL A-3
NEW CONCRETE STOOP TO BE 5'-0" X 5'-0"
BLUEGRASS SHELTER
5'-0"
12'-0"
BLUEGRASS EQUIPMENT SHELTER, SEE SHEET S-1 FOR FOUNDATION DETAIL
11'-5"
6'-0"
LOT 16W
LOT 15W
PIPE BOLLARDS
PROPANE PAD
PROPANE PAD, SEE SHEET S-1 FOR DETAILS
GENERATOR PAD, SEE SHEET S-1 & GENERATOR SPEC SHEET FOR DETAILS
GENERATOR PAD
4'-0"
4'-0"
9'-0"
5'-0"
5'-3"
NEW LEASE LINE
10'-0"
44'-0"
12'-0"
NEW LEASE AREA
NEW MULTI METER SERVICE BOARD WITH HOFFMAN BOX, SEE DETAIL SHEET E-2
27'-0"
15'-0"
NEW 12'-0" ACCESS GATE
22'-0"
NEW ASPHALT ACCESS DRIVE
EP
MISSIONARY DRIVE
EP

GENERAL NOTES:

1) EQUIPMENT PICK-UP AND DELIVERY TO SITE FROM BLUEGRASS CELLULAR STAGING FACILITY TO BE THE CONTRACTORS RESPONSIBILITY, INCLUDING CRANE SET, AND ALL COST INCURRED.

2) FOR, BUILDING AND ALL CONCRETE PAD DETAILS REFER TO STRUCTURALS AND SHEET S-1

3) ALL CONCRETE TO HAVE SPECIFIED COATED SEALANT PER STRUCTURAL RECOMMENDATIONS.

4) ANY DAMAGE DUE TO CONSTRUCTION, TO BE REPAIRED OR REPLACED TO ORIGINAL CONDITION. (SUBJECT TO BLUEGRASS CELLULAR'S APPROVAL).

5) ANY DAMAGE OF NATURAL SURROUNDINGS, INCLUDING BUT NOT LIMITED TO, GRASS, TREES, LANDSCAPING, ETC.. TO BE REPAIRED OR REPLACED TO ORIGINAL CONDITION AT BLUEGRASS CELLULAR'S APPROVAL.

6) ROADWAYS TO BE GRADED SMOOTH AND EVEN, REMOVING ALL POTHOLES. ROADS TO HAVE PROPER DRAINAGE AND RUNOFF PER BLUEGRASS CELLULAR'S APPROVAL.

7) ANY RELOCATION OF EXISTING UTILITIES TO BE DONE IN ACCORDANCE WITH LOCAL CODES AND RECOMMENDATIONS, CONSULTING ALL UTILITY COMPANIES INVOLVED FOR APPROVAL AND SPECIFICATIONS REQUIRED.

8) FOR GRADING DETAILS, SEE GENERAL NOTESHEET

9) CONTRACTOR TO FIELD VERIFY ALL TOWER DIMENSIONS WITH TOWER MANUFACTURER PRIOR TO JOB BIDDING OR START OF ANY CONSTRUCTION

10) CONTRACTOR RESPONSIBLE FOR APPLYING FOR SERVICE TO SITE AND PAYING ANY FEES REQUIRED FOR PERMITS, HOOKUP, ETC..

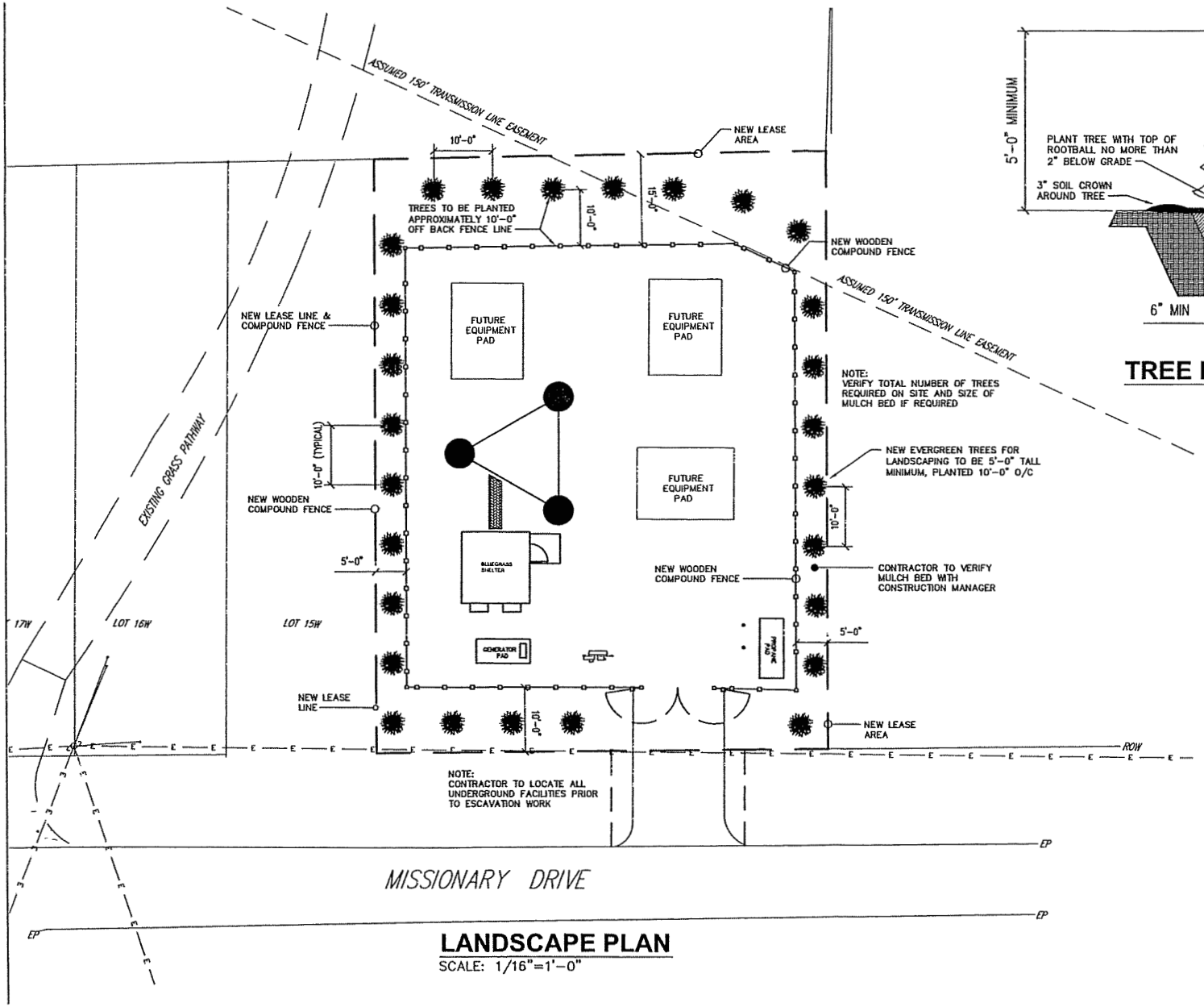
SITE PLAN
SCALE: NONE

RSB DESIGN
5405 MERCURY DRIVE LOUISVILLE, KY 40291

NO.	DATE	REVISION

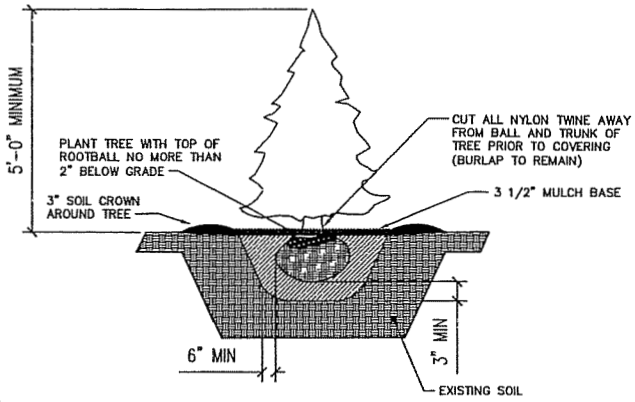
BLUEGRASS CELLULAR, INC.
STANDARD CELLULAR SITE
ALLIGATOR
57 MISSIONARY DR. RUSSELL SPRINGS, KY. 42642

DRAWN BY:	R. BECKER
ISSUE DATE:	01-23-06
SCALE:	LISTED
SHEET NUMBER	A-1



LANDSCAPE PLAN

SCALE: 1/16"=1'-0"



TREE PLANTING DETAIL

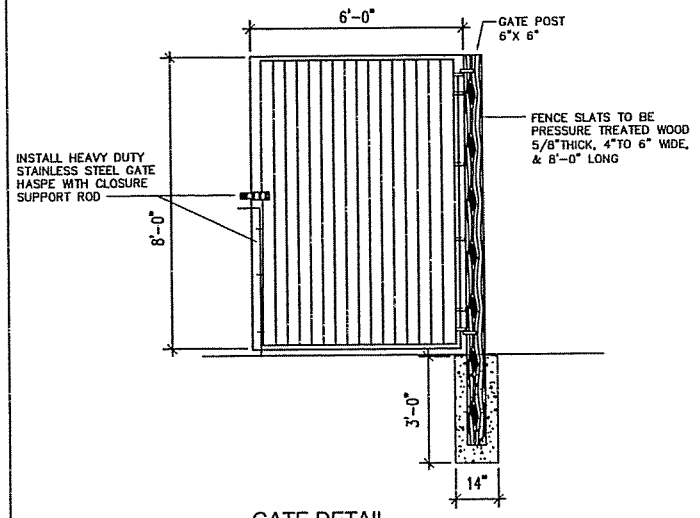
RSB DESIGN
8439 MERCURY DRIVE LOUISVILLE, KY 40291
(502) 509-9427 Fax (502) 231-3256

