THIS LEASE IS THE PROPERTY OF:

Woodbury County, Iowa 620 Douglas Street, Suite 104 -Sioux City, Iowa 51101

AND THE PROPERTY OF:

Senet Inc.

1000 Market Street Suite 102 Portsmouth, NH 03801

ATTN: Chauncey G. Morgan Phone: (603) 821-0003

Fax: (603) 821-0199

C/O Starcomm Public Safety Board P.O. Box 447 Sioux City, Iowa 51102

ATTN: Glenn Sedivy Phone: (712) 279-6959

Fax: (712) 279-6157

And

The City of Sioux City, Iowa 405 6th Street, P.O. Box 447 Sioux City, Iowa 51102

SITE LEASE AGREEMENT

THIS SITE LEASE AGREEMENT (hereinafter called "Lease"), is made and entered into as of this day of _______, 2017, by and between Woodbury County, Iowa, whose address is 620 Douglas Street, Suite 104, Sioux City, Iowa 51101 under the direction of the Starcomm Public Safety Board, whose address is P.O. Box 447 Sioux City, Iowa 51102 and the City of Sioux City, Iowa whose address is 405 6th Street, P.O. Box 447, Sioux City, IA 51102, hereinafter called "Lessors", and Senet, Inc. having an 1000 Market Street Suite 102 Portsmouth, NH 03801, hereinafter called "Lessee".

In consideration of the covenants and agreements hereinafter set forth, the parties hereto agree as follows:

- 1. <u>Leased Premises</u>. Lessors hereby Lease to the Lessee, for the period, at the rental, and upon the terms and conditions hereinafter set forth, the following Leased "Premises" located within the city limits of Sioux City, IA.
- a. Space on the Woodbury County radio tower for one (1) antenna as shown in Exhibit A, Senet Inc. Site Sketch and Plans.
- b. Space for equipment in Woodbury County Compound, which is the fenced in area around the tower, including the building shelter, as shown in Exhibit A, Senet Inc. Site Sketch and Plans.
- c. The legal description for the location of the above tower and equipment is:

All that part of the South One-Half (S ½) of the Northwest Quarter (NW ¼) of Section 36, Township 89 North, Range 47 West of the 5th Principal Meridian, Sioux City, Woodbury County, Iowa, described as follows:

Commencing at the Northeast corner of the SW ¼ of the NW ¼ of said Section 36; thence S 43°22'02"W for 60.00 feet to the point of beginning; thence S 46°37'58"E for

50.00 feet; thence S 43°22'02"W for 100.00 feet; thence N 46°37'58"W for 100.00 feet; thence N 43°22'02"E for 100.00 feet; thence S 46°37'58"E for 50.00 feet to the point of beginning. Said described lease contains 10,000.0 square feet.

NOTE: Basis of bearings established by reference to Plat of Survey and legal description as recorded on Roll 598 – Images 635 through 639 in the Woodbury County Recorder's Office, Sioux City, Iowa

(Property located in the vicinity of 4647 Stone Avenue)

- 2. Access. Lessors also grant to Lessee, access to the spaces described in paragraph one (1) above, seven days a week, 24 hours a day, throughout the term of this Lease, provided that, prior to Lessee or Lessee's contractors climbing the tower for antenna access, Lessee will give Lessors no less than 12 hours prior notice. To allow this access to climb the tower or Fenced Compound, Lessors will give Lessee a key to the lock on the Compound. Each time the Lessee's employee(s) access the location all the Lessee's employees will notify the Facility Manager, in writing, in person or if necessary over the phone by calling (712) 279-6960. These employees will be subject to criminal background checks, except in emergency situations and when otherwise agreed upon by Lessor. Security access to the sites compound will be provided by the Starcomm Director or Facility Manager. Each employee of Lessee who climbs the tower will have in their possession a card showing that they have completed the Qualified Climber/Rescue course offered through Comtrain or similar program approved by Lessors. Each employee of Lessee will follow all OSHA regulations while climbing any portion of the tower including wearing all required safety harnesses and will use the safety climbing cable while on the tower. There will never be fewer than 2 certified climbers on the site during any type of climbing on the tower. Lessee shall further abide by the terms set forth in Exhibit C.
- 3. <u>Initial Term and Commencement Date of Lease</u>. The "Initial Term" of this Lease shall be for a period of Five (5) years. The "Commencement Date" for the Initial Term of this Lease begins on the date Lessee acquires a valid building permit for all Lessee's equipment including the antennas and shelter.
- 4. Renewal Terms. Lessors hereby grant to Lessee the right, privilege and option to extend this Lease for four (4) additional "Renewal Terms" of Five (5) years; provided that the total length of all terms does not extend beyond the term of the Lease Agreement between Lessors and WIT; each with the consent and written approval from Lessors, from the end of the Initial Term, under the same terms, covenants and conditions as herein contained, provided that Lessee is not in default of any of the terms, covenants or conditions of this Lease at the conclusion of the Initial Term or any prior Renewal Term, respectively. This Lease shall automatically terminate unless Lessee gives written notice of the desire to extend or renew the Lease at least one hundred eighty (180) days prior to the end of the applicable term and obtains Lessors' consent to each requested extension.

