

**File #:** 2015-227

**Owner's Name:** Monroe County

**Applicant:** Spisiak, James E.

**Agent:** Christina Spottswood

**Type of Application:** Variance - PC

**Key:** Long Key

**RE:** 00098780.000000

**Additional Information added to File 2015-227**

**AFFIDAVIT**

BEFORE ME, the undersigned Notary Public, personally appeared James E. Spisiak, the undersigned Affiant, who after being duly sworn, depose and states the following:

1. At the time of making this affidavit Affiant is the owner of Telcom Systems, Ltd.
2. The undersigned Affiant has a mailing address of 450 NE 1st Road, Homestead, FL 33030.
3. The undersigned Affiant leases the subject property owned by Monroe County, vacant land on Long Key, Florida, with parcel ID 00098780-000000, which is the location of the proposed tower.
4. Affiant makes the following representations in regard to Monroe County Project 2015-227:
  - a. The proposed tower replaces two towers, and the new tower must accommodate at least the same number of independent antennas. The spacing of this number of antennas requires the additional height in order to eliminate interference from one another when assigned to different frequencies that may be close enough that when sufficient power is applied unwanted signal overlap may occur.
  - b. Given the number of existing and replacement antennas to be placed on the new tower and the separation required, together with the structural integrity required for the high wind environment possibilities of the Keys location, the lattice tower structure must be of the height proposed.
  - c. The tower has been designed to carry additional antennas as may be required in the future by current users such as the Monroe County Sherriff's Office. That space for additional antennas requires sufficient space between antennas, and thus the height.

DATED this 11 day of Jan, 2017:

Witnesses as to all:

Joseph Perez  
Witness

James E. Spisiak  
James E. Spisiak

Joseph Perez  
Print Name

Bette J Holland  
Witness

Bette J Holland  
Print Name

STATE OF FLORIDA            )  
COUNTY OF MONROE        )

SWORN TO AND SUBSCRIBED before me this 11 day of Jan. 2017<sup>10</sup> by James E. Spisiak, who is personally known to me or has produced \_\_\_\_\_ as identification to me.



April O'Mara  
Notary Public

**AGREEMENT FOR WIRELESS CONSULTING SERVICES**

**This AGREEMENT FOR WIRELESS CONSULTING SERVICES**, is made and entered into by and between CityScape Consultants, Inc., a Florida Corporation, hereinafter referred to as the "Consultant," and Monroe County, Florida, a body politic and corporate of the State of Florida, hereinafter referred to as the "County." The Consultant and County are collectively referred to as the "Parties."

**WHEREAS**, Section 704 of the Telecommunications Act of 1996 mandates that local government cannot prohibit the provision of personal wireless services and requires local government to not unreasonably discriminate among providers of functionally equivalent services; and

**WHEREAS**, the County desires to engage the services of the Consultant to perform for the County consulting services regarding the review of wireless application(s) to the County to ensure the County's compliance with the aforementioned provisions of existing and proposed federal regulation and legislation; and to minimize the aesthetic impact of these facilities on the County; and

**WHEREAS**, the Consultant desires to consult with appropriate County staff as an independent contractor of the County on regarding wireless telecommunications issues or projects within the County; and

**NOW, THEREFORE**, in consideration of the mutual benefits and conditions set forth below, the parties hereto agree as follows:

1. **Scope of Services to be performed by Consultant.** The Consultant shall perform those services associated with the review of wireless communications facilities application submitted on behalf of James E. Spisiak for a new Wireless Communications Facility proposed at an address known as Lot 1, Section 5, T. 65 S., R. 35 E. on Long Key, having real estate number: 00098780-000000, and further described in Exhibit "A" of this Agreement. In performing such approved services, the Consultant shall comply with all federal, state and local laws and regulations applicable to the performance of such services. The Consultant shall perform services diligently and completely and in accordance with generally accepted professional standards of conduct and performance.
2. **Duration of Contract.** This Agreement is effective on the date it is signed by both parties (the "Effective Date") and shall be in full force and until the County's final decision on the subject application.
3. **Compensation and Method of Payment.** For its services in connection with the review of wireless telecommunications facility applications, Consultant shall receive as compensation for the performance of services contemplated by this Agreement, a fee, as shown in Exhibit "B" of this Agreement. Consultant's fee will be invoiced and paid by the County upon completion and submittal of application review and/or hearing attendance, if required.
4. **Notices.** Whenever any notice is required or permitted, such notice shall be in writing and shall be deemed sufficiently given if delivered by hand or by guaranteed overnight delivery service to the address of the party to be notified or if deposited in the United States mail, postage prepaid, certified or registered mail, return receipt requested, addressed to the party to be notified as follows:

**CONSULTANT:** CityScape Consultants, Inc.  
7050 W Palmetto Park Rd #15-652  
Boca Raton, FL 33433  
Attn: Kay Miles, Business Manager  
Email: kay@cityscapegov.com  
Tel: 877-438-2851 Fax: 877-220-4593

**COUNTY:** Monroe County  
1100 Simonton Street  
Key West, FL 33040  
Attn: Mayte Santamaria, Senior Director  
Planning & Environmental Resources  
Email: Santamaria-Mayte@MonroeCounty-FL.Gov  
Tel: (305) 289-2562 Fax:

Notices delivered in accordance with this paragraph shall be deemed received on the date of delivery to such address or, if mailed, three days following deposit in the United States mail. Either party may change its address for delivery of notice by giving notice of change of address in compliance with the terms of this Section.

5. **Entire Agreement:** This Agreement constitutes the entire agreement and understanding of the parties and supersedes all offers, negotiations, proposals and any other agreement of any kind relating to the subject matter of this Agreement. There are no representations or understandings of any kind not set forth herein. Any modification of this Agreement shall be in writing and executed by both parties hereto.
6. **Governing Law; Jurisdiction; Venue.** The construction and performance of this Agreement shall be governed by and construed pursuant to the laws of the State of Florida. Venue for any legal actions initiated concerning this Agreement or arising in any way from and out of this Agreement shall be brought in the appropriate state court sitting in Monroe County, Florida, having jurisdiction over said claim. The parties waive any right they may have to venue in any other jurisdiction.
7. **Authority.** Each party hereto represents to the other party that such individual executing this Agreement on behalf of that party is authorized by the requisite action of the party to execute this Agreement.
8. **Insurance.** Consultant shall maintain a general liability policy in the amount of \$1,000,000 dollar naming the County as an additional insured thereon.
9. **Project Records and Documents.** Each party, upon reasonable request of the other party, shall permit examination or audit of all project-related records, books, documents, and papers during or following completion of the project. Each party shall maintain such records, books, documents, and papers for at least three (3) years following completion of the services performed.
10. **Assignment.** Neither party may assign or transfer its rights or obligations under this Agreement without prior written consent of all other parties.
11. **Indemnification.** Consultant agrees to protect, defend, indemnify and hold County, its employees and elected and appointed officials, harmless from any and all claims, damages, costs, liability, or expenses (including attorney's fees) arising out of or in any way connected with the activities and

performance of the Consultant, Consultant's employees, agents, sub-contractors and anyone else working for or on behalf of Consultant arising out of or from the Work.

12. Relationship. Nothing herein shall be construed to imply a joint venture, partnership, or principal-agent relationship between the County and Consultant; and neither Party shall have the right, power, or authority to obligate or bind the other in any manner whatsoever, except as otherwise agreed in writing.

13. Liability for Payment. The fees provided for herein for Consultants services shall be paid by the County. Consultant shall assist the County in amending its existing regulations to permit recover of some or all of the fees from the site applicants while remaining in compliance with applicable state law regarding fees for expert review.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the 27<sup>th</sup> day of June, 2016.

**CONSULTANT: CITYSCAPE CONSULTANTS, INC.**

By: [Signature]  
Title: VP Business Manager

Date: 6/23/2016

ATTEST:

[Signature]  
Elizabeth Smith  
Print Name

**COUNTY: MONROE COUNTY, FLORIDA**

By: [Signature] Date: 6/27/16  
Title: Director of Planning + Environmental Resources

ATTEST:

[Signature]  
Ashley Weaver  
Print Name

## EXHIBIT A

### THIRD PARTY EXPERT SITE PLAN APPLICATION REVIEWS

Consultant will provide expert review (Site Application Review) of Wireless Facility Application submitted to the County for the placement and construction and/or modification of personal wireless service facilities to ensure they meet the requirements of the zoning, permissible structure height, safety and aesthetics and compliance with applicable federal guidelines. Consultant will conduct a technical evaluation of the applicant's request for facilities to include but not limited to:

- Accuracy of data and application completeness of submission;
- Assurance that the County works within the confines of the applicable "shot clock" and meets the time allowed for disposition of telecommunications applications;
- Applicability of analysis techniques and methodologies;
- Validity of conclusions reached;
- Compliance with all applicable federal, state, and local structural codes.
- Whether the proposed wireless telecommunications facility complies with the applicable approval criteria set forth in the County's local regulations (specifically Monroe County Code Sections 146-6 and 146-7);
- Determination if the search ring is adequate based on generally accepted cellular, PCS, ESMR, ISP, paging and other engineering principles for the intended site;
- Evaluation of proposed height based on capacity, coverage or upgrades;
- Evaluation of the site option and/or any alternative site location options and collocations/modifications/upgrades;
- Evaluation of compliance with existing ordinance and regulations (*i.e.*, setbacks, tower separations, ordinance definitions, etc.)
- Compliance with zoning requirements to include, but not limited to correctness of concealed design, low profile antenna installation, maintaining correct number of approved zoning collocations and assurance of matching concealment;
- Compliance with the Telecommunications Act of 1996, Tax Relief and Job Creation Act of 2012, and other applicable federal laws, state and local rules and regulations, whether now existing or hereafter enacted;
- Compliance with any state wireless statutes;
- Evaluation of aesthetic impacts and possible mitigation of, structures, shelters, containers and landscaping to provide a more aesthetically pleasing solution;
- Evaluation of Federal Communications Commission (FCC) Radio Frequency (RF) exposure compliance;
- Evaluation of compliance with public safety communications systems;
- Other lawful matters deemed by the County to be relevant to determining whether a proposed wireless telecommunications facility complies with the provisions of the County's regulations.

The County will forward to Consultant the application submittal package, or arrange for Consultant to receive submittals simultaneously and electronically from the applicant for which the review is required. When all submission items are deemed complete, Consultant within fifteen business (15) days will submit to the County a written report summarizing the petitioner's request and detailing the findings. Consultant will notify the County's Project Planner of any additional materials required to conduct a comprehensive review of the application. Consultant will provide the County with eight (8) copies of written analysis, submitted via Federal Express, next day delivery, including a PDF copy via electronic mail. Upon request and advanced scheduled notice by the County, Consultant will attend related zoning hearing for expert testimony and will also be available to generate any follow-up submittal letters pertaining to expert testimony regarding a petitioner's application.

**EXHIBIT B**  
**THIRD PARTY EXPERT SITE PLAN APPLICATION REVIEWS**  
**CONSULTING FEES**

**Wireless Application Review Project Fees**

CityScape’s application review services are provided at a fixed cost, which are paid for by the applicant. The fee is set per review and there are no additional or hidden costs.

|  |  |
|--|--|
| <p><b><i>Site Review and Analysis – New Structure</i></b></p> <ul style="list-style-type: none"> <li>• <i>New structure review to include attendance by Engineer at: two (2) related visits (i.e. site visit, planning board, public hearing, etc.)</i></li> <li>• <i>Review analysis; no attendance at related public hearings</i></li> <li>• <i>Additional Meetings attended by CityScape</i></li> </ul> | <p>\$ 6,500.00*</p> <p>\$ 5,000.00</p> <p>\$ 1,000.00*</p> |
|--|--|

*\*Includes all travel related expenses.*

The review fee includes an initial review for “technical completeness,” evaluation of the application and submitted materials and/or follow-up review and/or letters on same application. There will be no incidental charges associated with the review fee (i.e., faxing, emailing, printing and reproduction costs). The site review for a new tower application may include attendance, as requested in advance by the County, at related planning/zoning hearings to provide expert testimony and assistance to the County.

The review fee will be paid directly to the County by the applicant, through the County’s application and review process. CityScape will invoice the County for the review upon the completion and submittal of the completed review and analysis by CityScape and attendance at any scheduled meetings at the discretion of the County.

# Biosurveys, Inc.

bio-consulting

794 26<sup>th</sup> Street

Marathon, Florida

33050

Donald L. Craig, AICP  
Land Use Director  
Spottswood, Spottswood & Spottswood  
Key West, Florida

August 9, 2016

Re: Site Assessment of Environmental Conditions – Telecom Systems  
Replacement Communications Tower, 67200 Overseas Highway, Long Key  
RE# 00098780-000000 Land Owner - Monroe County

This memo documents my findings from a biological assessment of the site located on Long Key where there are currently two towers standing on a 2.07 acre parcel owned by Monroe County. The replacement is to be a stand-alone tower without guys and anchor units. The older two towers with their anchor systems are to be removed from the site. The existing elevated fill pad that supports the communication equipment buildings and tower bases will remain in its current footprint. The fill is approximately 4.5 to 5 feet in elevation and covered with gravel. An elevated fill gravel drive connects the towers and equipment pad with the Overseas Highway.

## **Site Vegetative Conditions**

Since the fill pad and drive footprints are kept well maintained, there is no vegetative habitat found there. At the time the towers were erected, lower fill averaging three (3) feet in height were necessary to construct the guy wire anchors that extend out from the main pad approximately 100 feet in three directions. These 10-15 foot wide fill pads support sparse and low lying wetland indicator vegetation typical of salt marsh environments found in the Florida Keys. The dominant plant cover is Buttonwood, Sea Daisy, Salt Wort, Sea Purslane and a mix of marsh grasses. Mangroves are found along the shoulders of the fill and extend canopy over the linear pads to the anchor areas. This is the only vegetation found on the developed areas of the tower system site. Surrounding the fill pads is dense mangroves supported by inundated low elevation wetlands. Black and White Mangroves are dominant around the main tower equipment pad with Red Mangroves primarily found along the shoulders of the three anchoring pads.

Any demolition activity of the guy anchors would necessarily require heavy equipment access to the anchor sites at the ends of the fill using these elevated linear anchor pads. This access would require short-term travel over this low growing ground cover. Some canopy trimming and side trimming of existing mangroves would be needed for the anchor removal.

**Biological opinion and Recommendation:**

The access drive and fill pad for the tower bases with equipment buildings are barren of vegetation. The shoulders of the fill pads are surrounded by mangrove habitat supported by low elevation hydrologically inundated wetlands. These undisturbed wetlands are extensive on the subject parcel and typical of mangrove wetlands found in comparable flooded elevation areas of the Florida Keys. Any demolition of existing towers or other development on the main fill pad and replacement as planned for this site should pose no significant impact to undisturbed vegetative habitat. Once the tower guy wires are removed from the three guy anchor locations, the anchors should be left to remain so that no impact occurs to the vegetation that is over-taking the three low elevation linear anchor pads.



Existing Two Tower Bases & Equipment Bldgs



Drive Fill Pad to Site– View frm Overseas Highway

Harry DeLashmutt,

Consulting Biologist

(305) 942-9221

[hdelashmutt@comcast.net](mailto:hdelashmutt@comcast.net)

**SPOTTSWOOD, SPOTTSWOOD, SPOTTSWOOD & STERLING, PLLC**

ATTORNEYS AND COUNSELORS AT LAW  
500 FLEMING STREET  
KEY WEST, FLORIDA 33040

JOHN M. SPOTTSWOOD, JR.  
ERICA HUGHES STERLING  
CRISTINA L. SPOTTSWOOD  
WILLIAM B. SPOTTSWOOD, JR.  
RICHARD J. McCHESNEY

Telephone | 305-294-9556  
Facsimile | 305-504-2696

OF COUNSEL:

JOHN M. SPOTTSWOOD (1920 – 1975)  
ROBERT A. SPOTTSWOOD (of Counsel)  
WILLIAM B. SPOTTSWOOD (of Counsel)



Memorandum

To:

*Marty*

From:

*Qu*

Date:

*12.12.16*

Subject

*Log by Tower*

CC:

Attachments:

*Hand Copies of Email Attachments*

*Marty - Attached are hand copies of  
the materials I sent this morn.*

*Best -*

*Qu*



**Federal Communications Commission**  
Wireless Telecommunications Bureau

**RADIO STATION AUTHORIZATION**

LICENSEE: TELCOM SYSTEMS, LTD.

ATTN: JAMES E. SPISIAK  
TELCOM SYSTEMS, LTD.  
450 NE FIRST ROAD  
HOMESTEAD, FL 33030-6134

RECEIVED  
DEC 13 2016  
2015-227  
MONROE CO. PLANNING DEPT

|  |                      |
|--|----------------------|
| Call Sign<br>WHO465  |                      |
| File Number<br>0004441472  |                      |
| Radio Service<br>CF - Common Carrier Fixed Point to<br>Point Microwave |                      |
| SMSA   | Station Class<br>FXO |

FCC Registration Number (FRN): 0001735000

| Grant Date | Effective Date | Expiration Date | Print Date |
|------------|----------------|-----------------|------------|
| 12-28-2010 | 12-28-2010     | 02-01-2021      | 12-28-2010 |

**LOCATION**

**Fixed Location Address or Area of Operation:**

2 MI SW OF  
City: LAYTON County: MONROE State: FL

| Loc No. | Location Name | Latitude     | Longitude     | Elevation | Antenna Structure<br>Registration No. |
|---------|---------------|--------------|---------------|-----------|---------------------------------------|
| 001     | LONG KEY      | 24-48-47.0 N | 080-49-33.8 W | 1.5       |                                       |
| 002     | TAVERNIER     | 25-00-25.4 N | 080-31-15.2 W | 0.9       |                                       |
| 003     | MARATHON      | 24-42-41.5 N | 081-05-29.2 W | 1.8       |                                       |

**FREQUENCY PATHS**

| Frequency<br>(MHz) | Tol<br>(%) | Emission<br>Desig | EIRP<br>(dBm) | Constr<br>Date | Path<br>No | Seg | Emit<br>Loc<br>No | Ant Hgt<br>(m)  | Gain<br>(dBi) | Beam<br>(deg) | POL | AZIM<br>(deg) | Rec<br>Loc<br>No | Rec<br>Call<br>Sign |
|--------------------|------------|-------------------|---------------|----------------|------------|-----|-------------------|-----------------|---------------|---------------|-----|---------------|------------------|---------------------|
| 6616.25            | 0.00050    | 2M50D7W           | 61.400        | 09-23-2011     | 003        | 1   | 001               | 42.7            | 40.1          | 1.5           | H   | 55.0          | 002              | WHO464              |
|                    |            |                   |               |                |            |     |                   | Diversity: 28.9 | 40.1          | 1.5           |     |               |                  |                     |
| 6668.75            | 0.00050    | 2M50D7W           | 61.600        | 09-23-2011     | 004        | 1   | 001               | 39.6            | 40.1          | 1.5           | V   | 247.3         | 003              | WHO466              |
|                    |            |                   |               |                |            |     |                   | Diversity: 30.5 | 40.1          | 1.5           |     |               |                  |                     |

**Waivers/Conditions:**

NONE

**Conditions:**

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



Federal Communications Commission  
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: TELCOM SYSTEMS, LTD.

ATTN: JAMES E. SPISIAK  
TELCOM SYSTEMS, LTD.  
450 NE FIRST ROAD  
HOMESTEAD, FL 33030-6134

|   |                      |
|---|----------------------|
| Call Sign<br>WHO465   |                      |
| File Number<br>0004441472   |                      |
| Radio Service<br>CF - Common Carrier Fixed Point to Point Microwave |                      |
| SMSA  | Station Class<br>FXO |

FCC Registration Number (FRN): 0001735000

|                          |                              |                               |                          |
|--------------------------|------------------------------|-------------------------------|--------------------------|
| Grant Date<br>12-28-2010 | Effective Date<br>12-28-2010 | Expiration Date<br>02-01-2021 | Print Date<br>12-28-2010 |
|--------------------------|------------------------------|-------------------------------|--------------------------|

LOCATION

Fixed Location Address or Area of Operation:

2 MI SW OF  
City: LAYTON County: MONROE State: FL

| Loc No. | Location Name | Latitude     | Longitude     | Elevation | Antenna Structure Registration No. |
|---------|---------------|--------------|---------------|-----------|------------------------------------|
| 001     | LONG KEY      | 24-48-47.0 N | 080-49-33.8 W | 1.5       |                                    |
| 002     | TAVERNIER     | 25-00-25.4 N | 080-31-15.2 W | 0.9       |                                    |
| 003     | MARATHON      | 24-42-41.5 N | 081-05-29.2 W | 1.8       |                                    |

FREQUENCY PATHS

| Frequency (MHz) | Tol (%) | Emission Desig | EIRP (dBm) | Constr Date | Path No | Seg | Emit Loc No | Ant Hgt (m) | Gain (dBi) | Beam (deg) | POL | AZIM (deg) | Rec Loc No | Rec Call Sign |
|-----------------|---------|----------------|------------|-------------|---------|-----|-------------|-------------|------------|------------|-----|------------|------------|---------------|
| 6616.25         | 0.00050 | 2M50D7W        | 61.400     | 09-23-2011  | 003     | 1   | 001         | 42.7        | 40.1       | 1.5        | H   | 55.0       | 002        | WHO464        |
|                 |         |                |            |             |         |     | Diversity:  | 28.9        | 40.1       | 1.5        |     |            |            |               |
| 6668.75         | 0.00050 | 2M50D7W        | 61.600     | 09-23-2011  | 004     | 1   | 001         | 39.6        | 40.1       | 1.5        | V   | 247.3      | 003        | WHO466        |
|                 |         |                |            |             |         |     | Diversity:  | 30.5        | 40.1       | 1.5        |     |            |            |               |

Waivers/Conditions:  
NONE

Conditions:

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



**Federal Communications Commission**  
Wireless Telecommunications Bureau

**RADIO STATION AUTHORIZATION**

LICENSEE: TELCOM SYSTEMS, LTD.

