

CITY COUNCIL AGENDA REQUEST FORM

Today's date: 12 / 13 / 16

Date of meeting 12 / 21 / 16

(City Council meetings are held the 1st and 3rd Wednesday of each month.)

Name of Citizen, Organization, Elected Official, or Department Head making request:

Jared Yost

Address: 1123 Lake Street

Phone number and email address: jyost@sandpointIdaho.gov

Authorized by:

Handwritten signature of Aaron Swells

name of City official

City official's signature

(Department Heads, City Council members, and the Mayor are City officials.)

Subject: Renewal of Baldy site lease for American Messaging

Summary of what is being requested: American Messaging would like to renew their lease for a term of 1 year at the Baldy site.

The following information MUST be completed before submitting your request to the City Clerk:

1. Would there be any financial impact to the city? Yes or No [] [X]

If yes, in what way? _____

2. Name(s) of any individual(s) or group(s) that will be directly affected by this action:

Have they been contacted? Yes or No

Blank lines for names and contact status

3. Is there a need for a general public information or public involvement plan? Yes or No

If yes, please specify and suggest a method to accomplish the plan: [] [X]

4. Is an enforcement plan needed? Yes or No [] [X] Additional funds needed? Yes or No [] [X]

5. Have all the affected departments been informed about this agenda item? Yes or No [X] []

This form must be submitted no later than 6 working days prior to the scheduled meeting. All pertinent paperwork to be distributed to City Council must be attached.

ITEMS WILL NOT BE AGENDIZED WITHOUT THIS FORM

**CITY OF SANDPOINT
AGENDA REPORT**

DATE: 12/13/16

TO: MAYOR AND CITY COUNCIL

FROM: Jared Yost, Urban Forester

SUBJECT: Baldy Transmitter Site Lease renewal for American Messaging.

DESCRIPTION/BACKGROUND: American Messaging previously known as PASSWORD leases space at the Baldy transmitter site. Their current lease expires on 12/31. Lease has been reviewed by the City Attorney. American Messaging would like to renew the lease for a 1 year term.

STAFF RECOMMENDATION: Provide authority to Mayor to sign and approve new lease.

ACTION:

WILL THERE BE ANY FINANCIAL IMPACT? No

HAS THIS ITEM BEEN BUDGETED?

ATTACHMENTS:

No: 16-
Date: December 21, 2016

RESOLUTION
OF THE CITY COUNCIL
CITY OF SANDPOINT

TITLE: AMERICAN MESSAGING, LLC, BALD MOUNTAIN TRANSMITTER SITE LEASE RENEWAL

WHEREAS: The City of Sandpoint owns real property on Bald Mountain and leases transmitter sites on the mountain to various individuals and entities, including American Messaging, LLC (f/k/a Pass Word, Inc.);

WHEREAS: The current lease issued to American Messaging, approved pursuant to Resolution No. 13-65, will expire on December 31, 2016; and

WHEREAS: A new lease has been prepared and approved by the City Attorney, setting out the terms and conditions of lease renewal.

NOW, THEREFORE, BE IT RESOLVED THAT: The Mayor is hereby authorized, on behalf of the City, to execute the American Messaging, LLC, Bald Mountain Transmitter Site Lease, a copy of which is attached hereto and made a part hereof as if fully incorporated herein.

Shelby Rognstad, Mayor

ATTEST:

Maree Peck, City Clerk

City Council Members:

YES NO ABSTAIN ABSENT

1. Eddy
2. Aitken
3. Williamson
4. Camp
5. Ruehle
6. Snedden

AMERICAN MESSAGING, LLC, BALD MOUNTAIN TRANSMITTER SITE LEASE

This Lease is effective this 1st day of January, 2017, between the CITY OF SANDPOINT, IDAHO, a municipal corporation, 1123 Lake Street, Sandpoint, Idaho 83864, hereinafter referred to as "CITY", and AMERICAN MESSAGING, LLC, a Delaware Corporation, whose address is 1720 Lakepointe Drive, Suite 100, Lewisville, TX 75057, hereinafter referred to as "LESSEE."