5. Termination.

- a. Both Lessors and Lessee shall have the right to terminate this Lease for cause, in the event the other party defaults on any material provision of this Lease, and in the event that such default is not cured within thirty (30) days after written notice thereof is provided to the other party. Said curative period shall be extended another thirty (30) days provided defaulting party has shown a good faith effort to cure default.
- b. The parties agree that in the event that federal or state law requires the installation of back up power sources or supplies that the terms of this Lease will require an amendment to be negotiated between the parties. No additional equipment shall be placed upon the Premises by Lessees with out the written

consent of Lessors including mandated equipment, and should the parties fail to reach agreement regarding the installation of any additional equipment including federally or state mandated back up power sources or supplies and fuel for those sources or supplies that this agreement shall terminate ninety (90) days from the date the impasse is reached.

- c. This Lease may be terminated without further liability as set forth below:
- 1) by either party upon a default of any covenant or term hereof by the other party, which default is not cured within ninety (90) days of receipt of written notice of default except that the grace period for any monetary default is thirty (30) days from receipt of written notice and the grace period for lapse in insurance coverage is ten (10) days from the receipt of written notice; or
- 2) by Lessee if it does not obtain or maintain any license, permit or other approval necessary for the construction and operation of Lessee's facilities; or
- 3) by Lessee if Lessee is unable to occupy and utilize the tower site due to an action of the FCC, including without limitation, a take-back of channels, a change in frequencies, or a change in licensed coverage area; this will require ninety (90) days of the effective termination date by the FCC; or
- 4) by Lessee if Lessee determines that the tower site is not appropriate for its operations for economic or technological reasons, including, without limitation, signal interference; or
- 5) by Lessors if the Lessors determine the tower site is no longer suitable to be used by Lessors for their operation and the Lessors choose to remove the building; or
- 6) by Lessors after the expiration of the initial term of this Lease upon providing Lessee with written notice. Such notice, if given by Lessors, must be given not less than three hundred sixty-five (365) days prior to the date therein specified (this time is given for Lessee to find a new site, get zoning approval, construct a new site and move Lessee's shelter and antennas).
- d. In the event of termination or expiration of this Lease, Lessee shall have a reasonable period of time (not exceeding ninety (90) days from the actual termination date) to remove all antennas, shelter, equipment, and other operating materials from the Premises, however all improvements to the tower and/or ancillary structures shall be left in place and in good repair by the Lessee. Upon expiration of this Lease, Lessee shall restore the Premises to reasonably good condition and repair, subject to ordinary wear and tear on the Premises, which is specifically excepted. Failure of Lessee to remove its equipment at the expiration or termination of this Lease will result in Lessors removing the equipment and payment of all charges occasioned by such removal will be the responsibility of the Lessee.