ATTN: JAMES E. SPISIAK  
TELCOM SYSTEMS, LTD.  
450 NE FIRST ROAD  
HOMESTEAD, FL 33030-6134

|  |                      |
|--|----------------------|
| Call Sign<br>WHO466  |                      |
| File Number<br>0004441468  |                      |
| Radio Service<br>CF - Common Carrier Fixed Point to<br>Point Microwave |                      |
| SMSA   | Station Class<br>FXO |

FCC Registration Number (FRN): 0001735000

|                          |                              |                               |                          |
|--------------------------|------------------------------|-------------------------------|--------------------------|
| Grant Date<br>12-28-2010 | Effective Date<br>12-28-2010 | Expiration Date<br>02-01-2021 | Print Date<br>12-28-2010 |
|--------------------------|------------------------------|-------------------------------|--------------------------|

**LOCATION**

**Fixed Location Address or Area of Operation:**

U.S. HIGHWAY 1, ATLANTIC SIDE

City: MARATHON      County: MONROE      State: FL

| Loc No. | Location Name  | Latitude     | Longitude     | Elevation | Antenna Structure<br>Registration No. |
|---------|----------------|--------------|---------------|-----------|---------------------------------------|
| 001     | MARATHON       | 24-42-41.5 N | 081-05-29.2 W | 1.8       | 1211363                               |
| 002     | SUGAR LOAF KEY | 24-39-35.2 N | 081-32-17.9 W | 1.8       |                                       |
| 003     | LONG KEY       | 24-48-47.0 N | 080-49-33.8 W | 1.5       |                                       |

**FREQUENCY PATHS**

| Frequency<br>(MHz) | Tol<br>(%) | Emission<br>Desig | EIRP<br>(dBm) | Constr<br>Date | Path<br>No | Seg | Emit<br>Loc<br>No | Ant Hgt<br>(m) | Gain<br>(dBi) | Beam<br>(deg) | POL | AZIM<br>(deg) | Rec<br>Loc<br>No | Rec<br>Call<br>Sign |
|--------------------|------------|-------------------|---------------|----------------|------------|-----|-------------------|----------------|---------------|---------------|-----|---------------|------------------|---------------------|
| 6828.75            | 0.00050    | 2M50D7W           | 61.700        | 09-23-2011     | 003        | 1   | 001               | 41.2           | 40.1          | 1.5           | V   | 67.2          | 003              | WHO465              |
|                    |            |                   |               |                |            |     | Diversity:        | 32.0           | 40.1          | 1.5           |     |               |                  |                     |
| 6743.75            | 0.00050    | 2M50D7W           | 59.800        | 09-23-2011     | 004        | 1   | 001               | 74.7           | 40.1          | 1.5           | H   | 262.9         | 002              | WHO467              |
|                    |            |                   |               |                |            |     | Diversity:        | 62.5           | 40.1          | 1.5           |     |               |                  |                     |

**Waivers/Conditions:**

NONE

**Conditions:**

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



**Federal Communications Commission**  
Wireless Telecommunications Bureau

**RADIO STATION AUTHORIZATION**

LICENSEE: TELCOM SYSTEMS, LTD.

ATTN: JAMES E. SPISIAK  
TELCOM SYSTEMS, LTD.  
450 NE FIRST ROAD  
HOMESTEAD, FL 33030-6134

|  |                             |
|--|-----------------------------|
| <b>Call Sign</b><br>WHO464   |                             |
| <b>File Number</b><br>0004441471   |                             |
| <b>Radio Service</b><br>CF - Common Carrier Fixed Point to Point Microwave |                             |
| <b>SMSA</b>  | <b>Station Class</b><br>FXO |

FCC Registration Number (FRN): 0001735000

|                                 |                                     |                                      |                                 |
|---------------------------------|-------------------------------------|--------------------------------------|---------------------------------|
| <b>Grant Date</b><br>12-28-2010 | <b>Effective Date</b><br>12-28-2010 | <b>Expiration Date</b><br>02-01-2021 | <b>Print Date</b><br>12-28-2010 |
|---------------------------------|-------------------------------------|--------------------------------------|---------------------------------|

**LOCATION**

**Fixed Location Address or Area of Operation:**

NEAR US HWY 1 APPROX AT MARKER 92  
City: TAVERNIER      County: MONROE      State: FL

| Loc No. | Location Name | Latitude     | Longitude     | Elevation | Antenna Structure<br>Registration No. |
|---------|---------------|--------------|---------------|-----------|---------------------------------------|
| 001     | TAVERNIER     | 25-00-25.4 N | 080-31-15.2 W | 0.9       |                                       |
| 002     | HOMESTEAD     | 25-28-27.3 N | 080-28-16.2 W | 2.7       |                                       |
| 003     | LONG KEY      | 24-48-47.0 N | 080-49-33.8 W | 1.5       |                                       |
| 004     | MARATHON      | 24-42-44.5 N | 081-05-45.2 W | 2.1       |                                       |

**FREQUENCY PATHS**

| Frequency<br>(MHz) | Tol<br>(%) | Emission<br>Desig | EIRP<br>(dBm) | Constr<br>Date | Path<br>No | Seg | Emit<br>Loc<br>No | Ant Hgt<br>(m) | Gain<br>(dBi) | Beam<br>Reflector<br>Ht(m)xWd(m) | POL | AZIM<br>(deg) | Rec<br>Loc<br>No | Rec<br>Call<br>Sign |
|--------------------|------------|-------------------|---------------|----------------|------------|-----|-------------------|----------------|---------------|----------------------------------|-----|---------------|------------------|---------------------|
| 6768.75            | 0.00050    | 2M50D7W           | 59.300        | 03-04-2010     | 004        | 1   | 001               | 85.3           | 40.1          | 1.5                              | V   | 5.5           | 002              | WHE477              |
| 6776.25            | 0.00050    | 2M50D7W           | 60.700        | 09-23-2011     | 005        | 1   | 001               | 65.5           | 40.1          | 1.5                              | H   | 235.2         | 003              | WHO465              |
|                    |            |                   |               |                |            |     | Diversity:        | 45.7           | 40.1          | 1.5                              |     |               |                  |                     |

**Waivers/Conditions:**

Grant of the request to update licensee name is conditioned on it not reflecting an assignment or transfer of control (see Rule 1.948); if an assignment or transfer occurred without proper notification or FCC approval, the grant is void and the station is licensed under the prior name.

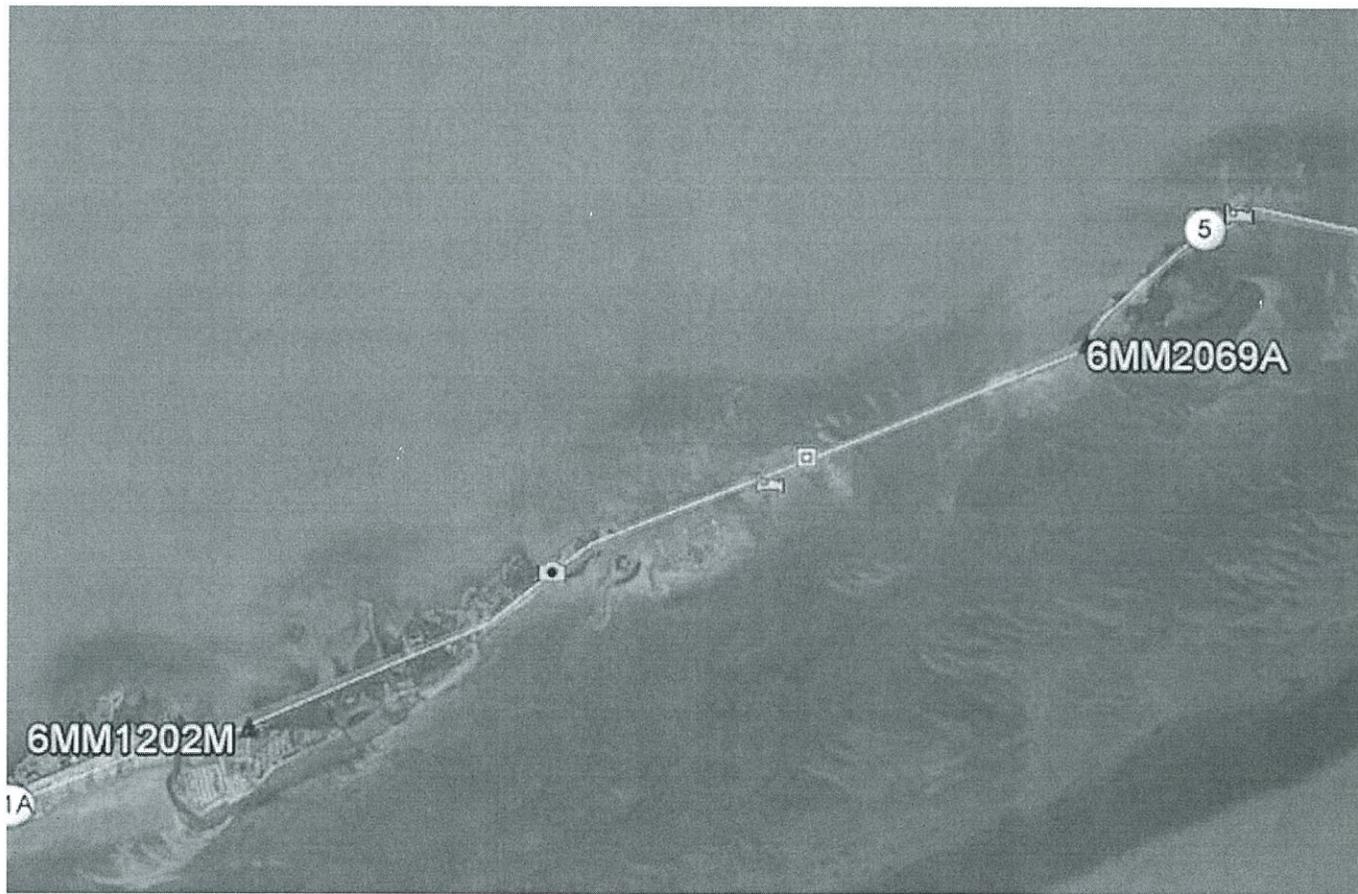
**Conditions:**

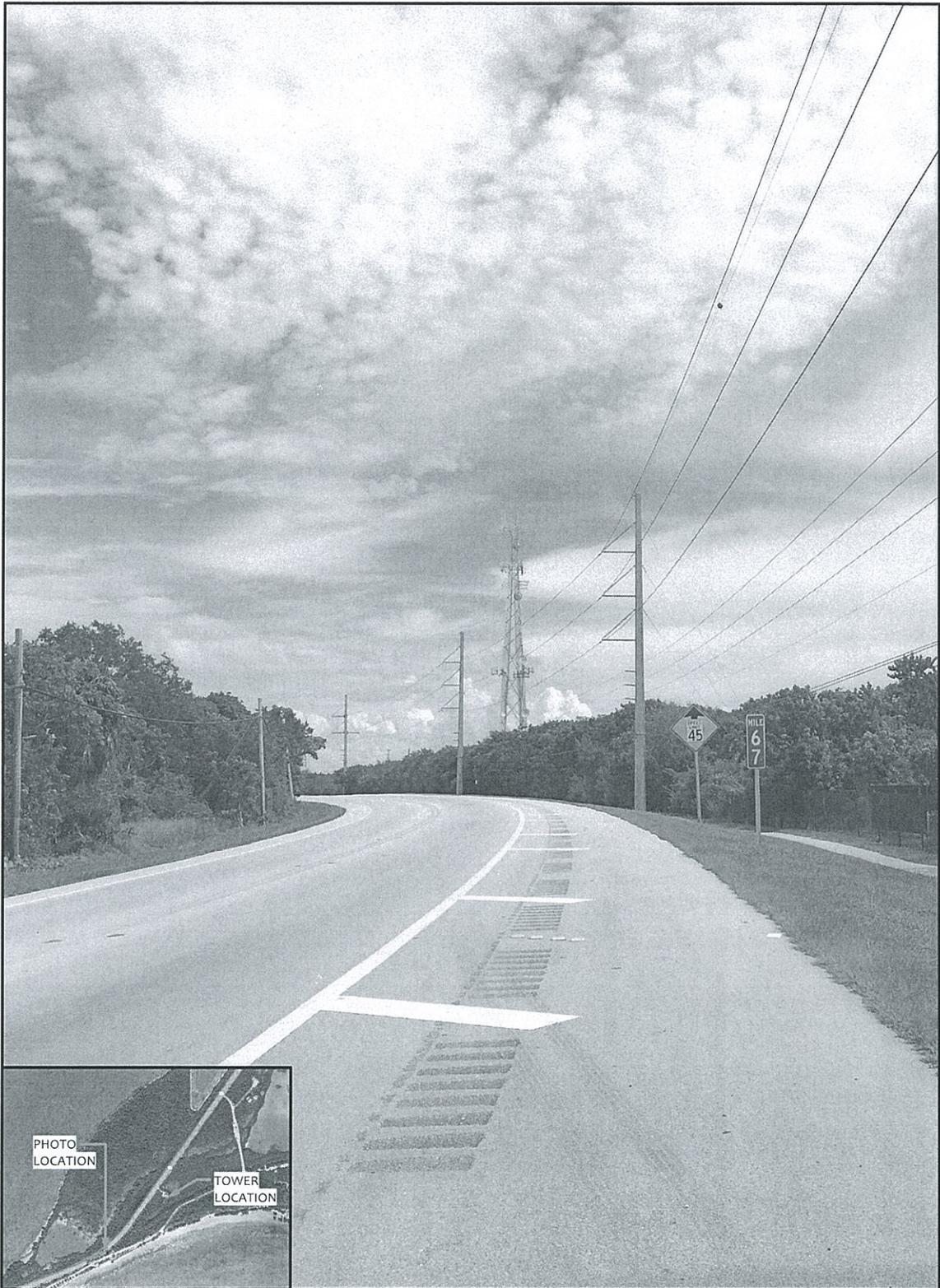
Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term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

Long Key – T- Mobile Hand Off Sites and Locations

6MM1206M - 24.856, -80.7311 - 105 Lakeview Drive Matecumbe Key  
33036

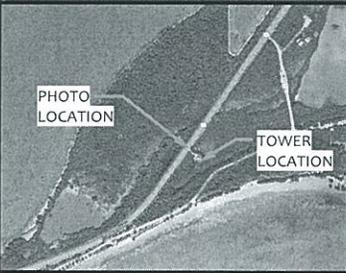
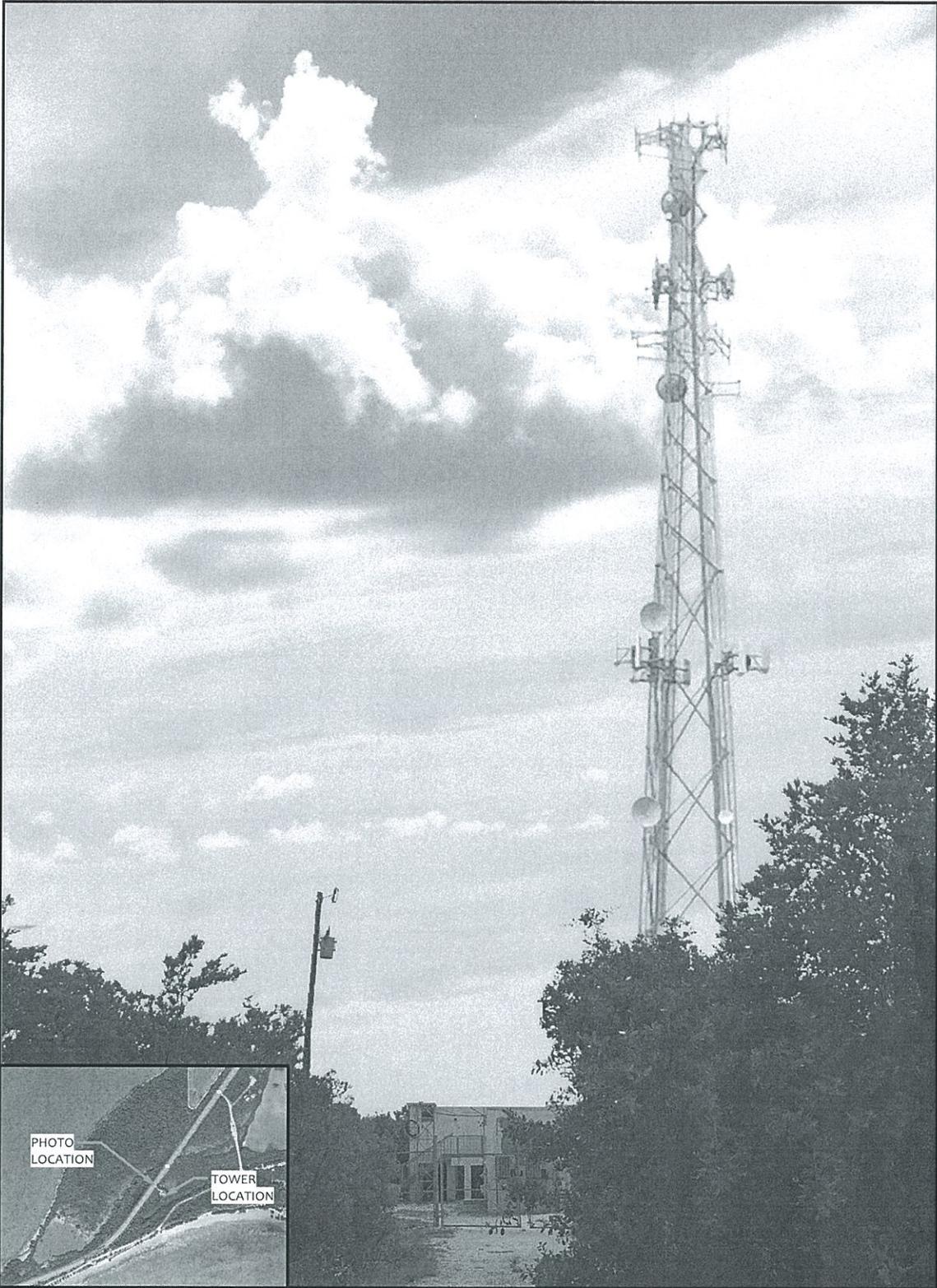
6MM1202M - 24.7345, -81.0131 - 13860 Overseas Highway  
Marathon 33050





AERIAL VIEW  
APPROX. 1000' AWAY FROM TOWER

VIEW FROM OVERSEAS HIGHWAY ONE LOOKING NORTH  
APPROXIMATELY 1000' AWAY FROM TOWER



AERIAL VIEW  
APPROX. 150' AWAY FROM TOWER

VIEW FROM OVERSEAS HIGHWAY ONE LOOKING EAST  
APPROXIMATELY 150' AWAY FROM TOWER



AERIAL VIEW  
APPROX. 620' AWAY FROM TOWER



VIEW FROM OVERSEAS HIGHWAY ONE LOOKING SOUTH  
APPROXIMATELY 620' AWAY FROM TOWER

**AFFIDAVIT**

BEFORE ME, the undersigned Notary Public, personally appeared James E. Spisiak, the undersigned Affiant, who after being duly sworn, depose and states the following:

1. At the time of making this affidavit Affiant is the owner of Telcom Systems, Ltd.
2. The undersigned Affiant has a mailing address of 450 NE 1st Road, Homestead, FL 33030.
3. The undersigned Affiant leases the subject property owned by Monroe County, vacant land on Long Key, Florida, with parcel ID 00098780-000000, which is the location of the proposed tower.
4. Affiant makes the following representations in regard to Monroe County Project 2015-227:
  - a. The radio frequency emissions from the proposed antenna-supporting structure will comply with FCC standards for such emissions.
  - b. Affiant agrees to allow the collocation of other wireless equipment on the proposed antenna-supporting structure.

DATED this 19 day of Sept., 2016:

Witnesses as to all:

Bette J Holland  
Witness

James E. Spisiak  
James E. Spisiak

Bette J Holland  
Print Name

[Signature]  
Witness

JACK TALLEDO  
Print Name

STATE OF FLORIDA                    )  
COUNTY OF MONROE                )

SWORN TO AND SUBSCRIBED before me this 19<sup>th</sup> day of Sept. 2016 by James E. Spisiak, who is personally known to me or has produced \_\_\_\_\_ as identification to me.



April O'Mara  
Notary Public



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

Aeronautical Study No.  
2014-ASO-12350-OE

Issued Date: 05/24/2016

James Spisiak  
Telcom Systems, Ltd.  
450 NE 1st Road  
Homestead, FL 33030

**\*\* Extension \*\***

A Determination was issued by the Federal Aviation Administration (FAA) concerning:

|            |   |
|------------|---|
| Structure: | Antenna Tower Layton (Towers)   |
| Location:  | Layton, FL  |
| Latitude:  | 24-48-47.00N NAD 83   |
| Longitude: | 80-49-33.80W  |
| Heights:   | 5 feet site elevation (SE)<br>215 feet above ground level (AGL)<br>220 feet above mean sea level (AMSL) |

In response to your request for an extension of the effective period of the determination, the FAA has reviewed the aeronautical study in light of current aeronautical operations in the area of the structure and finds that no significant aeronautical changes have occurred which would alter the determination issued for this structure.

Accordingly, pursuant to the authority delegated to me, the effective period of the determination issued under the above cited aeronautical study number is hereby extended and will expire on 11/24/2017 unless otherwise extended, revised, or terminated by this office. You must adhere to all conditions identified in the original determination.

This extension issued in accordance with 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerns the effect of the 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 extension will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (404) 305-6462. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ASO-12350-OE.

Signature Control No: 234257148-293223830  
Michael Blaiçh  
Specialist

( EXT )

cc: FCC

## AFFIDAVIT

BEFORE ME, the undersigned Notary Public, personally appeared William R. Heiden III, the undersigned Affiant, who after being duly sworn, depose and states the following:

1. At the time of making this affidavit Affiant is the Manager of Engineering for Valmont Industries, Inc. for the Specialty Structures Division.
2. The undersigned Affiant has a mailing address of 1545 Pidco Dr., Plymouth, IN 46563.
3. As Manager of Engineering, Affiant is responsible for all aspects of the tower design and management of drawings. The Manager of Engineering provides policy direction & implementation. He also provides technical support to internal staff & external customers.
4. The undersigned Affiant is familiar with the existing antennas and associated structures located on the subject property owned by Monroe County, vacant land on Long Key, Florida, with parcel ID 00098780-000000.
5. Affiant, in his expert opinion, makes the following observations in regard to monopole towers vs. self-supporting towers (3-leg/lattice design):

a. **Maximum tower heights (typical):**

The typical maximum monopole tower height is approximately 200'. The height is usually achieved in lower wind speed areas (i.e. 90mph) and with cellular antenna type loading.

The typical maximum self-supporting/lattice tower height is approximately 600'. Valmont has provided numerous self-supporting towers to customers in Florida as well as other locations around the Caribbean (i.e. Puerto Rico, Jamaica, Virgin Islands, etc.).

b. **Stiffness/Flexibility:**

In the case of a cellular array application the design of the monopole tower is controlled/limited by the strength of the material and the stress induced by the loading. In contrast, where microwave or other directional antennae are required the design is typically governed by twist & sway (deflection criteria) to ensure the equipment can transmit the required signal to a distant receiving antenna. The twist & sway design criteria will significantly increase the monopole diameter &/or wall thickness with a corresponding increase in cost.