1. Premises: The CITY leases to LESSEE the parcel of real property located in Bonner County, Idaho, described in the attached Exhibit 1, which is incorporated herein by this reference.
2. Term: The term of this Lease shall be for one (1) year, commencing on the date set forth above.
3. Negotiation For Renewal:
 - A. The CITY agrees to enter into negotiations with LESSEE for two additional lease terms, not to exceed a total of (2) years on the following terms and conditions:
 - 1) That no default exists or is continuing in the performance of any of the terms, covenants, and conditions of this Lease.
 - 2) That the renewal term shall be upon terms, covenants, and conditions mutually agreed to by both parties including, but not limited to, an agreement as to what would be then a fair rental value for the upcoming renewal term. The rent to be paid by LESSEE to the CITY for the renewal term shall be in accordance with standard fees adopted by the City.
 - 3) In the event the parties are unable to reach terms acceptable to the City, the Lease shall terminate; however, the CITY will, if the LESSEE is not in default, extend the term of the current lease for a period equal to the expiration dates for the leases from LESSEE to any sublessees so that LESSEE can complete any ongoing contractual responsibilities; such extension shall be by written addendum for a period not to exceed three years and all cost of living increases in lease payments shall apply during such extension.

- 4) There shall be no absolute right to an additional lease term and the City may reject LESSEE'S request for a new lease without cause.

B. LESSEE shall request to negotiate a renewal term in the following manner:

- 1) At least three (3) months but no more than six (6) months prior to the expiration of the initial term, LESSEE shall notify the CITY and request negotiation for the renewal term.
- 2) Upon giving of such notice of desire to negotiate, the parties may arrange for negotiations to be completed before the end of the then-existing term and to reach mutual agreements on all of the terms, covenants, and conditions of the Lease for the renewal term.

4. Payment: The total rent, as set forth in the attached Exhibit 2, shall be due and payable annually, in advance on the first day of each year of the Lease, in lawful money of the United States to the Treasurer of the CITY. In the event LESSEE fails to pay the full amount of the rent when due, a lien shall be placed on the equipment owned by the company. Tenant shall be responsible for all payments due from subtenants. Said rental figure may be adjusted by an amount to be determined by the percentage of increase or decrease in the cost of living index as reported in the "Consumer Price Index (CPI) for all Urban Consumers, U.S. City Average," as published by the Bureau of Labor Statistics from the date of the Resolution. The CPI Adjustment will be calculated from January of the previous lease year to July of the present lease year. However, rental adjustments shall not exceed 5% per year. The rates set forth in Exhibit 2 shall also apply to all sub-tenancies approved by the CITY. Exhibit 2, attached, is hereby incorporated by this reference. LESSEE shall pay a full base payment calculated on the basis of the most expensive use authorized on LESSEE'S site, regardless of LESSEE'S use, and LESSEE shall additionally pay seventy-five percent (75%) of the fee set forth on Exhibit 2 for each other use by LESSEE or a sublessee on LESSEE'S site. The payment for a new sublessee is due when the sublease is entered into but may be pro-rated during the first year.

5. Interest: All rent not paid within thirty (30) days of the due date hereunder shall bear interest from the date due at the rate of twelve percent (12%) per annum or the maximum permitted by law, whichever is less.
6. Late charges: Lessee hereby acknowledges that late payment by Lessee to Lessor of Rent and other sums due hereunder will cause Lessor to incur costs not contemplated by the Lease, the exact amount of which are now and will be difficult to ascertain. Accordingly, if any installment of Rent or any other sums due from Lessee shall not be received by Lessor within thirty (30) days after such amount shall be due, Lessee shall pay to Lessor a late charge equal to five percent (5%) of the amount(s) past due. The parties hereby agree that such late charge represents a fair and reasonable estimate of the costs Lessor will incur by reason of late payment by Lessee. Acceptance of such late charge by Lessor shall in no event constitute a waiver of Lessee's default with respect to such overdue amount, nor prevent Lessor from exercising any of the other rights and remedies granted hereunder. Moreover, if Lessee fails to cure any outstanding balance for which Lessor provides written notice to Lessee, this lease shall be in default 30 days after the written notice is mailed to Lessee.
7. Use: LESSEE shall not use, nor permit the Premises or any part thereof to be used for any purpose other than LESSEE's use as a communications site, or as approved herein or as may be hereafter approved in writing by the CITY, which approval shall not be unreasonably withheld.
8. Insurance: LESSEE shall maintain general liability insurance protecting LESSEE and the CITY from any claim for property damage or personal injury, including death, which may arise from LESSEE's lease of the Premises in an amount not less than \$1,000,000.00 of a type and placed with a company qualified to do business in the State of Idaho and acceptable to the City, and the City shall be named as an additional insured. A certificate of such insurance shall be filed annually with the Clerk of the City and shall provide that such insurance shall not be cancelled without 30 days actual notice to the City.
9. Conditions: This Lease shall be conditional and contingent on the following:

- A. LESSEE's operations (including sublessees) not interfering with the operation of preexisting Public Safety Communications or other transmission facilities installed at the Premises.
 - B. LESSEE shall not commit, nor allow to be committed, any waste upon the Premises or any nuisance by its sublessees or any party under its direction or control.
 - C. Except for the erection or installation of equipment or facilities contemplated under this Lease, LESSEE shall not make, nor allow to be made by its sublessees or any party under its direction or control, any alteration of the Premises or any part thereof without the prior written consent of the CITY. Any additions to or alterations of the Premises except items which may be removed without damage to the Premises shall become a part of the realty and belong to the CITY provided that at the expiration of this Lease the CITY may require LESSEE, at LESSEE's expense, to remove any improvement it has made to the Premises. In order to avoid inclement weather LESSEE shall have a reasonable time to remove items.
 - D. Maximum Wattage permitted for transmission from this site should be limited to the minimum power required for adequate radio coverage and must be authorized by either an FCC license or an NTIA authorization.
10. Abandonment: LESSEE shall not vacate or abandon the Premises at any time during the term. In the event LESSEE shall abandon, vacate, or surrender the Premises, or be dispossessed by process of law, or otherwise, any personal property belonging to LESSEE and left on the Premises shall be deemed to be abandoned; provided that the CITY may at its election cause to be removed, at the expense of LESSEE, any improvement from the Premises.
11. Maintenance: LESSEE shall keep and maintain the Premises in good and sanitary order, condition, and repair at its own expense. LESSEE certifies that all parts of the structure, tower(s), etc. meets or exceeds engineering specifications concerning inclement weather conditions and manufactured weight limits. LESSEE further certifies that structures, tower(s), etc. are within design specifications. LESSEE has inspected the Premises and accepts them as being in good and sanitary order, condition, and repair. LESSEE agrees

on the last day of the term or sooner termination of this Lease to surrender the Premises to the CITY in the same condition as when received, reasonable use and wear thereof and damage by fire, act of God, or by the elements excepted.

12. Liens: LESSEE shall keep the Premises free from any liens arising out of any work performed, materials furnished, or obligations incurred by LESSEE.
13. Compliance: LESSEE shall, at its expense, comply with all of the requirements of any governmental authority, now enforced or which may hereafter be in force, pertaining to the Premises and shall faithfully observe in the use of the Premises all applicable governmental regulations or laws, now in force or which may hereafter be in force. This obligation of LESSEE shall include, but not be limited to, LESSEE and each of its subtenants maintaining and posting inside the building at the site copies of all authorizations required by the Federal Communications Commission of the United States Government. Upon written request of the CITY, LESSEE will provide copies of authorizations required by the Federal Communications Commission and provide the same to the Sandpoint City Clerk.
14. Indemnity: To the extent required by law, LESSEE waives all claims against the CITY for damages to property or injuries to any person upon or about the Premises, arising at any time and from any cause except the CITY's negligence or greater degree of culpability. LESSEE indemnifies and shall hold the CITY harmless from any damages to property or injury to any person, including subtenants, to the extent arising from the use of the Premises by LESSEE and its subtenants or from the failure of LESSEE to keep the Premises maintained.
15. Utilities and Taxes: LESSEE shall pay for all utility services supplied to the Premises including, but not limited to, electrical power. LESSEE shall be responsible for all taxes and assessments levied against the Premises during the term of this Lease.
16. Entry: Subject to LESSEE's reasonable security and safety requirements, LESSEE shall permit the CITY and its agents to enter upon the Premises at reasonable times for the purpose of inspecting the same or any other reasonable purpose.

17. Assignments: LESSEE shall not assign this Lease, any interest therein, any right or privilege appurtenant to the same, or suffer any other person, except for the agents and servants of LESSEE, to occupy or use the Premises or any portion thereof without the prior written consent of the CITY; provided that LESSEE may sublease the property as provided below. The consent to one assignment, occupation, or use by any other person shall not be deemed to be consent to any subsequent assignment, occupation, or use. Any such assignment, occupation, or use by another person without such consent shall be void and shall, at the option of the CITY, terminate this Lease. This Lease and any interest therein shall not be assignable as to the interest of LESSEE, by operation of law, without the prior written consent of the CITY. The CITY shall not unreasonably withhold its written consent to an assignment; provided that the assignment is for purposes not inconsistent with this Lease and that the character and financial responsibility of the proposed assignee are reasonably satisfactory to the CITY. Notwithstanding the foregoing, LESSEE may assign or transfer its rights and obligations without the CITY's prior consent in the event of a merger, acquisition or a sale of substantially all of LESSEE'S assets or in a corporate restructuring.