6. Initial Term Rent.

a. Lessee shall pay Woodbury County, Iowa, administrator of funds of Starcomm Public Safety Board, monthly "Rent" during each year of the Initial Term, based on the sum total of: All parties specifically agree that total Rent will not be less than \$ 350.00 per month, throughout the Initial Term of five (5) years, but total Rent may be higher than \$350.00 per month if Lessee's equipment increases in quantity or size, then a new monthly rate increasing the base rate may be negotiated by the parties. Each month's Rent payment shall be due to Woodbury County, Iowa on or before the first day of each month. In addition Lessee shall be responsible for all utility service payments with the exception of telephone service at the site used exclusively by Lessors. Lessors shall provide Lessee with a W-9 or its equivalent in order for Lessee to set up Lessors as a payee in Lessee's rent payment system. In addition, Lessors

shall receive their rent payment via Electronic Funds Transfer (EFT). Lessors shall provide documentation to Lessee in order for the Lessee to set up Lessors for a payment of the rent via EFT.

- 7. Renewal Term Rent. Lessee shall pay Woodbury County, Iowa, administrator of funds of Starcomm Public Safety Board, "Rent" for each month of the Five (5) years for Renewal Terms as listed below in this paragraph. Each monthly Rent payment shall be due to Woodbury County, Iowa on or before the first day of each month.
- a. First Renewal Term (years 6 through 10) Rent shall be increased by 10% over the highest amount paid at the end of the Initial Term.
- b. Second Renewal Term (years 11 through 15) Rent shall be increased by 10% over the highest amount paid at the end of the first Renewal Term.
- c. Third Renewal Term (years 16 through 20) Rent shall be increased by 10% over the highest amount paid at the end of the second Renewal Term.
- d. Fourth Renewal Term (years 21 through 25) Rent shall be increased by 10% over the highest amount paid at the end of the third Renewal Term.
- 8. <u>Use and Non-Interference of Premises</u>. The Premises shall be used by Lessee only for the installation, operation, and maintenance of a communications system, including but not limited to cellular telephone, PCS Telephone, radio, paging and other narrow band and broad band radiowave transmission and reception and related purposes. Lessee shall not do or permit any activities upon the Premises, which would cause interference to Landlord or with Landlord's principle use of the Premises as a Lattice Tower in the City of Sioux City, Iowa at 4647 Stone Ave behind WIT Building "C". The Lessee shall further not do or permit any activities upon the premises which would cause interference to Western Iowa Tech (WIT). In addition, Lessors and Lessee shall not do or permit any activities upon the Premises, which would cause or permit physical, electronic, or other interference with the radio transmission facilities, equipment, or signal of WIT's own radio station currently designated as KWIT. The Lessee will only install its equipment outside the communications tower house. This is not an exclusive lease of the premises. Landlord (Lessors) retains the right to lease additional space to other Tenants (Lessees) provided that the additional Tenants (Lessees) do not utilize equipment that would interfere with the transmission signals of the Tenant (Lessee). Additionally, Landlord will continue to use the premises for their own business or public safety purposes.

9. Insurance and Indemnification.

At all times during the term of this Lease, Lessee shall at its expense carry and maintain for the mutual benefit of the Lessors:

a. General public liability insurance against the claims for personal injury, death or property damage occurring in or about the Leased Premises or resulting from the installation, operation or maintenance of the Lessee's business on the Leased Premises, such insurance to be in the amount of at least \$1,000,000.00 for all personal injuries and deaths resulting from any one accident, \$1,000,000.00 for property damage in any one accident, and a minimum aggregate coverage in the amount of \$3,000,000.00 with Lessors named as additional insureds. Damages incurred by Lessee shall be limited to the insurance proceeds and/or third party recovery. Lessors shall not be liable for any damages, costs or fees incurred by the Lessee.

