



BOARD OF SUPERVISORS AGENDA ITEM REPORT **CONTRACTS / AWARDS / GRANTS**

☐ Award ☒ Contract ☐ Grant

Requested Board Meeting Date: August 20, 2018

* = Mandatory, information must be provided

or Procurement Director Award ☐

***Contractor/Vendor Name/Grantor (DBA):**

City of Tucson

***Project Title/Description:**

City of Tucson Tower License Agreement

***Purpose:**

To allow the City of Tucson to install radio equipment on the Public Works building rooftop, to support the City of Tucson Department of Transportation Regional Transportation Data Network.

***Procurement Method:**

Non-Procurement Contract and not subject to Procurement Rules.

***Program Goals/Predicted Outcomes:**

Approval of a tower license agreement to memorialize the installation of the five existing antennas.

***Public Benefit:**

Provides network connectivity to City and County intersection signal cabinets for traffic signal management.

***Metrics Available to Measure Performance:**

Ability of City and County personnel to perform traffic signal management.

***Retroactive:**

Yes. The Information Technology Department performed an inspection of the Public Works building rooftop and identified five antennas owned by the City of Tucson. City representatives did not know exactly when the antennas were installed, but it is assumed that they have been on the rooftop for approximately ten years. A review of existing tower license agreements in the AMS system found that there was not an approved tower license agreement for the City at 201 N. Stone Avenue. Therefore, a tower license agreement was drafted for City signature and Board of Supervisors approval. If not approved, the City will be required to remove the antennas.

To: COB- 8.7-18
Ver. 1
pgs- 22
(11)

Contract / Award Information

Document Type: CTN Department Code: IT Contract Number (i.e., 15-123): 19*013
Effective Date: 08/20/2018 Termination Date: 08/19/2023 Prior Contract Number (Synergen/CMS): _____
☐ Expense Amount: \$* 0 ☐ Revenue Amount: \$ 0

***Funding Source(s) required:** N/A

Funding from General Fund? ☐ Yes ☒ No If Yes \$ _____ % _____

Contract is fully or partially funded with Federal Funds? ☐ Yes ☒ No

If Yes, is the Contract to a vendor or subrecipient? _____

Were insurance or indemnity clauses modified? ☐ Yes ☒ No

If Yes, attach Risk's approval.

Vendor is using a Social Security Number? ☐ Yes ☒ No

If Yes, attach the required form per Administrative Procedure 22-73.

Amendment / Revised Award Information

Document Type: _____ Department Code: _____ Contract Number (i.e., 15-123): _____
Amendment No.: _____ AMS Version No.: _____
Effective Date: _____ New Termination Date: _____

Prior Contract No. (Synergen/CMS): _____

☐ Expense or ☐ Revenue ☐ Increase ☐ Decrease Amount This Amendment: \$ _____

Is there revenue included? ☐ Yes ☐ No If Yes \$ _____

***Funding Source(s) required:**

Funding from General Fund? ☐ Yes ☐ No If Yes \$ _____ % _____

Grant/Amendment Information (for grants acceptance and awards) ☐ Award ☐ Amendment

Document Type: _____ Department Code: _____ Grant Number (i.e., 15-123): _____
Effective Date: _____ Termination Date: _____ Amendment Number: _____

☐ Match Amount: \$ _____ ☐ Revenue Amount: \$ _____

***All Funding Source(s) required:**

***Match funding from General Fund?** ☐ Yes ☐ No If Yes \$ _____ % _____

***Match funding from other sources?** ☐ Yes ☐ No If Yes \$ _____ % _____

***Funding Source:** _____

***If Federal funds are received, is funding coming directly from the Federal government or passed through other organization(s)?** _____

Contact: Dee Taskila / Jay Hogan

Department: ITD Telephone: 724-9590 / 724-2316

Department Director Signature/Date: [Signature] 7/30/18

Deputy County Administrator Signature/Date: [Signature] 8-1-18

County Administrator Signature/Date: [Signature] 8/1/18
(Required for Board Agenda/Addendum Items)

**Pima County Department of Information
Technology**

PROJECT: TOWER LICENSE AGREEMENT

LICENSEE: CITY OF TUCSON

AMOUNT: \$0.00

CONTRACT

NO. CTN-IT-19-013

AMENDMENT NO. _____

This number must appear on all
invoices, correspondence and
documents pertaining to this
contract.

(STAMP HERE)

**TOWER LICENSE
FOR WIRELESS COMMUNICATIONS FACILITIES**

This License is entered into between Pima County ("Licensor"), a political subdivision of the State of Arizona, and the City of Tucson, an Arizona Municipal Corporation, ("Licensee"), and is effective upon execution by both parties, and terminates five years from the effective date unless sooner terminated or further extended pursuant to the provisions of the License. The parties agree as follows:

1. **LICENSE** – Licensor hereby grants non-exclusive permission to Licensee to install, maintain, operate, and remove from, the Rooftop facility at 201 N. Stone, Ave, Arizona ("the Site") certain communications equipment ("the Equipment") described in **Exhibit A** – Equipment on Rooftop Facility (4 pages), and **Exhibit B** – Rooftop Drawing (1 page). The Equipment will consist only of the equipment as described in Exhibits A and B. Any modifications to Exhibits A and B, or additions or changes made to the Equipment as described therein will be made only pursuant to a modification of this License pursuant to Paragraph 26.
2. **SUITABILITY OF SITE** – Licensee has visited and inspected the Site, accepts the physical condition thereof, and acknowledges that no representations or warranties have been made to Licensee by Licensor regarding the condition of the Site and/or the building, or regarding the suitability thereof for Licensee's use. Licensee is responsible for determining all aspects as to the acceptability and adequacy of the Site for Licensee's use.
3. **INSTALLATIONS** – Licensee will submit to Licensor, for Licensor's approval, detailed written plans and specifications as to installation of the Equipment. Licensor will not unreasonably withhold such approval. Licensee will perform the installation of the Equipment in accordance with **Exhibit C** - Special Conditions, Facility Rules and Regulations, and Security Procedures for Users (4 pages). The location at which the Equipment is installed will be determined by Licensor with consideration of the needs of Licensee. Licensee is solely responsible for ensuring that its Equipment is installed properly. Licensor will not be unreasonable in its requirements, said requirements being based on good engineering practices, space utilization, and engineering quality control of the Site and the requirements of Licensor, all as Licensee hereby acknowledges. Licensee will utilize the existing electric circuits at the Site. In the event that Licensee's power requirements exceed the existing capacity or power distribution, it will be Licensee's responsibility, with the consent of Licensor and performed according to code,

to increase such capacity to meet its needs, provided Licensor consents to such increase in capacity. In the event Licensor does not consent to such an increase in existing capacity within thirty days after the date upon which Licensee makes such request, Licensee may void this License by giving Licensor thirty days' written notice.

