

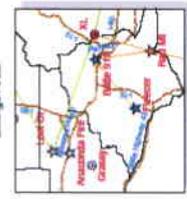
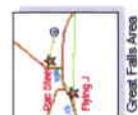
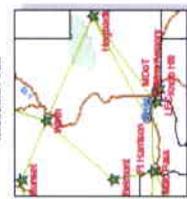
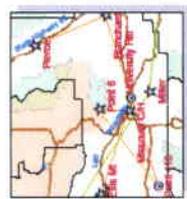
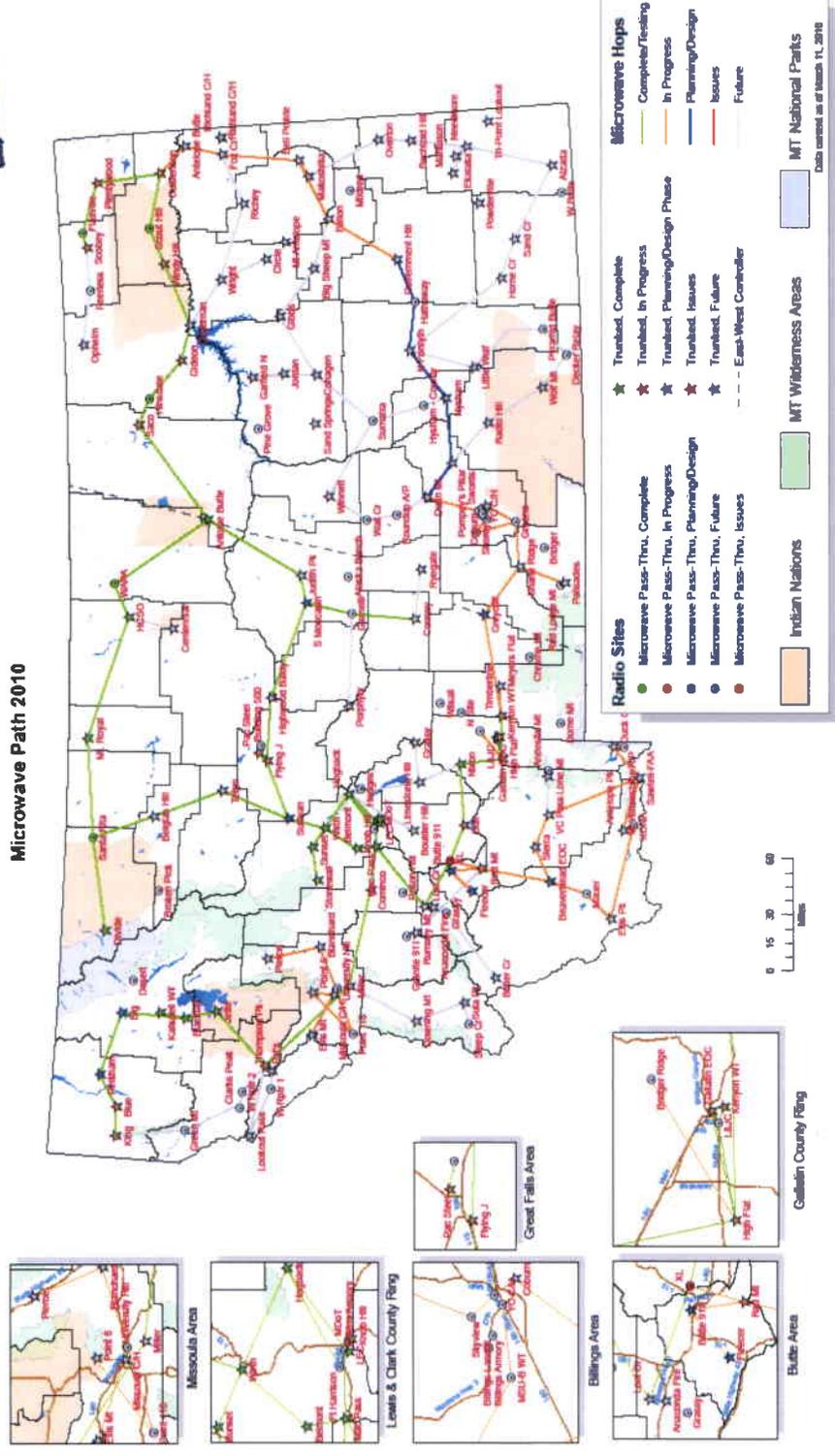
# **Antelope Butte Communication Site**

## **Appendix A: Site Maps**



# Interoperability Montana

Microwave Path 2010



Radio Sites		Microwave Hops	
●	Microwave Pass-Thru, Complete	★	Trunked, Complete
●	Microwave Pass-Thru, In Progress	★	Trunked, In Progress
●	Microwave Pass-Thru, Planning/Design	★	Trunked, Planning/Design Phase
●	Microwave Pass-Thru, Future	★	Trunked, Issues
●	Microwave Pass-Thru, Issues	★	Trunked, Future
●		---	East-West Corridor
—		—	Complete/Testing
—		—	In Progress
—		—	Planning/Design
—		—	Issues
—		—	Future

■	Indian Nations	■	MT Wilderness Areas	■	MT National Parks
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Data current as of March 11, 2010