- b. A Standard Workmen's Compensation and Employer's Liability Insurance Policy in the amount equal to the limit of liability and in a form prescribed by the laws of the state in which the Leased Premises is located.
- c. Any contract workers contracted by Lessee shall also carry insurance as set forth in a and b above.
- d. Lessors shall not be held liable for any injury or damage to any third party or parties caused in any manner by this Lease or the Lessors use of the Premises.
- 10. <u>Damage or Destruction</u>. If the Premises are damaged, destroyed by fire, winds, flood or other natural or manmade cause, Lessors shall have the option to repair or replace the Premises at their sole expense, or to terminate this Lease effective on the date of such damage or destruction. In the event Lessors elect to terminate this Lease, Lessee shall have no further obligations hereunder. Lessors shall have up to sixty (60) days to decide on whether to repair or replace the Premises. Failure by Lessors to notify Lessee within sixty (60) days of Lessors' decision to repair or replace the Premises shall be deemed an election by Lessors to terminate this Lease. If Lessors elect to repair or replace the Premises, Lessee shall have the option of either abating the rent due until such repair or replacement is completed and the Premises are restored to a condition that the Lessee can resume full operations at the Premises; or until Lessee begins operating a mobile telecommunication base station on the Premises. The option to operate a mobile telecommunications base station on the Premises is subject to the Lessee obtaining written consent of the Lessors and to Lessee obtaining all required State and local permits.
- 11. <u>Taxes</u>. Lessors shall pay and be responsible for all taxes on the Premises, and Lessee shall pay and be responsible for all taxes due on Lessee's equipment and fixtures installed on the Premises.
- **12.** <u>Notices</u>. Any notices required or permitted to be given hereunder shall be given in writing, and shall be deemed to have been given only upon receipt after mailing by certified or registered first class mail, postage prepaid, return receipt requested, and addressed to the parties as follows:

Lessors:

Woodbury County, Iowa Board of Supervisors 620 Douglas Street, Suite 104 Sioux City, Iowa 51101 Phone: 712-279-6525

Starcomm Public Safety Board P.O. Box 447 Sioux City, Iowa 51102 ATTN: Glenn Sedivy Phone: (712) 279-6959

Fax: (712 279-6157

City Clerk City of Sioux City, Iowa 405 6th Street, P.O. Box 447 Sioux City, Iowa 51102 Lessee:

Senet, Inc.

1000 Market Street Suite 102 Portsmouth, NH 03801 ATTN: Chauncey G. Morgan Phone: (603) 821-0003

Fax: (603) 821-0199

13. Hazardous Materials. At no time during the term hereof shall the Lessee store, place, leave or deposit at the Tower or the Premises any substance or material which, if known to be present on or at such property, would require cleanup, removal or some other remedial action under any federal, state or local law, including statutes, regulations, ordinances, codes, rules and other governmental restrictions and requirements relating to the discharge of air pollutants, water pollutants, processed waste water, solid wastes, or otherwise relating to environmental hazardous substances, including but not limited to the Federal Solid Waste Disposal Act, the Federal Clean Air Act, the Federal Clean Water Act, the Federal Resource Conservation and Recovery Act of 1976, the Federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, and all acts amendatory thereto, regulations of the Environmental Protection Agency, regulations of the Nuclear Regulatory Agency, and regulation of any State Department of Natural Resources or State Environmental Protection Agency now or at any time hereinafter in effect. The Lessee agrees to and does hereby indemnify and save the Lessors and owners harmless from any and all claims, demands, suits, actions, recoveries, judgments, costs and expenses relating in any way to Lessee's violation of this Section, and this indemnification obligation shall survive the expiration or termination of this Lease. Lessors acknowledge and agree that Lessee shall have no liability or responsibility whatsoever for any environmental violations or issues, at the tower or premises, existing prior to the date of Lessee's occupancy or otherwise not caused by Lessee.

14. Miscellaneous Provisions.

- a. Lessors warrant that Lessors are the owners of the tower and owners and/or lessees of the tower site property and that Lessors have full right, power, and authority to execute this agreement and if necessary have obtained all necessary consents to sublease the Premises. Lessors covenant that Lessee, in paying Rent and performing the covenants by Lessee herein made, shall and may peacefully and quietly have, hold, and enjoy the Leased Premises.
- b. Lessee shall obtain all necessary governmental and regulatory approvals required for Lessee's occupation and use of the Premises, including but not limited to zoning changes, and shall be responsible for the cost of obtaining such approvals. Lessors shall cooperate with Lessee in obtaining such approvals.
- c. The provisions of this Lease shall bind and inure to the benefit of the parties hereto and their heirs, legal representatives, successors and assigns.
- d. This Lease and the attached exhibits contain the entire agreement of the parties with respect to any matter mentioned herein and supersede any prior oral or written agreements.
- e. This Lease may be amended in writing only, signed by the parties in interest at the time of such amendment.
- f. This Lease shall be assignable intra-company by the Lessee, without the necessity of obtaining the Lessors' consent, to an affiliate, subsidiary or any related company that acquires at least 51% of the Lessee's assets through a merger. All third party assignments will require the Lessors' consent. Lessee

shall notify Lessors in writing of the name and address of any assignee. This Lease may be assigned by Lessors without the consent of Lessee provided that the assignee shall occupy and use the Premises subject to this Lease.