4. THIRD-PARTY INSTALLERS – Licensee must obtain Licensor's written consent to the use or employment of any third-party installer at the Site, which consent will not be unreasonably withheld. Any third-party installer must submit to Licensor a certificate of insurance naming Licensor as an additional insured and protecting itself and Licensor against any and all claims, demands, actions, judgments, costs, expenses, and liabilities that may arise out of or result, directly or indirectly, from its installation of Licensee's equipment at the Site. Such certificate of insurance must specifically indicate that the third-party installer has insurance specifically related to tower work if such installation involves a tower. Licensee is responsible and liable for any and all actions of any third-party installer, and for ensuring that the actions and work of any third-party installer are consistent with Licensee's obligations under this License and the exhibits hereto. Licensor has the right to disapprove any third-party installer. Licensee's sole remedies in the event of such disapproval by Licensor are (i) to seek Licensor consent to a different installer or subcontractor or (ii) to void this License by giving Licensor thirty days' written notice. Any actions and work by a third-party installer must be done in conformity with all applicable ordinances, codes, and technical standards, at Licensee's expense, and only with the consent of Licensor and performed according to code. All third-party installer crews must have in their possession an installation form issued to them by Licensor prior to the commencement of work at the Site. Licensee will notify Licensor at least twenty-four hours prior to the commencement of work by any third-party installer. Tower climbers must be OSHA certified and all work must conform to the CFRS 1910 and CFRS 1926 standard.
5. INTERFERENCE – Licensee has satisfied itself and hereby warrants that the Equipment is of a type and frequency that will not cause damage to the Site or surrounding property, or cause damage to or interference with electronic or other equipment and/or the television or radio reception of Licensor or of residents and/or tenants of the Site. In the event the Equipment causes such damage or interference, Licensee will cooperate with Licensor in determining the source, and immediately will take all steps necessary to correct and eliminate the interference. If such interference cannot be eliminated within forty-eight hours after receipt of notice from Licensor to Licensee of the existence of such interference, Licensee will discontinue use of any equipment creating said interference (the "Interfering Equipment") by temporarily disconnecting the electric power and shutting down the Interfering Equipment (except for such intermittent operation as is necessary for the purpose of testing after the performance of any maintenance, repair, modification, replacement, or other action designed to correct such interference). If such interference is not corrected within thirty days after receipt of the aforesaid notice, Licensee will remove the Interfering Equipment from the Site. In the event that the cause of the interference cannot be pinpointed to a particular piece of equipment or system, Licensee will disconnect the electric power and shut down all of its Equipment until such time as the interference problem is corrected. If such interference is not corrected within thirty days after receipt of the aforesaid notice, Licensee will remove its equipment from the Site within an additional ten-day period. This License will then terminate without further obligation by either party, except with respect to those obligations then owing or past-due, and except as may otherwise be enumerated

specifically herein. Licensor is not liable to Licensee for any interruption of service of Licensee or for interference with the operation of Licensee's equipment.

6. COMPLIANCE WITH STATUTES AND REGULATIONS – Licensee's equipment will be installed, operated, and maintained in accordance with the requirements and specifications of all laws, codes, and regulations of all governmental bodies and agencies having any jurisdiction there over, including any rules and/or orders now in effect or that hereafter may be issued by the Federal Communications Commission ("FCC") and/or the United States Environmental Protection Agency ("EPA"), and in compliance with the relevant standards promulgated by the American National Standards Institute ("ANSI") and the obligations imposed by this License and the exhibits hereto. It is Licensee's responsibility to know and conform to these laws, codes, regulations, standards, and requirements, and to obtain all required permits prior to the date of installation of any equipment.
7. SERVICES BY LICENSOR – In the event that Licensor provides repair, technical, removal, or other services (including but not being limited to legal or engineering services), directly or indirectly, to Licensee, Licensee will reimburse Licensor for Licensee's reasonable proportionate share (as determined by Licensor) of the expenses and costs incurred by Licensor in the provision of such services.
8. MAINTENANCE OF LICENSEE'S EQUIPMENT – Licensee will, at its own expense, operate and maintain any equipment that it installs at the Site in a safe condition, in good repair, and in a manner suitable to Licensor so as not to conflict with the use of the Site or surrounding areas by Licensor or any other authorized user thereof.
9. RESPONSIBILITY FOR LICENSEE'S EQUIPMENT – Any equipment installed by Licensee remains the property of Licensee. Licensee agrees that Licensor does not bear any responsibility for Licensee's equipment, the operation, care, or security thereof, or the services provided thereby. Licensee further agrees that it has no right to demand that Licensor or its agents or employees alter, maintain, or repair the Site, Licensee's equipment, or any other property or equipment, regardless of who might own or otherwise be responsible for such property or equipment. Licensee further acknowledges and agrees that Licensor does not bear any responsibility or liability to Licensee for construction means, techniques, sequences, or procedures in connection with any work performed on the Site or on any other property or equipment either by Licensor or by others.
10. ACCESS – Licensee will have access to the Site for the purpose of installing, operating, inspecting, servicing, maintaining, repairing, and removing its equipment between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, except in the case of emergencies, in which case access will be permitted at any time subject to the reasonable security, safety, and identification procedures required by Licensor. (See **Exhibit D** for detailed procedures for access to the Site. [2 pages]) Licensor further grants Licensee a right of access to the areas where Licensee's connecting equipment is located for the purposes of installing, operating, maintaining, and repairing same. Only authorized engineers, employees, contractors, technicians, third-party installers, subcontractors, and agents of Licensee or the FCC, or persons under Licensee's direct supervision, will be permitted to enter the Site, and then only for the purposes of installing, operating, removing, servicing, repairing, inspecting, or maintaining Licensee's equipment.

11. TERM, RENEWAL, AND TERMINATION – This License runs for a period of five years from the effective date, unless extended or terminated as provided herein.

The License is renewable for an additional three (3) five-year periods upon the mutual written agreement of both parties.