In contrast to the monopole tower, the self-supporting/lattice towers are much stiffer & therefore deflect less. As such, these structures are not always governed by the twist & sway requirements of the microwave or other directional antennae. Self-supporting towers would typically only be governed by twist & sway if the deflection criteria are small (i.e. large

diameter mw dish, high frequency mw dish, etc.). The inherently stiffer self-supporting structure makes transmittal of signal between microwave and other directional antennae more consistently effective, in addition to typically being more cost effective than a monopole tower in this application. In addition, in very high wind speed locations, self-supporting towers may be the only structures that will meet the design criteria.

c. **Corrosion/Rust Potential:**

This location has an increased potential for corrosion due to salt spray and humidity. In the case of the monopole tower, internal corrosion may occur & would not be readily apparent. In most cases, the area inside the monopole will not be large enough to access and may also be filled with transmission lines. Whereas the self-supporting/lattice solid rod tower does not have any exposed internal areas where corrosion could occur.

d. **Conclusion:**

Affiant concludes that because of the height and use of the tower, the self-supporting tower is the safer and better choice, and that construction of the monopole may not be feasible.

DATED this 2 day of November, 2015:

Witnesses as to all:

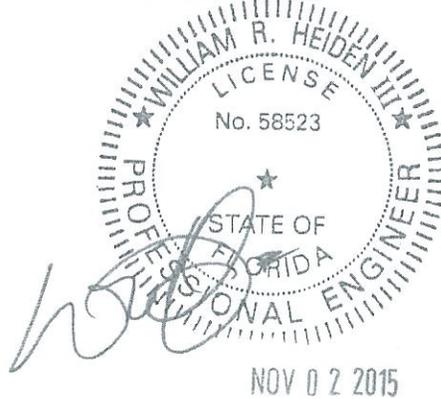
Christine Ward  
Witness

Christine Ward  
Print Name

Witness

Print Name

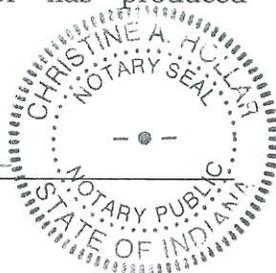
William R. Heiden III



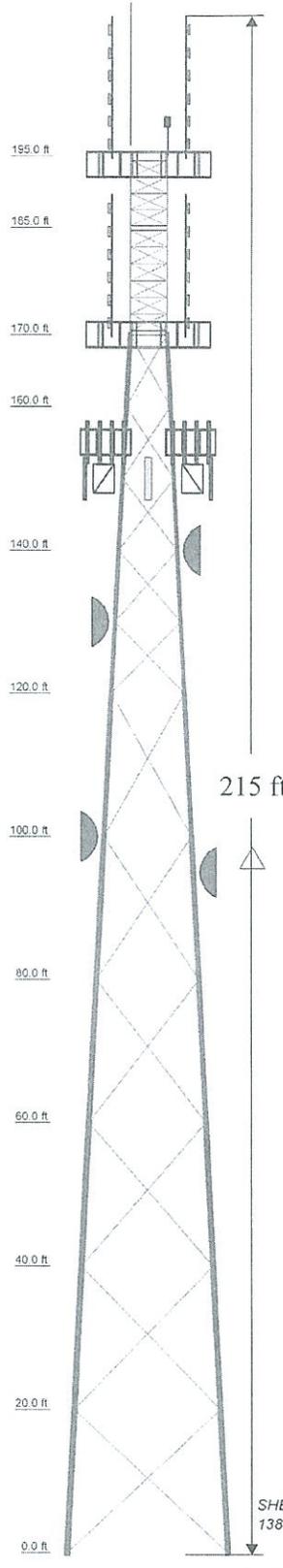
STATE OF FLORIDA Indiana )  
COUNTY OF MONROE Marshall )

SWORN TO AND SUBSCRIBED before me this 2 day of November 2015 by William R. Heiden III, who is personally known to me or has produced driver's license as identification to me.

Christine Ward  
Notary Public



|                 |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Section         | T1 | T2 | T3 | T4 | T5 | T6 | T7 | T8 | T9 | T10 | T11 | T12 | T13 | T14 | T15 | T16 | T17 | T18 | T19 | T20 | T21 | T22 |
| Legs            |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Leg Grade       |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Diagonals       |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Diagonal Grade  |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Top Girts       |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Mid Girts       |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Bottom Girts    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Horizontals     |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Face Width (ft) |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |
| # Panels @ (ft) |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Weight (K)      |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |



ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:

DOWN: 810 K  
 UPLIFT: -741 K  
 SHEAR: 87 K

AXIAL: 68 K

SHEAR: 138 K

MOMENT: 14995 kip-ft

TORQUE 46 kip-ft

REACTIONS - 150 mph WIND

DESIGNED APPURTENANCE LOADING

| TYPE   | ELEVATION | TYPE                                | ELEVATION |
|--|-----------|-------------------------------------|-----------|
| 21' LRE with 7'-6" lightning rod (arm=11.5') | 195       | Raycap RCMD-C-3315-PF-48            | 155       |
| Beacon                                       | 195       | (2) FXFB (22.1" x 19.4" x 5.2')     | 155       |
| Beacon Extender (4) 803062                   | 195       | (2) FRIG (23" x 16.4" x 6" assumed) | 155       |
| (3) DB420-A                                  | 195       | FRIE                                | 155       |
| (3) DB420-A                                  | 195       | 13' V Frame                         | 155       |
| (3) 2" sch 40 x 50" pipe                     | 195       | (4) CMA-B/3324                      | 155       |
| (3) 2" sch 40 x 50" pipe                     | 195       | (4) 2" sch 40 x 84" pipe            | 155       |
| (3) 2" sch 40 x 50" pipe                     | 195       | Raycap RCMD-C-3315-PF-48            | 155       |
| (3) 2" sch 40 x 50" pipe                     | 195       | (2) FXFB (22.1" x 19.4" x 5.2')     | 155       |
| 13' V Frame                                  | 195       | (2) FRIG (23" x 16.4" x 6" assumed) | 155       |
| 13' V Frame                                  | 195       | FRIE                                | 155       |
| 13' V Frame                                  | 195       | 13' V Frame                         | 155       |
| (3) DB420-A                                  | 170       | PANEL (8' X 1' X 2')                | 150       |
| (3) DB420-A                                  | 170       | PANEL (8' X 1' X 2')                | 150       |
| (3) DB420-A                                  | 170       | PANEL (8' X 1' X 2')                | 150       |
| (3) 2" sch 40 x 50" pipe                     | 170       | 6' Pivot Side Arm (50" pipe)        | 150       |
| (3) 2" sch 40 x 50" pipe                     | 170       | 6' Pivot Side Arm (50" pipe)        | 150       |
| (3) 2" sch 40 x 50" pipe                     | 170       | 6' Pivot Side Arm (50" pipe)        | 150       |
| 13' V Frame                                  | 170       | 6' Grid Dish                        | 140       |
| 13' V Frame                                  | 170       | 6' Grid Dish                        | 130       |
| 13' V Frame                                  | 170       | 6' Grid Dish                        | 100       |
| (4) ADF01820-3333B-XDM                       | 155       | 6' Grid Dish                        | 95        |
| (4) 2" sch 40 x 72" pipe                     | 155       |                                     |           |

SYMBOL LIST

| MARK | SIZE  | MARK | SIZE  |
|------|---|------|---|
| A    | #122G - 1.25" - 1.00" conn. (Pirod 208951)          | F    | #122G - 2.50" - 0.875" conn. (Pirod 208335)         |
| B    | #122G - 1.50" - 1.25" conn. (Pirod 224112)          | G    | #122G - 2.75" - 0.875" conn. (Pirod 208337)         |
| C    | #122G - 1.75" - 1.00" conn. (Pirod 195557)          | H    | #122G - 3.00" - 0.875" conn. (Pirod 208336)         |
| D    | #122G - 2.00" - 0.875" conn. - Trans (Pirod 211843) | I    | #122G - 3.00" - 0.875" conn. - Trans (Pirod 208338) |
| E    | #122G - 2.25" - 0.875" conn. (Pirod 208334)         | J    | L2 1/2x2 1/2x3/16                                   |

MATERIAL STRENGTH

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

TOWER DESIGN NOTES

1. Tower is located in Monroe County, Florida.
2. Tower designed for Exposure D to the TIA-222-G Standard.
3. Tower designed for a 150 mph basic wind in accordance with the TIA-222-G Standard.
4. Deflections are based upon a 60 mph wind.
5. Tower Structure Class II.
6. Topographic Category 1 with Crest Height of 0.00 ft.



|  |                              |  |            |
|--|------------------------------|--|------------|
| <b>valmont</b><br>STRUCTURES<br>1545 Pidco Dr.<br>Plymouth, IN<br>Valmont Structures, Inc. - Speciality Structures Group<br>Phone: (574) 936-4221<br>FAX: (574) 936-6458 | Job: 184708                  | Project: U-22 x 195' - Long Key Site, FL |            |
|  | Client: Telcom Systems, LTD. | Drawn by: WRH2                           | App'd:     |
|  | Code: TIA-222-G              | Date: 08/18/15                           | Scale: NTS |
|  | Path:                        | Dwg No:                                  | E-1        |

# County of Monroe Growth Management Division

## Planning & Environmental Resources

### Department

2798 Overseas Highway, Suite 410

Marathon, FL 33050

Voice: (305) 289-2500

FAX: (305) 289-2536



## Board of County Commissioners

Mayor Danny L. Kolhage, Dist. 1

Mayor Pro Tem Heather Carruthers, Dist. 3

George Neugent, Dist. 2

David Rice, Dist. 4

Sylvia Murphy, Dist. 5

*We strive to be caring, professional, and fair.*

Date: 12.09.15

Time: \_\_\_\_\_

Dear Applicant:

This is to acknowledge submittal of your application for Variance - PE  
Type of application

Spisiak, James  
Project / Name to the Monroe County Planning Department.

Thank you.

Gail Creech

Planning Staff

MCPA GIS Public Portal  
 Scott P. Russell, CFA

• **Pan**

• [Legend](#)

• **Zoom In**

MCPA GIS Public Portal  
 Major Road

**Zoom Out**

Monroe Outline  
 Subdivisions

**Address**

Section Lines  
 Find

**Identify**

SECTION TEXT

**Select**

Parcels

**Buffer**

Shoreline

**Measure**

Lot Lines

**Print**

Hooks Leads

[Help](#)  
 Click on our [Getting Started](#) tutorial!

**Expand All**

- MCPA GIS Public Portal
- 2014 Condo
  - Monroe Overlay
  - Subdivisions
- 2013 Condo
  - Section Lines
  - Parcels
  - Shoreline
- 2012 Condo
  - Lot Lines
  - Hooks Leads
- 2011 Condo
  - Easements
  - Text Displays
- 2010 Condo
  - Qualified Condo Sales
  - Qualified Sales
  - Transportation
- 2009 Condo
- 2008 Condo
- 2015 Sales
- 2014 Sales
- 2013 Sales
- 2012 Sales
- 2011 Sales
- 2010 Sales
- 2009 Sales
- 2008 Sales
- Road Centerline
- Road Block Name

Zoom-in Zoom-in to a defined extent...  
 Zoom-out Zoom-out to a defined extent...  
 Full Extent Zoom to the full extent tool was clicked!  
 Latitude: 28.448 Longitude: -80.830255

Basemap Select a basemap Locate Clear

| OBJECTID | SDE.DBO.W_PARCELS.ID | SDE.DBO.W_PARCELS.RECHAR | SDE.DBO.W_PARCELS.GEO_FEAT |
|----------|----------------------|--------------------------|----------------------------|
| 188938   | 98780.0001           | 00098780-000100          | 36527                      |
| 31821    | 98730                | 00098730-000000          | 46735                      |
| 14507    | 98780                | 00098780-000000          | 41580                      |

Verified GC

MONROE COUNTY  
500 WHITEHEAD ST  
KEY WEST, FL 33040-6581

TIITF/REC & PARKS  
3900 COMMONWEALTH BLVD  
TALLAHASSEE, FL 32399-3000

Labels GC 1 of 1

**End of Additional File 2015-227**

**SPOTTSWOOD, SPOTTSWOOD AND SPOTTSWOOD**

ATTORNEYS AND COUNSELORS AT LAW  
500 FLEMING STREET  
P. O. BOX 900  
KEY WEST, FLORIDA 33041-1900

JOHN M. SPOTTSWOOD, JR.  
WILLIAM B. SPOTTSWOOD  
ERICA N. HUGHES-STERLING  
CRISTINA L. SPOTTSWOOD  
WILLIAM B. SPOTTSWOOD, JR.  
RICHARD J. McCHESNEY

TELEPHONE  
305-294-9556  
FAX  
305-292-1982  
305-504-2696

OF COUNSEL:

JOHN M. SPOTTSWOOD (1920 – 1975)  
ROBERT A. SPOTTSWOOD

December 8, 2015

Monroe County Planning Department  
Attention: Gail Creech  
2798 Overseas Highway, Suite 410  
Marathon, FL 33050



Re:

Dear Ms. Creech:

Enclosed in the original please find the Variance Application relative to the above referenced matter. Also enclosed, please find our check in the amount of \$1,862.00. This check represents payment of \$1,608.00 for application fee, \$245.00 for the newspaper notice and \$9.00 for property owner's notice. Kindly process this application in your typical manner and contact myself or Attorney Cristina Spottswood should you have any questions in regards to this matter. Thank you.

Sincerely,



Danyel Clynes  
Legal Assistant &  
Real Estate Closer

/drc  
Enclosures

APPLICATION  
**MONROE COUNTY**  
**PLANNING & ENVIRONMENTAL RESOURCES DEPARTMENT**



RECEIVED

**DEC 09 2015**

MONROE CO. PLANNING DEPT

**Variance Application to the Monroe County Planning Commission**

**An application must be deemed complete and in compliance with the Monroe County Code by the Staff prior to the item being scheduled for review**

Planning Commission Variance Application Fee: \$1,608.00

*In addition to the application fee, the following fees also apply:*

Advertising Costs: \$245.00

Surrounding Property Owner Notification: \$3.00 for each property owner required to be noticed

**Date of Submittal:** 12 / 8 / 2015  
Month Day Year

**Property Owner:**

James E. Spisiak  
Name

450 NE 1st Road, Homestead, FL 33030  
Mailing Address (Street, City, State, Zip Code)

(305) 245-4511  
Daytime Phone

tel\_com@bellsouth.net  
Email Address

**Agent (if applicable):**

Cristina Spottswood / Spottswood, Spottswood, & Spottswood  
Name

500 Fleming St., Key West, FL 33040  
Mailing Address (Street, City, State, Zip Code)

(305) 294-9550, ext. 240  
Daytime Phone

Cristy @ spottswoodlaw.com  
Email Address

**Legal Description of Property:**

(If in metes and bounds, attach legal description on separate sheet)

| Block  | Lot | Subdivision             | Long Key |
|--|-----|-------------------------|----------|
| 00098780-000000                                | 1   | 1115533                 | Key      |
| Real Estate (RE) Number                        |     | Alternate Key Number    |          |
|  |     | 67.2                    |          |
| Street Address (Street, City, State, Zip Code) |     | Approximate Mile Marker |          |

APPLICATION

Land Use District Designation(s): Native Area

Present Land Use of the Property: Communications Tower Site

Total Land Area: 2.07 AC

Please provide the standard required by the land development regulations: Height: Not greater than 199 feet.  
(i.e. front yard setback of 25 feet, 100 off-street parking spaces, etc.)

Please provide that requested: 217 feet  
(i.e. front yard setback of 10 feet, 70 off-street parking spaces, etc.)

**All of the following standards must be met in order to receive variance approval. Please describe how each standard shall be met.**

- 1) The applicant shall demonstrate a showing of good and sufficient cause:  
Removing two dilapidated towers and replacing it with one tower.
- 2) Failure to grant the variance would result in exceptional hardship to the applicant:  
To get similar coverage, would need to replace both towers instead of building one new tower in place of both - which would be extra cost & take up extra space.
- 3) Granting the variance will not result in increased public expenses, create a threat to public health and safety, create a public nuisance or cause fraud or victimization of the public:  
Granting the variance will not result in increased public expenses, create a threat to public health & safety, create a public nuisance or cause fraud or victimization of the public.
- 4) Property has unique or peculiar circumstances, which apply to this property, but which do not apply to other properties in the same zoning district:  
Unlike other properties in the same district, this property has long been developed with radio towers & thus makes it unique within a distance of many miles.
- 5) Granting the variance will not give the applicant any special privilege denied other properties in the immediate neighborhood in terms of the provisions of this chapter or established development patterns:  
Granting the variance will not give the applicant any special privileges.

APPLICATION

- 6) Granting the variance is not based on disabilities, handicaps or health of the applicant or members of his family:

Granting the variance is not based on disabilities, handicaps or health.

- 7) Granting the variance is not based on the domestic difficulties of the applicant or his family:

Granting the variance is not based on domestic difficulties.

- 8) The variance is the minimum necessary to provide relief to the applicant:

The variance is the minimum necessary.

All of the following must be submitted in order to have a complete application submittal:  
(Please check as you attach each required item to the application)

- Complete variance application (unaltered and unbound);
- Correct fee (check or money order to Monroe County Planning & Environmental Resources);
- Proof of ownership (i.e. Warranty Deed); owned by Monroe County
- Current Property Record Card(s) from the Monroe County Property Appraiser;
- Location map;
- Photograph(s) of site from adjacent roadway(s);
- Signed and Sealed Boundary Survey, prepared by a Florida registered surveyor – 16 sets (at a minimum, survey should include elevations; location and dimensions of all existing structures, paved areas and utility structures; all bodies of water on the site and adjacent to the site; total acreage by land use district; and total acreage by habitat);
- Signed and Sealed Site Plans, prepared by a Florida registered architect, engineer or landscape architect– 16 sets (drawn to a scale of 1 inch equals 20 feet, except where impractical and the Director of Planning authorizes a different scale). At a minimum, the site plan should include the following:
  - Date, north point and graphic scale;
  - Boundary lines of site, including all property lines and mean high-water lines;
  - Land use district of site and any adjacent land use districts;
  - Locations and dimensions of all existing and proposed structures and drives;
  - Type of ground cover (i.e. concrete, asphalt, grass, rock);
  - Adjacent roadways;
  - Setbacks as required by the land development regulations;
  - Location and dimensions of all parking spaces (including handicap accessible, bicycle and scooter) and loading zones;
- Typed name and address mailing labels of all property owners within a 300 foot radius of the property. This list should be compiled from the current tax rolls of the Monroe County Property Appraiser. In the event that a condominium development is within the 300 foot radius, each unit owner must be included;

APPLICATION

If applicable, the following must be submitted in order to have a complete application submittal:

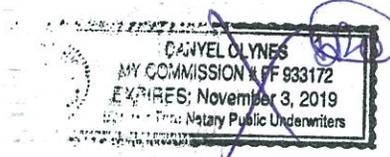
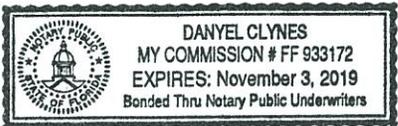
- Notarized Agent Authorization Letter (note: authorization is needed from all owner(s) of the subject property)

If deemed necessary to complete a full review of the application, the Planning & Environmental Resources Department reserves the right to request additional information.

I certify that I am familiar with the information contained in this application, and that to the best of my knowledge such information is true, complete and accurate.

Signature of Applicant: Curtis J. Gansmeed Date: 12/08/2015

Sworn before me this 8<sup>th</sup> day of December, 2015



Danyel Clynes  
Notary Public  
My Commission Expires

Please send the complete application package to the Monroe County Planning & Environmental Resources Department, Marathon Government Center, 2798 Overseas Highway, Suite 400, Marathon, FL 33050.

# Location Map

AK 1115533

MONROE COUNTY PROPERTY  
APPRAISER OFFICE



THIS PROPERTY LOCATION MAP HAS BEEN COMPILED FOR INTERNAL OFFICE USE AS AN AID IN THE PREPARATION OF THE MONROE COUNTY TAX ROLL. IT IS NOT A SURVEY AND THE OWNERSHIP INFORMATION DEPICTED THEREON SHOULD NOT BE RELIED UPON FOR TITLE PURPOSES. NEITHER MONROE COUNTY NOR THE OFFICE OF THE PROPERTY APPRAISER ASSUMES RESPONSIBILITY FOR ANY ERRORS OR OMISSIONS.

1:2,748

Date: 12/8/2015

July 20, 2015  
(Date)

I hereby authorize Spottswood, Spottswood & Spottswood be listed as authorized agent  
(Name of Agent)

for James Spisiak, Telecom Systems for the application submittal for  
(Name of ~~Property Owner(s)~~ the Applicant(s))

Property described as: Parcel ID # 00098780-000000.

Subdivision: \_\_\_\_\_, Key (island): Long Key

Property Owner: Monroe County

This authorization becomes effective on the date this affidavit is notarized and shall remain in effect until terminated by the undersigned. This authorization acts as a durable power of attorney only for the purposes stated.

The undersigned understands the risks and liabilities involved in the granting of this agency and accepts full responsibility for any and all of the actions of the agent named herein related to the processing of the services requested, application(s) and/or the acquisition of approvals/permits for the aforementioned applicant. The applicant(s) hereby indemnifies and holds harmless Monroe County, its officers, agents and employees for any damage to applicant caused by its agent or arising from this agency authorization.

**Note:** Authorization is needed from each owner of the subject property. Therefore, one or more authorization forms must be submitted with the application if there are multiple owners.

James E. Spisiak  
Applicant Signature

James E. Spisiak  
Printed Name of Applicant

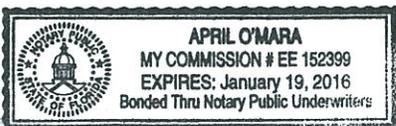
**NOTARY:  
STATE OF FLORIDA  
COUNTY OF MONROE**

The foregoing instrument was acknowledged before me this 20 day of July, 2015.

James E. Spisiak is  personally known \_\_\_\_\_ produced identification

(\_\_\_\_\_ Type of Identification), did / did not take an oath.

April O'Mara  
Notary



July 20, 2015

(Date)

I hereby authorize Cristina Spottswood be listed as authorized agent  
(Name of Agent)

for James Spisiak, Telecom Systems for the application submittal for  
(Name of ~~Property Owner(s)~~ the Applicant(s))

Property described as: Parcel ID # 00098780-000000.

Subdivision: \_\_\_\_\_, Key (island): Long Key

Property owner: Monroe County

This authorization becomes effective on the date this affidavit is notarized and shall remain in effect until terminated by the undersigned. This authorization acts as a durable power of attorney only for the purposes stated.

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**Note:** Authorization is needed from each owner of the subject property. Therefore, one or more authorization forms must be submitted with the application if there are multiple owners.

