Appendix D

Communication Facilities Plan

Pacific Connector GAS PIPELINE

Pacific Connector Gas Pipeline, LP

Communication Facilities Plan

Pacific Connector Gas Pipeline Project

January 2018

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1.0 INTRODUCTION

The purpose of this plan is to describe the construction, modification, operation and maintenance of communication facilities necessary for the operation of the Pacific Connector Gas Pipeline Project (Pipeline or Pipeline Project) proposed by Pacific Connector Gas Pipeline, LP (PCGP) on federal lands managed by the Bureau of Land Management (BLM) and the US Forest Service (USFS). The communication facilities are necessary to enable communications between facilities constructed in conjunction with the Pipeline Project and the PCGP gas control center. PCGP will utilize space on existing towers whenever possible. If, at the time of pipeline construction, existing building and/or tower space is not available or suitable, PCGP will construct new facilities (buildings/towers) at previously developed sites as described in this document.

2.0 PURPOSE

Each of the meter stations, automated block valves, and the compressor station included as part of the Pipeline Project will require a communications link with the PCGP gas control monitoring system. Therefore, radio antennas and towers will be required at each meter station, automated block valves, and the compressor station, and on existing mountain top radio communication sites as required to create a communication link with the gas control monitoring system.

PCGP proposes to install a microwave data system and a mobile radio system. The microwave system will be used to convey operational data to the gas control center. The mobile system will be used for private mobile radio communication during the construction and operational phases of the project. PCGP intends to use a microwave radio in the lower 6 GHz range for the primary microwave system and a Motorola iDen system operating in either the 700 MHz or 900 MHz range. PCGP will use licensed, as opposed to spread spectrum radios. As part of the FCC requirements for both communication systems, a frequency and interference study will be completed before any license is granted. This is done to protect those who utilize the radio spectrum in the area.

Antennas will be located at line of site locations roughly following the PCGP alignment to communicate with the gas control monitoring system. Each of these antennas will transmit and receive radio signals. Each radio site will require a tower with antennas and an equipment building. All communication facilities will be located within a perimeter fence. Attachment 1 illustrates the communications path proposed by PCGP.

PCGP has conducted initial communications studies and determined that in addition to the seven proposed towers that will be installed at the meter station, automated block valves, and compressor station, eight additional mountain top communication facilities will be needed for the Pipeline Project. Six of these sites are located on federal lands and will be described within this document (see Table 1). PCGP prefers to co-locate with existing tower facilities when possible, and will do so if leased space is available on existing tower facility sites at the time of construction. If leased space is not available or suitable, PCGP will apply to authorize and construct the necessary facilities in accordance with Communication Site Management Plans, as appropriate. If the construction of new towers is required, PCGP will seek to obtain an approximate 100 foot by 100 foot (0.23 acre) area for each of the new facility installations. The new tower and communications building will be enclosed within a 50 foot by 50 foot (0.06 acre) fenced area located within the larger 100 foot by 100 foot parcel. Attachment 2 shows a typical plot plan for a PCGP communications site.

3.0 FACILITY LOCATIONS

Each of the facility locations on federal lands comprising the proposed communication system required for the PCGP Project are described in the following sections. Table 1 summarizes facility names and locations and provides existing tower and desired antenna heights.

Table 1
Communication Tower Locations on Federal Land

Site Name	Location							Existing Tower Height (feet)	Tower Height [3] (feet)	Jurisdiction
	Latitude			Longitude			County			
Proposed New Towers within Proposed Aboveground Facility Sites										
ABVA #4 (Deep Creek Spur) [1]	43	3	2.6	123	42.	57.01	Douglas	N/A	40	BLM
Existing Communication Tower Sites (space to be leased or new tower installed)										
Blue Ridge	43	16	16	124	5	9	Coos	161	160	BLM[2]
Signal Tree (Kenyon Mtn.)	43	0	7.4	123	46	44.3	Coos	110	125	BLM[2]
Flounce Rock	42	43	40.4	122	36	33.1	Jackson	165	140	BLM[2]
Robinson Butte	42	21	51.4	122	22	54.1	Jackson	80	125	Forest Service[2]
Stukel Mountain	42	5	46.0	121	38	1.0	Klamath	120	100	BLM[2]

[1] Communication facilities are included in the fenced facility (disturbed areas) associated with the meter station, block valves and compressor station.
[2] New towers and equipment buildings may be necessary at these locations if lease space is unavailable at the time of construction.
[3] Proposed tower heights should new towers be necessary; tower heights would be as proposed or up to the heights allowed by the applicable Communication Site Plan.

3.1 Blue Ridge

Three towers are currently located at the BLM managed Blue Ridge site. One of the towers, owned by American Tower (site # OR 53667) has space available and is suitable for co-location. This tower is 161 feet in height and is of heavy construction with ladders on four faces (see Photo 1). PCGP has been in communication with American Tower who has indicated a willingness to discuss co-location. American Tower has indicated that some of the existing antennas may be removed, if required, to accommodate PCGP's required lease space. PCGP proposes to locate three additional antennas on the tower, one located at 105 feet and two at 145 feet. Tree height surrounding the tower site is approximately 90 to 100 feet.

The American Tower tower is located within a fenced area measuring approximately 97 feet in length and tapering from 70 feet to 53 feet in width. An equipment building is also currently located within the fenced area at this site. American Tower has indicated PCGP may potentially co-locate communications equipment within the existing building or construct a separate building within the existing fenced area. American Tower will not allow the construction of an additional tower within the fenced area. Access to this site is on existing paved and gravel roads which are listed in Table 2 in section 5.1.

It is the intention of PCGP to co-locate antennas on the existing American Tower tower and construct a separate equipment building within the existing fenced area. If space is no longer available at the time of construction, PCGP will seek to construct a new tower and communications equipment building within the Blue Ridge area zoned for communication facilities and administered by the BLM adjacent to the existing tower sites. Although co-location is preferred by PCGP, permits for the construction of a new facility will be filed as contingency.

A preliminary site plan illustrating the location of a potential facility is included in Attachment 3. An elevation drawing showing antenna heights and configuration is included in Attachment 5.

Photo 1. American Tower Site at Blue Ridge

3.2 Signal Tree (Kenyon Mtn.)

The Signal Tree (Kenyon Mtn.) site is located on BLM land and is populated by a number of facilities with multiple operators. American Tower owns a 71 foot tower with four parabolic antennas (site #OR 42214) at this location. PCGP has discussed the possibility of co-location at this site with American Tower, who has expressed a willingness to work with PCGP. PCGP proposes to locate six antennas at this site, at heights up to 110 feet. American Tower has indicated the existing tower may be modified or replaced to meet the needs of PCGP. The American Tower site is depicted in Photo 2.

The American Tower site at Signal Tree (Kenyon Mtn.) is contained within a fenced area measuring approximately 93 feet in length and 55 feet in width. American Tower has indicated PCGP may co-locate equipment within the existing communications building or construct a separate building within the existing fenced area. Access to this site is indicated in Table 2.

It is the intent of PCGP to co-locate the necessary antennas on the existing tower managed by American Tower and construct a separate communications equipment building within the existing site. An elevation drawing showing antenna heights and configuration is included in Attachment 5. PCGP will permit new facility construction at this location. If at the time of construction, tower space is not available on the new American Tower or the existing American Tower facility may not be modified/replaced to meet necessary antenna heights, PCGP will seek to construct a new tower and communications equipment building within the Signal Tree

(Kenyon Mtn.) area zoned for communication facilities and administered by the BLM adjacent to the existing tower sites. A preliminary site plan illustrating the location of the facility is included in Attachment 3.

Photo 2. American Tower Site at Signal Tree (Kenyon Mtn.)

3.3 Flounce Rock

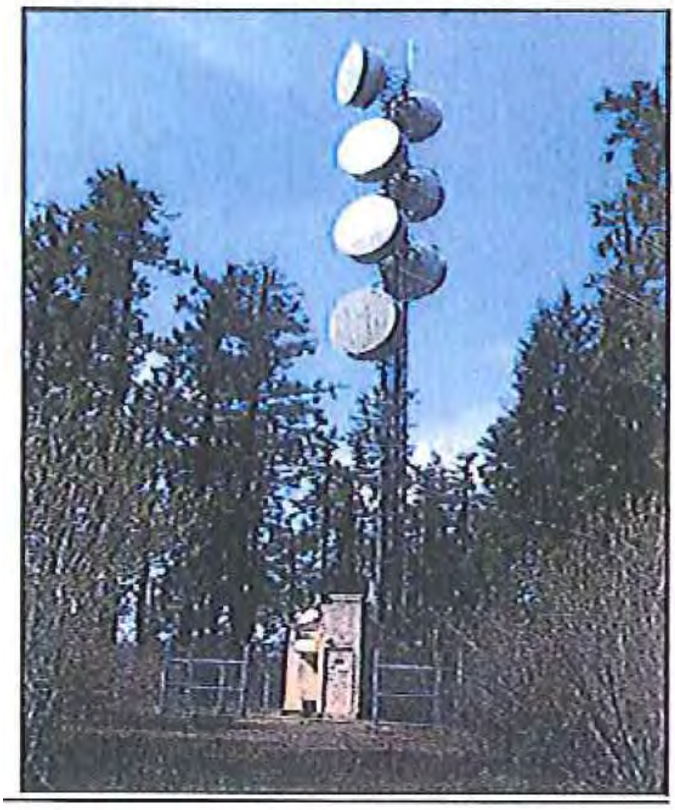
The Flounce Rock site is located on BLM land and is occupied by eight authorized users. Users at the Flounce Rock site include US Cellular, AT&T, PacifiCorp, the Army Corps of Engineers, Telava Wireless and several others. PCGP proposes to locate five parabolic antennas at this location, at potential heights of 30, 70, 110 and 135 feet. PCGP has investigated the possibility of co-location on two potentially suitable towers. One tower is owned by Telava and one tower is shared by US Cellular/AT&T. US Cellular/AT&T is not amenable to collocation and the tower is shorter than desired. The Telava tower is a 165 foot guyed tower and is more likely capable of supporting the additional proposed antenna load. Telava has expressed an interest in discussing co-location with PCGP, however the tower is currently occupied such that PCGP's antennas cannot be accommodated. Further analysis to determine if future use of the tower will allow co-location will be completed during the detailed design phase of the project. Photo 3 shows the Telava site.

Co-location of communication equipment within an existing building is not available at the Telava site. If PCGP is able to utilize the Telava site, PCGP proposes to construct a small building to house the necessary communications equipment. Access to this site is on gravel and dirt roads as indicated in Table 2.

If co-location is not an option, PCGP will construct a new communications facility on BLM land at the Flounce Rock location including a new 140 foot tower and communications equipment

building. An elevation drawing showing antenna heights and configuration is included in Attachment 5. Space is presently available to construct a new facility. PCGP will request new construction as a contingency for the event that co-location is not a possibility. A preliminary site plan illustrating the location of a potential new facility is included in Attachment 3.

Photo 3. Telava Site at Flounce Rock



3.4 Robinson Butte

The Robinson Butte site is located on USFS land and is occupied by two towers. One tower is owned by the USFS and the other is owned by AT&T. The USFS tower is used by the USFS and US Cellular (see Photo 5). This tower is constructed of wood members and has an enclosed lookout at the top. This tower is not useable by PCGP. The AT&T tower is used by AT&T and the State of Oregon Department of Transportation (see Photo 4). This tower is 80 feet in height and is fitted with a platform and omni antennas,

PCGP has been in conversation with AT&T regarding potential collocation of equipment and antennas on AT&T's existing facilities. Following review of the facilities and the surrounding environment, it was determined the AT&T site is inadequate to accommodate the necessary PCGP communications equipment. The AT&T tower was deemed inadequate for the following reasons: The existing tree height in the immediate vicinity prohibits the use of this tower because the tower is only 80 feet in height and the surrounding trees are 80 – 100 feet tall. The implementation of "Space Diversity" is necessary at this site for proper antenna performance and requires a minimal vertical separation between antennas of approximately 30 feet. Therefore, the tower would have to be at least 125 feet tall to achieve any line-of-sight between adjacent antennas. Finally, the existing structure is not capable of supporting the increased wind load produced by the additional antennas.

Photo 4. AT&T Tower at Robinson Butte

Photo 5. USFS Tower at Robinson Butte

PCGP proposes to construct a new 125 foot tower supporting four antennas at heights of 85 and 125 feet and a separate communications building at the Robinson Butte site. Both AT&T and US Cellular have expressed interest in working with PCGP to develop a new shared facility. The new facility would include a communication building large enough to accommodate multiple parties and house the emergency power requirements of such a facility. An elevation drawing showing antenna heights and configuration is included in Attachment 5.

The current USFS site plan allows only an 80 foot tower. PCGP recognizes the height restriction and also recognizes that a variance must be applied for and will work with the Forest Service to achieve the best possible solution. PCGP plans on filing an application for a variance to the existing Site Management Plan.

PCGP will complete the Communication Site Plan checklist and USDA Forest Service Technical Data Communication Type Land Use application (included as Attachment 4) when requesting authorization to use the site.

The addition of the new facility would require the local power company to size the existing transformer serving the area. If the existing utility provider determined the size of the transformer was adequate there would be no modification to the existing system. However, if the transformer is inadequate, then modification to the transformer would be required. In either case, a new electrical conduit, ground well, and meter base would be installed in conjunction with the new facilities.

PCGP is aware of the use of the site for wildfire detection and will work with the Forest Service to avoid detrimental impacts to the viewshed. The preliminary location of the proposed tower is southwest of the existing FS lookout tower and would not obstruct the view shed of Mount McLaughlin or Brown Mountain. A site visit conducted with representatives of PCGP and the USFS concluded additional space is available at this location, and PCGP has begun discussing plans for a new facility with the USFS. A preliminary site plan illustrating the potential location of a facility is included in Attachment 3. Access to this location is on dirt roads listed in Table 2.

3.5 Stukel Mountain

The Stukel Mountain site is located on a narrow ridge occupied by numerous users. The tower owned by the California-Oregon Broadcasting Company is approximately 120 feet in height and appears to be potentially suitable for co-location. However, the beam path from this tower is obstructed by other facilities and is not useable by PCGP. No additional facilities at this site are suitable for co-location. PCGP will need to locate three antennas, two at a minimum height of 40 feet and one at 80 feet at this site. Access to this site is described in Table 2. The Stukel Mountain communications site is shown in Photo 6.

PCGP proposes to construct a new communications facility including a 100 foot tower and equipment building on BLM land adjacent to the existing towers. An elevation drawing showing antenna heights and configuration is included in Attachment 5. A suitable plot of land is available to the south of the California-Oregon Broadcasting Company tower. PCGP has contacted the BLM regarding this site. Although the BLM prefers co-location, they will accept an application for a new site. A preliminary site plan illustrating the location of a potential facility is included in Attachment 3.

Photo 6. California-Oregon Broadcasting Company Tower at Stukel Mountain

4.0 PERMIT PROCESS

4.1 Permit Schedule

PCGP will submit all required permit applications in advance such that permits will be available prior to the commencement of tower and communication building construction.

4.2 Site Plans

PCGP will work with the land managing agencies to ensure facility use and construction is compatible with the applicable Communications Site Management Plan. If necessary, PCGP will seek evaluation and amendment or variance if a proposed use is not compatible with an existing Site Management Plan. A Site Management Plan does not currently exist for the Stukel Mountain site.

4.3 Authorization

Communication facilities will be authorized following existing federal regulations. Authorization of communication towers owned by a third party and leased by PCGP will be managed by the tower owner. PCGP will negotiate use with the lease holder. New towers to be constructed and managed by PCGP will be permitted as an exclusive use under the ROW Grant. All new communications buildings will be permitted as ancillary facilities under the ROW Grant.

5.0 CONSTRUCTION CONSIDERATIONS

5.1 Design Criteria

All tower construction or modification will be permitted and completed in accordance with applicable industry and regulatory codes and standards, including building, electrical, Federal Communications Commission and Federal Aviation Authority permits as required.

All proposed facilities are located at existing developed communication sites and will be accessed using existing roads. Individual roads proposed for use during construction are listed in Table 2 below. Additional information including vehicle types and estimated trips are included in the Transportation Management Plan found in Appendix Y of the Plan of Development.

Table 2
Access Roads to Communication Sites

Location	Road Name	Road Use	Surface	Ingress/ Egress [5]
Blue Ridge	Blue Ridge System Road (BLM 26-12-35.5)	Access only	Gravel	All
	Blue Ridge System Road (BLM 26-12-35.1)	Access only	Gravel	All
	Blue Ridge System Road (BLM 26-12-35)	Access only	Gravel	All
	Blue Ridge Road (BLM 26-12-4.2)	Access only	Paved	All
SignalTree (Kenyon Mtn.)	Signal Tree Lookout (BLM 29-9-33.4)	Access only	Gravel	All
	Lower Signal Tree (BLM 29-9-36)	Access only	Paved	All
Flounce Rock	Flounce Rock (BLM 32-2E-34)	Access only	Gravel	All
Robinson Butte	FS Road 3730050	Access only	Gravel	All
Stukel Mountain	(BLM 40-10E-05, 40-10E-03 and 40-10E-10)	Access only	Gravel	All

5.2 Equipment

Retrofit of existing towers or installation of antennas on existing towers may involve the use of rubber tired cranes, light construction equipment and miscellaneous support and personnel vehicles.

Construction of new towers will require some earthwork and may involve the use of earth moving equipment, including bulldozers, trackhoes or backhoes, cranes, additional light construction equipment, support and personnel vehicles, and possibly helicopters.

All new building installations will require earthwork and light building construction. This will likely involve the use of bulldozers, trackhoes or backhoes and well as other light construction and support vehicles.

5.3 Schedule

Construction duration at each site is estimated to last approximately 12 weeks for the construction of a new tower and communications building and nine weeks if an existing tower is used but a new building is constructed. If an existing tower and building are used, activity may be completed within four weeks.

6.0 OPERATIONAL CONSIDERATIONS

Following construction completion, PCGP will access the communication sites only for routine maintenance or equipment modification. It is anticipated that this will occur a minimum of two times per year for inspections. In addition, sites may be accessed at any time in response to equipment failure or other emergency situations. All access will be on existing roads.

7.0 ENVIRONMENTAL CONSIDERATIONS

PCGP will complete all requisite species and cultural resource surveys prior to commencement of construction of the PCGP Project. PCGP will attempt to preserve trees and avoid felling, limbing, or topping trees whenever practicable. PCGP will also ensure the following Plans of Development are followed during modification and/or construction of the communication facilities:

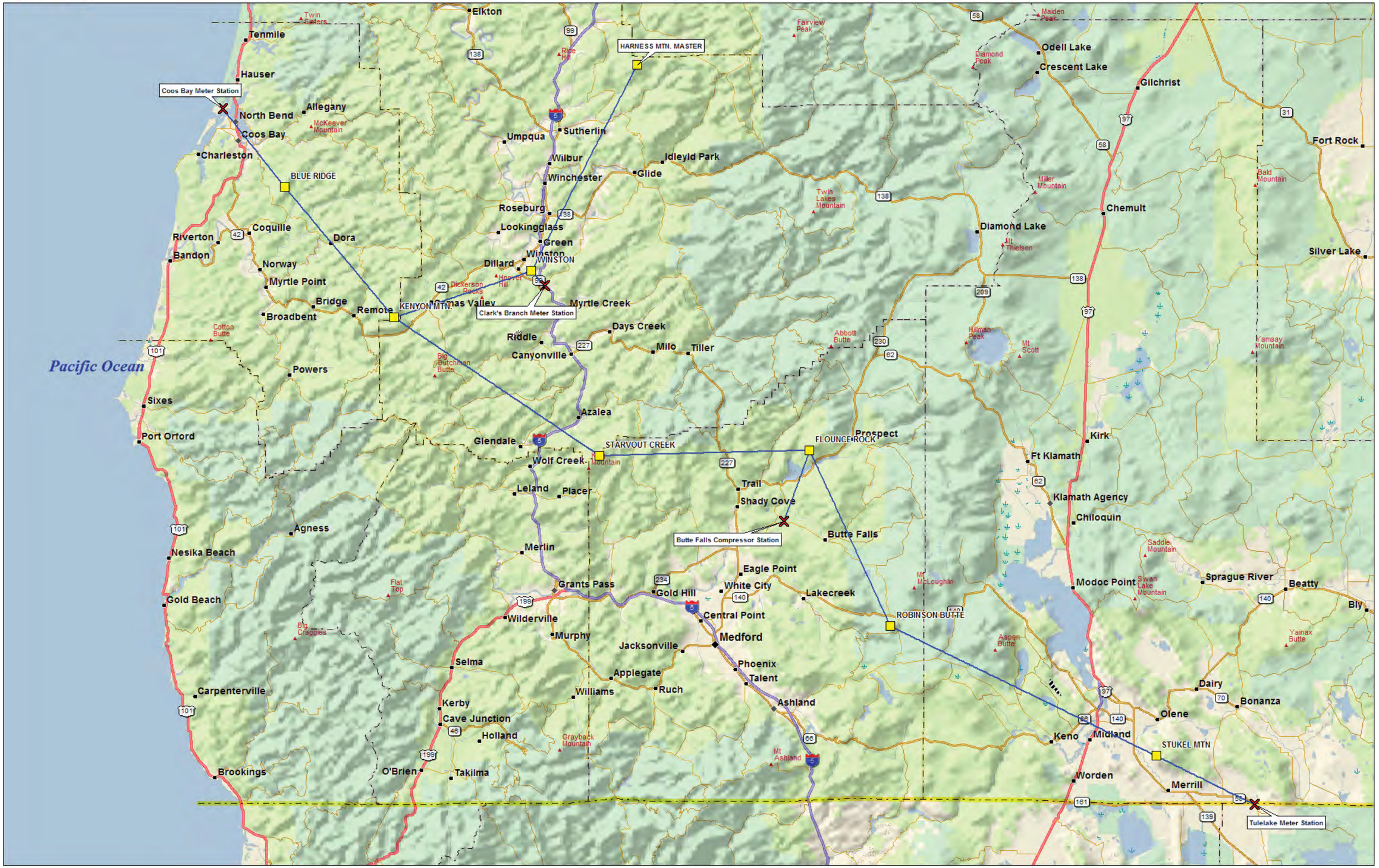
- Air/Noise and Fugitive Dust Control Plan
- Erosion Control and Revegetation Plan
- Fire Prevention and Suppression Plan
- Integrated Pest Management Plan
- Leave Tree Protection Plan
- Right-of-Way Marking Plan
- Right-of-way Clearing Plan
- Safety and Security Plan
- Sanitation and Waste Disposal Management Plan
- Spill Prevention, Containment, and Countermeasures Plan
- Transportation Management Plan
- Unanticipated Discovery Plan

ATTACHMENT 1

PCGP Communications Path

DeLORME

XMap® 4.5



LEGEND

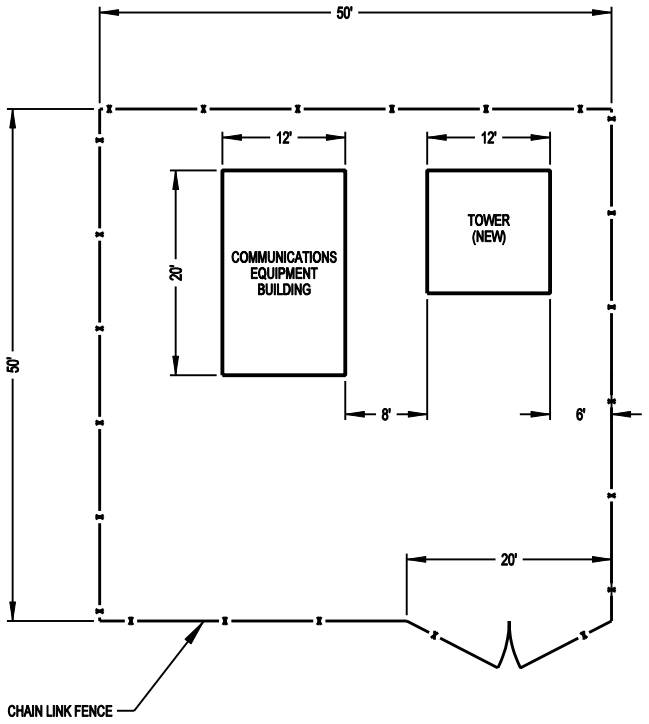
- Existing communication site
- X Proposed communication site

MN (16.1° E)

Pacific Connector GAS PIPELINE COMMUNICATIONS

ATTACHMENT 2

Typical PCGP Communications Facility Plot Plan



DRAWING NO.	REFERENCE TITLE

PACIFIC CONNECTOR GAS PIPELINE PROJECT
PACIFIC CONNECTOR GAS PIPELINE, LP
36" PACIFIC CONNECTOR GAS PIPELINE
COMMUNICATIONS TOWER STANDARD

Pacific Connector GAS PIPELINE

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.

DRAWN BY: JCP	DATE: 4-27-2010	ISSUED FOR BID:	SCALE: NONE
CHECKED BY:	DATE:	ISSUED FOR CONSTRUCTION:	
APPROVED BY:	DATE:	DRAWING NUMBER: COMMS TOWER STANDARD	SHEET 1
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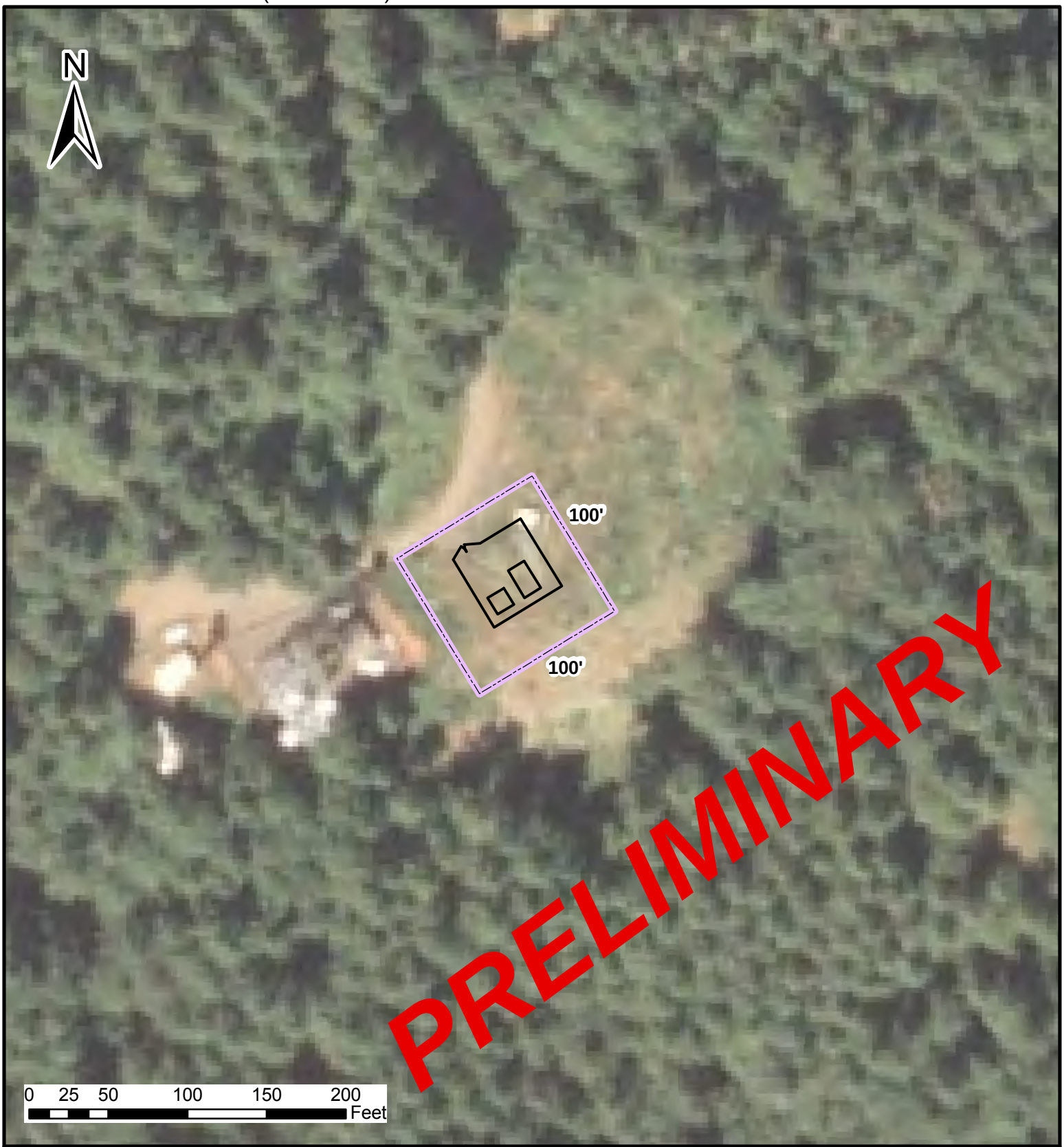
ATTACHMENT 3

Preliminary Location Maps for Potential New Tower Construction



DRAWING NO.	REFERENCE TITLE

PACIFIC CONNECTOR GAS PIPELINE PROJECT
PACIFIC CONNECTOR GAS PIPELINE, LP
36" PACIFIC CONNECTOR GAS PIPELINE
BLUE RIDGE COMMS TOWER
S-35, T-26-S, R-12-W
COOS COUNTY, OREGON

Pacific Connector GAS PIPELINE

NO.	DATE	BY	REVISION NUMBER	W.O. NO.	CHK.	APP.

DWG. BY: JCP	DATE: 4-26-2010	ISSUED FOR BID:	SCALE: AS NOTED
CHK BY:	DATE:	ISSUED FOR CONTS:	
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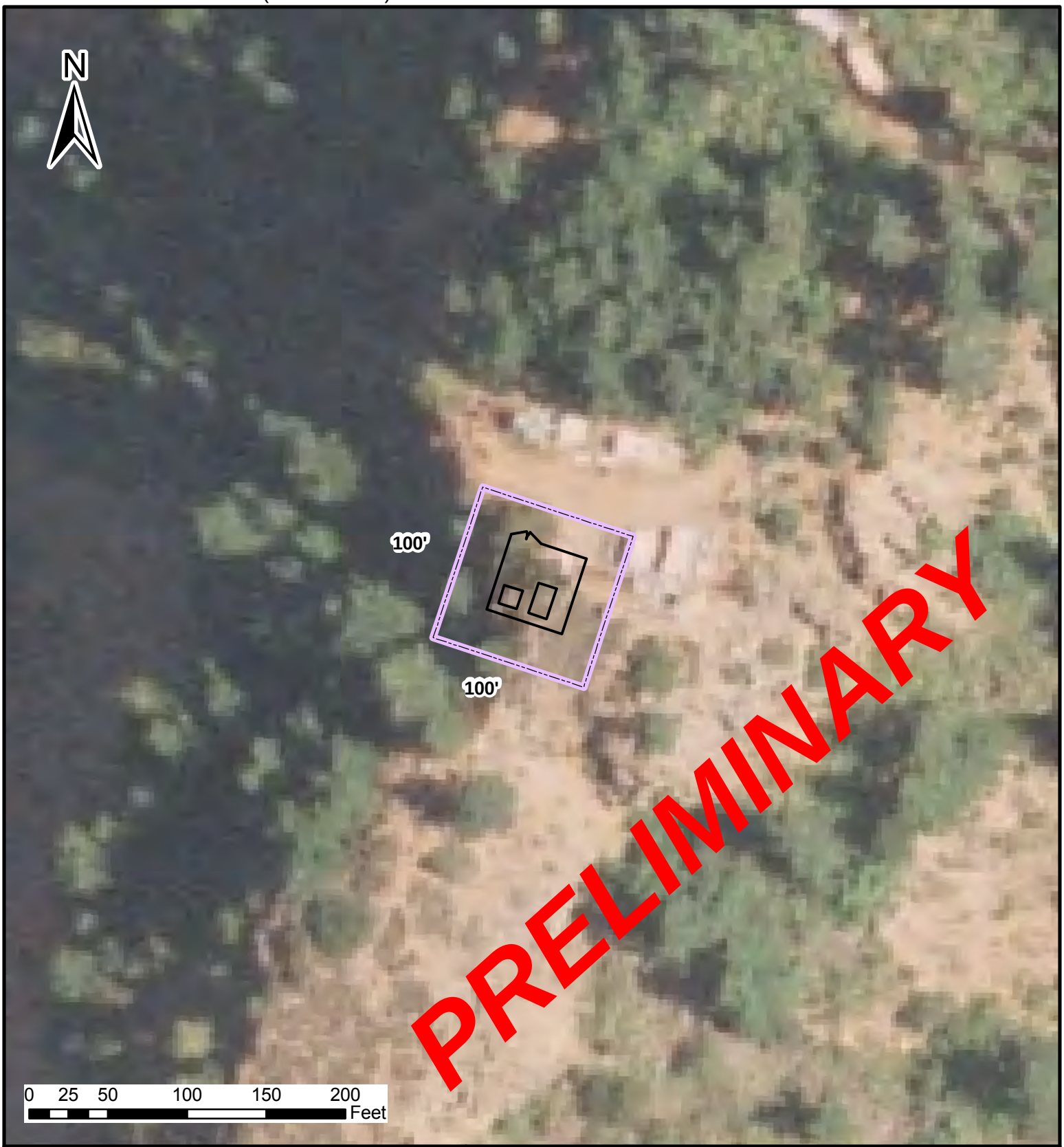

DRAWING NO.	REFERENCE TITLE

PACIFIC CONNECTOR GAS PIPELINE PROJECT
PACIFIC CONNECTOR GAS PIPELINE, LP
36" PACIFIC CONNECTOR GAS PIPELINE
FLOUNCE ROCK COMMS TOWER
S-05, T-33-S, R-02-E
JACKSON COUNTY, OREGON

Pacific Connector GAS PIPELINE

NO.	DATE	BY	REVISION NUMBER	W.O. NO.	CHK.	APP.

DWG. BY: JCP	DATE: 4-26-2010	ISSUED FOR BID:	SCALE: AS NOTED
CHK BY:	DATE:	ISSUED FOR CONTS:	
APPR. BY:	DATE:	DRAWING NUMBER: Flounce Rock	SHEET 1
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DRAWING NO.	REFERENCE TITLE

PACIFIC CONNECTOR GAS PIPELINE PROJECT
PACIFIC CONNECTOR GAS PIPELINE, LP
36" PACIFIC CONNECTOR GAS PIPELINE
KENYON MOUNTAIN COMMS TOWER
S-33, T-29-S, R-09-W
COOS COUNTY, OREGON

Pacific Connector GAS PIPELINE

NO.	DATE	BY	REVISION NUMBER	W.O. NO.	CHK.	APP.

DWG. BY: JCP	DATE: 4-26-2010	ISSUED FOR BID:	SCALE: AS NOTED
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DRAWING NO.	REFERENCE TITLE

PACIFIC CONNECTOR GAS PIPELINE PROJECT
PACIFIC CONNECTOR GAS PIPELINE, LP
36" PACIFIC CONNECTOR GAS PIPELINE
ROBINSON BUTTE COMMS TOWER
S-08, T-37-S, R-04-E
JACKSON COUNTY, OREGON

Pacific Connector GAS PIPELINE

NO.	DATE	BY	REVISION NUMBER	W.O. NO.	CHK.	APP.

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DRAWING NO.	REFERENCE TITLE

PACIFIC CONNECTOR GAS PIPELINE PROJECT
PACIFIC CONNECTOR GAS PIPELINE, LP
36" PACIFIC CONNECTOR GAS PIPELINE
STUKEL MOUNTAIN COMMS TOWER
S-15, T-40-S, R-10-E
KLAMATH COUNTY, OREGON

Pacific Connector GAS PIPELINE

NO.	DATE	BY	REVISION NUMBER	W.O. NO.	CHK.	APP.

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APPR. BY:	DATE:	DRAWING NUMBER: STUKEL MOUNTAIN	SHEET 1
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ATTACHMENT 4

USFS Communications Site Plan Guide and Technical Data
Communication Type Land Use Application

COMMUNICATION SITE PLAN OF DEVELOPMENT

HO#3

1. Purpose and Need of the Facilities
    a. what will be built
    b. what is use
    c. what is size
    d. can it be housed within an existing site as a sublease
    e. can it be constructed to allow for future expansion and permit subleasing of the facility
    f. can it accommodate government agencies as sublessee
    g. is this ancillary to an existing right-of-way
    h. list alternative routes or locations

2. Right-of-way Location
    a. legal description of the facility
    b. maps
    c. drawings of typical tower installation, shelters, and guy wire configuration
    b. engineering design drawings and/or standards for roads, drainage, and power lines

3. Facility Design Factors
    a. design factors to be considered include wind loads, type and color of structures, wiring standards, suitability of soils and geology for placement of the facility
    b. technical data information
    c. list temporary use areas that are needed
    d. required associated rights-of-way, including access roads, power lines
    e. length, width, acreage of right-of-way
    f. compatibility with other users
    g. potential conflicts with other communication modes (i.e., mixing high power continuous with low power intermittent operations, obstructions between microwave towers, etc.)
    h. required associated rights-of-way including access roads, power lines, material sites

4. Additional Components
    a. list existing components on and off public land
    b. list possible future components on and off public land
    c. location of equipment storage areas

5. Government Agencies Involved
    a. Federal Communication Commission
    b. state and local agencies

6. Construction of the Facilities
    a. will a helicopter be required
        1) if so designate the flight routes on a map
    b. will temporary access be required
    c. will the site be fenced after construction
    d. construction (brief description)
        1) major facilities (including vehicles and number of tons and loads)
        2) ancillary facilities (including vehicles and number of tons and loads)
    e. work force (number of people and vehicles)
    f. flagging or staking the right-of-way
    e. clearing and grading
    f. facility construction data
        1) description of construction process
    g. access to and along right-of-way during construction
    h. contingency planning
        1) holder contacts
        2) BLM contacts
    i. safety requirements
    j. industrial wastes and toxic substances

7. Resource Values and Environmental Concerns
    a. address at level commensurate with anticipated impacts
        1) location with regard to designated corridors
    b. anticipated conflicts with resources or public health and safety
        1) air, noise, geologic hazards, mineral and energy resources, paleontological resources, soils, water, vegetation, wildlife, threatened and endangered species, cultural resources, visual resources, BLM projects, recreation activities, wilderness, etc.

8. Stabilization and Rehabilitation
    a. soil replacement and stabilization
    b. disposal of vegetation removed during construction (i.e., trees, shrubs, etc.)
    c. seeding specifications
    d. fertilizer
    e. limiting access to right-of-way

9. Operation and Maintenance
    a. will all-weather roads be required
    b. will operational access to the site require a helicopter
    a. safety
    b. industrial wastes and toxic substances
    c. inspection and maintenance schedules
    d. work schedules
    e. fire control
    f. long term access
    g. signs
    h. inspections
    i. contingency planning

10. Termination and Restoration
    a. removal of structures
    b. obliteration of roads, building sites, antenna sites
    c. stabilization and re-vegetation of disturbed areas

USDA Forest Service

FS-2700-10 (11/07)
OMB No. 0596-0082

USDA Forest Service
Technical Data
Communication
Type Land Use
(Ref. FSM 2700)

INSTRUCTIONS: Applicant completes system items 1 to 16, and submit this form, license(s), along with an application to place communication equipment on National Forest System land. This form is authorized by Federal Land Policy and Management Act of 1976, P. L. 94-579 to evaluate the requested use and no authorization may be issued unless this form is completed.

1. Applicants's Name: _____

   Street Address: _____

   City State & Zip Ccde: _____

   Telephone Number: ( ) -

2. Location Applied For:

   Site Name: _____ Forest: _____ District: _____

3. Technical Data:

a. License number and call sign	
b. Date license issued	(mm/dd/yyyy)
c. FCC/NTIA eligibility	
d. Class of service (FCC/NTIA symbol)	
e. Type of emission (FCC/NTIA symbol)	
f. Transmit output power (watts)	
g. Transmit output (Effective Radiated Power)	
h. CTCSS control tone (Hz)	
i. Receive frequency crystal	
j. Receiver IF frequency 1	
frequency 2	
k. Receive frequency	
l. Transmit frequency crystal	
Multi 1	
Multi 2	
Multi 3	
Multi 4	
Output	

4. Control Method:
   Wireline ☐ Radio Link ☐ Local ☐
   Repeater ☐ Microwave ☐ Other ☐

5. Control Frequency _____

6. Antenna Type:
   Omnidirectional ☐ Directional ☐ Polarization ☐ Gain _____ dB
   Height to top of antenna from ground level _____ ft.; Dish Diameter _____ ft.
   Beam path with _____ deg.; Azimuth _____ deg.; Tilt _____ +/- deg.;
   Name of place beam goes to: _____ Beam path length _____ ft.

7. Tower Type: Pole – Guyed ☐ Self-Supporting ☐ Height _____ ft.
   Metal – Guyed ☐ Self-Supporting ☐ Height _____ ft.

8. Ground elevation above sea level at the base of the tower _____ ft.

9. Tower: Latitude: _____ Longitude _____

10. Chief Engineer or Service company: _____
    Street Address: _____
    City _____ State _____ Zip Code _____
    Phone Number ( ) - Emergency Number ( ) -

11. Will station have commercial power? Yes ☐ No ☐

12. Will station have standby power plant? Yes ☐ No ☐

13. Will station have commercial telephone? Yes ☐ No ☐

Area code and Phone number (_____) _____-_____

14. Attached *(check appropriate block(s))* :

☐ Current FCC License/NTIA Radio Frequency Authorization
☐ FCC License Application
☐ FCC Construction Permit with Land Owner (FS) sign-off

15. Additional Information:

NOTICE: Title 18, U.S.C. Section 1001, makes it a crime for any person to knowingly and willfully make any false, fictitious, or fraudulent statements or representations to matters under the jurisdiction of the United States Government.

16. Applicant's Signature: _____ Title: _____ Date: _____ (m/dd/yyyy)

Department of the Interior
Bureau of Land Management

BLUE RIDGE COMMUNICATIONS SITE MANAGEMENT PLAN

Prepared by the United States Bureau of Land Management
Coos Bay District Office
State of Oregon

Approved by: _____ _____
Field Manager **Date**

4/27/12

BLUE RIDGE COMMUNICATIONS SITE PLAN

I. INTRODUCTION

Demand for new communication sites continues to be active in the United States including carrier requests to locate cellular facilities on public lands in the western states. This demand is due to advances in communication technology, strong consumer interest, and a 1983 Federal Communication Commission (FCC) decree establishing wireless carrier coverage requirements.

Blue Ridge is an established communication site with characteristics desired by government agencies, wireless carriers, microwave relay, and other communication providers. The communication site is approximately 15 miles inland from the Pacific Ocean and four miles north of Fairview.

This Communication Site Management Plan has been developed to document and evaluate the existing communication site and facilities located on Blue Ridge. The plan also provides an outline for orderly future development of the site in conformance with the Coos Bay District Office's current land use planning document, the Coos Bay Resource Management Plan (RMP). When the current RMP is reviewed and revised, a clearly defined boundary of the communication site area will be delineated to facilitate efficient site operations and maintenance.

Current BLM program guidance for resource management planning specifies that every planning document shall contain determinations relevant to communication sites. The Coos Bay RMP, approved in 1995 addresses this land use under General Objectives Chapter 2-88 and on Map 2-11. Therefore, in order to supplement the land use planning document, this site management plan has been prepared to address specific issues encountered on Blue Ridge.

Approved lessees or right-of-way (ROW) holders with facilities currently located on Blue Ridge are shown in the Users' Table, Appendix B. Additional tenants or customers may be accommodated within the confines of existing authorized communication facilities as long as such additions are in compliance with the terms and conditions of authorized leases or ROW grants and with the supplemental direction contained in this site plan. Requests for new communication site facilities may be authorized at the discretion of the Bureau of Land Management (BLM) Authorized Officer through the issuance of new Communications Use Leases, or in some cases, by the issuance of additional ROW grants.

This site plan will be incorporated into all future new leases issued for the Blue Ridge Communication Site. This plan will also be included as a part of all existing leases and renewed leases or ROW grants as the terms of those authorizations allow. Provisions of the site plan are enforced through the terms and conditions of the ROW or lease authorization. Each lessee is expected to incorporate mandatory BLM lease and site plan requirements into any subsequent agreements with the lessee's tenants and customers. The lessee is also responsible for enforcement of said requirements involving the lessee's tenants and customers.

A. Terms and Definitions

The terms used in this communications site management plan conform to the definitions listed in the April 22, 2005, Federal Register notice "Rights-of-Way, Principles and Procedures: Rights-of-Way under the Federal Land Policy and Management Act and the Mineral Leasing Act", with further clarification provided in BLM Handbook 2860-1 and the United States Code of Federal Regulations (CFR) 43 CFR 2800. In the event of a conflict, between the plan and these sources, the Federal Register notice and the BLM Handbook will govern.

The words "lease" and "lessee" as used in this plan refer to the relationship between the BLM and the communications use lease lessee, or ROW holder. The words "customer" and "tenant" refer to the relationship between the lessee or holder and the occupants in the lessee's facilities.

LEASE OR ROW – A use authorization issued to a communication Facility Owner or Facility Manager allowing for the use of public land to construct and or operate a communications facility and, unless specifically prohibited, to sublease to occupants in that facility.

LESSEE, LEASE HOLDER, OR ROW HOLDER – A Facility Owner or Facility Manager

CUSTOMER – A facility occupant who is paying a facility manager, facility owner, or tenant for using all or any part of the space in the facility, or for communication services, and is not selling communication services or broadcasting to others.

TENANT – A facility occupant who is paying a facility manager, facility owner, or other entity for occupying and using all or part of a facility. A tenant operates communication equipment in the facility for profit by broadcasting to others or selling communication services.

COMMUNICATIONS SITE – An area of BLM-managed public land designated through the land and resource management planning process as being used or is suitable for communications uses. A communications site may be limited to a single communications facility, but most often encompasses more than one. Each site is identified by name; usually a local prominent landmark, such as Signal Tree Communications Site.

FACILITY – The building, tower, and related incidental structures or improvements authorized under the terms of the grant or lease.

FACILITY MANAGER – The holder of a BLM communications use authorization who leases space for other communication users. A facility manager does not own or operate communications equipment in the facility for personal or commercial purposes.

FACILITY OWNER – Individuals, commercial entities, organizations, or agencies, that own a communications facility on Federal land; own and operate their own communications equipment; and hold a communications use authorization. Facility owners may or may not lease space in the facility to other communications users.

NON-BROADCAST – This category includes Commercial Mobile Radio Service (CMRS), Facility Managers, Cellular Telephone, Private Mobile Radio Service (PMRS), Microwave, Local Exchange Network, and Passive Reflector.

BROADCAST – This category includes Television Broadcast, AM and FM Radio Broadcast, Cable Television, Broadcast Translator, Low Power Television, and Low Power FM Radio.

RIGHT-OF-WAY (ROW) – The public land authorized to be used or occupied pursuant to a ROW grant.

RIGHT-OF-WAY GRANT – A use authorization issued pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (43 U.S.C. 1701 *et seq.*), or issued on or before October 21, 1976, pursuant to then existing statutory authority, authorizing the use of a ROW over, upon, under or through public land for construction, operation, maintenance and termination of a project.

HOLDER – Any applicant who has received a ROW grant, lease or temporary use permit.

USERS – All ROW and lease holders, lessees, customers, and tenants that own or operate a facility or communication equipment at the communication site.

SENIOR USE – Any use whose implementation date is prior to the implementation date of the use in question.

RANALLY METRO AREA (RMA) – A series of nine population zone areas, the highest of which is greater than 5 million and the lowest being 25,000 or less. These zones are determined annually and published in the Ranally Metro Area Population Ranking, an independent publication from Rand McNally, and are used in rent determination under guidelines established in 43 CFR 2806.

B. Purpose

This plan will be used by Bureau of Land Management officials, administering communications uses at Blue Ridge, existing lessees, holders, and applicants desiring a lease, grant, or an amendment to an existing lease or grant. The plan will be kept updated by amending pages or sections of the plan rather than issuing a revised edition of the plan. When an administrative revision is necessary (such as the addition of a user), a letter will be sent to the holders from the Coos Bay District Office enclosing a copy of revised pages or sections. The amendments will be consecutively numbered. Other proposed revisions to the plan will be circulated to holders for comment prior to implementation.

Overall management direction for the administration of communications sites is outlined in the U.S. Code of Federal Regulations (CFR's) and the BLM Handbook and applicable BLM Instructional Memoranda. Specific direction for site management planning on designated communications sites is contained in BLM Handbook 2860-1. Primary regulations and policy pertaining to issuance of ROW authorizations by the Bureau of Land Management are found in Title 43, Code of Federal Regulations (CFR), Sections 2801- 2808 and BLM Handbook 2860-1.

This Site Management Plan provides applicable guidance and adds current policy and technical standards for better management of the Blue Ridge Communication Site. This plan governs development and management of Blue Ridge and will be modified in the future as needs and conditions warrant. Any future such uses must be designed, installed, operated, and maintained

to be compatible and not interfere with the senior uses as defined in Section A above. This site-specific plan is administrative in nature and is Categorically Excluded from further review under the National Environmental Policy Act (NEPA) in accordance with 516.DM 2, Appendix 1, item 1.10, which states " – Policies, directives, regulations, and guidelines that are of an administrative, financial, legal, technical, or procedural in nature and whose environmental effects are too broad, speculative, or conjectural to lend themselves to meaningful analysis and will later be subject to the NEPA process, either collectively or case-by-case". Any additional development of Blue Ridge will be addressed in a site-specific NEPA document.

C. Site Description

The site is located on Blue Ridge east of Coos Bay, Oregon. The area is managed by the Umpqua Resource Area, Coos Bay District Office and the site is specifically located in portions of Section 35, T. 26 S.., R. 12 W., Willamette Meridian, Coos County, Oregon at approximately 43° 16' 14" North Latitude and 124° 05' 13" West Longitude. The elevation at the Blue Ridge Communications Site is approximately 1600 feet above mean sea level. A site map is provided as Appendix A.

D. Area Served

This site does not serve a Ranally Metro Area, RMA. The population zone served is less than 25,000 (Zone 9). This zone may be adjusted in the future as population change. This information will be used for rental fee determination.

E. Access

Access to Blue Ridge is from Highway 101 in Coos Bay toward Sumner on the Sumner-Fairview Road then east on local roads to the site. All of the access roads are either County or public roads on the BLM.

F. Site History and Development

The Blue Ridge Communication Site was established as a fire lookout in the early 1930's under authorization from the General Land Office. BLM later classified all such sites administered by the State of Oregon state-wide as lookout sites under the Public Works Act of September 3, 1954 (68 Stat 1146). When the state no longer needed Blue Ridge, the lookout was removed and it was later developed as a communication site.

The initial communications facility right-of-way authorization on Blue Ridge was issued for a microwave relay facility to Western Coast Telephone in 1960, which became GTE, then Verizon and is now Frontier Communication under ORORE 006061. The BLM also installed communication facilities, OROR 036189, at this site which upgraded into a newer building and tower. AT&T constructed the third facility for microwave relay. This facility is now managed by American Tower (OROR053667).

The demand for the site appears to be low and the existing facilities seem to be adequate for the foreseeable future.

A list of all authorized facilities as of the date of this plan can be found in Appendix B. Any modifications to existing facilities or proposals for new facilities must be approved by the Coos Bay District Office according to the appropriate NEPA process and guidance described in this document.