Figure 2.3: Coverage Map

Radio coverage provided by proposed Antelope Butte site

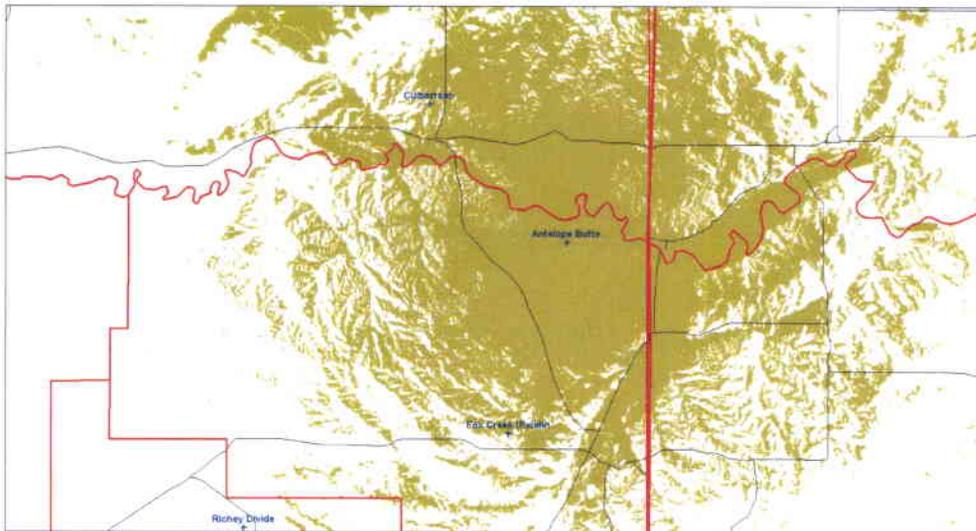
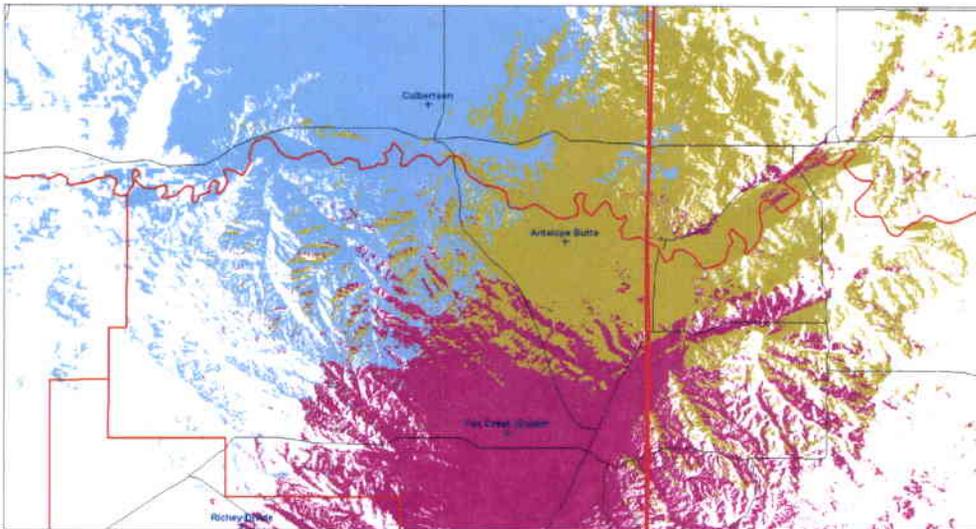
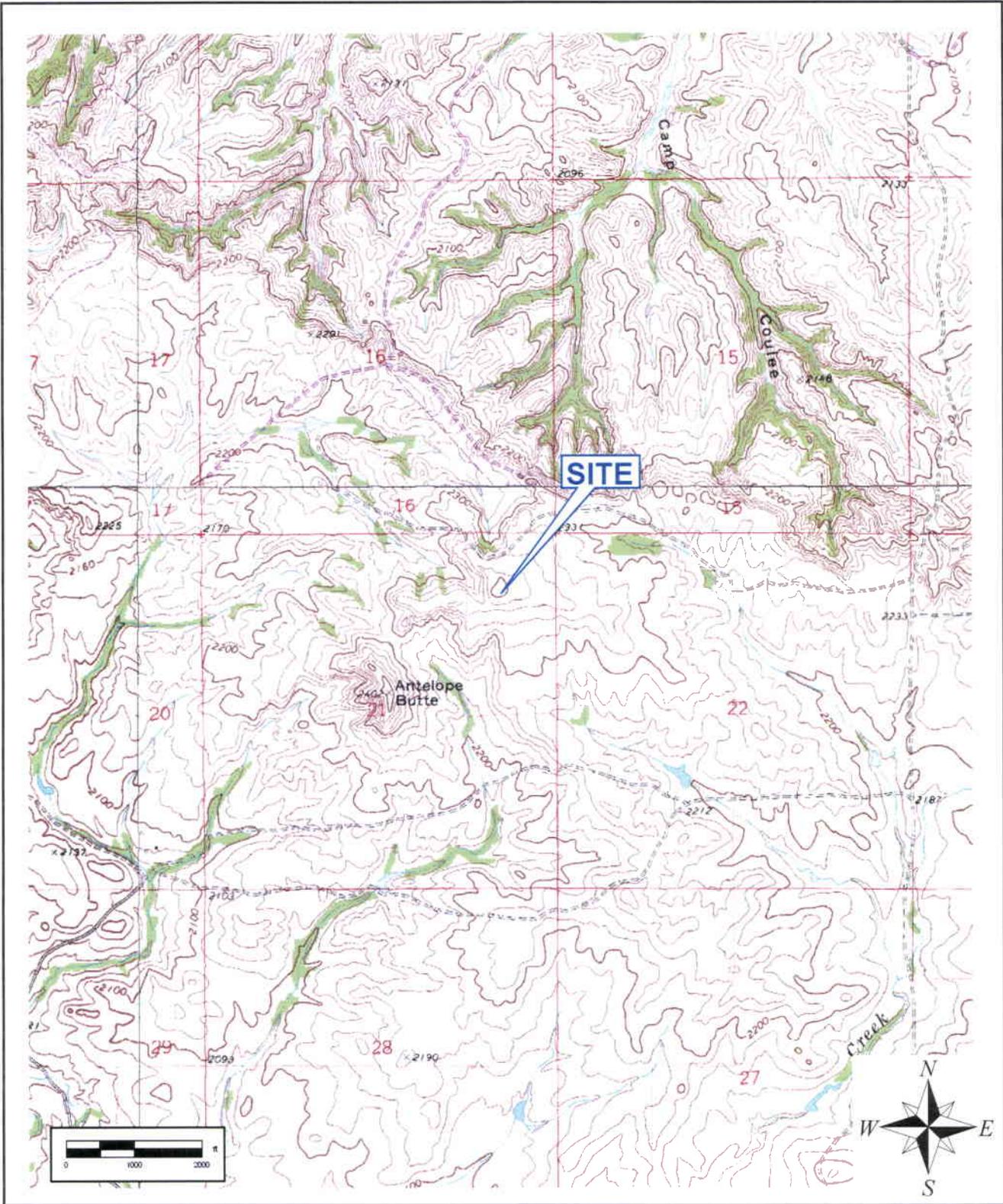


Figure 2.4: Propagation Map

Radio coverage provided by Culberson(Light Blue), Antelope Butte(green), and Fox Creek(Lavendar) Sites.