18. Subleases:

- A. LESSEE may sublet communication sites to other persons or entities, and must provide the City with a current list of Sublessees annually, and any new sublease at the time the sublease is entered into. Any sublease shall have conditions consistent with LESSEE's rights under this Lease. LESSEE and all sublessees must provide the information set forth in Exhibit 3, attached and incorporated by this reference. LESSEE agrees to provide the information required in Exhibit 3 for each Sublessee within 30 days of the Sublessee entering the Premises. If LESSEE fails to provide the information required in Exhibit 3 to LESSOR and LESSOR provides written notice thereof, LESSEE shall have 30 days from receipt of the written notice in which to provide the information. If the information is not provided within 30 days, the lease shall enter default. The completed Exhibit 3 shall be incorporated by this reference.

- B. Sublessees will provide copies of any required permits, governmental leases, or other required authorizations for utilization of the Premises as a communications/ transmitter site to the CITY as set forth in Exhibit 3.
 - C. LESSEE, and the CITY, may negotiate a lower lease rate for bona fide non-profit public organizations. As a condition precedent to such sublease, LESSEE shall provide a copy of the sublease to the CITY for approval and provide to the CITY a copy of any required permits, governmental leases, or other required authorizations for utilization of the site. No sublease shall exceed the term of the Lease between the CITY and LESSEE for the Premises.
19. Insolvency: The following events shall constitute a breach of the Lease by LESSEE:
- A. The appointment of a receiver to take possession of all or substantially all of the assets of LESSEE;
 - B. A general assignment by LESSEE for the benefit of creditors; or
 - C. Any action taken or suffered by LESSEE under any insolvency or bankruptcy act.
20. Default and Forfeiture: Time and the strict and faithful performance of each and every one of the conditions of this agreement are expressly made the essence of this agreement. If default be made by LESSEE in payment of any part of LESSEE'S rent when the same shall become due or default be made by the LESSEE in keeping, performing, or observing any of the covenants and agreements herein contained, and said default shall remain so for a period of thirty (30) days after written notice shall have been sent as set forth below in the paragraph entitled "Notice," then in such event the CITY shall have any and all rights and remedies available in law or equity including, but not limited to, the following:
- A. CITY may terminate LESSEE'S right to possession of the Premises, and re-enter the Premises, which LESSEE shall peacefully relinquish;
 - B. CITY may rent the Premises to any other party under at least the same terms and conditions as required under the Lease. LESSEE shall be liable for any costs and expense to re-enter and restore the Premises so they may be rented and LESSEE shall be liable for any loss sustained by CITY as direct result thereof; or

C. CITY may terminate the Lease and all of the LESSEE's right thereunder.

21. Surrender or Cancel: The voluntary or other surrender of this Lease by LESSEE, or a mutual cancellation thereof, shall not result in an automatic cancellation of any subleases and shall, at the option of the CITY, terminate all or any existing subleases, or may, at the option of the CITY, operate as an assignment to the CITY of any such subleases.
22. Fees: In the event this Lease is placed in the hands of an attorney for enforcement, or in the event of any suit or other proceedings brought for enforcement of the terms of this Lease, or because of the breach of this Lease, the prevailing party shall be entitled to an award of costs and reasonable attorney's fees against the other party.
23. Notices: All notices to be given to either party shall be given in writing personally or by depositing the same in the United States Mail, postage prepaid, and addressed to the party at the address noted above or at such other address as may be in writing designated by one other party to the other.
24. Non-Waiver: The waiver by either party of any breach of any term, covenant, or condition of this Lease shall not be deemed to be a waiver of such term, covenant, or condition with regard to any subsequent breach of the same or any other term, covenant, or condition. The subsequent acceptance of rent by the CITY shall not be deemed to be a waiver of any preceding breach by LESSEE of any term, covenant, or condition of this Lease, other than the failure of LESSEE to pay the particular rental so accepted, regardless of the CITY's knowledge of such preceding breach at the time of acceptance of the rent.
25. Holding Over: Any holding over after the expiration of the term, with the consent of the CITY, shall be construed to be a tenancy from month-to-month at a rental as set forth in paragraphs four (4) and eighteen (18) above entitled respectively, "Payment" and "Subleases" and shall otherwise be on the terms and conditions specified in this Lease, so far as are applicable.
26. Site Limitations: LESSEE has examined the Premises and its access and acknowledges that the Premises consist of an isolated mountaintop for which access is seasonally impaired. LESSEE accepts the Premises in their present condition and acknowledges that