G. Goals and Objectives of Site Management Plan

1. Manage the Blue Ridge site for low-power uses including two-way radio, microwave, cellular, and internet service provider (ISP). All uses must be designed, operated and maintained so as not to physically or electronically interfere with the senior uses. The maximum power output expressed as effective radiated power (ERP) for the Blue Ridge Communications Site is based on the maximum output allowed for two-way radio under the FCC's rules at Title 47, Code of Federal Regulations, Part 90. As of the 2003 regulation, that is 500 watts ERP. Each use must operate at or below the power level authorized by their respective FCC license as long as it does not exceed the site limitation. This power limitation does not preclude existing and new uses from being designed, operated and maintained to meet other interference, noise floor, receive sensitivity, or radio frequency radiation (RFR) standards included in this plan. No continuously transmitting uses are authorized at this site, excluding microwave and radio control channels.

2. Manage communication equipment on the Blue Ridge Site to maintain the radio frequency (RF) hazard to be within the Public Standard as defined by the FCC.

3. Systematically develop the site to maximize the number of compatible uses while ensuring safety and protection of resources. Development of new towers or buildings within each of the authorized owner's facilities will be authorized only after their respective tower or building space area is filled to near capacity.

4. Help fulfill the public need for adequate communications sites.

5. Protect the interests of holders, lessees, tenants and customers, by preserving a safe and electronically "clean" environment.

6. Encourage the efficient development and use of space and facilities within the designated site, subject to the BLM's goal to provide the best possible public service at reasonable cost.

7. Achieve visual quality objectives by requiring design standards that are unobtrusive and utilizing earth tone colors and non-reflective surface material and stringent site maintenance requirements.

8. Describe the BLM's policy for authorizing road use and maintenance.

9. Develop new facilities only after the appropriate site-specific NEPA analysis and coordination with current lease or ROW holders and users.

10. Amend the Communications Site Plan as necessary to be consistent with future RMPs. BLM will provide authorization holders with proposed amendments to this plan and will allow a reasonable period of time for the holders to review and comment on the proposed changes.

11. Encourage a Communications Site Users Association for road access, maintenance, and fuel-break maintenance as well as on-site user coordination.

II. AUTHORITY AND DIRECTION

A. Authority

The authority used by BLM to authorize communications uses on public land (administered by the BLM) is the Federal Land Policy and Management Act of 1976, 90 Stat. 2776 (43 U.S. C. 1761-1771) and is reflected in Title 43, Code of Federal Regulations (CFR), Sections 2801- 2808 and various BLM Washington Office Information Bulletins and Instruction Memoranda.

BLM authority for communications site management planning is contained in Bureau of Land Management Handbook 2801-1, Plan of Development. Direction on and policy for, communication use authorizations is contained in Bureau of Land Management Manual (BLM Manual) section 2860.

Authority for the issuance of authorizations and/or licenses for the transmission and reception of electronic radiation for communication purposes is granted by Congress and administered by the Federal Communications Commission (FCC) and/or the National Telecommunication and Information Administration – Interagency Radio Advisory Committee (NTIA/IRAC).

B. Relationship to Communications Site Lease/ROW Grants

This site plan will be incorporated into all leases and grants issued (now and/or in the future) for this communications site and must be used in conjunction with the granting authorization. **PROVISIONS OF THE SITE PLAN ARE ENFORCED THROUGH THE GRANTING AUTHORIZATION (LEASE OR ROW GRANT).** Each lessee or holder is expected to include the requirements of the authorization and this site plan into any documents, which describe the business relationship between the lessee and their tenants or customers. The lessee or holder is responsible for enforcing those provisions.

III. GENERAL RESPONSIBILITIES

A. The Bureau of Land Management

The BLM retains the responsibility for issuing and amending authorizing instruments to Facility Owners and Facility Managers, only for the areas actually occupied by the authorized improvements. The issuance of a FCC license (authorization), or frequency assignment, does not authorize occupancy of public lands. Granting occupancy and use of public lands rests exclusively with the BLM. This includes:

1. Approving any new facility(ies) at the site.

2. Approving amendments to existing facilities (i.e. additions to tower, building, support facilities), and assignments of leases and ROW grants to qualified buyers of facilities on the site.

3. Approving any modifications to existing facilities including the tower, antenna, equipment or building. Also, approving any changes to the existing FCC licenses, prior to the submission of an application to the FCC.

4. Frequency Management. The BLM is not normally responsible for the resolution of conflicts when the licensees or agencies are operating within the limits of the FCC and NTIA/IRAC authorizations.

B. Facility Owners and Facility Managers

Facility owners and facility managers (or their designated representatives) are responsible for:

1. Complying with their use authorization and all provisions of this site plan.
2. Ensuring that all new facilities, expansions, or improvements are consistent with the Coos Bay District Office land use planning documents; any environmental document(s)/decisions for the site; and, this site plan.
3. Ensuring facilities/equipment not complying with Federal/State/local laws/regulations/ ordinances will be removed or modified within one year of the approval of this plan. Any modification needs pre-approval by the BLM.
4. Keeping all facilities within the established limits of their authorized area.
5. Providing the BLM, with the name, address and phone number for a local contact person. The Facility Owner and Facility Manager and the contact person may be the same individual. The contact person will be available for emergencies and will have the authority to make decisions about construction issues, facility maintenance and all equipment within the facility.
6. Providing 30-day notice to all facility owners/facility managers at the site, as well as the BLM, of all new frequencies proposed for the site. A completed BLM technical data sheet or equivalent must be sent with the 30-day notice to allow for comment of potential interference. This notification requirement applies to new frequencies for facility owners/facility managers as well as their tenants and customers.
7. Adhering to the lease/ROW grant as follows:

    a. Facility Owners and Facility Managers with Communications Use Leases are authorized to rent building/tower space to tenants and/or customers without prior written approval from the BLM.

    b. Tenants and/or customers may not construct their own equipment shelter (building, shelter, generator pad, cabinet, etc.) or antenna support structure (tower or mast). The facility owner must own all communication shelters and towers under their lease or grant. [If that is not possible, a separate SF-299 application, cost-recovery fees, analysis, and authorization are required. This will result in the use being a tenant/customer of the

original lease/ROW in addition to being a separate facility for billing purposes. See 43 CFR 2806.37]

c. Tenants and/or customers using a facility covered by a Facility Lease/ROW will not have separate BLM leases/ROWs to authorize their use except in situations where regulations or policy require them

d. Facility Owners and Facility Managers are responsible for complying with the terms and conditions of the facility lease/ROW. Facility Owner/Managers are also responsible for ensuring that their tenants and customers are in compliance with the terms and conditions of the lease/ROW, and applicable FCC or NTIA/IRAC license terms and conditions.

e. The Facility Owner and Facility Manager may not place any unreasonable restrictions nor any restriction restraining competition or trade practices on tenants and/or customers, or potential tenants and/or customers.

8. Ensuring that all new communications facilities and equipment are installed, operated, and maintained according to the Motorola R-56 Standards and Guidelines for Communication Sites. Repairs and modifications to existing facilities/equipment must also meet Motorola R-56 Standards. These standards may be waived by the BLM authorized officer when recommended by a site user association or similar technical committee upon request of a facility owner/manager when equivalent measures would achieve similar results.

9. Ensuring that all communication equipment meets ANSI, FCC and BLM regulations, guidelines and standards concerning radiation limitations by:

   a. Monitoring radiation levels at their facility and;

   b. Immediately correcting any radiation levels that are, or could be a hazard to human health. (FCC 47CFR sections 1.1307(b), 1.1310 and 2.1093) and FCC OET Bulletin 65, August 1997.

10. Providing the BLM with a certified copy of all uses and the correct category of uses within the facility, along with the current phone numbers and addresses of all tenants and customers as of September 30th each year. This report is due by October 15th each year.

11. Keeping the premises around their buildings free of trash and debris.

12. Placing the lease/ROW serial number on the door of their communications site building, or on a gate if a fenced compound.

13. Correcting interference problems. The users are normally responsible for the resolution of conflicts when the licensees or agencies are operating within the limits of the FCC and NTIA/IRAC authorizations.

C. FCC and NTIA/IRAC

The FCC and NTIA/IRAC are responsible for Frequency Management. The FCC and NTIA/IRAC are not normally responsible for the resolution of conflicts when the licensees or agencies are operating within the limits of the authorizations.

IV. AUTHORIZED USES AND USERS WITHIN A FACILITY

Use by Multiple Users

Use of all facilities and improvements by more than one user will be required except where the facility owner is a government agency. Site applicants will take the lead in this area and design their proposals to accommodate multiple uses of facilities and improvements. This includes multiple uses of buildings, towers, back-up generators, grounding systems, fuel containers, access ways and parking areas.

BLM will not authorize new ROWs, ROW expansion, or modification until it is determined that existing authorized space and facilities are being used to capacity. Development or expansion of a ROW solely to preclude potential competitors from locating nearby is unacceptable and will not be authorized by the BLM.

Facility Owners and Facility Managers are not required to lease facility space to others if they can prove to the BLM authorized officer that:

1. Space is not available;
2. The use is incompatible with the existing facilities;
3. Additional space is needed by the facility owner/manager;
4. Additional users would violate system security needs; or,
5. Potential interference is not resolvable.

V. FEES

The BLM will charge Facility Owners and Facility Managers annual rental fees pursuant to federal regulations contained in 43 CFR 2806. The fees are based on two factors- the type of communications use, and the population served by the use. These fees are considered fair market value for the use of public land. The population Zone 9 (less than 25,000) will be used for these calculations unless something else is specifically agreed to in writing by the authorizing officer or until populations change.

Fees that Facility Owners and Facility Managers may charge their tenants and customers are to be reasonable (consistent with, and not in excess of, other fees for similar facilities) and commensurate with the uses and occupancy of the facilities and services provided to tenants and customers.

VI. GENERAL OPERATION AND MAINTENANCE DIRECTION

A. Unique Resource Considerations at this Communication Site

There are no currently identified special resource coordination considerations with on-site or adjacent resource values. Should special conditions arise through the revision process of the land use plan or other situations, this site plan will be amended accordingly. Special habitat may occur on adjacent parcels, but no site specific restrictions have been applied to uses at this site.

B. Wiring and Grounding

1. All equipment is to be installed within existing buildings and in metal equipment racks or within metal equipment cabinets and in accordance with manufacturers' specifications. All equipment, racks, cabinets and overhead ladder trays are to be grounded and shielded in compliance with National Electrical Code (NEC) and in accordance with accepted industry standards.

2. All electrical wiring and grounding must meet the NEC and applicable State/local codes. All permanent wiring shall be installed in metallic conduit. Surge protection shall be installed between the electric service meter and the first power distribution panel.

3. Lightning protection shall be in accordance with NEC part 810-20 Antenna Discharge Units and Part 810-21 Grounding Conductors. Periodic bonding of the antenna feed lines to the tower (when galvanized steel) shall be made with proper bonding connectors that are stainless steel (preferred), Copperweld, tin plated, or made of brass.

4. Each building is to have its own separate grounding system for all users in that structure. Wherever practical, interconnection of individual grids and/or the simultaneous placement of a large sized copper ground wire with any new grounding systems that are buried on the site will be required.

5. Site or facility grounding must be constructed of copper with #2 AWG or larger wire, Copperweld, or 2" or larger solid copper strap, connected to an adequate site/facility ground electrode system. The site/facility ground electrode system shall be bonded to the power service entrance grounding electrode conductor. Guy wires should also be grounded using manufacturers approved methods to preclude bi-metallic junction and corrosion. All equipment on the site (buildings, towers, power units, transmitters, receivers, antennas, combiners, telephone systems, power cabinets, HVAC units, etc) must be connected to the site/facility ground by direct connection. Electrical system ground wiring is required for electrical ground fault protection and circuit breaker coordination. The grounding systems shall comply with applicable laws, codes and in

accordance with standard engineering practice. Below ground connections must use either an exothermic welding process (i.e., Cadweld, Thermoweld, etc.), copper wedge pressure devices (i.e., Ampact, Burndy, Wrench-lock, etc.), or brazed copper connections in conjunction with a mechanical UL listed connector (to be used as a physical strength enhancement component). Brazing by itself is not an acceptable method of bonding below earth grade (buried).

C. Communications Equipment

Equipment Ownership

All equipment shall be labeled (or the information available at the site, as applicable) with:

1. The owner's name;
2. Transmitter frequency(ies);
3. A valid FCC, or IRAC, authorization;
4. Transmitting power output(s); and
5. A current 24-hour phone contact number.

Transmitting Equipment

All transmitters will have protective devices (shields, filters, isolation components), designed into or externally installed, to prevent interference with other users. All transmitters will meet FCC licensing requirements. Two-way transmitters should have dual section isolators for a total of 60 db of isolation.

The re-radiation of intercepted signals from any unprotected transmitter and its associated antenna system will be prevented by the use of appropriate filters (wide band and narrow band broadcast transmitters).

Direct radiation of out-of-bound emissions (i.e., noise or spurious harmonics) will be reduced to a level such that they may not be identified as a source of interference as defined in the FCC Rules and Regulations (e.g., Part 90.209(e) for the non-broadcast uses, and Parts 73 and 74 for broadcast uses). If site noise (electromagnetic noise) becomes an issue, noise threshold limits will be established, and amended into the site plan, prior to authorizing any new uses.

Direct radiation of out-of-bound emissions, (i.e., transmitter wide band noise, spurious emissions, harmonics, etc.) shall be reduced to a noninterference level by using bandpass, lowpass, and/or harmonic filtering. Where duplexing is used, use of a notch type device should be avoided.

Re-radiation of signals from a transmitter and its associated antenna system shall be prevented by installing appropriate devices (i.e., ferrite isolators), with minimum return loss of 25 db.

All transmitters not in immediate use and not specifically designated as standby equipment shall be removed. Loads connected to circulators are to be capable of dissipating the total power output of the transmitter.

Receiving Equipment

All receivers shall comply with all applicable parts of the FCC rules, including Parts 2 and 15.

All receivers shall have sufficient "front end" pre-selection to prevent receiver spurious response. The use of bandpass, band-reject cavity or crystal filters may be required to prevent receiver-produced intermodulation or adjacent-channel interference.

Where duplexing is used, a bandpass cavity duplexer is required. Use of the notch-type device is not permitted. Where notch-type devices are currently in place and there is no interference problems, their use may continue until the equipment is replaced, at which time they must be replaced with bandpass devices.

Tower

Generally only one tower is authorized for each facility owner. Facility Owners and Facility Managers may obtain permission to construct the second tower only after submitting evidence that demonstrates that their existing tower is completely filled and full use has been made of combining systems.

1. All towers will be left unpainted, if they are dull, galvanized steel. Paint is required only if the tower has a shiny (i.e., reflective) surface. If paint is required, the BLM will determine what non-reflective color the tower shall be painted.

2. Maximum tower height (including antennas) for this site is 120 feet.

3. Anti-climb devices, removable steps, or other means to discourage unauthorized climbing, are highly recommended to reduce or avoid liability claims.

4. All new towers will be self-supporting. No guy lines are permitted.

5. To avoid possible impacts to birds or bats, follow the most current version of the U.S. Fish & Wildlife Service's Interim Guidelines on the Siting, Construct, Operation and Decommissioning of Communication Towers, available at the following website: *http://www.fws.gov/habitatconservation/com_tow_guidelines.pdf*

Antennas

1. Microwave (dish) antennas (other than ground mounted satellite dishes) will be limited to a maximum of eight (8) feet in diameter. The smallest diameter dishes are preferred if technically feasible.

2. Dishes should be mounted as low as possible to reduce visual impacts.

3. All antennas must meet all OSHA safety standards. If an antenna exceeds FCC public radiation standards (see FCC OET Bulletin 65) at ground level in publicly accessible areas, it will be remedied within 24 hours after measures are taken or isolated (e.g., fencing, signing, relocation, lowering power levels are all possible remedies). Ground measurements of RFR levels will be taken before mitigation measures are implemented.

4. Color(s) for dish antennas, or covers, must be pre-approved by the BLM. New white dish antennas and/or covers will not be approved. Existing white dishes and covers must be repainted or replaced with dishes of approved color (typically dark gray), as repairs or replacement become necessary.

5. Antennas will be purchased with or treated to have a non-reflectance surface.

Interference

The responsibility for correcting interference problems is a matter for resolution between the lease/ROW holder of the facility(ies), the user causing the interference, and the affected party(ies). First users on a site have seniority with respect to the resolution of interference complaints. Senior holders have an obligation to maintain their equipment to industry standards, to operate their systems in accordance with the terms of both the FCC license and NTIA/IRAC frequency authorization, and to comply with the BLM authorization.

New users on a site must correct, at their expense, interference problems that they create. They may be required to furnish an intermodulation study, electromagnetic noise study, or other interference-related data and must agree to accept financial responsibility for elimination or prevention of any interference caused by the facility before their application can be evaluated. They must cease operation of the suspect equipment until the problem is corrected. If interference problems cannot be resolved or corrected within a reasonable time, the new use that is causing the interference may be terminated and the equipment removed.

All users shall cooperate with the Site Users Association, if one is formed, and the BLM in identification and correction of any interference. The BLM does not have authority for correcting interference problems, but can act as a mediator to help all affected parties. Interference problems must be coordinated with the FCC or NTIA/IRAC whichever is appropriate.

Interference with law enforcement and/or emergency communications must be corrected immediately. The operation of equipment covered by this site plan shall not interfere with United States Government radio or electronic operations already in existence on public land within two (2) miles of this site. The user causing this interference, shall, at its own expense, take all action necessary to prevent or eliminate such interferences. If it does not eliminate such interference within ten (10) days after receipt of notice from the BLM to do so, this use will be terminated.

If electromagnetic noise becomes an issue, noise thresholds will be established and this site plan will be amended accordingly.

D. Cables and Transmission Line (Wave Guides)

All new cabling will be jacketed and shielded and shall either be flexible or semi-rigid type. Existing substandard cables will be upgraded as repairs or replacement become necessary.

Cables will be properly installed and will be strapped and fastened down. Use of ports at building entrance points will be kept to a minimum by use of combiners.

When attaching cables onto a tower, conduits should be used. Coax and wave guides should be installed in a wave guide ladder or equally divided among all tower legs.

All transmission lines (wave guides) are to be supported in accordance with manufacturer's specifications.

Unjacketed transmission line of any type is prohibited. No transmission line shall be left unterminated.

Double shielded braided, or solid shielded cable will be used. No RG-8 type cable is permitted. No connector-type adapters will be used on transmission lines. Only correct connectors that will mate to connected devices are to be used.

Conduits will be shared when they service common areas and will be buried where possible.

E. Radiation

All communications uses must meet ANSI, FCC and BLM regulations, guidelines and standards concerning radiation limitations. This site is considered uncontrolled for the purposes of compliance with RFR standards.

Monitoring radiation levels at the site is the responsibility of all site users and will occur at intervals to comply with FCC regulations and guidelines. A copy of the monitoring report will be provided to the BLM upon request. The FCC is responsible for enforcement of the monitoring and standardization for compliance. The FCC could revoke the license and/or issue a fine for failure to comply. Additionally, the BLM could terminate or suspend the use authorization for failure to comply.

Onsite RFR measurements will be taken using appropriate equipment that can adequately measure and record both on-tower and on the ground levels before mitigation measures related to RFR are implemented pursuant to FCC standards and requirements.

Security fences with RFR notice signs are required around areas that exceed public use levels including anchor points outside the primary facility compound fence, if necessary. Raising higher power transmitting antenna on the tower or modifying the antenna type to half wavelength may be necessary to eliminate RFR hazards. Reducing power may also be required if other alternatives are not feasible. All fencing location and design or new tower construction must be pre-approved by the BLM.

Warning signs will comply with ANSI C95.2 color, symbol, and content conventions. Contact information including name and telephone number will also be included on warning signs. Existing warning signs compliant with FCC 47 CFR 1.1307(b) which do not currently include name and telephone number will be accepted as long as the name and telephone number is clearly posted on other signage at the Lessee's site.

Lowering power levels for on-tower access during maintenance will be coordinated between affected users.

Any identified RFR radiation problems that are, or could be, a human health hazard must be corrected within 24 hours after measurement tests have been completed or be removed from the site by the site user(s). If the proposed corrective action involves any new ground disturbance, it must be pre-approved by the BLM.

F. Utilities-Availability of and Requirements for:

Commercial Electrical Power

Commercial power is provided to the site under separate ROW grant to PacifiCorp.

Telephone Service

There is no commercial telephone provided to the site.

If additional service is ever deemed necessary, a separate ROW grant will be issued. Site users will pay for the cost of:

1. The necessary resource surveys and reports for service connections; and
2. The cost of constructing service connections.

For visual reasons, overhead utility poles may not be authorized.

Fuel Tanks

Facility Owners and Facility Managers are responsible for providing fuel storage (propane and diesel) and emergency power for their tenants and customers. No tenants or customers will be authorized to have separate fuel tanks and/or generators. Each facility owner will preferably consolidate fuel storage into a tank large enough in size to accommodate all tenants and customers within their facility. At a minimum, tanks will be grouped together in a consolidated area adjacent to their facilities. All fuel storage tanks (e.g., LPG, propane and diesel) must meet current fire department, Federal, State and local government safety and hazardous materials requirements. Propane is the preferred fuel for future generators.

1. All tanks will be:
    a. Signed in red letters, "SMOKING OR OPEN FLAME PROHIBITED WITHIN 20 FEET";

b. In conformance with National Fire Protection Association (NFPA) requirements; and,

c. Painted an approved color, or screened by an enclosure to blend in with the natural environment. If an enclosure is used, it must be pre-approved and painted an approved color from the Munsell Soil Color Chart, Standard Environmental Colors.

2. Diesel tanks will also be:

a. Enclosed in BLM and fire department approved secondary containment vaults that are painted a BLM-approved color from the Munsell Soil Color Chart, Standard Environmental Colors.

b. Constructed with underground fuel lines. Fuel line must be constructed of black, treated pipe and fittings, and must be posted.

c. A containment basin must be maintained below all diesel tanks which are not designed and approved to be self contained.

G. Sanitary Facilities

1. Plans for any sanitary facilities must be pre-approved by the BLM. If it is determined by the BLM that the users need such facilities, they will be provided by the lease/ROW holder in a manner and location satisfactory to the BLM and within the requirements of the County Health Department.

H. Security and Law Enforcement

The County Sheriff's Department is the key law enforcement agency for the area. They are responsible for most civil and criminal matters. The BLM will be responsible for enforcing matters related to uses of BLM lands (e.g. resource protection issues).

Patrolling and policing for security purposes is the user's responsibility.

Gates and key access must be approved in advance by the BLM and must be adequate for BLM and Coos Fire Protection Association (CFPA) access needs.

All future facilities must be fenced to prevent public access to towers and facilities. Future fencing must meet the following criteria:

1. All fences must meet health and safety requirements.

2. All fence locations and design require BLM pre-approval. The standard fencing type will be chain-link (i.e. cyclone).

3. The standard fence height will be eight (8) feet.

4. Fencing will be designed, installed, maintained, grounded, and of a type to minimize interference issues as described in the Motorola R-56 standards.

5. Fences will be signed with RFR notices if RFR is above public levels.

I. Site Maintenance

The objective of maintenance activities is to present a clean, neat, and orderly appearance at the site and have all of the authorized improvements safe for workers and the public. All users will keep up the overall appearance of the site.

Miscellaneous debris remaining after any construction and/or equipment installation, removal or modification, is not only a hazard, but can cause interference or intermodulation problems. In particular, all loose wire or metal objects are to be removed from the site.

The users of the Site will remove all graffiti within 10 working days of finding it, weather permitting. If graffiti is on natural features (e.g. rocks), the graffiti will be removed in a method approved by the BLM Authorized Officer.

Users will not be permitted to leave or dispose of trash, garbage or cut brush on public lands. No outside trash or litter containers will be provided. Site users will remove litter from the site as it is produced.

Policing of litter in common areas (i.e. areas between buildings and developed sites) is the shared responsibility of those holders bordering these areas.

During construction and/or maintenance, paintbrushes will not be cleaned off on the rocks around the site and excess materials (e.g., cement, wire, metal, building materials) will be removed from public land.

Peeling paint on buildings and/or towers will be re-painted within thirty (30) days of discovery by the facility owner or facility manager and within 10 days of notification of the holder by the BLM, weather permitting. The Lessee is responsible for the abatement and control of noxious weeds within the bounds of their lease site and common use areas. Abatement practices are to be implemented in accordance with the Coos Bay District Office weed abatement programs. The Lessee shall control noxious weeds, as listed by Oregon Department of Agriculture, within the right-of-way. Manual control of noxious weeds using hands or hand tools may be conducted without further review. Proposed mechanical, biological and chemical control activities must be reviewed by Bureau of Land Management specialists for compliance with applicable laws and policies. Contact the authorized officer at least 30 days prior to proposed work. The Lessee shall prevent the spread of noxious weeds from the right-of-way.

Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations described in BLM policy and relevant NEPA documents. Additionally, a BLM-approved Pesticide Use Proposal is necessary prior to pesticide application and all pesticide application will be done by a licensed pesticide applicator. When planning the use of pesticides, the Lessee shall submit a Pesticide Use Proposal or - a plan showing the pest(s) to be controlled as well as the proposed type and quantity of material to be used, method of application, and any other information deemed necessary by the authorized officer. All use of pesticides shall be approved in writing by the authorized officer prior to such use.

J. Inspections

Enforcement authority is vested in the BLM as the Communications Site Administrator for Blue Ridge via 43 CFR 2800. The BLM may conduct an annual inspection of each user's facility. This inspection will verify:

1. Compliance with technical standards.
2. Structural integrity.
3. As-built plan accuracy.
4. Electromagnetic compatibility.
5. General site health, safety, and cleanliness.

The BLM shall provide written notice of the scheduled inspection date at least 30 days in advance. Each primary shall arrange to have personnel available at the site at the time of the inspection.

Any non-compliance found by a user shall be forwarded to the BLM. The BLM will conduct an inspection and a written copy of the inspection report shall be forwarded to the violating user within 30 working days following the inspection. The report shall include:

1. A description of the violation.
2. Corrective action required.
3. Name, address, and organization of the responsible party.
4. Time allowed for completion of corrective measures.
5. Anticipation action in the event of noncompliance with remedial instructions.

K. Fire Prevention and Hazard Reduction Requirements

Facility owners and facility managers will be required to control vegetation within the fenced area around their facilities. Gravel or mineral soil (i.e., bare ground) or mowed vegetation must be maintained to a minimum of ten (10) feet clearance around buildings; and a minimum of ten (10) feet clearance around any propane tanks. Identified threatened, endangered, or sensitive plant species must remain within the minimum clearance areas.

Smoking is prohibited in flammable vegetation areas.

Roof structures shall be kept reasonably clear of debris at all times.

No explosives will be stored at this site. Flammable materials shall be stored in conformance with the requirements of local fire regulations. Flammables will be placed in closed containers

and stored away from sources of ignition and combustible materials. If flammables are stored within a building, the building will be locked, properly signed and well ventilated.

Approved spark arresters will be required and maintained on all internal combustion engines.

At least one (1) U.L. rated 20 lb. A:B:C dry chemical fire extinguisher is required inside each building. Prior to each June, fire extinguisher(s) shall be inspected by holders and refilled, if necessary.

Any fire will be immediately reported to "911", the nearest BLM office and/or Coos County Sheriff.

BLM Officers will make periodic fire prevention inspections. They will call to the holder's attention any lack of compliance with the above regulations, plus any other existing hazards. Compliance with these inspections is required within the time limits specified in the inspection report.

All fire protection standards must be accomplished by the beginning of fire season unless otherwise agreed to, and then maintained throughout the fire season.

For new construction, the BLM will provide the Holder with a separate Construction Fire Plan which will be prepared at that time as applicable.

L. Access Maintenance and Restrictions

Roads

The roads are primarily paved to within 1 mile of the site and then it is well maintained gravel by the County and BLM. If a user association is formed on Blue Ridge, the costs of road maintenance may be assessed by the association and enforced through this management plan. Individual users who damage or disturb the access road, or any associated structures, such as ditches, culverts, roadside vegetation, signs and/or underground utilities or facilities, will be required to repair the road and/or associated structures, to conditions equal to or superior to those prior to any damage or disturbance. This work must be done according to applicable BLM road maintenance standards and may require the appropriate NEPA analysis.

Interior Site Driveways/ Parking Areas

Interior site driveways within the communications site will be maintained by the site users. Interior roads will be planned and approved during establishment of new facilities. Interior roads will be maintained in a manner to allow only one entrance to the site. Off-road vehicle use in and around the site will be avoided.

Road Closures

Roads on public land are subject to periodic closures to entry during periods of extreme fire danger, inclement weather, or wet conditions. Authorized site users may use the site during these periods but should use judgment and may need to seek advance approval from the BLM.

VII. CONDITIONS FOR CONSTRUCTION, MODIFICATIONS OR EXPANSION

A. Facility Owner/Manager Responsibilities

In addition to the responsibilities listed in Section III, new applicants and existing Facility Owners/Managers proposing new, modified, or expanded facilities are responsible for:

1. Submitting a complete application to the Coos Bay District Office (ATTN: "Realty Specialist") prior to any new construction, or modifications to existing improvements, unless new electronic equipment is being installed in/on an existing tower and/or an existing building. The application must include:

   a. The appropriate cost recovery and application fees as determined by the BLM;

   b. A copy of the approved Site Plan Base Map showing all of the proposed (new) facilities including structures, towers, and auxiliary equipment;

   c. Completed drawings/plans prepared by a registered engineer and Plan of Development approved by the BLM;

   d. Identification of any microwave beam paths, a plot of their azimuth(s), and their proposed elevation(s) on the tower;

   e. Documentation that shows that proposed facilities will not be obstructing, or interfering with any existing fixed point to point antennas, omni directional broadcast antennas, or microwave beam paths in the directions of primary population targets. Proposed beam path needs must be shown on Site Plan Base Map; and,

   f. Any needed recommendations, changes or modifications to their original proposal, based on any required resource surveys and/or reports.

2. Demonstrating that their proposals will not cause undue interference with any existing uses before the BLM can approve new facilities. In addition, it is the applicant's responsibility to show that any new facilities will make the most efficient use of the limited amount of space at the site.

3. Showing their proposals will provide for future users without additional construction.

4. Providing engineering and geotechnical investigations for development of specific foundation designs and grading plans.

5. Providing for erosion control as part of the Plan of Development prior to construction activities. At a minimum, erosion control must include: sediment control, stipulations that cut/fill slopes will be graded and contoured to prevent erosion and/or excessive runoff, and recommendations for temporary erosion control measures, (e.g., netting, silt fences, swales, and/or sediment collection areas).

6. Coordinating with other Federal (e.g., FCC and FAA), State and County agencies and obtaining all required approvals and/or permits.

7. Providing 30-day notice to all facility owners/managers at the site, as well as the BLM, of all new frequencies proposed for the site. A completed BLM technical data sheet or equivalent must be sent with the 30-day notice to allow for comment of potential interference. This would be for new frequencies for themselves and their tenants and customers.

8. Insuring that all written approvals have been obtained from the BLM prior to construction. In addition:

   a. Directional antennas will only be protected within the arch between their licensed 3 dB points.

   b. New and/or modified facilities will not obstruct existing fixed point-to-point antennas or omni-directional broadcast antennas in directions of primary population targets.

B. Construction Methods and Resource Protection

Plans submitted by an applicant for any new construction or modifications shall specify provisions for soil rehabilitation measures including, but not limited to, soil replacement and stabilization and for proper handling of runoff from buildings, parking area, access roads, and undeveloped common areas.

The following methods and resource protection measures will be required to minimize impacts during construction:

1. Avoid and protect sensitive resource areas, as identified by the BLM.

2. Compliance with the Plan of Development and the Erosion Control Plan.

3. During construction and/or maintenance, no paint or paint thinner will be disposed of on site.

4. Minimize ground disturbance and vegetation removal as much as possible during construction activities. All ground-disturbing activities require BLM pre-approval.

5. Disturbed areas will be re-vegetated with species pre-approved by BLM as soon as possible after construction. If necessary, reseeding will be required until vegetation is successfully established as determined by the BLM.

6. No grading material will be cast off during construction/reconstruction activities. Excess soil can be used for fill material on road and/or building/tower pads.

7. Temporary, on-site storage of construction materials will require pre-approval by the BLM.

8. Construction materials and supplies, except for hazardous materials (see number 9. below) may be left unattended at the construction site at the end of each workday, but at the owner's risk.

9. Hazardous materials, including, but not limited to all fuels, oils, and lubricants are not to be left unattended at the site at any time. During construction, these materials are to be removed from the site at the end of each workday, or temporarily stored inside a locked and signed building until the following workday.

10. All surplus construction materials and/or waste debris must be removed from the site no later than thirty (30) days after construction has been completed.

11. Any earth moving or heavy equipment (e.g. dozers, graders, cranes, backhoes, etc.) leaving the designated roadway and/or approved parking area(s) to perform authorized activities at the site, will be washed off prior to being brought onto public lands to prevent the introduction and spread of noxious weeds into the area.

C. Construction Inspection

1. All new construction, reconstruction, or major modification shall conform to the established technical standards and accepted engineering practices (i.e., the Uniform Building Code).

2. Any construction inspections required by other applicable agencies are the responsibility of the lessee/holder. Copies of completed inspections are to be provided to the Coos Bay District Office, Authorized Officer, either as they occur or as part of the final as-built plan. Inspection information shall become a permanent part of the holder's lease/ROW case file.

3. The Lessee/Holder agrees that corrective work detailed in BLM, or other agency required compliance inspections, would be completed by the scheduled completion date. If the Lessee/Holder disagrees or has questions about specific items, the Lessee/Holder must contact the BLM in order that the disagreement or item may be resolved.

4. A final set of as-built plans will be submitted to the Coos Bay District Officer, Authorized Officer, within 90 days of acceptance of structure (if contracted) or of completion date.

D. New or Remodeled/Expanded Buildings

1. Any new buildings must be designed to accommodate multiple users along with fitting into the physical environment as defined in a site-specific environmental analysis developed at the time of the proposal. All new facilities must meet R-56 standards.

2. Buildings are required to be one-story. The roof must be metal or covered with metal to be fire resistant. Roofs can be equipped with antenna support structures, such as poles and railings that can extend up to 25-feet above ground level.

3. Facility Owners and Facility Managers are encouraged to construct the interior of their buildings in a modular fashion, so that they can:

a. Sublease sections to others;

b. Provide tenants and customers with internal separation and security;

c. Reduce physical interference; and

d. Increase management effectiveness.

4. The following materials are approved for construction of new facilities (i.e. buildings)

a. Floors – Concrete slab with drainage.

b. Walls – Concrete block, metal or pre-fabricated concrete.

c. Roof – Metal, or concrete, if painted to eliminate shiny surfaces, or other fireproof material as approved by the BLM. Proposals for wooden roofs will not be approved.

d. Partitions – If it is felt partitions are necessary in buildings, ensure they are constructed with fire resistant material (e.g., concrete block, reinforced concrete, or properly grounded fencing.

e. Color – Proposed color for use on all exterior building surfaces must be pre-approved by the BLM. The goal of the color selection for the facilities is to make the building as inconspicuous as possible and make buildings located on the skyline look inconspicuous when viewed from a distance. The intent is to reduce or eliminate glare from reflective and/or illuminated surfaces such as windowpanes, sheeting and reflective paints. Non-reflective, BLM approved colors will be used on equipment buildings.

5. Building entry lights must:

a. Only light the immediate area in the vicinity of the door;

b. Be motion activated and have a limited time duration (e.g., 3-5 minutes); and

c. Have a shielded beam that is pointed at the building door.

Requests for all-night (i.e. "dusk-to-dawn") lighting, or entry lighting that would be visible from outside of the site will not be approved. FAA-required lighting would be the only exception.

E. <u>New or Remodeled/Expanded Towers</u>

1. All new construction, reconstruction, and modifications to towers will be pre-approved by the BLM prior to implementation.

2. It is the applicant/holder's responsibility to assure that a new, or modified, structure will not unduly interfere electronically or physically with any existing equipment at the site. Towers must be spaced, so as to prevent ground level radiation and/or interference problems. This

must be clearly demonstrated in writing to the BLM prior to issuance of a lease/ROW or amendment.

3. All new towers will comply with current structural and safety specifications and design standards, including safety-climbing devices. Towers should be as narrow and "open" as safety and structural integrity allow. New towers will be designed using maximum wind, snow, and/or tower loading anticipated for the site.

VIII. SITE ASSOCIATION/ADVISORY GROUP

A Site Users' Association is probably not needed at this time. In the future if the number of users and/or the number of facilities increases, a Users Association may be desirable to coordinate common needs.

The objective of a sanctioned association will be to represent all site users as a group when dealing with the Coos Bay BLM Field Office on matters relating to the site administration. The association will be able to work in cooperation with the BLM to identify problems or opportunities and make recommendations to the BLM for any changes in management strategies at the site. The association could also provide input to the BLM regarding the future addition of equipment and facilities at the site. While the advice and recommendations of the association would not be binding on the BLM, the BLM could use the input for administration of the site. The BLM would be a member of such a group and would help jointly develop the charter (i.e., the ground rules).

IX. APPENDICIES

A. Location and Site Maps

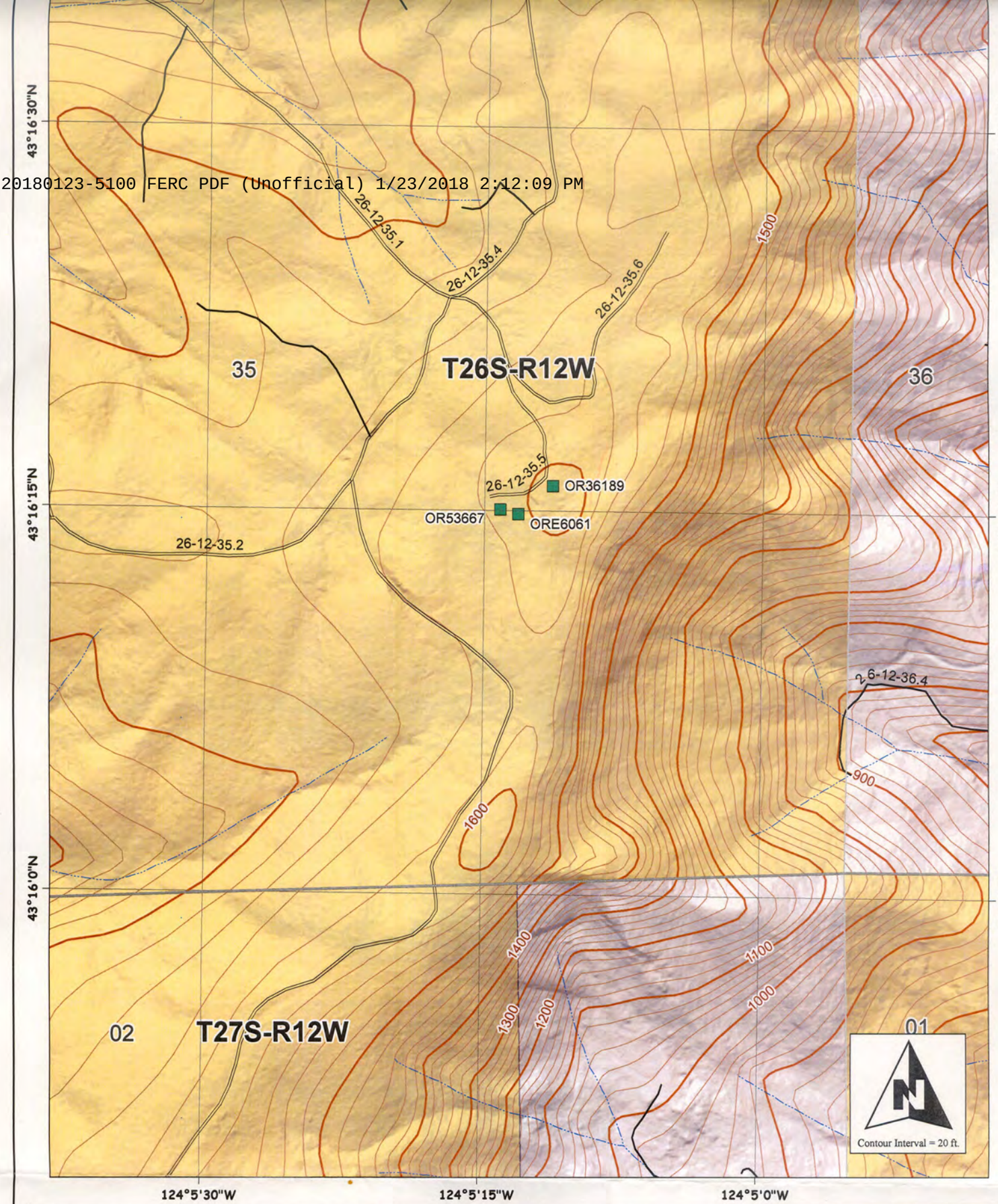
B. Authorized Facilities

C. Site Photographs

D. Inspection Checklist

APPENDIX A

SITE MAP



Map Features

(Not all map features shown in the legend will be present in the area mapped above.)

- Blue Ridge Comm Sites
- Highway
- County Road
- Paved Road
- Gravel Road
- Natural/Unk Surface Road
- Perennial Stream
- Intermittent Stream
- BLM Administered Land
- Bureau of Indian Affairs
- U.S. Forest Service
- Other Federal Lands
- Private or Other Lands

US DEPARTMENT OF THE INTERIOR
Bureau of Land Management

Coos Bay District Office
Umpqua Resource Area
1300 Airport Lane
North Bend, OR 97459

0 500 1,000
Feet

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data.

Appendix A: Blue Ridge Communication Site

APPENDIX B

AUTHORIZED FACILITIES

	Auth #	Use	Building	Tower	Access/Parking	Other
Facility # 1 Coos Bay BLM	OROR 036189	PMRS	8'x10' concrete	100' guyed	Access and parking	
Facility #2 American Tower	OROR 053667	MIC	20'x20' concrete	100' 4-legged metal	Access and parking	Horns & portable generator in parking lot
Facility #3 Frontier Communication	ORORE 006061	MIC	25' x 15' metal	100' guyed	Access and parking	500 gallon diesel vault

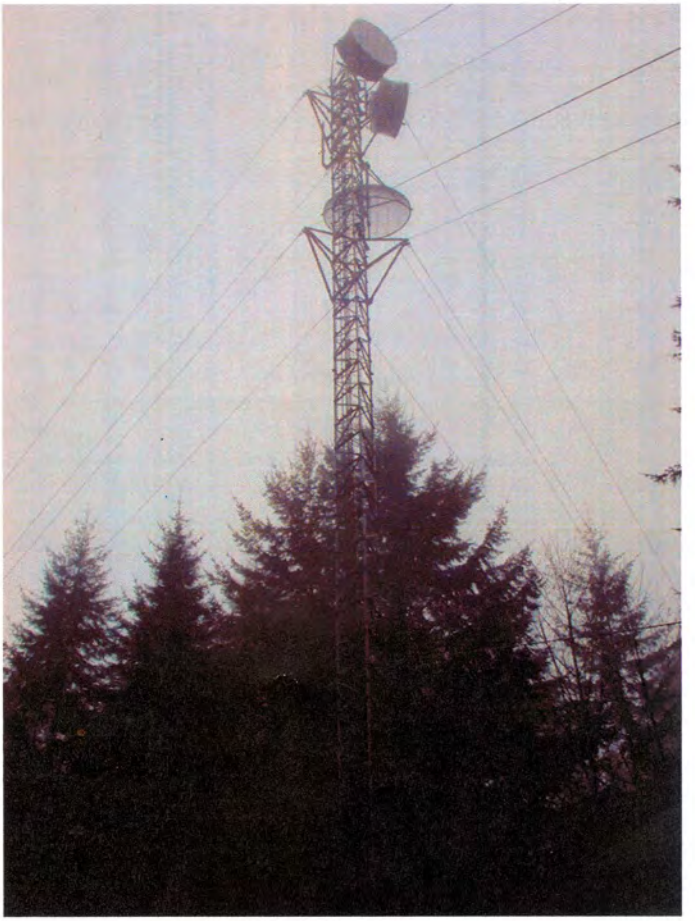
APPENDIX C

SITE PHOTOGRAPHS

Blue Ridge
Facility 1 – Bureau of Land Management
OR036189

Blue Ridge
Facility 2 – American Tower
OR053667

Blue Ridge
Facility 3 – Frontier Communications
ORORE006061



APPENDIX D

INSPECTION CHECKLIST

"Blue Ridge Annual Technical Inspection"

Date Inspected: _____ Time Inspection: _____

Permit Holder: _____ Authorization # _____

Site Technician : _____ Phone # _____

Number of Transmitters _____ License Posted _____

Please mark the following Items as Acceptable (A) or Unacceptable (U).

Electrical Wiring ---------- (A) (U) Grounding ---------- (A) (U)

Equipment Installation ---------- (A) (U) Housekeeping ---------- (A) (U)

Building Repair ---------- (A) (U) Tower Repair ---------- (A) (U)

Please mark the following Items as Yes (Y) or NO (N) or (NA)

Isolators ---------- (Y) (N) (NA) Circulators ---------- (Y) (N) (NA)

Cavities ---------- (Y) (N) (NA) Terminators ---------- (Y) (N) (NA)

Filters ---------- (Y) (N) (NA) Lightning Protection ---------- (Y) (N) (NA)

Comments: _____

_____

Recommended Corrective Action: _____

_____

_____

Required Corrective Action To Be Taken: _____

_____

_____

_____

Committee Representatives: _____

Bureau of Land Management Representatives: _____

Please make the required corrective action within the next 120 days. Please make a written report of corrective action taken and submit to the BLM in Coos Bay. If you should have any questions, please call the BLM office.

Department of the Interior
Bureau of Land Management

FLOUNCE ROCK COMMUNICATIONS SITE MANAGEMENT PLAN

Prepared by the Bureau of Land Management
Butte Falls Resource Area
Medford District, Oregon

Approved by: **Jon K. Raby** **11/17/2009**
Field Manager **Date**

FLOUNCE ROCK COMMUNICATIONS SITE MANAGEMENT PLAN

I. INTRODUCTION

Demand for new communication sites continues to be active in the United States including carrier requests to locate cellular facilities on public lands in the western states. This demand is due to advances in communication technology, strong consumer interest, and a 1983 Federal Communication Commission (FCC) decree establishing wireless carrier coverage requirements.

Flounce Rock is a communication site administered by the BLM Butte Falls Resource Area. It is an established site with characteristics desired by wireless carriers, microwave users, and other communication providers. The communication site overlooks smaller communities such as Prospect and Trail, and also a rural but growing population area to the south and to some extent the more distant city of Medford. Highway 62 runs in a generally west/east direction along the Rogue River approximately two miles south of Flounce Rock. A number of other secondary roads also run through the surrounding area.

This Communication Site Management Plan has been developed to document and evaluate the existing communication site and facilities located on Flounce Rock. The plan also provides an outline for orderly future development of the site in conformance with the Butte Falls Resource Area's current land use planning document, the Medford District Record of Decision and Resource Management Plan (RMP).

Current BLM program guidance for resource management planning specifies that every planning document shall contain determinations relevant to communication sites. The Medford District RMP, approved in June of 1995, does not discuss specific details needed for proper management of the communication site. Therefore, in order to supplement the land use planning document, this site management plan has been prepared to address specific issues encountered on Flounce Rock.

Approved lessees or right-of-way (ROW) holders with facilities currently located on Flounce Rock are shown in the Users' Table, Appendix B. Additional tenants or customers may be accommodated within the confines of existing authorized communication facilities as long as such additions are in compliance with the terms and conditions of authorized leases or ROW grants and with the supplemental direction contained in this site plan. Requests for new communication site facilities may be authorized at the discretion of the Bureau of Land Management (BLM) Authorized Officer through the issuance of new Communications Use Leases, or in some cases, by the issuance of additional ROW grants.

This site plan will be incorporated into all future new leases issued for the Flounce Rock Communication Site. This plan will also be included as a part of all existing leases and renewed leases or ROW grants as the terms of those authorizations allow. Provisions of the site plan are enforced through the terms and conditions of the ROW or lease authorization. Each lessee is expected to incorporate mandatory BLM lease and site plan requirements into any subsequent agreements with the lessee's tenants and customers. The lessee is also responsible for enforcement of said requirements involving the lessee's tenants and customers.

A. Terms and Definitions

The terms used in this communications site management plan conform to the definitions listed in the April 22, 2005, Federal Register notice "Rights-of-Way, Principles and Procedures: Rights-of-Way under the Federal Land Policy and Management Act and the Mineral Leasing Act", with further clarification provided in BLM Handbook 2860-1 and the United States Code of Federal Regulations (CFR) 43 CFR 2800. In the event of a conflict, between the plan and these sources, the Federal Register notice and the BLM Handbook will govern.

The words "lease" and "lessee" as used in this plan refer to the relationship between the BLM and the communications use lease lessee, or ROW holder. The words "customer" and "tenant" refer to the relationship between the lessee or holder and the occupants in the lessee's facilities.

LEASE OR ROW – A use authorization issued to a communication Facility Owner or Facility Manager allowing for the use of public land to construct and or operate a communications facility and, unless specifically prohibited, to sublease to occupants in that facility.

LESSEE, LEASE HOLDER, OR ROW HOLDER – A Facility Owner or Facility Manager

CUSTOMER – A facility occupant who is paying a facility manager, facility owner, or tenant for using all or any part of the space in the facility, or for communication services, and is not selling communication services or broadcasting to others.

TENANT – A facility occupant who is paying a facility manager, facility owner, or other entity for occupying and using all or part of a facility. A tenant operates communication equipment in the facility for profit by broadcasting to others or selling communication services.

COMMUNICATIONS SITE – An area of BLM-managed public land designated through the land and resource management planning process as being used or is suitable for communications uses. A communications site may be limited to a single communications facility, but most often encompasses more than one. Each site is identified by name; usually a local prominent landmark, such as Flounce Rock Communications Site.

FACILITY – The building, tower, and related incidental structures or improvements authorized under the terms of the grant or lease.

FACILITY MANAGER – The holder of a BLM communications use authorization who leases space for other communication users. A facility manager does not own or operate communications equipment in the facility for personal or commercial purposes.

FACILITY OWNER – Individuals, commercial entities, organizations, or agencies, that own a communications facility on Federal land; own and operate their own communications equipment; and hold a communications use authorization. Facility owners may or may not lease space in the facility to other communications users.

NON-BROADCAST – This category includes Commercial Mobile Radio Service (CMRS), Facility Managers, Cellular Telephone, Private Mobile Radio Service (PMRS), Microwave, Local Exchange Network, and Passive Reflector.

BROADCAST – This category includes Television Broadcast, AM and FM Radio Broadcast, Cable Television, Broadcast Translator, Low Power Television, and Low Power FM Radio.

RIGHT-OF-WAY (ROW) – The public land authorized to be used or occupied pursuant to a ROW grant.

RIGHT-OF-WAY GRANT – A use authorization issued pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (43 U.S.C. 1701 *et seq.*), or issued on or before October 21, 1976, pursuant to then existing statutory authority, authorizing the use of a ROW over, upon, under or through public land for construction, operation, maintenance and termination of a project.

HOLDER – Any applicant who has received a ROW grant, lease or temporary use permit.

USERS – All ROW and lease holders, lessees, customers, and tenants that own or operate a facility or communication equipment at the communication site.

SENIOR USE – Any use whose implementation date is prior to the implementation date of the use in question.

RANALLY METRO AREA (RMA) – A series of nine population zone areas, the highest of which is greater than 5 million and the lowest being 25,000 or less. These zones are determined annually and published in the Ranally Metro Area Population Ranking, an independent publication from Rand McNally, and are used in rent determination under guidelines established in 43 CFR 2806.