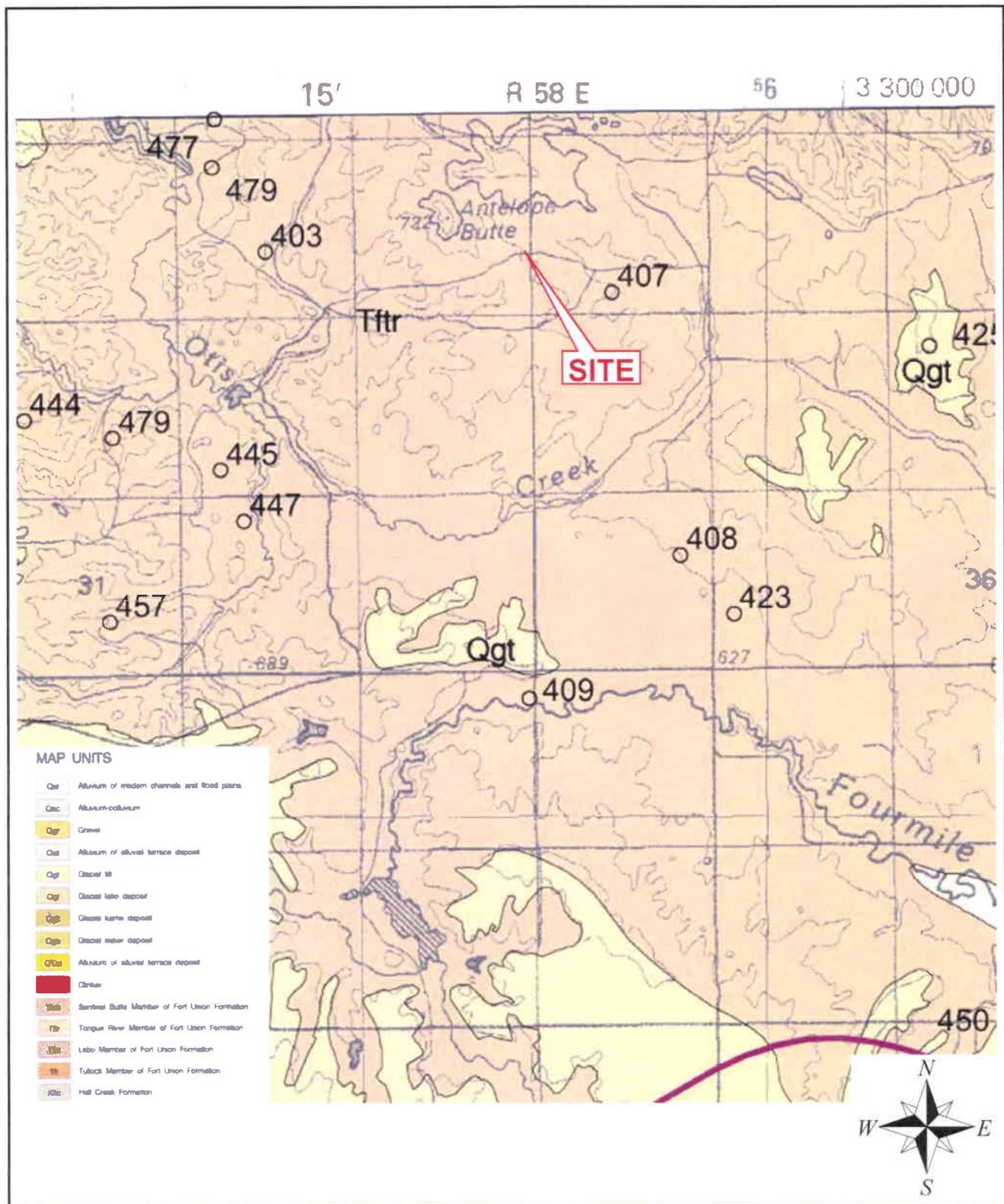


USGS Topographic Map - Fairview NW, MT Quadrangle



NEPA Site Assessment  
 Antelope Butte MT Tower Site  
 Richland County, Montana

Figure No.: 2  
 Date: 07/07/10  
 DEA No.: 21002006



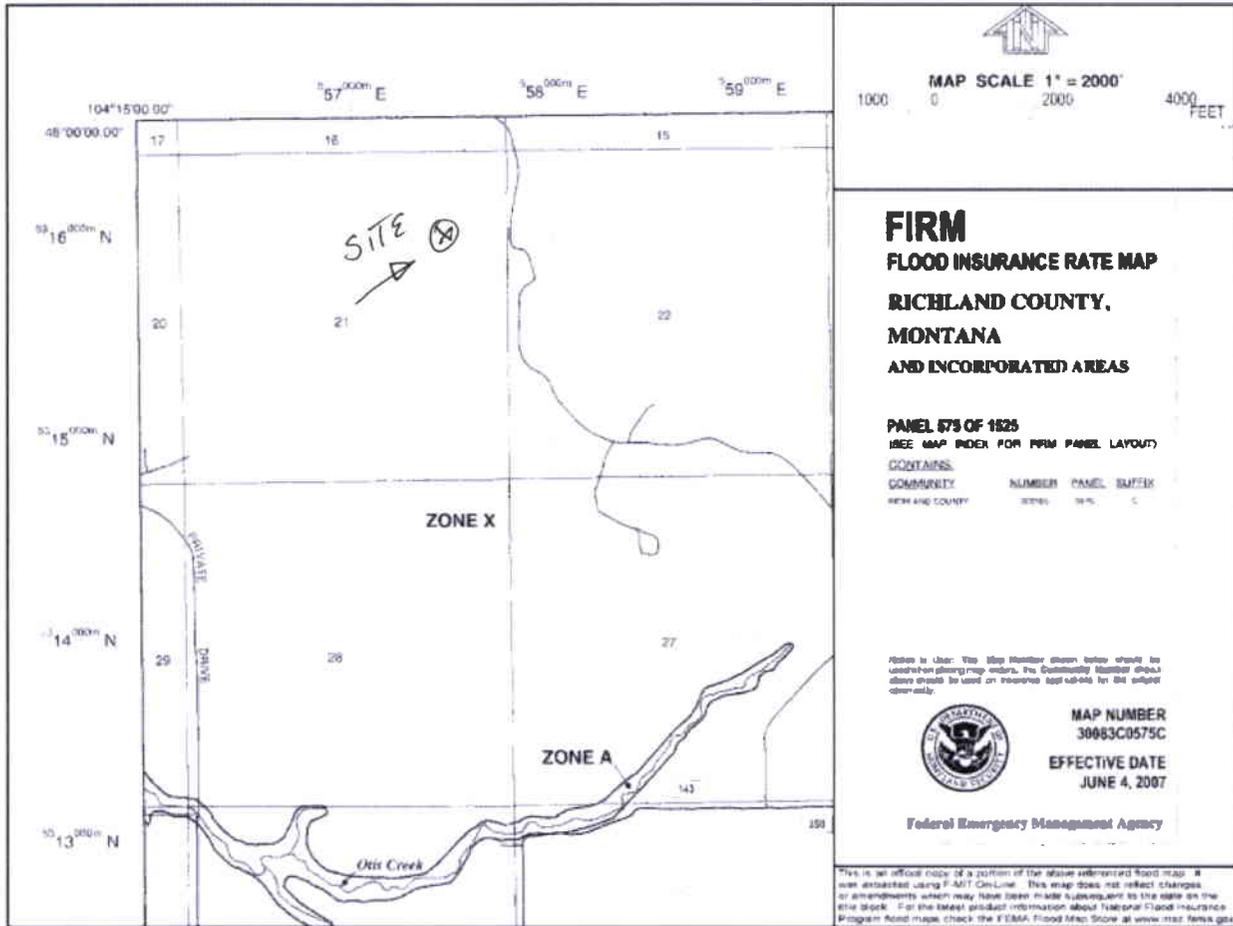
Geologic and Structure Contour Map of the Sidney 30' x 60' Quadrangle

NEPA Site Assessment  
 Antelope Butte MT Tower Site  
 Richland County, Montana

Figure No.: 3  
 Date: 07/07/10  
 DEA No.: 21002006

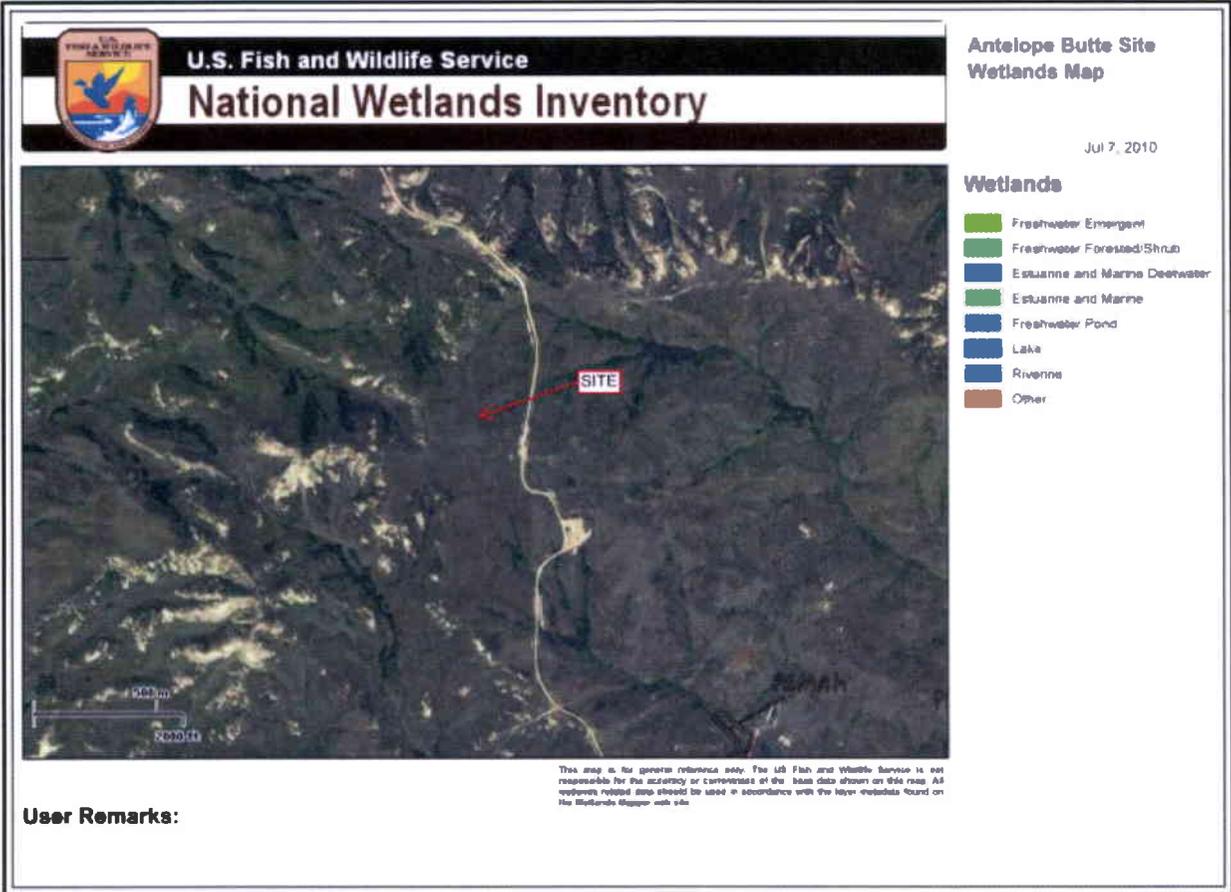
FEMA's Flood Insurance Rate Maps (FIRMs):