NO.	DATE	REVISION

BLUEGRASS CELLULAR, INC.
STANDARD CELLULAR SITE
ALLIGATOR
57 MISSIONARY DR. RUSSELL SPRINGS, KY. 42642

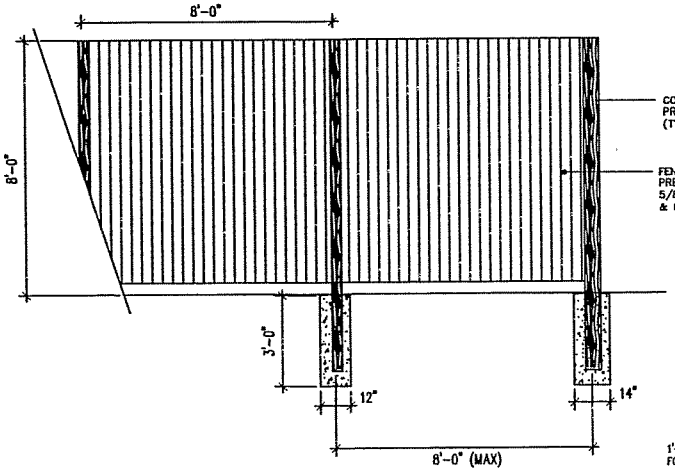
DRAWN BY: R. BECKER
ISSUE DATE: 01-23-06
SCALE: LISTED

SHEET NUMBER
A-2



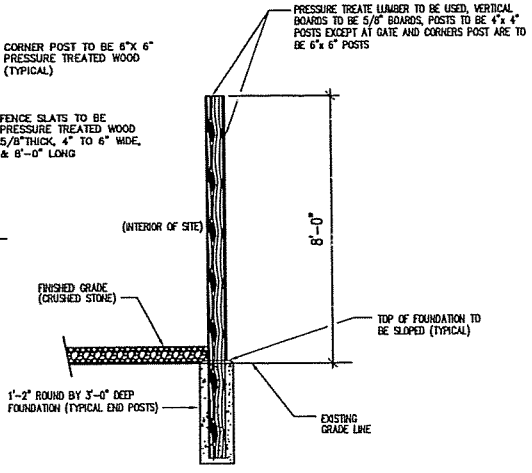
GATE DETAIL

NOT TO SCALE



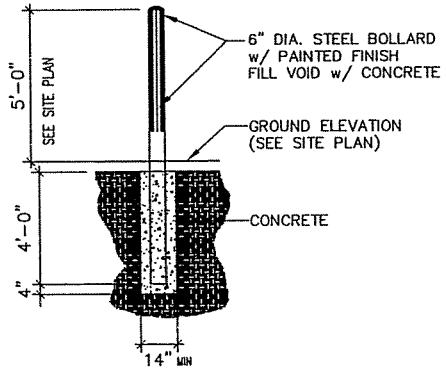
FENCE DETAIL SLATS

NOT TO SCALE



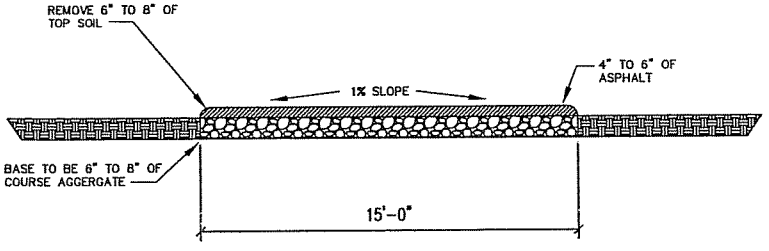
FENCE POSTS (TYPICAL)

NOT TO SCALE



PIPE BOLLARD DETAIL

NOT TO SCALE



ACCESS DRIVE DETAIL

NOT TO SCALE

RSB

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NO.	DATE

BLUEGRASS CELLULAR, INC.
STANDARD CELLULAR SITE
ALLIGATOR
57 MISSIONARY DR. RUSSELL SPRINGS, KY. 42642

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ISSUE DATE: 01-23-06
SCALE: LISTED

SHEET NUMBER
A-3

BLUEGRASS CELLULAR GENERAL NOTES & ANTENNA SPECS

ALL LINES AND ANTENNAS TO BE PROPERLY MOUNTED TO TOWER OR STRUCTURE PER BLUEGRASS CELLULAR SPECIFICATIONS.

ALL GROUND BARS TO BE INSTALLED AND CAD WELDED TO GROUND FIELD (WHERE REQUIRED)

ALL LINES TO BE GROUNDED AT THE TOP AND BASE OF STRUCTURE OR TOWER.

ALL LINES TO BE GROUNDED AT ENTRANCE OF SHELTER BEFORE WAVE GUIDE PORTS. (EXTERIOR OF BUILDING)

LINES ARE TO BE SECURED TO ICE BRIDGE

WAVE-GUIDE BOOTS ARE TO BE INSTALLED ON ALL LINES (BOTH INSIDE AND OUTSIDE)

ALL COAX CONNECTIONS ARE TO BE WEATHER PROOFED.

INVENTORY OF ALL MATERIAL IS TO BE DONE PRIOR TO INSTALLATION BY CONTRACTOR. (LIST WILL BE PROVIDED)

ALL TRASH AND REFUGE IS TO BE PROPERLY DISPOSED OF.

CONTRACTOR TO EXTEND HARDLINES INTO BUILDING 12" & INSTALL POLYPHASERS, PER INSTRUCTION OF PROJECT MANAGER.

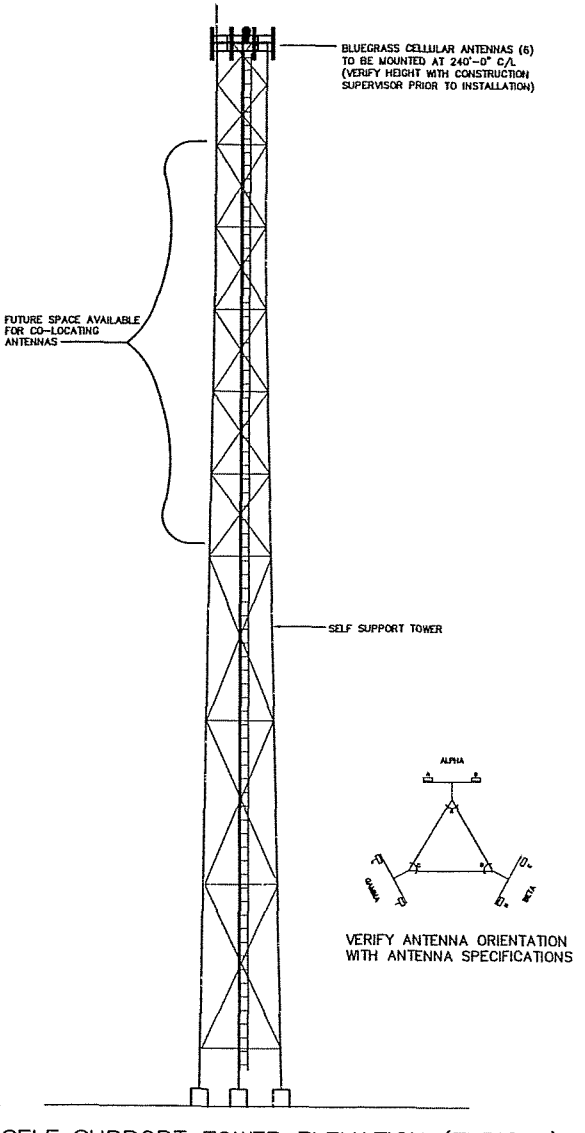
CONTRACTORS TO SUPPLY POLYPHASERS OR LIKE UNITS TO BE INSTALLED AND GROUNDED TO GROUND BAR INSIDE BUILDING AT WAVE GUIDE ENTRANCE. GO TO SUPPLY GROUND CABLE & LUGS.

GENERAL CONTRACTOR TO MOUNT ANTENNA MOUNTS AT TOP OF STRUCTURE OR TOWER BY BLUEGRASS CELLULAR SPECIFICATIONS.

ICE BRIDGE TO BE SUPPLIED AND INSTALLED BY GENERAL CONTRACTOR. (Additional Ice Bridge if needed)

TRAPEZE KIT TO BE SUPPLIED AND INSTALLED BY GENERAL CONTRACTOR.

CONTRACTOR TO INSTALL GPS BRACKET



SELF SUPPORT TOWER ELEVATION (TYPICAL)

VERIFY ANTENNA ORIENTATION WITH ANTENNA SPECIFICATIONS

TOWER HEIGHT & TYPE

240'-0" SELF SUPPORT TOWER

ANTENNA SPECS

	TYPE	SIZE L x W x D	NUMBER	AZIMUTH	MOUNTING HEIGHT
ANTENNA (PRIMARY)	AP13-880-850D ADT-XP	L= N/A W= N/A D= N/A	6	0°, 120°, 240°	240'-0" C/L VERIFY WITH CONSTRUCTION SUPERVISOR
ANTENNA (SECONDARY)					

ANTENNA MOUNTING HARDWARE SPECS

	TYPE	SIZE	NUMBER
MOUNT (PRIMARY)	TRI-SECTOR MOUNT		3
MOUNT (SECONDARY)			

ANTENNA TRANSMISSION LINES SPECS

	TYPE	SIZE	NUMBER
TRANSMISSION LINE (PRIMARY)	ANDREW	1-5/8"	6
TRANSMISSION LINE (SECONDARY)			