B. Purpose

This plan will be used by BLM officials administering communications uses at Flounce Rock, existing lessees, holders, and applicants desiring a lease, grant, or an amendment to an existing lease or ROW grant. The plan will be kept updated by amending pages or sections of the plan rather than issuing a revised edition of the plan. When an administrative revision is necessary (such as the addition of a user), a letter will be sent to the holders from the Butte Falls Resource Area enclosing a copy of revised pages or sections. The amendments will be consecutively numbered. Other proposed revisions to the plan will be circulated to holders for comment prior to implementation.

Overall management direction for the administration of communications sites is outlined in the CFR and the BLM Handbook and applicable BLM Instructional Memoranda. Specific direction for site management planning on designated communications sites is contained in BLM Handbook 2860-1. Primary regulations and policy pertaining to issuance of ROW authorizations by the BLM are found in Title 43 CFR Sections 2801- 2808 and BLM Handbook 2860-1.

The 1995 Medford District RMP, as amended, states public lands will continue to be available for communications sites and will be located adjacent to existing facilities to the extent technically and economically feasible. It also states "allow expansion of communications facilities on existing communication sites consistent with protection of threatened and endangered species". It goes on to state "consider new communication sites on a case-by-case basis".

This Site Management Plan provides applicable guidance and adds current policy and technical standards for better management of the Flounce Rock Communications Site. This plan governs development and management of Flounce Rock and will be modified in the future as needs and conditions warrant. Any future such uses must be designed, installed, operated, and maintained to be compatible and not interfere with the senior uses as defined in Section A above. This site-specific plan is administrative in nature and is Categorically Excluded from further review under the National Environmental Policy Act (NEPA) in accordance with 516.DM 2, Appendix 1, item 1.10, which states " – Policies, directives, regulations, and guidelines that are of an administrative, financial, legal, technical, or procedural in nature and whose environmental effects are too broad, speculative, or conjectural to lend themselves to meaningful analysis and will later be subject to the NEPA process, either collectively or case-by-case". Any additional development of Flounce Rock will be addressed in a site-specific NEPA document.

C. Site Description

The site is located approximately 6.3 miles west of Prospect, Oregon, and approximately 2 miles north of Lost Creek Reservoir. It is on Flounce Rock, a prominent landmark in the area. The area is managed by the Butte Falls Resource Area. It is specifically located in sec. 5, T. 33 S., R. 2 E., Jackson County, Oregon at approximately 42º 43' 39.7" North Latitude and 122º 36' 31.9" West Longitude. The elevation at the Flounce Rock Communications Site is approximately 4,133 feet above mean sea level. A site map is provided as Appendix A.

D. Area Served

This site serves the Medford Ranally Metro Area (RMA), population 100,000 to 299,999, which is an RMA Zone 6. This zone may be adjusted in the future as populations change. This information will be used for rental fee determination.

E. Access

Access to Flounce Rock is from State Highway 62, to Ulrich Road, then north and west to the site over BLM road #32-2E-34 for approximately 6.4 miles. Where the road crosses private lands, BLM has legal access through exclusive easements. These easements were acquired in the past from the private landowners.

F. Site History and Development

The first communications facility ROW on Flounce Rock was issued to Elk Lumber Company, now Meriwether S. Oregon Land and Timber (Forest Capital Partners), in 1954 for two-way radio communications. At that time, the road and power line were also authorized to Elk Lumber

Company. In 1965, the U. S. Forest Service and the BLM established facilities for radio repeaters for their respective agency use. The next facility authorized was to the Prospect Lions Club in 1966. This facility was a television broadcast translator serving the community of Prospect.

In 1982, the Corp of Engineers, Portland Office, was authorized a ROW for a microwave and radio repeater facility at the site. Western Tele-Communications was authorized a microwave relay facility at the site in 1985. This facility was transferred to Pinnacle in 2001, then later to Corban Communications, now defunct. Pacific Power & Light, now Pacificorp, was authorized a radio and microwave relay facility in 1988. The final two facilities were authorized to Cellular One, (now AT&T) and U.S. Cellular for cellular phone service in 1993.

The Meriwether facility is scheduled for removal in 2009 or 2010.

Space appears to be available in the existing buildings and towers to serve this area for the current and future demand. Any modifications to existing facilities or proposals for new facilities must be approved by the Medford District Office according to the appropriate NEPA process and guidance described in this document.

A list of all authorized facilities as of the date of this plan can be found in Appendix B. Any modifications to existing facilities or proposals for new facilities must be approved by the Butte Falls Resource Area according to the appropriate NEPA process and guidance described in this document.

The site currently appears to be relatively free of interference, receiver sensitivity, and noise. If additional new uses deteriorate the receiving/transmitting operation of the existing uses, the new uses may be required to institute additional studies, equipment upgrades, frequency isolation, or physically separate from the existing uses. This may be particularly required if they are continuously transmitting in nature.

G. Goals and Objectives of Site Management Plan

1. This site is to be used for low power communications uses only. The maximum power output expressed as effective radiated power (ERP) for the Flounce Rock Communications Site is based on the maximum output allowed for two-way radio under the FCC's rules at Title 47, Code of Federal Regulations, Part 90. As of the 2003 regulation, that is 500 watts ERP. Each use must operate at or below the power level authorized by their respective FCC license as long as it does not exceed the site limitation. This power limitation does not preclude existing and new uses from being designed, operated and maintained to meet other interference, noise floor, receive sensitivity, or RFR standards included in this plan.

2. Manage communication equipment on the Flounce Rock site to maintain the radio frequency (RF) hazard to be within the Public Standard as defined by the FCC.

3. Systematically develop the site to maximize the number of compatible uses while ensuring safety and protection of resources. Development of new towers or buildings within each of the authorized owner's facilities will be authorized only after their respective tower or building space area is filled to near capacity.

4. Help fulfill the public need for adequate communications sites.

5. Protect the interests of holders, lessees, tenants and customers, by preserving a safe and electronically "clean" environment.

6. Encourage the efficient development and use of space and facilities within the designated site.

7. Achieve visual quality objectives by requiring design standards that are unobtrusive and utilizing earth tone colors and non-reflective surface material and stringent site maintenance requirements.

8. Describe the BLM's policy for maintenance of the road to the Flounce Rock communications site.

9. Develop new facilities only after the appropriate site-specific NEPA analysis and coordination with current lease or ROW holders and users. This future development must be consistent with the land use plan.

10. Amend this Communications Site Plan as necessary to be consistent with future RMPs. BLM will provide authorization holders with proposed amendments to this plan and will allow a reasonable period of time for the holders to review and comment on the proposed changes.

II. AUTHORITY AND DIRECTION

A. Authority

The authority used by BLM to authorize communications uses on public land (administered by the BLM) is the Federal Land Policy and Management Act of 1976, 90 Stat. 2776 (43 U.S. C. 1761-1771) and is reflected in Title 43, Code of Federal Regulations (CFR), Sections 2801- 2808 and various BLM Washington Office Information Bulletins and Instruction Memoranda.

BLM authority for communications site management planning is contained in BLM Handbook 2801-1, Plan of Development. Direction on and policy for communication use authorizations is contained in BLM Manual Section 2860.

Authority for the issuance of authorizations and/or licenses for the transmission and reception of electronic radiation for communication purposes is granted by Congress and administered by the FCC and/or the National Telecommunication and Information Administration – Interagency Radio Advisory Committee (NTIA/IRAC).

B. Relationship to Communications Site Leases/ROW Grants

This site plan will be incorporated into all leases and ROW grants issued (now and/or in the future) for this communications site and must be used in conjunction with the granting authorization. **PROVISIONS OF THIS SITE PLAN ARE ENFORCED THROUGH THE GRANTING AUTHORIZATION (LEASE OR ROW GRANT).** Each lessee or holder is

expected to include the requirements of the authorization and this site plan into any documents, which describe the business relationship between the lessee and their tenants and customers. The lessee or holder is responsible for enforcing those provisions.

III. GENERAL RESPONSIBILITIES

A. The Bureau of Land Management

The BLM retains the responsibility for issuing and amending authorizing instruments to Facility Owners and Facility Managers, only for the areas actually occupied by the authorized improvements. The issuance of a FCC license (authorization), or frequency assignment, does not authorize occupancy of public land. Granting occupancy and use of public land rests exclusively with the BLM. This includes:

1. Approving any new facility(ies) at the site.

2. Approving amendments to existing facilities (i.e., additions to tower, building, support facilities), and approving assignments of leases and ROW grants to qualified buyers of facilities on the site.

3. Approving any modifications to existing facilities including the tower, antenna, equipment or building. Also, approving any changes to the existing FCC licenses, prior to the submission of an application to the FCC.

4. Frequency Management. The BLM is not normally responsible for the resolution of conflicts when the licensees or agencies are operating within the limits of the FCC and NTIA/IRAC authorizations.

B. Facility Owners and Facility Managers

Facility owners and facility managers (or their designated representatives) are responsible for:

1. Complying with their use authorization and all provisions of this site plan.
2. Ensuring that all new facilities, expansions, or improvements are consistent with the Butte Falls Resource Area land use planning documents; any environmental document(s)/decisions for the site; and, this site plan.
3. Ensuring facilities/equipment not complying with Federal/State/local laws/regulations/ ordinances will be removed or modified within one year of the approval of this plan. Any modification needs pre-approval by the BLM.
4. Keeping all facilities within the established limits of their authorized area.
5. Providing the BLM with the name, address and phone number for a local contact person. The Facility Owner and Facility Manager and the contact person may be the same individual. The contact person will be available for emergencies and will have the authority to make

decisions about construction issues, facility maintenance and all equipment within the facility.

6. Providing 30-day notice to all facility owners/facility managers at the site, as well as the BLM, of all new frequencies proposed for the site. A completed BLM technical data sheet or equivalent must be sent with the 30-day notice to allow for comment of potential interference. This notification requirement applies to new frequencies for facility owners/facility managers as well as their tenants and customers
7. Adhering to the lease/ROW grant as follows:

    a. Facility Owners and Facility Managers with Communications Use Leases are authorized to rent building/tower space to tenants and/or customers without prior written approval from the BLM.

    b. Tenants and/or customers may not construct their own equipment shelter (building, shelter, generator pad, cabinet, etc.) or antenna support structure (tower or mast). The facility owner must own all communication shelters and towers under their lease or grant. [If that is not possible, a separate SF-299 application, cost-recovery fees, analysis, and authorization are required. This will result in the use being a tenant/customer of the original lease/ROW in addition to being a separate facility for billing purposes. See 43 CFR 2806.37]

    c. Tenants and/or customers using a facility covered by a Facility lease/ROW will not have separate BLM leases/ROWs to authorize their use except in situations where regulations or policy require them.

    d. Facility Owners and Facility Managers are responsible for complying with the terms and conditions of the facility lease/ROW. Facility Owners/Facility Managers are also responsible for ensuring that their tenants and customers are in compliance with the terms and conditions of the lease/ROW and applicable FCC or NTIA/IRAC license terms and conditions.

    e. The Facility Owner and Facility Manager may not place any unreasonable restrictions nor any restriction restraining competition or trade practices on tenants and/or customers, or potential tenants and/or customers.
8. Ensuring that all communications facilities and equipment are installed, operated, and maintained according to the Motorola R-56 Standards and Guidelines for Communication Sites. Repairs and modifications to existing facilities/equipment must also meet Motorola R-56 Standards. These standards may be waived by the BLM authorized officer when recommended by a site user association or similar technical committee upon request of a facility owner/manager when equivalent measures would achieve similar results.
9. Ensuring that all communication equipment meets ANSI, FCC and BLM regulations, guidelines and standards concerning radiation limitations by:

    a. Monitoring radiation levels at their facility and;

b. Immediately correcting any radiation levels that are, or could be a hazard to human health. (FCC 47 CFR sections 1.1307(b), 1.1310 and 2.1093) and FCC OET Bulletin 65, August 1997.

10. Providing the BLM with a certified copy of all uses and the correct category of uses within the facility, along with the current phone numbers and addresses of all tenants and customers as of September 30th each year. This report is due by October 15th each year.

11. Keeping the premises around their buildings free of trash and debris.

12. Placing the BLM lease/ROW serial number on the door of their communications site building, or on a gate if a fenced compound.

13. Correcting all interference problems. The users are normally responsible for the resolution of conflicts when the licensees or agencies are operating within the limits of the FCC and NTIA/IRAC authorizations.

C. FCC and NTIA/IRAC

The FCC and NTIA/IRAC are responsible for Frequency Management. The FCC and NTIA/IRAC are not normally responsible for the resolution of conflicts when the licensees or agencies are operating within the limits of the authorizations.

IV. AUTHORIZED USES AND USERS WITHIN A FACILITY

Use by Multiple Users

Use of all facilities and improvements by more than one user will be required except where the facility owner is a government agency or as noted below. Site applicants will take the lead in this area and design their proposals to accommodate multiple uses of facilities and improvements. This includes multiple uses of buildings, towers, back-up generators, grounding systems, fuel containers, access ways and parking areas.

BLM will not authorize new ROWs, ROW expansion, or modification until it is determined that existing authorized space and facilities are being used to capacity. Development or expansion of a ROW solely to preclude potential competitors from locating nearby is unacceptable and will not be authorized by the BLM.

Facility Owners and Facility Managers are not required to lease facility space to others if they can prove to the BLM authorized officer that:

1. Space is not available;

2. The use is incompatible with the existing facilities;

3. Additional space is needed by the facility owner/manager;

4. Additional users would violate system security needs; or,

5. Potential interference is not resolvable.

6. Additional users would violate security requirements to which the Facility Owner or Facility Manager is subject.

V. FEES

The BLM will charge Facility Owners and Facility Managers annual rental fees pursuant to federal regulations contained in 43 CFR 2806. The fees are based on two factors- the type of communications use, and the population served by the use. These fees are considered fair market value for the use of public land. The population Zone 9 (less than 25,000) will be used for these calculations unless something else is specifically agreed to in writing by the authorizing officer or until populations change.

Fees that Facility Owners and Facility Managers may charge their tenants and customers are to be reasonable (consistent with, and not in excess of, other fees for similar facilities) and commensurate with the uses and occupancy of the facilities and services provided to tenants and customers.

VI. GENERAL OPERATION AND MAINTENANCE DIRECTION

A. Unique Resource Considerations at this Communication Site

There are no currently identified special resource coordination considerations with on-site or adjacent resource values. Should special conditions arise through the revision process of the land use plan or other situations, this site plan will be amended accordingly.

B. Wiring and Grounding

1. All equipment is to be installed within existing buildings and in metal equipment racks or within metal equipment cabinets and in accordance with manufacturers' specifications. All equipment, racks, cabinets and overhead ladder trays are to be grounded and shielded in compliance with National Electrical Code (NEC) and in accordance with accepted industry standards.

2. All electrical wiring and grounding must meet the NEC and applicable State/local codes. All permanent wiring shall be installed in metallic conduit. Surge protection shall be installed between the electric service meter and the first power distribution panel.

3. Lightning protection shall be in accordance with NEC part 810-20 Antenna Discharge Units and Part 810-21 Grounding Conductors. Periodic bonding of the antenna feed lines

to the tower (when galvanized steel) shall be made with proper bonding connectors that are stainless steel (preferred), Copperweld, tin plated, or made of brass.

4. Each building is to have its own separate grounding system for all users in that structure. Wherever practical, interconnection of individual grids and/or the simultaneous placement of a large sized copper ground wire with any new grounding systems that are buried on the site will be required.

5. Site or facility grounding must be constructed of copper with #2 AWG or larger wire, Copperweld, or 2" or larger solid copper strap, connected to an adequate site/facility ground electrode system. The site/facility ground electrode system shall be bonded to the power service entrance grounding electrode conductor. Guy wires should also be grounded using manufacturers approved methods to preclude bi-metallic junction and corrosion. All equipment on the site (buildings, towers, power units, transmitters, receivers, antennas, combiners, telephone systems, power cabinets, HVAC units, etc) must be connected to the site/facility ground by direct connection. Electrical system ground wiring is required for electrical ground fault protection and circuit breaker coordination. The grounding systems shall comply with applicable laws, codes and in accordance with standard engineering practice. Below ground connections must use either an exothermic welding process (i.e., Cadweld, Thermoweld, etc.), copper wedge pressure devices (i.e., Ampact, Burndy, Wrench-lock, etc.), or brazed copper connections in conjunction with a mechanical UL listed connector (to be used as a physical strength enhancement component). Brazing by itself is not an acceptable method of bonding below earth grade (buried).

C. Communications Equipment

Equipment Ownership

All equipment shall be labeled (or the information available at the site, as applicable) with:

1. The owner's name;

2. Transmitter frequency(ies);

3. A valid FCC, or IRAC, authorization;

4. Transmitting power output(s); and

5. A current 24-hour phone contact number.

Transmitting Equipment

All transmitters will have protective devices (shields, filters, isolation components), designed into or externally installed, to prevent interference with other users. All transmitters will meet FCC licensing requirements. Two-way transmitters should have dual section isolators for a total of 60 db of isolation.

The re-radiation of intercepted signals from any unprotected transmitter and its associated antenna system will be prevented by the use of appropriate filters (wide band and narrow band broadcast transmitters).

The direct radiation of out-of-band emissions (i.e., noise or spurious harmonics) will be reduced to a level such that they may not be identified as a source of interference as defined in the FCC Rules and Regulations (e.g., Part 90.209(e) for non-broadcast uses). If site noise (electromagnetic noise) becomes an issue, noise threshold limits will be established, and amended into the site plan, prior to authorizing any new uses.

Direct radiation of out-of-bound emissions, (i.e., transmitter wide band noise, spurious emissions, harmonics, etc.) shall be reduced to a noninterference level by using bandpass, lowpass, and/or harmonic filtering. Where duplexing is used, use of a notch type device should be avoided.

Re-radiation of signals from a transmitter and its associated antenna system shall be prevented by installing appropriate devices (i.e., ferrite isolators), with minimum return loss of 25 db.

All transmitters not in immediate use and not specifically designated as standby equipment shall be removed. Loads connected to circulators are to be capable of dissipating the total power output of the transmitter.

Receiving Equipment

All receivers shall comply with all applicable parts of the FCC rules, including Parts 2 and 15.

All receivers shall have sufficient “front end” pre-selection to prevent receiver spurious response. The use of bandpass, band-reject cavity or crystal filters may be required to prevent receiver-produced intermodulation or adjacent-channel interference.

Where duplexing is used, a bandpass cavity duplexer is required. Use of the notch-type device is not permitted. Where notch-type devices are currently in place and there are no interference problems, their use may continue until the equipment is replaced, at which time they must be replaced with bandpass devices.

Tower

Generally only one tower is authorized for each facility owner. Facility Owners and Facility Managers may obtain permission to construct the second tower only after submitting evidence that demonstrates that their existing tower is completely filled and full use has been made of combining systems.

1. All towers will be left unpainted, if they are dull, galvanized steel. Paint is required only if the tower has a shiny (i.e., reflective) surface. If paint is required, the BLM will determine what non-reflective color the tower shall be painted.

2. Maximum tower height for future towers at this site is 165 feet.

3. Anti-climb devices, removable steps, or other means to discourage unauthorized climbing, are highly recommended to reduce or avoid liability claims.

4. All new towers will be self supporting. No guy lines are permitted.

5. To avoid possible impacts to birds or bats, follow the most current version of the U.S. Fish & Wildlife Service's Interim Guidelines on the Siting, Construction, Operation and Decommissioning of Communication Towers, available at the following website: *http://migratorybirds.fws.gov/issues/towers/comtow.html*

Antennas

1. Microwave (dish) antennas (other than ground mounted satellite dishes) will be limited to a maximum of eight (8) feet in diameter. The smallest diameter dishes are preferred if technically feasible.

2. Dishes should be mounted as low as possible to reduce visual impacts.

3. All antennas must meet all OSHA safety standards. If an antenna exceeds FCC public radiation standards (see FCC OET Bulletin 65) at ground level in publicly accessible areas, it will be remedied within 24 hours after measurements are taken or isolated (e.g., fencing, signing, relocation, lowering power levels are all possible remedies). Ground measurements of radio frequency radiation (RFR) levels will be taken before mitigation measures are implemented.

4. Color(s) for dish antennas, or covers, must be pre-approved by the BLM. New white dish antennas and/or covers will not be approved. Existing white dishes and covers must be repainted or replaced with dishes of approved color (typically dark grey), as repairs or replacement become necessary.

5. Antennas will be purchased with or treated to have a non-reflective surface.

Interference

The responsibility for correcting interference problems is a matter for resolution between the lease/ROW holder of the facility(ies), the user causing the interference, and the affected party(ies). First users on a site have seniority with respect to the resolution of interference complaints. Senior holders have an obligation to maintain their equipment to industry standards, to operate their systems in accordance with the terms of both the FCC license and NTIA/IRAC frequency authorization, and to comply with the BLM authorization.

New users on a site must correct, at their expense, interference problems that they create. They may be required to furnish an intermodulation study, electromagnetic noise study, or other interference-related data and must agree to accept financial responsibility for elimination or prevention of any interference caused by the facility before their application can be evaluated. They must cease operation of the suspect equipment until the problem is corrected. If interference problems cannot be resolved or corrected within a reasonable time, the new use that is causing the interference may be terminated and the equipment removed.

All users shall cooperate with the Site Users Association, if one is formed, and the BLM in identification and correction of any interference. The BLM does not have authority for correcting interference problems, but can act as a mediator to help all affected parties. Interference problems must be coordinated with the FCC or NTIA/IRAC, whichever is appropriate.

Interference with law enforcement and/or emergency communications must be corrected immediately. The operation of equipment covered by this site plan shall not interfere with United States Government radio or electronic operations already in existence on public land within two (2) miles of this site. The user causing this interference, shall, at its own expense, take all action necessary to prevent or eliminate such interferences. If it does not eliminate such interference within ten (10) days after receipt of notice from the BLM to do so, this use will be terminated.

If electromagnetic noise becomes an issue, noise thresholds will be established and this site plan will be amended accordingly.

D. Cables and Transmission Line (Wave Guides)

All new cabling will be jacketed and shielded and shall either be flexible or semi-rigid type. Existing substandard cables will be upgraded as repairs or replacement become necessary.

Cables will be properly installed and will be strapped and fastened down. Use of ports at building entrance points will be kept to a minimum by use of combiners.

When attaching power cables onto a tower, conduits should be used. Coax and wave guides should be installed in a wave guide ladder or equally divided among all tower legs.

All transmission lines (wave guides) are to be supported in accordance with manufacturer's specifications.

Unjacketed transmission line of any type is prohibited. No transmission line shall be left unterminated.

Double shielded braided or solid shielded cable will be used. No RG-8 type cable is permitted. No connector-type adapters will be used on transmission lines. Only correct connectors that will mate to connected devices are to be used.

Conduits will be shared when they service common areas and will be buried where possible.

E. Radiation

All communications uses must meet ANSI, FCC, and BLM regulations, guidelines, and standards concerning radiation limitations. This site is considered uncontrolled for the purposes of compliance with RFR standards.

Monitoring radiation levels at the site is the responsibility of all site users and will occur at intervals to comply with FCC regulations and guidelines. A copy of these monitoring reports

will be provided to the BLM upon request. The FCC is responsible for enforcement of the monitoring and standardization for compliance. The FCC could revoke the license and/or issue a fine for failure to comply. Additionally, the BLM could terminate or suspend the use authorization for failure to comply.

Onsite RFR measurements will be taken using appropriate equipment that can adequately measure and record both on-tower and on-the-ground levels before mitigation measures related to RFR are implemented pursuant to FCC standards and requirements.

Security fences with RFR notice signs are required around areas that exceed public use levels including anchor points outside the primary facility compound fence, if necessary. Raising higher power transmitting antenna on the tower or modifying the antenna type to half wavelength may be necessary to eliminate RFR hazards. Reducing power may also be required if other alternatives are not feasible. All fencing location and design or new tower construction must be pre-approved by the BLM.

Warning signs will comply with ANSI C95.2 color, symbol, and content conventions. Contact information including name and telephone number will also be included on warning signs. Existing warning signs compliant with FCC 47 CFR 1.1307(b) which do not currently include name and telephone number will be accepted as long as the name and telephone number is clearly posted on other signage at the Lessee's site.

Lowering power levels for on-tower access during maintenance will be coordinated between affected users.

Any identified RFR radiation problems that are, or could be, a human health hazard must be corrected within 24 hours after measurement tests have been completed or be removed from the site by the site user(s). If the proposed corrective action involves any new ground disturbance, it must be pre-approved by the BLM.

F. Utilities-Availability of and Requirements for:

Commercial Electrical Power

Commercial power is provided to the site under a separate ROW grant to PacifiCorp. The current electrical service to the site has the capacity to service additional users at the site. Future upgrades of the electrical service will be part of the right-of-way to PacifiCorp and may need to be paid for by the benefiting user(s).

Telephone Service

If additional telephone service is ever deemed necessary or expanded at this site, a separate ROW grant will be issued. Site users will also pay for the cost of:

1. The necessary resource surveys and reports for service connections; and

2. The cost of constructing service connections.

For visual reasons, overhead utility poles may not be authorized.

Fuel Tanks

Facility owners and facility managers are responsible for providing fuel storage (propane and diesel) and emergency power for their tenants and customers. No tenants or customers will be authorized to have separate fuel tanks and/or generators. Each facility owner will preferably consolidate fuel storage into a tank large enough in size to accommodate all tenants and customers within their facility. At a minimum, tanks will be grouped together in a consolidated area adjacent to their facilities. All fuel storage tanks (e.g., LPG, propane and diesel) must meet current fire department, Federal, State and local government safety and hazardous materials requirements. Propane is the preferred fuel for future generators.

1. All tanks will be:

    a. Signed in red letters, "SMOKING OR OPEN FLAME PROHIBITED WITHIN 20 FEET";

    b. In conformance with National Fire Protection Association (NFPA) requirements; and,

    c. Painted an approved color, or screened by an enclosure to blend in with the natural environment. If an enclosure is used, it must be pre-approved and painted an approved color from the Munsell Soil Color Chart, Standard Environmental Colors.

2. Diesel tanks will also be:

    a. Enclosed in BLM and fire department approved secondary containment vaults that are painted a BLM-approved color from the Munsell Soil Color Chart, Standard Environmental Colors.

    b. Constructed with underground fuel lines. Fuel line must be constructed of black, treated pipe and fittings, and must be posted.

    c. A containment basin must be maintained below all diesel tanks which are not designed and approved to be self contained.

G. Sanitary Facilities

Plans for any sanitary facilities must be pre-approved by the BLM. If it is determined by the BLM that the users need such facilities, they will be provided by the lease/ROW holder in a manner and location satisfactory to the BLM and within the requirements of the Jackson County Health Department.

H. Security and Law Enforcement

The Jackson County Sheriff's Department is the key law enforcement agency for the area. They are responsible for most civil and criminal matters. The BLM will be responsible for enforcing matters related to uses of BLM lands (e.g., resource protection issues).

Patrolling and policing for security purposes is the user's responsibility.

Several of the facilities on Flounce Rock are currently fenced. If fencing is ever deemed necessary for security purposes at other facilities on the site, it must meet the following criteria:

1. All fences must meet health and safety requirements.

2. All fence locations and design require Bureau of Land Management pre-approval. The standard fencing type will be chain-link (i.e. cyclone).

3. The standard fence height will be eight (8) feet.

4. Fencing will be designed, installed, maintained, and of a type to minimize interference issues as described in the Motorola R-56 standards.

5. Fences will be signed with RFR notices if RFR is above public levels.

I. Site Maintenance

The objective of maintenance activities is to present a clean, neat, and orderly appearance at the site and have all of the authorized improvements safe for workers and the public. All users will keep up the overall appearance of the site.

Miscellaneous debris remaining after any construction and/or equipment installation, removal or modification, is not only a hazard, but can cause interference or intermodulation problems. In particular, all loose wire or metal objects are to be removed from the site.

The users of the site will remove all graffiti within 10 working days of finding it, weather permitting.

Users will not be permitted to leave or dispose of trash, garbage or cut brush on public lands. No outside trash or litter containers will be provided. Site users will remove litter from the site as it is produced.

Policing of litter in common areas (i.e., areas between buildings and developed sites) is the shared responsibility of those holders bordering these areas.

During construction and/or maintenance, excess materials (e.g., cement, wire, metal, building materials) will be removed from public land.

Peeling paint on buildings and/or towers will be re-painted within thirty (30) days of discovery by the facility owner or facility manager and within 10 days of notification of the holder by the BLM, weather permitting.

The Lessee is responsible for the abatement and control of noxious weeds within the bounds of their lease site and common use areas. Abatement practices are to be implemented in accordance with the Butte Falls Resource Area weed abatement programs.

J. Inspections

Enforcement authority is vested in the BLM as the Communications Site Administrator for Flounce Rock via 43 CFR 2800. The BLM may conduct an annual inspection of each user's facility. This inspection will verify:

1. Compliance with technical standards.
2. Structural integrity.
3. As-built plan accuracy.
4. Electromagnetic compatibility.
5. General site health, safety, and cleanliness.

The BLM shall provide written notice of the scheduled inspection date at least 30 days in advance. Each user shall arrange to have personnel available at the site at the time of the inspection.

Any non-compliance found by a user shall be reported to the BLM. The BLM will conduct an inspection and a written copy of the inspection report shall be forwarded to the violating user within 30 working days following the inspection. The report shall include:

1. A description of the violation.
2. Corrective action required.
3. Name, address, and organization of the responsible party.
4. Time allowed for completion of corrective measures.
5. Anticipated action in the event of noncompliance with remedial instructions.

K. Fire Prevention and Hazard Reduction Requirements

Facility owners and facility managers will be required to control vegetation within the fenced area around their facilities. Gravel or mineral soil (i.e., bare ground) must be maintained to a minimum of (10) feet clearance around buildings and a minimum of (10) feet clearance around any propane tanks. Identified threatened, endangered, or sensitive plant species must remain within the minimum clearance areas.

Smoking is prohibited in flammable vegetation areas.

Roof structures shall be kept reasonably clear of debris at all times.

No explosives will be stored at this site. Flammable materials shall be stored in conformance with the requirements of local fire regulations. Flammables will be placed in closed containers

and stored away from sources of ignition and combustible materials. If flammables are stored within a building, the building will be locked, properly signed and well ventilated.

Approved spark arresters will be required and maintained on all internal combustion engines.

At least one (1) U.L. rated 20 lb. A:B:C dry chemical fire extinguisher is required inside either each building or in any vehicle the user brings to the site. Prior to each June, fire extinguisher(s) shall be inspected by holders and refilled, if necessary.

Any fire will be immediately reported to "911", the nearest BLM office and/or Jackson County Sheriff.

BLM Officers will make periodic fire prevention inspections. They will call to the holder's attention any lack of compliance with the above regulations, plus any other existing hazards. Compliance with these inspections is required within the time limits specified in the inspection report.

All fire protection standards must be accomplished by the beginning of fire season unless otherwise agreed to, and then maintained throughout the fire season.

For new construction, the BLM will provide the Holder with a separate Construction Fire Plan which will be prepared at that time as applicable

L. Access Maintenance and Restrictions

Roads

The road to the site is generally good condition due to maintenance by BLM and the county. However, it is certain that future use of the site will, over time, degrade the quality of the road and will require maintenance. If a user association is formed on Flounce Rock, the costs of road maintenance will be assessed by the association and enforced through this management plan. If a user association is not formed, maintenance costs may be assessed depending on the amount of use on the road. If there is disagreement among users as to the assessed costs, BLM will determine the costs to be borne by each leaseholder.

Individual users who damage or disturb the access road, or any associated structures, such as ditches, culverts, roadside vegetation, signs and/or underground utilities or facilities, will be required to repair the road and/or associated structures, to conditions equal to or superior to those prior to any damage or disturbance. This work must be done according to applicable road maintenance standards and may require the appropriate NEPA analysis.

Interior Site Driveways/ Parking Areas

Interior site driveways within the communications site will be maintained by the site users. Interior roads will be planned and approved during establishment of new facilities. Interior roads will be maintained in a manner to allow only one entrance to the site. Off-road vehicle use by a user in and around the communication site will be avoided.

Road Closures

Native surface roads are subject to periodic closures to entry during periods of extreme fire danger, inclement weather, or wet conditions. Authorized site users may use the site during these periods, but should use judgment and may need to seek advance approval from the Bureau of Land Management.

VII. CONDITIONS FOR CONSTRUCTION, MODIFICATIONS OR EXPANSION

A. Facility Owner/Manager Responsibilities

In addition to the responsibilities listed in Section III, new applicants and existing Facility Owners/Managers proposing new, modified, or expanded facilities are responsible for:

1. Submitting a complete application to the Butte Falls Resource Area (ATTN: "Realty Specialist") prior to any new construction or modifications to existing improvements, unless new electronic equipment is being installed in/on an existing tower and/or an existing building. The application must include:

    a. The appropriate cost recovery and application fees as determined by BLM.

    b. A copy of the approved Site Plan Base Map showing all of the proposed (new) facilities including structures, towers, and auxiliary equipment;

    c. Completed drawings/plans prepared by a registered engineer and Plan of Development approved by the BLM;

    d. Identification of any microwave beam paths, a plot of their azimuth(s), and their proposed elevation(s) on the tower;

    e. Documentation that shows that proposed facilities will not be obstructing, or interfering with, any existing fixed point to point antennas, omni-directional broadcast antennas, or microwave beam paths in the directions of primary population targets. Proposed beam path needs must be shown on Site Plan Base Map; and,

    f. Any needed recommendations, changes or modifications to their original proposal, based on any required resource surveys and/or reports.

2. Demonstrating that their proposals will not cause undue interference with any existing uses before the BLM can approve new facilities. In addition, it is the applicant's responsibility to show that any new facilities will make the most efficient use of the limited amount of space at the site.

3. Showing their proposals will provide for future users without additional construction.

4. Providing engineering and geotechnical investigations for development of specific foundation designs and grading plans.

5. Providing for erosion control as part of the Plan of Development prior to construction activities. At a minimum, erosion control must include: sediment control, stipulations that cut/fill slopes will be graded and contoured to prevent erosion and/or excessive runoff, and recommendations for temporary erosion control measures, (e.g. netting, silt fences, swales, and/or sediment collection areas).

6. Coordinating with other Federal (e.g., FCC and FAA), State and County agencies and obtaining all required approvals and/or permits.

7. Providing 30-day notice to all facility owners/facility managers at the site, as well as the BLM, of all new frequencies proposed for the site. A completed BLM technical data sheet or equivalent must be sent with the 30-day notice to allow for comment of potential interference. This would be for new frequencies for themselves and their tenants and customers.

8. Insuring that all written approvals have been obtained from the BLM prior to construction. In addition:

   a. Directional antennas will only be protected within the arch between their licensed 3 dB points.

   b. New and/or modified facilities will not obstruct existing fixed point-to-point antennas or omni-directional broadcast antennas in directions of primary population targets.

B. Construction Methods and Resource Protection

Plans submitted by an applicant for any new construction or modifications shall specify provisions for soil rehabilitation measures including, but not limited to, soil replacement and stabilization and for proper handling of runoff from buildings, parking area, access roads, and undeveloped common areas.

The following methods and resource protection measures will be required to minimize impacts during construction:

1. Avoid and protect sensitive resource areas, as identified by the BLM.

2. Compliance with the Plan of Development and the Erosion Control Plan.

3. During construction and/or maintenance, no paint or paint thinners will be disposed of on site.

4. Minimize ground disturbance and vegetation removal as much as possible during construction activities. All ground-disturbing activities require BLM pre-approval.

5. Disturbed areas will be re-vegetated with species pre-approved by BLM as soon as possible after construction. If necessary, reseeding will be required until vegetation is successfully established as determined by the BLM.

6. No grading material will be cast off during construction/reconstruction activities. Excess soil can be used for fill material on road and/or building/tower pads.

7. Temporary on-site storage of construction materials will require pre-approval by the BLM.

8. Construction materials and supplies, except for hazardous materials (see number 9. below) may be left unattended at the construction site at the end of each workday, but at the owner's risk.

9. Hazardous materials, including but not limited to all fuels, oils, and lubricants, are not to be left unattended at the site at any time. During construction, these materials are to be removed from the site at the end of each workday, or temporarily stored inside a locked and signed building until the following workday.

10. All surplus construction materials and/or waste debris must be removed from the site no later than thirty (30) days after construction has been completed.

11. Any earth moving or heavy equipment (e.g., dozers, graders, cranes, backhoes, etc.) leaving the designated roadway and/or approved parking area(s) to perform authorized activities at the site, will be washed off prior to being brought onto public lands to prevent the introduction and spread of noxious weeds into the area.

C. Construction Inspection

1. All new construction, reconstruction, or major modification shall conform to the established technical standards and accepted engineering practices (i.e., the Uniform Building Code).

2. Any construction inspections required by other applicable agencies are the responsibility of the lessee/holder. Copies of completed inspections are to be provided to the Butte Falls Resource Area, Authorized Officer, either as they occur or as part of the final as-built plan. Inspection information shall become a permanent part of the holder's lease/ROW case file.

3. The Lessee/Holder agrees that corrective work detailed in BLM, or other agency required compliance inspections, would be completed by the scheduled completion date. If the Lessee/Holder disagrees or has questions about specific items, the Lessee/Holder must contact the BLM in order that the disagreement or item may be resolved.

4. A final set of as-built plans will be submitted to the Butte Falls Resource Area Authorized Officer within 90 days of acceptance of structure (if contracted) or of completion date.

D. New or Remodeled/Expanded Buildings

1. Any new buildings must be designed to accommodate multiple users along with fitting into the physical environment as defined in a site-specific environmental analysis developed at the time of the proposal.

2. Buildings are required to be one-story. The roof must be metal or covered with metal to be fire resistant. Roofs can be equipped with antenna support structures, such as poles and railings that can extend up to 25-feet above ground level.

3. Facility Owners and Facility Managers are encouraged to construct the interior of their buildings in a modular fashion, so that they can:

    a. Sublease sections to others;

    b. Provide tenants and customers with internal separation and security;

    c. Reduce physical interference; and

    d. Increase management effectiveness.

4. The following materials are approved for construction of new facilities (i.e. buildings):

    a. Floors – Concrete slab with drainage.

    b. Walls – Concrete block, metal, or pre-fabricated concrete.

    c. Roof – Metal, or concrete, if painted to eliminate shiny surfaces, or other fireproof material as approved by the BLM. Proposals for wooden roofs will not be approved.

    d. Partitions – If it is felt partitions are necessary in buildings, ensure they are constructed with fire resistant material (e.g., concrete block, reinforced concrete, or properly grounded fencing.

    e. Color – Proposed color for use on all exterior building surfaces must be pre-approved by the BLM. The goal of the color selection for the facilities is to make the building as inconspicuous as possible and make buildings located on the skyline look inconspicuous when viewed from a distance. The intent is to reduce or eliminate glare from reflective and/or illuminated surfaces such as windowpanes, sheeting and reflective paints. Non-reflective, BLM-approved colors will be used on equipment buildings.

5. Building entry lights must:

    a. Only light the immediate area in the vicinity of the door;

    b. Be motion activated and have a limited time duration (e.g., 3-5 minutes); and

    c. Have a shielded beam that is pointed at the building door.

Requests for all-night (i.e., "dusk-to-dawn") lighting, or entry lighting that would be visible from outside of the site will not be approved. FAA-required lighting would be the only exception.

E. New or Remodeled/Expanded Towers

1. All new construction, reconstruction, and modifications to towers will be pre-approved by the BLM prior to implementation.

2. It is the applicant/holder's responsibility to assure that a new, or modified, structure will not unduly interfere electronically or physically with any existing equipment at the site. Towers must be spaced, so as to prevent ground level radiation and/or interference problems. This must be clearly demonstrated in writing to the BLM prior to issuance of a new lease/ROW or amendment.

3. All new towers will comply with current structural and safety specifications and design standards, including safety-climbing devices. Towers should be as narrow and "open" as safety and structural integrity allow. New towers will be designed using maximum wind, snow, and/or tower loading anticipated for the site.

VIII. SITE ASSOCIATION/ADVISORY GROUP

A site association is probably not needed at this time. If development were to increase, a users association may become desirable. Leadership would need to come from one of the users. As needed in the future, the site association would be responsible for obtaining and maintenance of an administrative access and upkeep of internal roads and parking areas. The site association would also be responsible for ensuring cooperation between users for on-tower access. A site safety officer would be identified within the site association. The site association would be expected to develop a Radio Frequency Radiation Plan/Agreement and recommend measures to reduce interference issues (e.g., through use of filters).

The goal of the site association would also be to maximize the effective use of the site. The objective of a sanctioned association will be to represent all site users as a group when dealing with the Butte Falls Resource Area on matters relating to the site administration. The association would be able to work in cooperation with the BLM to identify problems or opportunities and make recommendations to the BLM for any changes in management strategies at the site. The association could also provide input to the BLM regarding the future addition of equipment and facilities at the site. While the advice and recommendations of the association would not be binding on the BLM, the BLM could use the input for administration of the site. The BLM would be a member of such a group and would help jointly develop the charter (i.e., the ground rules).

In the absence of a formal Site Association, the BLM may utilize a Site Advisory Group that can make suggestions and/or recommendations to specific problems associated with the administration of the site.

IX. APPENDICES

A. Location and Site Maps

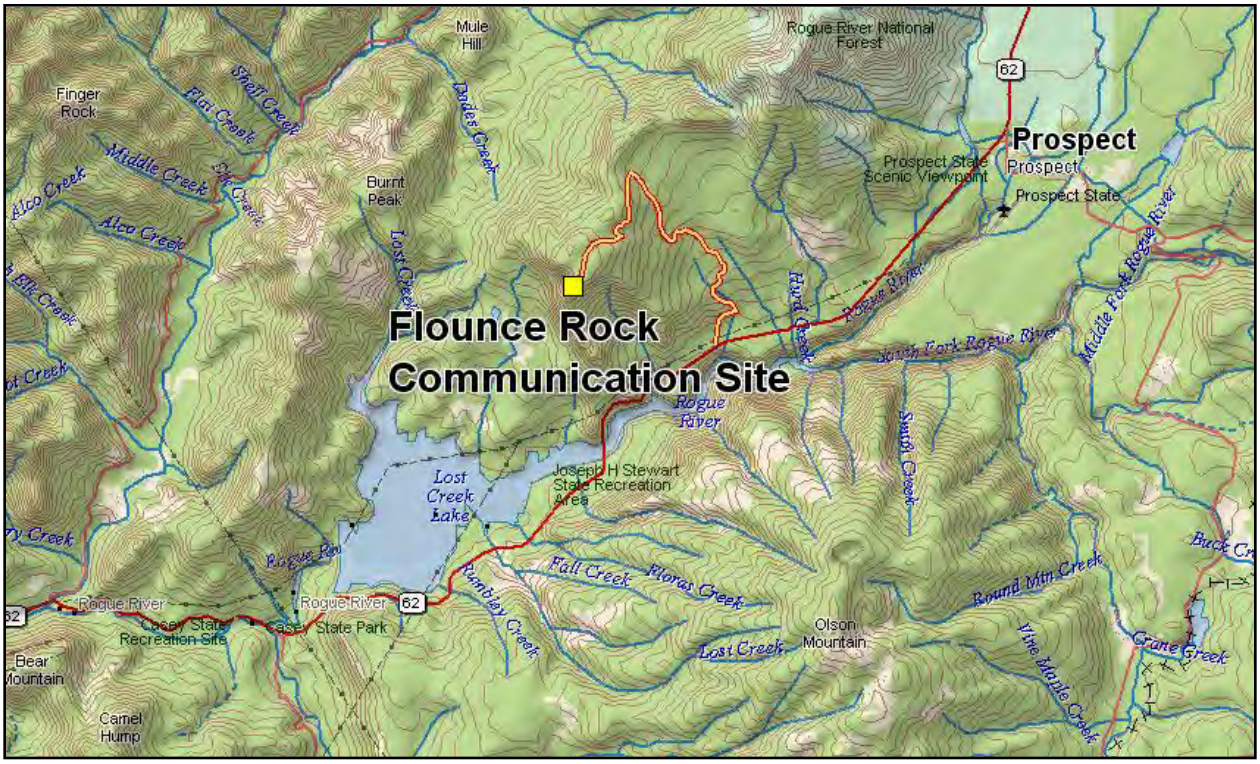
B. Authorized Facilities

C. Site Photographs

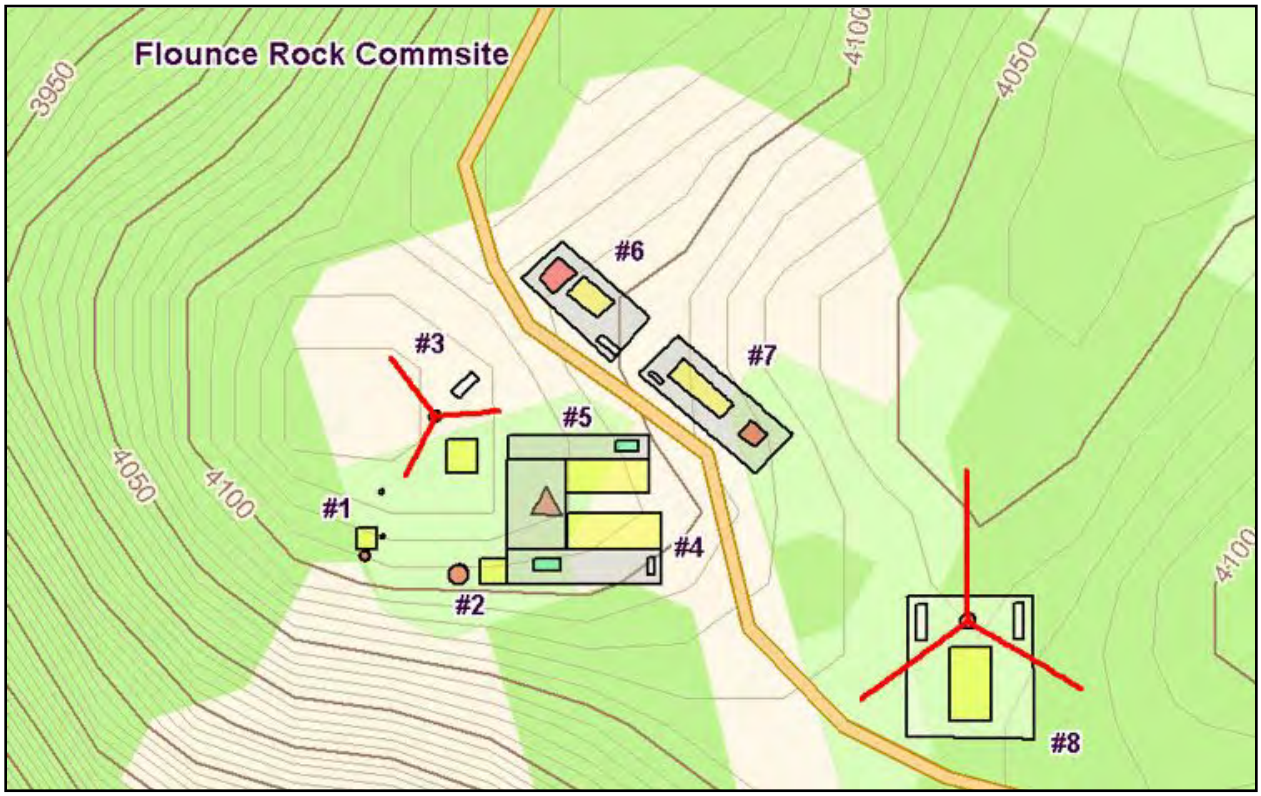
D. Inspection Checklist

APPENDIX A

LOCATION MAP



SITE MAP



APPENDIX B

FLOUNCE ROCK COMMUNICATIONS SITE LESSEE/HOLDER FACILITY TABLE

(See associated User's Table on the Website)

	Auth #	Use	Building	Tower	Access/Parking	Other
Facility # 1 Prospect Lions Club	**ORORE 015295**	**FAM**	**6'x 6' block**	**35' rohn 20' rohn 10' mast**	**Access and parking.**	
Facility #2 BLM Medford	**ORORE 015011**	**PMRS**	**8'x 8' block**	**40' monopole**	**Access and parking.**	
Facility #3 Meriwether S. OR Land and Timber	**ORORE 062087 (scheduled for removal)**	**PMRS**	**8'x 12' block**	**60' guyed**	**Access and parking.**	
Facility #4 AT&T	**ORORE 48431**	**CEL**	**12'x 28' aggregate**	**120' lattice**	**Access and parking**	**Fence 200 gal propane Generator**
Facility #5 US Cellular	**ORORE 48869**	**CEL**	**13'x 21' aggregate**	**None (on AT&T tower)**	**Access and parking.**	**1000 gal propane, Generator Fence**
Facility #6 Corp of Eng. Portland	**ORORE 29029**	**MIC/PMRS**	**10'x 12' alum siding**	**30' lattice**	**Access and parking**	**500 gal propane Generator 30'x 50' fence**
Facility #7 Pacificorp	**ORORE 63072**	**MIC/PMRS**	**10'x 20' metal**	**25' lattice**	**Access and parking**	**250 gal propane generator 30'x 60' fence.**
Facility #8 Telava	**ORORE 65924**	**MIC**	**10'x 25' metal**	**165' guyed**	**Access and parking**	**2- 1000 gal propane tanks. Generator 30'x 60' fence**

APPENDIX C

SITE PHOTOGRAPHS

(See associated Facility Photos on the Website)

Facility 1, Prospect Lions Club

Facility 2, BLM

Facility 3, Meriwether So. OR Land and Timber (to be removed)

Facility 4, AT&T

Facility 5, US Cellular

Facility 6, Corps of Engineers

Facility 7, PacifiCorp

Facility 8, Telava

APPENDIX D

"Flounce Rock Annual Technical Inspection"

Date Inspected: _____ Time Inspection: _____

Permit Holder: _____ Authorization # _____

Site Technician: _____ Phone # _____

Number of Transmitters _____ License Posted _____

Please mark the following Items as Acceptable (A) or Unacceptable (U).

Electrical Wiring ---------- (A) (U) Grounding ---------- (A) (U)

Equipment Installation ---------- (A) (U) Housekeeping ---------- (A) (U)

Building Repair ---------- (A) (U) Tower Repair ---------- (A) (U)

Please mark the following Items as Yes (Y) or NO (N) or (NA)

Isolators ---------- (Y) (N) (NA) Circulators ---------- (Y) (N) (NA)

Cavities ---------- (Y) (N) (NA) Terminators ---------- (Y) (N) (NA)

Filters ---------- (Y) (N) (NA) Lightning Protection ---------- (Y) (N) (NA)

Comments: _____

_____

Recommended Corrective Action: _____

_____

_____

Required Corrective Action to Be Taken: _____

_____

_____

_____

_____

Committee Representatives: _____

Bureau of Land Management Representatives: _____

Please make the required corrective action within the next 120 days. Please make a written report of corrective action taken and submit to the BLM. If you should have any questions, please call the BLM office.

ROBINSON BUTTE COMMUNICATIONS SITE MANAGEMENT PLAN

ROGUE RIVER-SISKIYOU NATIONAL FOREST
HIGH CASCADES RANGER DISTRICT
PROSPECT, OREGON

Submitted By: **/s/Kerwin Dewberry** **7/1/2010**
District Ranger Date

Approved By: **/s/Scott D. Conroy** **7/7/2010**
Forest Supervisor Date

Table of Contents

I. DEFINITIONS

Authorized Officer. The Forest Service employee with the delegated authority to issue and manage communications uses. The authorized officer is usually the District Ranger or Forest Supervisor of the unit on which the communications site is located.