In addition to any other termination provisions set forth in this License, Licensee may terminate this License under the following circumstances by providing at least thirty days' written notice to Licensors: (i) in the event the actions or equipment of a third party (i.e., a party other than Licensors, Licensee, or the agents or employees of either) cause interference that results in a measurable diminution in the quality of Licensee's transmission or reception capability and that cannot be remedied after reasonable efforts to do so have been exhausted by Licensee and such third party, (ii) in the event that Licensee's FCC license is canceled or not renewed by the FCC through no fault of Licensee, or (iii) in the event that there is any unreasonable change to or denial of Licensee's access to the Site for the purposes of installing, modifying, inspecting, repairing, or removing Licensee's equipment.

Either party may terminate this License at any time with at least 90 days' notice to the other party.

12. LICENSE FEE – Due to the governmental nature of Licensee's operations, there is no fee associated with this License.
13. ADDITIONAL PAYMENTS – The Licensee will pay any sums of money, charges, or other amounts required to be paid by Licensee, whether to Licensors or to any other entity. Such additional payments will include that portion, if any, of any tax (including excise tax), fee, or other assessment attributable to Licensee's use of the Site or to the Site generally.
14. EXCISE TAX – In addition to any other sums due under this License, Licensee will pay to Licensors, on or before December 1 of each year during the Term, any property-lease excise tax due under Title 42, Chapter 6, Article 5, Arizona Revised Statutes (A.R.S. § 42-6201, *et seq.*), as may be amended or re-numbered from time to time. Failure to pay any such taxes constitutes an event of default for which this License may be terminated, and penalties and interest shall accrue as provided by law. If this License is exempt from such excise tax pursuant to A.R.S. § 42-6208, Licensee will keep the information required by A.R.S. § 42-6204. Licensors will calculate the amount of tax on the applicable space and invoice Licensee separately therefore in time to meet the annual payment deadline of December 1.
15. UTILITIES – Licensee equipment consists of rooftop antennas and cameras which consume no power, therefore there will be no monthly utility cost paid by the Licensee.
16. INSURANCE – Licensee shall carry adequate insurance to protect the parties hereto and Licensors against any and all claims, demands, actions, judgments, costs, expenses, and liabilities that may arise out of or result, directly or indirectly, from Licensee's use of the Site, except such liability as shall arise solely from the negligence of Licensors.

Licensee must deliver to Licensor satisfactory proof of the following insurance coverages.

Liability Insurance Coverages – 1. *Commercial General Liability* insurance with coverage in an amount not less than \$2,000,000.00 per occurrence and aggregate covering the Premises and all activities thereon, endorsed to include Pima County as an additional insured. 2. *Business Automobile Liability* coverage for owned, non-owned, and hired vehicles with limits in the amount of \$1,000,000 combined single limit for vehicles used in the operations at the Premises. 3. *Workers' Compensation (WC)* insurance with the required statutory limits for all persons employed or hired by Licensee to work on the Premises. WC Policy shall include Employers' Liability coverage in an amount not less than \$1,000,000 per injury, illness, or disease. Workers' Compensation coverage is to include a waiver of subrogation. Self-Insurance is acceptable to meet the insurance requirements.

Property Insurance – Business property insurance to include broad form property coverage for Licensee's property with the full replacement cost of all Licensee property and improvements on the Premises with Licensor added as an additional insured. Licensee must furnish to Licensor a Certificate of Insurance documenting proof Builder's Risk/Installation insurance that Licensee, or Licensee's contractor, has obtained. Coverage to include broad form and "all risks" builder's risk/installation policy providing insurance while contractor is installing, repairing or replacing parts on the Tower. Licensor is to be included as an additional insured on the property policy.

Evidence of Coverage - Licensee shall, during the term of this License, including any renewals and any holding-over thereafter, provide Licensor with current certificates of insurance (or self-insurance) evidencing that such insurance is in full force and effect, with policy endorsed to include Licensor as an additional insured, and is non-cancelable without at least thirty days' written notice to Licensor. The certificates of insurance as required herein must be presented to Licensor within ten days of the effective date of this License and on each anniversary date thereof during the term of the License, including any renewals and any holding-over thereafter.

Any modification or variation from the insurance requirements in this License shall be made by the licensing department in consultation with the Division of Risk Management. Such modification will not require a formal License amendment, but may be made by administrative action, and without the consent of Licensee, upon notice by Licensor. Licensee shall supply a certificate of insurance including the modification within ten (10) days from the date notice of the modification is received by Licensee. Such notice will be given pursuant to the terms of the License; if the License does not specify a notice procedure, Licensor may give notice by Certified U.S. Mail, E-Mail or Facsimile; Certified Receipt, E-Mail Receipt Confirmation or Facsimile Confirmation shall constitute proof of receipt of notice. Failure by Licensee to supply a modified certificate of insurance as required by this paragraph shall constitute material breach by Licensee and grounds for immediate termination of the License by Licensor. Licensee further hereby consents to the addition of the modified insurance requirements to the License.

17. **RIGHTS TO EQUIPMENT** – During the term of this License, provided that Licensee is not in default hereunder, Licensor will not claim any interest in, make claim to, or assert any right to the Equipment. Provided Licensee is not then in default of this License, Licensee may, at its election, have its Equipment removed on or before the expiration or

termination of this License, provided that Licensee will repair any damage caused by said removal. In the case of damage to the Site, Licensee agrees to engage such contractor or contractors as Licensor may require to perform the necessary repairs, and to pay for any such repairs.

Any of Licensee's property remaining on the Site thirty days after the expiration or termination of this License becomes the property of Licensor, free of any claim by Licensee or any person claiming through Licensee. At the termination or expiration of the License, Licensee agrees to restore the Site to its original condition excepting only reasonable wear and tear thereof.

18. HOLDING OVER – Any holding over by Licensee after the expiration of the term hereof without the written consent of Licensor will be construed as a tenancy at sufferance, subject to all of the provisions of this License and at twice the monthly License Fee prevailing in the last month of the term hereunder (including any renewals thereof), and increasing at the same annual rate as provided in Paragraph 12. At all times during any holdover period, Licensor has the unilateral right to terminate this License and to remove Licensee's equipment.
19. INDEMNIFICATION – Licensee will indemnify, defend, and hold Licensor and its officers, elected officials, employees, agents, and contractors harmless from and against any and all suits, claims, liabilities, damages, and expenses of any kind or character (including, but not limited to, reasonable attorneys' fees and expenses incurred in the defense of Licensor), arising out of the injury to or death of any person, damage to any property, or infringement of any property rights, that may be alleged, charged, or otherwise asserted in connection with the installation, operation, removal, or maintenance of Licensee's equipment on or about the Site, or with any act, omission, or negligence of Licensee or Licensee's agents, employees, or contractors on or in the vicinity of the Site, except as said claims or demands may be the result of the negligence of Licensor or its employees or agents. This indemnity survives any termination or expiration of this License.