it accepts the Premises with their limited access. LESSEE shall not construct any structures or improvements, nor perform any activities on the Premises, which would constitute a fire hazard or other danger to adjacent users of property or the Premises. No tower, other than the existing tower, for which consent has previously been given, shall be constructed without the prior written consent of the CITY. The use by LESSEE of the Premises shall not interfere with any pre-existing adjacent users of the CITY's Premises for radio and electronic communications uses. Any interference caused by LESSEE or its sublessees to preexisting operations at the Premises shall be abated by LESSEE as soon as reasonable at its expense upon notification.

27. Site Access: The CITY grants LESSEE ingress and egress to the site using the customary access route commonly known as the Forest Service Road off Baldy Road. If the CITY chooses to gate, lock or restrict access in any way, LESSEE shall be given prior advance notice of such change and 24-hour access to the site by way of having keys to the site available at the Sandpoint Police Department.
28. Binding Effect: This agreement shall be binding upon the heirs, parties' legal representatives, successors, and assigns of these.
29. Time: Time is of the essence of this agreement.
30. Governing Law: The validity, meaning, and effect of this agreement shall be determined in accordance with the laws of the State of Idaho applicable to contracts made and performed in that state. Venue shall be in the First Judicial District Court in and for Bonner County, Idaho.
31. Captions: The captions to the paragraphs of this agreement are for convenience only, and shall not be deemed to enlarge, diminish, explain or in any manner affect the meaning of those paragraphs.
32. Site Standards: Lessee shall comply with minimum standards as set forth in Exhibit 4, "Minimum Standards and Site Management Plan," incorporated herein by this reference.

IN WITNESS WHEREOF, the parties hereby execute this Lease.

CITY OF SANDPOINT

AMERICAN MESSAGING, LLC

Shelby Rognstad, Mayor

Maree Peck, City Clerk

print name and company title

STATE OF IDAHO)
) ss.
County of Bonner)

On this ____ day of _____, 20____, before me personally appeared Shelby Rognstad and Maree Peck known to me to be the persons whose names are subscribed to the within instrument as Mayor and City Clerk of the City of Sandpoint and acknowledged to me that they executed the same on behalf of the City.

GIVEN under my hand and official seal this ____ day of _____, 20_____.

Notary Public
Residing at _____
My Commission Expires _____

STATE OF _____)
) ss.
County of _____)

On this ____ day of _____, 20____, before me, the undersigned, a Notary Public in and for the above named County and State, personally appeared _____, known or identified to me to be the above named individual and acknowledged that he/she signed this lease on behalf of American Messaging, LLC.

GIVEN under my hand and official seal this ____ day of _____, 20_____.

Notary Public
Residing at _____
My Commission Expires _____

- Attachments (incorporated by reference):
- Exhibit 1: Description of Property
 - Exhibit 2: Lease Rates
 - Exhibit 3: Information required of tenants and sublessees
 - Exhibit 4: Minimum Standards and Site Management Plan