James E. Spisiak  
Applicant Signature

James E. Spisiak  
Printed Name of Applicant

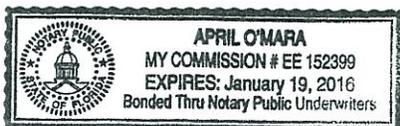
**NOTARY:  
STATE OF FLORIDA  
COUNTY OF MONROE**

The foregoing instrument was acknowledged before me this 20 day of July, 2015.

James E. Spisiak is  personally known \_\_\_\_\_ produced identification

\_\_\_\_\_ (Type of Identification), did / did not take an oath.

April O'Mara  
Notary



July 20, 2015  
(Date)

I hereby authorize John M. Spottswood, JR. be listed as authorized agent  
(Name of Agent)

for James Spisiak, Telecom Systems for the application submittal for  
(Name of ~~Property Owner(s)~~ the Applicant(s))

Property described as: Parcel ID # 00098780-000000.

Subdivision: \_\_\_\_\_, Key (island): Long Key

Property owner: Monroe County

This authorization becomes effective on the date this affidavit is notarized and shall remain in effect until terminated by the undersigned. This authorization acts as a durable power of attorney only for the purposes stated.

The undersigned understands the risks and liabilities involved in the granting of this agency and accepts full responsibility for any and all of the actions of the agent named herein related to the processing of the services requested, application(s) and/or the acquisition of approvals/permits for the aforementioned applicant. The applicant(s) hereby indemnifies and holds harmless Monroe County, its officers, agents and employees for any damage to applicant caused by its agent or arising from this agency authorization.

**Note:** Authorization is needed from each owner of the subject property. Therefore, one or more authorization forms must be submitted with the application if there are multiple owners.

James E. Spisiak  
Applicant Signature

James E. Spisiak

Printed Name of Applicant

**NOTARY:  
STATE OF FLORIDA  
COUNTY OF MONROE**

The foregoing instrument was acknowledged before me this 20 day of July, 2015.

James E. Spisiak is  personally known \_\_\_\_\_ produced identification

(\_\_\_\_\_ Type of Identification), did / did not take an oath.

April O'Mara  
Notary



July 20, 2015  
(Date)

I hereby authorize Richard Mcchesney be listed as authorized agent  
(Name of Agent)

for James Spisiak, Telecom Systems for the application submittal for  
(Name of Property Owner(s) the Applicant(s))

Property described as: Parcel ID # 00098780-000000.

Subdivision: \_\_\_\_\_, Key (island): Long Key

Property Owner: Monroe County

This authorization becomes effective on the date this affidavit is notarized and shall remain in effect until terminated by the undersigned. This authorization acts as a durable power of attorney only for the purposes stated.

The undersigned understands the risks and liabilities involved in the granting of this agency and accepts full responsibility for any and all of the actions of the agent named herein related to the processing of the services requested, application(s) and/or the acquisition of approvals/permits for the aforementioned applicant. The applicant(s) hereby indemnifies and holds harmless Monroe County, its officers, agents and employees for any damage to applicant caused by its agent or arising from this agency authorization.

**Note:** Authorization is needed from each owner of the subject property. Therefore, one or more authorization forms must be submitted with the application if there are multiple owners.

James E. Spisiak  
Applicant Signature

James E. Spisiak

Printed Name of Applicant

**NOTARY:  
STATE OF FLORIDA  
COUNTY OF MONROE**

The foregoing instrument was acknowledged before me this 20 day of July, 2015.

James E. Spisiak is  personally known \_\_\_\_\_ produced identification

(\_\_\_\_\_ Type of Identification), did / did not take an oath.

April O'Mara  
Notary



## Variance Application for TELCOM

Per Section 146-7 (b) of the Monroe County Code of Ordinances, Land Development Code, the planning commission may grant variances from the minimum height requirements set forth in this chapter. The planning commission, in granting or denying such a variance, shall consider the following:

- 1) Will the granting of the variance result in additional public expenses that would not otherwise occur; create a nuisance; or cause fraud or victimization of the public?  
**The granting of this variance will not result in any additional public expenses that would not otherwise occur; It will not create a nuisance; nor will it cause fraud or victimization of the public. To the contrary, the granting of this variance will allow for continued public benefit, as this tower will reserve space for the Monroe County Sheriff's Office.**
- 2) Is the variance sought the minimum necessary to address the need for the variance, subsequent to exploring all reasonable siting alternatives?  
**The variance sought is the minimum necessary needed to address the need of the variance. The applicant will be tearing down two towers and replacing them with one tower. The applicant will be reducing its footprint on this site overall, and is only seeking an additional 20 feet.**
- 3) Will the granting of the variance will have a significant detrimental impact on adjacent property values?  
**There will not be any detrimental impact on adjacent properties. The adjacent properties are currently zoned Parks & Refuge (PR).**
- 4) Is the granting of the proposed variance consistent with the purpose and intent of this chapter?  
**The granting of this variance is consistent with the purpose and intent of this chapter. This variance will allow the applicant to do with one tower what he previously needed two to accomplish, thus minimizing new visual and aesthetic impacts, and reducing the effects upon the natural environment and wildlife.**

Per Section 146-7 (c) of the Monroe County Code of Ordinances, Land Development Code, the planning commission, in determining whether the conditions for a variance have been met, shall consider the following factors relevant:

- 1) Whether failure to grant the variance would prohibit or have the effect of prohibiting the provision of personal wireless services;  
**Failure to grant this variance will have the effect of prohibiting the provision of personal wireless services. This tower will have space for T-Mobile and other personal wireless services.**

- 2) Whether failure to grant the variance would unreasonably discriminate among providers of functionally equivalent personal wireless services;

**Failure to grant the variance would unreasonably discriminate among providers of functionally equivalent personal wireless services; the two towers on this property are derelict and need replacing. Failure to allow this would unreasonably discriminate against the applicant.**

- 3) Physical characteristics of the proposed wireless communications facility for which the variance is requested;

**Applicant is requesting to build a lattice structure, rather than monopole. The lattice structure is more conducive to the types of antenna systems that will be placed on this tower (please see attached affidavit form Engineer William Heiden).**

- 4) The importance to the community of the wireless communication services to be provided if the proposed variance is granted;

**Personal wireless service providers already have contracts to place antennas on this tower, including T-Mobile.**

- 5) The compatibility of the proposed variance with adjacent land uses and the availability of alternative sites and technologies in light of existing and permitted development in area;

**This site currently has two derelict towers on it. This will be reducing the amount of towers and thus be less impactful than it currently is.**

- 6) Whether granting of the proposed variance will obviate the need for additional new antenna-supporting structures due to increased collocation opportunities that would not be possible if the variance were not granted; and

**The granting of this variance not only obviates the need for additional new towers, but it allows for the reduction in existing towers. The applicant with be tearing down two towers and building one in their place, if this variance is granted.**

- 7) Whether granting of the proposed variance is necessary to ensure adequate public safety and emergency management communications.

**One of the lease terms in the written lease between the applicant (TELCOM) and Monroe County requires the applicant "to hold space on the tower for use by the County for Monroe County Sheriff's Office (MCSO) communication equipment..."**

## AFFIDAVIT

BEFORE ME, the undersigned Notary Public, personally appeared William R. Heiden III, the undersigned Affiant, who after being duly sworn, depose and states the following:

1. At the time of making this affidavit Affiant is the Manager of Engineering for Valmont Industries, Inc. for the Specialty Structures Division.
2. The undersigned Affiant has a mailing address of 1545 Pidco Dr., Plymouth, IN 46563.
3. As Manager of Engineering, Affiant is responsible for all aspects of the tower design and management of drawings. The Manager of Engineering provides policy direction & implementation. He also provides technical support to internal staff & external customers.
4. The undersigned Affiant is familiar with the existing antennas and associated structures located on the subject property owned by Monroe County, vacant land on Long Key, Florida, with parcel ID 00098780-000000.
5. Affiant, in his expert opinion, makes the following observations in regard to monopole towers vs. self-supporting towers (3-leg/lattice design):

a. **Maximum tower heights (typical):**

The typical maximum monopole tower height is approximately 200'. The height is usually achieved in lower wind speed areas (i.e. 90mph) and with cellular antenna type loading.

The typical maximum self-supporting/lattice tower height is approximately 600'. Valmont has provided numerous self-supporting towers to customers in Florida as well as other locations around the Caribbean (i.e. Puerto Rico, Jamaica, Virgin Islands, etc.).

b. **Stiffness/Flexibility:**

In the case of a cellular array application the design of the monopole tower is controlled/limited by the strength of the material and the stress induced by the loading. In contrast, where microwave or other directional antennae are required the design is typically governed by twist & sway (deflection criteria) to ensure the equipment can transmit the required signal to a distant receiving antenna. The twist & sway design criteria will significantly increase the monopole diameter &/or wall thickness with a corresponding increase in cost.

In contrast to the monopole tower, the self-supporting/lattice towers are much stiffer & therefore deflect less. As such, these structures are not always governed by the twist & sway requirements of the microwave or other directional antennae. Self-supporting towers would typically only be governed by twist & sway if the deflection criteria are small (i.e. large

diameter mw dish, high frequency mw dish, etc.). The inherently stiffer self-supporting structure makes transmittal of signal between microwave and other directional antennae more consistently effective, in addition to typically being more cost effective than a monopole tower in this application. In addition, in very high wind speed locations, self-supporting towers may be the only structures that will meet the design criteria.

c. **Corrosion/Rust Potential:**

This location has an increased potential for corrosion due to salt spray and humidity. In the case of the monopole tower, internal corrosion may occur & would not be readily apparent. In most cases, the area inside the monopole will not be large enough to access and may also be filled with transmission lines. Whereas the self-supporting/lattice solid rod tower does not have any exposed internal areas where corrosion could occur.

d. **Conclusion:**

Affiant concludes that because of the height and use of the tower, the self-supporting tower is the safer and better choice, and that construction of the monopole may not be feasible.

DATED this 2 day of November, 2015:

Witnesses as to all:

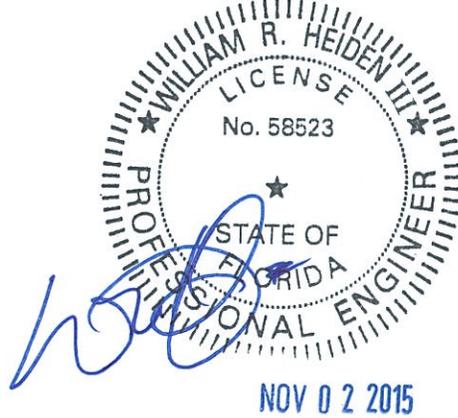
Christine Ward  
Witness

Christine Ward  
Print Name

Witness

Print Name

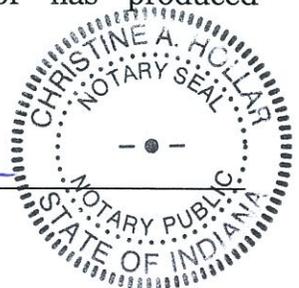
William R. Heiden III



STATE OF ~~FLORIDA~~ Indiana )  
COUNTY OF ~~MONROE~~ Marshall )

SWORN TO AND SUBSCRIBED before me this 2 day of November 2015 by William R. Heiden III, who is personally known to me or has produced drivers license as identification to me.

Christine A. Hollar  
Notary Public



# Monroe County Property Appraiser - Radius Report

---

|   |                            |                   |                |            |
|---|----------------------------|-------------------|----------------|------------|
| AK: 1115533   | Parcel ID: 00098780-000000 | Physical Location | 67200 OVERSEAS | LONG KEY   |
| Legal Description: 5 65 35 LONG KEY PT LOT 1 OR15-374-376 |                            |                   |                |            |
| Owners Name: MONROE COUNTY                                |                            |                   |                |            |
| Address: 500 WHITEHEAD ST                                 |                            | KEY WEST          | FL             | 33040-6581 |

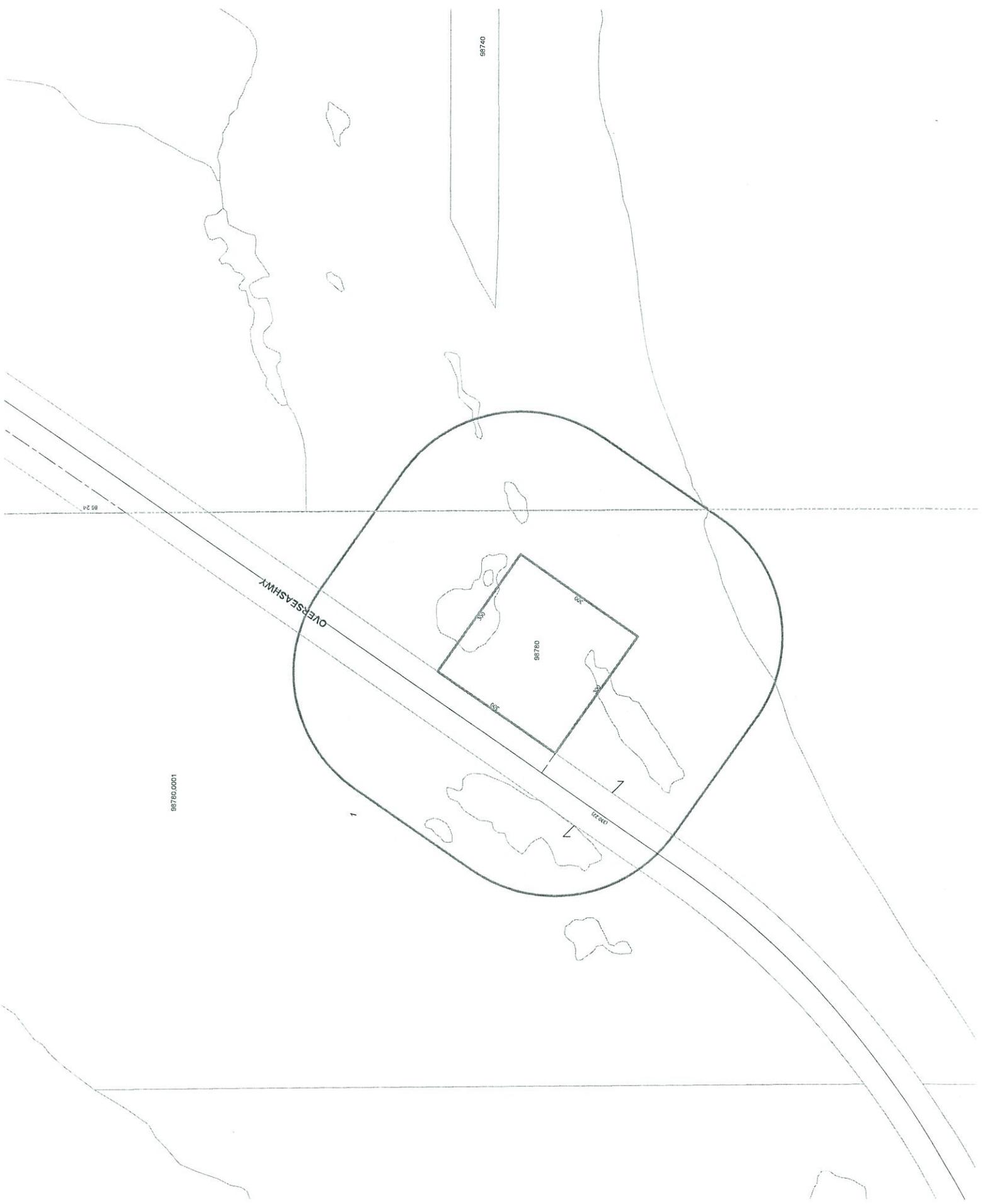
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|  |                            |                   |              |            |
|--|----------------------------|-------------------|--------------|------------|
| AK: 1115487  | Parcel ID: 00098780-000000 | Physical Location | OVERSEAS HWY | LONG KEY   |
| Legal Description: 4 65 35 LONG KEY PT LOT 3 OR228-563/566 |                            |                   |              |            |
| Owners Name: TITF/REC & PARKS                              |                            |                   |              |            |
| Address: 3900 COMMONWEALTH BLVD                            |                            | TALLAHASSEE       | FL           | 32399-3000 |

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|  |                            |                   |             |            |
|--|----------------------------|-------------------|-------------|------------|
| AK: 1115541  | Parcel ID: 00098780-000100 | Physical Location | VACANT LAND | LONG KEY   |
| Legal Description: 5 65 35 LONG KEY PT LOT 1 OR431-457-458 OR445-774-775 |                            |                   |             |            |
| Owners Name: TITF/REC & PARKS  |                            |                   |             |            |
| Address: 3900 COMMONWEALTH BLVD  |                            | TALLAHASSEE       | FL          | 32399-3000 |

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08760

08760

OVERSEAS HWY

08760.0001

08760

08760

1

| NAME              | ADD1 | ADD2                   | UNIT | CITY        | STATE | ZIP        | COUNTRY | RE           | AK      |
|-------------------|------|------------------------|------|-------------|-------|------------|---------|--------------|---------|
| MONROE COUNTY     |      | 500 WHITEHEAD ST       |      | KEY WEST    | FL    | 33040-6581 |         | 98780.000000 | 1115533 |
| TIITF/REC & PARKS |      | 3900 COMMONWEALTH BLVD |      | TALLAHASSEE | FL    | 32399-3000 |         | 98730.000000 | 1115487 |
| TIITF/REC & PARKS |      | 3900 COMMONWEALTH BLVD |      | TALLAHASSEE | FL    | 32399-3000 |         | 98780.000100 | 1115541 |

LEGAL1

5 65 35 LONG KEY PT LOT 1 OR15-374-376

4 65 35 LONG KEY PT LOT 3 OR228-563/566

5 65 35 LONG KEY PT LOT 1 OR431-457-458 OR445-774-

Easy Peel® Labels  
Use Avery® Template 5160®

MONROE COUNTY  
500 WHITEHEAD STREET  
KEY WEST, FL 33040-6581

TIITF/ REC & PARKS  
3900 COMMONWEALTH  
BOULEVARD  
TALLAHASSEE, FL 32399-3000

~~TIITF/ REC & PARKS  
3900 COMMONWEALTH  
BOULEVARD  
TALLAHASSEE, FL 32399-3000~~

County of Monroe  
Growth Management Division

**Planning & Environmental Resources**

**Department**

2798 Overseas Highway, Suite 410  
Marathon, FL 33050  
Voice: (305) 289-2500  
FAX: (305) 289-2536



**Board of County Commissioners**

Mayor Danny L. Kolhage, District 1  
Mayor Pro Tem, Heather Carruthers, District 3  
George Neugent, District 2  
David Rice, District 4  
Sylvia J. Murphy, District 5

May 18, 2015

James E. Spisiak

Telecom Systems, Ltd.  
450 N.E. 1<sup>st</sup> Road  
Homestead, FL 33030

RE: Building Permit Application #152-2398 – Real Estate No. 00098780.000000

The Planning & Environmental Resources Department is in receipt of your building permit application for the demolition of two (2) antenna supporting structures and the construction of a replacement antenna supporting structure at 6700 Overseas Highway, Long Key.

Please be advised that the following issues were identified when performing a plans review:

1. According to the scope of work on the building permit, a 215' self supporting tower will be constructed and two existing guyed towers will be demolished. Revise scope of work to show a 195' self supporting tower will be constructed.
2. According to the submitted plans, it is not clear that the existing antenna-supporting structures will be demolished. Please revise plans to show that the two existing antenna-supporting structures and accessory structures (i.e. concrete anchor blocks) will be demolished.
3. According to the submitted plans, a lattice antenna supporting structure will be constructed. Pursuant to MCC §146-5(2)3(i) replacement antenna-supporting structures with an overall height of 199 feet or less shall have a monopole type construction; except that AM broadcast replacement facilities may be of the same construction type as the structure being replaced. Revise plans to show an antenna supporting structure of monopole type construction.
4. Pursuant to MCC §146-5(2), the following regulations apply to the replacement of an existing antenna-supporting structure:

**Setbacks.**

- (i) Any new equipment enclosures shall meet the minimum setback requirements for the land use district where they are located pursuant to section 130-186.
- (ii) Replacement antenna-supporting structure foundations (excluding guy wire anchors) constructed on properties that are contiguous to the IS, SR, UR or URM zones shall not be any closer to these zones than the foundation of the original antenna-supporting structure being replaced.

(iii) Replacement antenna-supporting structure foundations (excluding guy wire anchors) constructed on properties that are contiguous to the right-of-way of U.S. Highway 1 shall not be any closer to such right-of-way than the foundation of the original antenna-supporting structure being replaced.

(iv) Replacement antenna-supporting structures and the associated ancillary structures shall meet the environmental design criteria related to wetland setbacks pursuant to section 118-7 to the maximum extent practicable.

Landscaping. Landscaping and/or screening in the form of at least a class D buffer as drawn in the class D bufferyard figure in section 114-128 shall be required around the development area to the maximum extent practicable.

---

Submittal requirements for replacement antenna-supporting structure applications

1. A completed application form and any appropriate fees;
2. Three sets of signed and sealed site plans;
3. A property card for the subject property from the county's property appraiser's office or a tax bill showing the ownership of the subject parcel;
4. A form indicating that a property and/or antenna-supporting structure's owner's agent has authorization to act upon its behalf (if applicable);
5. A signed statement from the antenna-supporting structure's owner or owner's agent stating that the radio frequency emissions comply with FCC standards for such emissions;
6. Proof of an FCC license or construction permit to transmit radio signals in the county;
7. A stamped or sealed structural analysis of the proposed antenna-supporting structure prepared by a licensed state engineer indicating the proposed and future loading capacity of the antenna-supporting structure;
8. One original and two copies of a survey of the property completed by a licensed state engineer that shows all existing uses, structures, and improvements;
9. Three copies of a vegetation survey or habitat evaluation index (HEI);
10. Proof of FAA compliance with subpart C of the Federal Aviation Regulations part 77, Objects Affecting Navigable Airspace;
11. A signed statement from the antenna-supporting structure owner agreeing to allow the collocation of other wireless equipment on the proposed antenna-supporting structure;
12. All other documentation, evidence, or materials necessary to demonstrate compliance with the applicable approval criteria set forth in this chapter, including where applicable:
  - (i) Existing wireless communications facilities to which the proposed facility will be a handoff candidate, including latitude, longitude, and power levels of each;
  - (ii) A radio frequency plot indicating the coverage of existing wireless communications sites, and that of the proposed site sufficient to demonstrate radio frequency search area, coverage prediction, and design radius;
  - (iii) A statement by a qualified professional engineer specifying the design structural failure modes of the proposed facility; and
  - (iv) Antenna heights and power levels of the proposed facility and all other facilities on the subject property.