Co-location. Installation of telecommunications equipment in or on an existing communications facility or other structure.

Communications Site. An area of National Forest System (NFS) lands designated as an electronic site through the Forest Land and Resource Management planning process for telecommunications uses. A communications site may be limited to a single communications facility, but most often encompasses more than one. Each site is identified by name, usually denoting a local prominent landmark, such as Bald Mountain Communications Site.

Customer. An individual, business, organization, or agency that is paying a facility owner or tenant for communications services and is not re-selling communications services to others. Private ("other communications use" category) and internal (private mobile radio service and non-commercial microwave categories) communications uses leasing space in a building and not re-selling communications services to others are considered customers for rental calculation purposes.

Facility. A building, tower, or other physical improvement (buildings and towers do not have to be combined to be considered a facility) that is built or installed to house and support authorized communications equipment.

Facility Manager. The holder of a Forest Service communications use authorization who (1) owns a communications facility on NFS lands, (2) rents space in or on their facility to other communication users, but (3) does not own or operate their own communications equipment and they do not directly provide communications services to third parties. Persons or entities that manage or administer a communications facility on NFS lands for a facility owner or a facility manager are not facility managers for purposes of this communications site plan.

Facility Owner. The holder of a Forest Service communications use authorization who (1) owns a communications facility on NFS lands, (2) may or may not be renting space or equipment to other communications users in or on their facility, and (3) owns and operates their own communications equipment in their facility.

Multiple-Use Facility. A communications site facility that has multiple communications uses operated directly by the facility owner or has customers or tenants in or on that facility.

Ranally Metro Area. Geographic areas in the United States identified by Rand McNally in its Commercial Atlas and Marketing Guide that define population centers of 50,000 or more. There are approximately 450 Ranally Metro Areas (RMAs) in the United States.

Senior Use. A communications use that predates another communications use. The most senior use or uses form the basis for the communications site designation.

Single-Use Facility. A communications site facility that contains only the single communications use of the facility owner and no tenants or customers in or on the facility.

Tenant. A communications user who rents space in a communications facility and operates communications equipment for the purpose of re-selling communications services to others for profit. Tenants may hold separate authorizations, without sub-tenancy rights, at the full schedule rent based on the category of use.

II. NARRATIVE

A. Site Description

Robinson Butte Communication Site is located on High Cascades Ranger District, Rogue River-Siskiyou National Forest, Jackson County, State of Oregon in NW1/4, SW1/4,Section 8, T. 37 S., R. 4 E., Willamette Meridian at approximately Latitude 42° 21' 52" North, Longitude 122° 22' 53" West. The elevation at Robinson Butte communications site is approximately 5855 feet above mean sea level (msl). The area for development is approximately 2 acres in size. Robinson Butte Communication Site is road accessible. The USDA Forest Service currently maintains a fire lookout on Robinson Butte.

This site serves Medford, Oregon Ranally Metro Area (RMA). The population is currently greater than 100,000 less than 300,000 and is therefore Zone 6. The population identified for this Zone is updated annually by the Forest Service, Washington Office, Director of Lands, and is used to determine the annual rental fee due the Forest Service.

The most senior use at this site is two-way radio and the site is designated as low power non-broadcast. This designation was established in the Robinson Butte Electronic Communication Site Environmental Assessment and Decision Notice approved on September 2, 1993. The decision was consistent with Rogue River-Siskiyou National Forest Land and Resource Management plan within prescriptions which allow electronic sites. The maximum power output for the Robinson Butte Communication Site is based on the maximum output allowed for two-way radio under the Federal Communications Commission's rules at Title 47, Code of Federal Regulations, Part 90.

This plan supersedes the Robinson Butte Electronic Site Plan approved September 2, 1993.

B. Existing Site Development

Robinson Butte was first developed as a fire detection location in 1933. In 1974, the lookout was replaced with the current 53' treated timber structure. The current tower structure provides space for commercial cellular and microwave antennas. Discourage future commercial use of Forest Service facilities.

Medford Cellular (ATT) was issued a permit (ASH413601) for cellular telephone on September 11, 1993.

US Cellular was issued a permit (ASH413701) for cellular telephone. The Forest Service lookout tower serves as the antenna support for US Cellular equipment.

See Appendix B for a current list of currently authorized facilities.

C. Objectives

The primary objectives of the Robinson Butte Communications Site Management Plan are to:

1. Document site management policy, procedures and standards, which are not already specified in the standard communication site lease.

2. Manage for primary use as fire detection facility. No uses shall visually or electronically interfere with fire lookout operations.

3. Manage for low power communications uses only. The maximum power output expressed as ERP is based on the maximum output allowed for two-way radio under the Federal Communications Commission's rules at Title 47, Code of Federal Regulations, Part 90. As of the 2003 regulation, that is 500 watts ERP. Each use must operate at or below the power level authorized by their respective FCC license as long as it does not exceed the site limitation.

4. No continuously transmitting uses are authorized at this site, excluding microwave.

5. All uses must be designed, operated and maintained so as not to physically or electronically interfere with the senior uses. If new used deteriorate the receiving/transmitting operation of existing uses, the new use uses may be required to institute at their expense; additional studies, equipment upgrades, frequency isolation, or physically separate themselves from the existing uses.

6. Present a program for operation within the site.

7. Help fulfill the public need for adequate communication sites.

8. Protect the interests of leaseholders and site users by preserving a safe and an electronically "clean" environment.

9. Encourage the efficient development and use of space and facilities within the designated site, subject to the USFS goal to provide the best possible public service at reasonable cost.

10. Authorize new Tenant and/or Customer uses that can physically and electronically be accommodated within existing buildings and/or towers.

11. Maintain visual resource objectives by requiring design standards that are unobtrusive and by utilizing earth tone colors and non-reflective surface material consistent with the standards in the Land and Resource Management Plan.

12. Amend this Communications Site Plan as necessary to be consistent with future Forest Resource Management Plan. The Forest Service will provide authorization holders with proposed amendments to this plan and will allow a reasonable period of time for the holders to review and comment on the proposed changes.

III. AUTHORITY AND JURISDICTION

A. Authority

Forest Service authority to authorize and manage communications uses on National Forest System lands derives from the Federal Land Policy and Management Act of 1976 (43 U.S. C. 1761-1771); Title 36, Code of Federal Regulations, part 251, subpart B (36 CFR 251, subpart B); Forest Service Manual (FSM) 2700; and Forest Service Handbook (FSH) 2709.11, chapter 90.

B. Jurisdiction

The Forest Service has jurisdiction over the use and occupancy of National Forest System (NFS) lands for communications purposes under the National Forest Management Act (NFMA) of 1976 (16 U.S.C. 1600 et seq.); the Federal Land Policy and Management Act (FLPMA) of 1976 (43 U.S.C. 1701 et seq.), and Title 36, Code of Federal Regulations, part 251, Subpart B (36 CFR part 251, subpart B).

The Federal Communications Commission (FCC) has jurisdiction over the use of non-Federal channels of radio and television transmission under licenses granted by the FCC. The National Telecommunications and Information Administration (NTIA) has jurisdiction over the use of Federal channels of radio transmission under authorizations granted by the NTIA.

The issuance of an FCC license or NTIA authorization does not authorize the use and occupancy of NFS lands. A Forest Service special use authorization is required for the use and occupancy of NFS lands for communications purposes.

The Forest Service has jurisdiction over resolution of conflicts associated with the use and occupancy of NFS lands, such as those involving location and re-radiation. The FCC and NTIA are not responsible for resolving occupancy conflicts associated with the use and occupancy of NFS lands or the resolution of other conflicts when entities are operating within the limits of their FCC license or NTIA authorization. However, the FCC or the NTIA may be useful in assisting in the resolution of interference problems or other frequency conflicts.

IV. RIGHTS AND RESPONSIBILITIES

A. The Forest Service

The Forest Service retains the responsibility for issuing and amending authorizing instruments to Facility Owners and Facility Managers for the authorized improvements. The issuance of a FCC license (authorization), or frequency assignment, does not authorize occupancy of National Forest system lands. Granting occupancy and use of National Forest system lands rest exclusively with the Forest Service. This includes:

1. Amend or modify this site plan as deemed appropriate.

2. Approve new facilities including those constructed within a lease holder's authorized area.

3. Approve assignment of a communications site lease.

B. Facility Owners and Facility Managers Are Responsible for:

1. Complying with the terms and conditions of their communications site authorization and this site plan.

2. Ensuring that all new facilities, expansions, or improvements are consistent with the Rogue River-Siskiyou National Forests Land and Resource Management Plan, environmental documentation and decisions affecting the use of this site, and the provisions of this site plan.

3. May rent building and tower space to tenants and customers without prior written approval from the Forest Service as long as that tenant or customer use is an approved communications use as designated in this site plan and does not interfere with other existing uses at the site.

4. May not place any unreasonable restrictions on potential or existing tenants and customers.

5. Ensuring that facilities and equipment not complying with Federal, State, and local laws, regulations, and ordinances will be removed or modified within one year of approval of this site plan. Modifications require the pre-approval of the authorized officer.

6. Keeping all facilities within the established limits of their authorized area. The Facility owner or manager may not, for itself or for any customer or tenant, authorize construction of any equipment shelter or tower, or manipulation of the site or vegetation in any way, without specific authorization from the Forest Service (See sec. VII).

7. Providing the authorized officer the name, address, and telephone number of a local contact. The facility owner or the facility manager and the local contact person may be the same individual. The local contact shall be available for emergencies and shall have the authority to make decisions about construction issues, facility maintenance, and all equipment within the facility.

8. Ensuring that all communications equipment in their facility is properly installed, operated, and maintained in accordance with ANSI, FCC, and Forest Service regulations, guidelines and standards concerning radiation limitations, including monitoring radiation levels at their facility and immediately correcting any radiation levels that are, or could be a hazard to human health.

9. Providing the authorized officer by October 15th of each year, a certified statement listing their type or types of communications uses they provide and the business names of all occupants and their type of communication use in the facility on September 30th of that year.

10. Treat and control noxious weeds as allowed for in the terms and conditions of the authorization on and adjacent to their permitted area, access, and parking areas. Treatment requirements and standards must be according to applicable regulations. Standards and application procedures may be obtained from the Forest Office.

C. Tenants and Customers:

May co-locate in an existing facility when their communications use is an approved use in the site plan. Co-location in a non-Federal communications facility does not require a Forest Service authorization. Tenants and customers who co-locate in a Federal facility shall first be issued a special use permit from the authorized officer before locating in that Federal facility.

V. USE OF THE SITE

A. Multiple-Use Facilities

Co-location, when practical, shall be required. Site applicants shall take the lead in this area and shall design their proposals to accommodate multiple uses of facilities and improvements. This includes the multiple-use of buildings, towers, solar generating

systems, back-up generators, grounding systems, fuel containers, access ways, and parking areas.

Due to the limited development space at the site, new facilities, or major modifications to existing facilities, shall be designed to accommodate additional users even if other users are, or could be, competitors.

Facility owners and facility managers are not required to lease facility space to others if they can demonstrate to the authorized officer that:

1. Space is not available;

2. The use is incompatible with the existing communications uses at the site. For example, the proposed use is not compatible with other uses as provided for in FSH 2709.11, section 97, exhibit 05;

3. Additional space is needed by the facility owner or the facility manager; or

4. Additional users would compromise security of the facility or communications systems located in that facility.

VI. RENTAL FEES

Unless specified differently in the communications site lease, the Forest Service shall charge facility owners and facility managers of non-Federal facilities and tenants and customers in Federal facilities an annual rental fee based on the fee schedule for communications uses on National Forest System lands contained in FSH 2709.11, section 95. The rental rates shall be adjusted annually using the Consumer Price Index-Urban (CPI-U), and the population figures are adjusted annually based on the most recent Rand McNally Commercial Atlas and Marking Guide (for RMAs) and Rand McNally Road Atlas for non-RMA communities.

Rental fees that facility owners and facility managers may charge their tenants and customers shall be:

1. Reasonable and commensurate with the use and occupancy of the facilities and services provide to tenants and customers; and

2. Consistent with other fees charged for similar facilities.

VII. CONDITIONS FOR NEW CONSTRUCTION AND MODIFICATION OR EXPANSION OF A FACILITY

A. New Construction, Modification, and Expansion Responsibilities

Construction space at the site is available. If new facilities are proposed or if existing facilities ever need modification, the following guidelines shall apply.

In addition to the responsibilities listed in Section IV, proponents, facility owners, and facility managers seeking to construct a new facility or modify or expand an existing facility are responsible for:

1. Submitting a complete application to the authorized officer prior to any new construction, modification, or expansion of a facility. The application shall include:

    a. A copy of the approved site plan base map showing all of the proposed new, modified, or expanded facilities, including structures, towers, and auxiliary equipment;

    b. Completed drawings or plans prepared by a professional engineer or architect;

    c. Identification of any proposed microwave beam paths, a plot of their azimuth, and their proposed elevation on the tower; and

    d. Documentation showing that the proposed facilities will not obstruct or interfere with any exiting uses, including fixed point-to-point antennas, omni-directional broadcast antennas, or microwave beam paths.

2. Demonstrating that the new facility will make the most efficient use of the limited amount of space at the site and will provide for future uses without additional construction.

3. Providing engineering and geotechnical investigations for development of specific foundation designs and grading plans.

4. Providing an erosion control plan prior to construction. At a minimum, the erosion control plan shall include sediment control, stipulations that cut and fill slopes will be graded and contoured to prevent erosion and excessive runoff, and recommendations for temporary erosion control measures, such as netting, silt fences, swales, sediment collection areas, and so forth.

5. Coordinating with other Federal and local governments and securing all pertinent permits and approvals from those agencies.

6. Providing 30-days notice to all facility owners and facility managers at the site, as well as the Forest Service, of all new frequencies, either for themselves or their tenants and customers, proposed for the site. A completed FS-2700-10 shall be sent with the 30-day notice to allow for comment of potential

interference. This would be for new frequencies for themselves and their tenants or customers.

B. Construction Methods and Resource Protection

Plans submitted by a proponent, facility owner, or a facility manager for construction, modification, or expansion of a facility shall provide for soil rehabilitation measures, including soil replacement and stabilization and proper handling of runoff from buildings, parking areas, access roads, and undeveloped common areas. The authorized officer must approve all cutting or trimming of vegetation.

During construction, modification, or expansion of facilities, facility owners and facility managers shall:

1. Identify, avoid, and protect sensitive resource areas identified by the Forest Service.

2. Comply with the erosion control plan.

3. Notify the Forest Service authorized officer prior to commencing any approved ground-disturbing activities.

4. During construction and/or maintenance, paintbrushes will not be cleaned off on rocks. No marks of any kind, including survey marks, will be permitted on rocks.

5. Minimize, to the greatest extent possible, ground disturbance and vegetation removal.

6. Re-vegetate extensive cut and fill slopes with native vegetation as soon as possible after construction. All re-vegetation must have prior written approval of the authorized officer.

7. Not cast off grading material. Excess soil can be used as fill material for roads, buildings and towers.

8. Obtain prior written approval of the authorized officer for temporary, on-site storage of construction materials.

9. Not leave hazardous materials, including fuels, oils, and lubricants unattended at the site at any time. Hazardous materials shall be removed from the site at the end of each workday or temporarily stored inside a locked and posted building until the following workday. Construction materials and supplies other than hazardous materials may be left unattended at the construction site at the end of each workday at the owner's risk.

10. Remove surplus construction materials and waste debris from the site no later than 30 days after construction has been completed.

11. To prevent the spread of noxious weeds into the area, power wash off any earth-moving or heavy equipment, such as dozers, graders, cranes, backhoes, and so forth before it is brought onto National Forest System lands.

C. Construction Inspection

1. All new construction, modification, and expansion of facilities shall conform to established technical standards and accepted engineering practices, such as the Uniform Building Code.

2. Any construction inspections required by other agencies are the responsibility of the holder. Copies of completed inspections shall be provided to the Authorized Officer, either as they occur or as part of the final as-built plan. Inspection information shall become a permanent part of the holder's special-use file.

3. Corrective work required as a result of Forest Service or other agency inspections shall be completed by the date specified in the inspection report to the satisfaction of the inspecting official.

4. A final set of as-built plans shall be submitted to the Authorized Officer within 90 days of acceptance of a structure (if the construction was contracted) or of its completion date (if the construction was not contracted).

D. New or Remodeled or Expanded Buildings

1. Any new buildings shall be designed to accommodate multiple users and shall be consistent with a site-specific environmental analysis conducted at the time of the proposal.

2. Buildings shall be one-story and have a flat roof unless specifically authorized. The roof shall be non-reflective metal or other non-reflective fire resistant material approved by the Forest Service. Building height will be restricted to a single story unless specifically authorized for two stories or with a snow vestibule. Roofs can be equipped with antenna support structures, such as poles and railings that can extend up to 25 feet above ground level.

3. Facility owners and facility managers are encouraged to construct the interior of their buildings in a modular fashion, so that they can:

    a. Sublease sections to others;

    b. Provide tenants and customers with internal separation and security;

c. Reduce physical interference; and

d. Increase management effectiveness.

4. The following materials are approved for construction of new buildings:

a. Floors: Concrete slab with drainage or as part of a non-flammable pre-fabricated structure.

b. Walls: Concrete block, metal, or pre-fabricated concrete.

c. Roofs: Concrete, metal (if painted to eliminate shiny surfaces), or other fireproof material approved by the Forest Service. Proposals for wooden roofs will not be approved.

d. Partitions: Fire resistant material, such as reinforced concrete or properly grounded expanded metal.

e. Color: Color used on all exterior building surfaces must have prior written approval of the authorized officer. The goal of color selection is to make buildings as inconspicuous as possible when viewed from a distance. The intent is to reduce or eliminate glare from reflective and/or illuminated surfaces such as windowpanes, sheeting and reflective paints. Non-reflective, Forest Service approved dark gray to green colors shall be used on equipment buildings.

Building entry lights must:

a. Only light the immediate area in the vicinity of the door;

b. Be motion-activated and have a limited time duration of 3 to 5 minutes; and

c. Have a shielded beam that is pointed at the building door.

Requests for all-night (dusk-to-dawn) lighting or entry lighting that would be visible from outside the site will not be approved.

E. New or Remodeled/Expanded Towers

1. All construction, modification, and expansion of towers shall have the prior written approval of the authorized officer.

2. It is the applicant and holder's responsibility to ensure that new, modified, or expanded towers will not unduly interfere electronically or physically with any existing equipment at the site. Towers shall be spaced so as to prevent ground level radiation and interference problems. Compliance with these

requirements shall be demonstrated in writing to the authorized officer prior to issuance of a lease, permit, or amendment.

3. All new towers shall comply with current structural and safety specifications and design standards, including safety-climbing devices. Towers should be as narrow and "open" as safety and structural integrity allow. New towers should be designed using maximum wind, snow, and tower loading anticipated for the site.

4. All new towers (including antennas) shall not exceed 80 feet. All new towers shall be self-supporting unless specifically authorized.

5. To avoid possible impacts to birds or bats, follow the most current version of the U.S. Fish & Wildlife Service's Interim Guidelines on the Siting, Construction, Operation and Decommissioning of Communication Towers (available at http://migratorybirds.fws.gov/issues/towers/comtow.html).

6. All towers shall be left unpainted if they are made of dull, galvanized steel. Paint is required only if the tower has a shiny or reflective surface. Non-reflective, Forest Service approved dark gray to green colors will be approved unless the FAA requires red and white tower striping.

7. No lights, beacons, or strobes shall be allowed on new towers unless specifically required by the FCC/FAA.

VIII. GENERAL OPERATION AND MAINTENANCE

A. Special Environmental and/or Biological Considerations

There are no unique environmental or resource coordination requirements at this site. If issues arise in the future, this plan will be amended in accordance with the applicable decision or direction.

B. Wiring and Grounding

1. All equipment shall be installed in metal cabinets or open frame equipment racks that are grounded and shielded. Grounding is to be installed in accordance with manufacturer's recommendations and accepted industry standards.

2. All electrical wiring and grounding shall meet the National Electrical Code and applicable State codes. All permanent wiring shall be installed in metallic conduit. Surge protection shall be installed on all power distribution panels.

3. Every effort shall be made to protect the equipment from lightning damage. Lightning protectors should be used on all coaxial cable connections to

equipment enclosures. Gas gap and MOV protectors should be used on all control, audio, and power lines.

4. Each building shall have its own separate grounding system for all users in that structure. Wherever practical, interconnection of individual grids and/or the simultaneous placement of large sized copper ground wire with any new grounding systems that are buried on the site shall be encouraged.

5. Grounding shall be installed in accordance with accepted practices and standards, such as Motorola specification R-56 and the NEC. Grounding using bentonitic clays is currently the only approved method for chemical grounding. Other types of chemical grounding shall require completion of NEPA documentation by the applicant prior to consideration for approval by the authorized officer.

C . Communications Equipment

1. Equipment Ownership

   All equipment shall be labeled with:

   a. The owner's name;

   b. Applicable transmitter frequencies;

   c. The applicable FCC license or NTIA authorization;

   d. Transmitting power outputs; and

   e. A current 24-hour telephone contact number.

2. Transmitting Equipment

   All transmitters shall have protective devices built into them or externally installed to prevent interference with other uses. All transmitters shall meet FCC licensing requirements.

   The re-radiation of intercepted signals from any unprotected transmitter and its associated antenna system shall be prevented by the use of appropriate filters, typically bandpass filters, circulators, and/or harmonic filters.

   The direct radiation of out-of-band emissions (noise or spurious harmonics) shall be reduced to a level such that it may not be identified as a source of interference as defined in FCC Regulations (47 CFR 90.209(e)). If site noise (electromagnetic noise) becomes an issue, noise threshold limits shall be established, and amended into the Site Plan.

All transmitters not in immediate use and not specifically designated as standby equipment shall be removed. Loads connected to circulators shall be capable of dissipating the total power output of the transmitter.

3. Receiving Equipment

A bandpass device, such as a cavity or crystal filter, is recommended at the input of all receiving devices. Cavity filters or other protective devices may be used at receiver inputs to reduce interference.

Where duplexing is used, a notch-type device should be avoided. In situations where a notch-type device is used, a bandpass filter shall be used on both the receiver and transmitter.

4. Antennas

a. Microwave (dish) antennas and other than ground-mounted satellite dishes shall not exceed 10 feet in diameter.

b. All antennas shall meet all OSHA safety standards. If an antenna is operating in excess of FCC public or occupations standards, steps will be taken, such as fencing, posting of signs, relocation, lowering power levels, within 24 hours to bring it into compliance. Ground measurements of RFR levels will be taken before mitigation measures are implemented.

c. Colors for dish antennas or covers shall be pre-approved by the authorized officer. White dish antennas and covers will not be approved. Existing white dishes and covers shall be repainted or replaced as repairs or replacement become necessary.

d. Antennas shall be treated to reduce or eliminate reflected glare.

e. Low-powered transmit and receive antennas may be located low on the tower or on the ground.

5. Interference

The responsibility for correcting interference problems lies with the holder of the communications site authorization for the facility, the user causing the interference, and the affected parties. Generally, the first users at a site have seniority with respect to resolution of interference complaints. Senior users have an obligation to maintain their equipment to industry standards, to operate their systems in accordance with the terms of both the FCC license and NTIA/IRAC frequency authorization, and to comply with the Forest Service communications site authorization. New users at a site shall correct, at their expense, interference problems that they create. They shall cease

operation of the suspect equipment until the problem is corrected. If interference problems cannot be resolved or corrected within a reasonable time, the new use that is causing the interference may be terminated and the equipment removed.

If a Site Users Association is formed, all users shall cooperate with the Forest Service in the identification and correction of any interference. The Forest Service does not have any responsibility for correcting interference problems, but can act as a mediator to help all affected parties. Interference problems should be coordinated with the FCC or NTIA, as appropriate.

Interference with law enforcement and emergency communications shall be corrected immediately. Operation of equipment covered by this site plan shall not interfere with Federal Government radio or electronic operations already in existence on National Forest System lands within two miles of the Robinson Butte Communications Site. The user causing this interference shall at their own expense take all actions necessary to prevent or eliminate the interference. If they do not eliminate the interference within ten days after receipt of notice from the Forest Service to do so, their use will be terminated.

If electromagnetic noise becomes an issue, noise thresholds shall be established and incorporated as an amendment to this site plan. The cost of such analysis is the responsibility of the lease holders.

D. Cables and Transmission Lines

All new cabling shall be jacketed and shielded and shall either be flexible or semi-rigid. Existing substandard cables shall be upgraded as repairs or replacement become necessary. Cables shall be properly installed, strapped, and fastened down. Cable runs should be consistent with applicable engineering standards when attaching cables onto a tower.

All transmission lines (wave guides) shall be supported in accordance with manufacturer's specifications. Unjacketed transmission lines or unjacketed cables of any type are prohibited. No transmission lines shall be left unterminated.

Double-shielded braided or solid-shielded cable shall be used. No RG-8 cable is permitted. No connector-type adapters shall be used on transmission lines. Only correct connectors that will mate to connected devices may be used.

Conduits shall be shared when they service common areas and shall be buried where possible.

E. Radiation

All communications uses shall meet ANSI, FCC, and Forest Service regulations, policy, guidelines, and standards concerning radiation limitations.

Monitoring radiation levels at the site is the responsibility of all site users and shall occur at intervals to comply with FCC regulations and guidelines. A copy of the monitoring report shall be provided to the Forest Service within 30 days of its completion.

Onsite RFR measurements shall be taken using appropriate equipment that can adequately measure levels both on the tower and on the ground before mitigation measures related to RFR are implemented.

Security fences with RFR notice signs are required around areas that exceed public use levels. All fencing location and design shall be pre-approved by the Forest Service.

Warning signs shall be in English and Spanish and comply with ANSI C95.2 color, symbol, and content conventions. Contact information, including name and telephone number will also be included on warning signs.

Any identified RFR problems that are, or could be, a human health hazard shall be corrected within 24 hours after measurement tests have been completed, or the equipment involved shall be removed from the site by the site user. Any ground disturbance associated with correction of RFR problems or removal of equipment causing the problem must have prior written approval of the authorized officer.

F. Utilities

Site users shall pay for the cost to install and maintain utilities, including any resource surveys and reports needed for environmental compliance. For visual reasons, new overhead utility poles are not authorized.

1. Commercial Electrical Power

   Commercial power is provided to this site by Pacific Power.

2. Telephone Service

   Commercial telephone lines do not service this site.

3. Fuel Storage

   Fuel storage facilities on this site must be designed, installed and maintained according to applicable federal, State and local laws and ordinances.

If additional service is ever deemed necessary, a separate authorization will be issued to the owner of the service following the appropriate NEPA analysis and decision. The applicant must pay the cost of necessary resource surveys, and reports and construction costs including appropriate mitigation. For visual reason, overhead utility lines may not be authorized.

G. Sanitary Facilities

Sanitation facilities exist at this site. If needed, any new sanitary facilities shall be pre-approved by the Forest Service. If it is determined by the authorized officer that the user needs such facilities, they will be provided by the applicant/holder in a manner and location satisfactory to the authorized officer and requirements of the local health department.

H. Security and Law Enforcement

The Oregon State Police and Jackson County Sheriffs Department are the principal law enforcement agencies for the area in which the Robinson Butte Communications Site is located. Generally, the State Police and County Sheriffs are responsible for civil and criminal law enforcement. Generally, the Forest Service is responsible for enforcing Federal laws applicable to NFS lands, such as resource protection. Patrol and policing for security purposes is the holder's responsibility.

None of the facilities at Robinson Butte Communication Site are fenced. If additional fencing is ever deemed necessary for security purposes at other facilities on the site, it must meet the following criteria:

1. All fences must meet health and safety requirements.
2. All fence locations and design require Forest Service pre-approval.
3. The standard fencing type will be chain-link (i.e. cyclone).
4. The standard fence height will be eight (8) feet.
5. Fencing will be designed, maintained, and of a type to minimize interference issues.
6. Fences will be signed with RFR notices if RFR is above public levels.

Buildings shall be posted with a 24-hour contact phone number(s) on the main door(s) into the building where appropriate.

I. Site Maintenance

The objectives of site maintenance are to present a clean, neat, and orderly appearance at the site and to have all the authorized improvements at the site be safe for workers and the public. All users are responsible for maintaining the overall appearance of the site.

Miscellaneous debris remaining after any construction or installation, removal or modification of equipment is not only a hazard but can cause interference or intermodulation problems. All loose debris must be removed from the site within 30

days after completing construction, reconstruction, or other activities. In particular, all loose wire or metal objects shall be removed from the site. The users of the site shall remove graffiti within ten working days of finding it. If graffiti is on natural features, such as rocks and trees, site users will remove graffiti a method approved by the authorized officer.

Holders may not leave or dispose of trash, garbage, or cut brush on NFS lands. No outside trash or litter containers are allowed. Site users shall remove all trash and litter from the site as it is produced. Policing of litter in common areas, such as the areas between buildings and developed sites, is the shared responsibility of those holders bordering these areas.

Peeling paint on buildings and towers shall be re-painted within thirty days of discovery or as soon as possible as allowed by weather conditions.

J. Inspections

Unless waived in writing by the authorized officer, the holder shall have conducted annually a certified inspection of the facilities and equipment covered by the authorization. The inspection shall include a technical review that should ensure that all authorized equipment is operating in accordance with requirement of the this site plan, the applicable FCC license or NTIA authorization, ANSI standards, and the manufacturer's specifications. In addition, the inspection should ensure that the authorized equipment is secure, free of rust, properly grounded, and otherwise properly operated and maintained. A copy of the inspection report, certified by a telecommunication specialist, shall be provided to the authorized officer within 30 days of completion of the inspection. The Forest Service may also conduct periodic reviews to monitor for authorization compliance.

K. Fire Prevention and Hazard Reduction Requirements

Facility owners and facility managers will be required to control vegetation within the fenced or immediate area around their facilities. Gravel / mineral soil (i.e. bare ground, mowed vegetation) must be maintained to a minimum of (10) feet clearance around buildings and a minimum of (10) feet clearance around any propane tanks. Identified threatened, endangered, or sensitive plant species must remain within the minimum clearance areas.

Smoking is prohibited in flammable vegetation areas.

Roof structures shall be kept reasonably clear of debris at all times.

No explosives will be stored at this site. Flammable materials shall be stored in conformance with the requirements of local fire regulations. Flammables will be placed in closed containers and stored away from sources of ignition and combustible materials.

If flammables are stored within a building, the building will be locked, properly signed and well ventilated.

Approved spark arresters will be required and maintained on all internal combustion engines.

At least one (1) U.L. rated 20 lb. A:B:C dry chemical fire extinguisher is required inside each building. Prior to each June, fire extinguisher(s) shall be inspected by holders and refilled, if necessary.

Any fire will be immediately reported to "911", the nearest Forest Service office and/or Jackson County Sheriff.

Forest Service Officers will make periodic fire prevention inspections. They will call to the holder's attention any lack of compliance with the above regulations, plus any other existing hazards. Compliance with these inspections is required within the time limits specified in the inspection report.

All fire protection standards must be accomplished by the beginning of fire season unless otherwise agreed to, and then maintained throughout the fire season.

For new construction, the Forest Service will provide the Holder with a separate Construction Fire Plan which will be prepared at that time as applicable. State and local laws/regulations must be followed for the diesel tank installation.

L. Access

1. Road

   Holders who damage the access road, or any of its associated improvements, such as ditches, culverts, roadside vegetation, signs, and underground utilities and facilities, shall be required to repair the road to conditions equal to or superior to those prior to any damage or disturbance.

   Access to Robinson Butte Communication Site is from the junction of Forest Road 37 and Forest Road 3730 near Big Elk Guard Station. From the junction of Forest Road 37 and Forest Road 3730, go north on Forest Road 37 for approximately 0.2 miles; turn left onto access road and go approximately 1.1 miles; go through locked gate go another 0.8 miles to Robinson Butte Communication Site. The Robinson Butte Communication Site is located approximately 25 air miles east of Medford, Oregon and driving time is approximately 1 hour.

2. Internal Roads and Parking Areas

Internal roads and parking areas within the communications site are the responsibility of the site users. Interior roads and parking areas shall be planned and approved by the authorized officer in conjunction with establishment of new facilities. Interior roads shall be maintained so as to allow only one entrance to the site. The intent is to discourage off-road vehicle use in and around the site.

3. Road Closures

Forest Service roads are subject to periodic closures to entry during periods of extreme fire danger, inclement weather, or wetness. Site users may access the site during these closures if they have prior, written approval from the authorized officer.

IX. SITE ASSOCIATION AND ADVISORY GROUP

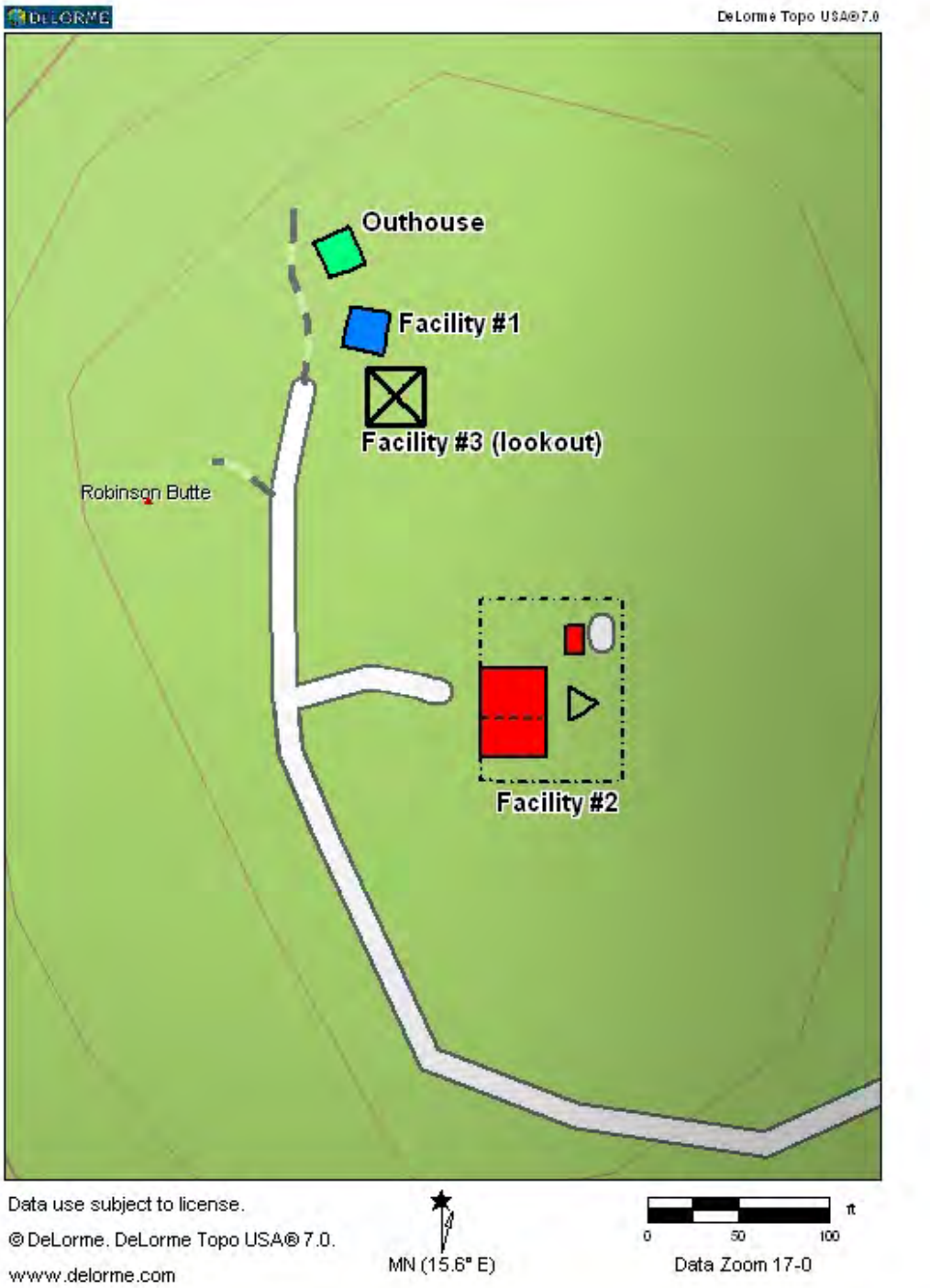
A site association is probably not needed at this time. If development were to increase, a users association may become desirable. Leadership would need to come from one of the users. As needed in the future, the site association would be responsible for obtaining and maintenance of an administrative access and upkeep of internal roads and parking areas. The site association would also be responsible for ensuring cooperation between users for on-tower access. A site safety officer would be identified within the site association. The site association would be expected to develop a Radio Frequency Radiation Plan/Agreement and recommend measures to reduce interference issues (e.g., through use of filters).

The goal of the site association would also be to maximize the effective use of the site. The objective of a sanctioned association will be to represent all site users as a group when dealing with the Forest Service on matters relating to the site administration. The association would be able to work in cooperation with the Forest Service to identify problems or opportunities and make recommendations to the Forest Service for any changes in management strategies at the site. The association could also provide input to the Forest Service regarding the future addition of equipment and facilities at the site. While the advice and recommendations of the association would not be binding on the Forest Service, the Forest Service could use the input for administration of the site. The Forest Service would be a member of such a group and would help jointly develop the charter (i.e., the ground rules).

X. APPENDICIES

APPENDIX A – Location Map

Site Map



APPENDIX B – Authorized Facilities

	Auth #	Use	Building	Tower	Other
Facility #1 US Cellular	**ASH413701**	**CEL**	**10’ x 12’ Aggregate**	**Om FS Lookout tower**	
Facility #2 Medford Cellular (dba ATT Wireless)	**ASH413601**	**CEL**	**12’ x 26’ Aggregate**	**80’ Lattice**	**Fence 50’ x 50’**
Facility #3 USDA Forest Service Lookout Tower	**N/A**	**PMRS**		**50’ Lookout Tower**	**Outhouse**

APPENDIX C – Facility Photographs

Facility 1 – US Cellular

Facility 2 – Medford Cellular (ATT)

Facility 3 – Forest Service Lookout Tower

Facility 3 – Forest Service Outhouse

APPENDIX D – Inspection Checklist

"Robinson Butte Annual Technical Inspection"

Date Inspected: _____ Time Inspection: _____

Permit Holder: _____ Authorization # _____

Site Technician : _____ Phone # _____

Number of Transmitters _____ License Posted _____

Please mark the following Items as Acceptable (A) or Unacceptable (U).

Electrical Wiring ---------- (A) (U) Grounding ---------- (A) (U)

Equipment Installation ---------- (A) (U) Housekeeping ---------- (A) (U)

Building Repair ---------- (A) (U) Tower Repair ---------- (A) (U)

Please mark the following Items as Yes (Y) or NO (N) or (NA)

Isolators ---------- (Y) (N) (NA) Circulators ---------- (Y) (N) (NA)

Cavities ---------- (Y) (N) (NA) Terminators ---------- (Y) (N) (NA)

Filters ---------- (Y) (N) (NA) Lightning Protection ---------- (Y) (N) (NA)

Comments:

_____

_____

Recommended Corrective Action:

_____

_____

_____

Required Corrective Action To Be Taken:

_____

_____

_____

Committee Representatives:

_____

Forest Service Representatives:

_____

Please make the required corrective action within the next 120 days.
Please make a written report of corrective action taken and submit to the FS.. If you should have any questions, please call the Forest Service office.

Department of the Interior
Bureau of Land Management

SIGNAL TREE COMMUNICATIONS SITE MANAGEMENT PLAN

Prepared by the Bureau of Land Management
Coos Bay District Office, Oregon

Approved by: Kathy Hoffine — **1/05/2011**
Field Manager — **Date**

SIGNAL TREE COMMUNICATIONS SITE MANAGEMENT PLAN

I. INTRODUCTION

Demand for new communication sites continues to be active in the United States including carrier requests to locate cellular facilities on public lands in the western states. This demand is due to advances in communication technology, strong consumer interest, and a 1983 Federal Communication Commission (FCC) decree establishing wireless carrier coverage requirements.

Signal Tree is an established communication site with characteristics desired by government agencies, wireless carriers, microwave relay, and other communication providers. The communication site overlooks small communities and a rural but growing population area along State Route 42 between Roseburg and Coos Bay.

This Communication Site Management Plan has been developed to document and evaluate the existing communication site and facilities located on Signal Tree. The plan also provides an outline for orderly future development of the site in conformance with the Coos Bay District Office's current land use planning document, the Coos Bay Resource Management Plan (RMP).

Current BLM program guidance for resource management planning specifies that every planning document shall contain determinations relevant to communication sites. The Coos Bay RMP, approved in 1994 addresses this land use under General Objectives Chapter 2-88 and on Map 2-11. Therefore, in order to supplement the land use planning document, this site management plan has been prepared to address specific issues encountered on Signal Tree.

Approved lessees or right-of-way (ROW) holders with facilities currently located on Signal Tree are shown in the Users' Table, Appendix B. Additional tenants or customers may be accommodated within the confines of existing authorized communication facilities as long as such additions are in compliance with the terms and conditions of authorized leases or ROW grants and with the supplemental direction contained in this site plan. Requests for new communication site facilities may be authorized at the discretion of the Bureau of Land Management (BLM) Authorized Officer through the issuance of new Communications Use Leases, or in some cases, by the issuance of additional ROW grants.

This site plan will be incorporated into all future new leases issued for the Signal Tree Communication Site. This plan will also be included as a part of all existing leases and renewed leases or ROW grants as the terms of those authorizations allow. Provisions of the site plan are enforced through the terms and conditions of the ROW or lease authorization. Each lessee is expected to incorporate mandatory BLM lease and site plan requirements into any subsequent agreements with the lessee's tenants and customers. The lessee is also responsible for enforcement of said requirements involving the lessee's tenants and customers.

A. Terms and Definitions

The terms used in this communications site management plan conform to the definitions listed in the April 22, 2005, Federal Register notice "Rights-of-Way, Principles and Procedures: Rights-

of-Way under the Federal Land Policy and Management Act and the Mineral Leasing Act", with further clarification provided in BLM Handbook 2860-1 and the United States Code of Federal Regulations (CFR) 43 CFR 2800. In the event of a conflict, between the plan and these sources, the Federal Register notice and the BLM Handbook will govern.

The words "lease" and "lessee" as used in this plan refer to the relationship between the BLM and the communications use lease lessee, or ROW holder. The words "customer" and "tenant" refer to the relationship between the lessee or holder and the occupants in the lessee's facilities.

LEASE OR ROW – A use authorization issued to a communication Facility Owner or Facility Manager allowing for the use of public land to construct and or operate a communications facility and, unless specifically prohibited, to sublease to occupants in that facility.

LESSEE, LEASE HOLDER, OR ROW HOLDER – A Facility Owner or Facility Manager

CUSTOMER – A facility occupant who is paying a facility manager, facility owner, or tenant for using all or any part of the space in the facility, or for communication services, and is not selling communication services or broadcasting to others.

TENANT – A facility occupant who is paying a facility manager, facility owner, or other entity for occupying and using all or part of a facility. A tenant operates communication equipment in the facility for profit by broadcasting to others or selling communication services.

COMMUNICATIONS SITE – An area of BLM-managed public land designated through the land and resource management planning process as being used or is suitable for communications uses. A communications site may be limited to a single communications facility, but most often encompasses more than one. Each site is identified by name; usually a local prominent landmark, such as Signal Tree Communications Site.

FACILITY – The building, tower, and related incidental structures or improvements authorized under the terms of the grant or lease.

FACILITY MANAGER – The holder of a BLM communications use authorization who leases space for other communication users. A facility manager does not own or operate communications equipment in the facility for personal or commercial purposes.

FACILITY OWNER – Individuals, commercial entities, organizations, or agencies, that own a communications facility on Federal land; own and operate their own communications equipment; and hold a communications use authorization. Facility owners may or may not lease space in the facility to other communications users.

NON-BROADCAST – This category includes Commercial Mobile Radio Service (CMRS), Facility Managers, Cellular Telephone, Private Mobile Radio Service (PMRS), Microwave, Local Exchange Network, and Passive Reflector.

BROADCAST – This category includes Television Broadcast, AM and FM Radio Broadcast, Cable Television, Broadcast Translator, Low Power Television, and Low Power FM Radio.

RIGHT-OF-WAY (ROW) – The public land authorized to be used or occupied pursuant to a ROW grant.

RIGHT-OF-WAY GRANT – A use authorization issued pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (43 U.S.C. 1701 *et seq.*), or issued on or before October 21, 1976, pursuant to then existing statutory authority, authorizing the use of a ROW over, upon, under or through public land for construction, operation, maintenance and termination of a project.

HOLDER – Any applicant who has received a ROW grant, lease or temporary use permit.

USERS – All ROW and lease holders, lessees, customers, and tenants that own or operate a facility or communication equipment at the communication site.

SENIOR USE – Any use whose implementation date is prior to the implementation date of the use in question.

RANALLY METRO AREA (RMA) – A series of nine population zone areas, the highest of which is greater than 5 million and the lowest being 25,000 or less. These zones are determined annually and published in the Ranally Metro Area Population Ranking, an independent publication from Rand McNally, and are used in rent determination under guidelines established in 43 CFR 2806.

B. Purpose

This plan will be used by BLM officials administering communications uses at Signal Tree, existing lessees, holders, and applicants desiring a lease, grant, or an amendment to an existing lease or ROW grant. The plan will be kept updated by amending pages or sections of the plan rather than issuing a revised edition of the plan. When an administrative revision is necessary (such as the addition of a user), a letter will be sent to the holders from the Coos Bay District Office enclosing a copy of revised pages or sections. The amendments will be consecutively numbered. Other proposed revisions to the plan will be circulated to holders for comment prior to implementation.

Overall management direction for the administration of communications sites is outlined in the CFR and the BLM Handbook and applicable BLM Instructional Memoranda. Specific direction for site management planning on designated communications sites is contained in BLM Handbook 2860-1. Primary regulations and policy pertaining to issuance of ROW authorizations by the BLM are found in Title 43 CFR Sections 2801- 2808 and BLM Handbook 2860-1.

This Site Management Plan provides applicable guidance and adds current policy and technical standards for better management of the Signal Tree Communications Site. This plan governs development and management of Signal Tree and will be modified in the future as needs and conditions warrant. Any future such uses must be designed, installed, operated, and maintained to be compatible and not interfere with the senior uses as defined in Section A above. This site-specific plan is administrative in nature and is Categorically Excluded from further review under the National Environmental Policy Act (NEPA) in accordance with 516.DM 2, Appendix 1, item 1.10, which states " – Policies, directives, regulations, and guidelines that are of an

administrative, financial, legal, technical, or procedural in nature and whose environmental effects are too broad, speculative, or conjectural to lend themselves to meaningful analysis and will later be subject to the NEPA process, either collectively or case-by-case". Any additional development of Signal Tree will be addressed in a site-specific NEPA document.

C. Site Description

The site is located approximately 50 miles southeast of Coos Bay, Oregon and approximately 18 miles west of I-5. It is on Signal Tree also known as Kenyon Mountain, a prominent landmark in the area. The area is managed by the Coos Bay District Office. It is specifically located in the SW¼ of sec. 33, T. 29 S., R. 9 W., Willamette Meridian, Coos County, Oregon at approximately 43º 0' 7.2" North Latitude and 123º 46' 43.3" West Longitude. The elevation at the Signal Tree Communications Site is approximately 3287 feet above mean sea level. A site map is provided as Appendix A.

D. Area Served

This site does not serve a Ranally Metro Area (RMA). The largest population zone served is less than 25,000. This zone may be adjusted in the future as populations change. This information will be used for rental fee determination.

E. Access

From the intersection of Highway 42 just west of Camas valley and Signal Tree road BLM 29-9-36.0 then north and west to the top of the ridge taking BLM 29-9-33.4 to the site from the saddle to the west. The site is approximately 5.66 miles to the saddle and then 0.33 miles to the site.

F. Site History and Development

There are currently thirteen communications facilities at Signal Tree. In the summer of 1961, the Fire Lookout was constructed on the site by the Coos Fire Protection Association and Oregon Department of Forestry. Government radio technology was added over the years including the Coos Bay, ORORO 008651, and Roseburg BLM radio repeaters. Additional facilities were authorized as follows:

In 1961, Pacific Northwest Bell Company was authorized a microwave relay facility at this site under ORORO 054613. This facility was sold to Ramcell in 1998.

Bonneville Power Administration was authorized a facility for microwave relay in 1960 under ORORE 0 006988.

Whitaker Trucking, ORORO 008113, was authorized a facility in 1972 for their two-way radio use and this facility has expanded to include other personal mobile and commercial wireless uses.

Oregon Department of Transportation, ORORO 034997, and Oregon Public Broadcasting, ORORO 034997A were authorized a facility at Signal Tree for two-way radio and microwave relay respectively.

AT&T longline OROR 042214, was authorized a microwave relay facility in 1987 and sold this facility to American Tower, Inc in 2002.

Eugene TV, KVAL Retlaw Enterprises, Inc., OROR 040875, was authorized a microwave relay facility in 1987. This facility also houses other inter-city microwave relay uses in addition to commercial wireless uses.

California-Oregon Broadcasting, Inc, was authorized a facility in 1988 for inter-city microwave relay.

Oregon Department of Forestry, OROR 046988, was authorized in 1991. The Oregon-Wing Civil Air Patrol holds a separate authorization, OROR 049266 in this facility dated 1993. Coos Forest Protection Association also holds a separate authorization, OROR 063498 issued in 2006 in this facility.

US Cellular, OROR 052018, was authorized a facility in 1995.

A list of all authorized facilities as of the date of this plan can be found in Appendix B. Any modifications to existing facilities or proposals for new facilities must be approved by the Coos Bay District Office according to the appropriate NEPA process and guidance described in this document.

The site currently appears to be relatively free of interference, receiver sensitivity, and noise. If additional new uses deteriorate the receiving/transmitting operation of the existing uses, the new uses may be required to institute additional studies, equipment upgrades, frequency isolation, or physically separate from the existing uses.

G. Goals and Objectives of Site Management Plan

1. Manage the Signal Tree site for low-power uses including two-way radio, microwave, cellular, and ISP. All uses must be designed, operated and maintained so as not to physically or electronically interfere with the senior uses. The maximum power output expressed as effective radiated power (ERP) for the Signal Tree Communications Site is based on the maximum output allowed for two-way radio under the FCC's rules at Title 47, Code of Federal Regulations, Part 90. As of the 2003 regulation, that is 500 watts ERP. Each use must operate at or below the power level authorized by their respective FCC license as long as it does not exceed the site limitation. This power limitation does not preclude existing and new uses from being designed, operated and maintained to meet other interference, noise floor, receive sensitivity, or radio frequency radiation (RFR) standards included in this plan. No continuously transmitting uses are authorized at this site, excluding microwave and radio control channels.

2. Manage communication equipment on the Signal Tree site to maintain the radio frequency (RF) hazard to be within the Public Standard as defined by the FCC.

3. Systematically develop the site to maximize the number of compatible uses while ensuring safety and protection of resources. Development of new towers or buildings within each of the authorized owner's facilities will be authorized only after their respective tower or building space area is filled to near capacity.

4. Help fulfill the public need for adequate communications sites.

5. Protect the interests of holders, lessees, tenants and customers, by preserving a safe and electronically "clean" environment.

6. Encourage the efficient development and use of space and facilities within the designated site.

7. Achieve visual quality objectives by requiring design standards that are unobtrusive and utilizing earth tone colors and non-reflective surface material and stringent site maintenance requirements.