<http://www.fema.gov/hazard/map/firm.shtm>

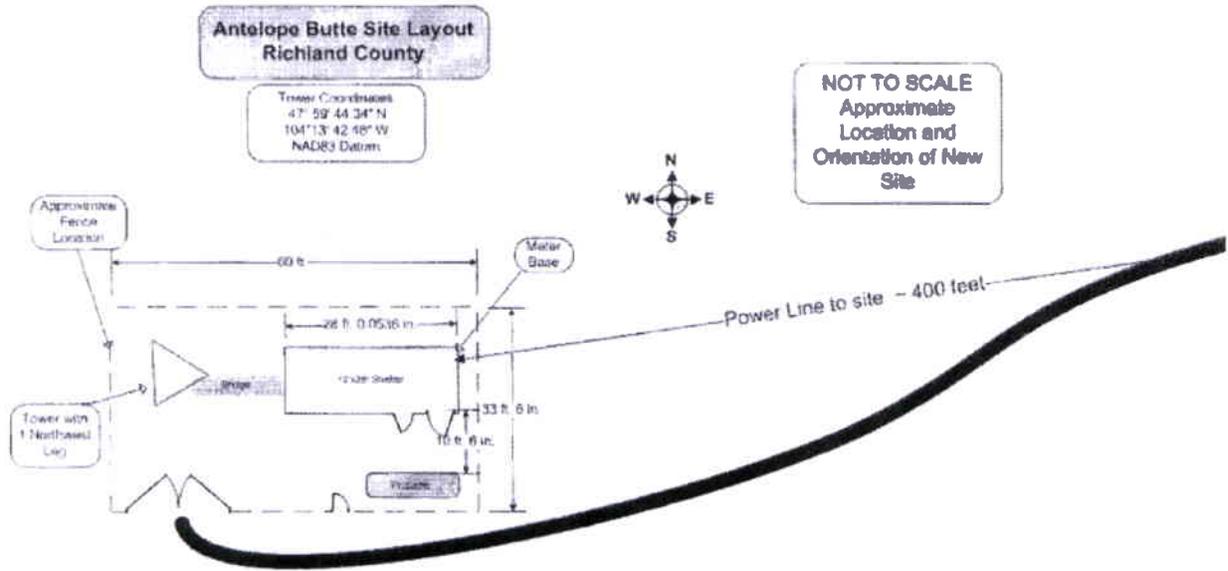


National Wetlands Inventory:

<http://www.fws.gov/wetlands/Data/Mapper.html>

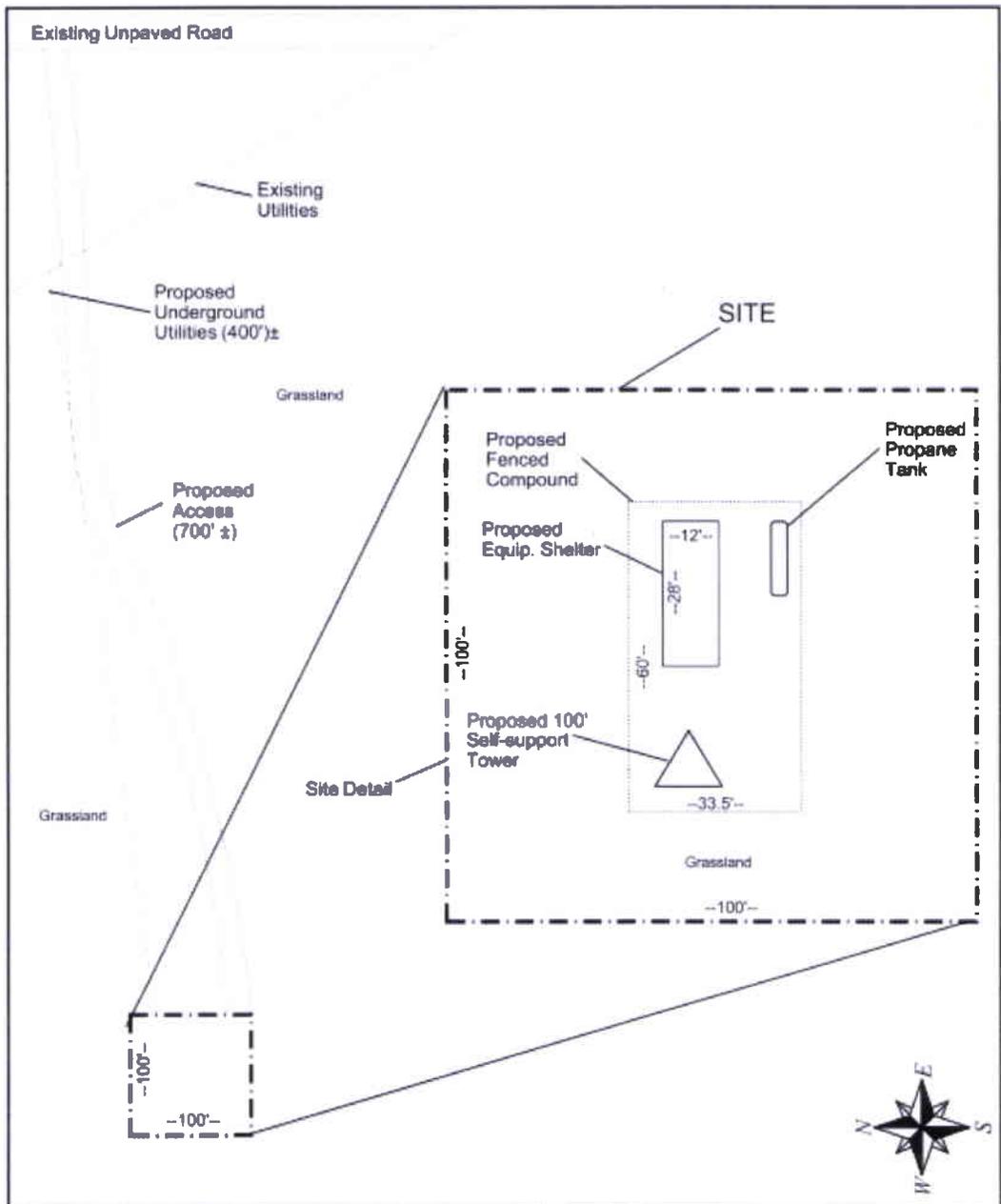


Attachment A – Site Map



**Site Layout Diagram**

**IFB#072109B, Antelope Butte Radio Site, Tower and Installation,**



**SITE PLAN**

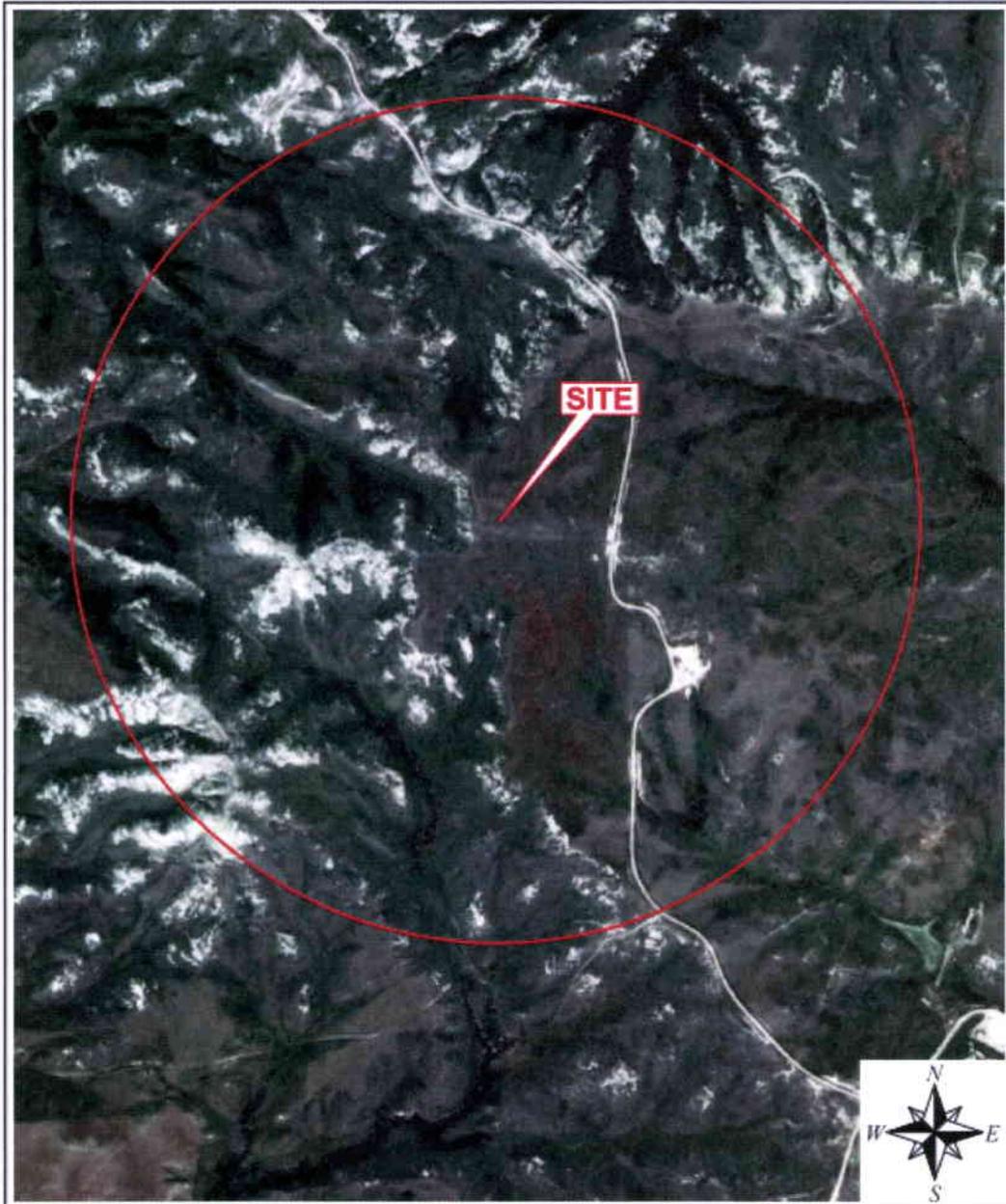


Cultural Resource Survey  
 Antelope Butte Tower Site  
 Richland County, Montana

Figure No.: 2  
 Date: 05/24/10  
 DEA No.: 21002006

# **Antelope Butte Communication Site**

## **Appendix B: Photographs**



2007 Aerial Photograph w/ 1/2 Mile Visual APE



Cultural Resource Survey  
Antelope Butte MT Tower Site  
Richland County, Montana

Figure No.: 3  
Date: 05/24/10  
DEA No.: 21002006



Access Road

Commercial Utility  
Power Line

Alternative 2:  
Approximate location  
of proposed site.

Alternative 1:  
Approximate location  
of proposed site.

**Color ground site photo:**



Photo 1 - View to proposed project location, facing north.



Photo 2 - View to proposed project location, facing south.



Photo 3 - View to proposed project location, facing east.



Photo 4 - View to proposed project location, facing west.



Photo 5 - View from the project location, facing north.



Photo 6 - View from the project location, facing south.



Photo 7 - View from the project location, facing east.



Photo 8 - View from the project location, facing west.



Photo 9 - View from the project location, facing southeast.



Photo 10 - View of the proposed access and utility easements, facing northeast.



Photo 11 - View of the proposed access and utility easements, facing southwest.



Photo 12 - View of the proposed access and utility easements from existing unimproved road, facing southwest.



Photo 13 - View of existing unimproved road located east of proposed project location, facing north,



Photo 14 - View of existing unimproved road located east of proposed project location, facing south.

# **Antelope Butte Communication Site**

## **Appendix C: Correspondence**

**DYNAMIC  
ENVIRONMENTAL  
ASSOCIATES, INC.**

A PROFESSIONAL ENVIRONMENTAL CONSULTING FIRM

2010052402

RECEIVED  
MAY 2  
SHPO

By: Certified Mail

May 18, 2010

Dr. Mark F. Baumler, SHPO  
State Historic Preservation Office  
1410 8th Avenue  
P.O. Box 201202  
Helena, MT 59620-1202

**CONCUR  
MONTANA SHPO**

*DATE: 5/20/10 SIGNED: [Signature]*

Re: Section 106 Review  
Interoperability Montana  
Antelope Butte Site  
Sidney, Richland County, Montana  
DEA No. 21002006

*Josef  
FCC  
Dynamic ENV  
Interoperability  
Antelope Butte Site  
RL Co*

Dear Dr. Baumler:

On behalf of Interoperability Montana, Dynamic Environmental Associates, Inc. (DEA) is requesting a review of potential impacts to historic properties that may result from the construction of a communications tower facility at the above location. Federal Communications Commission's (FCC) regulations require that a Section 106 Review be completed in accordance with the *National Historic Preservation Act (NHPA)* and the *Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission (NPA)*.

DEA is submitting for your review the enclosed FCC-Form 620 for the project site. We have concluded that there will be No Effect on historic or cultural resources as a result of this project, and we request your concurrence.

Very truly yours,  
Dynamic Environmental  
Associates, Inc.

*[Signature]*

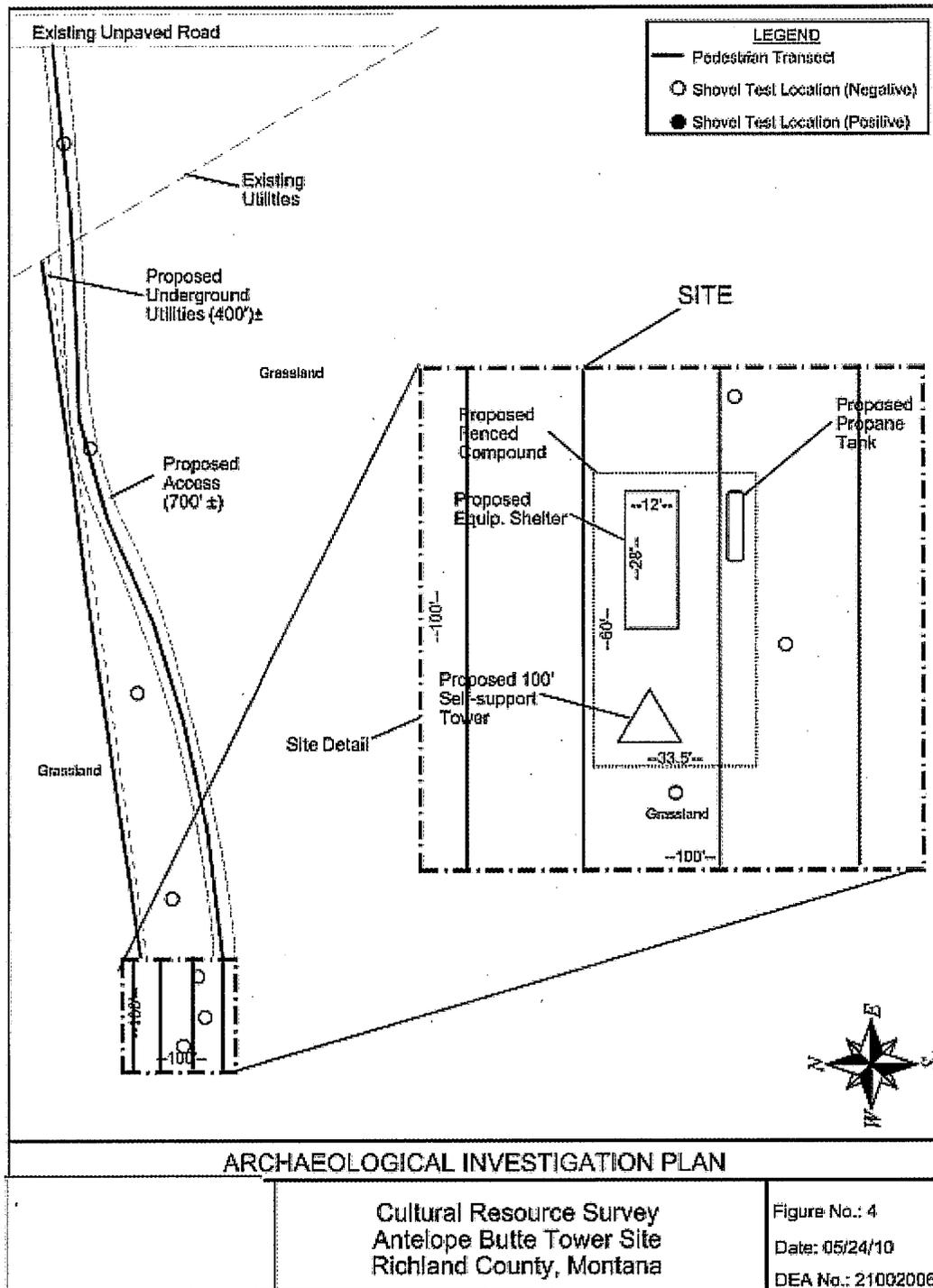
Virginia M. Janssen  
Principal Investigator

enc.:

21002006 - SHPO Letter

3850 Lake Street, Suite C, Macon, GA 31204

Phone (478) 745-7740 • Fax (478) 745-7415



## Admin

---

**From:** towernotifyinfo@fcc.gov  
**Sent:** Tuesday, February 16, 2010 5:02 PM  
**To:** Admin  
**Subject:** Proposed Tower Structure Info - Email ID #2410411

Dear Virginia M Janssen,

Thank you for submitting a notification regarding your proposed construction via the Tower Construction Notification System. Note that the system has assigned a unique Notification ID number for this proposed construction. You will need to reference this Notification ID number when you update your project's Status with us.