Please review Chapter 146 of the Monroe County Land Development Code to ensure your application is consistent with the code. The Monroe County Land Development Code is available on [www.municode.com](http://www.municode.com). The Planning & Environmental Resources Department has failed the assigned building permit application #152-2398.

You may appeal decisions made in this letter. The appeal must be filed with the County Administrator, 1100 Simonton Street, Gato Building, Key West, FL 33040, within thirty (30) calendar days from the date of this letter. In addition, please submit a copy of your application to Planning Commission Coordinator, Monroe County Planning & Environmental Resources Department, 2798 Overseas Highway, Suite 410, Marathon, FL 33050.

---

If you have any questions regarding the contents of this letter or if we may further assist you, please feel free to contact our office at (305) 289-2588.

Sincerely,

A handwritten signature in black ink that reads "Matt Coyle". The signature is written in a cursive, slightly slanted style.

Matt Coyle, Principal Planner



**Scott P. Russell, CFA**  
**Property Appraiser**  
**Monroe County, Florida**

Key West (305) 292-3420  
Marathon (305) 289-2550  
Plantation Key (305) 852-7130

## Property Record Card -

Maps are now launching the new map application version

Website tested on IE8,  
IE9, & Firefox.  
Requires Adobe Flash  
10.3 or higher

**Alternate Key: 1115533 Parcel ID: 00098780-000000**

### Ownership Details

Mailing Address:  
MONROE COUNTY  
500 WHITEHEAD ST  
KEY WEST, FL 33040-6581

### Property Details

PC Code: 80 - VACANT GOVERNMENTAL  
Millage Group: 500L  
Affordable Housing: No  
Section-Township-Range: 05-65-35  
Property Location: VACANT LAND LONG KEY  
Legal Description: 5 65 35 LONG KEY PT LOT 1 OR15-374-376

[Click Map Image to open interactive viewer](#)



### Exemptions

| Exemption        | Amount |
|------------------|--------|
| 14 - COUNTYLANDS | 207.00 |

### Land Details

| Land Use Code               | Frontage | Depth | Land Area |
|-----------------------------|----------|-------|-----------|
| 000X - ENVIRONMENTALLY SENS | 0        | 0     | 2.07 AC   |

### Appraiser Notes

TCI IMPROVEMENTS CARRIED ON PERSONAL PROPERTY 2001/10/29 SB, TPP ACCOUNT'S #8932815 - TOWER #33 & #8932925 - TOWER #34.

### Building Permits

| Bldg Number | Date Issued | Date Completed | Amount | Description | Notes                       |
|-------------|-------------|----------------|--------|-------------|-----------------------------|
| 09203044    | 08/24/2009  |                | 15,000 |             | REPAIR TO EXISTING SPALLING |
| 10203708    | 08/03/2010  |                | 8,466  |             | INSTALL (2) 3 TON SPLIT     |
| 0202576     | 07/17/2000  |                | 9,838  |             | INSTALL GUY WIR W/ ANCHOR   |

### Parcel Value History

Certified Roll Values.

[View Taxes for this Parcel.](#)

| Roll Year | Total Bldg Value | Total Misc Improvement Value | Total Land Value | Total Just (Market) Value | Total Assessed Value | School Exempt Value | School Taxable Value |
|-----------|------------------|------------------------------|------------------|---------------------------|----------------------|---------------------|----------------------|
| 2014      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 2013      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 2012      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 2011      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 2010      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 2009      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 2008      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 2007      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 2006      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 2005      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 2004      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 2003      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 2002      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 2001      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 2000      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 1999      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 1998      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 1997      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 1996      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 1995      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 1994      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 1993      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 1992      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 1991      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 1990      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 1989      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 1988      | 0                | 0                            | 207              | 207                       | 207                  | 207                 | 0                    |
| 1987      | 0                | 0                            | 621              | 621                       | 621                  | 621                 | 0                    |
| 1986      | 0                | 0                            | 38,813           | 38,813                    | 38,813               | 38,813              | 0                    |
| 1985      | 0                | 0                            | 38,813           | 38,813                    | 38,813               | 38,813              | 0                    |
| 1984      | 0                | 0                            | 38,813           | 38,813                    | 38,813               | 38,813              | 0                    |

|      |   |   |        |        |        |        |   |
|------|---|---|--------|--------|--------|--------|---|
| 1983 | 0 | 0 | 38,813 | 38,813 | 38,813 | 38,813 | 0 |
| 1982 | 0 | 0 | 38,813 | 38,813 | 38,813 | 38,813 | 0 |

### Parcel Sales History

NOTE: Sales do not generally show up in our computer system until about two to three months after the date of sale. If a recent sale does not show up in this list, please allow more time for the sale record to be processed. Thank you for your patience and understanding.

There are no sales to display for this parcel.

This page has been visited 150,653 times.

Monroe County Property Appraiser  
Scott P. Russell, CFA  
P.O. Box 1176 Key West, FL 33041-1176



**Federal Communications Commission**  
Wireless Telecommunications Bureau

**RADIO STATION AUTHORIZATION**

LICENSEE: TELCOM SYSTEMS, LTD.

ATTN: JAMES E. SPISIAK  
TELCOM SYSTEMS, LTD.  
450 NE FIRST ROAD  
HOMESTEAD, FL 33030-6134

|   |                             |
|---|-----------------------------|
| <b>Call Sign</b><br>WHO465  |                             |
| <b>File Number</b><br>0004441472  |                             |
| <b>Radio Service</b><br>CF - Common Carrier Fixed Point to<br>Point Microwave |                             |
| <b>SMSA</b>   | <b>Station Class</b><br>FXO |

FCC Registration Number (FRN): 0001735000

|                                 |                                     |                                      |                                 |
|---------------------------------|-------------------------------------|--------------------------------------|---------------------------------|
| <b>Grant Date</b><br>12-28-2010 | <b>Effective Date</b><br>12-28-2010 | <b>Expiration Date</b><br>02-01-2021 | <b>Print Date</b><br>12-28-2010 |
|---------------------------------|-------------------------------------|--------------------------------------|---------------------------------|

**LOCATION**

**Fixed Location Address or Area of Operation:**

2 MI SW OF  
City: LAYTON      County: MONROE      State: FL

| Loc No. | Location Name | Latitude     | Longitude     | Elevation | Antenna Structure<br>Registration No. |
|---------|---------------|--------------|---------------|-----------|---------------------------------------|
| 001     | LONG KEY      | 24-48-47.0 N | 080-49-33.8 W | 1.5       |                                       |
| 002     | TAVERNIER     | 25-00-25.4 N | 080-31-15.2 W | 0.9       |                                       |
| 003     | MARATHON      | 24-42-41.5 N | 081-05-29.2 W | 1.8       |                                       |

**FREQUENCY PATHS**

| Frequency<br>(MHz) | Tol<br>(%) | Emission<br>Desig | EIRP<br>(dBm) | Constr<br>Date | Path<br>No | Seg | Emit<br>Loc<br>No | Ant Hgt<br>(m) | Gain<br>(dBi) | Beam<br>(deg) | POL | AZIM<br>(deg) | Rec<br>Loc<br>No | Rec<br>Call<br>Sign |
|--------------------|------------|-------------------|---------------|----------------|------------|-----|-------------------|----------------|---------------|---------------|-----|---------------|------------------|---------------------|
| 6616.25            | 0.00050    | 2M50D7W           | 61.400        | 09-23-2011     | 003        | 1   | 001               | 42.7           | 40.1          | 1.5           | H   | 55.0          | 002              | WHO464              |
|                    |            |                   |               |                |            |     | Diversity:        | 28.9           | 40.1          | 1.5           |     |               |                  |                     |
| 6668.75            | 0.00050    | 2M50D7W           | 61.600        | 09-23-2011     | 004        | 1   | 001               | 39.6           | 40.1          | 1.5           | V   | 247.3         | 003              | WHO466              |
|                    |            |                   |               |                |            |     | Diversity:        | 30.5           | 40.1          | 1.5           |     |               |                  |                     |

**Waivers/Conditions:**

NONE

**Conditions:**

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



**Federal Communications Commission**  
Wireless Telecommunications Bureau

**RADIO STATION AUTHORIZATION**

LICENSEE: TELCOM SYSTEMS, LTD.

ATTN: JAMES E. SPISIAK  
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|   |                             |
|---|-----------------------------|
| <b>Call Sign</b><br>WHO465  |                             |
| <b>File Number</b><br>0004441472  |                             |
| <b>Radio Service</b><br>CF - Common Carrier Fixed Point to<br>Point Microwave |                             |
| <b>SMSA</b>   | <b>Station Class</b><br>FXO |

FCC Registration Number (FRN): 0001735000

|                                 |                                     |                                      |                                 |
|---------------------------------|-------------------------------------|--------------------------------------|---------------------------------|
| <b>Grant Date</b><br>12-28-2010 | <b>Effective Date</b><br>12-28-2010 | <b>Expiration Date</b><br>02-01-2021 | <b>Print Date</b><br>12-28-2010 |
|---------------------------------|-------------------------------------|--------------------------------------|---------------------------------|

**LOCATION**

**Fixed Location Address or Area of Operation:**

2 MI SW OF  
City: LAYTON      County: MONROE      State: FL

| Loc No. | Location Name | Latitude     | Longitude     | Elevation | Antenna Structure<br>Registration No. |
|---------|---------------|--------------|---------------|-----------|---------------------------------------|
| 001     | LONG KEY      | 24-48-47.0 N | 080-49-33.8 W | 1.5       |                                       |
| 002     | TAVERNIER     | 25-00-25.4 N | 080-31-15.2 W | 0.9       |                                       |
| 003     | MARATHON      | 24-42-41.5 N | 081-05-29.2 W | 1.8       |                                       |

**FREQUENCY PATHS**

| Frequency<br>(MHz) | Tot<br>(%) | Emission<br>Desig | EIRP<br>(dBm) | Constr<br>Date | Path<br>No | Seg | Emit<br>Loc<br>No | Ant Hgt<br>(m)  | Gain<br>(dBi) | Beam<br>(deg) | POL | AZIM<br>(deg) | Rec<br>Loc<br>No | Rec<br>Call<br>Sign |
|--------------------|------------|-------------------|---------------|----------------|------------|-----|-------------------|-----------------|---------------|---------------|-----|---------------|------------------|---------------------|
| 6616.25            | 0.00050    | 2M50D7W           | 61.400        | 09-23-2011     | 003        | 1   | 001               | 42.7            | 40.1          | 1.5           | H   | 55.0          | 002              | WHO464              |
|                    |            |                   |               |                |            |     |                   | Diversity: 28.9 | 40.1          | 1.5           |     |               |                  |                     |
| 6668.75            | 0.00050    | 2M50D7W           | 61.600        | 09-23-2011     | 004        | 1   | 001               | 39.6            | 40.1          | 1.5           | V   | 247.3         | 003              | WHO466              |
|                    |            |                   |               |                |            |     |                   | Diversity: 30.5 | 40.1          | 1.5           |     |               |                  |                     |

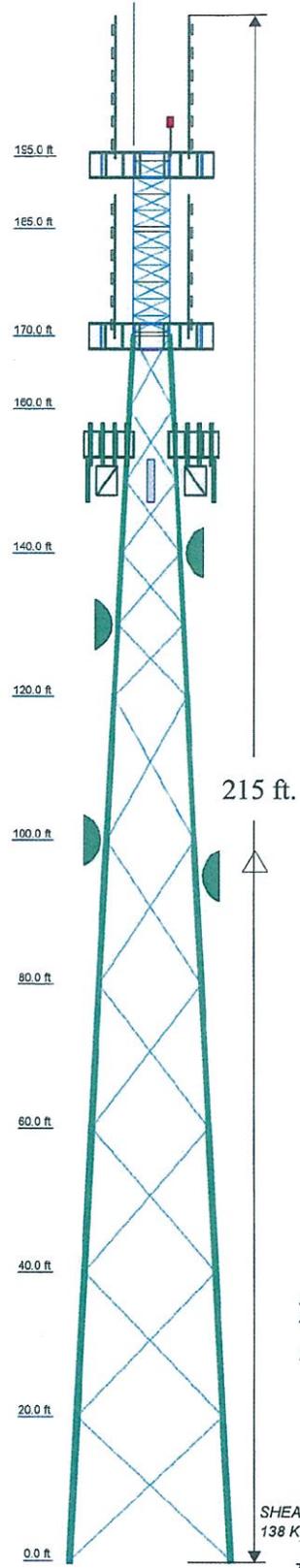
**Waivers/Conditions:**

NONE

**Conditions:**

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|                 |             |             |            |     |     |     |         |                   |     |     |           |      |
|-----------------|-------------|-------------|------------|-----|-----|-----|---------|-------------------|-----|-----|-----------|------|
| Section         | T1          | T2          | T3         | T4  | T5  | T6  | T7      | T8                | T9  | T10 | T11       |      |
| Legs            | SR 1 3/4    |             | A          | B   | C   | D   | E       | F                 | G   | H   | I         |      |
| Leg Grade       | SR 7/8      |             | J          |     |     |     | A572-50 | 2L3 1/2x3 1/2x1/4 |     |     | 2L4x4x1/4 |      |
| Diagonal Grade  | A572-50     |             |            |     |     |     | A36     |                   |     |     |           |      |
| Top Girts       | SR 1        |             | L3x3/8x1/5 |     |     |     | N.A.    |                   |     |     |           |      |
| Mid Girts       | SR 1        |             |            |     |     |     | N.A.    |                   |     |     |           |      |
| Bottom Girts    | SR 1        |             |            |     |     |     | N.A.    |                   |     |     |           |      |
| Horizontals     | SR 3/4      |             |            |     |     |     |         |                   |     |     |           |      |
| Face Width (ft) | 5           | 6           | 6          | 8   | 10  | 12  | 14      | 16                | 18  | 20  | 22        |      |
| # Panels @ 10'  | 6 @ 2.33333 | 4 @ 2.27604 |            |     |     |     |         | 6 @ 20            |     |     |           |      |
| Weight (K)      | 0.1         | 1.8         | 1.2        | 2.8 | 3.2 | 4.5 | 5.1     | 5.8               | 6.7 | 7.5 | 7.9       | 46.3 |



**DESIGNED APPURTENANCE LOADING**

| TYPE  | ELEVATION | TYPE                                | ELEVATION |
|---|-----------|-------------------------------------|-----------|
| 21' LRE with 7'-6" lightning rod (arm=11.5) | 195       | Raycap RCMDC-3315-PF-48             | 155       |
| Beacon                                      | 195       | (2) FXFB (22.1" x 19.4" x 5.2")     | 155       |
| Beacon Extender (4) 803062                  | 195       | (2) FRIG (23" x 16.4" x 6" assumed) | 155       |
| (3) DB420-A                                 | 195       | FRIE                                | 155       |
| (3) DB420-A                                 | 195       | 13' V Frame                         | 155       |
| (3) DB420-A                                 | 195       | (4) CMA-B3324                       | 155       |
| (3) 2" sch 40 x 50" pipe                    | 195       | (4) 2" sch 40 x 84" pipe            | 155       |
| (3) 2" sch 40 x 50" pipe                    | 195       | Raycap RCMDC-3515-PF-48             | 155       |
| (3) 2" sch 40 x 50" pipe                    | 195       | (2) FXFB (22.1" x 19.4" x 5.2")     | 155       |
| 13' V Frame                                 | 195       | (2) FRIG (23" x 16.4" x 6" assumed) | 155       |
| 13' V Frame                                 | 195       | FRIE                                | 155       |
| 13' V Frame                                 | 195       | 13' V Frame                         | 155       |
| (3) DB420-A                                 | 170       | PANEL (8' X 1' X 2')                | 150       |
| (3) DB420-A                                 | 170       | PANEL (8' X 1' X 2')                | 150       |
| (3) DB420-A                                 | 170       | PANEL (8' X 1' X 2')                | 150       |
| (3) 2" sch 40 x 50" pipe                    | 170       | 6' Pivot Side Arm (50" pipe)        | 150       |
| (3) 2" sch 40 x 50" pipe                    | 170       | 6' Pivot Side Arm (50" pipe)        | 150       |
| (3) 2" sch 40 x 50" pipe                    | 170       | 6' Pivot Side Arm (50" pipe)        | 150       |
| 13' V Frame                                 | 170       | 6' Grid Dish                        | 140       |
| 13' V Frame                                 | 170       | 6' Grid Dish                        | 130       |
| 13' V Frame                                 | 170       | 6' Grid Dish                        | 100       |
| (4) ADFD1820-3333B-XDM                      | 155       | 6' Grid Dish                        | 95        |
| (4) 2" sch 40 x 72" pipe                    | 155       |                                     |           |

**SYMBOL LIST**

| MARK | SIZE  | MARK | SIZE  |
|------|---|------|---|
| A    | #122G - 1.25" - 1.00" conn. (Pirod 208951)        | F    | #122G - 2.50" - 0.875" conn. (Pirod 208335)       |
| B    | #122G - 1.50" - 1.25" conn. (Pirod 224112)        | G    | #122G - 2.75" - 0.875" conn. (Pirod 208337)       |
| C    | #122G - 1.75" - 1.00" conn. (Pirod 195557)        | H    | #122G - 3.00" - 0.875" conn.-Trans (Pirod 208338) |
| D    | #122G - 2.00" - 0.875" conn.-Trans (Pirod 211843) | I    | #122G - 3.00" - 0.875" conn.-Trans (Pirod 208338) |
| E    | #122G - 2.25" - 0.875" conn. (Pirod 208334)       | J    | L2 1/2x2 1/2x3/16                                 |

**MATERIAL STRENGTH**

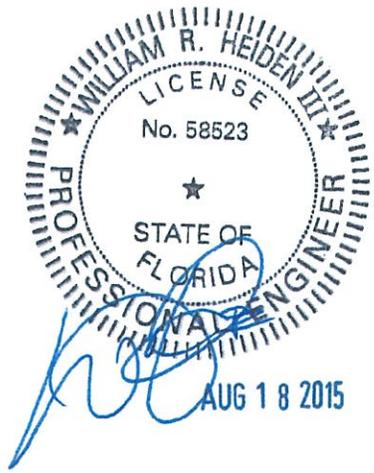
| GRADE   | Fy     | Fu     | GRADE | Fy     | Fu     |
|---------|--------|--------|-------|--------|--------|
| A572-50 | 50 ksi | 65 ksi | A36   | 36 ksi | 58 ksi |

**TOWER DESIGN NOTES**

1. Tower is located in Monroe County, Florida.
2. Tower designed for Exposure D to the TIA-222-G Standard.
3. Tower designed for a 150 mph basic wind in accordance with the TIA-222-G Standard.
4. Deflections are based upon a 60 mph wind.
5. Tower Structure Class II.
6. Topographic Category 1 with Crest Height of 0.00 ft

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:  
 DOWN: 810 K  
 UPLIFT: -741 K  
 SHEAR: 87 K



|  |   |                              |
|--|---|------------------------------|
|  | 1545 Pidco Dr.<br>Plymouth, IN                        | Job: <b>184708</b>           |
|  | Valmont Structures, Inc. - Specialty Structures Group | Client: Telcom Systems, LTD. |
|  | Phone: (574) 936-4221                                 | Drawn by: WRH2               |
|  | FAX: (574) 936-6458                                   | Date: 08/18/15               |
|  |   | App'd: _____                 |
|  |   | Code: TIA-222-G              |
|  |   | Scale: NTS                   |
|  |   | Path: _____                  |
|  |   | Dwg No. E-1                  |



Mail Processing Center  
 Federal Aviation Administration  
 Southwest Regional Office  
 Obstruction Evaluation Group  
 2601 Meacham Boulevard  
 Fort Worth, TX 76193

Aeronautical Study No.  
 2014-ASO-12350-OE

Issued Date: 12/05/2014

James Spisiak  
 Telcom Systems, Ltd.  
 450 NE 1st Road  
 Homestead, FL 33030

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

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

Structure: Antenna Tower Layton (Towers)  
 Location: Layton, FL  
 Latitude: 24-48-47.00N NAD 83  
 Longitude: 80-49-33.80W  
 Heights: 5 feet site elevation (SE)  
 215 feet above ground level (AGL)  
 220 feet above mean sea level (AMSL)

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

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, a med-dual system - Chapters 4,8(M-Dual),&12.

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

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

This determination expires on 06/05/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

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

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

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

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

If we can be of further assistance, please contact our office at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-ASO-12350-OE.