8. Describe the BLM's policy for maintenance of the road to the Signal Tree communications site.

9. Develop new facilities only after the appropriate site-specific NEPA analysis and coordination with current lease or ROW holders and users.

10. Amend this Communications Site Plan as necessary to be consistent with future RMPs. BLM will provide authorization holders with proposed amendments to this plan and will allow a reasonable period of time for the holders to review and comment on the proposed changes.

II. AUTHORITY AND DIRECTION

A. Authority

The authority used by BLM to authorize communications uses on public land (administered by the BLM) is the Federal Land Policy and Management Act of 1976, 90 Stat. 2776 (43 U.S. C. 1761-1771) and is reflected in Title 43, Code of Federal Regulations (CFR), Sections 2801- 2808 and various BLM Washington Office Information Bulletins and Instruction Memoranda.

BLM authority for communications site management planning is contained in BLM Handbook 2801-1, Plan of Development. Direction on and policy for communication use authorizations is contained in BLM Manual Section 2860.

Authority for the issuance of authorizations and/or licenses for the transmission and reception of electronic radiation for communication purposes is granted by Congress and administered by the FCC and/or the National Telecommunication and Information Administration – Interagency Radio Advisory Committee (NTIA/IRAC).

B. Relationship to Communications Site Leases/ROW Grants

This site plan will be incorporated into all leases and ROW grants issued (now and/or in the future) for this communications site and must be used in conjunction with the granting authorization. **PROVISIONS OF THIS SITE PLAN ARE ENFORCED THROUGH THE GRANTING AUTHORIZATION (LEASE OR ROW GRANT).** Each lessee or holder is expected to include the requirements of the authorization and this site plan into any documents,

which describe the business relationship between the lessee and their tenants and customers. The lessee or holder is responsible for enforcing those provisions.

III. GENERAL RESPONSIBILITIES

A. The Bureau of Land Management

The BLM retains the responsibility for issuing and amending authorizing instruments to Facility Owners and Facility Managers, only for the areas actually occupied by the authorized improvements. The issuance of a FCC license (authorization), or frequency assignment, does not authorize occupancy of public land. Granting occupancy and use of public land rests exclusively with the BLM. This includes:

1. Approving any new facility(ies) at the site.

2. Approving amendments to existing facilities (i.e., additions to tower, building, support facilities), and approving assignments of leases and ROW grants to qualified buyers of facilities on the site.

3. Approving any modifications to existing facilities including the tower, antenna, equipment or building. Also, approving any changes to the existing FCC licenses, prior to the submission of an application to the FCC.

4. Frequency Management. The BLM is not normally responsible for the resolution of conflicts when the licensees or agencies are operating within the limits of the FCC and NTIA/IRAC authorizations.

B. Facility Owners and Facility Managers

Facility owners and facility managers (or their designated representatives) are responsible for:

1. Complying with their use authorization and all provisions of this site plan.
2. Ensuring that all new facilities, expansions, or improvements are consistent with the Coos Bay District Office land use planning documents; any environmental document(s)/decisions for the site; and, this site plan.
3. Ensuring facilities/equipment not complying with Federal/State/local laws/regulations/ ordinances will be removed or modified within one year of the approval of this plan. Any modification needs pre-approval by the BLM.
4. Keeping all facilities within the established limits of their authorized area.
5. Providing the BLM with the name, address and phone number for a local contact person. The Facility Owner and Facility Manager and the contact person may be the same individual. The contact person will be available for emergencies and will have the authority to make decisions about construction issues, facility maintenance and all equipment within the facility.

6. Providing 30-day notice to all facility owners/facility managers at the site, as well as the BLM, of all new frequencies proposed for the site. A completed BLM technical data sheet or equivalent must be sent with the 30-day notice to allow for comment of potential interference. This notification requirement applies to new frequencies for facility owners/facility managers as well as their tenants and customers
7. Adhering to the lease/ROW grant as follows:

    a. Facility Owners and Facility Managers with Communications Use Leases are authorized to rent building/tower space to tenants and/or customers without prior written approval from the BLM.

    b. Tenants and/or customers may not construct their own equipment shelter (building, shelter, generator pad, cabinet, etc.) or antenna support structure (tower or mast). The facility owner must own all communication shelters and towers under their lease or grant. [If that is not possible, a separate SF-299 application, cost-recovery fees, analysis, and authorization are required. This will result in the use being a tenant/customer of the original lease/ROW in addition to being a separate facility for billing purposes. See 43 CFR 2806.37]

    c. Tenants and/or customers using a facility covered by a Facility lease/ROW will not have separate BLM leases/ROWs to authorize their use except in situations where regulations or policy require them.

    d. Facility Owners and Facility Managers are responsible for complying with the terms and conditions of the facility lease/ROW. Facility Owners/Facility Managers are also responsible for ensuring that their tenants and customers are in compliance with the terms and conditions of the lease/ROW and applicable FCC or NTIA/IRAC license terms and conditions.

    e. The Facility Owner and Facility Manager may not place any unreasonable restrictions nor any restriction restraining competition or trade practices on tenants and/or customers, or potential tenants and/or customers.
8. Ensuring that all new communications facilities and equipment are installed, operated, and maintained according to the Motorola R-56 Standards and Guidelines for Communication Sites. Repairs and modifications to existing facilities/equipment must also meet Motorola R-56 Standards. These standards may be waived by the BLM authorized officer when recommended by a site user association or similar technical committee upon request of a facility owner/manager when equivalent measures would achieve similar results.

9. Ensuring that all communication equipment meets ANSI, FCC and BLM regulations, guidelines and standards concerning radiation limitations by:

    a. Monitoring radiation levels at their facility and;

    b. Immediately correcting any radiation levels that are, or could be a hazard to human health. (FCC 47 CFR sections 1.1307(b), 1.1310 and 2.1093) and FCC OET Bulletin 65, August 1997.

10. Providing the BLM with a certified copy of all uses and the correct category of uses within the facility, along with the current phone numbers and addresses of all tenants and customers as of September 30th each year. This report is due by October 15th each year.

11. Keeping the premises around their buildings free of trash and debris.

12. Placing the BLM lease/ROW serial number on the door of their communications site building, or on a gate if a fenced compound.

13. Correcting all interference problems. The users are normally responsible for the resolution of conflicts when the licensees or agencies are operating within the limits of the FCC and NTIA/IRAC authorizations.

C. FCC and NTIA/IRAC

The FCC and NTIA/IRAC are responsible for Frequency Management. The FCC and NTIA/IRAC are not normally responsible for the resolution of conflicts when the licensees or agencies are operating within the limits of the authorizations.

IV. AUTHORIZED USES AND USERS WITHIN A FACILITY

Use by Multiple Users

Use of all facilities and improvements by more than one user will be required except where the facility owner is a government agency. Site applicants will take the lead in this area and design their proposals to accommodate multiple uses of facilities and improvements. This includes multiple uses of buildings, towers, back-up generators, grounding systems, fuel containers, access ways and parking areas.

BLM will not authorize new ROWs, ROW expansion, or modification until it is determined that existing authorized space and facilities are being used to capacity. Development or expansion of a ROW solely to preclude potential competitors from locating nearby is unacceptable and will not be authorized by the BLM.

Facility Owners and Facility Managers are not required to lease facility space to others if they can prove to the BLM authorized officer that:

1. Space is not available;

2. The use is incompatible with the existing facilities;

3. Additional space is needed by the facility owner/manager;

4. Additional users would violate system security needs; or,

5. Potential interference is not resolvable.

V. FEES

The BLM will charge Facility Owners and Facility Managers annual rental fees pursuant to federal regulations contained in 43 CFR 2806. The fees are based on two factors- the type of communications use, and the population served by the use. These fees are considered fair market value for the use of public land. The population Zone 9 (less than 25,000) will be used for these calculations unless something else is specifically agreed to in writing by the authorizing officer or until populations change.

Fees that Facility Owners and Facility Managers may charge their tenants and customers are to be reasonable (consistent with, and not in excess of, other fees for similar facilities) and commensurate with the uses and occupancy of the facilities and services provided to tenants and customers.

VI. GENERAL OPERATION AND MAINTENANCE DIRECTION

A. Unique Resource Considerations at this Communication Site

There are no currently identified special resource coordination considerations with on-site or adjacent resource values. Should special conditions arise through the revision process of the land use plan or other situations, this site plan will be amended accordingly. Special habitat may occur on adjacent parcels, but no site specific restrictions have been applied to uses at this site.

B. Wiring and Grounding

1. All equipment is to be installed within existing buildings and in metal equipment racks or within metal equipment cabinets and in accordance with manufacturers' specifications. All equipment, racks, cabinets and overhead ladder trays are to be grounded and shielded in compliance with National Electrical Code (NEC) and in accordance with accepted industry standards.

2. All electrical wiring and grounding must meet the NEC and applicable State/local codes. All permanent wiring shall be installed in metallic conduit. Surge protection shall be installed between the electric service meter and the first power distribution panel.

3. Lightning protection shall be in accordance with NEC part 810-20 Antenna Discharge Units and Part 810-21 Grounding Conductors. Periodic bonding of the antenna feed lines to the tower (when galvanized steel) shall be made with proper bonding connectors that are stainless steel (preferred), Copperweld, tin plated, or made of brass.

4. Each building is to have its own separate grounding system for all users in that structure. Wherever practical, interconnection of individual grids and/or the simultaneous placement of a large sized copper ground wire with any new grounding systems that are buried on the site will be required.

5. Site or facility grounding must be constructed of copper with #2 AWG or larger wire, Copperweld, or 2" or larger solid copper strap, connected to an adequate site/facility ground electrode system. The site/facility ground electrode system shall be bonded to the power service entrance grounding electrode conductor. Guy wires should also be grounded using manufacturers approved methods to preclude bi-metallic junction and corrosion. All equipment on the site (buildings, towers, power units, transmitters, receivers, antennas, combiners, telephone systems, power cabinets, HVAC units, etc) must be connected to the site/facility ground by direct connection. Electrical system ground wiring is required for electrical ground fault protection and circuit breaker coordination. The grounding systems shall comply with applicable laws, codes and in accordance with standard engineering practice. Below ground connections must use either an exothermic welding process (i.e., Cadweld, Thermoweld, etc.), copper wedge pressure devices (i.e., Ampact, Burndy, Wrench-lock, etc.), or brazed copper connections in conjunction with a mechanical UL listed connector (to be used as a physical strength enhancement component). Brazing by itself is not an acceptable method of bonding below earth grade (buried).

C. Communications Equipment

Equipment Ownership

All equipment shall be labeled (or the information available at the site, as applicable) with:

1. The owner's name;
2. Transmitter frequency(ies);
3. A valid FCC, or IRAC, authorization;
4. Transmitting power output(s); and
5. A current 24-hour phone contact number.

Transmitting Equipment

All transmitters will have protective devices (shields, filters, isolation components), designed into or externally installed, to prevent interference with other users. All transmitters will meet FCC licensing requirements. Two-way transmitters should have dual section isolators for a total of 60 db of isolation.

The re-radiation of intercepted signals from any unprotected transmitter and its associated antenna system will be prevented by the use of appropriate filters (wide band and narrow band broadcast transmitters).

The direct radiation of out-of-band emissions (i.e., noise or spurious harmonics) will be reduced to a level such that they may not be identified as a source of interference as defined in the FCC Rules and Regulations (e.g., Part 90.209(e) for non-broadcast uses, and Parts 73 and 74 for

broadcast uses). If site noise (electromagnetic noise) becomes an issue, noise threshold limits will be established, and amended into the site plan, prior to authorizing any new uses.

Direct radiation of out-of-bound emissions, (i.e., transmitter wide band noise, spurious emissions, harmonics, etc.) shall be reduced to a noninterference level by using bandpass, lowpass, and/or harmonic filtering. Where duplexing is used, use of a notch type device should be avoided.

Re-radiation of signals from a transmitter and its associated antenna system shall be prevented by installing appropriate devices (i.e., ferrite isolators), with minimum return loss of 25 db.

All transmitters not in immediate use and not specifically designated as standby equipment shall be removed. Loads connected to circulators are to be capable of dissipating the total power output of the transmitter.

Receiving Equipment

All receivers shall comply with all applicable parts of the FCC rules, including Parts 2 and 15.

All receivers shall have sufficient "front end" pre-selection to prevent receiver spurious response. The use of bandpass, band-reject cavity or crystal filters may be required to prevent receiver-produced intermodulation or adjacent-channel interference.

Where duplexing is used, a bandpass cavity duplexer is required. Use of the notch-type device is not permitted. Where notch-type devices are currently in place and there are no interference problems, their use may continue until the equipment is replaced, at which time they must be replaced with bandpass devices.

Tower

Generally only one tower is authorized for each facility owner. Facility Owners and Facility Managers may obtain permission to construct the second tower only after submitting evidence that demonstrates that their existing tower is completely filled and full use has been made of combining systems.

1. All towers will be left unpainted, if they are dull, galvanized steel. Paint is required only if the tower has a shiny (i.e., reflective) surface. If paint is required, the BLM will determine what non-reflective color the tower shall be painted.

2. Maximum tower height for future towers at this site is 125 feet unless specifically altered in the NEPA process.

3. Anti-climb devices, removable steps, or other means to discourage unauthorized climbing, are highly recommended to reduce or avoid liability claims.

4. All new towers will be self supporting. No guy lines are permitted.

5. To avoid possible impacts to birds or bats, follow the most current version of the U.S. Fish & Wildlife Service's Interim Guidelines on the Siting, Construction, Operation and Decommissioning of Communication Towers, available at the following website: *http://migratorybirds.fws.gov/issues/towers/comtow.html*

Antennas

1. Microwave (dish) antennas (other than ground mounted satellite dishes) will be limited to a maximum of eight (8) feet in diameter. The smallest diameter dishes are preferred if technically feasible.

2. Dishes should be mounted as low as possible to reduce visual impacts.

3. All antennas must meet all OSHA safety standards. If an antenna exceeds FCC public radiation standards (see FCC OET Bulletin 65) at ground level in publicly accessible areas, it will be remedied within 24 hours after measurements are taken or isolated (e.g., fencing, signing, relocation, lowering power levels are all possible remedies). Ground measurements of RFR levels will be taken before mitigation measures are implemented.

4. Color(s) for dish antennas, or covers, must be pre-approved by the BLM. New white dish antennas and/or covers will not be approved. Existing white dishes and covers must be repainted or replaced with dishes of approved color (typically dark grey), as repairs or replacement become necessary.

5. Antennas will be purchased with or treated to have a non-reflective surface.

Interference

The responsibility for correcting interference problems is a matter for resolution between the lease/ROW holder of the facility(ies), the user causing the interference, and the affected party(ies). First users on a site have seniority with respect to the resolution of interference complaints. Senior holders have an obligation to maintain their equipment to industry standards, to operate their systems in accordance with the terms of both the FCC license and NTIA/IRAC frequency authorization, and to comply with the BLM authorization.

New users on a site must correct, at their expense, interference problems that they create. They may be required to furnish an intermodulation study, electromagnetic noise study, or other interference-related data and must agree to accept financial responsibility for elimination or prevention of any interference caused by the facility before their application can be evaluated. They must cease operation of the suspect equipment until the problem is corrected. If interference problems cannot be resolved or corrected within a reasonable time, the new use that is causing the interference may be terminated and the equipment removed.

All users shall cooperate with the Site Users Association, if one is formed, and the BLM in identification and correction of any interference. The BLM does not have authority for correcting interference problems, but can act as a mediator to help all affected parties. Interference problems must be coordinated with the FCC or NTIA/IRAC, whichever is appropriate.

Interference with law enforcement and/or emergency communications must be corrected immediately. The operation of equipment covered by this site plan shall not interfere with United States Government radio or electronic operations already in existence on public land within two (2) miles of this site. The user causing this interference, shall, at its own expense, take all action necessary to prevent or eliminate such interferences. If it does not eliminate such interference within ten (10) days after receipt of notice from the BLM to do so, this use will be terminated.

If electromagnetic noise becomes an issue, noise thresholds will be established and this site plan will be amended accordingly.

D. Cables and Transmission Line (Wave Guides)

All new cabling will be jacketed and shielded and shall either be flexible or semi-rigid type. Existing substandard cables will be upgraded as repairs or replacement become necessary.

Cables will be properly installed and will be strapped and fastened down. Use of ports at building entrance points will be kept to a minimum by use of combiners.

When attaching power cables onto a tower, conduits should be used. Coax and wave guides should be installed in a wave guide ladder or equally divided among all tower legs.

All transmission lines (wave guides) are to be supported in accordance with manufacturer's specifications.

Unjacketed transmission line of any type is prohibited. No transmission line shall be left unterminated.

Double shielded braided or solid shielded cable will be used. No RG-8 type cable is permitted. No connector-type adapters will be used on transmission lines. Only correct connectors that will mate to connected devices are to be used.

Conduits will be shared when they service common areas and will be buried where possible.

E. Radiation

All communications uses must meet ANSI, FCC, and BLM regulations, guidelines, and standards concerning radiation limitations. This site is considered uncontrolled for the purposes of compliance with RFR standards.

Monitoring radiation levels at the site is the responsibility of all site users and will occur at intervals to comply with FCC regulations and guidelines. A copy of these monitoring reports will be provided to the BLM upon request. The FCC is responsible for enforcement of the monitoring and standardization for compliance. The FCC could revoke the license and/or issue a fine for failure to comply. Additionally, the BLM could terminate or suspend the use authorization for failure to comply.

Onsite RFR measurements will be taken using appropriate equipment that can adequately measure and record both on-tower and on-the-ground levels before mitigation measures related to RFR are implemented pursuant to FCC standards and requirements.

Security fences with RFR notice signs are required around areas that exceed public use levels including anchor points outside the primary facility compound fence, if necessary. Raising higher power transmitting antenna on the tower or modifying the antenna type to half wavelength may be necessary to eliminate RFR hazards. Reducing power may also be required if other alternatives are not feasible. All fencing location and design or new tower construction must be pre-approved by the BLM.

Warning signs will comply with ANSI C95.2 color, symbol, and content conventions. Contact information including name and telephone number will also be included on warning signs. Existing warning signs compliant with FCC 47 CFR 1.1307(b) which do not currently include name and telephone number will be accepted as long as the name and telephone number is clearly posted on other signage at the Lessee's site.

Lowering power levels for on-tower access during maintenance will be coordinated between affected users.

Any identified RFR radiation problems that are, or could be, a human health hazard must be corrected within 24 hours after measurement tests have been completed or be removed from the site by the site user(s). If the proposed corrective action involves any new ground disturbance, it must be pre-approved by the BLM.

F. Utilities-Availability of and Requirements for:

Commercial Electrical Power

Commercial power is provided to the site under a separate ROW grant to Douglas Electric Coop. The current electrical service to the site is adequate for the uses at the site. Future upgrades of the electrical service will be part of the right-of-way to Douglas Electric Coop and may need to be paid for by the benefiting user(s).

Telephone Service

If additional telephone service is ever deemed necessary or expanded at this site, a separate ROW grant will be issued. Site users will also pay for the cost of:

1. The necessary resource surveys and reports for service connections; and

2. The cost of constructing service connections.

Fuel Tanks

Facility owners and facility managers are responsible for providing fuel storage (propane and diesel) and emergency power for their tenants and customers. No tenants or customers will be authorized to have separate fuel tanks and/or generators. Each facility owner will preferably

consolidate fuel storage into a tank large enough in size to accommodate all tenants and customers within their facility. At a minimum, tanks will be grouped together in a consolidated area adjacent to their facilities. All fuel storage tanks (e.g., LPG, propane and diesel) must meet current fire department, Federal, State and local government safety and hazardous materials requirements. Propane is the preferred fuel for future generators.

1. All tanks will be:

    a. Signed in red letters, "SMOKING OR OPEN FLAME PROHIBITED WITHIN 20 FEET";

    b. In conformance with National Fire Protection Association (NFPA) requirements; and,

    c. Painted an approved color, or screened by an enclosure to blend in with the natural environment. If an enclosure is used, it must be pre-approved and painted an approved color from the Munsell Soil Color Chart, Standard Environmental Colors.

2. Diesel tanks will also be:

    a. Enclosed in BLM and fire department approved secondary containment vaults that are painted a BLM-approved color from the Munsell Soil Color Chart, Standard Environmental Colors.

    b. Constructed with underground fuel lines. Fuel line must be constructed of black, treated pipe and fittings, and must be posted.

    c. A containment basin must be maintained below all diesel tanks which are not designed and approved to be self contained.

G. Sanitary Facilities

Several outhouses exist at the site. Plans for any sanitary facilities must be pre-approved by the BLM. If it is determined by the BLM that the users need such facilities, they will be provided by the lease/ROW holder in a manner and location satisfactory to the BLM and within the requirements of the Coos County Health Department.

H. Security and Law Enforcement

The Coos County Sheriff's Department is the key law enforcement agency for the area. They are responsible for most civil and criminal matters. The BLM will be responsible for enforcing matters related to uses of BLM lands (e.g., resource protection issues).

Patrolling and policing for security purposes is the user's responsibility.

Several of the facilities on Signal Tree are currently fenced. All future facilities must be fenced to prevent public access to towers and facilities. Future fencing must meet the following criteria:

1. All fences must meet health and safety requirements.

2. All fence locations and design require Bureau of Land Management pre-approval. The standard fencing type will be chain-link (i.e. cyclone).

3. The standard fence height will be eight (8) feet.

4. Fencing will be designed, installed, maintained, grounded, and of a type to minimize interference issues as described in the Motorola R-56 standards.

5. Fences will be signed with RFR notices if RFR is above public levels.

I. Site Maintenance

The objective of maintenance activities is to present a clean, neat, and orderly appearance at the site and have all of the authorized improvements safe for workers and the public. All users will keep up the overall appearance of the site.

Miscellaneous debris remaining after any construction and/or equipment installation, removal or modification, is not only a hazard, but can cause interference or intermodulation problems. In particular, all loose wire or metal objects are to be removed from the site.

The users of the site will remove all graffiti within 10 working days of finding it, weather permitting.

Users will not be permitted to leave or dispose of trash, garbage or cut brush on public lands. No outside trash or litter containers will be provided. Site users will remove litter from the site as it is produced.

Policing of litter in common areas (i.e., areas between buildings and developed sites) is the shared responsibility of those holders bordering these areas.

During construction and/or maintenance, excess materials (e.g., cement, wire, metal, building materials) will be removed from public land.

Peeling paint on buildings and/or towers will be re-painted within thirty (30) days of discovery by the facility owner or facility manager and within 10 days of notification of the holder by the BLM, weather permitting. The Lessee is responsible for the abatement and control of noxious weeds within the bounds of their lease site and common use areas. Abatement practices are to be implemented in accordance with the Coos Bay District Office weed abatement programs. The Lessee shall control noxious weeds, as listed by Oregon Department of Agriculture, within the right-of-way. Manual control of noxious weeds using hands or hand tools may be conducted without further review. Proposed mechanical, biological and chemical control activities must be reviewed by Bureau of Land Management specialists for compliance with applicable laws and policies. Contact the authorized officer at least 30 days prior to proposed work. The Lessee shall prevent the spread of noxious weeds from the right-of-way.

Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations described in BLM policy and relevant NEPA documents. Additionally, a BLM-approved Pesticide Use Proposal is necessary prior

to pesticide application and all pesticide application will be done by a licensed pesticide applicator. When planning the use of pesticides, the Lessee shall submit a Pesticide Use Proposal or - a plan showing the pest(s) to be controlled as well as the proposed type and quantity of material to be used, , method of application, and any other information deemed necessary by the authorized officer. All use of pesticides shall be approved in writing by the authorized officer prior to such use.

J. Inspections

Enforcement authority is vested in the BLM as the Communications Site Administrator for Signal Tree via 43 CFR 2800. The BLM may conduct an annual inspection of each user's facility. This inspection will verify:

1. Compliance with technical standards.
2. Structural integrity.
3. As-built plan accuracy.
4. Electromagnetic compatibility.
5. General site health, safety, and cleanliness.

The BLM shall provide written notice of the scheduled inspection date at least 30 days in advance. Each user shall arrange to have personnel available at the site at the time of the inspection.

Any non-compliance found by a user shall be reported to the BLM. The BLM will conduct an inspection and a written copy of the inspection report shall be forwarded to the violating user within 30 working days following the inspection. The report shall include:

1. A description of the violation.
2. Corrective action required.
3. Name, address, and organization of the responsible party.
4. Time allowed for completion of corrective measures.
5. Anticipated action in the event of noncompliance with remedial instructions.

K. Fire Prevention and Hazard Reduction Requirements

Facility owners and facility managers will be required to control vegetation within the fenced area around their facilities. Gravel or mineral soil (i.e., bare ground) or mowed vegetation must be maintained to a minimum of (10) feet clearance around buildings and a minimum of (10) feet clearance around any propane tanks. Identified threatened, endangered, or sensitive plant species must remain within the minimum clearance areas.

Smoking is prohibited in flammable vegetation areas.

Roof structures shall be kept reasonably clear of debris at all times.

No explosives will be stored at this site. Flammable materials shall be stored in conformance with the requirements of local fire regulations. Flammables will be placed in closed containers and stored away from sources of ignition and combustible materials. If flammables are stored within a building, the building will be locked, properly signed and well ventilated.

Approved spark arresters will be required and maintained on all internal combustion engines.

At least one (1) U.L. rated 20 lb. A:B:C dry chemical fire extinguisher is required inside each building. Prior to each June, fire extinguisher(s) shall be inspected by holders and refilled, if necessary.

Any fire will be immediately reported to "911", the nearest BLM office and/or Coos County Sheriff.

BLM Officers will make periodic fire prevention inspections. They will call to the holder's attention any lack of compliance with the above regulations, plus any other existing hazards. Compliance with these inspections is required within the time limits specified in the inspection report.

All fire protection standards must be accomplished by the beginning of fire season unless otherwise agreed to, and then maintained throughout the fire season.

For new construction, the BLM will provide the Holder with a separate Construction Fire Plan which will be prepared at that time as applicable

L. Access Maintenance and Restrictions

Roads

The road to Signal Tree site is in generally good condition due primarily to the pavement and maintenance from private land logging. However, in the future if timber maintenance declines, the road surface will degrade and will require maintenance. If a user association is formed on Signal Tree, the costs of road maintenance will be assessed by the association and enforced through this management plan. Individual users who damage or disturb the access road, or any associated structures, such as ditches, culverts, roadside vegetation, signs and/or underground utilities or facilities, will be required to repair the road and/or associated structures, to conditions equal to or superior to those prior to any damage or disturbance. This work must be done according to applicable road maintenance standards and may require the appropriate NEPA analysis.

Interior Site Driveways/ Parking Areas

Interior site driveways within the communications site will be maintained by the site users. Interior roads will be planned and approved during establishment of new facilities. Interior roads will be maintained in a manner to allow only one entrance to the site. Off-road vehicle use by a user in and around the communication site will be avoided.

Road Closures

Native surface roads are subject to periodic closures to entry during periods of extreme fire danger, inclement weather, or wet conditions. Authorized site users may use the site during these periods, but should use judgment and may need to seek advance approval from the Bureau of Land Management.

VII. CONDITIONS FOR CONSTRUCTION, MODIFICATIONS OR EXPANSION

A. Facility Owner/Manager Responsibilities

In addition to the responsibilities listed in Section III, new applicants and existing Facility Owners/Managers proposing new, modified, or expanded facilities are responsible for:

1. Submitting a complete application to the Coos Bay District Office (ATTN: "Realty Specialist") prior to any new construction or modifications to existing improvements, unless new electronic equipment is being installed in/on an existing tower and/or an existing building. The application must include:

    a. The appropriate cost recovery and application fees as determined by BLM.

    b. A copy of the approved Site Plan Base Map showing all of the proposed (new) facilities including structures, towers, and auxiliary equipment;

    c. Completed drawings/plans prepared by a registered engineer and Plan of Development approved by the BLM;

    d. Identification of any microwave beam paths, a plot of their azimuth(s), and their proposed elevation(s) on the tower;

    e. Documentation that shows that proposed facilities will not be obstructing, or interfering with, any existing fixed point to point antennas, omni-directional broadcast antennas, or microwave beam paths in the directions of primary population targets. Proposed beam path needs must be shown on Site Plan Base Map; and,

    f. Any needed recommendations, changes or modifications to their original proposal, based on any required resource surveys and/or reports.

2. Demonstrating that their proposals will not cause undue interference with any existing uses before the BLM can approve new facilities. In addition, it is the applicant's responsibility to show that any new facilities will make the most efficient use of the limited amount of space at the site.

3. Showing their proposals will provide for future users without additional construction.

4. Providing engineering and geotechnical investigations for development of specific foundation designs and grading plans.

5. Providing for erosion control as part of the Plan of Development prior to construction activities. At a minimum, erosion control must include: sediment control, stipulations that cut/fill slopes will be graded and contoured to prevent erosion and/or excessive runoff, and recommendations for temporary erosion control measures, (e.g. netting, silt fences, swales, and/or sediment collection areas).

6. Coordinating with other Federal (e.g., FCC and FAA), State and County agencies and obtaining all required approvals and/or permits.

7. Providing 30-day notice to all facility owners/facility managers at the site, as well as the BLM, of all new frequencies proposed for the site. A completed BLM technical data sheet or equivalent must be sent with the 30-day notice to allow for comment of potential interference. This would be for new frequencies for themselves and their tenants and customers.

8. Insuring that all written approvals have been obtained from the BLM prior to construction. In addition:

   a. Directional antennas will only be protected within the arch between their licensed 3 dB points.

   b. New and/or modified facilities will not obstruct existing fixed point-to-point antennas or omni-directional broadcast antennas in directions of primary population targets.

B. <u>Construction Methods and Resource Protection</u>

Plans submitted by an applicant for any new construction or modifications shall specify provisions for soil rehabilitation measures including, but not limited to, soil replacement and stabilization and for proper handling of runoff from buildings, parking area, access roads, and undeveloped common areas.

The following methods and resource protection measures will be required to minimize impacts during construction:

1. Avoid and protect sensitive resource areas, as identified by the BLM.

2. Compliance with the Plan of Development and the Erosion Control Plan.

3. During construction and/or maintenance, no paint or paint thinners will be disposed of on site.

4. Minimize ground disturbance and vegetation removal as much as possible during construction activities. All ground-disturbing activities require BLM pre-approval.

5. Disturbed areas will be re-vegetated with species pre-approved by BLM as soon as possible after construction. If necessary, reseeding will be required until vegetation is successfully established as determined by the BLM.

6. No grading material will be cast off during construction/reconstruction activities. Excess soil can be used for fill material on road and/or building/tower pads.

7. Temporary on-site storage of construction materials will require pre-approval by the BLM.

8. Construction materials and supplies, except for hazardous materials (see number 9. below) may be left unattended at the construction site at the end of each workday, but at the owner's risk.

9. Hazardous materials, including but not limited to all fuels, oils, and lubricants, are not to be left unattended at the site at any time. During construction, these materials are to be removed from the site at the end of each workday, or temporarily stored inside a locked and signed building until the following workday.

10. All surplus construction materials and/or waste debris must be removed from the site no later than thirty (30) days after construction has been completed.

11. Any earth moving or heavy equipment (e.g., dozers, graders, cranes, backhoes, etc.) leaving the designated roadway and/or approved parking area(s) to perform authorized activities at the site, will be washed off prior to being brought onto public lands to prevent the introduction and spread of noxious weeds into the area.

C. Construction Inspection

1. All new construction, reconstruction, or major modification shall conform to the established technical standards and accepted engineering practices (i.e., the Uniform Building Code).

2. Any construction inspections required by other applicable agencies are the responsibility of the lessee/holder. Copies of completed inspections are to be provided to the Coos Bay District Office, Authorized Officer, either as they occur or as part of the final as-built plan. Inspection information shall become a permanent part of the holder's lease/ROW case file.

3. The Lessee/Holder agrees that corrective work detailed in BLM, or other agency required compliance inspections, would be completed by the scheduled completion date. If the Lessee/Holder disagrees or has questions about specific items, the Lessee/Holder must contact the BLM in order that the disagreement or item may be resolved.

4. A final set of as-built plans will be submitted to the Coos Bay District Office Authorized Officer within 90 days of acceptance of structure (if contracted) or of completion date.

D. New or Remodeled/Expanded Buildings

1. Any new buildings must be designed to accommodate multiple users along with fitting into the physical environment as defined in a site-specific environmental analysis developed at the time of the proposal. All new facilities must meet R-56 standards.

2. Buildings are required to be one-story. The roof must be metal or covered with metal to be fire resistant. Roofs can be equipped with antenna support structures, such as poles and railings that can extend up to 25-feet above ground level.

3. Facility Owners and Facility Managers are encouraged to construct the interior of their buildings in a modular fashion, so that they can:

    a. Sublease sections to others;

    b. Provide tenants and customers with internal separation and security;

    c. Reduce physical interference; and

    d. Increase management effectiveness.

4. The following materials are approved for construction of new facilities (i.e. buildings):

    a. Floors – Concrete slab with drainage.

    b. Walls – Concrete block, metal, or pre-fabricated concrete.

    c. Roof – Metal, or concrete, if painted to eliminate shiny surfaces, or other fireproof material as approved by the BLM. Proposals for wooden roofs will not be approved.

    d. Partitions – If it is felt partitions are necessary in buildings, ensure they are constructed with fire resistant material (e.g., concrete block, reinforced concrete, or properly grounded fencing).

    e. Color – Proposed color for use on all exterior building surfaces must be pre-approved by the BLM. The goal of the color selection for the facilities is to make the building as inconspicuous as possible and make buildings located on the skyline look inconspicuous when viewed from a distance. The intent is to reduce or eliminate glare from reflective and/or illuminated surfaces such as windowpanes, sheeting and reflective paints. Non-reflective, BLM-approved colors will be used on equipment buildings.

5. Building entry lights must:

    a. Only light the immediate area in the vicinity of the door;

    b. Be motion activated and have a limited time duration (e.g., 3-5 minutes); and

    c. Have a shielded beam that is pointed at the building door.

Requests for all-night (i.e., "dusk-to-dawn") lighting, or entry lighting that would be visible from outside of the site will not be approved. FAA-required lighting would be the only exception.

E. New or Remodeled/Expanded Towers

1. All new construction, reconstruction, and modifications to towers will be pre-approved by the BLM prior to implementation.

2. It is the applicant/holder's responsibility to assure that a new, or modified, structure will not unduly interfere electronically or physically with any existing equipment at the site. Towers must be spaced, so as to prevent ground level radiation and/or interference problems. This must be clearly demonstrated in writing to the BLM prior to issuance of a new lease/ROW or amendment.

3. All new towers will comply with current structural and safety specifications and design standards, including safety-climbing devices. Towers should be as narrow and "open" as safety and structural integrity allow. New towers will be designed using maximum wind, snow, and/or tower loading anticipated for the site.

VIII. SITE ASSOCIATION/ADVISORY GROUP

A Site Users' Association is recommended at this site. If formed in the future, all lease and ROW holders would be encouraged to join the association. The goal of the association would be to maximize the effective use of the site, coordinate access and maintenance. The objective of a sanctioned association would also be to represent all site users as a group when dealing with the BLM Coos Bay District Office on matters relating to the site administration. The association would be able to work in cooperation with the BLM to identify problems or opportunities and make recommendations to the BLM for any changes in management strategies at the site. The association could also provide input to the BLM regarding the future addition of equipment and facilities at the site. While the advice and recommendations of the association would not be binding on the BLM, the BLM could use the input for administration of the site. The BLM would be a member of such a group and would help jointly develop the charter (i.e., the ground rules).

The goal of the Site Association would also be to maximize the effective use of the site. The objective of a sanctioned association will be to represent all site users as a group when dealing with the Coos Bay District Office on matters relating to the Site administration. The association would be able to work in cooperation with the BLM to identify problems or opportunities and make recommendations to these entities for any changes in management strategies at the site. The association could also provide input to these entities regarding the future addition of equipment and facilities at the site. While the advice and recommendations of the association would not be binding on these entities, they could use the input for administration of the site.

The BLM would be a member of such a group and would help jointly develop the charter (i.e., the ground rules).

In the absence of a formal Site Association, the BLM may utilize a Site Advisory Group that can make suggestions and/or recommendations to specific problems associated with the administration of the site.

IX. APPENDICES

A. Location and Site Maps

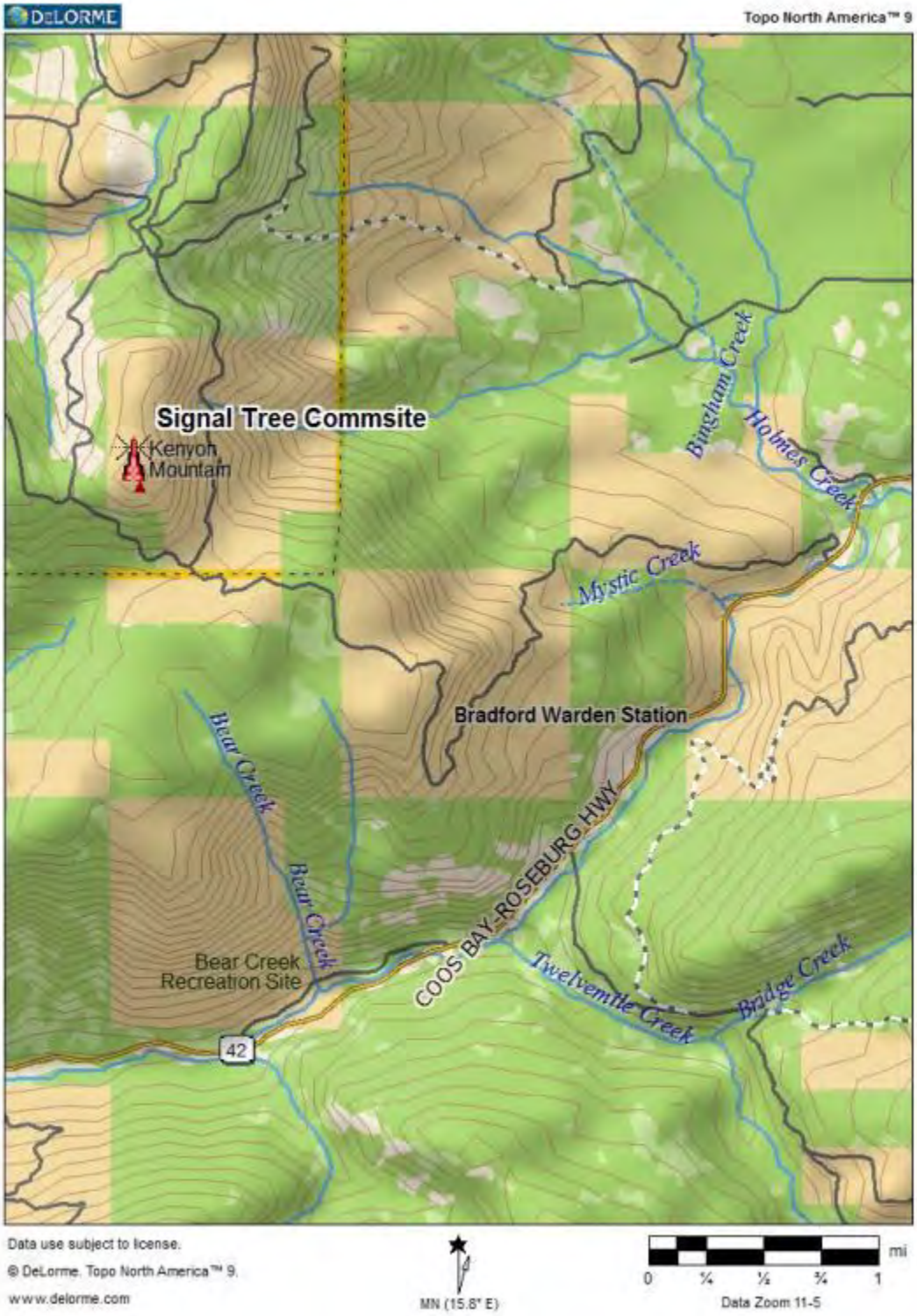
B. Authorized Facilities

C. Site Photographs

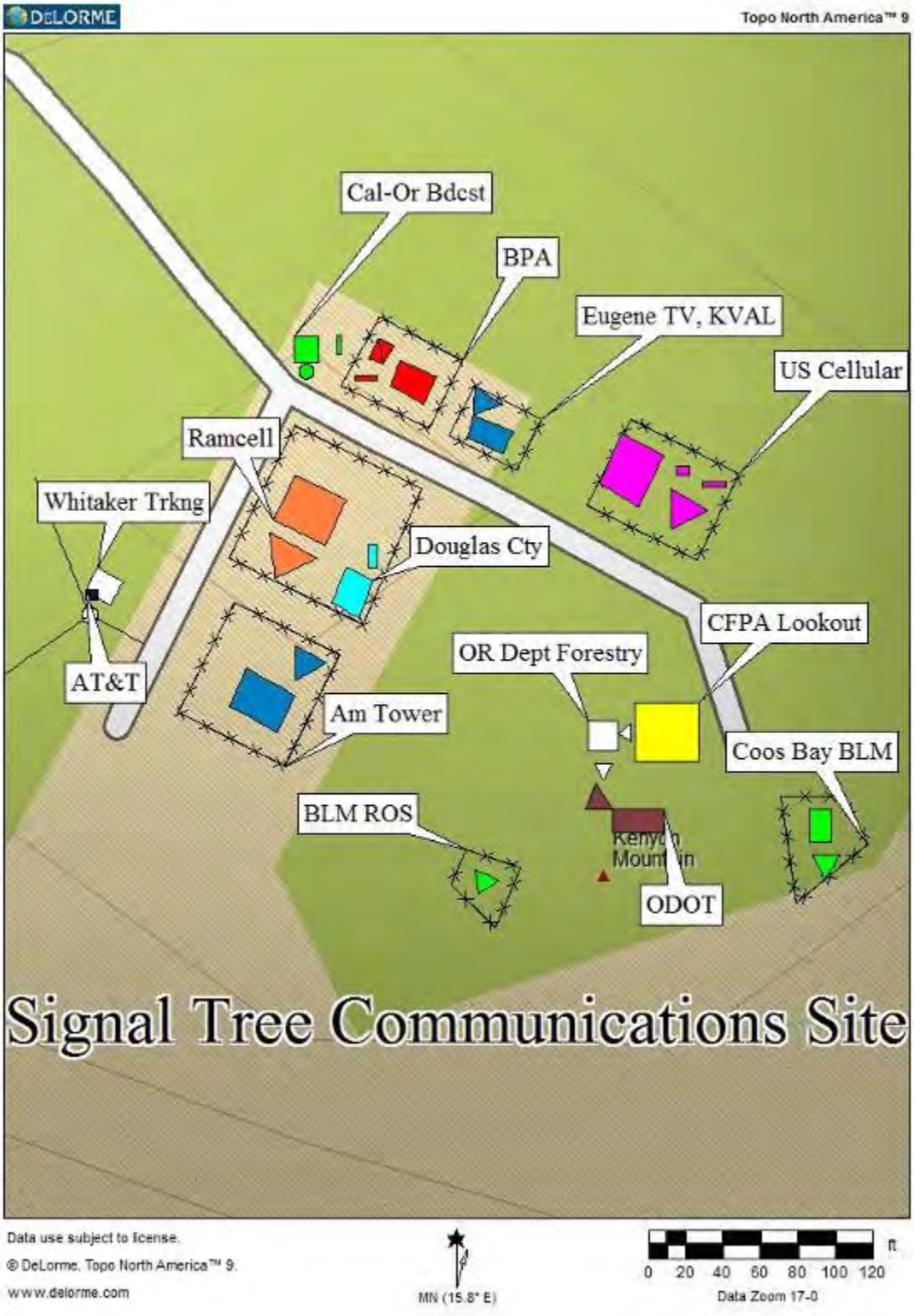
D. Inspection Checklist

APPENDIX A

LOCATION MAP



SITE MAP



APPENDIX B

SIGNAL TREE COMMUNICATIONS SITE LESSEE/HOLDER FACILITY TABLE

	Auth #	Use	Building	Tower	Access/Parking	Other
Facility #1 Calif-Oregon Bdcst Inc.	**ORORE 44098**	**MIC**	**8'x 12' wood**	**40' monopole**	**Access and parking**	**500 gal. propane tank**
Facility #2 BPA	**ORORE 0 6988**	**MIC**	**15'x 20' Metal siding**	**55' lattice self supported**	**Access and parking**	**1000 gal. propane tank, 40'x50' fence, outhouse**
Facility #3 Eugene TV, KVAL	**ORORE 40875**	**MIC**	**15'x15' concrete block**	**40' lattice**	**Access and parking**	**30'x40' fence 500 gal propane tank**
Facility #4 US Cellular	**ORORE 52018**	**CEL**	**12'x20' aggregate prefab**	**100' lattice self support**	**Access and parking**	**50'x50' fence, 500 gal propane tank, Generator**
Facility #5 Coos Fire Protection Association	**ORORE 63498**	**PMRS**	**12'x 12' wood lookout cab**	**50' wood guyed lookout tower**	**Access and parking**	
Facility #6 Coos Bay BLM	**ORORE8651**	**PMRS**	**10'x 12' metal com container**	**80' lattice self support**	**Access and parking**	**50'x 50' fence**
Facility #7 OR DOT OR Public Bdcst	**ORORE 34997 ORORE 34997 A**	**PMRS MIC**	**12'x 20' metal**	**50' lattice self support**	**Access and parking**	
Facility #8	**ORORE**	**PMRS**	**10'x 10'**	**50' lattice**	**Access and**	

	Auth #	Use	Building	Tower	Access/Parking	Other
Oregon Dept of Forestry OR Wing Civil Air Patrol	**46988 OROR 63498**		**block**	**braced against lookout twr 30' lattice**	**parking**	
Facility #9 American Tower	**OROR 42214**	**FAM**	**25'x 25' concrete**	**65' lattice Self support**	**Access and parking**	**70'x 90' fence**
Facility #10 Ramcell	**OROR 54613**	**FAM**	**25'x 27' metal siding**	**125' lattice self support**	**Access and parking**	**80'x 80' fence outhouse**
Facility #10 A Douglas County	**Trespass**	**PMRS**	**10'x 12' aggregate prefab**	**On Ramcell twr**		**Diesel generator**
Facility #11 Whitaker Trucking	**OROR 8113**	**PMRS**	**10'x 12' block**	**100' guyed**	**Access and parking**	
Facility #11A AT&T Wireless	**Trespass**	**CEL**	**Outside cabinet**	**On Whitake twr**		
BLM ROS		**Nat Res Monitoring**				**20'x 20' fence**

APPENDIX C

SITE PHOTOGRAPHS

California-Oregon Broadcasting, Inc.

Bonneville Power Administration

Eugene TV, KVAL Retlaw Enterprises

US Cellular

Coos Fire Protection Association

Bureau of Land Management – Coos Bay

Oregon Department of Transportation
Oregon Public Broadcasting

Oregon Department of Forestry
Oregon Wing Civil Air Patrol

American Tower

Ramcell of Oregon

Douglas County (Trespass)

Gene Whitaker Trucking

AT&T Wireless (Trespass)

BLM ROS Weather Station

APPENDIX D

"Signal Tree Annual Technical Inspection"

Date Inspected: _____ Time Inspection: _____

Permit Holder: _____ Authorization # _____

Site Technician: _____ Phone # _____

Number of Transmitters _____ License Posted _____

Please mark the following Items as Acceptable (A) or Unacceptable (U).

Electrical Wiring ---------- (A) (U) Grounding ---------- (A) (U)

Equipment Installation ---------- (A) (U) Housekeeping ---------- (A) (U)

Building Repair ---------- (A) (U) Tower Repair ---------- (A) (U)

Please mark the following Items as Yes (Y) or NO (N) or (NA)

Isolators ---------- (Y) (N) (NA) Circulators ---------- (Y) (N) (NA)

Cavities ---------- (Y) (N) (NA) Terminators ---------- (Y) (N) (NA)

Filters ---------- (Y) (N) (NA) Lightning Protection ---------- (Y) (N) (NA)

Comments: _____

_____

Recommended Corrective Action: _____

_____

_____

Required Corrective Action to Be Taken: _____

_____

_____

_____

_____

Committee Representatives: _____

Bureau of Land Management Representatives: _____

Please make the required corrective action within the next 120 days. Please make a written report of corrective action taken and submit to the BLM. If you should have any questions, please call the BLM office.

Department of the Interior
Bureau of Land Management

STUKEL MOUNTAIN COMMUNICATIONS SITE MANAGEMENT PLAN

Prepared by the Bureau of Land Management
Lakeview District
Klamath Falls Resource Area, Oregon

Approved by: Donald J. Holmstrom 3/2/2011

Donald J. Holmstrom
Field Manager

Date

STUKEL MOUNTAIN COMMUNICATIONS SITE MANAGEMENT PLAN

A. Terms and Definitions

The terms used in this communications site management plan conform to the definitions listed in the April 22, 2005, Federal Register notice "Rights-of-Way, Principles and Procedures: Rights-of-Way under the Federal Land Policy and Management Act and the Mineral Leasing Act", with further clarification provided in BLM Handbook 2860-1 and the United States Code of Federal Regulations (CFR) 43 CFR 2800. In the event of a conflict, between the plan and these sources, the Federal Register notice and the BLM Handbook will govern.

The words "lease" and "lessee" as used in this plan refer to the relationship between the BLM and the communications use lease lessee, or ROW holder. The words "customer" and "tenant" refer to the relationship between the lessee or holder and the occupants in the lessee's facilities.

LEASE OR ROW – A use authorization issued to a communication Facility Owner or Facility Manager allowing for the use of public land to construct and or operate a communications facility and, unless specifically prohibited, to sublease to occupants in that facility.

LESSEE, LEASE HOLDER, OR ROW HOLDER – A Facility Owner or Facility Manager

CUSTOMER – A facility occupant who is paying a facility manager, facility owner, or tenant for using all or any part of the space in the facility, or for communication services, and is not selling communication services or broadcasting to others.

TENANT – A facility occupant who is paying a facility manager, facility owner, or other entity for occupying and using all or part of a facility. A tenant operates communication equipment in the facility for profit by broadcasting to others or selling communication services.

COMMUNICATIONS SITE – An area of BLM-managed public land designated through the land and resource management planning process as being used or is suitable for communications uses. A communications site may be limited to a single communications facility, but most often encompasses more than one. Each site is identified by name; usually a local prominent landmark, such as Stukel Mountain Communications Site.

FACILITY – The building, tower, and related incidental structures or improvements authorized under the terms of the grant or lease.

FACILITY MANAGER – The holder of a BLM communications use authorization who leases space for other communication users. A facility manager does not own or operate communications equipment in the facility for personal or commercial purposes.

FACILITY OWNER – Individuals, commercial entities, organizations, or agencies, that own a communications facility on Federal land; own and operate their own communications equipment; and hold a communications use authorization. Facility owners may or may not lease space in the facility to other communications users.

NON-BROADCAST – This category includes Commercial Mobile Radio Service (CMRS), Facility Managers, Cellular Telephone, Private Mobile Radio Service (PMRS), Microwave, Local Exchange Network, and Passive Reflector.

I. INTRODUCTION

Demand for new communication sites continues to be active in the United States including carrier requests to locate cellular facilities on public lands in the western states. This demand is due to advances in communication technology, strong consumer interest, and a 1983 Federal Communication Commission (FCC) decree establishing wireless carrier coverage requirements.

Stukel Mountain is an established communication site with characteristics desired by government agencies, broadcast, wireless carriers, microwave relay, and other communication providers. The communication site overlooks small communities and a rural but growing population area southeast of Klamath Falls, Oregon.