- g. No waiver by either party of any provision herein shall be deemed a waiver of any other provision or of any prior or subsequent breach of any provision herein.
- h. If any term or provision of this Lease is held to be invalid or unenforceable, such invalidity or unenforceability shall not be construed to affect any other provision of this Lease and the remaining provisions shall be enforceable in accordance with their terms.
- i. This agreement shall be governed by and construed in accordance with the laws of the State of IOWA.
- j. If Lessee does not promptly vacate the Premises upon valid termination of this Lease, such holding over shall be treated as creating a month to month tenancy. This holdover will not be approved for more than ninety (90) days. Rent during the holdover will be 150% of the current rent. Further, if Lessee does not vacate the Premises as required, Lessee's equipment shall be removed by Lessors at Lessee's expense. Any bill for removal of Lessee's equipment by Lessors shall be paid in full within thirty (30) days of mailing.
- k. Lessee may make reasonable alterations with prior approval from Lessors, additions or improvements to the Premises necessary for its antennas, communication shelter, power cables and telephone cables, so long as the structural integrity of the Premises is not affected. Lessee will bear the total cost of such alterations, additions or improvements, including regular maintenance, and the cost of removal and returning the Premises to the condition it was at the time of entering into the Lease (subject to the terms of paragraph 5(d) of this Lease).
- l. Lessee shall be solely responsible for site maintenance, and shall arrange for all maintenance under separate contract for all such maintenance services. Lessee shall not expect or ask Lessors to do any special site maintenance for Lessee's antennas or shelter, unless Lessee enters into a separate maintenance contract with Lessors, which contract will be separate from the terms of this Lease (i.e.: in the event that some minor snow plowing is requested for Lessee's access to their shelter, Lessee will separately contract for that service under a separate document).
- m. Lessee will bear any and all costs associated with temporary relocation of Lessee's equipment, if required, during repairs or painting of Lessors' building. Lessors will give Lessee at least thirty (30) days advance notice of scheduled repairs or painting of Lessors' building or tower which may affect Lessee's operation, so that Lessee can pre-plan for providing high-quality communications to Lessee's customers during any temporary relocation required by Lessors' repair or painting activities. Lessors are not required to provide notice of routine repairs, such as replacement of tower lights, which do not affect Lessee's operation. Lessors will provide Lessee notice of emergency repairs with at least twelve (12) hours prior notice unless it is impossible or impractical to do so and then the Lessee shall be provided with as much prior notice as possible under the emergency circumstances.
- n. Lessee shall indemnify and hold Lessors harmless against all expenses, liabilities and claims of every kind, including reasonable attorney fees, made necessary by or on behalf of any person or entity arising out of:
- 1) A failure by Lessee to perform any of the terms and conditions of this Lease; or

- 2) Any injury or damage happening on or about the Leased Premises which is caused in whole or in part by Lessee's use of the Premises, any act or omission of Lessee or anyone for whose acts Lessee may be liable; or
- 3) Any injury or damage to any employee, agent, or customer of Lessee or Lessors on or about the Leased Premises; or
- 4) Failure of Lessee to comply with any applicable laws or governmental authority; or
- 5) Any action brought by a third party for damages as a result of action or inaction of the Lessee.
- **15.** <u>Approval.</u> This Lease is subject to the consent to sublease by Western Iowa Tech (WIT), and subject to approval by Starcomm's Executive Board, the Woodbury County Board of Supervisors and the City Council of the City of Sioux City.

IN WITNESS WHEREOF the parties have executed this Agreement as of the date first above written.

CITY OF SIOUX CITY, IOWA

Robert E. Scott

Mayor of Sioux City, Iowa

Certification of City Clerk:

I, Lisa L. McCardle, certify that I am the City Clerk of the City of Sioux City, Iowa, and that Mayor Robert E. Scott, who executed this Agreement for and on behalf of the City, was duly authorized and empowered to do so as of ______, 2017.