Below are the details you provided for the construction you have proposed:

Notification Received: 02/16/2010

Notification ID: 60702

Tower Owner Individual or Entity Name: Interoperability Montana (21002006)

Consultant Name: Virginia M Janssen

Street Address: c/o Dynamic Environmental Associates, Inc.  
3850 Lake Street, Suite C

City: Macon

State: GEORGIA

Zip Code: 31204

Phone: 478-745-7740

Email: [NATC@DynamicEnvironmental.com](mailto:NATC@DynamicEnvironmental.com)

Structure Type: UTOWER - Unguyed - Free Standing Tower

Latitude: 47 deg 59 min 44.3 sec N

Longitude: 104 deg 13 min 42.5 sec W

Location Description: @ 2.2 miles NW of the intersection of CR 350 & CR 143

City: Sidney

State: MONTANA

County: RICHLAND

Ground Elevation: 727.6 meters

Support Structure: 30.5 meters above ground level

Overall Structure: 30.5 meters above ground level

Overall Height AMSL: 758.1 meters above mean sea level

## Admin

---

**From:** towernotifyinfo@fcc.gov  
**Sent:** Friday, February 19, 2010 9:29 AM  
**To:** Admin  
**Cc:** kim.pristello@fcc.gov; diane.dupert@fcc.gov  
**Subject:** NOTICE OF ORGANIZATION(S) WHICH WERE SENT PROPOSED TOWER CONSTRUCTION NOTIFICATION INFORMATION - Email ID #2413164

Dear Sir or Madam:

Thank you for using the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS). The purpose of this electronic mail message is to inform you that the following authorized persons were sent the information you provided through TCNS, which relates to your proposed antenna structure. The information was forwarded by the FCC to authorized TCNS users by electronic mail and/or regular mail (letter).

Persons who have received the information that you provided include leaders or their designees of federally-recognized American Indian Tribes, including Alaska Native Villages (collectively "Tribes"), Native Hawaiian Organizations (NHOs), and State Historic Preservation Officers (SHPOs). For your convenience in identifying the referenced Tribes and in making further contacts, the City and State of the Seat of Government for each Tribe and NHO, as well as the designated contact person, is included in the listing below. We note that Tribes may have Section 106 cultural interests in ancestral homelands or other locations that are far removed from their current Seat of Government. Pursuant to the Commission's rules as set forth in the Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission (NPA), all Tribes and NHOs listed below must be afforded a reasonable opportunity to respond to this notification, consistent with the procedures set forth below, unless the proposed construction falls within an exclusion designated by the Tribe or NHO. (NPA, Section IV.F.4).

The information you provided was forwarded to the following Tribes and NHOs who have set their geographic preferences on TCNS. If the information you provided relates to a proposed antenna structure in the State of Alaska, the following list also includes Tribes located in the State of Alaska that have not specified their geographic preferences. For these Tribes and NHOs, if the Tribe or NHO does not respond within a reasonable time, you should make a reasonable effort at follow-up contact, unless the Tribe or NHO has agreed to different procedures (NPA, Section IV.F.5). In the event such a Tribe or NHO does not respond to a follow-up inquiry, or if a substantive or procedural disagreement arises between you and a Tribe or NHO, you must seek guidance from the Commission (NPA, Section IV.G). These procedures are further set forth in the FCC's Declaratory Ruling released on October 6, 2005 (FCC 05-176).

1. Cultural Resources Director Ambrose Little Ghost - Spirit Lake Nation - Fort Totten, ND - electronic mail.

Details: If the applicant/tower builder receives no response from the Spirit Lake Nation within 30 days after notification through TCNS, the Spirit Lake Nation has no interest in participating in pre-construction review for the proposed site. The Applicant/tower builder, however, must IMMEDIATELY notify the Spirit Lake Nation in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.

If the applicant/tower builder receives no response from the Spirit Lake Nation within 30 days after notification through TCNS, the Spirit Lake Nation has no interest in participating

in pre-construction review for the proposed site. The Applicant/tower builder, however, must immediately notify the Spirit Lake Nation in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.

2. Cultural Resources Consultant Brian L Molyneaux PhD - Lower Brule Sioux Tribe - Lower Brule, SD - electronic mail and regular mail

Details: Please Note: The Lower Brule Sioux Tribe, Cultural Resources Office, does not subscribe to the 30-day deadline for tower notification responses. Under ordinary circumstances, the Tribe will respond within 7 days, but reserves the right to respond without prejudice more than 30 days after notification if made necessary by the nature of the data received for the proposed consultation, or by internal scheduling and workload contingencies.

The consultation process is greatly expedited if: a) documents are submitted via email in pdf format; and 2) the subject line contains the TCNS#.

The Tribe requests the following information from applicants proposing the construction of telecommunications towers and ancillary structures within our traditional territory.

IF THE PROJECT IS: a rebuild, co-locate, antenna on existing (non-tower) structure, is within a highway right-of-way, or within an urban (built-up) area, the applicant need only send a brief letter with a general description of the undertaking, a map, and at least one site photograph, showing the project site in its landscape setting.

ALL OTHER PROJECTS REQUIRE THE FOLLOWING DETAILS:

1. Color photographs towards the proposed locality, sufficient to show the topographic formation at a distance and the Area of Potential Effect. Each photograph should have the actual location of the tower marked.
2. A state-wide map showing the regional location (i.e. with towns, cities, roads and major geographic features).
3. A topographic map (derived from the USGS 7.5 Topographic Quadrangle series) zoomed out to a scale of about 1:20,000 to clearly show the landscape (i.e. with the location in a surrounding area of at least four square miles).
4. A map showing the locations of any known cultural sites of indigenous peoples (i.e., archaeological sites) within a half-mile of the APE.
5. If relevant, a map showing the location of any indigenous cultural site (i.e., archaeological site) within or adjacent to the APE in relation to the locations of proposed structures.
6. A succinct description of the site of the proposed undertaking with bulleted descriptions of local topography, typical vegetation, existing disturbances, archaeological survey results (i.e. as per Section 106, NHPA), and a characterization by the applicant's archaeologist of the potential for buried cultural resources or Traditional Cultural Properties.

Applicants should send this information in a pdf via email to Dr. Brian L. Molyneaux, Cultural Resources Office, Lower Brule Sioux Tribe (BrianMolyneaux@brule.bia.edu).

3. THPO Perry Brady - Three Affiliated Tribes - New Town, ND - electronic mail and regular mail

Details: Please forward a section map via e-mail for each proposed site. The map should include the county, range and township of the proposed site. The map should also include a legal land description for the proposed site. Please e-mail this information to Pete Coffey, Asst. THPO, at pcoffey@mhanation.com.

4. Program Planning Coordinator Alfred Slater - Trenton Indian Service Area - Trenton, ND - electronic mail

5. Acting THPO Lynette Grey - Cheyenne-Arapaho Tribes of Oklahoma - Concho, OK - electronic mail and regular mail

6. Tribal Historic Preservation Officer John Murray - Blackfeet Nation - Browning, MT - regular mail

Details: If the Applicant receives no response from the Blackfeet Nation within 30 days after notification through TCNS, the Blackfeet Nation has no interest in participating in pre-construction review for the proposed site. The Applicant, however, must notify the Blackfeet Nation in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.

7. THPO Dale Old Horn - Crow Tribe - Crow Agency, MT - electronic mail and regular mail

8. Environmental Manager Ina Nez Perce - Fort Belknap Community Council - Harlem, MT - electronic mail

Details: If the Applicant/tower constructor has not received a response within 30 days of the TCNS notification, the Gros Ventre and Assiniboine Tribes of the Fort Belknap Indian Community have no interest in the site. If the Applicant discovers human remains or archaeological resources, the Applicant must immediately stop construction and notify the affected local Tribes and the Gros Ventre and Assiniboine Tribes of the Fort Belknap Indian Community in accordance with Commission rules (See 47 C.F.R. s 1.1312(d) and Section IX of the NPA).