This Communication Site Management Plan has been developed to document and evaluate the existing communication site and facilities located on Stukel Mountain. The plan also provides an outline for orderly future development of the site in conformance with the Klamath Falls Resource Area's current land use planning document, the Klamath Falls Resource Management Plan (RMP).

Current BLM program guidance for resource management planning specifies that every planning document shall contain determinations relevant to communication sites. The Klamath Falls RMP, approved in June 1995 addresses this land use under General Land Allocation Objectives, designation for TV broadcast and two-way radio on Table 15, and shown on Map 2-12. In order to supplement the land use planning document, this site management plan has been prepared to address specific issues applicable to Stukel Mountain.

Approved lessees or right-of-way (ROW) holders with facilities currently located on Stukel Mountain are shown in the Users' Table, Appendix B. Additional tenants or customers may be accommodated within the confines of existing authorized communication facilities as long as such additions are in compliance with the terms and conditions of authorized leases or ROW grants and with the supplemental direction contained in this site plan. Requests for new communication site facilities may be authorized at the discretion of the Bureau of Land Management (BLM) Authorized Officer through the issuance of new Communications Use Leases, or in some cases, by the issuance of additional ROW grants.

This site plan will be incorporated into all future new leases issued for the Stukel Mountain Communication Site. This plan will also be included as a part of all existing leases and renewed leases or ROW grants as the terms of those authorizations allow. Provisions of the site plan are enforced through the terms and conditions of the ROW or lease authorization. Each lessee is expected to incorporate mandatory BLM lease and site plan requirements into any subsequent agreements with the lessee's tenants and customers. The lessee is also responsible for enforcement of said requirements involving the lessee's tenants and customers.

BROADCAST – This category includes Television Broadcast, AM and FM Radio Broadcast, Cable Television, Broadcast Translator, Low Power Television, and Low Power FM Radio.

RIGHT-OF-WAY (ROW) – The public land authorized to be used or occupied pursuant to a ROW grant.

RIGHT-OF-WAY GRANT – A use authorization issued pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (43 U.S.C. 1701 *et seq.*), or issued on or before October 21, 1976, pursuant to then existing statutory authority, authorizing the use of a ROW over, upon, under or through public land for construction, operation, maintenance and termination of a project.

HOLDER – Any applicant who has received a ROW grant, lease or temporary use permit.

USERS – All ROW and lease holders, lessees, customers, and tenants that own or operate a facility or communication equipment at the communication site.

SENIOR USE – Any use whose implementation date is prior to the implementation date of the use in question.

RANALLY METRO AREA (RMA) – A series of nine population zone areas, the highest of which is greater than 5 million and the lowest being 25,000 or less. These zones are determined annually and published in the Ranally Metro Area Population Ranking, an independent publication from Rand McNally, and are used in rent determination under guidelines established in 43 CFR 2806.

B. Purpose

This plan will be used by BLM officials administering communications uses at Stukel Mountain, existing lessees, holders, and applicants desiring a lease, grant, or an amendment to an existing lease or ROW grant. The plan will be kept updated by amending pages or sections of the plan rather than issuing a revised edition of the plan. When an administrative revision is necessary (such as the addition of a user), a letter will be sent to the holders from the Klamath Falls Resource Area enclosing a copy of revised pages or sections. The amendments will be consecutively numbered. Other proposed revisions to the plan will be circulated to holders for comment prior to implementation.

Overall management direction for the administration of communications sites is outlined in the CFR and the BLM Handbook and applicable BLM Instructional Memoranda. Specific direction for site management planning on designated communications sites is contained in BLM Handbook 2860-1. Primary regulations and policy pertaining to issuance of ROW authorizations by the BLM are found in Title 43 CFR Sections 2801- 2808 and BLM Handbook 2860-1.

This Site Management Plan provides applicable guidance and adds current policy and technical standards for better management of the Stukel Mountain Communications Site. This plan governs development and management of Stukel Mountain and will be modified in the future as needs and conditions warrant. Any future such uses must be designed, installed, operated, and maintained to be compatible and not interfere with the senior uses as defined in Section A above.

This site-specific plan is administrative in nature and is Categorically Excluded from further review under the National Environmental Policy Act (NEPA) in accordance with 516.DM 2, Appendix 1, item 1.10, which states " – Policies, directives, regulations, and guidelines that are of an administrative, financial, legal, technical, or procedural in nature and whose environmental effects are too broad, speculative, or conjectural to lend themselves to meaningful analysis and will later be subject to the NEPA process, either collectively or case-by-case". Any additional development of Stukel Mountain will be addressed in a site-specific NEPA document.

C. Site Description

The site is located approximately 11.3 miles southeast of Klamath Falls, Oregon. It is on Stukel Mountain, a prominent landmark in the area. The area is managed by the Lakeview District Office, Klamath Falls Resource Area. It is specifically located in the NE ¼ NW¼ of sec. 15, T. 40 S., R.10 E., Williamette Meridian, Klamath County, Oregon at approximately 42° 5' 48.25" North Latitude and 121° 38' 1.75" West Longitude. The elevation at the Stukel Mountain Communications Site is approximately 6400 feet above mean sea level. The site covers 3.77 acres of which only portions are buildable. A site map is provided as Appendix A.

D. Area Served

This site does not serve a Ranally Metro Area (RMA). The largest population zone served is less than 25,000. This zone may be adjusted in the future as populations change. This information will be used for rental fee determination.

E. Access

From the intersection of Highway 39 and Short Road turn east and travel 1 mile then right onto Reeder Road and south to Hill road, turn right and travel approximately 2 miles then left onto the Stukel Mountain Road as it becomes BLM Route 40-10-4.0 then east and south just prior to the private land and the newly graveled bypass road at approximately 3.21 miles. The bypass road rejoins the original road south of the private land at approximately 2.14 miles and then to the site at approximately 1.86 miles. The total distance on BLM lands from Hill Road to the site is approximately 6.22 miles. The road completely bypasses the private land.

F. Site History and Development

There are currently three communications facilities at Stukel Mountain on lands administered by the BLM. Additional communications facilities are located on private lands and Federal Aviation Administration (FAA) lands to the north. A vacant site suitable for future development is located south of the existing facilities on BLM land.

California-Oregon Broadcasting, Inc, OROR 35373, was authorized a facility in 1983 for television broadcast and inter-city microwave relay. In 1998, California-Oregon was authorized to amend their grant to add a second building and tower to accommodate cellular radio equipment and antenna. This second building and tower actually belongs to US Cellular and must be authorized separately. The site was additionally amended in 2008 to allow for an additional third tower and platform for an additional cellular provider. Since Edge Wireless placed a self contained outdoor equipment cabinet at the site instead of placing their equipment within existing shelters owned by California-Oregon Broadcasting, they were required and issued a separate grant for their shelter in 2008. The third tower holds the antenna of AT&T Mobility and a tenant cellular provider. The outdoor equipment cabinet is now owned by AT&T Mobility, OROR 65377.

A list of all authorized facilities as of the date of this plan can be found in Appendix B. Any modifications to existing facilities or proposals for new facilities must be approved by the Lakeview District Office according to the appropriate NEPA process and guidance described in this document.

The site currently appears to be relatively free of interference, receiver sensitivity, and noise. If additional new uses deteriorate the receiving/transmitting operation of the existing uses, the new uses may be required to institute additional studies, equipment upgrades, frequency isolation, or physically separate from the existing uses.

G. Goals and Objectives of Site Management Plan

1. Manage the Stukel Mountain site for broadcast and low-power uses including two-way radio, microwave, cellular, and ISP. All uses must be designed, operated and maintained so as not to physically or electronically interfere with the senior uses. The maximum power output expressed as effective radiated power (ERP) for the Stukel Mountain Communications Site is based on the maximum output allowed the FCC's rules at Title 47, Code of Federal Regulations, Part 90 and Part 73 and 74. Each use must operate at or below the power level authorized by their respective FCC license as long as it does not exceed the site limitation. This power limitation does not preclude existing and new uses from being designed, operated and maintained to meet other interference, noise floor, receive sensitivity, or RFR standards included in this plan.

2. Manage communication equipment on the Stukel Mountain site to maintain the radio frequency (RF) hazard to be within the Public Standard as defined by the FCC.

3. Systematically develop the site to maximize the number of compatible uses while ensuring safety and protection of resources. Development of new towers or buildings within each of the authorized owner's facilities will be authorized only after their respective tower or building space area is filled to near capacity.

4. Help fulfill the public need for adequate communications sites.

5. Protect the interests of holders, lessees, tenants and customers, by preserving a safe and electronically "clean" environment.

6. Encourage the efficient development and use of space and facilities within the designated site.

7. Achieve visual quality objectives by requiring design standards that are unobtrusive and utilizing earth tone colors and non-reflective surface material and stringent site maintenance requirements.

8. Describe the BLM's policy for maintenance of the road to the Stukel Mountain communications site.

9. Develop new facilities only after the appropriate site-specific NEPA analysis and coordination with current lease or ROW holders and users.

10. Amend this Communications Site Plan as necessary to be consistent with future RMPs. BLM will provide authorization holders with proposed amendments to this plan and will allow a reasonable period of time for the holders to review and comment on the proposed changes.

II. AUTHORITY AND DIRECTION

A. Authority

The authority used by BLM to authorize communications uses on public land (administered by the BLM) is the Federal Land Policy and Management Act of 1976, 90 Stat. 2776 (43 U.S. C. 1761-1771) and is reflected in Title 43, Code of Federal Regulations (CFR), Sections 2801- 2808 and various BLM Washington Office Information Bulletins and Instruction Memoranda.

BLM authority for communications site management planning is contained in BLM Handbook 2801-1, Plan of Development. Direction on and policy for communication use authorizations is contained in BLM Manual Section 2860.

Authority for the issuance of authorizations and/or licenses for the transmission and reception of electronic radiation for communication purposes is granted by Congress and administered by the FCC and/or the National Telecommunication and Information Administration – Interagency Radio Advisory Committee (NTIA/IRAC).

B. Relationship to Communications Site Leases/ROW Grants

This site plan will be incorporated into all leases and ROW grants issued (now and/or in the future) for this communications site and must be used in conjunction with the granting authorization. **PROVISIONS OF THIS SITE PLAN ARE ENFORCED THROUGH THE GRANTING AUTHORIZATION (LEASE OR ROW GRANT).** Each lessee or holder is expected to include the requirements of the authorization and this site plan into any documents, which describe the business relationship between the lessee and their tenants and customers. The lessee or holder is responsible for enforcing those provisions.

III. GENERAL RESPONSIBILITIES

A. The Bureau of Land Management

The BLM retains the responsibility for issuing and amending authorizing instruments to Facility Owners and Facility Managers, only for the areas actually occupied by the authorized improvements. The issuance of a FCC license (authorization), or frequency assignment, does not authorize occupancy of public land. Granting occupancy and use of public land rests exclusively with the BLM. This includes:

1. Approving any new facility(ies) at the site.
2. Approving amendments to existing facilities (i.e., additions to tower, building, support facilities), and approving assignments of leases and ROW grants to qualified buyers of facilities on the site.
3. Approving any modifications to existing facilities including the tower, antenna, equipment or building. Also, approving any changes to the existing FCC licenses, prior to the submission of an application to the FCC.
4. Frequency Management. The BLM is not normally responsible for the resolution of conflicts when the licensees or agencies are operating within the limits of the FCC and NTIA/IRAC authorizations.

B. Facility Owners and Facility Managers

Facility owners and facility managers (or their designated representatives) are responsible for:

1. Complying with their use authorization and all provisions of this site plan.
2. Ensuring that all new facilities, expansions, or improvements are consistent with the Klamath Falls Resource Area land use planning documents; any environmental document(s)/decisions for the site; and, this site plan.
3. Ensuring facilities/equipment not complying with Federal/State/local laws/regulations/ ordinances will be removed or modified within one year of the approval of this plan. Any modification needs pre-approval by the BLM.
4. Keeping all facilities within the established limits of their authorized area.
5. Providing the BLM with the name, address and phone number for a local contact person. The Facility Owner and Facility Manager and the contact person may be the same individual. The contact person will be available for emergencies and will have the authority to make decisions about construction issues, facility maintenance and all equipment within the facility.
6. Providing 30-day notice to all facility owners/facility managers at the site, as well as the BLM, of all new frequencies proposed for the site. A completed BLM technical data sheet or equivalent must be sent with the 30-day notice to allow for comment of potential

interference. This notification requirement applies to new frequencies for facility owners/facility managers as well as their tenants and customers

7. Adhering to the lease/ROW grant as follows:

   a. Facility Owners and Facility Managers with Communications Use Leases are authorized to rent building/tower space to tenants and/or customers without prior written approval from the BLM.

   b. Tenants and/or customers may not construct their own equipment shelter (building, shelter, generator pad, cabinet, etc.) or antenna support structure (tower or mast). The facility owner must own all communication shelters and towers under their lease or grant. [If that is not possible, a separate SF-299 application, cost-recovery fees, analysis, and authorization are required. This will result in the use being a tenant/customer of the original lease/ROW in addition to being a separate facility for billing purposes. See 43 CFR 2806.37]

   c. Tenants and/or customers using a facility covered by a Facility lease/ROW will not have separate BLM leases/ROWs to authorize their use except in situations where regulations or policy require them.

   d. Facility Owners and Facility Managers are responsible for complying with the terms and conditions of the facility lease/ROW. Facility Owners/Facility Managers are also responsible for ensuring that their tenants and customers are in compliance with the terms and conditions of the lease/ROW and applicable FCC or NTIA/IRAC license terms and conditions.

   e. The Facility Owner and Facility Manager may not place any unreasonable restrictions nor any restriction restraining competition or trade practices on tenants and/or customers, or potential tenants and/or customers.

8. Ensuring that all communications facilities and equipment are installed, operated, and maintained according to the Motorola R-56 Standards and Guidelines for Communication Sites. Repairs and modifications to existing facilities/equipment must also meet Motorola R-56 Standards. These standards may be waived by the BLM authorized officer when recommended by a site user association or similar technical committee upon request of a facility owner/manager when equivalent measures would achieve similar results.

9. Ensuring that all communication equipment meets NTIA, FCC and BLM [illegible] guidelines and standards concerning radiation limitations by:

   a. Monitoring radiation levels at their facility and;

   b. Immediately correcting any radiation levels that are, or could be a hazard to human health. (FCC 47 CFR sections 1.1307(b), 1.1310 and 2.1093) and FCC OET Bulletin 65, August 1997.

10. Providing the BLM with a certified copy of all uses and the correct category of uses within the facility, along with the current phone numbers and addresses of all tenants and customers as of September 30th each year. This report is due by October 15th each year.

11. Keeping the premises around their buildings free of trash and debris.

12. Placing the BLM lease/ROW serial number on the door of their communications site building, or on a gate if a fenced compound.

13. Correcting all interference problems. The users are normally responsible for the resolution of conflicts when the licensees or agencies are operating within the limits of the FCC and NTIA/IRAC authorizations.

C. FCC and NTIA/IRAC

The FCC and NTIA/IRAC are responsible for Frequency Management. The FCC and NTIA/IRAC are not normally responsible for the resolution of conflicts when the licensees or agencies are operating within the limits of the authorizations.

IV. AUTHORIZED USES AND USERS WITHIN A FACILITY

Use by Multiple Users

Use of all facilities and improvements by more than one user will be required except where the facility owner is a government agency. Site applicants will take the lead in this area and design their proposals to accommodate multiple uses of facilities and improvements. This includes multiple uses of buildings, towers, back-up generators, grounding systems, fuel containers, access ways and parking areas.

BLM will not authorize new ROWs, ROW expansion, or modification until it is determined that existing authorized space and facilities are being used to capacity. Development or expansion of a ROW solely to preclude potential competitors from locating nearby is unacceptable and will not be authorized by the BLM.

Facility Owners and Facility Managers are not required to lease facility space to others if they can prove to the BLM authorized officer that:

1. Space is not available;

2. The use is incompatible with the existing facilities;

3. Additional space is needed by the facility owner/manager;

4. Additional users would violate system security needs; or,

5. Potential interference is not resolvable.

V. FEES

The BLM will charge Facility Owners and Facility Managers annual rental fees pursuant to federal regulations contained in 43 CFR 2806. The fees are based on two factors- the type of communications use, and the population served by the use. These fees are considered fair market value for the use of public land. The population Zone 9 (less than 25,000) will be used for these calculations unless something else is specifically agreed to in writing by the authorizing officer or until populations change.

Fees that Facility Owners and Facility Managers may charge their tenants and customers are to be reasonable (consistent with, and not in excess of, other fees for similar facilities) and commensurate with the uses and occupancy of the facilities and services provided to tenants and customers.

VI. GENERAL OPERATION AND MAINTENANCE DIRECTION

A. Unique Resource Considerations at this Communication Site

There are no currently identified special resource coordination considerations with on-site or adjacent resource values. Should special conditions arise through the revision process of the land use plan or other situations, this site plan will be amended accordingly. Special habitat may occur on adjacent parcels, but no site specific restrictions have been applied to uses at this site.

B. Wiring and Grounding

1. All equipment is to be installed within existing buildings and in metal equipment racks or within metal equipment cabinets and in accordance with manufacturers' specifications. All equipment, racks, cabinets and overhead ladder trays are to be grounded and shielded in compliance with National Electrical Code (NEC) and in accordance with accepted industry standards.

2. All electrical wiring and grounding must meet the NEC and applicable State/local codes. All permanent wiring shall be installed in metallic conduit. Surge protection shall be installed between the electric service meter and the first power distribution panel.

3. Lightning protection shall be in accordance with NEC part 810-20 Antenna Discharge Units and Part 810-21 Grounding Conductors. Periodic bonding of the antenna feed lines to the tower (when galvanized steel) shall be made with proper bonding connectors that are stainless steel (preferred), Copperweld, tin plated, or made of brass.

4. Each building is to have its own separate grounding system for all users in that structure. Wherever practical, interconnection of individual grids and/or the simultaneous placement of a large sized copper ground wire with any new grounding systems that are buried on the site will be required.

5. Site or facility grounding must be constructed of copper with #2 AWG or larger wire, Copperweld, or 2" or larger solid copper strap, connected to an adequate site/facility ground electrode system. The site/facility ground electrode system shall be bonded to the power service entrance grounding electrode conductor. Guy wires should also be grounded using manufacturers approved methods to preclude bi-metallic junction and corrosion. All equipment on the site (buildings, towers, power units, transmitters, receivers, antennas, combiners, telephone systems, power cabinets, HVAC units, etc) must be connected to the site/facility ground by direct connection. Electrical system ground wiring is required for electrical ground fault protection and circuit breaker coordination. The grounding systems shall comply with applicable laws, codes and in accordance with standard engineering practice. Below ground connections must use either an exothermic welding process (i.e., Cadweld, Thermoweld, etc.), copper wedge pressure devices (i.e., Ampact, Burndy, Wrench-lock, etc.), or brazed copper connections in conjunction with a mechanical UL listed connector (to be used as a physical strength enhancement component). Brazing by itself is not an acceptable method of bonding ~~below earth grade (buried).~~

C. Communications Equipment

Equipment Ownership

All equipment shall be labeled (or the information available at the site, as applicable) with:

1. The owner's name;
2. Transmitter frequency(ies);
3. A valid FCC, or IRAC, authorization;
4. Transmitting power output(s); and
5. A current 24-hour phone contact number.

Transmitting Equipment

All transmitters will have protective devices (shields, filters, isolation components), designed into or externally installed, to prevent interference with other users. All transmitters will meet FCC licensing requirements. Two-way transmitters should have dual section isolators for a total of 60 db of isolation.

The re-radiation of intercepted signals from any unprotected transmitter and its associated antenna system will be prevented by the use of appropriate filters (wide band and narrow band broadcast transmitters).

The direct radiation of out-of-band emissions (i.e., noise or spurious harmonics) will be reduced to a level such that they may not be identified as a source of interference as defined in the FCC Rules and Regulations (e.g., Part 90.209(e) for non-broadcast uses, and Parts 73 and 74 for broadcast uses. If site noise (electromagnetic noise) becomes an issue, noise threshold limits will be established, and amended into the site plan, prior to authorizing any new uses.

Direct radiation of out-of-bound emissions, (i.e., transmitter wide band noise, spurious emissions, harmonics, etc.) shall be reduced to a noninterference level by using bandpass, lowpass, and/or harmonic filtering. Where duplexing is used, use of a notch type device should be avoided.

Re-radiation of signals from a transmitter and its associated antenna system shall be prevented by installing appropriate devices (i.e., ferrite isolators), with minimum return loss of 25 db.

All transmitters not in immediate use and not specifically designated as standby equipment shall be removed. Loads connected to circulators are to be capable of dissipating the total power output of the transmitter.

Receiving Equipment

All receivers shall comply with all applicable parts of the FCC rules, including Parts 2 and 15.

All receivers shall have sufficient "front end" pre-selection to prevent receiver spurious response. The use of bandpass, band-reject cavity or crystal filters may be required to prevent receiver-produced intermodulation or adjacent-channel interference.

Where duplexing is used, a bandpass cavity duplexer is required. Use of the notch-type device is not permitted. Where notch-type devices are currently in place and there are no interference problems, their use may continue until the equipment is replaced, at which time they must be replaced with bandpass devices.

Tower

Generally only one tower is authorized for each facility owner. Facility Owners and Facility Managers may obtain permission to construct the second tower only after submitting evidence that demonstrates that their existing tower is completely filled and full use has been made of combining systems.

1. All towers will be left unpainted, if they are dull, galvanized steel. Paint is required only if the tower has a shiny (i.e., reflective) surface. If paint is required, the BLM will determine what non-reflective color the tower shall be painted.

2. Maximum tower height for future towers at this site is 180 feet unless specifically altered in the NEPA process.

3. Anti-climb devices, removable steps, or other means to discourage unauthorized climbing, are highly recommended to reduce or avoid liability claims.

4. All new towers will be self supporting. No guy lines are permitted.

5. To avoid possible impacts to birds or bats, follow the most current version of the U.S. Fish & Wildlife Service's Interim Guidelines on the Siting, Construction, Operation and Decommissioning of Communication Towers, available at the following website: *http://migratorybirds.fws.gov/issues/towers/comtow.html*

Antennas

1. Microwave (dish) antennas (other than ground mounted satellite dishes) will be limited to a maximum of eight (8) feet in diameter. The smallest diameter dishes are preferred if technically feasible.

2. Dishes should be mounted as low as possible to reduce visual impacts.

3. All antennas must meet all OSHA safety standards. If an antenna exceeds FCC public radiation standards (see FCC OET Bulletin 65) at ground level in publicly accessible areas, it will be remedied within 24 hours after measurements are taken or isolated (e.g., fencing, signing, relocation, lowering power levels are all possible remedies). Ground measurements of radio frequency radiation (RFR) levels will be taken before mitigation measures are implemented.

4. Color(s) for dish antennas, or covers, must be pre-approved by the BLM. New white dish antennas and/or covers will not be approved. Existing white dishes and covers must be repainted or replaced with dishes of approved color (typically dark grey), as repairs or replacement become necessary.

5. Antennas will be purchased with or treated to have a non-reflective surface.

Interference

The responsibility for correcting interference problems is a matter for resolution between the lease/ROW holder of the facility(ies), the user causing the interference, and the affected party(ies). First users on a site have seniority with respect to the resolution of interference complaints. Senior holders have an obligation to maintain their equipment to industry standards, to operate their systems in accordance with the terms of both the FCC license and NTIA/IRAC frequency authorization, and to comply with the BLM authorization.

New users on a site must correct, at their expense, interference problems that they create. They may be required to furnish an intermodulation study, electromagnetic noise study, or other interference-related data and must agree to accept financial responsibility for elimination or prevention of any interference caused by the facility before their application can be evaluated. They must cease operation of the suspect equipment until the problem is corrected. If interference problems cannot be resolved or corrected within a reasonable time, the new use that is causing the interference may be terminated and the equipment removed.

All users shall cooperate with the Site Users Association, if one is formed, and the BLM in identification and correction of any interference. The BLM does not have authority for correcting interference problems, but can act as a mediator to help all affected parties. Interference problems must be coordinated with the FCC or NTIA/IRAC, whichever is appropriate.

Interference with law enforcement and/or emergency communications must be corrected immediately. The operation of equipment covered by this site plan shall not interfere with United States Government radio or electronic operations already in existence on public land

within two (2) miles of this site. The user causing this interference, shall, at its own expense, take all action necessary to prevent or eliminate such interferences. If it does not eliminate such interference within ten (10) days after receipt of notice from the BLM to do so, this use will be terminated.

If electromagnetic noise becomes an issue, noise thresholds will be established and this site plan will be amended accordingly.

D. Cables and Transmission Line (Wave Guides)

All new cabling will be jacketed and shielded and shall either be flexible or semi-rigid type. Existing substandard cables will be upgraded as repairs or replacement become necessary.

Cables will be properly installed and will be strapped and fastened down. Use of ports at building entrance points will be kept to a minimum by use of combiners.

When attaching power cables onto a tower, conduits should be used. Coax and wave guides should be installed in a wave guide ladder or equally divided among all tower legs.

All transmission lines (wave guides) are to be supported in accordance with manufacturer's specifications.

Unjacketed transmission line of any type is prohibited. No transmission line shall be left unterminated.

Double shielded braided or solid shielded cable will be used. No RG-8 type cable is permitted. No connector-type adapters will be used on transmission lines. Only correct connectors that will mate to connected devices are to be used.

Conduits will be shared when they service common areas and will be buried where possible.

E. Radiation

All communications uses must meet ANSI, FCC, and BLM regulations, guidelines, and standards concerning radiation limitations. This site is considered uncontrolled for the purposes of compliance with RFR standards.

Monitoring radiation levels at the site is the responsibility of all site users and will occur at intervals to comply with FCC regulations and guidelines. A copy of these monitoring reports will be provided to the BLM upon request. The FCC is responsible for enforcement of the monitoring and standardization for compliance. The FCC could revoke the license and/or issue a fine for failure to comply. Additionally, the BLM could terminate or suspend the use authorization for failure to comply.

Onsite RFR measurements will be taken using appropriate equipment that can adequately measure and record both on-tower and on-the-ground levels before mitigation measures related to RFR are implemented pursuant to FCC standards and requirements.

Security fences with RFR notice signs are required around areas that exceed public use levels including anchor points outside the primary facility compound fence, if necessary. Raising higher power transmitting antenna on the tower or modifying the antenna type to half wavelength may be necessary to eliminate RFR hazards. Reducing power may also be required if other alternatives are not feasible. All fencing location and design or new tower construction must be pre-approved by the BLM.

Warning signs will comply with ANSI C95.2 color, symbol, and content conventions. Contact information including name and telephone number will also be included on warning signs. Existing warning signs compliant with FCC 47 CFR 1.1307(b) which do not currently include name and telephone number will be accepted as long as the name and telephone number is clearly posted on other signage at the Lessee's site.

Lowering power levels for on-tower access during maintenance will be coordinated between affected users.

~~Any identified RFR radiation problems that are, or could be, a human health hazard must be~~ corrected within 24 hours after measurement tests have been completed or be removed from the site by the site user(s). If the proposed corrective action involves any new ground disturbance, it must be pre-approved by the BLM.

F. Utilities-Availability of and Requirements for:

Commercial Electrical Power

Commercial power is provided to the site under a separate ROW grant to Douglas Electric Coop. The current electrical service to the site is adequate for the uses at the site. Future upgrades of the electrical service will be part of the right-of-way to Douglas Electric Coop and may need to be paid for by the benefiting user(s).

Telephone Service

If additional telephone service is ever deemed necessary or expanded at this site, a separate ROW grant will be issued. Site users will also pay for the cost of:

1. The necessary resource surveys and reports for service connections; and
2. The cost of constructing service connections.

For visual reasons, overhead utility poles may not be authorized.

Fuel Tanks

Facility owners and facility managers are responsible for providing fuel storage (propane and diesel) and emergency power for their tenants and customers. No tenants or customers will be authorized to have separate fuel tanks and/or generators. Each facility owner will preferably consolidate fuel storage into a tank large enough in size to accommodate all tenants and customers within their facility. At a minimum, tanks will be grouped together in a consolidated area adjacent to their facilities. All fuel storage tanks (e.g., LPG, propane and diesel) must meet

current fire department, Federal, State and local government safety and hazardous materials requirements. Propane is the preferred fuel for future generators.

1. All tanks will be:

   a. Signed in red letters, "SMOKING OR OPEN FLAME PROHIBITED WITHIN 20 FEET";

   b. In conformance with National Fire Protection Association (NFPA) requirements; and,

   c. Painted an approved color, or screened by an enclosure to blend in with the natural environment. If an enclosure is used, it must be pre-approved and painted an approved color from the Munsell Soil Color Chart, Standard Environmental Colors.

2. Diesel tanks will also be:

   a. Enclosed in BLM and fire department approved secondary containment vaults that are painted a BLM-approved color from the Munsell Soil Color Chart, Standard Environmental Colors.

   b. Constructed with underground fuel lines. Fuel line must be constructed of black, treated pipe and fittings, and must be posted.

   c. A containment basin must be maintained below all diesel tanks which are not designed and approved to be self contained.

G. Sanitary Facilities

Several outhouses exist at the site. Plans for any sanitary facilities must be pre-approved by the BLM. If it is determined by the BLM that the users need such facilities, they will be provided by the lease/ROW holder in a manner and location satisfactory to the BLM and within the requirements of the Klamath County Health Department.

H. Security and Law Enforcement

The Klamath County Sheriff's Department is the key law enforcement agency for the area. They are responsible for most civil and criminal matters. The BLM will be responsible for enforcing matters related to uses of BLM lands (e.g., resource protection issues).

Patrolling and policing for security purposes is the user's responsibility.

The US Cellular facility on Stukel Mountain is currently fenced. If fencing is ever deemed necessary for security purposes at other facilities on the site, it must meet the following criteria:

1. All fences must meet health and safety requirements.

2. All fence locations and design require Bureau of Land Management pre-approval. The standard fencing type will be chain-link (i.e. cyclone).

3. The standard fence height will be eight (8) feet.

4. Fencing will be designed, installed, maintained, grounded, and of a type to minimize interference issues as described in the Motorola R-56 standards.

5. Fences will be signed with RFR notices if RFR is above public levels.

I. Site Maintenance

The objective of maintenance activities is to present a clean, neat, and orderly appearance at the site and have all of the authorized improvements safe for workers and the public. All users will keep up the overall appearance of the site.

Miscellaneous debris remaining after any construction and/or equipment installation, removal or modification, is not only a hazard, but can cause interference or intermodulation problems. In particular, all loose wire or metal objects are to be removed from the site.

The users of the site will remove all graffiti within 10 working days of finding it, weather permitting.

Users will not be permitted to leave or dispose of trash, garbage or cut brush on public lands. No outside trash or litter containers will be provided. Site users will remove litter from the site as it is produced.

Policing of litter in common areas (i.e., areas between buildings and developed sites) is the shared responsibility of those holders bordering these areas.

During construction and/or maintenance, excess materials (e.g., cement, wire, metal, building materials) will be removed from public land.

Peeling paint on buildings and/or towers will be re-painted within thirty (30) days of discovery by the facility owner or facility manager and within 10 days of notification of the holder by the BLM, weather permitting.

The Lessee is responsible for the abatement and control of noxious weeds within the bounds of their lease site and common use areas. Abatement practices are to be implemented in accordance with the Lakeview District Office weed abatement programs.

J. Inspections

Enforcement authority is vested in the BLM as the Communications Site Administrator for Stukel Mountain via 43 CFR 2800. The BLM may conduct an annual inspection of each user's facility. This inspection will verify:

1. Compliance with technical standards.

2. Structural integrity.

3. As-built plan accuracy.

4. Electromagnetic compatibility.

5. General site health, safety, and cleanliness.

The BLM shall provide written notice of the scheduled inspection date at least 30 days in advance. Each user shall arrange to have personnel available at the site at the time of the inspection.

Any non-compliance found by a user shall be reported to the BLM. The BLM will conduct an inspection and a written copy of the inspection report shall be forwarded to the violating user within 30 working days following the inspection. The report shall include:

1. A description of the violation.
2. Corrective action required.
3. Name, address, and organization of the responsible party.
4. Time allowed for completion of corrective measures.
5. Anticipated action in the event of noncompliance with remedial instructions.

K. Fire Prevention and Hazard Reduction Requirements

Facility owners and facility managers will be required to control vegetation within the fenced area around their facilities. Gravel or mineral soil (i.e., bare ground) or mowed vegetation must be maintained to a minimum of (10) feet clearance around buildings and a minimum of (10) feet clearance around any propane tanks. Identified threatened, endangered, or sensitive plant species must remain within the minimum clearance areas.

Smoking is prohibited in flammable vegetation areas.

Roof structures shall be kept reasonably clear of debris at all times.

No explosives will be stored at this site. Flammable materials shall be stored in conformance with the requirements of local fire regulations. Flammables will be placed in closed containers and stored away from sources of ignition and combustible materials. If flammables are stored within a building, the building will be locked, properly signed and well ventilated.

Approved spark arresters will be required and maintained on all internal combustion engines.

At least one (1) U.L. rated 20 lb. A:B:C dry chemical fire extinguisher is required inside each building. Prior to each June, fire extinguisher(s) shall be inspected by holders and refilled, if necessary.

Any fire will be immediately reported to "911", the nearest BLM office and/or Klamath County Sheriff.

BLM Officers will make periodic fire prevention inspections. They will call to the holder's attention any lack of compliance with the above regulations, plus any other existing hazards.

Compliance with these inspections is required within the time limits specified in the inspection report.

All fire protection standards must be accomplished by the beginning of fire season unless otherwise agreed to, and then maintained throughout the fire season.

For new construction, the BLM will provide the Holder with a separate Construction Fire Plan which will be prepared at that time as applicable

L. Access Maintenance and Restrictions

Roads

The road to Stukel Mountain site is in generally good condition. In the future when road conditions need maintenance, the costs of road maintenance will be assessed by the BLM and enforced through this management plan along with the individual right of way grants issued to the users on the private and FAA lands.

Individual users who damage or disturb the access road, or any associated structures, such as ditches, culverts, roadside vegetation, signs and/or underground utilities or facilities, will be required to repair the road and/or associated structures, to conditions equal to or superior to those prior to any damage or disturbance. This work must be done according to applicable road maintenance standards and may require the appropriate NEPA analysis.

Interior Site Driveways/ Parking Areas

Interior site driveways within the communications site will be maintained by the site users. Interior roads will be planned and approved during establishment of new facilities. Interior roads will be maintained in a manner to allow only one entrance to the site. Off-road vehicle use by a user in and around the communication site will be avoided.

Road Closures

Native surface roads are subject to periodic closures to entry during periods of extreme fire danger, inclement weather, or wet conditions. The Stukel Mountain road is closed to motorized public use from November 1 to April 15 each year. Authorized site users may use the road during these periods, but will need to obtain advance approval from the Authorized Officer.

VII. CONDITIONS FOR CONSTRUCTION, MODIFICATIONS OR EXPANSION

A. Facility Owner/Manager Responsibilities

In addition to the responsibilities listed in Section III, new applicants and existing Facility Owners/Managers proposing new, modified, or expanded facilities are responsible for:

1. Submitting a complete application to the Lakeview District Office (ATTN: "Realty Specialist") prior to any new construction or modifications to existing improvements,

unless new electronic equipment is being installed in/on an existing tower and/or an existing building. The application must include:

a. The appropriate cost recovery and application fees as determined by BLM.

b. A copy of the approved Site Plan Base Map showing all of the proposed (new) facilities including structures, towers, and auxiliary equipment;

c. Completed drawings/plans prepared by a registered engineer and Plan of Development approved by the BLM;

d. Identification of any microwave beam paths, a plot of their azimuth(s), and their proposed elevation(s) on the tower;

e. Documentation that shows that proposed facilities will not be obstructing, or interfering with, any existing fixed point to point antennas, omni-directional broadcast antennas, or microwave beam paths in the directions of primary population targets. Proposed beam path needs must be shown on Site Plan Base Map; and,

f. Any needed recommendations, changes or modifications to their original proposal, based on any required resource surveys and/or reports.

2. Demonstrating that their proposals will not cause undue interference with any existing uses before the BLM can approve new facilities. In addition, it is the applicant's responsibility to show that any new facilities will make the most efficient use of the limited amount of space at the site.

3. Showing their proposals will provide for future users without additional construction.

4. Providing engineering and geotechnical investigations for development of specific foundation designs and grading plans.

5. Providing for erosion control as part of the Plan of Development prior to construction activities. At a minimum, erosion control must include: sediment control, stipulations that cut/fill slopes will be graded and contoured to prevent erosion and/or excessive runoff, and recommendations for temporary erosion control measures, (e.g. netting, silt fences, swales, and/or sediment collection areas).

6. Coordinating with other Federal (e.g., FCC and FAA), State and County agencies and obtaining all required approvals and/or permits.

7. Providing 30-day notice to all facility owners/facility managers at the site, as well as the BLM, of all new frequencies proposed for the site. A completed BLM technical data sheet or equivalent must be sent with the 30-day notice to allow for comment of potential interference. This would be for new frequencies for themselves and their tenants and customers.

8. Insuring that all written approvals have been obtained from the BLM prior to construction. In addition:

a. Directional antennas will only be protected within the arch between their licensed 3 dB points.

b. New and/or modified facilities will not obstruct existing fixed point-to-point antennas or omni-directional broadcast antennas in directions of primary population targets.

B. Construction Methods and Resource Protection

Plans submitted by an applicant for any new construction or modifications shall specify provisions for soil rehabilitation measures including, but not limited to, soil replacement and stabilization and for proper handling of runoff from buildings, parking area, access roads, and undeveloped common areas.

The following methods and resource protection measures will be required to minimize impacts during construction:

1. ~~Avoid and protect sensitive resource areas, as identified by the BLM.~~
2. Compliance with the Plan of Development and the Erosion Control Plan.
3. During construction and/or maintenance, no paint or paint thinners will be disposed of on site.
4. Minimize ground disturbance and vegetation removal as much as possible during construction activities. All ground-disturbing activities require BLM pre-approval.
5. Disturbed areas will be re-vegetated with species pre-approved by BLM as soon as possible after construction. If necessary, reseeding will be required until vegetation is successfully established as determined by the BLM.
6. No grading material will be cast off during construction/reconstruction activities. Excess soil can be used for fill material on road and/or building/tower pads.
7. Temporary on-site storage of construction materials will require pre-approval by the BLM.
8. Construction materials and supplies, except for hazardous materials (see number 9. below) may be left unattended at the construction site at the end of each workday, but at the owner's risk.
9. Hazardous materials, including but not limited to all fuels, oils, and lubricants, are not to be left unattended at the site at any time. During construction, these materials are to be removed from the site at the end of each workday, or temporarily stored inside a locked and signed building until the following workday.
10. All surplus construction materials and/or waste debris must be removed from the site no later than thirty (30) days after construction has been completed.

11. Any earth moving or heavy equipment (e.g., dozers, graders, cranes, backhoes, etc.) leaving the designated roadway and/or approved parking area(s) to perform authorized activities at the site, will be washed off prior to being brought onto public lands to prevent the introduction and spread of noxious weeds into the area.

C. Construction Inspection

1. All new construction, reconstruction, or major modification shall conform to the established technical standards and accepted engineering practices (i.e., the Uniform Building Code).

2. Any construction inspections required by other applicable agencies are the responsibility of the lessee/holder. Copies of completed inspections are to be provided to the Lakeview District Office, Authorized Officer, either as they occur or as part of the final as-built plan. Inspection information shall become a permanent part of the holder's lease/ROW case file.

3. The Lessee/Holder agrees that corrective work detailed in BLM, or other agency required compliance inspections, would be completed by the scheduled completion date. If the Lessee/Holder disagrees or has questions about specific items, the Lessee/Holder must contact the BLM in order that the disagreement or item may be resolved.

4. A final set of as-built plans will be submitted to the Lakeview District Office Authorized Officer within 90 days of acceptance of structure (if contracted) or of completion date.

D. New or Remodeled/Expanded Buildings

1. Any new buildings must be designed to accommodate multiple users along with fitting into the physical environment as defined in a site-specific environmental analysis developed at the time of the proposal. All new facilities must meet R-56 standards.

2. Buildings are required to be one-story. The roof must be metal or covered with metal to be fire resistant. Roofs can be equipped with antenna support structures, such as poles and railings that can extend up to 25-feet above ground level.

3. Facility Owners and Facility Managers are encouraged to construct the interior of their buildings in a modular fashion, so that they can:

   a. Sublease sections to others;

   b. Provide tenants and customers with internal separation and security;

   c. Reduce physical interference; and

   d. Increase management effectiveness.

4. The following materials are approved for construction of new facilities (i.e. buildings):

   a. Floors – Concrete slab with drainage.

   b. Walls – Concrete block, metal, or pre-fabricated concrete.

c. Roof – Metal, or concrete, if painted to eliminate shiny surfaces, or other fireproof material as approved by the BLM. Proposals for wooden roofs will not be approved.

d. Partitions – If it is felt partitions are necessary in buildings, ensure they are constructed with fire resistant material (e.g., concrete block, reinforced concrete, or properly grounded fencing.

e. Color – Proposed color for use on all exterior building surfaces must be pre-approved by the BLM. The goal of the color selection for the facilities is to make the building as inconspicuous as possible and make buildings located on the skyline look inconspicuous when viewed from a distance. The intent is to reduce or eliminate glare from reflective and/or illuminated surfaces such as windowpanes, sheeting and reflective paints. Non-reflective, BLM-approved colors will be used on equipment buildings.

5. Building entry lights must:

a. Only light the immediate area in the vicinity of the door;

b. Be motion activated and have a limited time duration (e.g., 3-5 minutes); and

c. Have a shielded beam that is pointed at the building door.

Requests for all-night (i.e., "dusk-to-dawn") lighting, or entry lighting that would be visible from outside of the site will not be approved. FAA-required lighting would be the only exception.

E. New or Remodeled/Expanded Towers

1. All new construction, reconstruction, and modifications to towers will be pre-approved by the BLM prior to implementation.

2. It is the applicant/holder's responsibility to assure that a new, or modified, structure will not unduly interfere electronically or physically with any existing equipment at the site. Towers must be spaced, so as to prevent ground level radiation and/or interference problems. This must be clearly demonstrated in writing to the BLM prior to issuance of a new lease/ROW or amendment.

3. All new towers will comply with current structural and safety specifications and design standards, including safety-climbing devices. Towers should be as narrow and "open" as safety and structural integrity allow. New towers will be designed using maximum wind, snow, and/or tower loading anticipated for the site.

VIII. SITE ASSOCIATION/ADVISORY GROUP

A Site Users' Association is recommended at this site. Since communication uses also occur on adjacent private lands, it is recommended that all uses become part of an association. If formed in the future, all lease and ROW holders would be encouraged to join the association. The goal of the association would be to maximize the effective use of the site, coordinate access and maintenance. The objective of a sanctioned association would also be to represent all site users as a group when dealing with the BLM Lakeview District Office on matters relating to the site administration. The association would be able to work in cooperation with the BLM to identify problems or opportunities and make recommendations to the BLM for any changes in management strategies at the site. The association could also provide input to the BLM regarding the future addition of equipment and facilities at the site. While the advice and recommendations of the association would not be binding on the BLM, the BLM could use the input for administration of the site. The BLM would be a member of such a group and would help jointly develop the charter (i.e., the ground rules).

The goal of the Site Association would also be to maximize the effective use of the site. The objective of a sanctioned association will be to represent all site users as a group when dealing with the Lakeview District Office on matters relating to the Site administration. The association would be able to work in cooperation with the BLM to identify problems or opportunities and make recommendations to these entities for any changes in management strategies at the site. The association could also provide input to these entities regarding the future addition of equipment and facilities at the site. While the advice and recommendations of the association would not be binding on these entities, they could use the input for administration of the site. The BLM would be a member of such a group and would help jointly develop the charter (i.e., the ground rules).

In the absence of a formal Site Association, the BLM may utilize a Site Advisory Group that can make suggestions and/or recommendations to specific problems associated with the administration of the site.

IX. APPENDICES

A. **Location and Site Maps**

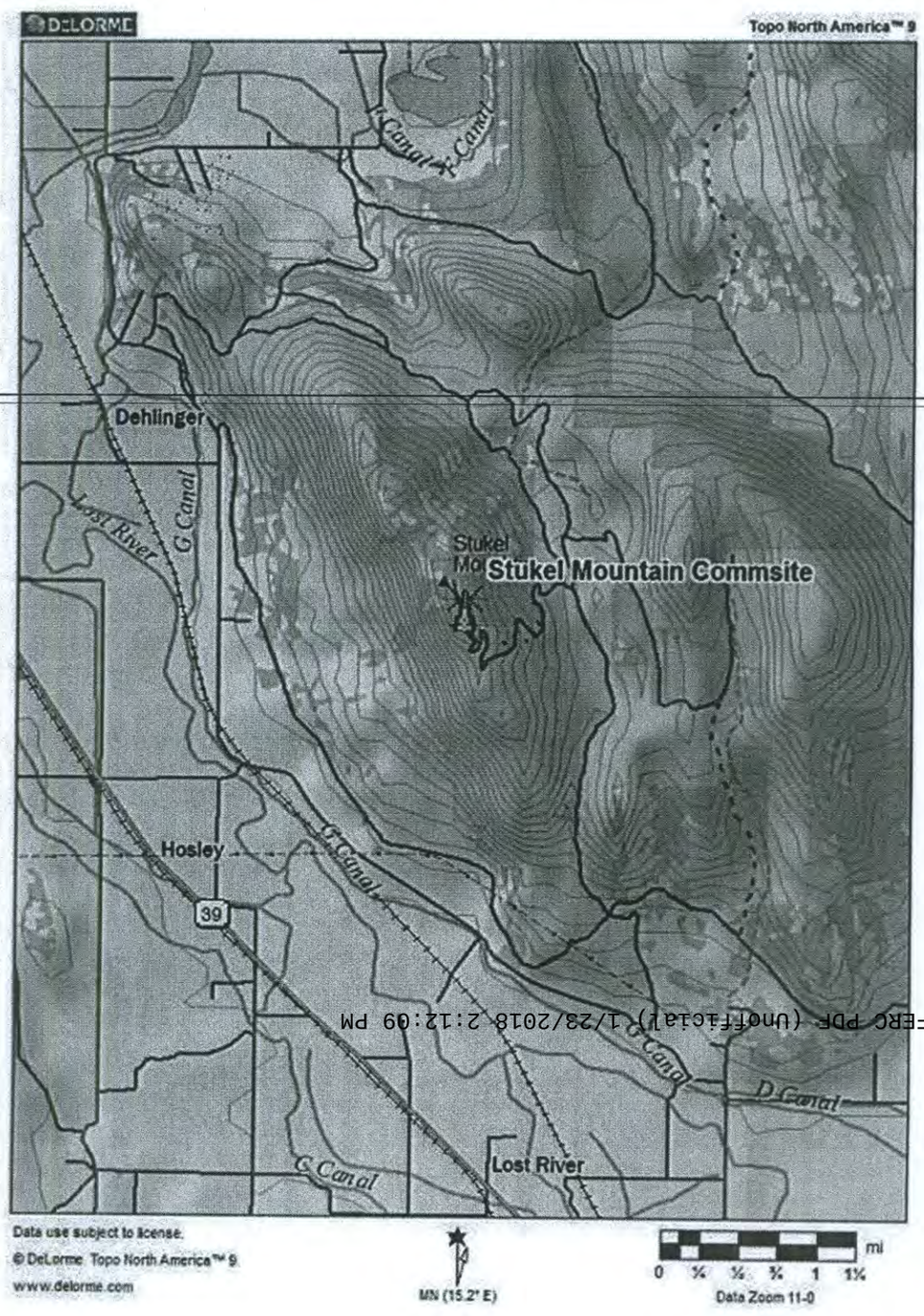
B. **Authorized Facilities**

C. **Site Photographs**

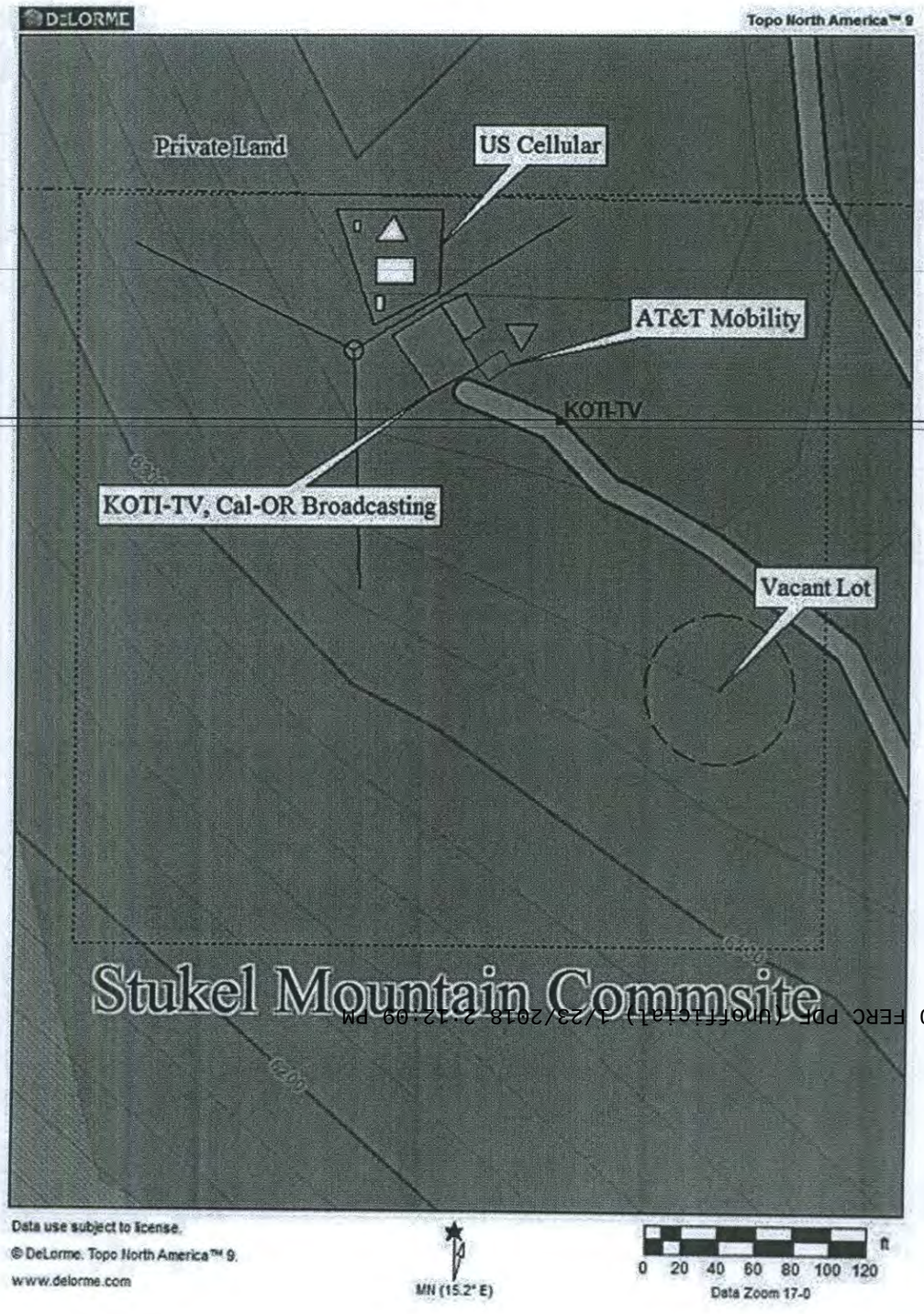
D. **Inspection Checklist**

APPENDIX A

LOCATION MAP



SITE MAP



APPENDIX B

STUKEL MOUNTAIN COMMUNICATIONS SITE LESSEE/HOLDER FACILITY TABLE

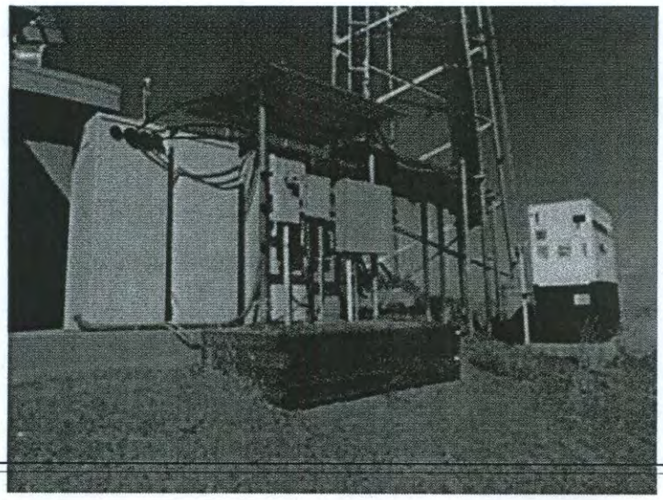
	Auth #	Use	Building	Tower	Access/Parking	Other
Facility #1 Calif-Oregon Bdcst Inc. KOTI	**ORORR 35373**	**TV**	**30'x 45' block**	**180' guyed 140' lattice self support**	**Access and parking. 6.3 miles x 30'**	**2-1000 gal. propane tanks**
Facility #2 AT&T Mobility	**ORORR 65377**	**CEL**	**Outdoor cabinet**	**On Ca-Or 140' tower**	**Access and parking. 6.3 miles x 30'**	
Facility #3 US Cellular	**Unauthorized**	**MIC**	**12'x20' prefab aggregate**	**100' lattice**	**Access and parking. 6.3 miles x 30'**	**2-500 gal propane tanks Generator Fence 71'x 56'x 45'x 38'**

APPENDIX C

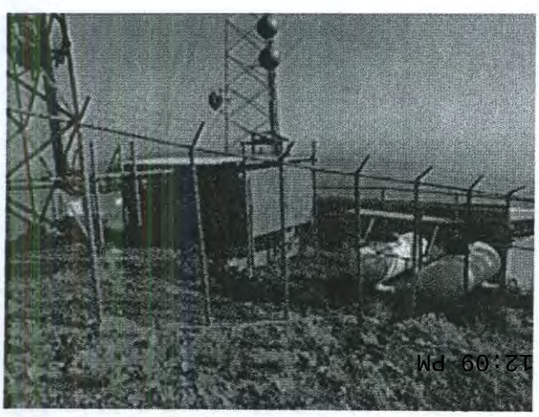
SITE PHOTOGRAPHS

California-Oregon Broadcasting, Inc.