Licensee further agrees to indemnify, hold harmless, and defend Licensor and its officers, elected officials, employees, agents, and contractors from and against any and all suits, claims, liabilities, damages, and expenses of any kind or character (including, but not limited to, reasonable attorneys' fees and expenses incurred in the defense of Licensor), arising out of any damage to the Site or surrounding property or out of interference with electronic or other equipment and/or the television or radio reception of Licensor or of residents and/or tenants of the Site. This indemnity survives any expiration or termination of this License.

Licensee further agrees to indemnify, hold harmless, and defend Licensor and its officers, elected officials, employees, agents, and contractors from and against any and all suits, claims, liabilities, damages, and expenses of any kind or character (including, but not limited to, reasonable attorneys' fees and expenses incurred in the defense of Licensor), arising out of any failure or alleged failure by Licensor to alter, maintain, or repair the Site, Licensee's equipment, or any other property or equipment, regardless of who might own or otherwise be responsible for such property or equipment, or out of the construction means, techniques, sequences, or procedures used in connection with any work performed on the Site or on any other property or equipment either by Licensor or by others. This indemnity survives any expiration or termination of this License.

Licensee further agrees to indemnify, hold harmless, and defend Licensor and its officers, elected officials, employees, agents, and contractors from and against any and all suits, claims, liabilities, damages, and expenses of any kind or character (including, but not limited to, reasonable attorneys' fees and expenses incurred in the defense of Licensor), arising out of any failure or alleged failure by Licensee to implement or to abide by any safety program or programs.

20. REPAIRS – In addition to the repairs referred to in Section 18, Licensee will repair any damage to the Site that results from or arises through the use and/or operation of its equipment at the site and/or the acts or negligence of Licensee or its agents, servants, contractors, or employees. Such repairs must be accomplished in a manner and by a contractor satisfactory to Licensor.
21. IMPROVEMENTS TO PREMISES – Licensor reserves the right to implement and utilize improvements in technology or management techniques that will provide for better management and use of the space and capacity of the Site, including (but not limited to) the use of combiners, special antennas, etc. Licensor may, in its discretion, require Licensee to incorporate such improvements into such systems as Licensee has installed and is operating at the Site. Licensee will, within ninety days of its receipt of LICENSOR's written demand to do so, either (i) incorporate such improvements or (ii) if the cumulative cost of such required improvements exceeds \$4,000, give written notice of its intention to terminate this License upon the expiration of thirty days from the date of Licensor's receipt of such notice.
22. COORDINATION OF OPERATION – Licensor will make reasonable efforts to give Licensee advance notice (except in the case of emergency where advance notice cannot reasonably be given) of any planned shut downs for routine maintenance, and of any repairs, alterations, additions, or improvements to the Site that might materially affect the operation of Licensee's facilities and equipment at the Site. Licensor will make reasonable efforts to minimize any inconvenience, loss, or expense to Licensee arising therefrom, but is not liable to Licensee or any of Licensee's customers for any such inconvenience, loss, or expense suffered by Licensee and/or Licensee's customers.
23. CASUALTY – In the event there is a total destruction of the Site by fire or other casualty, and the Site cannot, in Licensor estimation (which estimation shall be made within ten days from the date of such casualty), reasonably be restored within ninety days from the date of such casualty, or if Licensor chooses not to undertake such restoration, this License will terminate automatically upon the expiration of the ten-day period following the casualty, unless the parties otherwise agree. In the event of damage to the Site by casualty comprising less than a total destruction thereof, Licensee may terminate this License upon thirty days' written notice to Licensor if Licensor (i) chooses not to undertake, (ii) has not completed, or (iii) cannot reasonably be expected to complete the restoration of the Site within three months from the date of such casualty. If any casualty occurs during the last year of the term of this License or any renewal term thereof, Licensee may terminate the License upon thirty days' written notice to Licensor provided such notice is given within sixty days after the date of such casualty.
24. CONDEMNATION – In the event the Site or any significant portion thereof is condemned or otherwise subjected to a taking by any governmental authority exercising the power of eminent domain, unless Licensor and Licensee are permitted to continue their

operations at the Site, this License will terminate as of the date upon which Licensor and/or Licensee are required by the governmental authority to cease their operation(s) at the Site. Licensee is entitled to seek its own award against the governmental authority only if such award will not result in a diminution of Licensor's award.

25. **DEFAULT** – In the event Licensee fails to comply with any of the provisions of this License or the exhibits hereto, or defaults in any of its obligations hereunder, LICENSOR may, at its option, terminate this License provided LICENSOR has given Licensee written notice of such default and Licensee has failed to cure the same within twenty days after receipt of such notice. Where, in LICENSOR's sole judgment, such default cannot reasonably be cured within such twenty-day period, LICENSOR will extend the time to cure such default for such period of time, not to exceed sixty days, as may be necessary to complete such cure, provided that Licensee must proceed promptly to cure the same and pursue such cure with all due diligence.

Licensor will not, except in an emergency, undertake to cure any default by Licensee until after the expiration of Licensee's time to cure such default as provided herein. Licensee will reimburse Licensor for any expenses incurred by Licensor in curing any default by Licensee.

In the event the default is non-payment of the License Fee by Licensee, Licensor will give notice to Licensee via hand delivery, overnight mail, electronic mail, or certified United States Mail of non-receipt of payment. In the event Licensee fails to make full payment of the License Fee then due within fifteen days from the date of delivery of such notice to Licensee, Licensor will have the right to disconnect, remove, and store Licensee's equipment. All costs and expenses incurred by Licensor in connection with such disconnection, removal, and storage will be reimbursed by Licensee. Such reimbursement by Licensee does not relieve Licensee of its obligation to pay the License Fees in default together with any additional expenses incurred by Licensor in connection with the collection thereof. The rights and remedies of Licensor described in this Paragraph 25 and elsewhere in this License are not exhaustive and are in addition to any other rights or remedies that may exist now or in the future, at law or equity. Licensee will indemnify, release, defend, and hold harmless Licensor against all losses, costs (including reasonable attorneys' fees), damages, expenses, claims, demands, or liabilities arising out of or caused by, or alleged to have arisen out of or been caused by, the disconnection or removal by Licensor of Licensee's equipment pursuant to this Paragraph 25, or for any resulting impairment to or interruption of Licensee's services or operation.