DISH SPECS

	MICROWAVE/DONOR	SIZE	NUMBER	AZIMUTH	MOUNTING HEIGHT
DISH #1					
DISH #2					

DISH MOUNT SPECS

	TYPE	SIZE	NUMBER
MOUNT #1			
MOUNT #2			

DISH TRANSMISSION LINES

	TYPE	SIZE	NUMBER
TRANSMISSION LINE #1			
TRANSMISSION LINE #2			

ANTENNA SYNOPSIS

- ANTENNAS TO HAVE A 2° ELECTRICAL DOWNTILT
- ANTENNA FREQUENCY 880.00 – 890.00

RSB DESIGN
8403 MERCURY DRIVE LOUISVILLE, KY 40291
(502) 968-8427 Fax (502) 671-2330

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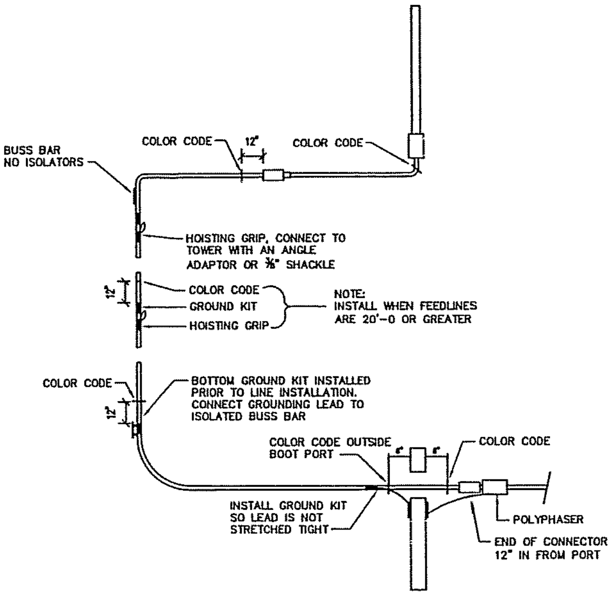
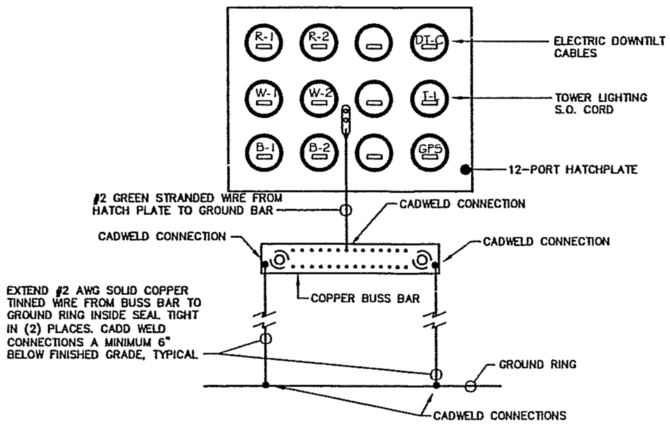
BLUEGRASS CELLULAR, INC.
STANDARD CELLULAR SITE
ALLIGATOR
57 MISSIONARY DR. RUSSELL SPRINGS, KY. 42642

DRAWN BY: R. BECKER
ISSUE DATE: 01-23-06
SCALE: LISTED

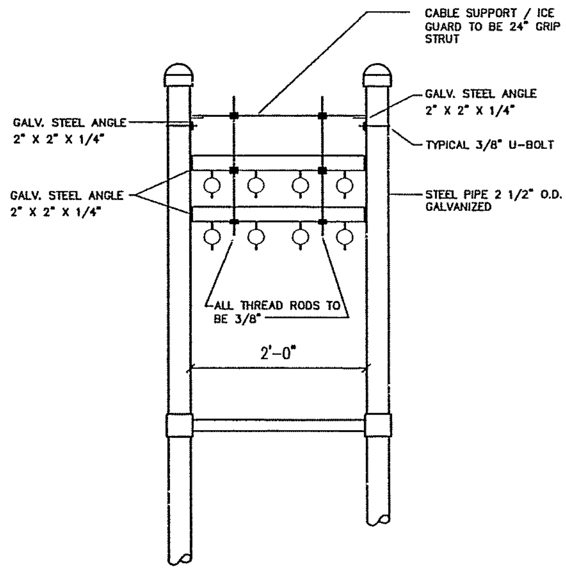
SHEET NUMBER
ANTENNA DETAILS 1


BUSS BAR
NO ISOLATORS
COLOR CODE
12"
COLOR CODE
HOISTING GRIP, CONNECT TO TOWER WITH AN ANGLE ADAPTOR OR ⅝" SHACKLE
12"
COLOR CODE
GROUND KIT
HOISTING GRIP
NOTE:
INSTALL WHEN FEEDLINES ARE 20'-0 OR GREATER
COLOR CODE
12"
BOTTOM GROUND KIT INSTALLED PRIOR TO LINE INSTALLATION. CONNECT GROUNDING LEAD TO ISOLATED BUSS BAR
COLOR CODE OUTSIDE BOOT PORT
6" 6"
COLOR CODE
INSTALL GROUND KIT SO LEAD IS NOT STRETCHED TIGHT
POLYPHASER
END OF CONNECTOR 12" IN FROM PORT

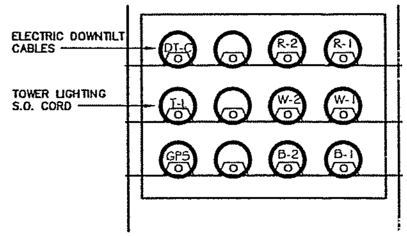
COLOR CODING DETAIL
NO SCALE


R-1
R-2
DT-C
ELECTRIC DOWNTILT CABLES
W-1
W-2
T-1
TOWER LIGHTING S.O. CORD
B-1
B-2
GPS
12-PORT HATCHPLATE
#2 GREEN STRANDED WIRE FROM HATCH PLATE TO GROUND BAR
CADWELD CONNECTION
CADWELD CONNECTION
CADWELD CONNECTION
EXTEND #2 AWG SOLID COPPER TINNED WIRE FROM BUSS BAR TO GROUND RING INSIDE SEAL TIGHT IN (2) PLACES. CADD WELD CONNECTIONS A MINIMUM 6" BELOW FINISHED GRADE, TYPICAL
COPPER BUSS BAR
GROUND RING
CADWELD CONNECTIONS

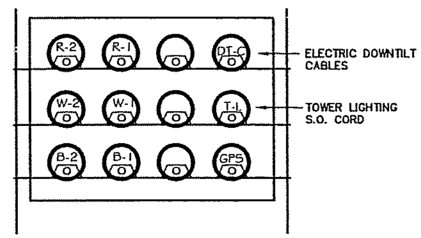
BOOT PORT GROUNDING DETAIL
NO SCALE



ICE BRIDGE / COAX SUPPORT DETAIL
NO SCALE



COAX ENTRY DETAIL POWER SIDE (VIEW FROM INSIDE SHELTER)
NO SCALE



COAX ENTRY DETAIL A/C SIDE (VIEW FROM INSIDE SHELTER)
NO SCALE

NO.	DATE	REVISION

BLUEGRASS CELLULAR, INC.
STANDARD CELLULAR SITE
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57 MISSIONARY DR. RUSSELL SPRINGS, KY. 42642

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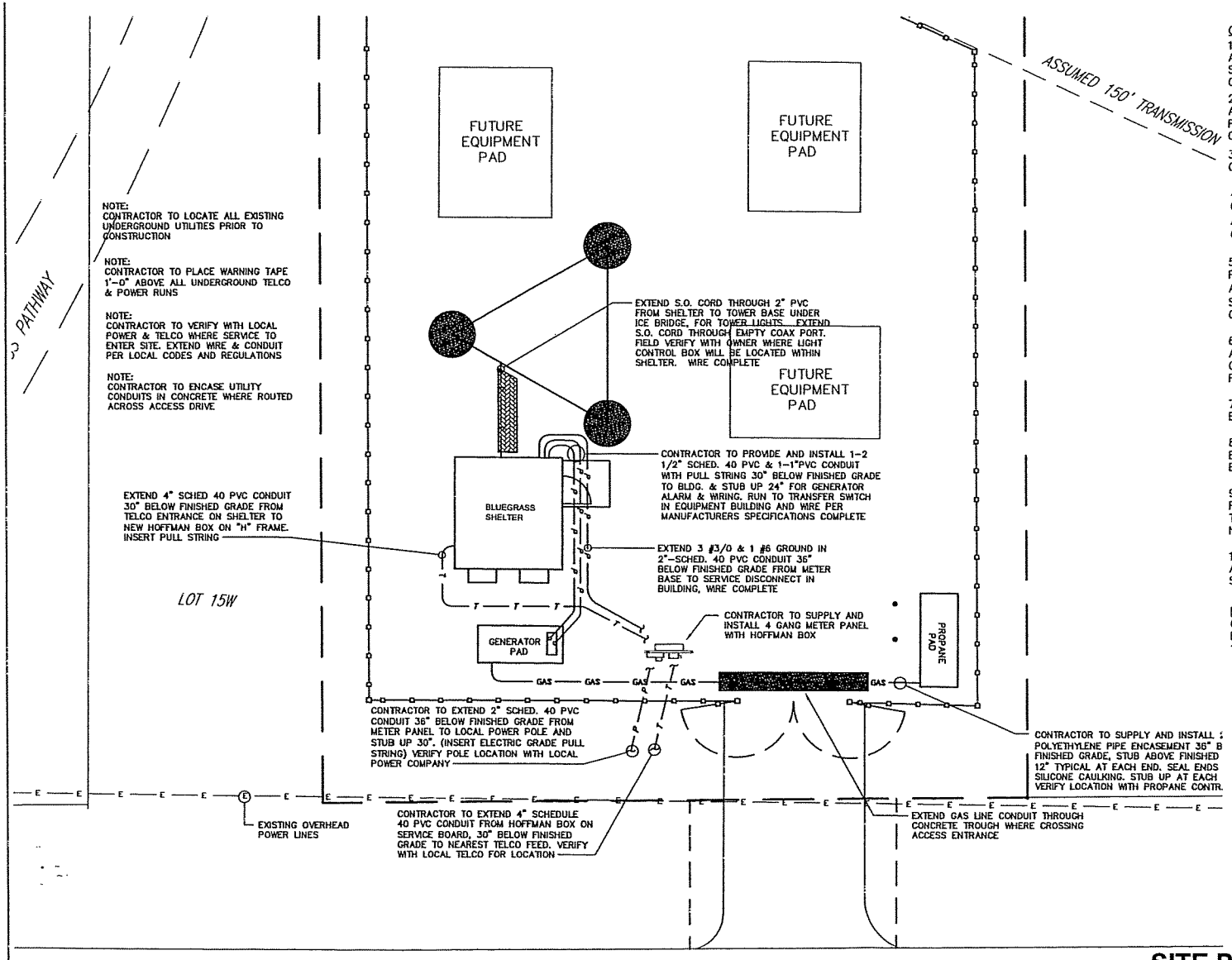
SCALE: LISTED

SHEET NUMBER
ANTENNA DETAILS 2



GENERAL ELECTRICAL NOTES:

1) CONTRACTOR RESPONSIBLE FOR MAKING ALL ARRANGEMENTS WITH THE LOCAL UTILITIES FOR SERVICE AND FEE PAYMENTS REQUIRED TO OBTAIN SERVICE.