AT&T Mobility



US Cellular



Vacant Lot

APPENDIX D

"Stukel Mountain Annual Technical Inspection"

Date Inspected: _____ Time Inspection: _____

Permit Holder: _____ Authorization # _____

Site Technician: _____ Phone # _____

Number of Transmitters _____ License Posted _____

Please mark the following Items as Acceptable (A) or Unacceptable (U).

Electrical Wiring ---------- (A) (U) Grounding ---------- (A) (U)

Equipment Installation ---------- (A) (U) Housekeeping ---------- (A) (U)

Building Repair ---------- (A) (U) Tower Repair ---------- (A) (U)

Please mark the following Items as Yes (Y) or NO (N) or (NA)

Isolators ---------- (Y) (N) (NA) Circulators ---------- (Y) (N) (NA)

Cavities ---------- (Y) (N) (NA) Terminators ---------- (Y) (N) (NA)

Filters ---------- (Y) (N) (NA) Lightning Protection ---------- (Y) (N) (NA)

Comments: _____

_____

Recommended Corrective Action: _____

_____

_____

Required Corrective Action to Be Taken: _____

_____

_____

_____

_____

Committee Representatives: _____

Bureau of Land Management Representatives: _____

Please make the required corrective action within the next 120 days. Please make a written report of corrective action taken and submit to the BLM. If you should have any questions, please call the BLM office.

ATTACHMENT 5

Tower Elevation Drawings

(forthcoming)

Appendix E

Contaminated Substances Discovery Plan

Pacific Connector GAS PIPELINE

Pacific Connector Gas Pipeline, LP

Contaminated Substances Discovery Plan

Pacific Connector Gas Pipeline Project

(During the previous NEPA process, PCGP submitted a Plan of Development to meet BLM Right-of-Way Grant requirements based on BLM regulations. These plans will be updated in consultation with the Federal land managing agencies [BLM, USFS, and Reclamation] during the current NEPA process.).

October 2017

Table of Contents

List of Attachments

Contaminated Substances Discovery Plan

1.0 INTRODUCTION

The intent of this Contaminated Substances Discovery Plan is to outline practices to protect human health and worker safety and to prevent further contamination in the event of an unanticipated discovery of contaminated soil, water, or groundwater during construction of the Pacific Connector Gas Pipeline Project (Pipeline).

2.0 SITES WITHIN CONSTRUCTION AREAS

Pacific Connector Gas Pipeline, LP (PCGP) completed a review of the Oregon Department of Environmental Quality (ODEQ) Environmental Cleanup Site Information Database (ECSI) to assess the presence of known or potential contamination from either Landfills or Hazardous Waste Sites. Several sites have been identified as potentially occurring within the Pipeline construction area. These sites are primarily within proposed pipe yards, which are often located in disturbed/vacant industrial sites, many of which were former lumber mills or log storage yards. Use of pipe yards would not involve excavation or other activities that would interact with contaminated areas. The Jordan Cove Meter Station (MP 0.00) is the only location associated with the Pipeline where excavation would have the potential of encountering known contamination.

2.1 MPs 0.0 to 0.14 Construction Right-of-Way and TEWAS 0.01-W and 0.01-N

At the Jordan Cove Meter Station (MP 0.00), the Pipeline is approximately 0.2 mile south of the Weyerhaeuser North Spit Landfill LUST (leaking underground storage tank) site (site id [log number] 06-89-0061) and ECSI site 1083; this is the same site as the Weyerhaeuser Containerboard/Mill property. ODEQ records indicate that the permitted landfill cells and settling basins have leaked over time contributing to a localized area of groundwater contamination. Petroleum hydrocarbons are present in subsurface soils and groundwater from these past mill operations/practices. These contaminants primarily consist of petroleum constituents from fuel, fuel oil, lubricants, solvents, and hydraulic oil. The extent of the hydrocarbon removal will be based on final structural fill/soil improvement requirements and subject to ODEQ approval (JCEP 2017). In 2003, Weyerhaeuser shut down the mill and cleanup was reviewed by the ODEQ. It was determined that no further action was deemed necessary at this site. Fort Chicago Holdings II U.S. LLC purchased the Weyerhaeuser parcel in 2012. Milepost 0.00 and the Jordan Cove Meter Station are approximately 980 feet south of the estimated center-point of the mill area.

Based on available information (Delta Environmental 2006; JCEP 2017), the southern portion of Jordan Point was formerly used as a disposal area for mill-related fill and construction debris. This area is presently an open field vegetated with grasses and small shrubs. These activities were conducted for a period of approximately five to ten years during the 1960s and ceased by approximately 1970. According to the previous site investigations and studies, it appears that fill was primarily concentrated in a former ditch and low-lying area in the general area of about MPs 0.12 and 0.20. According to previous site investigations and studies, fill consisted of metal plates and scrap, wire, and discarded building materials, including asbestos-containing transite siding. The transite siding consisted of “scrap” pieces of siding, such as cutouts for piping that were derived from the installation of transite siding on buildings (primarily at the mill/paper machine

building) at the site. Therefore, pieces of transite siding in the fill/debris are relatively small, and the overall volume is thought to be limited (Delta Environmental 2006).

As excavation and other construction activities occur in this location, PCGP would adhere to the Human Health, Worker Safety, and Environmental Protection guidelines (see Section 4.0 below), and would coordinate activities with ODEQ in this area.

2.2 K-2 Pipe Yard

At the proposed K-2 Pipe Yard, ECSI site 527 is associated with the Weyerhaeuser Expert Services location. The site was historically developed for use as a lumberyard in the 1880's. Since then, it has been used for sawmill/timber related uses. Weyerhaeuser developed the property in 1950 for lumber export services operations. Weyerhaeuser operations included a sawmill, a planer building, a green sort building, a green chain, a machine shop, a paint shop, and a powerhouse. Finished wood products were treated with pentachlorophenol in the green sort building area prior to being packaged and exported. There was a pentachlorophenol spill on March 24, 1984. There was also an approximate 1,000-gallon spill of NP-1 anti-sapstain in March 1987. Contamination in this area is approximately 8 feet below the ground surface, and is currently capped with asphalt. In January 2009, ODEQ selected leaving the contamination in place, but required that the cap remain intact and that a plan be developed to guide future developers on how to manage the soils in the unlikely event that the soils were ever disturbed. The plan was developed and is referenced in a deed restriction on the property that will apply to the current owner and any future owner of the property. ODEQ issued a conditional no further action letter on July 14, 2009.

This site has been capped and use of the site with a condition of no excavation is consistent with the current status of the remedial action guidance. There is no risk of impact based on the proposed surface use of this area as a pipe yard.

2.3 Brunell Pipe Yard

In this proposed yard, Champion International LUST site (06-90-0009) was a diesel spill in 1990 and was remediated the same year; the log file has been closed. Also in the pipe yard is Central Dock Company LUST site (06-93-0042). This was a leaded gas spill in 1993 that contaminated soil, groundwater, surface water, and drinking water. The site was cleaned up and remediated the same year, and the log file has been closed. The third site is the Central Dock site (ECSI 4646) location, which was a Standard Oil and Union Oil petroleum, product-related warehouse facility dating from at least 1911 through approximately 1945. From 1945 to 1993, the property was used for log and lumber storage, handling, and shipping. From 1993 to 1996, Hall-Buck Marine, Inc. operated a copper ore concentrate handling and shipping facility on the property. The property has been vacant since 1996. Soil, sediments, and/or groundwater at or near the property have been contaminated by petroleum compounds and/or metals, primarily arsenic and copper. Remediation was to include capping the entire upland property and implementing institutional controls (no excavation, groundwater extraction, etc.). While portions of the area have been capped, aerial photography shows that some areas have not been capped.

PCGP believes that there is no risk of impact based on the proposed surface use of this area as a pipe yard.

2.4 Coquille Yard

PCGP reviewed the information for the Georgia Pacific Mill site (ECSI 1255) within this yard. Testing of the site in 1992 indicated selected areas had long-chain hydrocarbon contamination in the south conveyor tail drum area, around the north lathe bases and in one area of the south lathe bases, in the vicinity of the press pits, and areas of drum and hydraulic oil tank storage. A subsequent 1994 report for the former LUST area identified benzene and xylenes in the groundwater, found asbestos in on-site debris piles, and detected polychlorinated biphenyls (PCBs) in soils at a transformer area. A work plan for the site by the City of Coquille (site owner) was approved by ODEQ in 1994, and sampling and remediation were conducted in 1995. Contaminated soil was removed and treated in a soil treatment area and the site was encapsulated with fill dirt from ODOT. In 1998 the ODEQ recommended No Further Action for the site.

This site has been remediated, and use of the site with a condition of no excavation is consistent with the current status of the remedial action guidance. There is no risk of impact from use as a pipe yard.

2.5 Millington 1 Pipe Yard

At this location, there is one LUST site (06-98-0036) at the edge of the pipe yard. This site had a reported spill of diesel that contaminated soils and groundwater in 1998. This site has been remediated and the log file has been closed. There is no risk from use as a pipe yard.

2.6 Winchester Pipe Yard

This was the location of the former Winchester Mill (ECSI 4441). Contaminants at the site include carbon tetrachloride, trichloroethylene, perchloroethylene, and 1, 2-Dichloroethane located within the old log pond soils. As these contaminants are in the old log pond, and this pond area would not be disturbed by use as a pipe yard, there would be no impact.

2.7 Hult Chip Yard 2

There is one LUST site within the proposed pipe yard. Reporting shows the site had spilled waste oil. This site was remediated in 1991 and the site closed out. As no excavation would occur from use as a pipe yard, there would be no impact.

3.0 SITES IN PROXIMITY TO PIPELINE PROJECT AREA

ODEQ's Potential Contaminated Sites (PCS) database (ODEQ 2017) was reviewed for PCS sites that are located within 200 feet of proposed construction disturbance and associated facilities. These sites were queried by PCGP in response to a FERC request, but these sites are not in proximity to the Pipeline, and there are no anticipated impacts.

3.1 Menasha Pipe Yard

At this location, LUST site 06-98-0006 occurs at the edge of the pipe yard. A leaking diesel tank was recorded, and cleanup was completed in 1998. No further action is required.

The Chambers Fuel Oil Inc. (ECSI 22) operated as a heating oil storage and distribution facility from 1954 to 1988 at the south end of the proposed pipe yard. At the end of facility operation in 1988, ODEQ's Southwest Region office required Chambers to empty its tanks and remove on-site asbestos. Coos County assumed ownership in 1990 due to tax default. ODEQ's Site Assessment program completed a Preliminary Assessment at the site in 1991 and concluded that further investigation was required. ODEQ conducted a Site Investigation and Removal Assessment in early 1994 that confirmed oil contamination in the soil and groundwater. A security fence was installed around the site in June 1994, and ODEQ removed some drums from the site in November 1994. Over 300 tons of soil contaminated with total petroleum hydrocarbons (TPH) and 80,000 gallons of contaminated groundwater were removed in 1997. The site was then backfilled with clean sand and regraded and is considered remediated. There would be no excavation at the pipe yard, and there is no impact anticipated at this location.

Ninety feet south of the Menasha Pipe Yard, there is one LUST site (06-16-1330). A leaking tank with miscellaneous petroleum (gas) products was recorded at this location, and cleanup is still underway. No further action is required for this location given the distance from the pipe yard.

3.2 K-2 Pipe Yard

Approximately 30 to 150 feet north of the K-2 Pipe Yard is the KO-KWEL Wharf Development sites (LUST 06-06-1367 and ECSI 4802). Contaminants include polycyclic aromatic hydrocarbons (PAH), trace metals, and other diesel and heavy-oil range petroleum hydrocarbons. Potential exposure pathways evaluated in the site risk assessment included occupational (indoor), construction, and excavation worker exposures to site soils and groundwater. A final report received on May 14, 2007 summarized the results of four separate site investigations in which more than 250 soil, groundwater, and sediment samples were collected. The report also included a comparison of all site contaminant concentrations to relevant ODEQ risk-based screening standards. The report concluded that all identified contaminants were below ODEQ's levels of concern, and therefore no remedial actions, engineering controls, or institutional controls were necessary to protect human health or the environment. ODEQ concluded that based on the information presented to date, the KO-KWEL Wharf Development Project site is currently protective of public health and the environment and requires no further action. No impact is expected given the distance to the pipe yard.

3.3 TEWA 7.44-W

LUST site 06-10-0979, heating oil associated with a residential home, is approximately 160 feet from TEWA 7.44-W. This site was remediated and closed in 2010. No impact is expected based on the distance from the TEWA.

3.4 Coquille Yard

LUST site 06-90-0120 is approximately 148 feet north of the Coquille Yard. This location is associated with a Texaco gas station. Cleanup was completed in 2004, and no further action is required and no impact is anticipated.

3.5 Green #1 Pipe Yard

Horizon Auto Body & Glass ECSI sites 2287 and 1960 are approximately 125 feet south of the Green #1 Pipe Yard. This location had several cleanup issues: contaminated runoff from the vehicle wash bay; spillage from several open-top drums containing wash rack sludge; and leakage from several paint-related waste storage containers, including contamination by PAHs, metals, and VOCs. A site assessment completed in October 2014 and July 2015, showed low levels of petroleum contamination remaining in shallow soils (less than one foot deep) that appear to be mostly found between the two buildings. The contamination does not appear to have migrated off-site. The site and surrounding properties are used for commercial/industrial purposes. The area is supplied by a municipal water source. Based on the available information from ODEQ, Horizon Auto Body and Glass is currently protective of public health and the environment, and no impacts are anticipated given the distance from the pipe yard.

3.6 Green District Pipe Yard

LUST site 10-91-0075, associated with Granny's Hut gas station, is approximately 30 feet from the Green District Pipe Yard. Cleanup of this location was completed in 1998, and no impacts are anticipated given the distance from the pipe yard.

3.7 Weaver Highway 99

LUST site 10-10-0244 is approximately 127 feet north of the Highway 99 Hay Field Pipe Yard. This location is associated with the Freeway Chevron gas station. There was physical damage to a diesel tank in 2010, and no further information is available for this location. Given the distance to the pipe yard, and location of the LUST, no impacts are anticipated.

3.8 Riddle Pasture and Riddle Main Street Pipe Yards

ECSI site 2250 is approximately 45 feet east of the proposed Riddle Pasture Yard, and the Tosco Bulk Plant is immediately adjacent to the pipe yard. The Tosco Bulk Plant No 0645 is approximately 80 feet from the Riddle Main Street Pipe Yard and includes ECSI Site 630 and LUST site 10-12-0517, which are associated with a Riddle Shell Gas Station LUST. The sites have contamination from BTEX and PAH in soils and groundwater. Site characterization and remediation are still underway; access to the pipe yards is expected to avoid these locations. No impacts are anticipated.

3.9 Thompson Mining Property

The USDA Forest Service has expressed concerns for the potential for naturally-occurring mercury to reach the aquatic environment during construction of the Pipeline near the historic Thomason mining property (near MP 109). The USDA Forest Service contracted with a geologist consultant to collect soil and stream sediment samples for analytical testing and reporting of mercury and other naturally-occurring minerals along a 2,000-foot section of the proposed route between MP 109 and the East Fork Cow Creek (see Attachment 1 – Potential for natural-occurring mercury mineralization to enter the aquatic environment between MP 109 and East Fork Cow Creek). Geochemical analysis of the soil and stream sediment samples have been determined to have very low to nominal concentrations of naturally-occurring mercury mineralization. The mercury level at one of

the stream sediment sites was 0.29 ppm which was above the Level II screening level value of 0.1 ppm for invertebrates (ODEQ 1998). In order to prevent this naturally-occurring mercury from mobilizing during and after construction, additional erosion control measures and monitoring will be conducted at these sites. The report in Attachment 1 concludes that proposed pipeline construction activities by PCGP within the upper East Fork Cow Creek watershed are not anticipated to disturb and expose soils and bedrock strata that contains more than low amounts of natural-occurring mercury mineralization; and any sediment that is generated is not likely to reach the aquatic environment due to implementation of short-term and permanent mitigation measures outlined in PCGP's Erosion Control and Revegetation Plan and as listed in Attachment 1 of this plan.

4.0 HUMAN HEALTH, WORKER SAFETY, AND ENVIRONMENTAL PROTECTION

Of the sites investigated, the only known areas that may be impacted by grading/excavation activities are at the Jordan Cove location. This includes the right-of-way from MPs 0.00 to 0.14, Block Valve Assembly #1, and TEWAs 0.01-W and 0.01-N. At the Jordan Cove location, PCGP will follow the process of this Contaminated Substances Discovery Plan. Since the identified locations are known prior to construction, qualified PCGP staff or qualified contractor personnel will collect representative samples of the debris/fill for laboratory analysis as determined necessary by ODEQ based on the status of the site at the time of construction in the grading and excavation zone.

If contaminated materials are identified in laboratory analysis, the contaminated material will be removed and properly disposed of in accordance with appropriate federal and state regulations pertaining to asbestos containing waste. PCGP will utilize an environmental contractor with experience and expertise in contaminated media to characterize the excavation area. If necessary, the excavation area will also be prepared and excavated by a firm appropriately credentialed for the handling and management of asbestos or other hazardous materials. Where the removed fill must be stockpiled pending characterization or regulatory approval, PCGP will take precautions to isolate the substances (e.g., appropriate liner for storage area, berms, etc.). In addition, PCGP will ensure workers are trained in hazard control measures that will be used at the site (e.g., respirators, protective clothing, decontamination techniques, etc.; OSHA standards 29 CFR 1910) as required by pertinent worker safety regulations. If contaminated fill is encountered that requires off-site disposal at a licensed disposal site, the material will be handled, containerized and transported appropriately. Clean backfill will be utilized to backfill excavations. This approach is consistent with ODEQ recommendations for this general area (e.g., ODEQ - No Further Action Determination Letter, Former Weyerhaeuser Containerboard Mill North Bend, Coos County, Oregon Tax Lots #25S-13W-4-100, 25S-13W-3-200,).

PCGP will also include pipeline contractor training regarding site status and history and that excavation and disturbance is to be limited. No excavation will be allowed without PCGP's knowledge and approval.

Potential pipe yards would be used to store pipe, equipment, or other construction supplies and materials. Minor surface grading would be limited to pushing berms as needed to support pipe joints, or other shallow grading (< 1-foot of ground disturbance). Based on current documented conditions, PCGP does not believe that this limited use of these sites would result in a potential effect to human health, worker safety, or the environment. However, prior to use of these sites, PCGP will consult with ODEQ to confirm that the proposed use is consistent with those approved under the various assessments and determinations. If there is a concern, PCGP would bring in clean fill to create a lift of uncontaminated material on the surface area intended for use.

PCGP will include pipeline contractor training, per OSHA requirements, regarding anticipated site status and history and that site excavation and disturbance is to be limited. No excavation will be allowed without PCGP's knowledge and approval.

5.0 UNANTICIPATED CONTAMINATION

PCGP believes the potential for encountering unknown contamination has been minimized to the extent practicable. However, it is not possible to completely preclude this potential, especially considering private land sites may contain unreported contamination resulting from third-party activities.

Since not all potential occurrences or actions can be reasonably predicted, the overarching objectives of those actions taken when contaminated material, regardless of media, is discovered are to: (a) protect human health and the environment, (b) inhibit or prevent the further spread of contamination and (c) remediate the contamination to the extent practicable, within the constraints of (a) and (b). It should also be recognized that immediate actions in the field to protect workers may not be the alternative that is most protective of the environment. Each condition and situation would be viewed as a unique condition and evaluated individually.

In the event unanticipated contaminated soil, water and/or or groundwater is encountered during construction (i.e., discolored soils, soils or groundwater with hydrocarbon-type odors or other chemical odors, etc.), the following general procedures will be implemented:

1. All construction work in the immediate vicinity of areas where hazardous or unknown wastes are encountered will be halted.

2. All construction, oversight, and observing personnel will be evacuated to a road or other accessible up-wind location until the types and levels of potential contamination can be verified by qualified staff.

3. PCGP's Chief Inspector and Environmental Lead will be notified. Following consultation with on-site personnel, the Environmental Lead will be responsible for designating follow-up actions, including mobilizing emergency response personnel and coordinating with the EPA and/or state and local agencies as appropriate. In the event of a spill or to report an emergency, PCGP personnel will also contact the Oregon Emergency Response System at (800) 452-0311, who will then notify the appropriate response agencies. If old contamination is encountered in Coos, Douglas, or Jackson counties, PCGP personnel will contact Mike Kucinski (ODEQ Cleanup Manager) at (541) 687-7331. If old contamination is encountered in Klamath County, PCGP personnel will contact David Anderson (ODEQ Cleanup Manager) at (541) 633-2012. If old contamination is encountered on federal lands, PCGP personnel will contact the land managing agency's contact personnel as listed in Attachment A of PCGP's Spill Prevention, Containment, and Countermeasures (SPCC) Plan.

4. If an immediate or imminent threat to human health or the environment exists, one of PCGP's emergency response contractors identified in the SPCC Plan or the National Response Team will be notified and mobilized. If an immediate or imminent threat to human health or the environment does not exist, or has been abated, PCGP or qualified contractor personnel will collect representative samples of the waste and surrounding materials for laboratory analysis. While waiting for the laboratory analytical results, reasonable and practicable measures will be taken to limit the further spread of contamination such as

covering affected soils with plastic, limiting and/or diverting the flow of surface water away from the affected area, or containing liquids in on-site containers.

5. The contaminated material will be removed and properly disposed of in accordance with appropriate regulations and ordinances and in accordance with Section VI of the SPCC Plan. Spill regulations, public safety and local solid waste ordinances may also be applicable depending on the release/waste type, level and type of threat posed and affected media. PCGP will, where feasible, comply with the regulatory notification and containment requirements. If the extent of contamination is too widespread for economical removal, or if disposal options are technically infeasible or cost-prohibitive, backfilling of that portion of the trench will be suspended until appropriate mitigation options are approved by regulatory authorities. Where hazardous substances or wastes must be stockpiled pending characterization or regulatory approval, PCGP will take precautions to isolate the substances (e.g., appropriate liner for storage area, berms, etc.).

In addition, PCGP will:

1. Ensure that a qualified person, who can recognize chemical contamination problems at the job site, is in charge of the cleanup project. Where necessary, PCGP will contact 911 to obtain 24-hr. Hazard Recognition/First Responder Trained personnel to be the first assessor of a potential release.

2. Ensure workers assigned to the cleanup are trained in the hazard control and safety measures that will be used at the site (e.g., respirators, protective clothing, decontamination techniques, etc., per OSHA 29 CFR 1910 standards).

If it is necessary to remove contaminated soils from the right-of-way, either from an accidental spill of materials during construction or if unknown and previously unsuspected pre-existing contamination is encountered, PCGP will replace the contaminated material with clean, uncontaminated soil that is weed free. The replacement soil will be verified to be clean before its use by sampling and analysis for total petroleum hydrocarbons gasoline range organics, total petroleum hydrocarbons diesel range organics, volatile organic compounds (VOC), semi-VOC, PCBs, and Resource Conservation Recovery Act metals in accordance with EPA testing methods. Additionally, PCGP's Environmental Inspectors will verify that the replacement soil is free of noxious weeds.

If contamination cannot be completely removed from an area, ODEQ will be consulted on appropriate remediation.

6.0 REFERENCES

Delta Environmental. 2006. Level II Environmental Assessment, Former Weyerhaeuser Containerboard Mill. April 2, 2006.

Jordan Cove Energy Project L.P. 2017. Resource Report No. 7, Soils. Docket No. CP17-495-000.

Oregon Department of Environmental Quality Guidance for Ecological Risk 1998. Assessment: Levels I, II, III, IV. Portland, OR.

Attachment 1

Potential for Natural-Occurring Mercury Mineralization to Enter the Aquatic Environment between MP 109 and East Fork Cow Creek

Potential for natural-occurring mercury mineralization to enter the aquatic environment between M.P. 109 and East Fork Cow Creek

Williams' Pacific Connector Gas Pipeline Project

Hydrologic Feature C – an intermittent (disrupted) stream channel and adjacent wetland on Forest Road 3200-500 (FIG. 5)

Prepared by

Larry Broeker, Consultant Geologist

Umpqua National Forest

November 18, 2009 (Revised February 3, 2010)

PURPOSE AND NEED

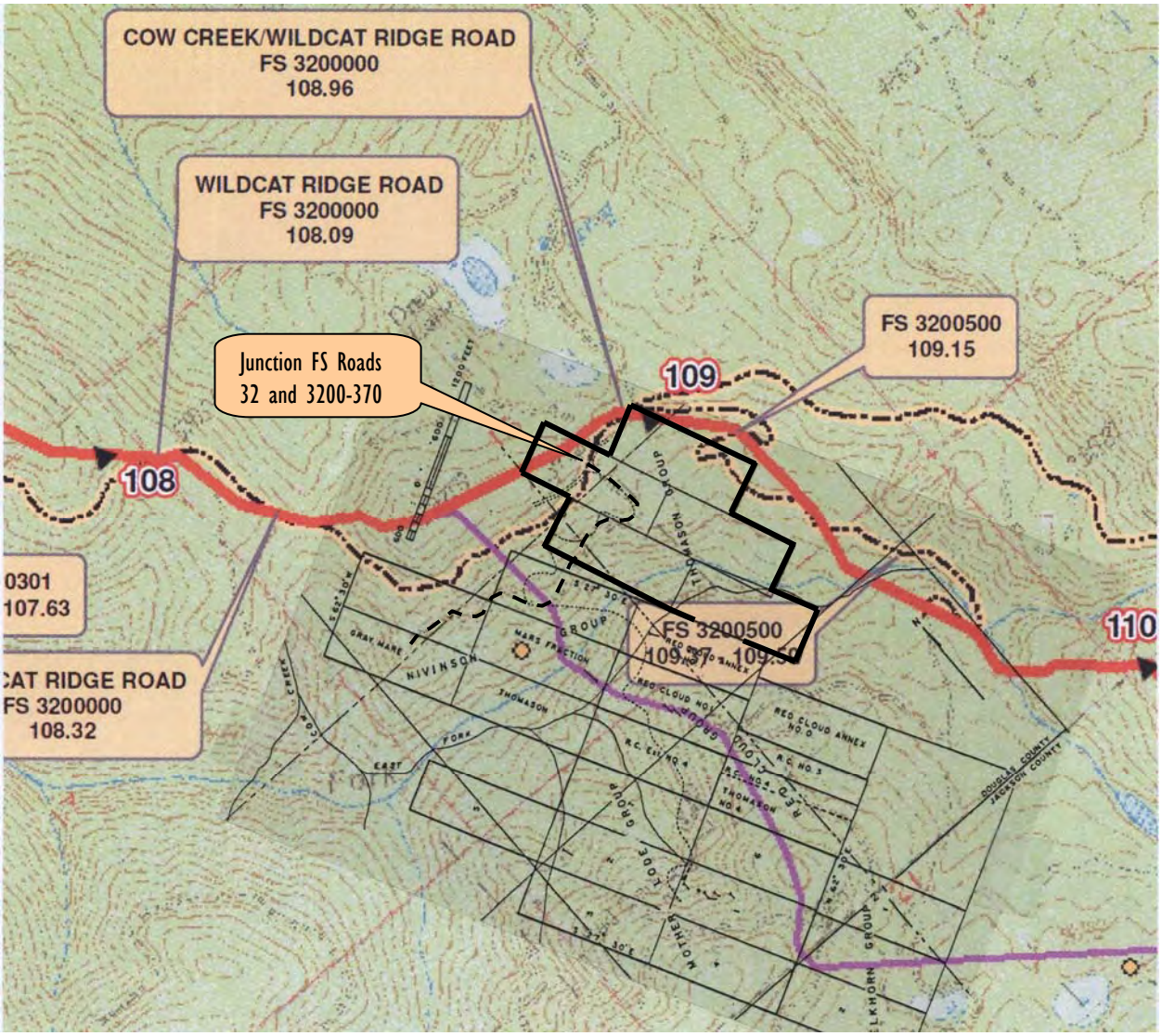
Wes Yamamoto, Resource Staff, Tiller Ranger District, Umpqua National Forest, requested my assistance to assess the potential for natural-occurring mercury reaching the aquatic environment as a consequence of Williams' Pacific proposed construction of a liquefied gas pipeline across the historic Thomason mining property. Prospecting and exploration activities occurred on these lode claims in the 1940's in search of mercury resources. This claim group encompasses a short segment of the finalized alignment located directly down slope from the junction of Forest Roads 32 and 3200-500 in the East Fork Cow Creek watershed[1] (FIG. 1). Yearlong residents of the upper Cow Creek watershed have voiced concern that pipeline construction activities in this locality may possibly intercept and expose soils containing native mercury; and that such disturbed sediment could be transported by surface erosion processes into the aquatic ecosystem. These residents have apprehension about water quality, specifically for domestic use.

My effort in this project consisted of collecting a number of soil samples for analytical testing of mercury and other naturally-occurring mineral substances along a 2,000-foot section of pipeline alignment extending from M.P. 109 to the East Fork Cow Creek, with focus on the area encompassing the historic Thomason claim group. I also collected several stream sediment samples along the main stem East Fork Cow Creek and its principal tributaries upstream from where the pipeline alignment first crosses the East Fork Cow Creek to ascertain if elevated (anomalous) amounts of mercury are present higher in the drainage system.

BACKGROUND

Lewis Thomason was among the original group of miners that staked numerous claims throughout the East Fork Cow Creek watershed beginning in the late 1920's. Throughout the 1930's and into the early 1940's miners conducted prospecting and exploration activities to uncover economic deposits of mercury mineralization throughout the area. The principal mercury property in the locale is the Red Cloud mine. This property reportedly produced at least 6 flasks (and possibly as many as 63 flasks) of elemental mercury or quicksilver by roasting cinnabar-bearing vein material in an on-site rotary furnace or retort (Ramp, 1963, p. 57).

[1] The spatial configuration of the Thomason claim block depicted in FIG. 1 is derived from a survey conducted in the early 1940's by an unknown author, as reported by Brooks (1963, Fig. 20, p. 59). Unfortunately, this survey map does not conform well spatially with topographic and cultural features when superimposed onto the 7.5-Minute Series, Richter Mountain 1:24,000 USGS 1989 topographic map. FIG. 1 provides the best approximation of the spatial configuration of the Thomason claim group with respect to the junction of Forest Roads 32 and 3200-370 and the historic Red Cloud mine site, features that are common to both map documents. Even doing so, the relative position of the East Fork Cow Creek differs considerably on these maps. I scaled the early 1940's survey map as a transparent overlay and placed it over a scanned version of PCGP's USGS Quad Based Transportation Map - Sheet No. 16 of 55, Drawing No. 3430.31-Y-016. The spatial orientation of the Thomason claim block near the junction of Forest Roads 32 and 3200-500 differs from that depicted by GeoEngineers, Inc. in Figures 2, 3, and 5 in their Red Cloud Mine Report transmitted electronically by Lauri Dalton, PCGP Project Engineer to Wes Yamamo on September 10, 2007. GeoEngineers, Inc. interpretation places the the intersection of Forest Roads 32 and 3200-370 in the center of a wetland depression (sag pond) several hundred feet north of the junction of Forest Roads 32 and 3200-500.



Pacific Connector Gas Pipeline Project, LP
USGS Quad Based Transportation Map; M.P. 102.80 to M.P. 110.20, Douglas County, Oregon
Section of map shown is scanned from Sheet No. 16 of 55, Drawing No. 3430.31-Y-016, May 2009, Revision 5

Legend

- ▲ Mileposts
- PCGP Proposed Centerline - 2008
- FERC Filed Centerline - 2007
- Wetlands (Jones & Stokes Aug. 2007)
- Above Ground Facilities
- Hydrostatic Test Breaks
- EAR = Existing Access Road
- PAR = Permanent Access Road
- TAR = Temporary Access Road
- BLM
- Forest Service
- Private

FIG. 1 Williams' Pacific finalized pipeline alignment in near vicinity of the historic Thomason mining claims
Thomason claim group is outlined in a bold black line

The Thomason claim group consists of five unpatented lode claims that are approximately situated in the southeast quarter of section 16 of T. 32 S., R. 2 W., WM, Douglas County, Oregon (FIG. 1). Development on the Thomason Group is said to consist of at least 4 bulldozer trenches, each about 100 feet long and several shallow shafts and pits, all of which were dug by Mr. Lewis Thomason during the early to mid 1940's. Mr. Thomason is also said to have bored about 500 auger holes to depths of 6 to 8 feet, reporting favorable "pannings" over several acres. Few of these holes penetrated below the soil mantle and rock fragments (colluvium) into the underlying decomposed schistose bedrock of the Klamath Mountain terrain. Several narrow fault zones having approximately the same trend as those at the Red Cloud mine were exposed by trenching operations, but none of these surface workings are said to have contained an appreciable amount of cinnabar (Brooks, 1963, p. 62).

Detailed geologic mapping in the East Fork Cow Creek watershed (Murray and Kays, 2001) reveals that much of the hillside that extends from the ridgeline where Forest Roads 32 and 3200-500 join down to the East Fork Cow Creek encompasses an ancient, deep-seated landslide deposit (FIG. 2). The presence of gravity-transported (colluvial) soils associated with this landform provides a plausible explanation why Mr. Thomason's auger holes never penetrated into the underlying bedrock. The chaotic mixture of broken rock fragments and soil matrix in this landslide mass is largely derived from the cliff-forming ash-flow tuff unit, the Tuff of Bond Creek, located one air-mile to the east.

Prior to the current and finalized alignment of the Pacific Connector Gas Pipeline within the East Fork Cow Creek watershed, the prior pipeline right-of-way crossed the East Fork Cow Creek through the Mars Fraction, part of the Nivinson Group of mercury lode claims (FIG. 1). According to Brooks (1963, p. 62), the Nivinson mining property is said to be developed by numerous short mine adits (horizontal tunnels) and open bulldozer cuts. Pannings taken from mine adit dumps are reported to contain traces of cinnabar. The lower mine adit, cited to be about 100 feet in length on the north bank of the East Fork Cow Creek in a large open cut, was reported by local historians to have contained pieces of high-grade cinnabar float (Brooks, 1963, p. 62).

In June and July of 2007, GeoEngineers, Inc., consultant to Williams' Pacific, conducted extensive soil and stream sediment sampling at selected sites in the upper reach of the East Fork Cow Creek watershed for geochemical analysis, based on the presence of known mercury mineralization and past mining activities conducted in that area. GeoEngineers, Inc. collected 21 soil samples on June 17, 2007 at the following sites: along a one and a half mile segment of Forest Road 32 between spurs -300 and -370, waste dumps on the Mars Fraction lode claim, and waste dumps at the Red Cloud mine (FIGS. 3a-b). At their own discretion, GeoEngineers submitted these samples to Apex Labs located in Tigard, Oregon for analytical testing.

On July 18, 2007 GeoEngineers, Inc. collected an additional 42 soil and stream sediment samples at five locations in the upper reach of East Fork Cow Creek delineated by the Umpqua National Forest. These locations are identified as Sample Areas A, B, C, D, E, and F (FIGS. 3a-b). GeoEngineers, Inc. submitted these 42 samples to the ALS Chemex Laboratory located in Reno, Nevada for analytical testing.

Sample Areas A, B, and C are situated along the East Fork Cow Creek where stream sediment samples were collected. Sample Area A corresponds to a segment of stream channel below the confluence of an unnamed stream originating at the Red Cloud mine site. Sample Area B corresponds to a section of stream channel located below the Mars Fraction lode (Nivinson Group) and the unnamed stream draining the Red Cloud mine. Sample Area C corresponds to a reach of stream channel located approximately one-third mile above the Nivinson Group. Sample Areas D, E, and F reflect sites where historic mercury mining activities were conducted. Soil sediment samples were collected in the following three areas. Sample Area D coincides with a one-mile segment of Forest Road 32 situated between Forest Roads 3200-300 and 3200-330[2]. Sample Area E corresponds to samples collected in waste dumps on the Mars Fraction of the Nivinson Group. Sample Area F corresponds to samples collected in waste dumps on the Red Cloud mine site (FIGS 3a-b). All 42 soil and stream sediment samples submitted to the ALS Chemex Laboratory were tested for 49 chemical substances (analytes). The results of analytical testing collected at Sample Areas A, B, C, D, E, and F on July 18, 2007 are displayed in Table 3.

FIELD METHODS

On Saturday, October 10, 2009 I traversed on foot portions of the pipeline alignment between M.P. 109 and the East Fork Cow Creek looking for evidence of surface workings such as dozer cuts or shallow pits in near vicinity of the historic Thomason Group of lode claims and to collect soil samples for analytical testing. No historic surface workings were observed in vicinities that I walked. A string box was used to measure distances along Forest Road 3200-500 to points where foot traverses were made down slope to the pipeline's alignment to collect soil samples. Soil sample sites were marked on the ground with an 8-inch long wooded stake. Pink flagging was hung to nearby vegetation. A total of six soil samples were collected along this section of the pipeline alignment. In addition, I collected three stream sediment samples along the East Fork Cow Creek upstream from where the pipeline alignment crosses the East Fork Cow Creek. The location of the aggregated 9 soil and stream sample sites is depicted in FIG. 4.

Fine-textured soil and stream sediment samples, each averaging approximately two to three pounds weight, were collected with a stainless steel trowel and placed into a labeled zip-lock plastic bag sealed within another zip-lock plastic bag or "double bagged" as an precautionary measure against accidental leakage and contamination. Samples were subsequently wet-washed through an 80-mesh stainless steel sieve to reduce the bulk of samples for analytical testing. The stainless steel sieve was thoroughly washed between screenings to prevent contamination. The 80-mesh minus soil and stream sediment samples, averaging about half a pound weight, were again placed into labeled zip-lock plastic bags in similar fashion and transmitted to ALC Chemex Laboratory located in Reno, Nevada for geochemical analytical analysis.

[2] Analytical results from the 12 soil samples collected in road cuts along Forest Road 32 between spurs -300 and -330 (Sample Area D) reveal very low mercury values; ranging from below detectable limits to a high of 0.02 parts per million (ppm) or 0.02 mg/kg. In contrast, the highest reported mercury (Hg) values in surface workings and waste rock dumps on the Red Cloud mine property are 53.5 and 60.1 ppm (GeoEngineers, Inc., 2007).

ANALYTICAL METHODS

To maintain consistency, sample preparation and analytical procedures on the six soil and three stream sediment samples transmitted to ALC Chemex Laboratory are identical to those specified by GeoEngineers, Inc. for the 42 soil and stream sediment samples that this lab received on July 24, 2007. Sample preparation methods are described in TABLE 1 and sample analytical procedures are outlined in TABLE 2.

ALS Lab Code ID	Description
WEI-21	Received Sample Weight
LOG	Sample login – Received w/o BarCode
SCR-41	Screen to 180 um and save both fractions

TABLE 1 Sample preparation methods specified to ALS Chemex Laboratory

ALS Lab Code ID	Description
ME-MS61	48 Element four-acid digestion via ICP-MS[3]
Hg-CV41	Trace Hg – Cold vapor AAS[4]

TABLE 2 Sample analytical procedures specified to ALS Chemex Laboratory

[3] ICP-MS denotes inductively-coupled plasma-mass spectrometry

[4] AAS denotes atomic-absorption spectroscopy

EVALUATION

Twelve soil samples were collected by GeoEngineers, Inc. on July 18, 2007 at roughly equal-spaced intervals along a one-mile segment of Forest Road 32 situated between Forest Roads 3200-300 and 3200-330 (Sample Area D). Review of the geologic literature indicates that this area is located well outside the zone of mercury mineralization within the East Fork Cow Creek watershed (Brooks, 1963, p. 58-62; Ramp, 1972, p. 48-49, 54-58; Murray, 1994, p. 214-215, 218-219, 221-222, 226-227; Murray and Kays, 2001). Findings from the August 22, 2007 geochemical analysis disclose that all twelve soil samples contained very low levels of mercury (Hg) mineralization (Table 4). Mercury values ranged from below detectable limits to a high of 0.02 parts per million (ppm). These values are considered to reflect ambient background or baseline conditions for mercury in the local geologic environment; and thus afford a means of comparison to areas where elevated or anomalous amounts of mercury are present. The highest reported mercury values detected to date in the East Fork Cow Creek watershed are in waste rock (dumps) located on the historic Red Cloud mine property. The highest mercury values at this mine site are 53.5 and 60.1 ppm, reflecting a 3×10^3 increase (three orders of magnitude) above ambient background levels.

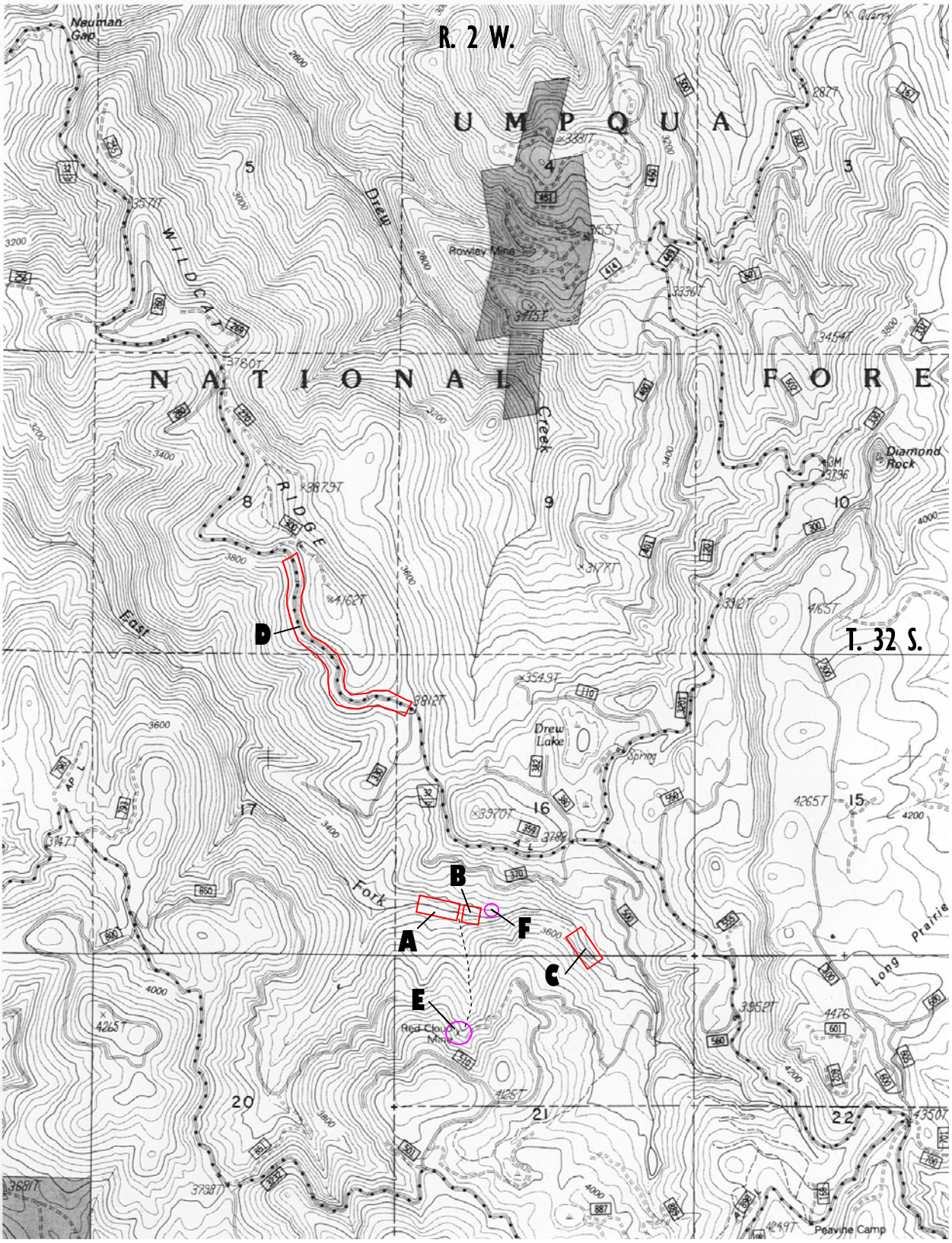


FIG. 3a Umpqua National Forest designated soil ○ and stream sediment □ Sample Areas A through F

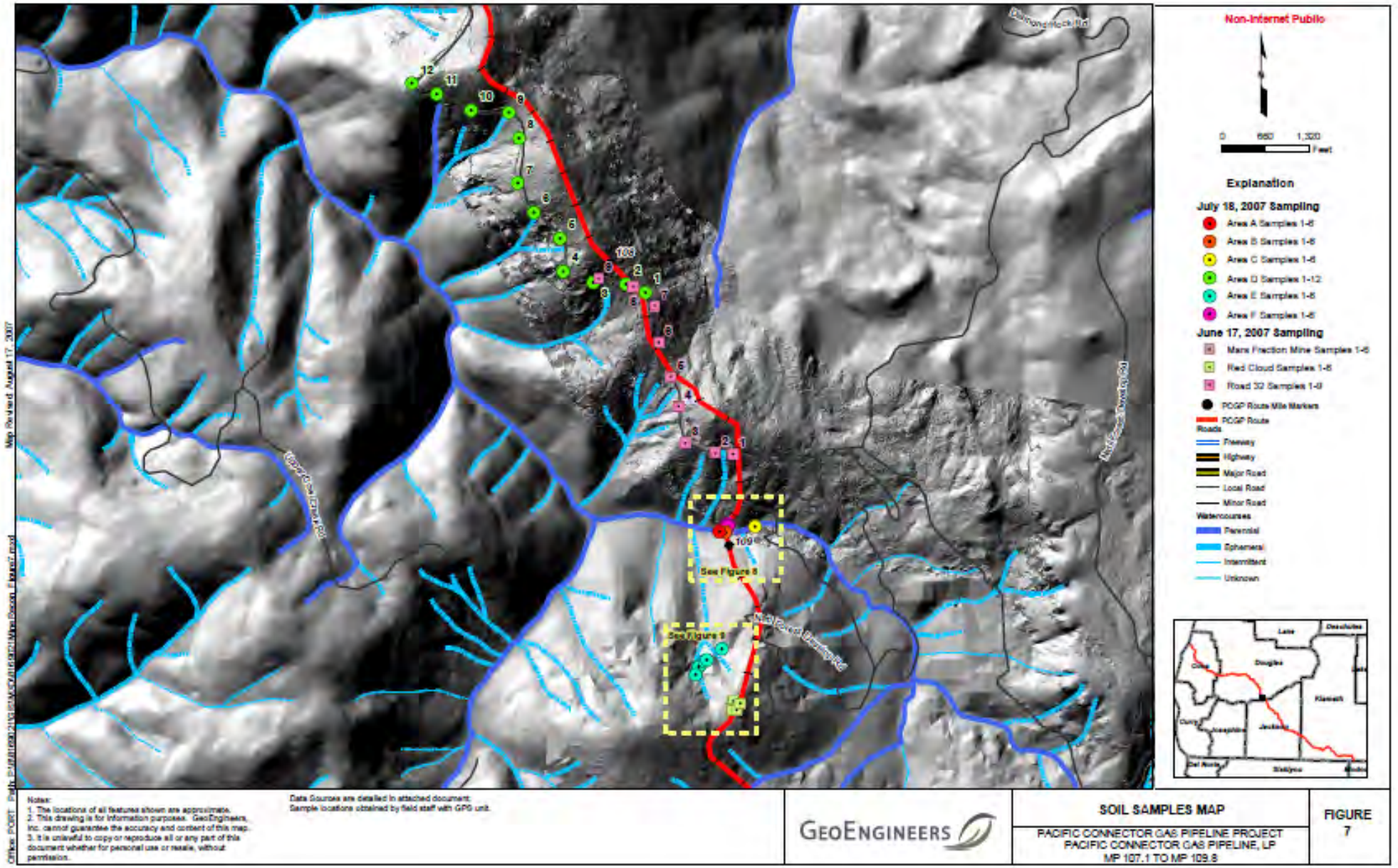


FIG. 3b Locations (Sample Areas A through F) where soil and stream sediment samples were collected by GeoEngineers, Inc. during their July 18, 2007 field investigation