Any three defaults by Licensee within a twelve-month period will be cause for termination of this License by Licensor without the extension of any cure period to Licensee.

26. **MODIFICATIONS** – Any addition, variation, or modification to this License is void and ineffective unless made in writing and signed by an authorized representative of each party.
27. **PARTIES BOUND BY AGREEMENT** – Subject to the provisions hereof, this License extends to and binds the heirs, executors, administrators, successors, and assigns of the parties hereto.

28. ASSIGNMENT – Without Licensor’s written consent, Licensee does not have the right to assign this License, or to sublicense all or any part of its rights or obligations hereunder.
29. AUTHORITY TO SIGN – Licensee represents that the individual signing this License on behalf of Licensee presently has and will maintain full authority to enter into this License and to bind and obligate Licensee to the terms, rights, and obligations under this License.
30. NOTICES – All notices sent pursuant to this License must be in writing and will be sent to the other party at the following addresses, either by hand delivery, overnight mail, or Certified U.S. Mail, return-receipt requested:

PIMA COUNTY
Information Technology Department
Attn: Contract Administrator
33 N. Stone Avenue, 14th Floor
Tucson, Arizona 85701
(520) 724-8113
contract.administrator@pima.gov

CITY OF TUCSON
Information Technology Department
Attn: Chong Cornn
481 W. Paseo Redondo
Tucson, Arizona 85701
(520) 837-6013
chong.cornn@tucsonaz.gov

31. CAPTIONS – Any captions in this License are inserted only as a matter of convenience and for reference, and in no way define, limit, or describe the scope of this License or the intent of any provision thereof.
32. COMPLIANCE WITH LAWS – In the performance of its obligations under this License, Licensee will comply with all applicable federal, state, and local laws, rules, ordinances, regulations, standards, and Executive Orders. The laws and regulations of the State of Arizona govern the rights of the parties, the performance of this License, and any disputes hereunder. Any legal action relating to this License must be filed and maintained in an Arizona Court, in Pima County, Arizona. Any changes in the governing laws, rules, and regulations during the term of this License apply, but do not require an amendment hereof.
33. NON-DISCRIMINATION – Licensee agrees to comply with all provisions and requirements of Arizona Executive Order 2009-09 which is hereby incorporated into this contract as if set forth in full herein including flow down of all provisions and requirements to any subcontractors. During the performance of this contract, Licensee will not discriminate against any employee, client or any other individual in any way because of that person’s age, race, creed, color, religion, sex, disability or national origin.
34. LICENSEE HAS NO INTEREST OR ESTATE – Licensee agrees that it has no claim, interest, or estate at any time in the Site by virtue of this License or its use hereunder. Upon termination of this License, Licensee has no right of entry into or upon the Site.
35. CONFLICT OF INTEREST – This Agreement is subject to the provisions of A.R.S. section 38-511.
36. FORCE MAJEURE – Neither of the parties hereto are responsible for damages due to delay that is the result of a contingency beyond the reasonable control of either party, including, but not limited to, acts of nature, pestilence, strikes, embargoes, lockouts,

boycotts, civil disturbance and disobedience, riots, war, revolution, acts of government, world shortage of qualified materials, accidents, fires, or floods. Upon the occurrence of such an event, the duties and obligations of the parties hereto will be suspended for so long as the event prevents proper performance under this License. However, if such suspension continues in excess of ninety days, the parties will meet and attempt to arrive at a mutually acceptable compromise within the spirit and intent of this License. In the absence of such compromise, this License will terminate.

37. ENTIRE AGREEMENT/SEVERABILITY – This document constitutes the entire agreement between the parties pertaining to the subject matter hereof, and all prior or contemporaneous agreements and understandings, oral or written, hereby are superseded and merged herein. This License may be modified, amended, altered, or extended only by a written amendment signed by the parties.

If any provision herein is deemed invalid, it will be considered deleted from this License and will not serve to invalidate the remaining provisions of this License to the fullest extent possible.

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IN WITNESS WHEREOF, the parties have executed this License.

PIMA COUNTY

Richard Elías, Chairman
Board of Supervisors

Date

CITY OF TUCSON

Authorized Officer Signature

Charles Salazar

Printed Name and Title

7/23/2018

Date

ATTEST

Julie Castaneda, Clerk of the Board

Date

APPROVED AS TO FORM

Chris Straub

Chris Straub, Deputy County Attorney

7-25-2018

Date

APPROVED AS TO CONTENT

Dan Hunt

Dan Hunt, Chief Information Officer
Information Technology Department

7/30/18

Date

4.9-5.9GHz 65° & 90° Sector Panels

This WiMAX antenna is designed to cover frequencies from 4.9 to 5.9 GHz. It offers excellent port to port isolation of 30 dB typical, with a VSWR of less than 1.5 in a rugged, off-white UV resistant radome.

Features

- Outstanding port to port isolation of 30 dB typical
- VSWR of less than 1.5
- Great upper side lobe suppression
- Adjustable scissors-style pipe mount bracket with 0-10° downtilt



RF/Electrical Specifications

Model	Frequency Range	Nominal Gain	Azimuth Beamwidth	Elevation Beamwidth
SP4959-17XP65	4.9-5.4 GHz	17.5 dBi	65° +/- 10%	5°
	5.4-5.9 GHz	16.5 dBi	65° +/- 10%	5°
SP4959-16XP90	4.9-5.4 GHz	16.5 dBi	90° +/- 10%	5°
	5.4-5.9 GHz	15.5 dBi	90° +/- 10%	5°

Mechanical Specifications

Model	Temperature Range	Dimensions (L X W X D)	Weight (Mass)	Wind Survivability
SP4959-17XP65	-40°C to 65°C storage / -40°C to 65°C operating	28" x 6.7" x 3.5" (711 x 171 x 90 mm)	7 lbs (3.1 kg)	125 mph (200 km/h)
SP4959-16XP90	-40°C to 65°C storage / -40°C to 65°C operating	28" x 6.7" x 3.5" (711 x 171 x 90 mm)	7 lbs (3.1 kg)	125 mph (200 km/h)

Technical Data

Polarization: Linear dual slant +/- 45°
Nominal Impedance: 50 ohms
VSWR: < 1.5
Front to Back Ratio: > 25 dB
Port to Port Isolation: 30 dB typical
Upper Side Lobe Suppression: 30 degrees above horizon: > -15 dB
Radome Material: Gray UV resistant plastic
Connector: Type N female
Mounting Method: Adjustable pipe mount bracket (included)
Mount Material: Nickel Zinc Trivalent Plated Steel (RoHS Compliant)