2) CONTRACTOR RESPONSIBLE FOR MAKING ALL ARRANGEMENTS WITH THE LOCAL TELEPHONE COMPANY FOR SERVICE AND FEE PAYMENTS REQUIRED TO OBTAIN SERVICE.

3) GROUND RING TO BE CONTAINED WITH IN THE COMPOUNDS FENCED AREA.

4) FENCE TO BE GROUNDED FROM GROUND RING TO ALL CORNER POST & GATES. SPACE FENCE GROUNDING APPROXIMATELY 20'-0" O/C. (CADD WELD ALL CONNECTIONS)

5) ALL GROUND RING CONNECTIONS TO BE AS CLOSE AS POSSIBLE, SHARP BENDS WILL NOT BE PERMITTED AS WELL AS "T" CONNECTIONS. ALL CONNECTIONS TO HAVE A SWEEPING RADIUS OF 8" MINIMUM. GROUNDING CONFIGURATION TO BE IN PARALLEL.

6) CONTACT POINTS FOR GROUNDING TO BE CLEANED OF ANY RUST, PAINT, DIRT, ETC. TO CREATE A GOOD BOND FOR CONDUCTOR. AREA THAT HAS BEEN CLEANED TO BE RESEALED TO PREVENT RUSTING.

7) PROPERLY GROUND ANY EXPOSED METAL THAT MAY EXIST ON EXTERIOR OF EQUIPMENT SHELTER OR CABINET.

8) WHERE GROUND CONDUCTORS REQUIRE MECHANICAL BONDING, STAINLESS STEEL CONNECTORS ARE REQUIRED AT EACH CONNECTING POINT USING LOCK WASHERS.

9) CONTRACTOR RESPONSIBLE FOR SEEING THAT UTILITY PERSONNEL MAKE FINAL CONNECTIONS, MAKING SURE THE TOWER ALARM IS CONNECTED AND WORKING. A TELEPHONE NUMBER FOR THE ALARM MUST BE SUPPLIED.

10) CONTRACTOR RESPONSIBLE FOR MEG TESTING THE SITE AND SUPPLYING OWNER WITH FINAL READINGS IN OWNERS SPECIFICATIONS.

NOTE:
CONTRACTOR TO PROVIDE WARNING TAPE IN TRENCHES FOR ALL POWER AND TELCO RUNS UNDER GROUND. TAPE TO BE INSTALLED 1'-0" ABOVE CONDUIT RUNS.

SYMBOLS LEGEND

- P — POWER
- G — GAS
- T — TELEPHONE
- F — FENCE
- SWITCH (DISCONNECT)
- M — METER PACK

SITE PLAN- ELECTRICAL

SCALE: 1/8"=1'-0"

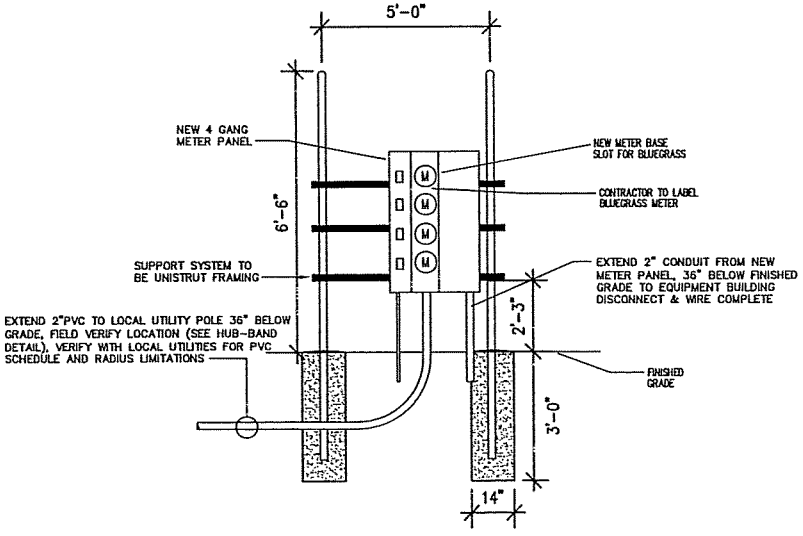
RSB DESIGN
8405 MENCHEF DRIVE LOUISVILLE, KY 40291
(502) 239-2427 FAX (502) 231-1035

NO.	DATE	REVISION

BLUEGRASS CELLULAR, INC.
STANDARD CELLULAR SITE
ALLIGATOR
57 MISSIONARY DR. RUSSELL SPRINGS, KY. 42642

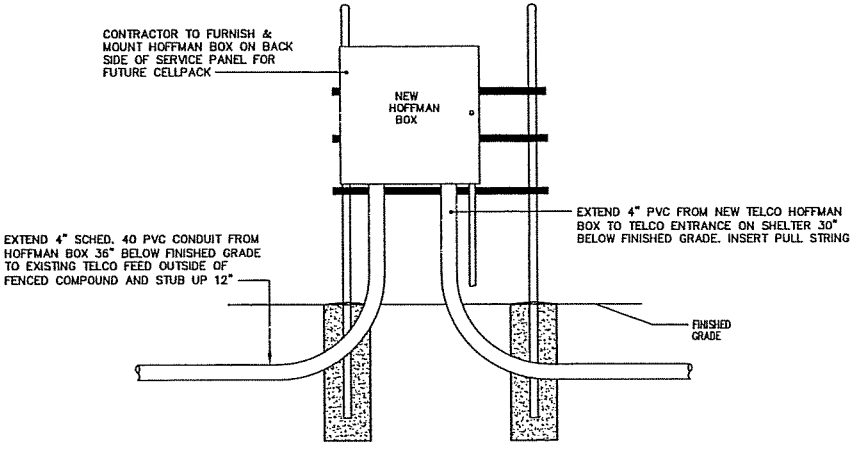
DRAWN BY: R. BECKER
ISSUE DATE: 01-23-06
SCALE: LISTED

SHEET NUMBER
E-1



SERVICE BOARD DETAIL

NO SCALE



BACKBOARD DETAIL

NO SCALE

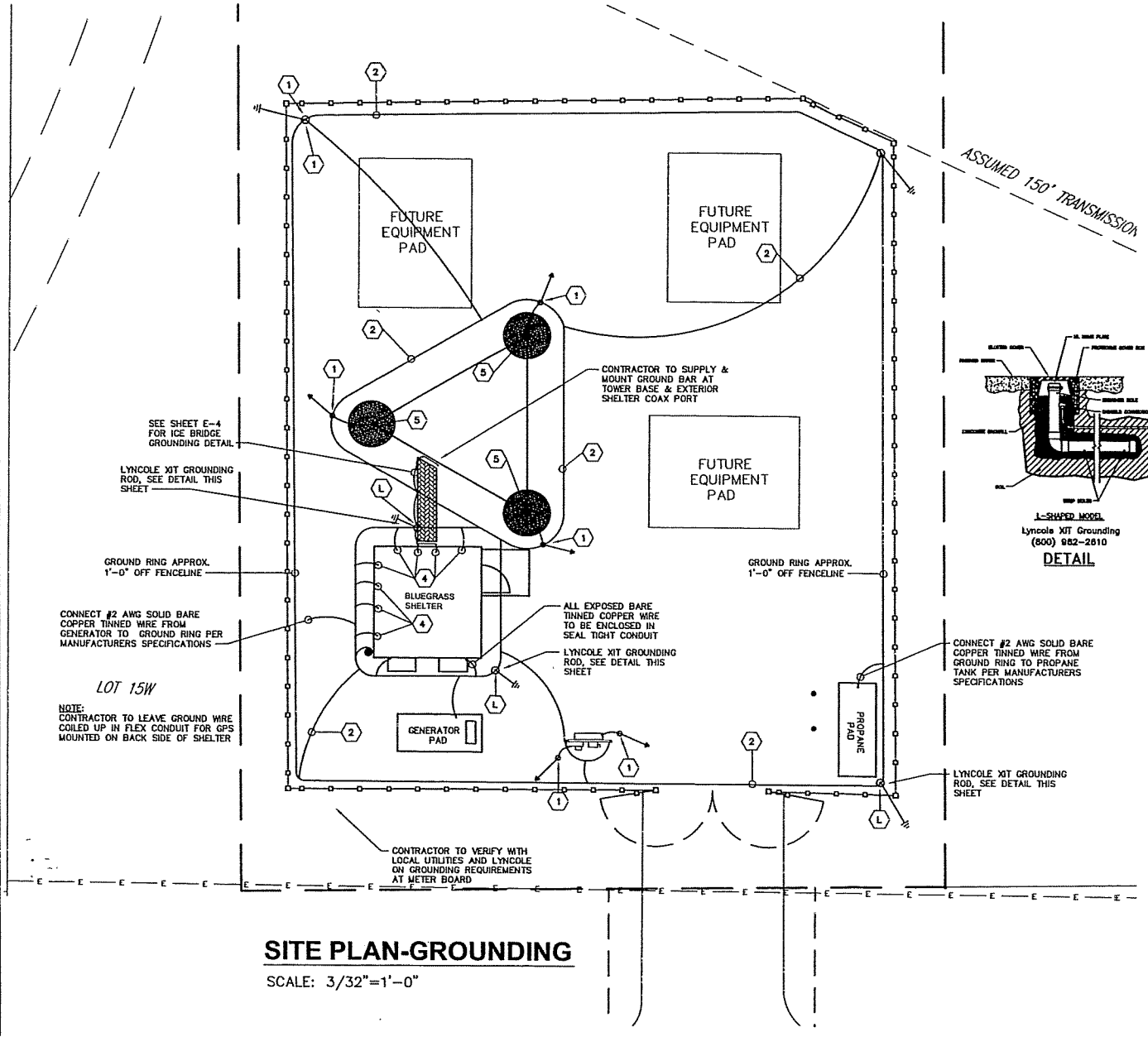
RSB
RF SERVICES, INC.