**Signature Control No: 234257148-236275275**  
Michael Blaich  
Specialist

( DNE )

Attachment(s)  
Frequency Data

cc: FCC

**Frequency Data for ASN 2014-ASO-12350-OE**

| <b>LOW<br/>FREQUENCY</b> | <b>HIGH<br/>FREQUENCY</b> | <b>FREQUENCY<br/>UNIT</b> | <b>ERP</b> | <b>ERP<br/>UNIT</b> |
|--------------------------|---------------------------|---------------------------|------------|---------------------|
| 6600                     | 6700                      | MHz                       | 61.6       | dBm                 |


[« OE/AAA](#)

## Signature Control Number Search Results: Form 7460-1 for ASN 2014-ASO-12350-OE

| Overview   |  |             |            |             |
|--|--|-------------|------------|-------------|
| <b>Study (ASN):</b>                                | 2014-ASO-12350-OE  |             |            |             |
| <b>Prior Study:</b>                                |  |             |            |             |
| <b>Status:</b>                                     | Determined   |             |            |             |
| <b>Letters:</b>                                    | <a href="#">Determination</a>  |             |            |             |
| <b>Supplemental Form 7460-2:</b>                   | Please <a href="#">login</a> to add a Supplemental Form 7460-2.                      |             |            |             |
| <b>Received Date:</b>                              | 11/12/2014   |             |            |             |
| <b>Entered Date:</b>                               | 11/12/2014   |             |            |             |
| <b>Completion Date:</b>                            | 12/05/2014   |             |            |             |
| <b>Expiration Date:</b>                            | 06/05/2016   |             |            |             |
| <b>Map:</b>  | <a href="#">View Map</a>   |             |            |             |
| Sponsor Information                                |  |             |            |             |
| <b>Sponsor:</b>                                    | Telcom Systems, Ltd.   |             |            |             |
| <b>Attention Of:</b>                               | James Spisiak  |             |            |             |
| <b>Address:</b>                                    | 450 NE 1st Road  |             |            |             |
| <b>Address2:</b>                                   |  |             |            |             |
| <b>City:</b>                                       | Homestead  |             |            |             |
| <b>State:</b>                                      | FL   |             |            |             |
| <b>Postal Code:</b>                                | 33030  |             |            |             |
| <b>Country:</b>                                    | US   |             |            |             |
| <b>Phone:</b>                                      | 305-245-4511   |             |            |             |
| <b>Fax:</b>  |  |             |            |             |
| Sponsor's Representative Information               |  |             |            |             |
| <b>Representative:</b>                             | Blooston, Mordkofsy, Dickens, Duffy & Prendergast                                    |             |            |             |
| <b>Attention Of:</b>                               | Richard Rubino   |             |            |             |
| <b>Address:</b>                                    | 2120 L Street, N.W., Suite 300   |             |            |             |
| <b>Address2:</b>                                   |  |             |            |             |
| <b>City:</b>                                       | Washington   |             |            |             |
| <b>State:</b>                                      | DC   |             |            |             |
| <b>Postal Code:</b>                                | 20037  |             |            |             |
| <b>Country:</b>                                    | US   |             |            |             |
| <b>Phone:</b>                                      | 202-828-5519   |             |            |             |
| <b>Fax:</b>  |  |             |            |             |
| Construction Info                                  |  |             |            |             |
| <b>Notice Of:</b>                                  | CONSTR   |             |            |             |
| <b>Duration:</b>                                   | PERM (Months: 0 Days: 0)   |             |            |             |
| <b>Work Schedule:</b>                              |  |             |            |             |
| <b>Date Built:</b>                                 |  |             |            |             |
| Structure Summary                                  |  |             |            |             |
| <b>Structure Type:</b>                             | Antenna Tower  |             |            |             |
| <b>Structure Name:</b>                             | Layton (Towers)  |             |            |             |
| <b>FCC Number:</b>                                 |  |             |            |             |
| Structure Details                                  |  |             |            |             |
| <b>Latitude (NAD 83):</b>                          | 24° 48' 47.00" N   |             |            |             |
| <b>Longitude (NAD 83):</b>                         | 80° 49' 33.80" W   |             |            |             |
| <b>Horizontal Datum:</b>                           | NAD 83   |             |            |             |
| <b>Survey Accuracy:</b>                            | 4D   |             |            |             |
| <b>Marking/Lighting:</b>                           | Dual-red and medium intensity  |             |            |             |
| <b>Other Description:</b>                          |  |             |            |             |
| <b>Current Marking/Lighting:</b>                   | N/A Proposed Structure   |             |            |             |
| <b>Current Marking/Lighting Other Description:</b> |  |             |            |             |
| <b>Name:</b>                                       |  |             |            |             |
| <b>City:</b>                                       | Layton   |             |            |             |
| <b>State:</b>                                      | FL   |             |            |             |
| <b>Nearest County:</b>                             | Monroe   |             |            |             |
| <b>Nearest Airport:</b>                            | MTH  |             |            |             |
| <b>Distance to Structure:</b>                      | 81151.18 feet  |             |            |             |
| <b>On Airport:</b>                                 | No   |             |            |             |
| <b>Direction to Structure:</b>                     | 66.95°   |             |            |             |
| <b>Description of Location:</b>                    | 2 miles SW of Layton Florida   |             |            |             |
| <b>Description of Proposal:</b>                    | Proposed construction of a 195 foot antenna tower with a 20 foot top mounted antenna |             |            |             |
| Height and Elevation                               |  |             |            |             |
|  | <b>Proposed</b>  | <b>DNE</b>  | <b>DET</b> |             |
| <b>Site Elevation:</b>                             | 5  |             |            |             |
| <b>Structure Height:</b>                           | 215  | 0           | 215        |             |
| <b>Total Height (AMSL):</b>                        | 220  | 0           | 220        |             |
| Frequencies  |  |             |            |             |
| <b>Low Freq</b>                                    | <b>High Freq</b>   | <b>Unit</b> | <b>ERP</b> | <b>Unit</b> |
| 6600   | 6700   | MHz         | 61.6       | dBm         |

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**FIRST AMENDMENT TO THE LEASE AGREEMENT  
BETWEEN MONROE COUNTY AND TELCOM SYSTEMS INC.**

THIS FIRST AMENDMENT to the LEASE AGREEMENT ("Agreement") dated April 20, 2011, is entered into this 17<sup>th</sup> day of October 2014 by and between TELCOM SYSTEMS, LTD. ("LESSEE or TELCOM"), a Florida Limited Partnership, having an address at 450 NE 1<sup>st</sup> Road, Homestead, Florida 33030, and Monroe County ("COUNTY or LESSOR"), a political subdivision of the State of Florida, whose address is 1100 Simonton Street, Gato Building, Key West, Florida 33040.

**WHEREAS**, COUNTY is the owner of certain property located at Lot 1, Section 5, T. 65 S., R. 35 E., on Long Key, Monroe County, Florida, and

**WHEREAS**, TELCOM owns and operates two communication towers and certain improvements related to the towers, and

**WHEREAS**, the COUNTY and TELCOM entered into a LEASE AGREEMENT ("LEASE") commencing April 20, 2011, and;

**WHEREAS**, the parties agree that a new tower is necessary at the Long Key location and further agree that TELCOM desires to demolish and remove the present communications towers and to build a new communications tower on that site, and

**WHEREAS**, it is in the public interest that the COUNTY facilitate the improvement of communication towers and facilities throughout the Keys.

**NOW THEREFORE**, in consideration of the mutual covenants and provisions contained herein, the parties agree to amend its earlier Agreement as follows:

1. TELCOM and COUNTY agree that TELCOM shall remove and demolish the present towers located on the COUNTY premises more definitely described below and shall replace the existing towers, which are in bad repair, with a new communications tower within 180 days of the execution of this First Amendment. TELCOM shall bear all the costs of demolition, disposal of the old towers, any parts or appurtenances, and associated buildings. TELCOM shall bear all the costs of construction, installation, clean-up of construction debris, and the costs of maintaining egress and ingress to the site during construction.
2. The completion of construction of a new tower is pursuant to Paragraph 16 of the Agreement which invokes an extension of the Agreement for an additional term. TELCOM shall obtain all relevant permits, approvals, certificates of occupancy or other requirements from any governmental entity related to, the demolition of existing towers, the construction of a new tower and clean-up of the site during and after the construction. TELCOM shall prepare at its expense all necessary drawings and specifications for the construction of a tower and telecommunications equipment, which COUNTY shall have the right to approve, such approval shall not be unreasonably withheld or delayed.
3. Nothing in this Amendment shall change the responsibility of TELCOM for Maintenance and Repairs under paragraph 6 of the AGREEMENT; however, if TELCOM wishes to maintain, make repairs or alterations to the towers prior to the demolition, removal and rebuild of the towers the County authorizes the maintenance and make repairs, so long as they are all accomplished as required according to applicable Federal State and County Ordinance, and "MCSO" requirements).

4. Copies of all proposals for maintenance, repair, demolition, including but not limited to proposed design/construction specifications of a new tower shall be submitted to the Monroe County Sheriff's Office Department and COUNTY prior to the work being started and prior to submission to any State, Federal or County entity for approval. In addition, prior to work on the present towers or construction of a new tower the Monroe County Sheriff's office shall approve, in writing, the engineered designs for any repairs, maintenance, and demolition of the present towers and for construction of a new tower. Such approval shall not be unreasonably withheld or delayed.

5 The construction of a new communications tower shall be completed within 365 days of the date of this amendment; however, this time frame may be enlarged by agreement of the parties in an amendment signed with same formality as the original Agreement.

6. All permitting or other requirements, including any and all FCC or FAA permissions, registrations and requirements, or necessary documents of any nature whatsoever related to the design, demolition of the present towers, construction and final completion of the tower shall be the full responsibility of TELCOM, including any fees of any kind. TELCOM shall comply with all requirements for painting, maintaining and illumination of the tower as prescribed by the Federal Communications Commission ("FCC"). TELCOM shall at its sole expense pay any development costs for the new tower and for the existing towers including installation of the equipment, improvements, fixtures, dishes, lights, switches, batteries, grids antenna(s), lines, accessories, structures appurtenances, or services necessary for the demolition and decommission of the presently existing towers and for the design and construction of the new tower. TELCOM shall also be solely responsible for any elements related to the tower including but not limited to the ground ring, concrete pad/foundation, fencing/enclosure, tower, site preparation, engineering, surveying, environmental and other fees and costs for professional and other services required for the construction of the tower. It is understood that this responsibility is part of the consideration for the COUNTY allowing TELCOM to build a new tower and rent space on the tower to third parties. However, TELCOM shall not demolish the present towers until the new tower is constructed and in operation.

7. TELCOM agrees that during the term of the Agreement, it will hold space on the tower for use by the County for Monroe County Sheriff's Office (MCSO) communication equipment; and acknowledges that the ability to locate equipment on the tower is part of the consideration for the County allowing TELCOM to construct a tower. MCSO shall work with TELCOM to determine the appropriate location for MCSO's facilities to be mounted on the tower. TELCOM acknowledges that this space must be free of interference to the MCSO equipment and transmissions. MCSO shall give TELCOM a minimum of thirty (30) days' notice prior to adding equipment to the tower, except in cases of emergency at which time the parties shall work together to provide space immediately but no longer than seven (7) days after notice is given of the need for space to TELCOM by the County or MCSO. TELCOM agrees to allow installation by MCSO of equipment of a type and frequency which will be acceptable to MCSO.

8. TELCOM shall procure and maintain additional insurance, over and above that required in paragraph 10 of the Agreement, due to the construction of the Tower and for the remainder of the term of the agreement.

8.1 TELCOM shall obtain and maintain insurance, as specified in the Agreement and this First Amendment, in effect at all times during the term of the Agreement and its Amendments. In the event the completion of the project (to include the work of others) is delayed or suspended as a result of TELCOM'S failure to purchase or maintain the required insurance, the CONSULTANT shall indemnify the COUNTY from any and all increased expenses resulting from such delay.

8.2 The coverage provided herein shall be provided by an insurer with an A.M. Best rating of VI or better, that is licensed to do business in the State of Florida and that has an agent for service of process within the State of Florida. The coverage shall contain an endorsement providing sixty (60) days' notice to the COUNTY prior to any cancellation of said coverage. Said coverage shall be written by an insurer acceptable to the COUNTY and shall be in a form acceptable to the COUNTY.

8.3 TELCOM shall obtain and maintain the following policies:

- A. Workers' Compensation insurance as required by the State of Florida, sufficient to respond to Florida Statute 440. Employers Liability Insurance with limits of \$100,000 per Accident, \$500,000 Disease policy limits, \$100,000 Disease each employee.
- B. Comprehensive business automobile and vehicle liability insurance covering claims for injuries to members of the public and/or damages to property of others arising from use of motor vehicles, including onsite and offsite operations, and owned, hired or non-owned vehicles, with \$200,000 per person, \$300,000 per Occurrence, \$200,000 Property Damage or \$300,000 combined single limit.
- C. Commercial general liability, including Personal Injury Liability, covering claims for injuries to members of the public or damage to property of others arising out of any covered act or omission of TELCOM or any of its employees, agents or subcontractors or subconsultants, including Premises and/or Operations, Products and Completed Operations, Independent Contractors; Broad Form Property Damage and a Blanket Contractual Liability Endorsement with \$1Million dollar Combined Single Limit.

An Occurrence Form policy is preferred. If coverage is changed to or provided on a Claims Made policy, its provisions should include coverage for claims filed on or after the effective date of this contract. In addition, the period for which claims may be reported must extend for a minimum of 48 months following the termination or expiration of this contract.

- D. COUNTY shall be named as an additional insured with respect to TELCOM'S insurance coverages identified in Paragraph C.
- E. TELCOM shall require its agents, design professionals and subcontractors to be adequately insured at least to the limits prescribed above, and to any increased limits of CONSULTANT if so required by the COUNTY during the term of this Agreement.
- F. TELCOM shall provide to the COUNTY certificates of insurance or a copy of all insurance policies including those naming the COUNTY as an additional insured. The COUNTY reserves the right to require a certified copy of such policies upon request.
- G. If TELCOM participates in a self-insurance fund, a Certificate of Insurance will be required. In addition, TELCOM may be required to submit updated financial statements from the fund upon request from the COUNTY.

9. Notwithstanding the provisions of Sec. 768.28, Florida Statutes, the participation of TELCOM and the COUNTY in this Agreement and the acquisition of any commercial liability insurance coverage, self-insurance coverage, or local government liability insurance pool coverage shall not be

deemed a waiver of immunity to the extent of liability coverage, nor shall any contract entered into by the COUNTY be required to contain any provision for waiver.

10. If the tower to be constructed by TELCOM should be totally or substantially destroyed or damaged (so that TELCOM may not operate the facility as contemplated under the Agreement and amendment) TELCOM may rebuild the Tower at its sole and complete expense. If TELCOM elects to rebuild the Tower as provided for in this paragraph, then in that case the Agreement shall be renegotiated as to term of the Agreement. In any event, due to such damage or destruction TELCOM's use of the premises is completely disrupted, any fees due to the COUNTY shall abate until the use is restored in full or in part, or for a period of no longer than 90 days (from the date of complete disruption ) or whichever occurs first. TELCOM shall immediately notice the destruction date and the restoration date to the County and MCSO.

11. If TELCOM fails to comply with the requirements of the Agreement and of this Amendment, that failure shall constitute a breach of the Amendment and, in the sole discretion of the COUNTY and MCSO, be reason to terminate the LEASE pursuant to paragraph 15 of the LEASE. Upon termination TELCOM shall surrender possession of the tower pursuant to paragraph 21 of the LEASE, and without compensation from the COUNTY to TELCOM.

12. In accordance with Florida Statutes 713.10, neither TELCOM or anyone claiming through TELCOM shall have the right to file construction liens or any other kind of lien on the Site or Premises and the filing of this notice under the Agreement constitutes notice that such liens are invalid against the COUNTY. Further, TELCOM agrees to give actual notice to any contractors, subcontractors or suppliers of good, labor, services that such liens will NOT be valid and to provide County with copies of such Notice and to record the Notice in the Public Records of Monroe County. TELCOM will immediately notify MCSO and Office of County Attorney if a lien is filed regarding the site and send a copy of such lien to both MCSO and Office of County Attorney.

13. Paragraph 12 of the original Agreement shall be amended to read:  
"Expiration of Term. At the expiration of the term of the Agreement and amendments thereto, TELCOM shall peaceably yield up to COUNTY the demised premises, including the tower, fixtures and improvements, as contemplated under the Agreement and Amendments, in good and tenantable repair. It is understood and agreed that TELCOM shall have the right to remove from the premises all personal property of TELCOM which is not permanently attached to the land, including, machinery, equipment, appurtenances, and appliances placed on the premises by TELCOM. TELCOM shall be solely responsible for any hazardous materials on the premises at the end of the term."

14. County requires and TELCOM agrees to enter into a payment and performance bond with the entity TELCOM hires to construct the new tower in an amount equal to the contract amount pursuant to Sec. 255.05, Florida Statutes.

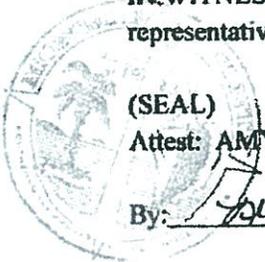
15. This Amendment shall be governed by and construed in accordance with the laws of the State of Florida applicable to contracts made and to be performed entirely in the State. In the event that any cause of action or administrative proceeding is instituted for the enforcement or interpretation of this Agreement, COUNTY and CONSULTANT agree that venue shall lie in the 16<sup>th</sup> Judicial Circuit, Monroe County, Florida, in the appropriate court or before the appropriate administrative body. This agreement shall not be subject to arbitration. Mediation proceedings initiated and conducted pursuant to this Agreement shall be in accordance with the Florida Rules of Civil Procedure and usual and customary procedures required by the circuit court of Monroe County.

16. TELCOM shall insure that all contracts, contractors, and subcontractors comply with local, state and Federal laws; and that there will be no discrimination against any person, and it is expressly understood that upon a determination by a court of competent jurisdiction that discrimination has occurred, this Agreement automatically terminates without any further action on the part of any party, effective the date of the court order. In addition, TELCOM agrees to comply with all Federal and Florida statutes, and all local ordinances, as applicable, relating to the demolition, removal of demolition debris, construction and operation of communications towers.

17. Paragraph 13 of the Agreement shall be amended to read as follows:  
"Assignment. TELCOM shall not assign the demised premises without prior written consent of COUNTY, in the form of an Amendment to the AGREEMENT accomplished with the same formality of this AMENDMENT; provided, however, that TELCOM may assign the lease to an affiliate of the LESSEE without such consent upon giving written notice to COUNTY a minimum of thirty (30) days prior to the assignment and by providing legal proof detailing the full contact information of the affiliate to the LESSOR.

18. In all other respects, the original Agreement with TELCOM for Long Key Communications tower remains unchanged.

IN WITNESS WHEREOF, each party caused this First Amendment to be executed by its duly authorized representative on the day and year first above written.



(SEAL)  
Attest: AMY HEAVILIN C.P.A, Clerk  
By: Audrey Gallen  
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS  
OF MONROE COUNTY, FLORIDA  
By: Stephen J. Murphy  
Mayor/Chairman

Witness to TELCOM's Signature  
By: April O'Mara  
WITNESS Signature

TELCOM SYSTEMS, LTD.  
By: James E. Spisiak  
Signature of Corporate Agent with  
authority to bind the corporation

April O'Mara  
Print Witness Name

James E. Spisiak  
Print Name of Corporate Agent

Date: 10/01/14

Date: 10/01/14

MONROE COUNTY ATTORNEY  
APPROVED AS TO FORM:  
Natileene W. Cassel  
NATILEENE W. CASSEL  
ASSISTANT COUNTY ATTORNEY  
Date: 10-1-2014

# mercado-pedro

 **Stipulated Approval of Minor Set**  
 **11/13/14 03:46 PM**



**LEASE AGREEMENT**

THIS LEASE AGREEMENT is made between MONROE COUNTY ("LESSOR" of "County"), a political subdivision of the State of Florida, whose address is 1100 Simonton Street, Gato Building, Key West, Florida 33040, and TELCOM SYSTEMS, Inc. ("LESSEE"), a Florida Corporation, having an address at 450 NE 1<sup>st</sup> Road, Homestead, Florida 33030.

WHEREAS, the LESSOR owns certain real property located on US 1 Long Key, Florida ("Leased Premises"); and

WHEREAS, the LESSEE owns and operated a communication tower and certain improvements related to the tower; and

WHEREAS, the prior lease with LESSEE has expired; and

WHEREAS, it is in the best interest of the public that the communication tower continue to be operated continuously without interruption on the site; and

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the LESSOR and LESSEE hereby agree as follows:

1. **Ownership Interest in Leased Premises.** The LESSOR owns a tract of land on Long, Key Florida, which is more particularly described as Exhibit "A", attached hereto and made a part hereof.
2. **Ownership of Communication Tower.** The LESSEE owns the Communication Tower and other improvements located on the leased premises, and have leased the premises from the County since April 15, 2009. LESSEE purchased the tower from the prior owner and received the lease by assignment from the prior owner with approval of the County.
3. **Term.** LESSEE shall have and hold the above described lease premises for a term commencing April 20, 2011 and terminating April 19, 2021.
4. **Rental Amount.** LESSEE shall pay to LESSOR the sum of One Thousand Dollars (\$1,000) per month, payable on or before the ninth day of each month for the first two years of the term of the lease, and increasing 2% every year thereafter. The fee shall be made payable to Monroe County and paid to the Clerk of Monroe County at 500 Whitehead Street, Key West, FL 33040.
5. **Tower Utilities.** LESSEE shall promptly pay all gas, water, electric, cable and any other utility charges which may become payable for utilities used by the LESSEE during the term of this agreement.
6. **Maintenance and Repairs.** LESSEE shall be responsible for all maintenance and repairs on the premises in accord with generally accepted business practices. Lessee shall also be responsible for any of the premises damages by the LESSEE, its officers, agents, employees, or equipment.
7. **Alterations.** LESSEE shall have the right to make any alterations in and to the demised premises during the term of this lease upon first obtaining the written consent thereto of the LESSOR, which consent shall not be unreasonably withheld.

8. Right of Ingress and Egress. LESSEE shall have the right of ingress to and egress from the premises.

9. Hold Harmless. Notwithstanding any minimum insurance requirements prescribed elsewhere in this agreement, the LESSEE covenants and agrees that he shall defend, indemnify and hold the COUNTY and the COUNTY's elected and appointed officers and employees harmless from and against (i) any claims, actions or causes of action, (ii) any litigation, administrative proceedings, appellate proceedings, or other proceedings relating to any type of injury (including death), loss, damage, fine, penalty or business interruption, and (iii) any costs or expenses that may be asserted against, initiated with respect to, or sustained by, any indemnified party by reason of, or in connection with, (A) any activity of LESSEE or any of its employees, officers, agents, or employees or other invitees during the term of this AGREEMENT, (B) the negligence or willful misconduct of LESSEE or any of its employees, officers, agents, or other invitees, except to the extent the claims, actions, causes of action, litigation, proceedings, costs or expenses arise from the intentional or sole negligent acts or negligent acts in part or omissions of the COUNTY or Monroe County Sheriff's office any of their employee, elected or appointed officers, agents, or invitees. Insofar as the claims, actions, causes of action, litigation, proceedings, costs or expenses relate to events or circumstances that occur during the term of this AGREEMENT, this section will survive the expiration of the term of this AGREEMENT or any earlier termination of this AGREEMENT.

The parties agree that good and valuable consideration has been received for the indemnification provided for the above.

The extent of liability is in no way limited to, reduced, or lessened by the insurance requirements contained elsewhere within this AGREEMENT.

10. Insurance. The LESSEE shall obtain, at its own expense, insurance as specified below. The LESSEE shall maintain the required insurance throughout the entire term of this agreement. Failure to comply with this provision may result in the immediate termination of the lease agreement and the return of all property owned by the County and the immediate loss of the right of ingress and egress onto the premises, at the discretion of the County, until such insurance has been provided.

The LESSEE shall provide to the County as satisfactory evidence of the required insurance, a Certificate of Insurance or a certified copy of the actual insurance policy. All insurance policies must specify that they are not subject to cancellation, non-renewal, material change, or reduction in coverage unless a minimum of thirty (30) days prior notification is given to the County by the insurer. The acceptance and/or approval of the LESSEE's insurance shall not be construed as relieving the LESSEE from any liability or obligation assumed under this contract or imposed by law.

The LESSEE shall maintain General Liability Insurance throughout the life of the contract and include, as a minimum:

- Premises Operations
- Products and Completed Operations
- Blanket Contractual Liability
- Personal Injury Liability
- Expanded Definition of Property Damage
- Fire Legal Liability (with limits equal to the fair market value of the leased property)

- Workers compensation limits as required by law
- Vehicle Liability

The minimum limits acceptable shall be \$300,000 Combined Single Limit (CSL). If split limits are provided, the minimum limits acceptable shall be \$100,000 per person, \$300,000 per occurrence and \$50,000 property damage.

The County, at its sole option, has the right to request a certified copy of any or all insurance policies required by this contract.