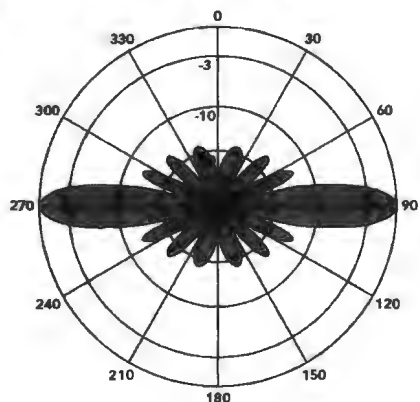
ANT450F6

FIBERGLASS COLLINEAR ANTENNA 6 dBd

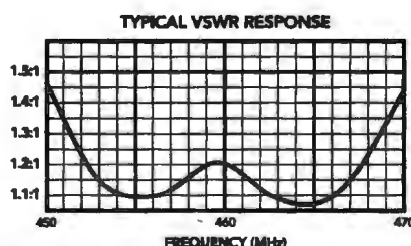
The Telewave ANT450F6 is an extremely rugged, medium-gain, fiberglass collinear antenna, designed for operation in all environmental conditions. The antenna is constructed with brass and copper elements, connected at DC ground potential for lightning impulse protection.

All junctions are fully soldered to prevent RF intermodulation, and each antenna is completely protected within a rugged, high-tech radome to ensure survivability in the worst environments. The "Cool Blue" radome provides maximum protection from corrosive gases, ultraviolet radiation, icing, salt spray, acid rain, and wind blown abrasives.

The ANT450F6 includes an ANT482 dual clamp set for mounting to a 1.5" to 3.5" O.D. support pipe, and a 24" removable RG-213 N-Male jumper. Stand off and top mounts are also available.



ANT450F6 - 460 MHz
Vertical Plane
Gain = 6.32 dBd



SPECIFICATIONS			
Frequency (continuous)	445-480 MHz	Dimensions (L x base diam.) in.	94 x 2.375
Gain	6 dBd	Tower weight (antenna + clamps)	21 lb.
Power rating (typ.)	500 watts	Shipping weight	26 lb.
Impedance	50 ohms	Wind rating / with 0.5" ice	150 / 125 MPH
VSWR	1.5:1 or less	Maximum exposed area	1.5 ft ²
Pattern	Omnidirectional	Lateral thrust at 100 MPH	60 lb.
Vertical beamwidth	18°	Bending moment at top clamp	143 ft. lb.
Termination	Recessed N Female 7-16 DIN-F opt.	(100 MPH, 40 PSF flat plate equiv.)	

Leica AR25

4 Constellation GNSS Antenna

Revolutionary Design, Built to Last



Will your infrastructure stand the test of time?

The Egyptians showed great ingenuity and innovation to build the pyramids with such precision and strength that they still stand today. The revolutionary 4 constellation AR25 choke ring antenna sets new standards in low elevation tracking and multipath reduction by using an innovative 3D design that is built to last, even in the harshest of environments.

Leica AR25

Stay ahead – be prepared

With emerging satellite systems closely on the horizon, in the form of the European Galileo System and the Chinese Compass (Beidou) System, a new high performance antenna is needed to encompass all Global Navigation Satellite Systems, and further support the Leica Geosystems "future proof" philosophy.



The new AR25 has been designed for all existing and currently planned signals of the GPS, GLONASS, Galileo and Compass systems.

The way ahead

The Leica AR25 brings choke ring design to a new level to enhance the key benefits of the choke ring antenna. Moving away from the traditional 2D choke ring design, the innovative 3D choke ring sets a new standard, whilst building on the strong traditions of the previous design. The AR25 uses a new ultra-wideband Dome-Margolin element. The Dome-Margolin antenna element design has become the industry standard for high accuracy and performance. Antenna gain has been optimised to allow use with most manufacturers geodetic receivers.

New standard

Choke ring antennas are known for their superior multipath rejection compared to other types of geodetic antennas. The Leica AR25 maintains superior levels of multipath rejection and tracking expected from a choke ring antenna, whilst setting new standards in low elevation tracking compared to traditional 2D choke ring design.

Enhances in atmospheric studies and network RTK modelling demand high performance antennas that can track satellites as soon as they are visible, down to the horizon and even below. Designed for a variety of applications, including reference stations, monitoring, seismic studies, scientific and atmospheric studies, the AR25 is a robust high performance antenna, built to stand the test of time.



Technical Specification

Leica AR25	
Design	Dome-Margolin antenna element with 3D choke ring ground plane
Signals tracked	GPS: L1, L2, L2c, L5 GLONASS: L1, L2, L3 Galileo: E2-L1-E1, E5a, E5b, E6, AltBOC Compass: B1, B2, B3, L5 L-Band (incl. SBAS, OmniSTAR and CDGPS)
Dimensions	380 mm x 200 mm
Weight	7.6 kg
Connector	N-Type with TNC adapter supplied
Supply Voltage	3.3 – 12 VDC
Nominal Impedance	50 ohms
Gain	typically 40 dBi
Noise Figure	0.5 – 1.2 dBi
Temperature, operating	–55° C to +85° C
Temperature, storage	–55° C to +90° C
Environmental Protection	Humidity: up to 100% Rain, dust, sand, wind: IP67 – Protection against blowing rain and dust. Waterproof to temporary submersion into water (1m)
Accessories	Weatherproof radome available
Antenna Cables	Are available in lengths of 1.2/2.8/10/30/50/70 metres. Longer cables available on request

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Leica Geosystems AG
Heerbrugg, Switzerland
www.leica-geosystems.com