Exhibit 1: Description of Property

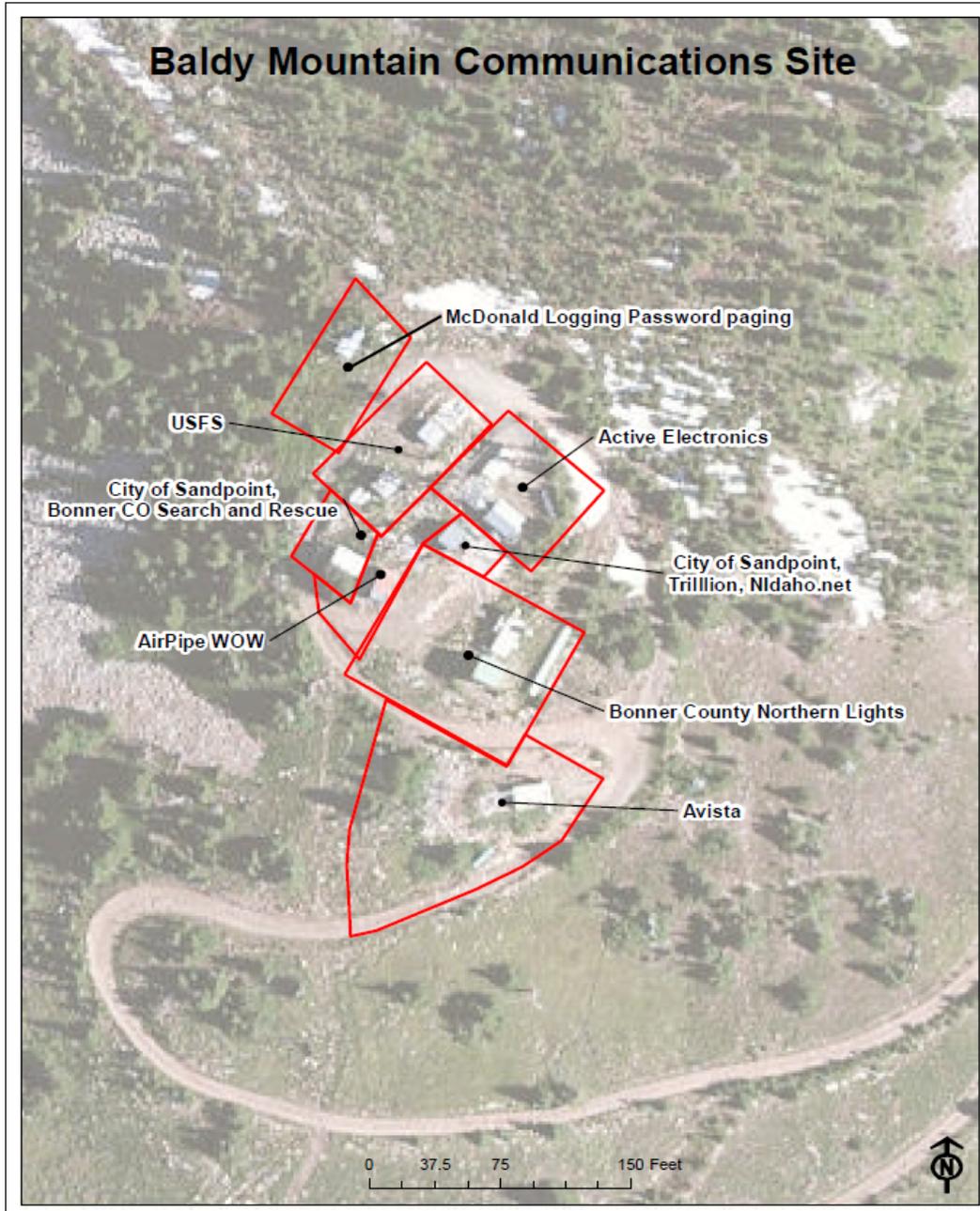


Exhibit 2: Lease Rates

	<i>January 2013 Adjusted Rate</i>	<i>January 2014 Adjusted Rate</i>	<i>January 2015 Adjusted Rate</i>	<i>January 2016 Adjusted Rate</i>
	1.60%	1.60%	-1.00%	1.40%
Cellular Telephone	4,240.83	4,308.68	4,265.59	4,325.31
Television Broadcaster	2,181.00	2,215.90	2,193.74	2,224.45
Microwave	2,181.00	2,215.90	2,193.74	2,224.45
AM/FM Radio Service	1,817.50	1,846.58	1,828.11	1,853.71
Mobile Radio Service	1,817.50	1,846.58	1,828.11	1,853.71
Pagers and jWireless Internet Providers	1,817.50	1,846.58	1,828.11	1,853.71
Cable Television	1,453.99	1,477.25	1,462.48	1,482.95
Facility Manager	1,453.99	1,477.25	1,462.48	1,482.95
Private Mobile Radio Service	908.75	923.29	914.06	926.85
Broadcast Translator	727.01	738.64	731.25	741.49
Broadcast Translator Nonprofit Public Radio or Television	363.50	369.32	365.63	370.75
Other	121.17	123.11	121.88	123.59

EXHIBIT 3

REQUIRED INFORMATION FOR BALDY MOUNTAIN TRANSMISSION FACILITIES

Company Name:

Mailing Address:

Contact Name and Phone Number:

Description of Service:

Microwave Radio

Equipment Manufacturer:

Equipment Model:

Serial Number:

Transmit Frequencies:

Transmit Power: (in dBm)

Transmit ERP: (in dBm)

Receive Frequencies:

IF Frequencies:

Transmit PL or DPL (if applicable):

Narrowband Conversion Date (if planned):

Private Mobile Radio

Equipment Manufacturer:

Equipment Model:

Serial Number:

Transmit Frequencies:

Transmit Power: (in dBm)

Transmit ERP: (in dBm)

Receive Frequencies:

IF Frequencies:

Transmit PL or DPL (if applicable):

Narrowband Conversion Date (if planned):

Please attach a copy of the FCC License.