The Gros Ventre and Assiniboine Tribes of the Fort Belknap Indian Community are not interested in participating in pre-construction review on projects where the proposed antenna or tower will be collocated on an existing tower, building or structure.

If the applicant/tower builder receives no response from the Fort Belknap Community Council within 30 days after notification through TCNS, the Fort Belknap Community Council has no interest in participating in pre-construction review for the proposed site. The Applicant/tower builder, however, must immediately notify the Fort Belknap Community Council in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.

9. Cultural Resources Dept. Director Curley Youpee - Fort Peck Tribes - Poplar, MT - electronic mail and regular mail

Details: For each proposed tower site, the Fort Peck Tribes (Assiniboine and Sioux) require that any assessments be performed by experts who meet the Secretary of the Interior's qualifications. The Fort Peck Tribes also require the following documents: 1.) An ETHNOGRAPHIC REPORT containing the history and prehistory of the area surrounding the proposed site, to include the plants and fauna of the area and the migration of the Assiniboine and Sioux Tribes; 2.) A listing of any archaeological sites listed on the National Register which are in this area (this information may be obtained from the State Historic Preservation Office); and 3.) Any archaeological site data that is registered with the State Historic Preservation Office, but may not be listed on the National Register. For all of the above, the search area should be within a 3 mile radius of the proposed site.

Please allow the Fort Peck Tribes a minimum of 30 days after sending this information for the Fort Peck Tribes to respond to you. Please send ONLY HARD COPIES of the aforementioned materials VIA US MAIL OR FEDERAL EXPRESS TO: Curley Youpee, Director, Cultural Resources Department at P.O. Box 1027, Poplar, Montana 59255. To avoid delay, please provide this information as soon as possible. Applications will NOT be processed if the aforementioned requests are not met. We MUST have hard copies of this information to review each proposed site.

10. President Anthony Addison Sr - Northern Arapaho - Fort Washakie, WY - regular mail  
Details: If the Applicant/tower builder receives no response from the Northern Arapaho Tribe within 30 days after notification through TCNS, the Northern Arapaho Tribe has no interest in participating in pre-construction review for the site. The Applicant/tower builder, however, must IMMEDIATELY notify the Northern Arapaho Tribe in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.

11. Board Member at Large Scott Larsen - Upper Sioux Community of Minnesota - Granite Falls, MN - electronic mail and regular mail

12. Coordinator Carolyn Smith - Shoshone-Bannock Tribes, Cultural Resources - Fort Hall, ID - electronic mail and regular mail

Details: The Shoshone-Bannock Tribes require the following information for EVERY proposed site, unless the proposed project is a collocation or is on already disturbed ground (we do not need any information on collocations or projects on already disturbed ground):

1. A complete identification survey (a Phase 1 Archaeological Survey) for the proposed site.
2. The past land uses of the proposed site.
3. A topo map with the proposed site marked with an 'X' or an arrow.
4. Any written information regarding Native American Tribes using the proposed area.
5. A copy of the applicant/tower builder's 'stop work order,' which the Shoshone-Bannock Tribes will keep on file at our offices. (In the event of an inadvertent find, the applicant/tower builder must stop all ground-disturbing work and immediately notify the Shoshone-Bannock Tribes Cultural Resources office, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.)

Thirty days AFTER you have provided the Shoshone-Bannock Tribes with the aforementioned information, if you have not received a response from the Shoshone-Bannock Tribes Cultural Resources Office, the Shoshone-Bannock Tribes have no interest in participating in pre-construction review for the proposed site. As noted in #5 above, however, in the event of an inadvertent find during construction, please cease all ground-disturbing activity and contact us immediately. Thank you!

Sincerely,  
Shoshone-Bannock Tribes Cultural Resources Office P.O. Box 306 Fort Hall, Idaho  
83203  
(208) 478-3706  
jbuckhouse@shoshonebannocktribes.com

13. THPO Alvin Windy Boy - Chippewa Creek Tribe of the Rocky Boy's Reservation - Box Elder, MT - electronic mail and regular mail

14. THPO Lenwood Tallbull - Northern Cheyenne Tribe - Lame Deer, MT - electronic mail and regular mail

If the applicant/tower builder receives no response from the Northern Cheyenne Tribe within 30 days after notification through TCNS, the Northern Cheyenne Tribe has no interest in participating in pre-construction review for the proposed site. The Applicant/tower builder, however, must immediately notify the Northern Cheyenne Tribe in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.

15. THPO Brady Grant - Turtle Mountain Band of Chippewa - Belcourt, ND - electronic mail and regular mail

Details: If the Applicant receives no response from the Turtle Mountain Band of Chippewa within 30 days after notification through TCNS, the Turtle Mountain Band of Chippewa has no interest in participating in pre-construction review for the site. The Applicant, however, must notify the Turtle Mountain Band of Chippewa in the event archaeological properties or human remains are discovered during construction, consistent with Section IX of the Nationwide Programmatic Agreement and applicable law.

The information you provided was also forwarded to the additional Tribes and NHOs listed below. These Tribes and NHOs have NOT set their geographic preferences on TCNS, and therefore they are currently receiving tower notifications for the entire United States. For these Tribes and NHOs, you are required to use reasonable and good faith efforts to determine if the Tribe or NHO may attach religious and cultural significance to historic properties that may be affected by its proposed undertaking. Such efforts may include, but are not limited to, seeking information from the relevant SHPO or THPO, Indian Tribes, state agencies, the U.S. Bureau of Indian Affairs, or, where applicable, any federal agency with land holdings within the state (NPA, Section IV.B). If after such reasonable and good faith efforts, you determine that a Tribe or NHO may attach religious and cultural significance to historic properties in the area and the Tribe or NHO does not respond to TCNS notification within a reasonable time, you should make a reasonable effort to follow up; and must seek guidance from the Commission in the event of continued non-response or in the event of a procedural or substantive disagreement. If you determine that the Tribe or NHO is unlikely to attach religious and cultural significance to historic properties within the area, you do not need

to take further action unless the Tribe or NHO indicates an interest in the proposed construction or other evidence of potential interest comes to your attention.

None

The information you provided was also forwarded to the following SHPOs in the State in which you propose to construct and neighboring States. The information was provided to these SHPOs as a courtesy for their information and planning. You need make no effort at this time to follow up with any SHPO that does not respond to this notification. Prior to construction, you must provide the SHPO of the State in which you propose to construct (or the Tribal Historic Preservation Officer, if the project will be located on certain Tribal lands), with a Submission Packet pursuant to Section VII.A of the NPA.

16. SHPO Mark F Baumler - State Historic Preservation Office - Helena, MT - regular mail

17. SHPO Merlan E Paaverud - State Historical Society of North Dakota - Bismarck, ND - electronic mail

18. Deputy SHPO Fern E Swenson - State Historical Society of North Dakota - Bismarck, ND - electronic mail

19. SHPO Jay D Vogt - State Historic Preservation Office, Cultural Heritage Center - Pierre, SD - electronic mail

20. Historic Preservation Coordinator Stephen Rogers - State Historic Preservation Office, Cultural Heritage Center - Pierre, SD - electronic mail

If you are proposing to construct a facility in the State of Alaska, you should contact Commission staff for guidance regarding your obligations in the event that Tribes do not respond to this notification within a reasonable time.

Please be advised that the FCC cannot guarantee that the contact(s) listed above opened and reviewed an electronic or regular mail notification. The following information relating to the proposed tower was forwarded to the person(s) listed above:

Notification Received: 02/16/2010

Notification ID: 60702

Tower Owner Individual or Entity Name: Interoperability Montana (21002006)

Consultant Name: Virginia M Janssen

Street Address: c/o Dynamic Environmental Associates, Inc.  
3850 Lake Street, Suite C

City: Macon

State: GEORGIA

Zip Code: 31204

Phone: 478-745-7740

Email: NATC@DynamicEnvironmental.com

Structure Type: UTOWER - Unguyed - Free Standing Tower  
Latitude: 47 deg 59 min 44.3 sec N  
Longitude: 104 deg 13 min 42.5 sec W  
Location Description: @ 2.2 miles NW of the intersection of CR 350 & CR 143  
City: Sidney  
State: MONTANA  
County: RICHLAND  
Ground Elevation: 727.6 meters  
Support Structure: 30.5 meters above ground level  
Overall Structure: 30.5 meters above ground level  
Overall Height AMSL: 758.1 meters above mean sea level

If you have any questions or comments regarding this notice, please contact the FCC using the electronic mail form located on the FCC's website at:

<http://wireless.fcc.gov/outreach/notification/contact-fcc.html>.