NO.	DATE	REVISION

BLUEGRASS CELLULAR, INC.
STANDARD CELLULAR SITE
ALLIGATOR
57 MISSIONARY DR. RUSSELL SPRINGS, KY. 42642

DRAWN BY: R. BECKER
ISSUE DATE: 01-23-06
SCALE: LISTED

SHEET NUMBER
E-2



SITE PLAN-GROUNDING

SCALE: 3/32"=1'-0"

L-SHAPED MODEL
Lyncole XIT Grounding
(800) 962-2810

DETAIL

GENERAL ELECTRICAL NOTES:

1) CONTRACTOR RESPONSIBLE FOR MAKING ALL ARRANGEMENTS WITH THE LOCAL UTILITIES FOR SERVICE AND FEE PAYMENTS REQUIRED TO OBTAIN SERVICE.

2) CONTRACTOR RESPONSIBLE FOR MAKING ALL ARRANGEMENTS WITH THE LOCAL TELEPHONE COMPANY FOR SERVICE AND FEE PAYMENTS REQUIRED TO OBTAIN SERVICE.

3) GROUND RING TO BE CONTAINED WITH IN THE COMPOUNDS FENCED AREA.

4) FENCE TO BE GROUNDED FROM GROUND RING TO ALL CORNER POST & GATES. SPACE FENCE GROUNDING APPROXIMATELY 20'-0" O/C. (CADD WELD ALL CONNECTIONS)

5) ALL GROUND RING CONNECTIONS TO BE AS CLOSE AS POSSIBLE, SHARP BENDS WILL NOT BE PERMITTED AS WELL AS "T" CONNECTIONS. ALL CONNECTIONS TO HAVE A SWEEPING RADIUS OF 8" MINIMUM. GROUNDING CONFIGURATION TO BE IN PARALLEL.

6) CONTACT POINTS FOR GROUNDING TO BE CLEANED OF ANY RUST, PAINT, DIRT, ETC. TO CREATE A GOOD BOND FOR CONDUCTOR. AREA THAT HAS BEEN CLEANED TO BE RESEALED TO PREVENT RUSTING.

7) PROPERLY GROUND ANY EXPOSED METAL THAT MAY EXIST ON EXTERIOR OF EQUIPMENT SHELTER OR CABINET.

8) WHERE GROUND CONDUCTORS REQUIRE MECHANICAL BONDING, STAINLESS STEEL CONNECTORS ARE REQUIRED AT EACH CONNECTING POINT USING LOCK WASHERS.

9) CONTRACTOR RESPONSIBLE FOR SEEING THAT UTILITY PERSONNEL MAKE FINAL CONNECTIONS, MAKING SURE THE TOWER ALARM IS CONNECTED AND WORKING. A TELEPHONE NUMBER FOR THE ALARM MUST BE SUPPLIED.

10) CONTRACTOR RESPONSIBLE FOR MEG TESTING THE SITE AND SUPPLYING OWNER WITH FINAL READINGS IN OWNERS SPECIFICATIONS.

NOTE:
CONTRACTOR TO PROVIDE WARNING TAPE IN TRENCHES FOR ALL POWER AND TELCO RUNS UNDER GROUND. TAPE TO BE INSTALLED AT 9" BELOW GRADE.

NOTE:
CONTRACTOR TO FOLLOW LYNCOLES GROUNDING SPECIFICATIONS WHEN USING THEIR XIT GROUNDING RODS. SEE DETAIL SHEET E-4.

KEYNOTES:

(L) LYNCOLE XIT GROUNDING ROD TO BE INSTALLED WHERE SHOWN AND TO MANUFACTURERS SPECIFICATIONS. (SEE LYNCOLE SPECIFICATIONS)

(1) GROUNDING RODS 10'-0" LONG x 3/4" COPPER BONDED GROUND RODS (TYPICAL) SPACING OF RODS INDICATED ON PLANS. INSPECTION SLEEVE TO

(2) INSTALL AND PROVIDE SOLID BARE TINNED COPPER WIRE #2 AWG, GROUND RING BELOW GRADE 30". USE #2 AWG SOLID BARE TINNED COPPER GROUND "TAP" CONNECTING CONDUCTORS. (CONNECTIONS FOR ALL TAP CONDUCTORS TO BE PARALLEL AND "CAD WELD" CONNECTIONS)

(3) FLEXIBLE GROUNDING STRAP TO BE USED TO PROVIDE A COMMON BOND BETWEEN GATE AND CHAIN LINK FENCE. #2 AWG SOLID COPPER BARE TINNED CONDUCTOR FROM GROUND RING TO FENCE USING CAD WELD CONNECTIONS. GROUND TAP TO BE PROVIDED ON EACH 4 SIDES TO GROUND RING AS DESCRIBED ABOVE.

(4) BONDED GROUND TO BE PROVIDED TO GROUND RING FOR EACH OF THE FOLLOWING: BUILDING STEEL, HATCH PLATE, EMERGENCY RECEPTACLE, WAVE GUIDE STRUCTURE, FRAME WORK, BUILDING DISCONNECT.

(5) FOR TOWER FRAME GROUNDING, REMOVE GALVANIZED COATING COMPLETELY AT SPOT TO "CAD WELD" TO AND CLEAN. #2 AWG SOLID BARE TINNED COPPER CONDUCTOR TO BE CAD WELDED APPROXIMATELY 1'-0" ABOVE FOUNDATION OR AT FLANGE IF PROVIDED BY TOWER MANUFACTURER. EXTEND CONDUCTOR TO GROUND RING. RIGHT ANGLES NOT ACCEPTED ALL BENDS TO BE SWEEPING.

RSB DESIGN
9423 MERCURY DRIVE LOUISVILLE, KY 40291
(502) 550-4927 Fax (502) 231-3180

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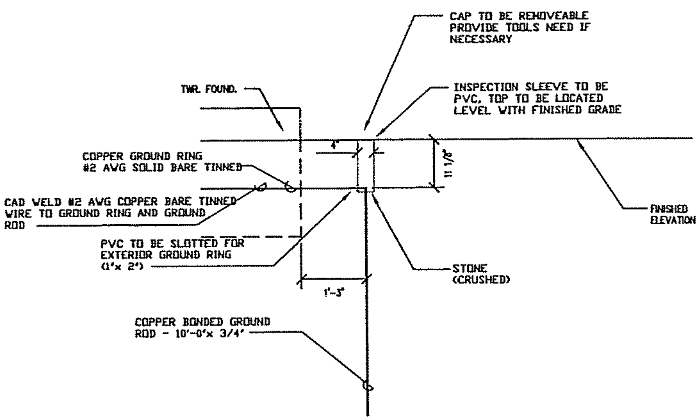
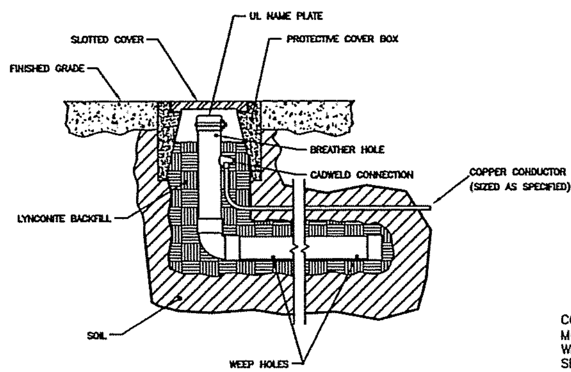
STANDARD CELLULAR SITE
ALLIGATOR
57 MISSIONARY DR. RUSSELL SPRINGS, KY. 42642

DRAWN BY: R. BECKER
ISSUE DATE: 01-23-06
SCALE: LISTED

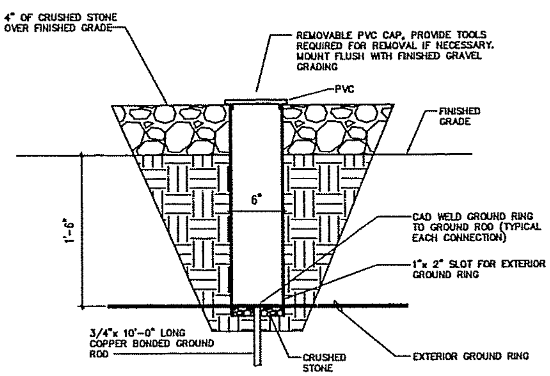
SHEET NUMBER
E-3


CAP TO BE REMOVEABLE
PROVIDE TOOLS NEED IF
NECESSARY
TWR. FOUND.
INSPECTION SLEEVE TO BE
PVC, TOP TO BE LOCATED
LEVEL WITH FINISHED GRADE
COPPER GROUND RING
#2 AWG SOLID BARE TINNED
CAD WELD #2 AWG COPPER BARE TINNED
WIRE TO GROUND RING AND GROUND
ROD
11 1/8"
FINISHED
ELEVATION
PVC TO BE SLOTTED FOR
EXTERIOR GROUND RING
(1"x 2")
STONE
(CRUSHED)
1'-3"
COPPER BONDED GROUND
ROD - 10'-0"x 3/4"