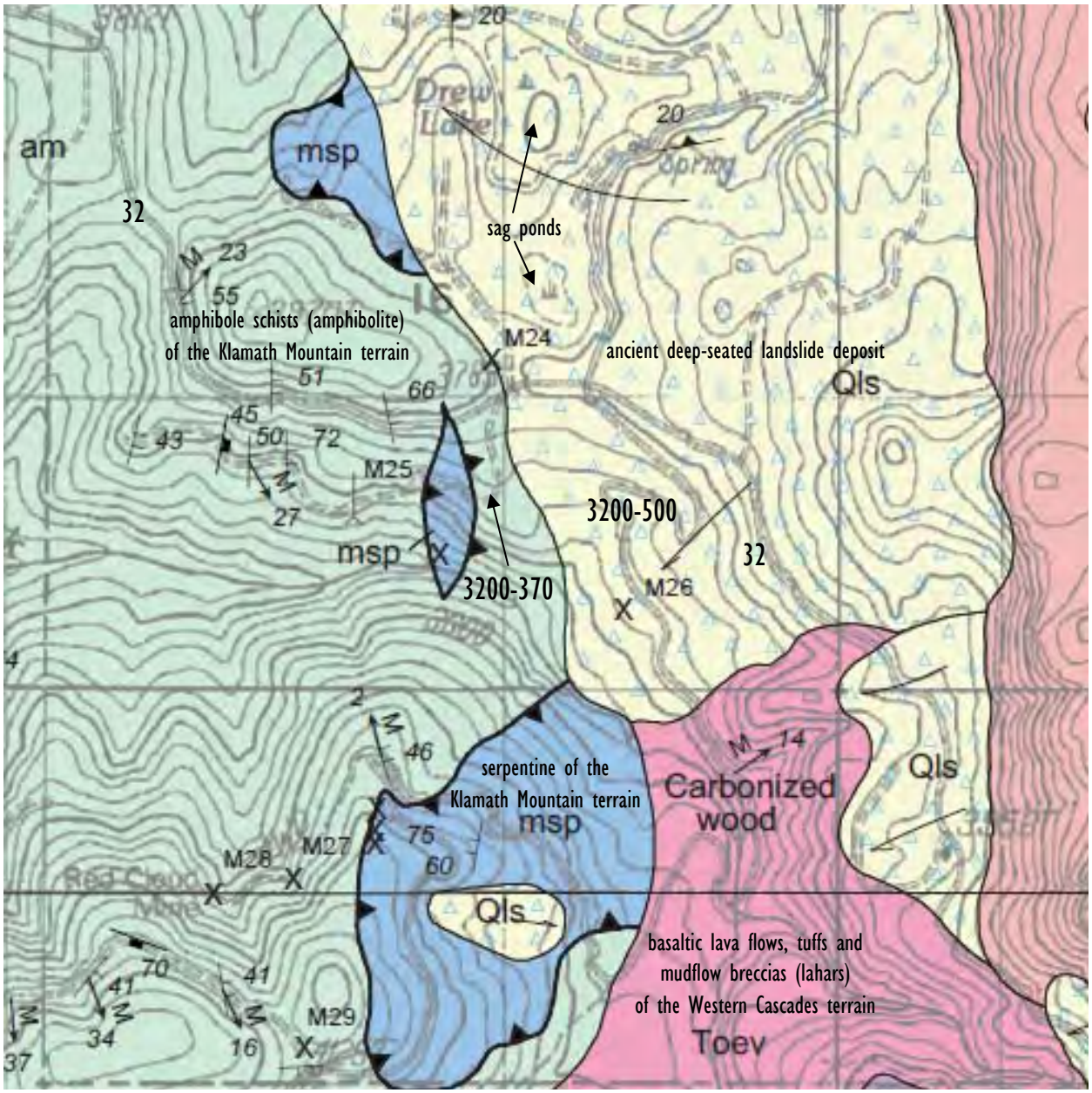


FIG. 2 Geologic map encompassing East Fork Cow Creek and surrounding area (Murray and Kays, 1991)

Contact -- Approximately located

Fault -- Dashed where inferred: ball and bar on downthrown block

Thrust fault -- Approximately located; sawteeth on upper (tectonically higher) plate

Minor fault (not traced) -- Showing strike and dip

Minor fault (not traced) -- Vertical or nearly vertical dip

Inclined joint -- Showing strike and dip

Minor inclined vein -- Showing strike and dip

Inclined bedding -- Showing strike and dip

Inclined cleavage -- Showing strike and dip

Vertical or near-vertical cleavage -- Showing strike

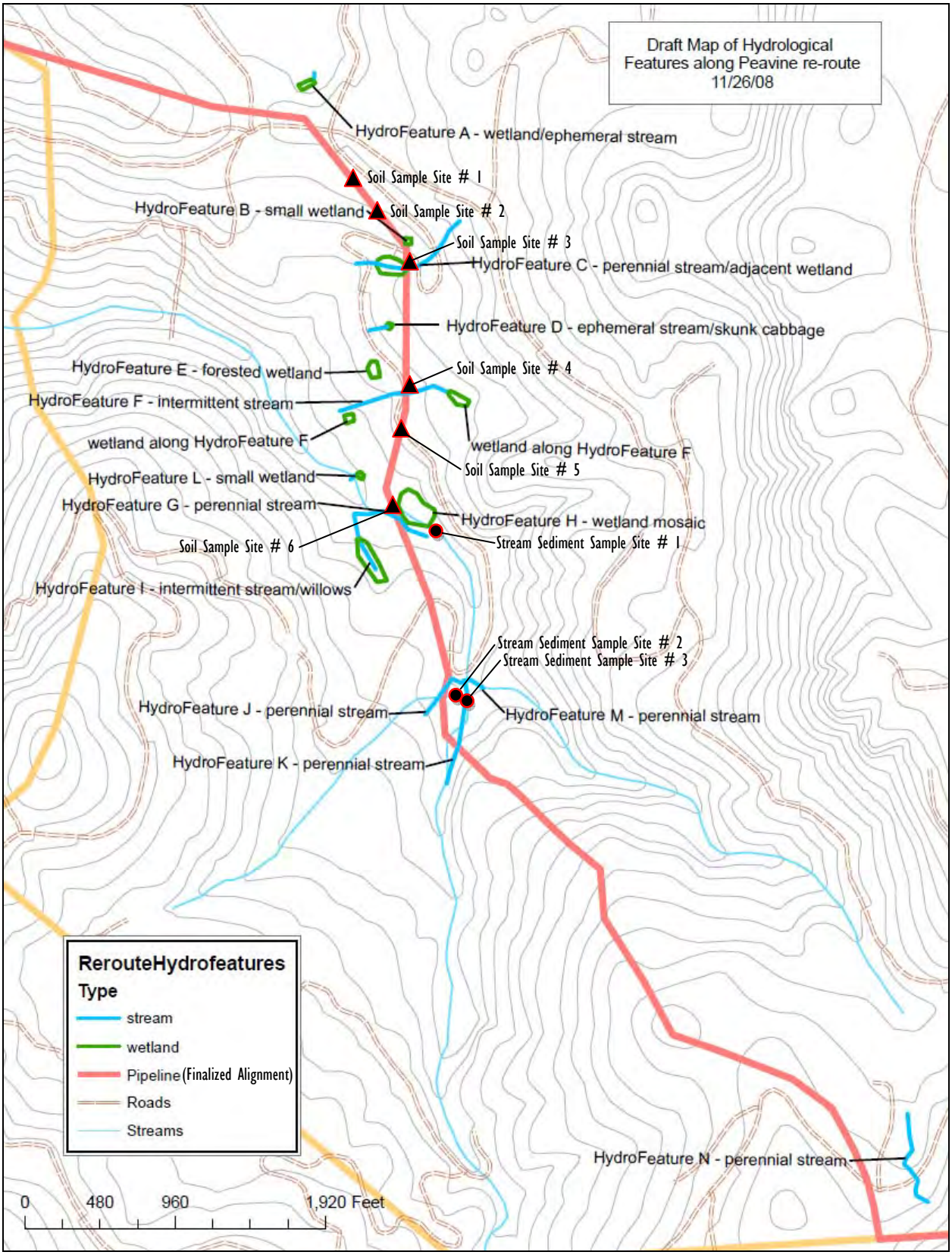


FIG. 5 Hydrologic features along the finalized pipeline alignment in the East Fork Cow Creek watershed
Field reconnaissance by Amy Rusk, District Hydrologist and Denise Dammann, Forest Hydrologist, November 26, 2008
Soil and stream sediment sample sites by Larry Broeker, Consultant Geologist to the Umpqua NF, October 10, 2009

On October 10, 2009 I collected six soil samples along the pipeline alignment between the intersection of Forest Roads 32 and 3200-500 and the East Fork Cow Creek, as well as three stream sediment samples; one on the mainstem East Fork Cow Creek and one on each of its principal tributaries higher in the system (FIG. 4). To maintain consistency and uniformity, these samples were submitted to the assay lab utilized by GeoEngineers, Inc., ALS Chemex, Inc. located in Reno, Nevada, employing the same sample preparation techniques and like analytical procedures. Findings from the November 16, 2009 geochemical testing for the six soil samples disclosed mercury values ranging from a low of 0.03 ppm (mg/kg) to a high of 0.09 ppm (mg/kg). All six soil samples had mercury values slightly above established ambient background levels of 0.02 ppm or lower indicating that the geologic environment in near vicinity of the historic Thomason mining claims contains very low concentrations of mercury. Results from the three stream sediment samples likewise revealed negligible mercury values; ranging from a low of 0.06 ppm (mg/kg) to a high of 0.29 ppm (mg/kg) (TABLE 4).

The Oregon Department of Environmental Quality (ODEQ) Level II Screening Level Values for ecological risk of mercury bioaccumulation[5] in freshwater sediment is 0.07 ppm (ODEQ, 1998; ODEQ, 2007). Two of the three stream sediment samples equal or exceed this threshold limit, EFCC-SS-1 at 0.07 ppm and EFCC-SS-2 at 0.29 ppm. Stream sediment sample EFCC-SS-2 taken from a tributary of the East Fork Cow Creek that drains a significant portion of an ancient earth flow landform located in section 21 of T. 32 S., R. 2 W. has a mercury value of 0.29 ppm. At least one unnamed mercury prospect has been identified in the upper reaches of this drainage. Presumably, if a sufficient volume of fine-textured sediment having mercury values in excess of 0.07 ppm is deposited into a water body with stagnant anaerobic conditions, the process of bioaccumulation can take place. Pipeline construction activities that transect the two principal tributaries forming the East Fork Cow Creek will inherently stir up sediment containing levels of inorganic mercury that equal or exceed the ODEQ threshold for bioaccumulation in fresh water sediment. Fine-textured sediment containing low levels of native inorganic mercury are continually being transported downstream in a relatively high-gradient stream channel of Cow Creek. This sediment is ultimately deposited and stored in Galesville Reservoir. This natural-occurring geologic process has been operative for countless millennia.

[5] Bioaccumulation refers to the process whereby mercury becomes increasingly more concentrated as it moves up through the food chain from absorption in vegetative matter to ingestion by living organisms, and ultimately, intake by humans. Inorganic mercury in the form of the mercury sulfide mineral (cinnabar) or its liquid elemental form (quicksilver) can readily be converted into an organic mercury compound (methyl-mercury) via bacterial action in an oxygen deficient (anaerobic) environment, such as that which occurs in muddy sediment at the bottom of a stagnant water body like a pond or lake. Vegetative matter in such an anaerobic environment absorbs the methyl-mercury, macro-invertebrates ingest the plant matter, bottom-dwelling fish swallow the macro-invertebrates, and humans consume the contaminated fish tissue. The Oregon Department of Human Services (DHS) generally issues advisories when the average mercury level in fish tissue from a particular water body is 0.35 ppm or greater. The average level of mercury found in fish from Galeville Reservoir is 0.69 ppm (Oregon Department of Human Services, 2001).

Two potential avenues for the transport of soil containing naturally-occurring mercury mineralization into the aquatic ecosystem as a consequence of proposed pipeline construction activities include: (1) perennial or intermittent streams that the pipeline alignment transects, and (2) the pipeline corridor or right-of-way itself.

Several intermittent streams do in fact traverse the finalized pipeline alignment along that segment of Forest Road 3200-500 extending from the intersection of Forest Road 32 and East Fork Cow Creek. These streams are identified as Hydrologic Features C and F (FIG. 5). Further field reconnaissance in this locality by Amy Rusk, Hydrologist, Tiller Ranger District and Denise Dammann, Forest Hydrologist on November 6, 2009 revealed that neither of these stream channels have direct connectivity with the East Fork Cow Creek. Both stream systems have disrupted flow patterns due to the "benchy" or stair-stepped ground topography associated with the ancient landslide deposit. Stream flow dissipates into the deep, gravity-transported (colluvial) soils on gently-sloping landslide benches and exudes as seeps and springs at the toe of adjoining scarps further downslope. Fine- and coarse-textured sediment being carried as bedload by either of these stream channels is deposited and stored on these benches. There is no direct connectivity for sediment generated from proposed pipeline construction activities to reach the East Fork Cow Creek.

The other plausible means for mercury-laden sediment to enter into the East Fork Cow Creek is from proposed construction activities along that section of the pipeline alignment construction extending from the intersection of Forest Roads 32 and 3200-500 and East Fork Cow Creek. Williams Pacific has developed in their (still in revision) Erosion Control and Revegetation Plan (ECRP) a number of temporary and permanent erosion control measures to minimize the potential for sediment to enter a wetland or water body (Williams Pacific, 2009).

Temporary or short-term erosion control measures (best management practices) are to be employed throughout the construction phase of the proposed pipeline; such measures being routinely monitored by an Environmental Inspector (EI) or authorized company representative. Along the pipeline construction right-of-way the following temporary erosion control measures are to be implemented:

(1) Sediment barriers consisting of silt fences or straw bales are to be installed to confine sediment; the number and distance between such structures to be determined by the EI. At present, the ECRP has not established distances between sediment barriers based on factors such as slope gradient, soil type, rainfall intensity, etc.

(2) Slope breakers constructed of soil mounds, silt fencing, staked straw bales, straw wattles, or sand bags are to be installed to reduce runoff velocity, concentrated flow, and to divert surface water in a manner to avoid excessive erosion.

(3) Mulch will be placed on disturbed ground prior to seeding, if it becomes necessary to delay final clean-up, including final grading and installation of permanent erosion control measures, beyond 20 days after the trench is backfilled.

Permanent erosion control measures (best management practices) are to be utilized to reduce sediment-transported pollutants and contaminants in storm water discharge following completion of all construction phases. Along the pipeline construction right-of-way, including temporary storage areas, the following permanent erosion control measures are to be implemented:

(1) Trench breakers, consisting of sand-filled sacks, are to be installed in the trench and "keyed" into trench walls or slopes prior to backfilling to slow the flow of subsurface water within the trench to prevent erosion of backfill materials. Spacing distances between trench breakers will be according slope gradient specified in the ECRP, unless otherwise directed by the EI or authorized company representative.

(2) Compacted ground from mainline construction activities are to be graded, contoured and scarified to promote infiltration, reduce surface water runoff, minimize erosion, and enhance re-vegetation efforts.

(3) A seedbed will be prepared in disturbed areas, where necessary, to a depth of three to four inches using appropriate equipment to promote a seedbed that is firm, yet rough enough to be conducive to capturing and lodging of seed when broadcast or hydro-seeded.

Implementation of best management practices relating to both temporary and permanent erosion control measures in the ERCP will reduce the likelihood and potential for sediment generated from proposed pipeline construction activities from entering into the East Fork Cow Creek.

The following recommendations were developed in consultation with the ODEQ. They were also discussed and agreed upon at the February 2, 2010 meeting to review the Contaminated Substances Discovery Plan:

(1) Within Riparian Reserves for all hydrologic features crossed by the pipeline between MP's 109 and 110 (FIG. 5) provide 100% post-construction ground cover on all disturbed areas. Wood fiber is the preferred material. In addition, construct water bars at 50-foot intervals.

(2) At hydrologic features G, J, and K (FIG. 5) assure that erosion control measures are in place before the fall rains and monitor for rilling, gullying and other forms of active erosion that may transport sediment into the aquatic environment. If rilling or gullying is occurring that may result in sediment transport into the aquatic environment, improve erosion control measures to preclude sedimentation.

(3) Inspect the construction corridor for sedimentation after each significant storm event (which would be more frequently than a bank-full[6] event) or whenever there is a visual sediment plume downstream. If the sediment source is originating from the pipeline corridor, improve erosion control measures to preclude

sedimentation. An authorized Agency representative will provide information to Williams' Pacific regarding these events.

KEY FINDINGS

Natural-occurring mercury is present in the disrupted soil regolith and underlying bedrock strata throughout the upper reaches of the East Fork Cow Creek watershed. Although quite spotty, mercury values are sufficiently high enough to have warranted exploration, development, and even minor production between the 1930's and 1960's.

Geochemical analysis of six soil samples collected along a 2,000-foot section of the finalized Pacific Connector Gas Pipeline that crosses partly through the historic Thomason mining claims has been determined to have very low concentrations of natural-occurring mercury mineralization.

Reconnaissance field investigation has concluded that two intermittent stream channels (Hydrologic Features C and F) that transect the finalized pipeline alignment lack connectivity to the main stem East Fork Cow Creek, thus any fine-textured sediment generated from proposed pipeline construction activities at these stream crossing sites will be transported and deposited (stored) on hill slope benches further down the channel.

Implementation of best management practices relating to both temporary and permanent erosion control measures in the ERCP will reduce the likelihood and potential for sediment generated from proposed pipeline construction activities entering into the East Fork Cow Creek.

Geochemical analysis of three stream sediment samples collected from the main stem East Fork Cow Creek and its two principal tributaries higher in the drainage also revealed nominal mercury values. Two of the three samples had mercury values that equaled or slightly exceeded the Oregon Department of Environmental Quality (ODEQ) Level II Screening Level Values for ecological risk of bioaccumulation in sediment.

In summary, proposed pipeline construction activities by Williams Pacific within the upper East Fork Cow Creek watershed are not anticipated to disturb and expose soils and bedrock strata that contains more than nominal amounts of natural-occurring mercury mineralization; and any sediment that is generated is not likely to reach the aquatic environment due to implementation of short-term and permanent mitigation measures outlined in Williams Pacific Erosion Control and Revegetation Plan.

[6] Bankfull discharge of a river is a stage of flow that is just contained within the banks.

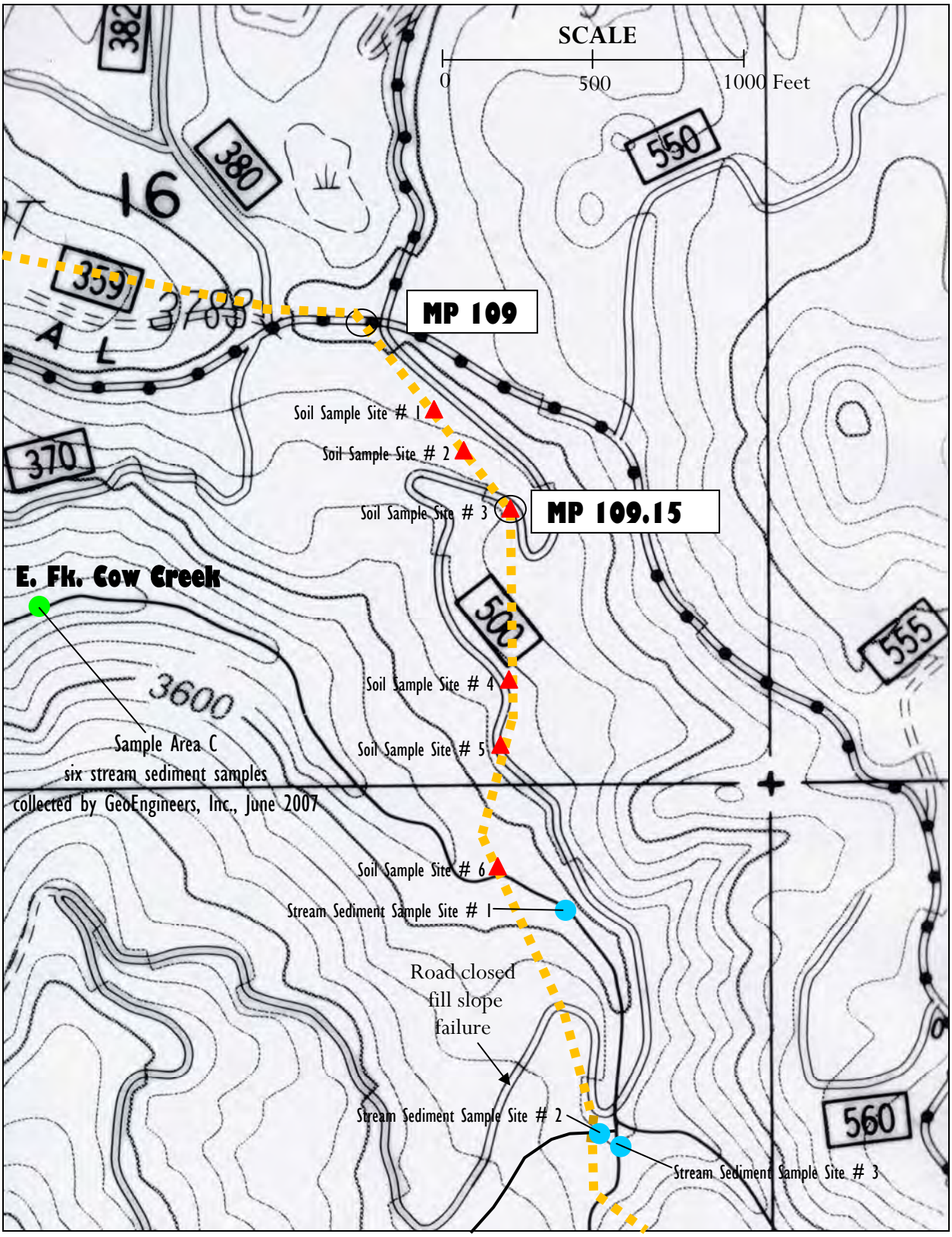


FIG. 4 Location of geochem stream sediment ● and soil sample ▲ sites along pipeline alignment ■ ■ ■ ■ ■

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TABLE 3

Results of ALS Chemex Geochemical Testing dated August 22, 2007

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Finalized Date: 22-AUG-2007
Account: GEOENG

Project: PCGP-RedCloudMine 8169-021-15

CERTIFICATE OF ANALYSIS RE07077668

Sample Description	Method	WEI-21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
AREA A Sample 1		0.32	0.08	8.80	15.2	340	1.07	0.07	2.74	0.17	30.80	35.3	201	1.97	40.6	7.49
AREA A Sample 2		0.26	0.03	9.02	7.1	280	0.92	0.05	3.07	0.10	26.80	28.8	263	1.87	31.8	6.57
AREA A Sample 3		0.32	0.15	8.73	13.1	360	1.04	0.05	2.17	0.17	36.30	44.2	151	1.92	43.2	8.22
AREA A Sample 4		0.30	0.02	9.04	7.2	300	0.91	0.06	2.53	0.13	28.30	28.8	187	1.94	38.4	6.46
AREA A Sample 5		0.34	0.05	8.32	12.6	300	1.20	0.08	2.55	0.14	32.30	34.7	199	1.99	39.6	6.36
AREA A Sample 6		0.32	0.29	8.73	9.0	310	0.89	0.06	2.90	0.16	27.80	32.3	197	1.74	37.4	6.78
AREA B Sample 1		0.30	0.07	8.44	7.9	280	0.97	0.05	2.70	0.15	27.30	30.9	198	1.72	40.3	6.64
AREA B Sample 2		0.28	0.08	8.71	11.2	310	1.02	0.06	2.83	0.15	29.00	36.5	214	1.76	38.0	7.33
AREA B Sample 3		0.34	0.05	7.63	10.2	280	1.23	0.06	2.64	0.15	28.10	32.5	194	1.82	43.1	6.73
AREA B Sample 4		0.30	0.05	8.05	11.5	270	1.10	0.05	2.85	0.14	26.70	28.0	220	1.82	37.9	6.53
AREA B Sample 5		0.34	0.06	7.95	9.0	260	1.04	0.08	2.97	0.15	25.00	25.6	255	1.89	38.1	6.29
AREA B Sample 6		0.34	0.06	7.86	7.1	230	1.05	0.06	3.15	0.11	22.20	26.8	344	1.69	36.8	6.44
AREA C Sample 1		0.30	0.04	7.86	7.4	250	1.01	0.06	2.72	0.13	25.80	25.5	246	1.87	35.1	6.16
AREA C Sample 2		0.28	0.03	7.80	8.4	250	1.07	0.05	2.63	0.10	22.70	26.0	235	1.85	32.5	5.91
AREA C Sample 3		0.32	0.03	7.79	7.6	250	1.04	0.05	2.62	0.12	23.10	23.2	174	1.82	33.4	5.60
AREA C Sample 4		0.28	0.05	7.96	9.4	270	1.11	0.05	2.52	0.10	23.00	26.3	182	1.85	32.9	5.93
AREA C Sample 5		0.30	0.05	8.23	8.5	280	0.98	0.05	2.58	0.12	24.80	24.4	234	1.89	34.7	6.36
AREA C Sample 6		0.32	0.33	7.78	10.9	280	1.15	0.05	2.40	0.14	27.10	30.8	189	1.86	36.3	6.67
AREA D Sample 1		0.22	0.04	7.06	1.3	110	0.52	0.04	4.34	0.09	13.85	32.4	280	1.17	51.6	4.98
AREA D Sample 2		0.34	0.04	8.64	<0.2	140	0.62	0.06	5.44	0.08	6.89	25.3	171	0.96	42.1	4.06
AREA D Sample 3		0.34	0.02	8.11	<0.2	80	0.58	0.04	4.59	0.07	6.57	24.4	150	0.36	61.8	3.82
AREA D Sample 4		0.32	0.10	8.65	<0.2	80	0.62	0.06	5.14	0.09	6.00	24.5	163	0.48	52.2	4.19
AREA D Sample 5		0.32	0.04	8.39	0.6	130	0.72	0.06	4.69	0.07	5.99	16.9	166	0.55	64.8	3.62
AREA D Sample 6		0.36	0.05	8.50	<0.2	130	0.66	0.04	4.53	0.11	8.42	26.9	147	0.68	58.8	4.19
AREA D Sample 7		0.28	0.05	8.01	0.2	150	0.74	0.06	5.02	0.23	7.48	24.9	150	0.65	40.6	3.77
AREA D Sample 8		0.30	0.04	8.26	0.4	140	0.65	0.05	4.59	0.11	8.31	26.5	111	0.45	53.3	4.36
AREA D Sample 9		0.32	0.13	8.32	0.4	490	0.67	0.06	5.24	0.25	8.03	26.9	178	0.93	41.4	3.81
AREA D Sample 10		0.38	0.03	9.26	<0.2	90	0.52	0.06	8.29	0.10	13.40	27.1	189	0.56	64.4	4.21
AREA D Sample 11		0.34	0.04	8.71	0.8	90	0.67	0.08	5.76	0.14	13.35	29.8	175	0.80	70.6	4.78
AREA D Sample 12		0.32	0.02	9.09	<0.2	30	0.79	0.01	5.78	0.12	13.50	31.9	182	0.33	78.0	6.13
AREA E Sample 1		0.34	0.10	8.67	1.1	90	0.78	0.05	5.07	0.15	11.20	33.1	172	0.66	85.7	5.53
AREA E Sample 2		0.36	0.06	8.46	13.5	50	0.72	0.03	4.16	0.16	12.05	32.7	180	1.10	91.0	5.42
AREA E Sample 3		0.34	0.09	8.20	14.9	50	0.61	0.04	4.03	0.31	11.10	34.2	187	1.29	103.5	5.20
AREA E Sample 4		0.26	0.15	8.33	0.6	130	0.70	0.07	4.87	0.20	11.60	32.6	168	1.26	69.1	4.88
AREA E Sample 5		0.28	0.09	8.04	0.9	80	0.75	0.05	4.56	0.09	12.50	29.9	179	0.80	91.7	5.18
AREA E Sample 6		0.26	0.04	8.24	0.5	60	0.72	0.05	4.82	0.07	9.40	29.9	159	0.62	94.4	5.15
AREA F Sample 1		0.28	0.04	8.77	0.5	70	0.82	0.05	4.93	0.12	15.60	36.1	298	0.80	126.5	6.21
AREA F Sample 2		0.34	0.04	8.80	1.6	90	0.74	0.05	4.90	0.12	17.45	42.3	257	0.84	111.5	5.95
AREA F Sample 3		0.34	0.09	8.58	1.2	50	0.57	0.02	4.68	0.09	18.05	40.2	278	0.68	141.5	6.09
AREA F Sample 4		0.32	0.04	9.44	1.0	50	0.75	0.02	5.52	0.10	16.90	37.7	305	0.59	107.5	6.59

Comments: REE's may not be totally soluble in MS61 method. Detection limits on samples requiring dilutions for Hg-CV41, due to inteferences or high concentration levels, have been increased according to the dilution factor.

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Project: PCGP-RedCloudMine 8169-021-15

CERTIFICATE OF ANALYSIS RE07077668

Sample Description	Method Analyte Units LOR	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	Hg-CV41 Hg ppm 0.01	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2	ME-MS61 P ppm 10
AREA A Sample 1		18.60	0.18	2.8	0.04	0.068	0.56	12.9	11.4	2.19	1940	1.97	1.24	6.5	157.0	670
AREA A Sample 2		19.10	0.18	2.8	0.03	0.066	0.48	12.0	11.1	2.38	1315	1.19	1.36	6.8	148.5	550
AREA A Sample 3		18.80	0.20	3.2	0.04	0.075	0.53	14.6	11.0	1.82	2570	2.39	1.00	6.9	148.5	760
AREA A Sample 4		18.80	0.19	3.0	0.06	0.068	0.49	12.9	11.1	2.02	1385	1.40	1.11	6.7	138.0	600
AREA A Sample 5		18.85	0.15	3.0	0.08	0.065	0.49	14.0	13.7	1.96	1535	1.72	1.25	6.1	147.0	600
AREA A Sample 6		18.05	0.19	2.6	0.06	0.067	0.48	12.0	10.9	2.32	1555	1.50	1.34	6.0	155.5	610
AREA B Sample 1		17.60	0.19	2.7	0.03	0.065	0.45	11.8	9.9	2.14	1555	1.77	1.21	6.2	144.0	590
AREA B Sample 2		18.25	0.21	2.8	0.72	0.069	0.47	12.4	10.7	2.23	1905	1.60	1.27	6.3	147.0	620
AREA B Sample 3		18.65	0.12	2.7	0.29	0.064	0.47	12.5	11.9	2.12	1640	2.37	1.08	6.2	153.0	600
AREA B Sample 4		18.55	0.12	2.7	0.04	0.062	0.46	12.2	12.3	2.16	1410	1.67	1.20	6.4	148.0	560
AREA B Sample 5		18.55	0.10	2.7	0.06	0.065	0.47	11.3	12.7	2.19	1250	1.28	1.20	6.3	155.0	550
AREA B Sample 6		19.30	0.11	2.7	0.05	0.065	0.44	9.8	12.5	2.34	1170	1.22	1.36	6.7	155.0	480
AREA C Sample 1		19.00	0.11	2.9	0.05	0.061	0.46	11.7	12.1	2.08	1230	1.30	1.14	6.9	147.0	540
AREA C Sample 2		19.05	0.12	2.9	0.04	0.059	0.45	10.7	11.8	2.00	1320	1.16	1.15	7.2	135.5	510
AREA C Sample 3		19.45	0.11	3.0	0.28	0.061	0.46	10.5	12.2	2.01	1060	1.19	1.11	6.7	135.0	500
AREA C Sample 4		18.80	0.12	2.9	0.04	0.062	0.47	10.4	11.7	1.95	1420	1.24	1.11	6.6	128.0	550
AREA C Sample 5		18.80	0.11	2.9	0.03	0.061	0.50	11.4	11.4	1.96	1290	1.52	1.10	6.6	132.0	590
AREA C Sample 6		18.60	0.13	3.1	0.03	0.065	0.51	11.9	11.5	1.84	1590	1.64	1.02	6.8	137.0	590
AREA D Sample 1		15.80	0.09	1.6	0.02	0.046	0.28	5.9	11.2	3.85	1090	0.42	0.91	2.8	88.8	520
AREA D Sample 2		15.10	0.08	0.4	0.01	0.032	0.24	3.1	11.8	3.89	840	0.14	2.00	1.5	85.2	130
AREA D Sample 3		14.70	0.07	0.3	<0.01	0.035	0.24	2.7	14.2	4.09	460	0.13	1.99	0.8	78.5	200
AREA D Sample 4		15.80	0.07	0.4	0.01	0.037	0.28	2.6	13.7	4.01	604	0.13	1.76	0.8	81.8	240
AREA D Sample 5		15.70	0.07	0.4	0.01	0.038	0.26	2.1	13.8	3.47	570	0.16	1.96	1.0	83.2	240
AREA D Sample 6		15.90	0.07	0.4	0.01	0.037	0.27	3.8	20.5	4.16	658	0.14	1.75	1.0	92.0	270
AREA D Sample 7		15.55	0.08	0.4	0.02	0.041	0.22	3.3	16.4	3.68	915	0.22	1.70	1.4	77.7	220
AREA D Sample 8		17.05	0.09	0.5	0.02	0.044	0.18	4.5	16.7	3.30	721	0.15	1.28	1.4	60.0	220
AREA D Sample 9		16.20	0.07	0.6	0.02	0.038	0.37	3.6	16.2	3.42	1060	0.21	1.87	2.1	98.0	230
AREA D Sample 10		17.10	0.08	0.7	0.01	0.040	0.15	6.2	10.6	3.43	966	0.19	1.73	2.6	97.8	300
AREA D Sample 11		15.80	0.09	0.6	0.01	0.045	0.36	5.7	14.7	3.95	874	0.24	1.99	2.1	94.9	390
AREA D Sample 12		17.50	0.11	0.5	0.02	0.058	0.25	4.6	9.8	3.30	959	0.19	2.13	2.1	60.1	440
AREA E Sample 1		17.15	0.09	0.8	0.22	0.054	0.13	3.7	10.5	3.57	1180	0.29	2.57	2.9	94.8	510
AREA E Sample 2		15.60	0.10	0.7	53.5	0.050	0.13	4.5	11.0	2.27	1050	0.50	2.41	2.3	83.7	630
AREA E Sample 3		15.60	0.10	0.8	60.1	0.048	0.13	4.1	12.7	2.09	944	0.69	2.28	2.4	86.9	700
AREA E Sample 4		16.60	0.09	0.7	0.41	0.048	0.19	4.5	12.5	3.37	1740	0.29	2.30	2.7	98.2	800
AREA E Sample 5		16.30	0.10	0.8	0.06	0.051	0.14	3.9	10.2	3.62	1100	0.23	2.34	2.5	103.5	510
AREA E Sample 6		16.15	0.09	0.7	0.05	0.052	0.11	3.4	9.0	3.60	1180	0.24	2.41	2.1	87.9	290
AREA F Sample 1		17.55	0.11	0.9	0.04	0.063	0.10	5.9	10.5	3.97	1280	0.40	1.95	3.0	181.0	340
AREA F Sample 2		16.25	0.11	0.7	0.17	0.061	0.16	7.0	10.7	4.19	1175	0.47	2.26	2.7	155.5	320
AREA F Sample 3		16.60	0.14	0.8	0.62	0.060	0.08	6.1	8.8	4.51	1110	0.47	2.10	2.4	188.0	290
AREA F Sample 4		16.85	0.11	0.9	0.01	0.073	0.08	5.7	8.8	4.61	1220	0.42	2.17	2.8	176.5	230

Comments: REE's may not be totally soluble in MS61 method. Detection limits on samples requiring dilutions for Hg-CV41, due to inteferences or high concentration levels, have been increased according to the dilution factor.

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Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.2	0.005	0.02	0.1
AREA A Sample 1		13.9	22.7	0.002	0.02	0.64	26.2	2	1.2	179.5	0.46	<0.05	3.0	0.653	0.22	1.0
AREA A Sample 2		6.7	17.0	<0.002	0.01	0.42	26.6	2	1.2	184.5	0.45	<0.05	3.0	0.703	0.16	1.0
AREA A Sample 3		9.3	27.1	<0.002	0.01	0.52	26.5	2	1.2	158.0	0.49	<0.05	3.3	0.664	0.27	1.1
AREA A Sample 4		7.0	23.5	<0.002	0.01	0.44	25.5	2	1.2	165.0	0.46	<0.05	3.0	0.659	0.19	1.1
AREA A Sample 5		31.1	26.0	<0.002	0.02	0.59	27.3	2	1.2	179.0	0.44	<0.05	2.8	0.627	0.15	0.9
AREA A Sample 6		29.4	17.4	<0.002	0.02	0.54	25.1	2	1.2	176.5	0.42	<0.05	2.5	0.626	0.17	0.9
AREA B Sample 1		9.6	20.2	<0.002	0.02	0.47	25.2	2	1.2	164.5	0.43	<0.05	2.7	0.628	0.18	1.0
AREA B Sample 2		18.0	20.9	<0.002	0.09	0.49	26.4	2	1.2	167.5	0.44	<0.05	2.7	0.666	0.19	1.0
AREA B Sample 3		10.7	24.1	0.003	0.02	0.57	27.2	2	1.2	165.0	0.39	<0.05	2.6	0.594	0.18	1.0
AREA B Sample 4		27.4	22.5	<0.002	0.02	0.51	26.1	2	1.2	174.5	0.41	<0.05	2.6	0.615	0.16	1.0
AREA B Sample 5		16.7	17.7	<0.002	0.02	0.53	26.3	2	1.2	174.0	0.42	<0.05	2.6	0.652	0.15	1.0
AREA B Sample 6		7.7	11.1	<0.002	0.02	0.46	26.5	2	1.3	181.5	0.43	<0.05	2.2	0.669	0.14	0.9
AREA C Sample 1		13.2	19.0	<0.002	0.01	0.43	25.6	2	1.2	168.5	0.44	<0.05	2.6	0.666	0.15	1.0
AREA C Sample 2		7.8	14.5	<0.002	0.01	0.41	24.7	2	1.2	169.5	0.45	<0.05	2.5	0.650	0.17	1.0
AREA C Sample 3		8.1	14.9	<0.002	0.01	0.41	25.2	2	1.2	167.0	0.44	<0.05	2.7	0.604	0.16	1.0
AREA C Sample 4		7.8	16.6	<0.002	0.02	0.41	24.4	2	1.2	165.5	0.42	<0.05	2.6	0.605	0.17	1.0
AREA C Sample 5		8.9	23.2	<0.002	0.01	0.48	24.9	2	1.2	168.0	0.42	<0.05	2.7	0.669	0.16	1.0
AREA C Sample 6		9.5	25.3	<0.002	0.01	0.47	25.4	3	1.2	162.0	0.44	<0.05	3.0	0.621	0.18	1.0
AREA D Sample 1		5.7	8.2	<0.002	0.02	0.15	31.7	2	0.7	198.5	0.18	<0.05	1.1	0.372	0.06	0.4
AREA D Sample 2		3.8	2.6	<0.002	0.01	0.11	25.9	2	0.8	197.0	0.11	<0.05	0.7	0.258	0.06	0.3
AREA D Sample 3		4.0	0.9	<0.002	0.01	0.07	25.1	2	0.7	241.0	0.06	<0.05	0.8	0.177	0.07	0.2
AREA D Sample 4		4.2	1.9	<0.002	0.01	0.07	26.7	2	0.8	190.0	0.07	<0.05	0.8	0.186	0.09	0.3
AREA D Sample 5		6.1	1.1	<0.002	0.01	0.09	27.0	2	0.8	232.0	0.07	<0.05	0.8	0.193	0.08	0.2
AREA D Sample 6		4.0	2.3	<0.002	<0.01	0.12	25.8	2	0.8	185.5	0.08	<0.05	0.7	0.205	0.24	0.3
AREA D Sample 7		6.8	2.0	<0.002	0.01	0.16	25.4	2	0.8	198.0	0.10	<0.05	0.7	0.213	0.39	0.4
AREA D Sample 8		5.2	1.0	<0.002	0.01	0.18	25.5	2	0.9	183.5	0.10	<0.05	0.9	0.244	0.13	0.4
AREA D Sample 9		12.4	3.4	<0.002	0.01	0.30	25.3	2	0.8	210.0	0.15	<0.05	0.8	0.308	1.08	0.5
AREA D Sample 10		4.1	2.5	<0.002	0.01	0.14	31.5	2	0.9	214.0	0.18	<0.05	1.5	0.341	0.08	0.5
AREA D Sample 11		3.7	6.3	<0.002	0.01	0.11	30.0	2	0.9	220.0	0.14	<0.05	1.1	0.343	0.08	0.4
AREA D Sample 12		1.5	4.3	<0.002	0.01	0.12	36.4	3	1.1	199.5	0.15	<0.05	0.3	0.646	0.03	0.4
AREA E Sample 1		3.7	1.1	<0.002	0.01	0.17	29.0	3	1.2	170.0	0.20	<0.05	0.8	0.553	0.04	0.3
AREA E Sample 2		4.1	3.2	<0.002	0.03	0.56	32.2	3	1.1	169.5	0.16	<0.05	0.5	0.569	0.04	0.2
AREA E Sample 3		5.1	2.4	<0.002	0.04	0.50	30.5	3	2.4	164.5	0.17	<0.05	0.5	0.617	0.05	0.2
AREA E Sample 4		5.2	4.5	<0.002	0.01	0.13	27.5	3	1.1	172.5	0.19	<0.05	0.9	0.469	0.06	0.3
AREA E Sample 5		2.8	1.3	<0.002	0.01	0.11	27.6	3	1.1	157.0	0.16	<0.05	1.1	0.430	0.03	0.3
AREA E Sample 6		2.4	0.8	<0.002	0.01	0.11	29.1	2	1.0	145.5	0.15	<0.05	0.7	0.432	<0.02	0.3
AREA F Sample 1		3.5	1.2	<0.002	0.02	0.17	34.3	3	1.3	177.0	0.20	<0.05	0.8	0.621	0.03	0.3
AREA F Sample 2		3.0	4.3	<0.002	0.01	0.20	37.7	<1	1.2	167.0	0.18	<0.05	1.6	0.558	0.04	0.4
AREA F Sample 3		3.9	1.0	<0.002	0.01	0.30	41.4	2	1.2	154.0	0.21	<0.05	0.9	0.579	0.05	0.3
AREA F Sample 4		2.5	3.2	<0.002	0.01	0.25	37.0	2	1.3	184.5	0.20	<0.05	0.8	0.661	0.03	0.4

Comments: REE's may not be totally soluble in MS61 method. Detection limits on samples requiring dilutions for Hg-CV41, due to inteferences or high concentration levels, have been increased according to the dilution factor.

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15055 SW SEQUOIA PKWY STE140
PORTLAND OR 97224

Finalized Date: 22-AUG-2007
Account: GEOENG

Project: PCGP-RedCloudMine 8169-021-15

CERTIFICATE OF ANALYSIS RE07077668

Sample Description	Method Analyte Units LOR	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
AREA A Sample 1		181	0.9	23.9	117	88.0
AREA A Sample 2		184	0.6	22.7	103	87.8
AREA A Sample 3		193	0.7	25.7	122	97.0
AREA A Sample 4		176	0.6	24.1	104	92.6
AREA A Sample 5		166	0.7	24.9	113	99.2
AREA A Sample 6		171	0.7	22.9	106	82.3
AREA B Sample 1		169	0.6	23.2	102	84.0
AREA B Sample 2		179	6.4	24.3	109	85.7
AREA B Sample 3		166	0.5	26.7	100	91.3
AREA B Sample 4		165	0.4	24.6	95	88.8
AREA B Sample 5		173	0.8	25.0	96	87.4
AREA B Sample 6		175	0.4	23.0	98	87.0
AREA C Sample 1		171	0.4	24.5	96	93.3
AREA C Sample 2		162	0.4	22.7	88	92.8
AREA C Sample 3		161	0.5	22.3	88	93.7
AREA C Sample 4		164	0.4	21.7	90	94.6
AREA C Sample 5		176	0.7	22.0	98	96.5
AREA C Sample 6		171	0.6	24.1	99	98.8
AREA D Sample 1		171	<0.1	15.6	64	49.7
AREA D Sample 2		132	<0.1	13.9	44	10.1
AREA D Sample 3		131	<0.1	12.3	41	7.7
AREA D Sample 4		140	<0.1	14.0	45	8.7
AREA D Sample 5		146	<0.1	12.7	40	9.2
AREA D Sample 6		147	<0.1	15.2	52	9.1
AREA D Sample 7		125	<0.1	14.3	73	11.4
AREA D Sample 8		134	<0.1	13.8	50	12.5
AREA D Sample 9		140	<0.1	14.1	95	17.3
AREA D Sample 10		136	<0.1	18.7	50	15.7
AREA D Sample 11		156	<0.1	18.9	60	13.4
AREA D Sample 12		208	<0.1	31.1	68	8.3
AREA E Sample 1		179	0.1	19.7	75	18.8
AREA E Sample 2		171	0.1	25.1	63	13.6
AREA E Sample 3		177	0.1	22.3	102	14.9
AREA E Sample 4		146	<0.1	19.7	87	18.2
AREA E Sample 5		163	0.1	18.1	60	18.9
AREA E Sample 6		164	<0.1	17.6	60	14.9
AREA F Sample 1		191	0.2	26.9	81	20.5
AREA F Sample 2		189	0.2	24.0	77	15.5
AREA F Sample 3		198	0.2	30.4	74	16.1
AREA F Sample 4		204	0.2	27.5	73	18.2

Comments: REE's may not be totally soluble in MS61 method. Detection limits on samples requiring dilutions for Hg-CV41, due to inteferences or high concentration levels, have been increased according to the dilution factor.

TABLE 4

Results of ALS Chemex Geochemical Testing dated November 16, 2009

ALS Chemex
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To: **UMPQUA NATIONAL FOREST**
UMPQUA NATIONAL FOREST
2900 NW STEWART PKY
ROSEBURG OR 97471

Finalized Date: 16-NOV-2009
Account: BROLAR

Project: East Fork Cow Creek

CERTIFICATE OF ANALYSIS RE09120235

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2	ME-MS61 Fe % 0.01
EFCC-S-1		0.08	0.06	8.15	9.8	770	1.41	0.11	1.22	0.04	41.1	7.2	207	4.93	15.1	2.03
EFCC-S-2		0.08	0.07	7.23	8.9	820	1.10	0.09	1.41	0.09	33.8	9.2	205	3.48	11.5	1.58
EFCC-S-3		0.22	0.03	9.09	9.2	600	1.30	0.15	1.17	0.08	44.0	16.4	316	3.82	25.6	4.50
EFCC-S-4		0.28	0.08	7.04	8.0	700	1.15	0.13	1.40	0.06	50.4	6.2	33	3.71	12.0	2.01
EFCC-S-5		0.18	0.03	9.58	13.2	500	1.25	0.18	0.70	0.04	70.2	6.5	42	6.40	15.5	3.18
EFCC-S-6		0.12	0.09	9.09	11.3	810	1.69	0.13	1.32	0.10	21.9	4.8	24	5.05	13.3	1.93
EFCC-SS-1		0.18	0.04	8.62	9.7	290	1.21	0.10	2.20	0.11	27.4	25.8	154	2.24	26.2	5.98
EFCC-SS-2		0.28	0.02	8.31	7.6	170	0.79	0.05	3.10	0.09	19.00	43.8	584	1.32	43.0	6.55
EFCC-SS-3		0.20	0.04	8.95	10.9	320	1.04	0.06	1.95	0.13	33.2	22.4	84	1.84	33.2	6.51

***** See Appendix Page for comments regarding this certificate *****

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2900 NW STEWART PKY
ROSEBURG OR 97471

Finalized Date: 16-NOV-2009
Account: BROLAR

Project: East Fork Cow Creek

CERTIFICATE OF ANALYSIS RE09120235

Sample Description	Method / Analyte / Units / LOR	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2	ME-MS61 P ppm 10	ME-MS61 Pb ppm 0.5
EFCC-S-1		16.75	0.08	2.6	0.030	1.79	24.6	17.1	0.34	1080	0.71	1.78	9.5	25.4	200	14.4
EFCC-S-2		14.35	0.09	2.2	0.025	1.84	18.6	18.9	0.29	2000	0.54	1.75	9.9	26.4	340	16.6
EFCC-S-3		21.4	0.13	4.7	0.075	1.23	24.5	29.0	1.04	1160	1.37	0.88	11.4	56.2	330	11.2
EFCC-S-4		15.60	0.10	4.3	0.046	1.04	26.9	25.9	0.44	943	0.80	1.35	12.1	8.3	260	13.6
EFCC-S-5		21.6	0.10	3.7	0.053	1.02	34.0	19.1	0.42	251	1.51	0.99	9.9	18.4	250	14.0
EFCC-S-6		21.9	0.07	1.9	0.029	1.43	13.0	40.2	0.28	402	0.87	2.10	7.8	21.8	420	17.5
EFCC-SS-1		21.3	0.11	3.5	0.090	0.53	12.1	16.0	1.42	1370	1.38	1.00	7.6	82.7	650	7.9
EFCC-SS-2		17.45	0.09	2.1	0.060	0.34	7.6	12.8	4.32	1360	0.54	1.25	5.0	342	420	4.9
EFCC-SS-3		22.6	0.10	4.0	0.074	0.44	13.9	16.0	0.83	1550	2.13	0.79	8.5	34.9	880	8.2

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Project: East Fork Cow Creek

CERTIFICATE OF ANALYSIS RE09120235

Sample Description	Method Analyte Units LOR	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.2	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1
EFCC-S-1		88.1	<0.002	0.01	1.16	7.2	2	1.6	167.0	0.74	<0.05	9.7	0.352	0.64	3.0	43
EFCC-S-2		74.7	<0.002	0.01	1.12	5.5	2	1.3	168.0	0.75	<0.05	6.6	0.349	0.56	2.4	37
EFCC-S-3		64.1	<0.002	0.01	0.90	22.8	2	1.9	124.0	0.78	<0.05	7.6	0.616	0.40	5.0	116
EFCC-S-4		54.6	<0.002	0.01	1.07	9.7	2	1.3	190.0	0.88	<0.05	8.2	0.403	0.46	3.0	37
EFCC-S-5		82.5	<0.002	0.01	1.24	12.3	2	2.2	98.1	0.60	<0.05	15.5	0.320	0.57	4.2	56
EFCC-S-6		60.8	<0.002	0.01	1.00	5.1	1	1.7	185.5	0.75	<0.05	6.0	0.214	0.44	1.6	31
EFCC-SS-1		22.6	<0.002	0.01	0.53	27.6	1	1.5	159.0	0.57	<0.05	3.3	0.706	0.20	1.3	177
EFCC-SS-2		7.0	<0.002	0.01	0.29	27.3	1	1.2	139.5	0.36	<0.05	1.6	0.627	0.11	0.6	178
EFCC-SS-3		19.9	<0.002	0.02	0.56	27.8	1	1.5	186.0	0.61	0.05	3.2	0.768	0.19	1.1	192

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Finalized Date: 16-NOV-2009
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CERTIFICATE OF ANALYSIS RE09120235

Sample Description	Method / Analyte / Units / LOR	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5	Hg-CV41 Hg ppm 0.01
EFCC-S-1		1.5	13.8	50	81.8	0.08
EFCC-S-2		1.7	12.8	60	75.0	0.07
EFCC-S-3		1.1	27.5	84	155.0	0.04
EFCC-S-4		1.3	24.3	61	172.0	0.03
EFCC-S-5		1.9	21.8	59	105.0	0.09
EFCC-S-6		1.8	8.4	82	55.9	0.05
EFCC-SS-1		0.8	22.4	103	123.5	0.07
EFCC-SS-2		0.8	19.3	87	74.2	0.29
EFCC-SS-3		0.8	25.0	109	143.5	0.06

***** See Appendix Page for comments regarding this certificate *****