Exhibit 4

BALDY MOUNTAIN TRANSMITTER SITES

Minimum Standards and Site Management Plan

Adopted September 16, 2009

1. The Site Manager retains the right to inspect users' equipment at any reasonable time to ensure compliance with site standards presently in effect or as may be amended. This clause shall not be construed as a duty to inspect. No equipment will be placed within the site without prior approval of complete system plan by the Site Manager. Proposed system plan will include: (a) Make, model, frequency and IF of transmitter and receiver (b) Make and model of antenna (c) Complete details of supporting equipment including RFI equipment, suppression, cabling, duplexers, combiners, etc. A manufacturer prepared specification sheet will be required on all items.

Any deviation from the approved plan will be grounds for immediate shutting down and removal of equipment from the site and shall be a basis for termination of the lease.

2. Each transmitter at the site will be identified with a copy of the Federal Communications Commission (FCC) License or National Telecommunications and Information Administration (NTIA) if applicable, and name of person or service agency responsible for repairs, their telephone number, equipment transmit/receive frequency, receiver IF frequencies and equipment transmit/receive tone frequencies. These will be in a form acceptable to the Site Manager.
3. All transmitter installations shall employ isolators to minimize spurious radiation and interconnect devices as listed below (a commercially produced Intermodulation Control Panel with a commercial duplexer easily meets these standards for two-way radio repeaters and is the preferred means to meet them):
 - A. Transmitters in the 25 to 53.999 MHz range shall have at least 20dB of isolation followed by either a low pass and a bandpass cavity with at least 30 dB of attenuation 1.0 MHz removed from the operating frequency or simply the bandpass cavity without the filter, providing testing reveals that the low pass filter is not needed.
 - B. Transmitters in the 54 to 87.999 MHz range shall have at least 25 dB of isolation followed by a bandpass cavity providing at least 20 dB of attenuation 1.0 Hz from the operating frequency.
 - C. Transmitters in the 88 to 107.999 MHz range at a power level of 25 watts output power or less shall have at least 25 dB of isolation followed by a bandpass cavity providing at least 25 dB of attenuation 1.0 MHz from the operating frequency.
 - D. Transmitters in the 88 to 107.999 MHz range at a power level greater than 50 watts output power shall have a bandpass cavity providing at least 25 dB of attenuation 1.0 MHz from the operating frequency.
 - E. Transmitters in the 180 to 299.999 MHz range shall have at least 50 dB of isolation followed by either a low pass filter and a bandpass cavity with at least 25

dB of attenuation 1.0 MHz removed from the operating frequency, or simply, the bandpass cavity without the filter, providing testing reveals that the low pass filter is not needed.