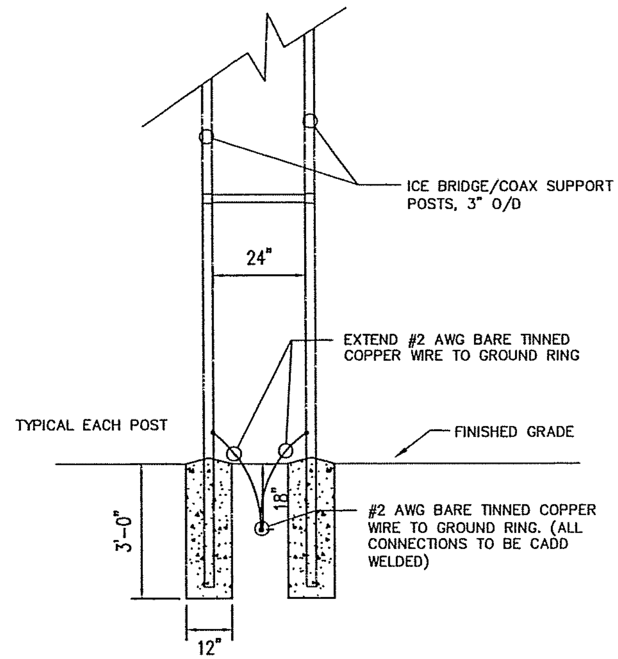
GROUND ROD DETAIL (Typical)
NO SCALE



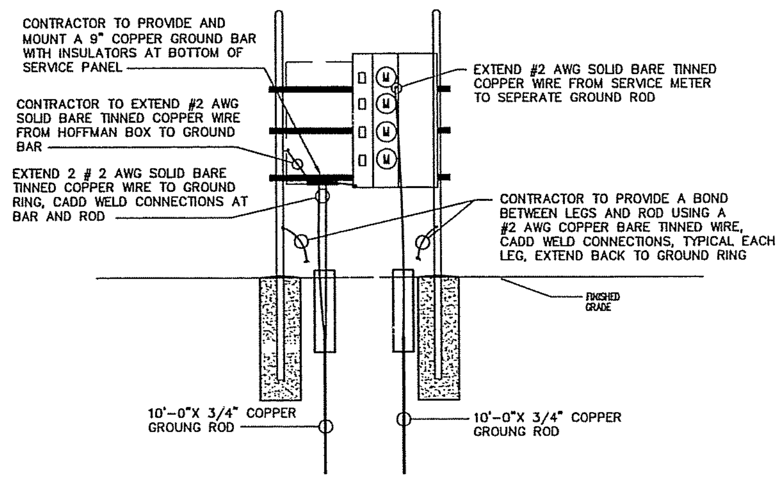
LYNCOLE XIT ROD DETAIL (Typical)
NO SCALE


4" OF CRUSHED STONE
OVER FINISHED GRADE
REMOVABLE PVC CAP, PROVIDE TOOLS
REQUIRED FOR REMOVAL IF NECESSARY.
MOUNT FLUSH WITH FINISHED GRAVEL
GRADING
PVC
FINISHED
GRADE
6"
1'-6"
CAD WELD GROUND RING
TO GROUND ROD (TYPICAL
EACH CONNECTION)
1"x 2" SLOT FOR EXTERIOR
GROUND RING
3/4"x 10'-0" LONG
COPPER BONDED GROUND
ROD
CRUSHED
STONE
EXTERIOR GROUND RING

GROUND SLEEVE DETAIL (Typical)
NO SCALE



COAX SUPPORT DETAIL (Typical)
NO SCALE


CONTRACTOR TO PROVIDE AND
MOUNT A 9" COPPER GROUND BAR
WITH INSULATORS AT BOTTOM OF
SERVICE PANEL
CONTRACTOR TO EXTEND #2 AWG
SOLID BARE TINNED COPPER WIRE
FROM HOFFMAN BOX TO GROUND
BAR
EXTEND 2 # 2 AWG SOLID BARE
TINNED COPPER WIRE TO GROUND
RING, CADD WELD CONNECTIONS AT
BAR AND ROD
EXTEND #2 AWG SOLID BARE TINNED
COPPER WIRE FROM SERVICE METER
TO SEPERATE GROUND ROD
CONTRACTOR TO PROVIDE A BOND
BETWEEN LEGS AND ROD USING A
#2 AWG COPPER BARE TINNED WIRE,
CADD WELD CONNECTIONS, TYPICAL EACH
LEG, EXTEND BACK TO GROUND RING
FINISHED
GRADE
10'-0"X 3/4" COPPER
GROUNG ROD
10'-0"X 3/4" COPPER
GROUNG ROD

SERVICE BOARD DETAIL (Typical)
NO SCALE

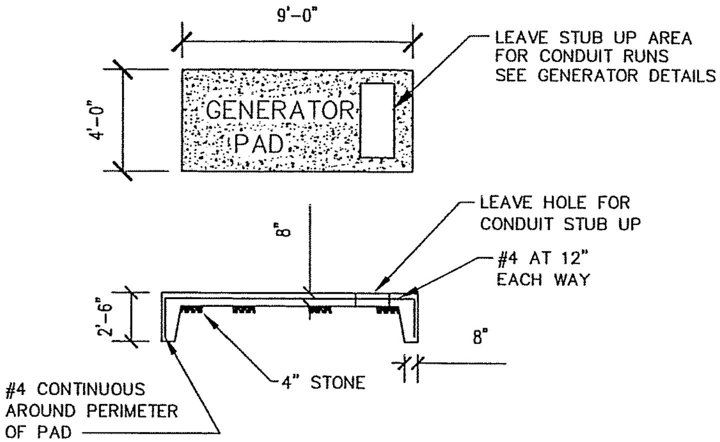
ASB DESIGN

NO.	DATE	REVISION

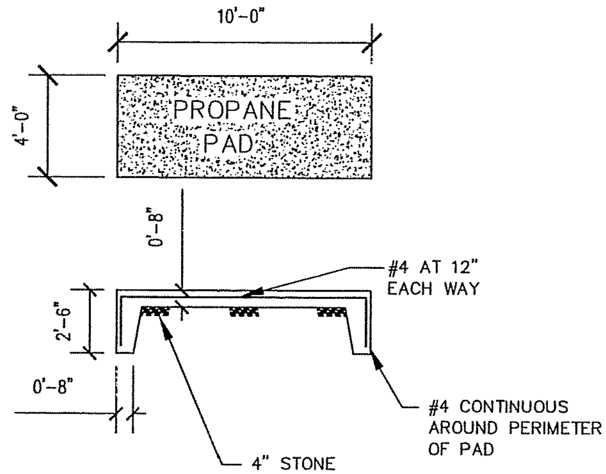
BLUEGRASS CELLULAR, INC.
STANDARD CELLULAR SITE
ALLIGATOR
57 MISSIONARY DR. RUSSELL SPRINGS, KY. 42642

DRAWN BY: R. BECKER
ISSUE DATE: 01-23-06
SCALE: LISTED

SHEET NUMBER
E-4



FOUNDATION DETAIL
NO SCALE



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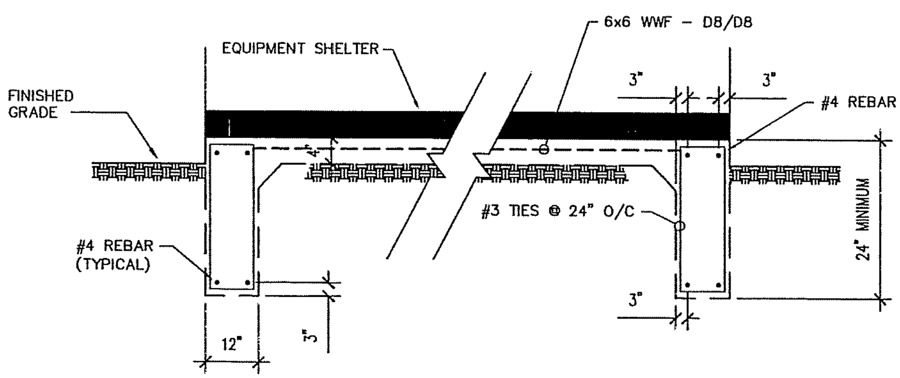
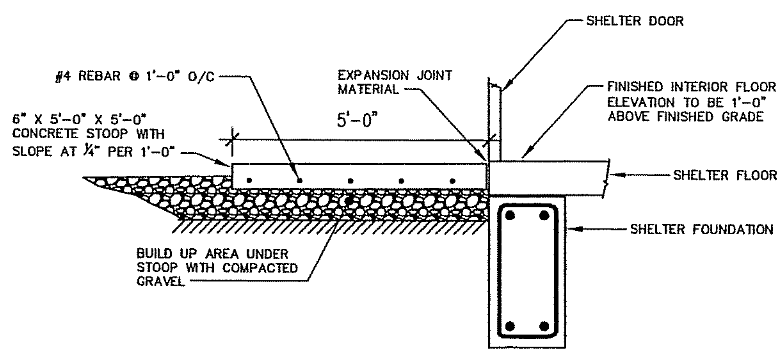


SHELTER FOUNDATION PLAN
NO SCALE


SHELTER DOOR
#4 REBAR @ 1'-0" O/C
EXPANSION JOINT MATERIAL
FINISHED INTERIOR FLOOR ELEVATION TO BE 1'-0" ABOVE FINISHED GRADE
6" X 5'-0" X 5'-0" CONCRETE STOOP WITH SLOPE AT ¼" PER 1'-0"
5'-0"
SHELTER FLOOR
SHELTER FOUNDATION
BUILD UP AREA UNDER STOOP WITH COMPACTED GRAVEL

CONCRETE STOOP DETAIL
NO SCALE

RSB DESIGN
6403 MERCURY DRIVE LOUISVILLE, KY 40213
(502) [illegible] Fax (502) [illegible]