Lisa L. McCardle,

City Clerk of the City of Sioux City, Iowa

WOODBURY COUNTY, IOWA

Ву	Mitte by	
	Matthew Ung	
	Chairperson	

Certification of County Auditor:

Patrick Gill

Woodbury County Auditor

STARCOMM, WOODBURY, IOWA

Ву ____

Douglas Young Chairperson

Certification of Starcomm:

I, Carrie Anfinson-Haden, certify that I am the Administrative Secretary for Starcomm and that Chairperson Douglas Young, who executed this Lease for and on behalf of Starcomm, was duly authorized and empowered to do so as of October 19, 2016.

Carie Anfinson-Haden,

Administrative Secretary for Starcomm

Date: 1/3/2017 By Chauncey G. Morgan Chief Financial Officer				
STATE OF ROCKINGHAM NH): SS				
OF USA ROCKINGHAM				
On this 3 PD day of JANVARY, 20 17 before me, the undersigned a Notary Public in and for said County and State, personally appeared CHANNEY 6. MORBAN				
to me known to be the identical person named in and who executed the foregoing instrument, and acknowledged that they executed the same as their voluntary act and deed.				
(SEAL) SEMBLE				
NOTARY PUBLIC in and for said COUNTY and STATE				

SENET, Inc.



ERIC P. MALCOLM Notary Public, State of New Hampshire My Commission Expires Nov. 4, 2020

CONSENT TO SUBLEASE

On this	
College as Landlord and pursuant to paragraph 9 of the <u>Lease – Business Property</u> dated May 17	7,
2004 hereby consents to the attached sublease between Starcomm, Woodbury County, Iowa, the)
City of Sioux City and Senet, Inc.	

By:

Print Name: Rosmus

Title: Board President



November 29, 2016

Mark Wesolaski Senet, Inc 1000 Market St, Ste 102 Portsmouth, NH 03801

RE:

IA-12 -WIT Sioux City, IA

Mark:

Senet is proposing to install a small omni antenna near the 325' elevation of the subject latticed tower. The following observations are made.

- Proposed omni antenna: KER-915, 1" diam x 39.4" long, 0.8 lb wt
- Radio mounted at base of antenna: 9"x5"x2.5", 4 lb wt
- Feed line: 6.2mm OD Cat5E cable, 2.8 lb/100ft
- A 4' side arm mount will be used.

Our August 2016 analysis of the tower identified the reinforced tower to be 101.5% loaded. It is our carefully considered opinion that the addition of this antenna will have very little impact on the tower and that the tower will have sufficient structural capacity to support the proposed equipment.

No conclusions, expressed or implied, shall indicate that Armor Tower has made an evaluation of the original design, materials, fabrication, or potential installation deficiencies. Any information contrary to that assumed for the purpose of preparing this certification could alter the findings and conclusions stated herein.

We appreciate the opportunity to provide our services to Senet, Inc. and if you have any questions concerning this certification, please contact us.

Sincerely,

ARMOR TOWER, INC.

Patrick Botimer

Structural Design Engineer, IV

325.0 ft 320.0 ft 300.0 ft 280.0 ft 260.0 ft 240.0 ft 220.0 ft 200.0 ft 180.0 ft 160.0 ft 140.0 ft 100.0 ft 80.0 ft 60.0 ft 40.0 ft 20.0 ft 0.0 ft