The acceptance and/or approval of the LESSEE's insurance shall not be construed as relieving the LESSEE from any liability or obligation assumed under the lease or imposed by law.

The Monroe County Board of County Commissioners, its employees and officials will be included as "Additional Insured" on all policies, except for Workers' Compensation.

Any deviation from these insurance requirements must be requested in writing on the County prepared form entitled "Request for Waiver of Insurance Requirements" and approved by the Monroe County Risk Management.

11. Injury or Damage to Property on Premises. LESSEE shall be responsible for all property of any kind that may be on the premises during the term of this lease, and, except for any negligence of the LESSOR, the LESSOR and or MCSO shall not be liable to the LESSEE or any other person for any injury, loss or damage to property or to any person on the premises. In the event that the demised premises or a major part thereof are destroyed by storm or other casualty, the LESSOR shall, forthwith restore the demised premises at its own cost and expense in order to restore the operation of the tower for the benefit of the residents of the county. Rental on the demised premises will cease until the completion of the restoration or for ninety (90) days whichever sooner. If the demised premises cannot, after such casualty, be restored within ninety (90) days, LESSEE or LESSOR may terminate the lease upon giving written notice to the other.

12. Expiration of Term. At the expiration of the term of the lease, the LESSEE shall peaceably yield up to the LESSOR the demised premises in good and tenantable repair which shall include removal of the tower and other improvements, unless the LESSOR and LESSEE can agree in writing to other conditions regarding removal of the structure upon expiration. It is understood and agreed that the LESSEE shall have the right to remove from the premises all personal property of the LESSEE and all fixtures, machinery, equipment, appurtenances, and appliances placed on the premises by LESSEE. LESSEE shall be solely responsible for any hazardous materials on the premises.

13. Assignment. The LESSEE shall not assign the demised premises without prior written consent of the LESSOR, provided, however, that LESSEE may assign the lease to an affiliate of the LESSEE without such consent upon giving written notice to LESSOR of the assignment and full contact information of the affiliate to the LESSOR.

14. Successors and Assigns Bound by Covenants. All the covenants, stipulations and agreements herein shall extend to and bind the legal representatives, successors, and assigns of the respective parties hereto.

15. Early Termination. The LESSOR shall have the right, upon giving thirty (30) calendar days Written notice to the Lessee of its intent to terminate this agreement due to a breach or default of any of the Lessee's covenants under this agreement, unless the Lessee shall correct the breach or default

within that thirty (30) day period. Either party may terminate this lease without cause upon giving one hundred and eighty (180) days written notice to the other party.

16. Construction of New Tower on Premises. The parties agree that a new tower will become necessary during the term of this lease and that in the event that the Communications Department of the Monroe County Sheriff's Department (MCSO) determines that the present tower is obsolete, damaged, dangerous, or in serious need of repair, the MCSO shall notify the LESSEE. If the LESSEE is willing to construct a new tower to the specifications of the County and/or MCSO, and in the time frame required by the County and/or the MCSO; the term of the lease will be extended upon the issuance of a certificate of occupancy for an additional ten (10) years on the same terms and conditions as set forth herein. If the LESSEE is unwilling or unable to build a new tower the lease may be terminated by the LESSOR upon one hundred and eighty (180) days written notice to the LESSEE.

17. Waiver. The waiver by the LESSOR of any breach of this lease by the LESSEE shall not be construed as a waiver of any subsequent breach of any duty or covenant imposed by this lease.

18. Right of Inspection. The County may enter upon the premises now or during the term of the lease at any reasonable time for any purpose necessary, incidental to, or connected with the performance of its obligations hereunder, or in the exercise of its governmental functions.

19. Notice. Notices to the parties shall be sent by certified mail, postage prepaid and addressed to the following:

FOR LESSOR:  
County Administrator  
1100 Simonton Street  
The Gato Building  
Key West, Florida 33040

COPY TO:  
Emergency Communications  
Laura White  
10600 Aviation Boulevard  
Marathon, Florida 33050

FOR LESSEE:  
James E. Spisiak  
TELCOM SYSTEMS, Ltd., Inc.  
450 NE 1<sup>st</sup> Road  
Homestead, Florida 33030

20. Taxes and Assessments. LESSEE shall pay all taxes and assessments which may be lawfully levied by a duly constituted taxing body with respect to the demised premises.

21. Surrender of Possession. Upon the expiration or other termination of this lease renewal thereof, LESSEE's right to use the premises, facilities, rights, licenses, services and privileges herein shall cease and LESSEE shall forthwith upon such expiration or termination surrender same in good repair.

22. Discrimination. The LESSEE, in exercising any of the rights or privileges herein granted to LESSEE, shall not discriminate or permit discrimination against any person or groups of persons on the basis of race, color, sex, age, national origin, religion, or any other basis set forth in local, state or federal law.

23. AS IS. The LESSEE acknowledges that he has leased the premises under another lease for an extended period of time and agrees to accept the premises in as is condition and LESSOR shall not be obligate to repair, maintain or renovate same.

24. Governing Law, Venue and Interpretation. This Lease Agreement shall be governed by and construed in accordance with the laws of the State of Florida applicable to contracts made and to be performed entirely in the State. In the event that any cause of action or administrative proceeding is instituted for the enforcement or interpretation of this Lease Agreement, the Lessor and Lessee agree

that venue will lie in the appropriate court or before the appropriate administrative body in Monroe County, Florida.

The LESSOR and LESSEE agree that, in the event of conflicting interpretations of the terms or a term of this Lease Agreement by or between any of them the issue shall be submitted to mediation prior to the institution of any other administrative or legal proceeding.

25. No Representation. County makes no representation, warranty, guarantee, or averment of any kind whatsoever concerning the physical condition of the premises at the commencement of this term, and it is agreed that County will not be responsible for any loss, damage, or cost which may be incurred by LESSEE by reason of any such physical damage.

26. Severability. If any term, covenant, condition or provision of this Lease Agreement (or the application thereof to any circumstance or person) shall be declared invalid or unenforceable to any extent by a court of competent jurisdiction, the remaining terms, covenants, conditions and provisions of this Lease Agreement, shall not be affected thereby; and each remaining term, covenant, condition and provision of this Lease Agreement shall be valid and shall be enforceable to the fullest extent permitted by law unless the enforcement of the remaining terms, covenants, conditions and provisions of this Lease Agreement would prevent the accomplishment of the original intent of this Lease Agreement. The Lessor and Lessee agree to reform the Lease Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision.

27. Attorney's Fees and Costs. The LESSOR and LESSEE agree that in the event any cause of action or administrative proceeding is initiated or defended by any party relative to the enforcement or interpretation of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees, and court costs only, as an award against the non-prevailing party, and shall include attorney's fees and courts costs only in appellate proceedings. Mediation proceedings initiated and conducted pursuant to this Lease Agreement shall be in accordance with the Florida Rules of Civil Procedure and usual and customary procedures required by the circuit court of Monroe County. The parties agree that mediation not arbitration shall be used in the event any dispute arises between the parties.

28. Binding Effect. The terms, covenants, conditions, and provisions of this Lease Agreement shall bind and inure to the benefit of the LESSOR and LESSEE and their respective legal representatives, successors, and assigns.

29. Authority. Each party represents and warrants to the other that the execution, delivery and performance of this Lease Agreement have been duly authorized by all necessary County and corporate action, as required by law.

30. Covenant of No Interest. LESSOR and LESSEE covenant that neither presently has any interest, and shall not acquire any interest, which would conflict in any manner or degree with its performance under this Lease Agreement, and that the only interest of each is to perform and receive benefits as recited in this Lease Agreement.

31. No Solicitation/Payment. The LESSOR and LESSEE warrant that, in respect to itself, it has neither employed nor retained any company or person, other than a bona fide employee working solely for it, to solicit or secure this Lease Agreement and that it has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for it, any fee,

commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this Lease Agreement. For the breach or violation of the provision, the Lessee agrees that the Lessor shall have the right to terminate this Lease Agreement without liability and, at its discretion, to offset from monies owed, or otherwise recover, the full amount of such fee, commission, percentage, gift, or consideration.

32. Public Access. The LESSOR and LESSEE shall allow and permit reasonable access to, and inspection of, all documents, papers, letters or other materials in its possession or under its control subject to the provisions of Chapter 119, Florida Statutes, and made or received by the Lessor and Lessee in conjunction with this Lease Agreement; and the Lessor shall have the right to unilaterally cancel this Lease Agreement upon violation of this provision by Lessee.

33. Non-Waiver of Immunity. Notwithstanding the provisions of Sec. 286.28, Florida Statutes, the participation of the LESSOR and LESSEE in this Lease Agreement and the acquisition of any commercial liability insurance coverage, self-insurance coverage, or local government liability insurance pool coverage shall not be deemed a waiver of immunity to the extent of liability coverage, nor shall any contract entered into by the Lessor be required to contain any provision for waiver.

34. Privileges and Immunities. All of the privileges and immunities from liability, exemptions from laws, ordinances, and rules and pensions and relief, disability, workers' compensation, and other benefits which apply to the activity of officers, agents, or employees of any public agents or employees of the Lessor, when performing their respective functions under this Lease Agreement within the territorial limits of the County shall apply to the same degree and extent to the performance of such functions and duties of such officers, agents, volunteers, or employees outside the territorial limits of the County.

35. Legal Obligations and Responsibilities. Non-Delegation of Constitutional or Statutory Duties. This Lease Agreement is not intended to, nor shall it be construed as, relieving any participating entity from any obligation or responsibility imposed upon the entity by law except to the extent of actual and timely performance thereof by any participating entity, in which case the performance may be offered in satisfaction of the obligation or responsibility. Further, this Lease Agreement is not intended to, nor shall it be construed as, authorizing the delegation of the constitutional or statutory duties of the LESSOR, except to the extent permitted by the Florida constitution, state statute, and case law.

36. Non-Reliance by Non-Parties. No person or entity shall be entitled to rely upon the terms, or any of them, of this Lease Agreement to enforce or attempt to enforce any third-party claim or entitlement to or benefit of any service or program contemplated hereunder, and the Lessor and Lessee agree that neither the Lessor nor the Lessee or any agent, officer, or employee of either shall have the authority to inform, counsel, or otherwise indicate that any particular individual or group of individuals, entity or entities, have entitlements or benefits under this Lease Agreement separate and apart, inferior to, or superior to the community in general or for the purposes contemplated in this Lease Agreement.

37. Attestations. Lessee agrees to execute such documents as the Lessor may reasonably require, to include a Public Entity Crime Statement, an Ethics Statement, and a Drug-Free Workplace Statement.

38. No Personal Liability. No covenant or agreement contained herein shall be deemed to

be a covenant or agreement of any member, officer, agent or employee of Monroe County in his or her individual capacity, and no member, officer, agent or employee of Monroe County shall be liable personally on this Lease Agreement or be subject to any personal liability or accountability by reason of the execution of this Lease Agreement.

39. Execution in Counterparts. This Lease Agreement may be executed in any number of counterparts, each of which shall be regarded as an original, all of which taken together shall constitute one and the same instrument and any of the parties hereto may execute this Lease Agreement by signing any such counterpart.

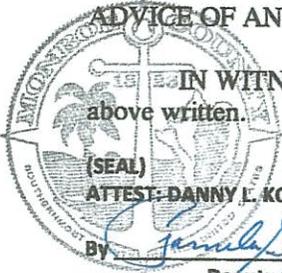
40. Section Headings. Section headings have been inserted in this Lease Agreement as a matter of convenience of reference only, and it is agreed that such section headings are not a part of this Lease Agreement and will not be used in the interpretation of any provision of this Lease Agreement.

41. Mutual Review. This Lease agreement has been carefully reviewed by Lessee and Lessor, and the counsel of their choice, therefore this Lease agreement is not to be construed against either party on the basis of authorship.

42. The county's performance and obligation to pay under this contract is contingent upon an annual appropriation by the legislature.

THIS IS TO BE A LEGALLY BINDING CONTRACT. IF NOT FULLY UNDERSTOOD, SEEK THE ADVICE OF AN ATTORNEY PRIOR TO SIGNING.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals the day and year first above written.



(SEAL)  
ATTEST: DANNY L. KOLHAGE, CLERK

By *[Signature]*  
Deputy Clerk 4/20/2011

BOARD OF COUNTY COMMISSIONERS  
OF MONROE COUNTY, FLORIDA

By *[Signature]*  
Mayor/Chairperson

LESSEE:

BY *[Signature]*  
Person Authorized to sign for LESSEE

JAMES E. SPISIAK  
Print Name  
Date: 4/7/11

MONROE COUNTY ATTORNEY  
APPROVED AS TO FORM:  
*[Signature]*  
NATILEENE W. CASSEL  
ASSISTANT COUNTY ATTORNEY  
Date 4-19-2011

WITNESS FOR LESSEE:

1) *[Signature]*  
Witness signature  
Bette J Holland  
Print Name  
Date 4/7/2011

2) *[Signature]*  
Witness signature  
Print Name ANITA RIVGA  
Date: 4-7-11

(STATE OF FLORIDA )  
(COUNTY OF Monroe) DADE

The foregoing instrument was acknowledged before me this 7 day of APRIL, 2011, by JAMES E. SPISIAK He/she is personally known to me or produced as identification.

Commission No. DD 736674  
My Commission Expires: Jan 19, 2012

*[Signature]*  
Notary Public



EXHIBIT "A"

Legal description of the premises which County leases to TELCOM SYSTEMS Inc. :

A tract of land in a part of Government Lot 1, Section 5, T. 65 S., R. 35 E., on Long Key, Monroe County, Florida, and being more particularly described by metes and bounds as follows:

Commencing at the centerline of U.S. Highway No. 1 and the Point of Curve of Station 24068 plus 96.1, Florida East Coast Railway Right of Way and Tract Map, bear northeasterly along the centerline of U.S. Highway No. 1 for a distance of 330.22 feet to a point; thence at right angles and southeasterly for a distance of 50.0 feet to the point of beginning of the tract of land hereinafter described, said point of beginning also being on the southeasterly right-of-way line of U.S. Highway No. 1; from said point of beginning, continue bearing southeasterly and at right angles to U.S. Highway No. 1 for a distance of 300.0 feet to a point; thence at right angles and northeasterly for a distance of 300.0 feet to a point; thence at right angles and northwesterly for a distance of 300.0 feet to a point on the southeasterly right-of-way line of U.S. Highway No. 1; thence bear southwesterly along the southeasterly right-of-way line of U.S. Highway No. 1 for a distance of 300.0 feet, back to the point of beginning.

August 18, 2015

James E. Spisiak  
Telcom Systems, Ltd.  
401 NE 1<sup>st</sup> Road  
Homestead, FL 33030

SUBJECT: Valmont File # 184708  
Model: U-22.0 X 195' Self Supporting Tower  
Site Name: Long Key, FL

Thank you for your inquiry concerning tower design codes and practices as they relate to your requested tower designs.

Valmont Structures has been designing and building guyed and self-supporting towers and monopoles since the early 1950's. During this time, we have sold thousands of towers ranging in height from as little as 50' high to in excess of 1400'. These towers were individually engineered to accommodate the loading requirements imparted by the design wind speed, ice considerations, antenna loading, and other factors dictated by the national code requirements existing at the time the tower was built.

The ANSI/TIA-222-G Standard represents the latest refinement of specific minimum requirements for tower engineers and manufacturers to follow to help assure that the tower structure and its foundations are designed to meet the most realistic conditions for local weather while assuring that the tower is designed to stringent factors of safety. This tower is designed to 150 MPH (no ice) per ANSI/TIA-222-G with Class II, Topographical category 1, Exposure criteria D and a Crest height of 0 feet.

We are aware of few documented instances of a self supporting tower or monopole failure. For self-supporting towers and monopoles the most common mode of failure is in the upper middle region of the tower, with the upper portion of the tower remaining connected and "bending and bowing over" against the base of the tower or pole. The fact that the wind is normally greater on the upper portion of the structure contributes to the likelihood of this type of failure.

Including myself, our site has three licensed Professional Engineers covering a total of 49 states. Valmont Structures is an AISC approved manufacturing facility. Valmont Structures welders are AWS and CWB qualified. Our total design, engineer and build process has been quality audited by our customers including public utilities, telephone companies, government agencies, and of course AISC.

We trust the above and the attached will be helpful to you. If you should need anything else, please let us know at your convenience.

Sincerely,

William R. Heiden III, P.E.  
Manager of Engineering

Valmont Industries, Inc.  
Specialty Structures Division  
✉ [william.heiden@valmont.com](mailto:william.heiden@valmont.com)



**REPORT OF SUBSURFACE EXPLORATION & GEOTECHNICAL  
ENGINEERING EVALUATION OF SUBSURFACE CONDITIONS**

**PROJECT:**

**RADIO TOWER FOUNDATION  
MILE MARKER 67.2  
LONG KEY, FLORIDA**



**OCTOBER 2009**

**Prepared for:**

**TELECOM SYSTEMS, LTD.  
450 N.E. 1<sup>ST</sup> ROAD  
HOMESTEAD, FLORIDA**

**WINGERTER LABORATORIES, INC.  
1820 NE 144th Street  
North Miami, Florida 33181**



Engineering Testing and Inspection Service  
Established 1949

No. 1

October 28, 2009

Telecom Systems, Ltd.  
Attention: Mr. James Spisiak  
450 N.E. 1<sup>st</sup> Road  
Homestead, Florida 33030

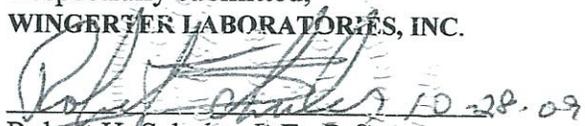
Reference: Report of Subsurface Soil Exploration and Geotechnical Engineering  
Evaluation of Subsurface Conditions  
Project: Radio Tower Foundation  
Mile Marker 67.2, Long key (Monroe County), Florida  
WLI Order No. 09-1374

Dear Mr. Spisiak:

We are pleased to present this report of our subsurface soil exploration and geotechnical engineering evaluation for the subject site. These services were performed in general accordance with our Professional Services Agreement dated October 16, 2009. This report presents our evaluation and specific recommendations for the proposed construction together with the field data.

We appreciate this opportunity to be of service to you during this phase of the project. If you have any questions or comments regarding the information contained in this report, please contact the undersigned at 305-944-3401, extension 301 or [rhs@wingertlab.com](mailto:rhs@wingertlab.com).

Respectfully submitted,  
WINGERTER LABORATORIES, INC.

  
Robert H. Schuler, P.E., P.G.  
Florida Registration No. 34715

enc: Report

The original of this report was signed and sealed by the above referenced Florida Registered Professional Engineer in accordance with Rule 61G15-18.011 of the Florida Administrative Code.

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## **INTRODUCTION**

**Wingerter Laboratories, Inc. (WLI)** is pleased to present this report of our subsurface soil exploration and geotechnical engineering evaluation for the subject site. The purpose of this investigation was to obtain specific subsurface data in order to provide an engineering evaluation of the subsurface conditions including recommendations for foundation design for support of the proposed cell tower to be located at the site at Mile marker 67.2, Long Key, Florida.

Our subsurface exploration consisted of a total of three (3) Standard Penetration Test Borings performed at the subject site as directed.

The following presents a review of the project information provided to us, a discussion of the subsurface conditions, detailed geotechnical engineering recommendations, our Report of Test Boring Number B-1 and our analytical pile data as shown on Appendix C of this report.

## **PROJECT INFORMATION**

No documents were provided to us for this project.

## **INVESTIGATIVE PROCEDURES**

Field work was performed using standard truck-mounted drilling equipment. Soil samples (disturbed) were obtained in accordance with ASTM D-1586 utilizing a 2-foot long, 2-inch diameter split spoon sampler which is advanced by successive blows of a 140 pound hammer free-falling 30 inches. The number of blows for each 6 inches of penetration is recorded. The sum of the second and third blow counts for each 2-foot sampling interval constitutes the Standard Penetration Resistance in blows per foot, which is referred to as the "N" Value. The following tables may be used in interpreting the consistency of the materials based on the "N" Value:

| SOIL CONSISTENCY vs. "N VALUE" |                            |                         |                            |                         |                            |
|--------------------------------|----------------------------|-------------------------|----------------------------|-------------------------|----------------------------|
| Cohesionless Soils             |                            | Cohesive Soils          |                            | Rock and Gravels        |                            |
| "N Value"<br>(blows/ft)        | Consistency<br>Designation | "N Value"<br>(blows/ft) | Consistency<br>Designation | "N Value"<br>(blows/ft) | Consistency<br>Designation |
| 0 to 4                         | Very Loose                 | 0 to 2                  | Very Soft                  | 0 to 25                 | Loose or Soft              |
| 5 to 10                        | Loose                      | 3 to 4                  | Soft                       | 26 to 50                | Medium<br>Dense            |
| 11 to 30                       | Medium<br>Dense            | 5 to 8                  | Medium                     | 51 to 90                | Dense                      |
| 31 to 50                       | Dense                      | 9 to 15                 | Stiff                      | -                       | -                          |
| 50 or More                     | Very Dense                 | 16 to 30                | Very Stiff                 | -                       | -                          |
| -                              | -                          | 31 or More              | Hard                       | -                       | -                          |

The Standard Penetration Test, "N" value curve shown on the boring logs indicates the general variation of the "N" value throughout the depth of the boring. This curve is plotted in a straight line which connects each "N" value. However, it should not be assumed that the changes in the "N" value are a linear function. The graphical representations shown on the boring logs should not be substituted for the actual material descriptions included in the logs.

Soil samples will be retained by **WLI** for a period of thirty (30) days only unless specifically requested otherwise by the client.

The test borings were marked in the field by **WLI**, using approximate methods. The borings were located by estimated distances from existing recognizable landmarks. The boring locations are, therefore, generally as shown, but no degree of accuracy is stated or implied.

Elevations were not established for the test boring locations. Depths reported on the logs represent depths below ground surface as they existed on the date drilled. The client is cautioned that if subsequent filling or excavation of the site occurs, the reported depth must be so adjusted. **WLI** can not assume responsibility for the accuracy of reported depths if the site is disturbed subsequent to the date drilled.

## TESTING PROGRAM AND CONDITIONS REVEALED

Our subsurface investigation consisted of a total of three (3) Standard Penetration Test Borings, conforming to the requirements of ASTM D 1586, that were performed at the site on October 19, 2009. Please refer to Appendix A for our Report of Test Boring Numbers B-1 through B-3 for a detailed description of the materials encountered and the depth intervals at which they were encountered.

The number, location and depth of the test borings were determined by WLI, taking into consideration the requirements of the project, site accessibility and the subsurface conditions revealed. The discussions, opinions and recommendations contained in this report are based upon the conditions revealed in the referenced test borings.