- F. Transmitters in the 300 to 469.999 MHz range shall have at least 50 dB of isolation followed by either a low pass filter and a bandpass cavity with at least 15 dB of attenuation 1.0 MHz removed from the operating frequency, or simply, the bandpass cavity without the filter, providing testing reveals that the low pass filter is not needed.
 - G. Transmitters in the 470 to 999.999 MHz range shall have at least 50 dB of isolation followed by either a low pass filter and a bandpass cavity with at least 15 dB of attenuation 1.0 MHz removed from the operating frequency, or simply, the bandpass cavity without the filter, provided testing reveals that the low pass filter is not needed.
 - H. Transmitters in the 1000 to 60,000.000 MHz range shall have at least 45 dB of isolation followed by at least (a) 3.0 dB of attenuation 2.5 MHz removed from center of operating frequency and (b) 45.0 dB of attenuation 50 MHz from center operating frequency. The use of external amplifiers of any type are prohibited.
4. **General engineering standards shall be observed as follows:**
- A. A bandpass cavity or crystal filter is recommended at the input of all receivers. Its purpose is to protect against RF energy “off frequency” from mixing in a non-linear device, such as the first RF amplifier in a receiver, which can re-radiate causing interference.
 - B. The band reject duplexer (cross notch duplexer) may not be used without a cavity/isolator as outlined above.
 - C. Single braid coaxial cable is prohibited. Double shielded cable may only be used to interconnect equipment and must have over 97% shield coverage. Ethernet lines will use a UV rated STP cable with bonded shielded RJ45 connectors, to include jumpers.
 - D. Jacketed coaxial cable is required. Un-jacketed transmission line of any type is prohibited and obsolete.
 - E. Use of “N” connectors or DIN connectors are recommended. Every effort should be made to prevent the use of coaxial adapters.
 - F. All equipment is to be grounded and shielded. Grounding is to be done with copper strap or heavy braid to a station ground grid. The “green wire” of the AC power plug is not an acceptable grounding point.
 - G. Transmitting systems must be checked at annually, which includes the isolator, VSWR on the load port of the isolator, and the overall system insertion loss.
 - H. Bare metallic ties are prohibited for securing transmission lines to towers. In the case of large lines, use of stainless steel or galvanized hangers is permitted. Hardware capable of rusting and dissimilar metals is prohibited. Transmission lines are to be insulated from metallic structures/objects. It is the duty of the installation personnel to prevent “diode junction” from taking place.
 - I. All loose wire or metal objects are to be removed from the tower and site. Unused hardware, feed line, and other materials should be removed.

- J. All equipment shall be licensed and operated in full accordance with all applicable rules and regulations of the regulatory agency Federal Communications Commission (FCC) License or National Telecommunications and Information Administration (NTIA). There shall be no modifications that violate “FCC type acceptance”.
- K. Grounding – tower separation ground if distance to entry is beyond 3 feet, entrance grounding, and interior halo tie to equipment rack. 6 AWG is the minimum for ground connections of any type to equipment.
- L. Every effort shall be made to protect the equipment from lightning damage. Feed-through lightning protectors should be used on all coaxial cable connections to equipment enclosures. Additionally a commercially produced protector should be used on control, audio, telephone, Ethernet and power connections.
- M. Radios, equipment and batteries installed in the site building will use support equipment that is braced, anchored, and/or secured in a manner that prevents or reduces the possibility of damage due to an earthquake.
- N. Batteries will be installed and maintained observing Federal safety standards. State and local guidelines for storage and containment will be enforced.
- O. **Exceptions.** Exceptions to standards can be requested from and approved by the Site Manager. This must be done in writing as to the technical reason for the exception and may cause a secondary status of equipment.

5. Interference Policy Statement

- A. In the event licensed radio interference (RI) intermod occurs, all users of the site are required to participate in solving the problem by providing technical personnel and test equipment to locate the source of the specific problem. If the above standards are complied with, additional filters, cavities, etc. may be required. Before any new user can be added an intermod study will be conducted to see if any intermod will be created by adding the additional user and/or frequencies.
- B. All equipment must be maintained in good working order and meet original manufacturers’ standards and be FCC type accepted for the application.
- C. Involved systems, not in full compliance with the standards, will be asked to comply immediately or will be removed.
- D. The standards are minimums found to be good engineering practices in the operation and maintenance of radio facilities.
- E. To prevent receiver desensitizing, further reduce interference, protect adjacent sites and enhance technician safety, no transmitters will be allowed more than 100 watts output with ERP exceeding 200 Watts. Directional antennas will be allowed a higher ERP. Antenna positions will be engineered by the site manager with the exact placement determined on a non-interfering basis. The top 20 feet of tower space will be reserved for Rx multicoupler use on all tower structures.

6. Electrical Standards

- A. Only assigned electrical outlets shall be used.

- B. Additions or modification shall not be made to any electrical distribution system within the building without first securing the manager's written permission.
- C. Access to the panelboard is provided for the circuit breaker to the users' assigned outlets.
- D. Radio equipment shall have internal fusing to protect the supply circuit.
- E. Coded connections for radio equipment shall have a ground wire and the attachment plugs shall have a "U" slot ground to provide a continuous ground from equipment to distribution panel.
- F. Radio equipment shall have its own surge protection.

7. Safety and Insurance

Personnel will be adequately trained in safety procedures for working at a radio/microwave facility or properly supervised if in training. Any person involved in climbing towers must have current safety certification from an OSHA-approved organization. On the job training is not adequate instruction. Documentation will be provided to the site manager upon request.

Any company or organization doing work on site must, before beginning work, provide the site manager with proof of liability insurance of 2 million dollars aggregate and 1 million per occurrence.