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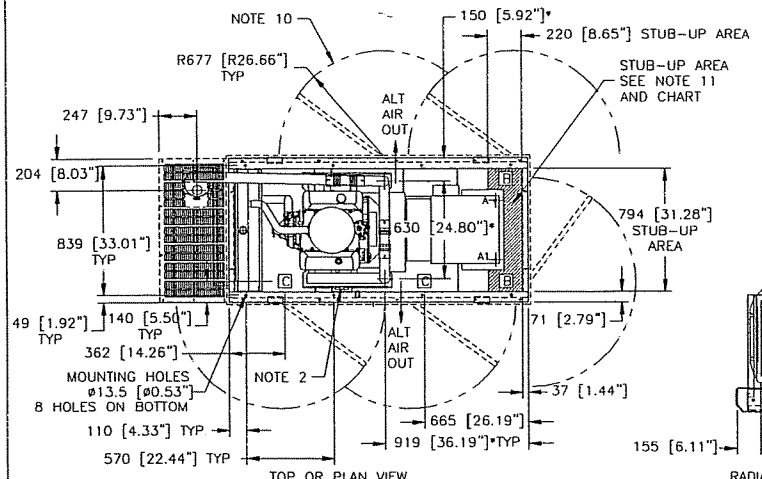
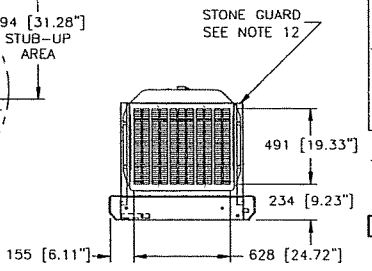
BLUEGRASS CELLULAR, INC.
STANDARD CELLULAR SITE
ALLIGATOR
57 MISSIONARY DR. RUSSELL SPRINGS, KY. 42642

DRAWN BY: R. BECKER
ISSUE DATE: 01-23-06
SCALE: LISTED

SHEET NUMBER: S–1



TOP OR PLAN VIEW



RADIATOR END VIEW WITH OPTIONAL STONE GUARD

RECOMMENDED FUEL/ELECTRICAL STUB-UPS (SEE TOP VIEW)	
DESCRIPTION	INSIDE BASE
AC LOAD LEAD CONDUIT (RIGHT)	A
(LEFT)	A1
120/240V AC FOR OPT. BATTERY CHARGER, OPT. BATTERY HEATER, AND BLOCK HEATER	B
INSIDE STUB-UP FOR FUEL CONNECTIONS	C

NOTE:
FUEL SYSTEM SET UP WITH OUTSIDE STUB UPS (SEE LEFT SIDE VIEW). SMALL FUEL SYSTEM MODIFICATIONS REQUIRED FOR INSIDE STUB-UPS.

WEIGHT DATA
UNIT: 729.7 kg [1609 lbs]
STEEL COMPARTMENT: 208.6 kg [460 lbs]

UNITS: mm [INCHES]

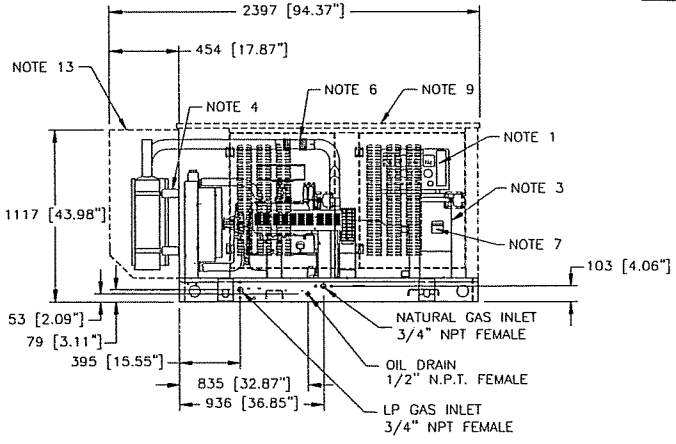
ENGINE SERVICE CONNECTIONS

INLET LP GAS = 3/4" NPT COUPLING
INLET NATURAL GAS = 3/4" NPT COUPLING
OIL DRAIN = 1/2" NPT COUPLING
EXHAUST OUTLET - EXHAUST MANIFOLDS AS SHOWN ON OPEN SET, 2.5" OD MUFFLER OUTLET WITH ENCLOSURE

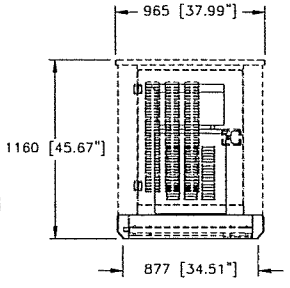
NOTES:

1. CONTROL PANEL MAY BE ROTATED 180° IN EITHER DIRECTION.
2. STANDARD BLOCK HEATER REQUIRES 120V AC CONNECTION (ALSO OPTIONAL BATTERY CHARGER, & BATTERY HEATER).
3. CONNECTION POINTS FOR AC LOAD LEADS AND ENGINE AUTOMATIC START/STOP CONTROL WIRES PROVIDED IN AC CONNECTION PANEL.
4. EXHAUST MUFFLER SUPPORT BRACKETS SUPPLIED WITH OPTIONAL COMPARTMENT.
5. 12 VOLT NEGATIVE GROUND SYSTEM
   BATTERY TRAY INSIDE DIMENSIONS: 178 X 342.5 [7" X 13.5"]
6. 2.5" I.D. FLEX EXHAUST, STANDARD WITH COMPARTMENT UNITS, OPTIONAL WITHOUT
7. MAIN LINE CIRCUIT BREAKER.
8. REMOVABLE BLANK PANEL FOR OPTIONAL 2nd MAIN LINE CIRCUIT BREAKER.
9. OPTIONAL COMPARTMENT
10. DOORS MUST BE OPENED 90 DEG. TO BE REMOVED.
11. A OR A1 MAY BE USED DEPENDING ON CIRCUIT BREAKER LOCATION.
12. STONE GUARDS AND AIR DUCT ADAPTER ARE OPTIONS AND CAN BE ORDERED FOR UNITS WITHOUT ENCLOSURES ONLY.
13. SEE DRAWING C3850 FOR DUCT REMOVAL. REMOVAL OF FRONT DUCT WILL PROVIDE ACCESS TO MUFFLER FOR SERVICING.

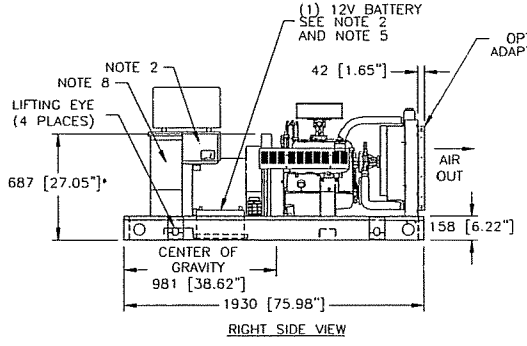
*DIMENSIONS ARE TO THE CENTER OF OUTLETS ON EXHAUST MANIFOLDS. DIMENSIONS SHOULD BE USED AS A REFERENCE WHEN EXHAUST SYSTEM IS NOT ORDERED. APPLIES TO OPEN SET ONLY.



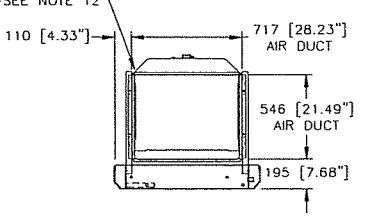
LEFT SIDE VIEW



REAR VIEW



RIGHT SIDE VIEW



RADIATOR END VIEW WITH OPTIONAL AIR DUCT ADAPTER

GENERAC®
INSTALLATION DRAWING

INSTALLATION DRAWING # C4505 REV -
SG035 & SG045
4.3 LITER SPARK-IGNITED ENGINE
NATURALLY ASPIRATED
ISSUE DATE 10/11/99

GENERAL NOTES:

1) THE CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT PICK UP DELIVERY TO SITE, ERECTION OF TOWER, AND CRANE SET, ALL COSTS ENCURRED.

2) THE CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE PRIOR TO BIDDING AND REVIEWING EXISTING STRUCTORS OR UTILITIES THAT MIGHT BE LOCATED ON OR AROUND THE COMPOUND THAT COULD INTERFERE.

3) THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING LOCAL AUTHORITIES NECESSARY FOR INSPECTIONS IF REQUIRED, PLEASE PROVIDE AMPLE NOTICE.

4) THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING PERSONS RESPONSIBLE FOR ANY MATERIALS TESTING, PLEASE PROVIDE AMPLE NOTICE.

5) THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH FINAL TEST RESULTS ON ALL MATERIALS TESTING. IF ANY PROBLEMS ARE FOUND PRIOR TO FINAL RESULTS PLEASE NOTIFY A&E OR OWNER IMMEDIATELY.

6) THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ADJOINING PROPERTY, AND REPAIRING OR REPLACING WHAT IS NECESSARY TO OWNERS APPROVAL.

7) THE CONTRACTOR IS TO VERIFY DIMENSIONS ON SITE PRIOR TO CONSTRUCTION STARTING, ANY PROBLEMS OR CHANGE FOUND CONTACT A&E OR OWNER TO VERIFY.

8) THE CONTRACTOR IS RESPONSIBLE FOR ANY TEMPORARY LIGHTING ON THE TOWER AND CONTACTING PROPER AUTHORITY IF ANY LIGHTING PROBLEMS OCCUR, ALL FINAL LIGHTING TO BE MOUNTED ON TOWER DURING CONSTRUCTION, NOTIFY OWNER WHEN TOWER HAS REACHED FINAL HEIGHT.

9) THE CONTRACTOR IS RESPONSIBLE FOR ALL ON SITE WORK MEANS AND METHODS, WORK TO BE DONE IN COMPLIANCE WITH OSHA RULES AND REGULATIONS.

10) THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL SITE DRAINAGE, AND PROVIDING SILT AND EROSION CONTROL NECESSARY TO MAINTAIN ANY RUN OFF.

11) THE CONTRACTOR RESPONSIBLE FOR ANY SEED AND STRAW NECESSARY TO DAMAGED AREAS.