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Flash Beacon Lighting	330	LPA-185063/12CF W. MtgPipe (Alpha)	221
Halo Mount	328	LPA-185063/12CF W. MtgPipe (Alpha)	221
18' Dipole	328	TMA (9"x12"x3") (Beta)	212
18' Dipole	328	TMA (9"x12"x3") (Beta)	212
10' Dipole	328	TMA (9"x12"x3") (Gamma)	212
10' Dipole	328	TMA (9"x12"x3") (Alpha)	212
12"x4"x3" TMA	328	TMA (9"x12"x3") (Gamma)	212
1.5"Sch40 x 8ft (P-Motorola Stabilizer)	324	TMA (9"x12"x3") (Alpha)	212
1.5"Sch40 x 8ft (Stabilizer)	321	(2) BTS/520015	210
3' Sidearm Mount (P-Motorola)	315	3'x6"x3" Antenna	210
4"Sch40 x 6ft (dish mount)			210
(P-Motorola)		6' Sector Boom	210
SB6-W60 (P-Motorola @ 356.99°)	309	3'x6"x3" Antenna	210
SC412-HF2LDF (P-Motorola)	305	3'x6"x3" Antenna	210
3' Sidearm Mount	301	6' Sector Boom	210
3' Sidearm Mount	301	(2) BTS/520015	210
3' Sidearm Mount	301	4"Sch40 x 6ft (dish mount)	170
20' Dipole	301	(P-Motorola)	-
10' Dipole	301	SB6-W60 (P-Motorola @ 106.29°)	170
10' Dipole	301	OB Light	165
4"Sch40 x 6ft (dish mount)	279	OB Light	165
(P-Motorola)		OB Light	165
SB6-W60 (P-Motorola @ 356.99°)	279	Camera	147
1.5"Sch40 x 8ft (Stabilizer)	263	4"Sch40 x 6ft (Dish mount)	146
1.5"Sch40 x 8ft (Stabilizer)	263	1.25 Sch.40 x 15ft (Dish support)	146
3' Sidearm Mount	253	RFS PAD8-59	146
3' Sidearm Mount	253	4"Sch40 x 6ft (dish mount)	138
DB204-A	253	(P-Motorola)	
DB204-A	253	SB4-W60 (P-Motorola @ 106.29°)	138
1.5"Sch40 x 8ft (Stabilizer)	249	1.5"Sch40 x 5ft (Dish mount)	130
1.5"Sch40 x 8ft (Stabilizer)	249	M# SP-4.7/2' Dia. Dish	130
DB264-A	227	SODU/ExtendAir	129
3' Sidearm Mount	227	3' Sidearm Mount	124
DB224	225	MFB4803	124
3' Sidearm Mount	225	RFS PAD6/59	106
LPA-185063/12CF W. MtgPipe (Gamma)	221	4"Sch40 x 6ft (Dish mount) Yagi	106
LPA-185063/12CF W. MtgPipe (Gamma)	221	DB230-J	99
LPA-185063/12CF W. MtgPipe (Beta)	221	3' Sidearm Mount	99
LPA-185063/12CF W. MtgPipe (Beta)	221	6' omni	99
Sabre 12' T-Boom (set of 3)	221	Yagi	78

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A500-50	50 ksi	62 ksi	A36	36 ksi	58 ksi

TOWER DESIGN NOTES

- TOWER DESIGN NOTES

 1. Tower is located in Woodbury County, lowa.
 2. Tower designed for Exposure C to the TIA-222-G Standard.
 3. Tower designed for a 90.00 mph basic wind in accordance with the TIA-222-G Standard.
 4. Tower is also designed for a 50.00 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
 5. Deflections are based upon a 60.00 mph wind.
 6. Tower Structure Class III.
 7. Topographic Category 1 with Crest Height of 0.00 ft
 8. Connections use galvanized A325 bolts, nuts and locking devices. Installation per TIA/EIA-222 and AISC Specifications.
 9. Tower members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards. Standards.

 10. Welds are fabricated with ER-70S-6 electrodes.

 11. Appurtenance are indicated as (P)roposed. All others are existing.

 12. TOWER RATING: 101.5%

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE: DOWN: 541386 lb SHEAR: 58746 lb

UPLIFT: -457234 lb SHEAR: 49917 lb

AXIAL 287399 lb

SHEAR MOMENT 32447 lb 5532 kip-ft

TORQUE 11 kip-ft 50.00 mph WIND - 0.75 in ICE AXIAL

91042 lb MOMENT SHEAR 97181 lb 14608 kip-ft

TORQUE 31 kip-ft REACTIONS - 90.00 mph WIND

Armor Tower Inc 330' SELF-SUPPORTING MOD DESIGN oject: ISICS - 93 WIT 9 N Main St ient: Pyramid Network Services Drawn by: KA App'd: Cortland, NY Date: 08/09/16 Scale: NTS
Dwg No. E-1 de: TIA-222-G Phone: (607) 434-0754 FAX: (866) 870-0840