- when it has to be right

Leica
Geosystems

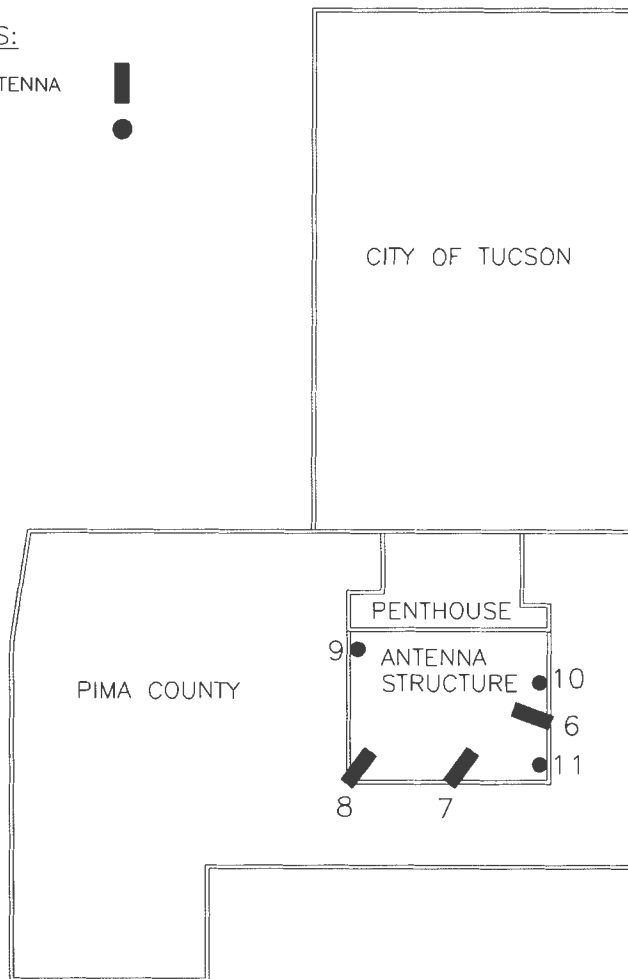
EXHIBIT B

SYMBOLS:

PANEL ANTENNA



MAST



(REV 3)

(REV 3)

(REV 3)


(REV 3)

(REV 3)

ITEM #	OWNER	ANTENNA TYPE
6	CITY OF TUCSON	PANEL 1
7	CITY OF TUCSON	PANEL 2
8	CITY OF TUCSON	PANEL 3
9	MAST 9 SUPPORTING:	
9-1	SIMPLY BITS	1-2' DISH
9-1	SIMPLY BITS	1-1' PANEL
10	MAST 10 SUPPORTING:	
10-1	CITY OF TUCSON	1-COLLINEAR ANTENNA
10-2	CITY OF TUCSON	1-GPS ANTENNA
11	MAST 11 SUPPORTING:	
11-1	PIMA COUNTY RFCD	1-YAGI ANTENNA
11-2	PIMA COUNTY RFCD	1-OMNI ANTENNA

REV.	
1	08-21-2015 1ST REVISION
2	01-18-2018 ADD RFCD
3	12-05-18 COT ANTENNAS



		TITLE: EXHIBIT B - ROOFTOP DRAWING CITY OF TUCSON 201 N. STONE AVENUE ROOFTOP AGREEMENT	
DRAWN BY: JH CHECKED BY: JH CHECKED BY:	SIZE: B NONE	PROJECT NO.: NONE	FILE NAME: PUBLIC WORKS ROOFTOP REV 3 020518
SCALE: NONE		DATE: SEE REV BLOCK	SHEET: 1 OF 1

**EXHIBIT C
SPECIAL CONDITIONS, FACILITY RULES & REGULATIONS
AND SECURITY PROCEDURES FOR USERS**

- I. Licensee must comply with the following special conditions:
- A. Equipment and Antennas Installation:
1. All exterior transmission lines must be grounded at the following locations:
 - a. at the top of the run immediately above the hoisting grip;
 - b. at the bottom of the run above the horizontal transition;
 - c. prior to the point of entry to the shelter; and
 - d. if the vertical run is more than 250', additional hoisting grips and grounding kits are required as per manufacturer's specifications. Only manufacturer's grounding kits will be allowed for attachment. If the cable diameter is 7/8" or less, the cable must enter the shelter through the strike plate.
 2. Transmission lines must be fastened to the rooftop facility's waveguide ladder or banjos using the proper mechanical hanger or snap-in hanger kit except on side arms and up small masts where stainless steel wraplock is permitted. Hoisting grips will be used at 200' vertical intervals, or more often as needed for proper cable support.
 3. All installation, repair and maintenance conducted by licensee shall be in accordance with good engineering standards and in conformity with the requirement of the FCC or any other body having jurisdiction over Licensee.
- B. It is vital that standards for interference protection of systems are used to reduce the possibility of interference. The standards below are minimum and must be installed by Licensee.

Frequency Range	Minimum of Reverse Isolation Required (Isolator)	Band Pass Cavity, Minimum Attenuation At 1 MHz from Tx frequency
25-54 MHz	20dB	30dB
66-88-MHz	25dB	20dB
88-108 MHz	25dB	25dB
130-108 MHz	50dB	25dB
400-512 MHz	50dB	15dB
806-960 MHz	50dB	15dB

Hybrid transmitter combining will have a band pass filter installed on the output with the following attenuation at 1 MHz from the transmit frequency: UHF/800000 MHz – 14dB.

Additional interference and isolation specifications may be required on a case-by-case basis as determined by Licensor at any time. All cavities are to be $\frac{3}{4}$ wave length, silver plated type.

Frequencies not included in the list above shall be dealt with on a case-by-case basis as determined within Licensor's reasonable discretions.

- C. All interior cables must be ¼" or ½" superflex or 3/8" value flex manufactured by Andrew corp. or an acceptable equivalent. Kinked, cracked or split cables are prohibited. All antenna lines must have a jacketed, corrugated, solid outer, copper conductor. All transmit interconnection cable and jumpers must be solid copper outer conductor "superflex", hard-line or LMR-400. No braid shield type cable is permitted anywhere under any circumstances. Moreover, all inside cable must be run on cable trays or hangers by the designated route for that location. All lines must be color coded at both ends showing termination points. All AC line cords must be 3-conductor type with grounding plug attached. All outside cables must be run on the transmission ice bridge with appropriate hardware and boots. Additionally, Licensee is prohibited from running cables within the equipment building or the rooftop facility without Licensor's written permission.
- D. Transmitters must meet the original manufacturer's specifications. All shields must remain in place. Transmitters must have a visual indication of transmitter operation and be identified with the following information: owner's name, contact name, contact's phone number, operating frequencies, a copy of Licensee's current FCC/ NTIA License for the equipment and the equipments model/serial number.
- E. All equipment cabinets and racks must be grounded to the designated building grounding point using #6 stranded copper – green jacketed cable. All equipment cabinets and racks must be bolted securely to the floor and include seismic braces at the top of the rack.
- F. Licensor does not provide any warranty against electrical surge. Therefore, Licensor recommends that Licensee install, at Licensee's expense, individual transient surge protection on each circuit used by Licensee.
- G. All antennas installed must be mounted using the proper antenna manufacturer's mounting brackets. Licensee shall pay for all antennas mounts it utilizes at the rooftop facility.
- H. All antennas must be installed according to the antenna manufacturer's and applicable rooftop facility manufacturer's specifications. Moreover, all antenna lines entering the equipment building must have a suitable lightning surge arrestor installed within two feet of the cable entry port. This surge arrestor must be bonded to the site grounding system.
- I. Licensor requires that all equipment that lends itself to rack-mounting be performed to conserve floor space at Licensee's expense.