12) CONTRACTOR TO GRADE SMOOTH OR REPAIR ANY POT HOLES OR DITCHING ON PROPERTY OR ROAD THAT HAS OCCURRED DURING CONSTRUCTION AT CONTRACTORS EXPIENCE.

NOTE: UPON COMPLETION OF ALL CONSTRUCTION WORK, THE CONTRACTOR WILL BE RESPONSIBLE FOR SUBMITTING CLOSEOUT DOCUMENTATION ON DISK FORMAT ONLY, CONTAINING THE FOLLOWING CLOSE OUT DOCUMENTATION:

- ASBUILT CONSTRUCTION DRAWINGS
- SWEEP TEST
- GROUND TEST USING BLUEGRASS FORM
- ELECTRICAL COMPLIANCE CERTIFICATE (LEGIBLE COPY)
- BUILDING PERMIT
- SITE PHOTOS (ALL SIDES) PREFERABLY ON DISK

"BEFORE YOU DIG"

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE UTILITY PROTECTION CENTER, PHONE 1-800-752-6007, WHICH WAS ESTABLISHED TO PROVIDE ACCURATE LOCATIONS OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE UTILITY PROTECTION CENTER 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ON THIS PROJECT. ALL NEW SERVICE AND GROUNDING TRENCHES PROVIDE A WARNING TAPE @ 12 INCHES BELOW GRADE.

GRADING & EXCAVATING NOTES:

1) ANY DAMAGE TO EXISTING UTILITIES, STRUCTURES, ROADS AND PARKING AREAS TO BE REPAIRED OR REPLACED TO OWNERS SATISFACTION.

2) PREPARATION FOR FILL:
REMOVAL OF ALL DEBRIS, WET AND UNSATISFACTORY SOIL MATERIALS, TOPSOIL, VEGETATION, AND HARMFUL MATERIALS FROM SURFACE OF GROUND PRIOR TO PLOWING, STRIPPING, PLACING FILLS OR BREAKING UP OF SLOPED SURFACES GREATER THAN 1 VERTICAL TO 4 HORIZONTAL SO MATERIAL FOR FILL WILL BOND WILL BOND TO EXISTING SURFACE. WHEN AREA TO RECEIVE FILL HAS A DENSITY LESS THAN REQUIRED, BREAK UP GROUND SURFACE TO DEPTH REQUIRED, AERATE, MOISTURE – CONDITION, OR PULVERIZE SOIL AND RECOMPACT TO REQUIRED DENSITY.

3) BACK FILLING:
– EXCAVATED AREA SHALL BE CLEARED FROM STONES OR CLODS OVER 2 1/2" MAXIMUM SIZE.
– SHALL BE PLACED IN LAYERS OF 8" AND COMPACTED TO A 95% STANDARD PROCTOR, USE A 90 PROCTOR IN GRASSED / LANDSCAPED AREAS WHERE REQUIRED.
– SHALL BE APPROVED MATERIALS CONSISTING OF SANDY CLAY, GRAVEL AND SAND, SOFT SHALE, EARTH OR LOAM. CONSULT WITH ENGINEER PRIOR TO FILL BEING ADDED.

4) ALL MATERIAL FOR FILL TO BE APPROVED BY ENGINEER AND ALL COMPACTING TEST TO BE COMPLETED TO SPEC'S ALL COMPACTING RESULTS TO BE TURNED OVER TO OWNER.

5) AFTER COMPLETION OF BELOW GRADE EXCAVATING, AREA TO BE CLEANED AND CLEARED OF ANY UNSUITABLE MATERIAL SUCH AS, TRASH, DEBRIS, VEGETATION AND SO FORTH COMPLETE.

6) ANY EXCAVATING IN WHICH CONCRETE IS TO BE PLACED SHALL BE SUBSTANTIALLY HORIZONTAL ON UNDISTURBED AND UNFROZEN SOIL AND BE FREE OF ANY LOOSE MATERIAL AND EXCESS GROUND WATER.

7) IF SOUND SOIL IS NOT REACHED AT DESIGNATED EXCAVATION DEPTH, THE POOR SOIL IS TO BE EXCAVATED TO ITS FULL DEPTH AND EITHER REPLACED WITH MECHANICALLY COMPACTED GRANULAR MATERIAL OR THE EXCAVATION TO BE FILLED WITH THE SAME QUALITY CONCRETE SPECIFIED FOR THE FOUNDATION. PLEASE CONTACT OWNER & ENGINEER FOR RECOMMENDATIONS.

8) MECHANICALLY COMPACTED GRANULAR MATERIAL OR CONCRETE OF THE SAME QUALITY SPECIFIED FOR THE FOUNDATIONS TO BE USED IF EXCAVATION EXCEEDED THE OVERALL REQUIRED DEPTH. FOR STABILIZATION OF THE BOTTOM OF THE EXCAVATION, CRUSHED STONE MAY BE USED. STONE, IF USED, SHALL NOT BE USED AS COMPILING CONCRETE THICKNESS. PLEASE CONTACT ENGINEER FOR RECOMMENDATIONS.

NOTE: GENERAL CONTRACTOR MUST HAVE A MINIMUM 2 LABORERS ON SITE DURING ANY PHASE OF CONSTRUCTION FOR EMPLOYEE SAFETY PRECAUTIONS.

NOTE: THIS SCOPE OF WORK IS A BASIC OUTLINE FOR THE GENERAL CONTRACTOR TO FOLLOW AND DOES NOT EXCLUDE OTHER DUTIES ASSOCIATED WITH THE GENERAL CONTRACTORS RESPONSIBILITIES TO COMPLETE THE CELLULAR SITE. IT IS RECOMMENDED THAT THE SPECIFICATIONS MANUAL BE READ PRIOR TO CONSTRUCTION. SEE RSB DESIGN IF SPECIFICATIONS MANUAL IS NEEDED. 502-599-9427

- INSTALL CONCRETE PADS FOR BUILDING, PROPANE TANK, GENERATOR PAD.
- INSTALL ELECTRIC AND GROUND FIELD FOR COMPOUND.
- EXCAVATION TO COMPOUND TO INCLUDE WEED CONTROL MAT.
- SITE TO HAVE PROPER DRAINAGE & EROSION CONTROL . (CROWNED FORMATION)
- GC WILL BE RESPONSIBLE FOR ALL CRANE OPERATIONS IN ORDER TO SET FIBREBOND BUILDING. COORDINATE BUILDING DELIVERY DATE THROUGH BLUEGRASS CELLULAR.
- GC WILL BE RESPONSIBLE FOR REPAIR OF ALL AREAS DISTURBED DURING CONSTRUCTION. (EXCAVATING ISSUES)
- GC WILL BE RESPONSIBLE FOR OFF LOADING AND STACKING OF TOWER WHEN APPLICABLE.
- GC WILL BE RESPONSIBLE FOR MOUNTING ALL LINES AND ANTENNAS.
- GC WILL BE RESPONSIBLE FOR SUPPLYING AND INSTALLING ICE BRIDGE.
- GC WILL BE RESPONSIBLE FOR SCHEDULING PROPANE TANK DELIVERY AND HOOK-UP.
- GC WILL BE RESPONSIBLE FOR CLEANING THE INSIDE OF BUILDING BEFORE I HAND SITE OVER TO OPERATIONS DEPARTMENT. THIS WILL INCLUDE SUPPLYING TRASHCAN, TRASH BAGS, BROOM, AND DOORMAT FOR BUILDING.
- GC WILL BE RESPONSIBLE FOR APPLYING FOR ELECTRICAL SERVICE AND PAYING NECESSARY FEES REQUIRED.
- ALL WAREHOUSE MATERIAL (LINES, ANTENNAS, MOUNTING HARDWARE, GENERATOR, TOWER FOUNDATION KIT, ETC.) WILL NEED TO BE PICKED UP BY GC.
- ALL ALARMS WILL NEED TO BE HOOKED UP BY GC, THIS IS TO INCLUDE: GENERATOR ALARM AND TOWER LIGHT ALARM. (TO BLUEGRASS CELLULAR INC. ALARM BLOCK)
- GC WILL BE RESPONSIBLE FOR SCHEDULING GENERATOR START-UP WITH CONTACT SCOTT ANDERSON (EVAPAR) 502-267-6315
- T1 CONDUIT WILL NEED TO BE PLACED FROM POLE TO BUILDING. (IF A MICROWAVE DISH IS USED, THE T1 CONDUIT WILL STILL BE INSTALLED FOR FUTURE USE.)
- GC WILL BE RESPONSIBLE FOR INSTALLATION OF ALL FENCING.
- ALL TRASH AND DEBRIS TO BE REMOVED BY GC
- GC TO SEPERATE ALL MATERIALS & LABOR IN BID.
- CONTRACTOR TO BREAK DOWN BIDS USING THE FOLLOWING LINE ITEMS:
  - ROAD
  - FENCE
  - COMPOUND DEVELOPMENT
  - BUILDING, PROPANE, AND GENERATOR FOUNDATIONS
  - GROUNDING
  - TELCO
  - ELECTRIC
  - BUILDING SET
  - ICE BRIDGE
  - TOWER FOUNDATION
  - TOWER ERECTION
  - LINE INSTALL
  - ANTENNA INSTALL
  - PERMITS

SYMBOLS LEGEND

- KEYNOTE
- INSPEC. SLEEVE / GRND ROD
- INSPECTION SLEEVE
- CAD WELD CONNECTION
- TRANSFORMER
- LIGHTNING SUPPRESSOR
- SWITCH (DISCONNECT)
- METER PACK
- P — POWER
- G — GAS LINE
- W — WATER LINE
- SS — SANITARY SEWER
- T — TELEPHONE
- SSD — STORM SEWER DRAIN
- X — FENCE

RSB DESIGN
8423 MERCURY DRIVE LOUISVILLE, KY 40291
(502) 599-9427 Fax (502) 231-3250

NO.	DATE	REVISION

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STANDARD CELLULAR SITE
ALLIGATOR
57 MISSIONARY DR. RUSSELL SPRINGS, KY. 42642

DRAWN BY: R. BECKER
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General Notes