A review of the test boring logs indicates that the site is generally mantled by loose sands, fragmented limestone, shell fragments and, in Boring No.1, a thin layer of silt with some shells, to about ten feet below land surface. Thereafter, to the maximum explored depth of 30 feet, the borings encountered dense and very dense layers of fragmented limestone.

The ground water level at the time of our investigation was encountered at a depth of four feet below the existing land surface. Fluctuations in the ground water level should be expected due to seasonal climatic changes, tidal action, rainfall variation, surface runoff, construction activity and other site specific factors.

## ENGINEERING RECOMMENDATIONS

Should a footing type foundation be used, a bearing capacity of 4500 pounds per square foot can be used for the limestone and 2000 pounds per square foot for the loose sands. The Florida Building Code requires a factor of safety of 2 on footing loads. It is not necessary to add additional factors of safety that may be used in the steel design. We have included an analysis of the pile capacity to assist the structural engineer in the pile cap design and adjusting the number of piles if required.

### 1. Spread Footings

- 1.1. Bottom of footings for the tower shall be placed directly upon in-situ limestone or compacted sands that was encountered generally near the surface.

However, there is the possibility that the top of limestone formation may be encountered at different depths throughout the site, other than that encountered at the tested location.

- 1.2. Footing excavation shall be carried to a minimum 1-foot below the top of the limestone.
  - 1.2.1. Excavation shall be clean and free of loose soil and rock debris. Final cleaning shall be performed immediately prior to placement of reinforcing steel and concrete.
  - 1.2.2. Any cavity, solution pipe, or sand pocket greater than 6 inches in diameter or all such cavities if, when combined, constitute more than 20 percent of the footing area, shall be cleaned to a depth of twice their diameter and backfilled with lean concrete.
  - 1.2.3. Footing excavations and lean concrete repair shall be inspected by the geotechnical inspector to verify the competence of the limestone and the acceptability of the excavation.
- 1.3. Footings shall be proportioned for an allowable design bearing capacity 4,500 pounds per square foot. At the recommended bearing capacity the footing dimensions for the tower footing will be 12 feet square.
- 1.4. Evaluation of materials at founding level and below, using accepted geotechnical criteria indicates that the materials will support the stated bearing capacity without failure and with anticipated maximum settlement of less than 1 inch, with differential settlement across the site approaching ½ inch.
- 1.5. Where feasible, footings shall be cast directly against the sides of the footing excavation. Sidewall bonding of the footing to the excavation will greatly enhance general bearing and will reduce concentrated toe-loads which may result from eccentric loading.
- 1.6. Special procedures for excavation below the ground water level.
  - 1.6.1. Excavation shall be witnessed by a qualified geotechnical inspector to verify that in-situ limestone has been encountered.
- 1.7. Compacted backfill alternative:
  - 1.7.1. Should the top of suitable rock vary such that unacceptable variation occurs in the bottom of footing elevation, footings may be placed upon compacted backfill placed upon rock.

1.7.2. Footings placed upon compacted fill directly on the limestone shall be proportioned for an allowable design bearing capacity of 4,500 pounds per square foot.

1.7.3. Dewatering will be required for footings placed on the limestone.

**2. Auger Cast (Cast-In-Place) Pile Anchors - if required**

2.1. Recommended size: 14 inches diameter installed at a 45 degree batter in line with the tower anchor cables.

2.2. Tension capacity: 364 kips.

2.3. Lateral capacity: Piles may be considered to develop lateral resistance of 10 tons, presuming that the reinforcing design is adequate for the stated shear.

2.4. Installation depth: Auger shall be advanced to a depth of 55 feet referenced to existing site grade, unless refusal occurs. Refusal is defined as one (1) foot or less penetration in two (2) minutes of drilling.

2.5. Physical Criteria:

2.5.1. Augering and pumping equipment, and technique shall be at the contractor's discretion on a performance basis by using acceptable installation procedures to deliver an integral pile.

2.5.2. The volume of grout per linear foot of pile shall exceed the theoretical pile volume with a minimum grout factor of 1.15.

2.5.3. Grout shall be a mixture of Portland cement, fine aggregate, and water with proportions and admixtures at the contractor's discretion on a performance basis. A design mix with confirming strength test results shall be submitted to the project structural engineer for approval prior to installation of the piles. The minimum 28-day compressive strength of the grout shall be no less than 4000 psi.

2.5.4. Grouting shall be performed in a continuous operation. During extraction of the auger, should volume of grout-take markedly increase and/or injection pressure markedly decrease, auger shall be reinserted to a minimum five (5) feet below the point in question, and grouting resumed. The procedure shall be repeated as frequently as necessary to insure vertical continuity of the

grout shaft. Grout testing shall be by three or four inch cylinders and not grout cubes.

2.5.5. Down-shaft reinforcing details shall be at the discretion of the contractor on a performance basis.

2.6. Testing and inspection:

2.6.1. Section 1808.2.8.2 of the Florida Building Code requires that pile capacities in excess of 40 tons (80 kips) be substantiated by a load test performed on site. Therefore, a minimum of one (1) static load test shall be performed. The test pile location shall be directed by the Geotechnical Engineer. The test pile shall be loaded to twice their design capacity as required by section 1808.2.8.2 of the Florida Building Code. Acceptance criteria shall be as per the Florida Building Code. The load test shall be performed under the direction of the Geotechnical Engineer. The pile contractor shall provide and install all testing equipment, reference beams, calibrated jack with pump and pressure gauge or a calibrated load cell, protection from the sun and rain, adequate lighting, adequate support for the load testing apparatus and cooperate with the Geotechnical Engineer in the performance of the load test.

2.6.2. Pile installation shall be witnessed and logged by the geotechnical inspector. Geotechnical inspector shall confirm shaft plumbness, compliance with depth requirements, continuity of grouting, and reinforcing details; inspector's log shall include the preceding and all other pertinent data including pile identification.

2.6.3. Grout shall be sampled and test cylinders or cubes shall be cast for 28-day strength confirmation at the frequency of no less than one sampling per 50 cubic yards placed, but at least one sampling in each sustained grouting operation.

### **Design Criteria for Certain Foundation Design Programs**

The Soil Friction Angle ( $\phi$ ) is shown on the foundation profile and soil condition. For depth 1' - 12', it is 30°. For depth 12' - 30', it is 39°.

The allowable bearing capacity of the near surface soils is 2000 PSF is based on the FBC. Required factor of safety of two (2). Therefore, under the tower, a 4000 PSF capacity can be assumed to a depth of 12' and 14,000 PSF below this depth. Without a factor of safety.

The  $\gamma_{sub}$  lb/ft<sup>3</sup> is the soil density when the soil is below the water table, the buoyant density is shown. For a design program, you can probably use 90 lb/ft<sup>3</sup> Submerged weight.

The K value is the subgrade modulus which is the Young's Modulus for a design program. You can use 86 lb/in<sup>3</sup>.

The skin friction for these soils can be used as 20°.

Since the limestone may or may not be solid rock, the calculation can be based on all soil supported pier. Young's Modulus and RQP only apply to solid rock that can be cored, and not the fragmented and void filled limestone that is present at this site. Treating this limestone as a compacted soil is appropriate.

The UCS can be considered the same as the Ultimate Bearing Capacity mentioned above.

#### **SPECIAL REMARKS & ANNOTATIONS**

In dealing with the unseen subsurface dimension, a prudent test boring program acts to identify the general range of conditions and to reduce, but not eliminate, the risks of unknown conditions. Therefore, **WLI** cannot offer a warrantee, expressed or implied, that materials or conditions other than those revealed in the test borings will not be encountered, nor that the relative proportions and density of the materials will not vary from those reported.

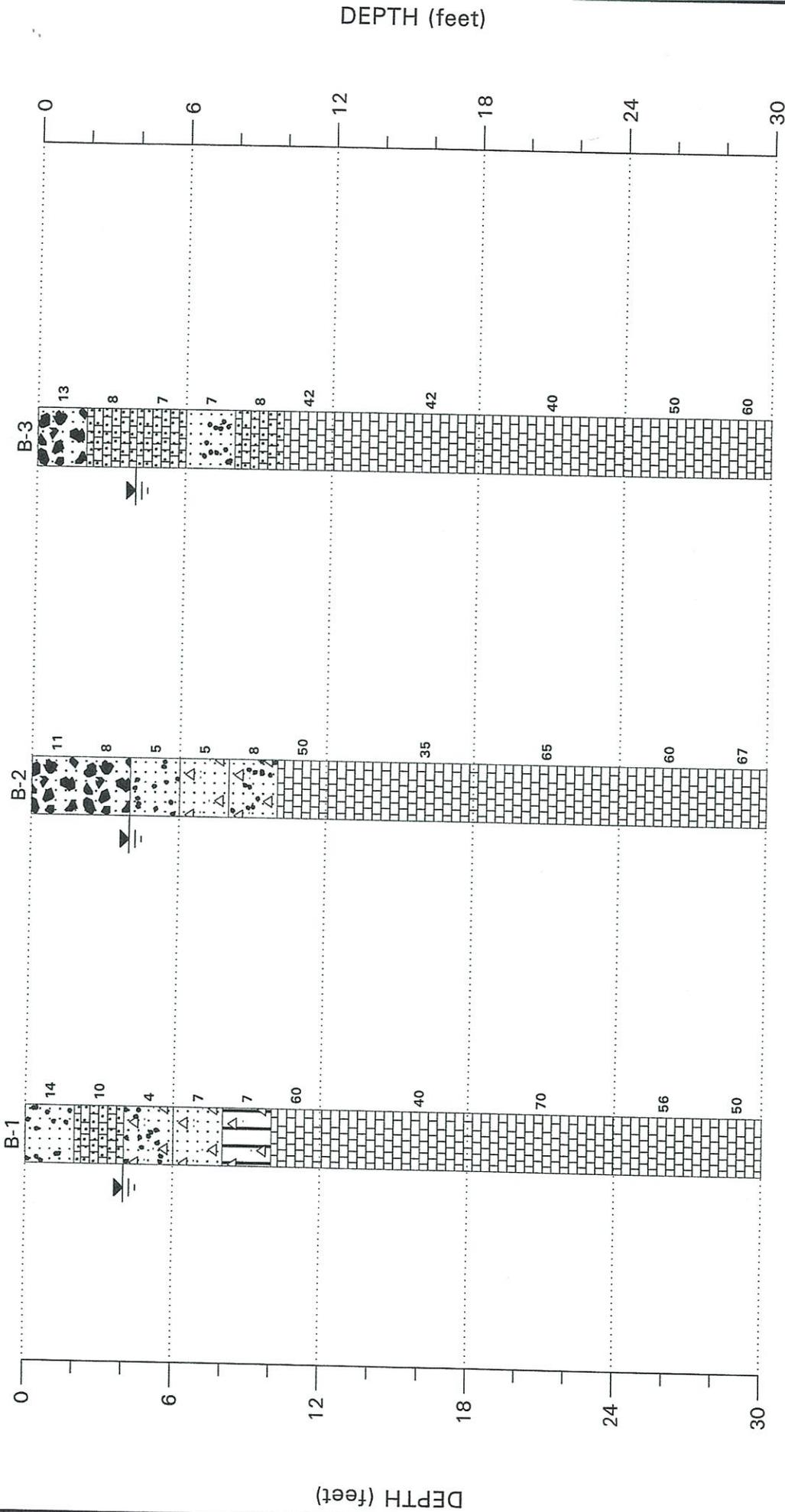
Furthermore, **WLI** assumes no responsibility for the accuracy of the reported depths should any excavation, filling or alteration of the site grade occur, subsequent to the date of the drilling operation, without surveying the existing conditions.

Also, since the criteria furnished to **WLI** constitutes our total knowledge and understanding of the project; inaccuracies, deviations or alterations of the criteria may invalidate these recommendations to the extent they impact the magnitude, distribution, and elevation of applied loads, or impact the nature of the construction.

**APPENDIX A**  
**TEST BORING LOGS**

# MULTIPLE BORING PROFILE(SUMMARY)

Radio Tower Foundation



# TEST BORING LOG

BORING NO.: B-1

CLIENT: *Telecom Systems, Ltd.*  
 PROJECT: *Radio Tower Foundation*  
 LOCATION: *As shown on boring location sketch*  
 DRILLER: *M. Felton*  
 DRILL RIG: *CMS*  
 DEPTH TO WATER: *4.0'*

ELEVATION: -  
 DATE STARTED: *10-19-09*  
 DATE COMPLETED: *10-19-09*

| DEPTH<br>(feet) | SOIL SYMBOLS,<br>AND BLOWS PER<br>SIX INCHES | SOIL DESCRIPTION  | STANDARD PENETRATION TEST |                      |    |                  |
|-----------------|--|---|---------------------------|----------------------|----|------------------|
|                 |  |   | SAMPLE<br>NO.             | SAMPLING<br>INTERVAL | N  | N-value<br>CURVE |
| 0               |  |   |                           |                      |    | 10 30 50 70 90   |
| 1               | 6  | Tan SAND with some fragmented limestone                   | 1                         | 0.0-2.0              | 14 |                  |
| 2               | 7  |   |                           |                      |    |                  |
| 3               | 8  | Tan fragmented LIMESTONE with some limesand               | 2                         | 2.0-4.0              | 10 |                  |
| 4               | 6  |   |                           |                      |    |                  |
| 5               | 5  | Tan SAND with trace fragmented limestone with some shells | 3                         | 4.0-6.0              | 4  |                  |
| 6               | 4  |   |                           |                      |    |                  |
| 7               | 3  | Tan SAND with some shells                                 | 4                         | 6.0-8.0              | 7  |                  |
| 8               | 4  |   |                           |                      |    |                  |
| 9               | 3  | Tan sandy SILT with some shells                           | 5                         | 8.0-10.0             | 7  |                  |
| 10              | 2  |   |                           |                      |    |                  |
| 11              | 5  | Tan fragmented LIMESTONE                                  | 6                         | 10.0-12.0            | 60 |                  |
| 12              | 25   |   |                           |                      |    |                  |
| 13              | 30   |   |                           |                      |    |                  |
| 14              | 30   |   |                           |                      |    |                  |
| 15              | 33   |   |                           |                      |    |                  |
| 16              | 20   |   | 7                         | 15.0-17.0            | 40 |                  |
| 17              | 20   |   |                           |                      |    |                  |
| 18              | 20   |   |                           |                      |    |                  |
| 19              | 20   |   |                           |                      |    |                  |
| 20              | 22   |   |                           |                      |    |                  |
| 21              | 20   |   | 8                         | 20.0-22.0            | 70 |                  |
| 22              | 20   |   |                           |                      |    |                  |
| 23              | 30   |   |                           |                      |    |                  |
| 24              | 35   |   |                           |                      |    |                  |
| 25              | 35   |   |                           |                      |    |                  |
| 26              | 30   |   | 9                         | 25.0-27.0            | 56 |                  |
| 27              | 25   |   |                           |                      |    |                  |
| 28              | 25   |   |                           |                      |    |                  |
| 29              | 31   |   |                           |                      |    |                  |
| 30              | 30   |   | 10                        | 28.0-30.0            | 50 |                  |
| 31              | 25   | Boring terminated at 30.0'                                |                           |                      |    |                  |
| 32              | 25   |   |                           |                      |    |                  |
| 33              | 25   |   |                           |                      |    |                  |

This information pertains only to this boring and should not be interpreted as being indicative of the site.

# TEST BORING LOG

BORING NO.: B-2

CLIENT: Telecom Systems, Ltd.  
PROJECT: Radio Tower Foundation  
LOCATION: As shown on boring location sketch  
DRILLER: M. Felton  
DRILL RIG: CMS  
DEPTH TO WATER: 4.0'

ELEVATION: -  
DATE STARTED: 10-19-09  
DATE COMPLETED: 10-19-09

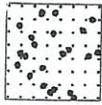
| DEPTH<br>(feet) | SOIL SYMBOLS,<br>AND BLOWS PER<br>SIX INCHES | SOIL DESCRIPTION  | STANDARD PENETRATION TEST |                   |    |                |
|-----------------|--|---|---------------------------|-------------------|----|----------------|
|                 |  |   | SAMPLE NO.                | SAMPLING INTERVAL | N  | N-value CURVE  |
| 0               |  |   |                           |                   |    | 10 30 50 70 90 |
| 1               |  | Tan fragmented LIMESTONE and LIMESAND                     | 1                         | 0.0-2.0           | 11 |                |
| 2               |  |   | 2                         | 2.0-4.0           | 8  |                |
| 3               |  |   |                           |                   |    |                |
| 4               |  |   |                           |                   |    |                |
| 5               |  | Tan SAND with trace fragmented limestone                  | 3                         | 4.0-6.0           | 5  |                |
| 6               |  |   |                           |                   |    |                |
| 7               |  | Tan SAND with some shells                                 | 4                         | 6.0-8.0           | 5  |                |
| 8               |  |   |                           |                   |    |                |
| 9               |  | Tan SAND with trace fragmented limestone with some shells | 5                         | 8.0-10.0          | 8  |                |
| 10              |  |   |                           |                   |    |                |
| 11              |  | Tan fragmented LIMESTONE                                  | 6                         | 10.0-12.0         | 50 |                |
| 12              |  |   |                           |                   |    |                |
| 13              |  |   |                           |                   |    |                |
| 14              |  |   |                           |                   |    |                |
| 15              |  |   |                           |                   |    |                |
| 16              |  |   | 7                         | 15.0-17.0         | 35 |                |
| 17              |  |   |                           |                   |    |                |
| 18              |  |   |                           |                   |    |                |
| 19              |  |   |                           |                   |    |                |
| 20              |  |   |                           |                   |    |                |
| 21              |  |   | 8                         | 20.0-22.0         | 65 |                |
| 22              |  |   |                           |                   |    |                |
| 23              |  |   |                           |                   |    |                |
| 24              |  |   |                           |                   |    |                |
| 25              |  |   | 9                         | 25.0-27.0         | 60 |                |
| 26              |  |   |                           |                   |    |                |
| 27              |  |   |                           |                   |    |                |
| 28              |  |   |                           |                   |    |                |
| 29              |  |   | 10                        | 28.0-30.0         | 67 |                |
| 30              |  |   |                           |                   |    |                |
| 31              |  | Boring terminated at 30.0'                                |                           |                   |    |                |
| 32              |  |   |                           |                   |    |                |
| 33              |  |   |                           |                   |    |                |

This information pertains only to this boring and should not be interpreted as being indicative of the site.

# LEGEND

Symbol Description

## Soil symbols



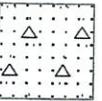
Sand with some to trace limestone



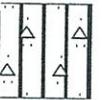
Limestone with some to trace sand



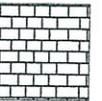
Sand with some fragmented limestone and shell fragments



Sand with trace shell fragments



Silt with some to trace shell fragments



Fragmented Limestone



Fragmented limestone and sand

## Misc. Symbols



Water table at  
boring completion

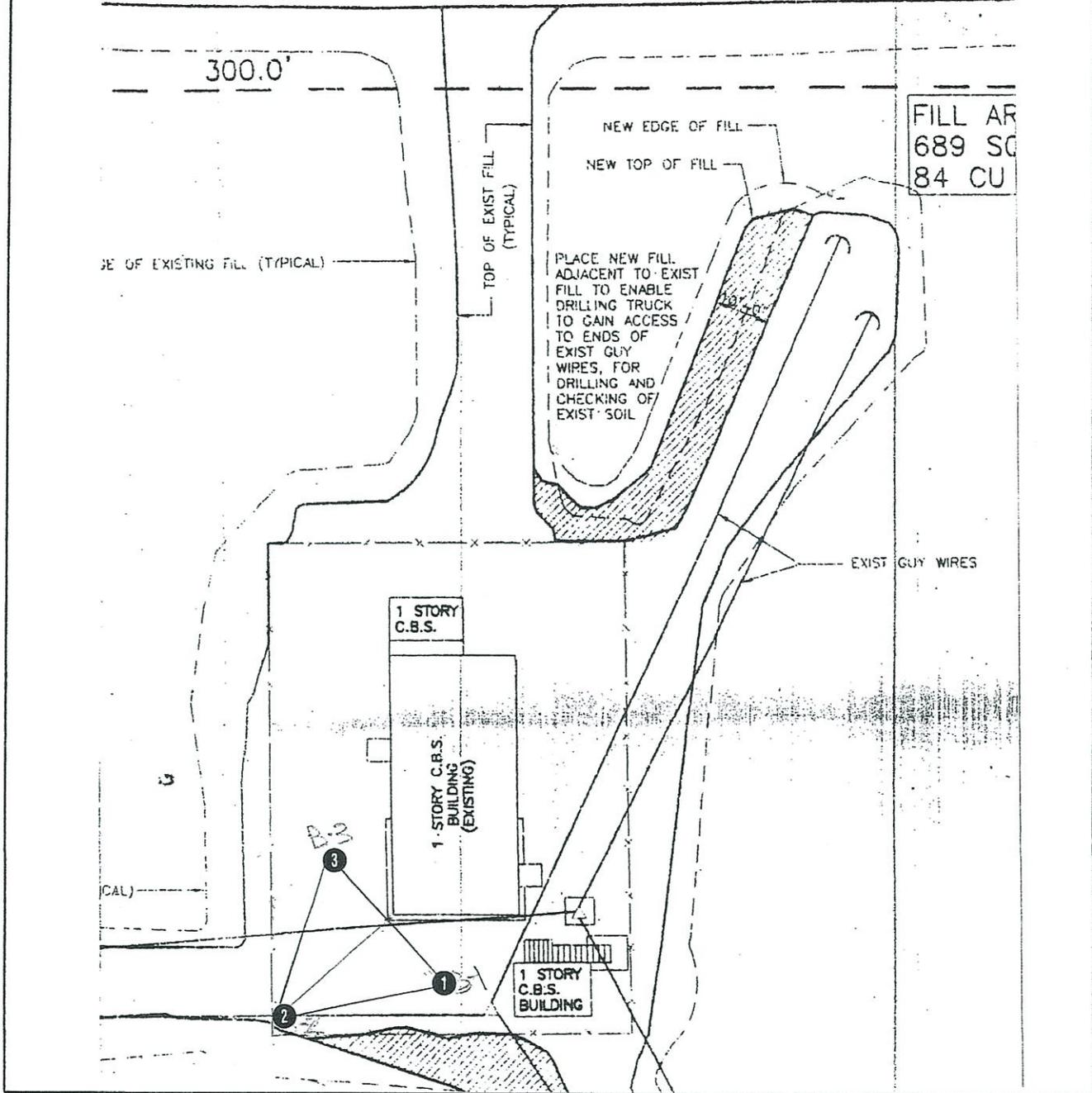
## Soil Samplers



Standard penetration test

TEST BORING LOCATION MAP

No 5 (US HIGHWAY No. 1)



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