- J. Licensee will operate its equipment with all shields attached, cabinet doors closed and side panels attached. Furthermore, unsealed batteries are not permitted at the rooftop facility. All external indicator lamps and LEDs must be operational and local speakers must remain off except during maintenance.
- K. Neither Licensee nor any of its representatives shall interfere with any other entity's equipment in the equipment shed. Moreover, Licensee will not trip any electric service breakers for any reason without Licensor's prior approval.
- L. All installations must be maintained in a neat and orderly manner. Doors to the equipment building must remain closed at all times. Access to equipment and antennas shall be by authorized personnel only.
- M. Prior to the activation of its system at the rooftop facility, Licensee must submit a copy of its applicable FCC/NTIA License and all technical information pertaining to the equipment to be installed including accurate block diagrams showing operating frequencies, all system components (active or passive) with gains and losses in dB, and all power levels to Licensor.
- N. Licensee must comply with the following rooftop facility rules and regulations, and access and security procedures for users:
 - 1. Doorways, vestibules and other areas in and around the rooftop facility shall not be used for the disposal of trash or be obstructed by Licensee or used by Licensee for any other purpose than entrance to and exit from the rooftop facility.
 - 2. The equipment shed shall be used only for the purpose for which it has been designed and no unsuitable materials such as rubbish, rags or sweepings shall be disposed of within. Damage to any such building by Licensee shall be at the liability of Licensee.
 - 3. Signs, advertisements, graphics or notices are not allowed in or around the Rooftop facility.
 - 4. Licensee will not make any alterations or physical additions in or to the Rooftop facility without the written permission of Licensor. Licensee will be required to conduct and submit an Interference & Inter-modulation Analysis (IIA), at the Licensee's expense, in addition to requirements outlined in section M above.
 - 5. Movement in or out of the rooftop facility with any bulky equipment shall be restricted and allowed only at such times as designated by Licensor. Licensor will determine the method and routing of such items so as to ensure the safety of all concerned and that potential harm to the rooftop facility be

minimized. Advance notice of at least 24 hours is required for the movement of equipment.

6. Licensor shall have the authority to prescribe the maximum weight in any area and the manner in which equipment is placed.
 7. Licensee shall not adjust, attempt to adjust or otherwise tamper with any temperature control thermostats in the equipment sheds. Licensor shall adjust thermostats as required to maintain building standard temperature.
 8. At all times, Licensee will comply with all requirements necessary for the security of the rooftop facility.
 9. Notwithstanding any other provisions to the contrary contained herein, no work shall be performed at the rooftop facility, with the exception of routine maintenance work performed strictly by qualified employees of Licensee, without prior written consent of Licensor. Any work involving the presence of Licensor's representative, will be billed to and paid by Licensee at the hourly market rate applicable to said representative at that time. Any violation of this policy will be considered a material breach by Licensee.
 10. All routine service calls are to be scheduled between the hours of 8:00 a.m. and 5:00 p.m. weekdays.
 11. No Cable Terminations or circuit interface equipment is to be installed in any area but the building main distribution frame (basement or roof) and the Licensee's rooftop equipment area. Inclusive of but not limited to: 66 mounting blocks; 110 mounting blocks; modems; net work interface devices; and CSU-DSU units.
- O. Licensor reserves the right to rescind any of these rules and to make other rules if required for the safety and care of the rooftop facility and all licensees. Any changes to the rule and regulation will be done by formal written amendment. Upon notification to Licensee, such rules and regulations shall be binding upon Licensee in a manner as if originally herein prescribed.

EXHIBIT D

Procedures for Access to Pima County Rooftop Facilities

Access to the rooftop facilities is restricted and will only be permitted for authorized purposes.

Procedures for access:

Weekdays (8:00 a.m. – 5:00p.m.)

1. All Tenants will supply a list of authorized users. This list shall include the following:
 - a. Name of Person
 - b. Company
 - c. Phone number
2. Email completed authorized user list to rooftops@pima.gov.
3. Prior to any work to be performed on any Pima County rooftop facility, tenant must
 - a. Email rooftops@pima.gov with the following information at least 24 hours in advance of arrival:
 - i. Name of company
 - ii. Contact person, names of individuals performing work
 - iii. Phone number
 - iv. Preferred day/time to schedule work
 - v. Type of work to be performed
 - vi. Duration of work
4. IT will review the request and forward it to Facilities Management (if approved) to arrange access to the rooftop facilities for authorized users and notify tenant
5. You must present picture identification and company identification. This will be compared to the Authorized Users List that each tenant supplies.
6. ONLY AUTHORIZED USERS WILL BE ALLOWED ACCESS.

Weeknights, weekend and holiday:

Emergencies

This process is to be utilized for true emergency service affecting outages

1. Call 740-3085 – This will be forwarded to Central Plant operations. They will have access to the buildings 24-7.
2. Emergency access must be reported to rooftops@pima.gov by 8:00 a.m. the next business day to advise of any addition, removal, or modification of equipment/antennas that was required as a result of the emergency.

3. This process is for true emergencies. Any tenant utilizing the Emergency process to bypass the Weekday process will be notified and the lease may be terminated.

After Hours Maintenance

This process is to be utilized for service affecting maintenance during non-peak hours

1. Prior to any work to be performed on any Pima County rooftop facility, tenant must
 - a. Email rooftops@pima.gov with the following information at least 24 hours in advance of arrival:
 - i. Name of company
 - ii. Contact person, names of individuals performing work
 - iii. Phone number
 - iv. Preferred day/time to schedule work
 - v. Type of work to be performed
 - vi. Duration of work
2. IT will review the request and forward it to Facilities Management (if approved) to arrange access to the rooftop facilities for authorized users and notify Tenant.
3. Call 740-3085 upon arrival for work being performed – This will be forwarded to Central Plant operations. They will have access to the buildings 24-7.