You may also call the FCC Support Center at (877) 480-3201 (TTY 717-338-2824). Hours are from 8 a.m. to 7:00 p.m. Eastern Time, Monday through Friday (except Federal holidays). To provide quality service and ensure security, all telephone calls are recorded.

Thank you,  
Federal Communications Commission

## Appendix C. Online Mapping and Information Resources

National Register of Historic Places:

<http://nrhp.focus.nps.gov/natreghome.do?searchtype=natreghome>

No historic places in the vicinity.

**DYNAMIC  
ENVIRONMENTAL  
ASSOCIATES, INC.**

A PROFESSIONAL ENVIRONMENTAL CONSULTING FIRM

By: Certified Mail

July 16, 2010

Dr. Mark F. Baumler, SHPO  
State Historic Preservation Office  
1410 8th Avenue  
P.O. Box 201202  
Helena, MT 59620-1202

Re: Section 106 Review  
Interoperability Montana  
Antelope Butte Site  
Sidney, Richland County, Montana  
DEA No. 21002006

Dear Dr. Baumler:

On May 18, 2010, a Form 620 was submitted on behalf of Interoperability Montana for the above referenced project. Your office responded with the attached concurrence response dated June 7, 2010. The purpose of this letter is to notify the Montana State Historic Preservation Office of a minor design revision to the proposed project.

The above site is located approximately 2.2 miles northwest of the intersection of County Rd 350 & County Rd 143, in Sidney, Richland County, Montana, in Section 21, Township 26 north, Range 58 East, at Latitude N47-59-44.3, Longitude W104-13-42.5.

The original height of the proposed self-support tower was 100' (30.5 m) tall. The proposed height for the self-support tower is now 150' (45.7 m) tall. It is noted that this increase in height does not alter the previously assessed one-half mile APE for visual effects. No other changes to the project are currently proposed. In consideration of the proposed project revision, our original recommendation of no effect on historic or cultural resources remains the same.

We request receiving your comments within 30 days of receipt of this letter. If we do not receive a response from you within this time, we will conclude that you have no additional comments. If you have any questions, or wish to discuss this project in more detail, please do not hesitate to contact us.

We trust this information will be acceptable for your records.

Very truly yours,  
Dynamic Environmental  
Associates, Inc.



Virginia M. Janssen  
Principal Investigator

enc.: 21002006 - SHPO Letter 2

3850 Lake Street, Suite C, Macon, Georgia 31204

(478) 745-7740 • Fax (478) 745-7415



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

### ECOLOGICAL SERVICES

MONTANA FIELD OFFICE

585 SHEPARD WAY

HELENA, MONTANA 59601

PHONE (406) 449-5225, FAX (406) 449-5339

File: M29

June 1, 2010

Timothy M. Gilliland  
Dynamic Environmental Associates, Inc.  
3850 Lake Street, Suite C  
Macon, Georgia 31204

Dear Mr. Gilliland:

This is in response to your April 29, 2010 request for U.S. Fish and Wildlife Service (Service) review for federally listed threatened and endangered species regarding the effects of the proposed Antelope Butte Tower Site. The site is located within Richland County in Sidney, Montana. We received your request on May 4, 2010.

The proposed action includes the construction of a communications tower facility within a 100-foot by 100-foot area. The proposed tower compound will be 60 feet by 33.5 feet in size. It will consist of a 100-foot tall self-support tower and associated communication equipment.

The Service has reviewed the biological assessment and concurs with the determination that the proposed action is not likely to adversely affect any federally listed endangered or threatened species. Therefore, pursuant to 50 CFR 402.13 (a), formal consultation on federally listed threatened or endangered species is not required.

The Service bases its concurrence on the information prepared by Dynamic Environmental Associates, Inc. This project is not located in an area that provides habitat to any of the listed species in Richland County. We also acknowledge that the proposed action was designed to adhere to the Service's guidelines for telecommunications towers to the extent practical, therefore minimizing impacts to migratory birds. If the final proposal is changed so as to have effects on threatened or endangered species other than those described in the biological assessment, a revised biological assessment will be necessary. The Service will then issue a letter of concurrence/non-concurrence on the revised biological assessment.

We appreciate your efforts to ensure the conservation of threatened and endangered species as part of your responsibilities under the Endangered Species Act, as amended. If you have questions or comments related to this issue, please contact Katrina Dixon or me at 406-449-5225.

Sincerely,

R. Mark Wilson  
Field Supervisor

**By: Certified Mail**

April 29, 2010

Mr. Mark Wilson, Field Supervisor  
U.S. Fish & Wildlife Services  
Ecological Services Montana Field Office  
585 Shepard Way  
Helena, MT 59601

Re: Section 7 Consultation  
Informal Biological Assessment  
**Antelope Butte Tower Site**  
Sidney, Richland County, Montana  
DEA No. 21002006

Dear Mr. Wilson:

Dynamic Environmental Associates, Inc. is completing a NEPA/MEPA Review for the proposed development of a communications tower facility within the State of Montana, in accordance with 47 CFR 1.1307 (a) 3. As described herein, an Informal Biological Assessment (IBA) has been conducted for Interoperability Montana (IM) to identify federal and state threatened and endangered species (T&E) and/or critical habitat that may be located at or near the proposed project location.

**Project Description:** Interoperability Montana is proposing to construct a communications tower facility within a 100' x 100' area (Site). The proposed tower compound will be 60' x 33.5' in size, and will consist of a 100' tall self-support tower and associated communication equipment, all surrounded by a chain link fence.

**Project Location:** The Site is located within a larger Parent Tract parcel of land located approximately 2.2 miles northwest of the intersection of County Rd 350 & County Rd 143, in Sidney, Montana in the jurisdiction of Richland County. The Site is found within Section 21, Township 26 north, Range 58 east, at Latitude N47-59-44.2 and Longitude W104-13-42.5. Access to the Site is west from an unnamed, unpaved county road, approximately 700' to the Site location.

**Location Maps:** The subject site location is shown on a portion of the USGS Fairview NW, MT 7.5-minute topographic quadrangle and Street Atlas road map, enclosed.

**Photographs:** Color photographs of the tower Site and immediate project area are enclosed.

**Description of Project Area:**

The following has been derived from information provided by American Tower Corporation, a review of available data and literature, and on observations made during a site visit conducted on April 15, 2010: Weather was overcast and 50°±F.

Location Description:	The proposed Site and Parent Tract are undeveloped grassland.
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<b>Description of Project Area:</b>	
Area Description:	All areas surrounding the Parent Tract are undeveloped grassland. The surrounding area is rural in nature with land in the immediate area being undeveloped with occasional oil wells present throughout the area.
Vegetation (Onsite):	Vegetation on the proposed Site area and the Parent Tract is consists of grasses and forbs.
Vegetation (Vicinity):	The surrounding area is rural in nature and is dominated by grasslands.
Hydrology & Wetlands (Onsite):	No water bodies or wetlands were observed on the Site or Parent Tract. Hydric soils and hydrophytic vegetation were not present on the site.
Hydrology & Wetlands (Vicinity):	No water bodies or wetlands are mapped by NWI, nor were any observed within 1/4 mile of the Site.
T&E Species Analysis:	<p>Species lists and habitat information for plants and animals protected or proposed for protection under the Federal Endangered Species Act were obtained from the sources listed on Table 1 (attached). We also reviewed "designated critical habitat" as defined in 50 CFR, and confirmed that no designated or proposed critical habitats exist in the site area.</p> <p>Table 1 presents state species of concern and federal listed and candidate T&amp;E species known to exist in the township and county, respectively. The table compares habitat and/or range requirements of each species with existing site and surrounding area conditions to serve as rationale for a "no impact" determination. Fish and Amphibians have been omitted from the table since their presence on the Site and potential impact is not applicable to this project.</p>
T&E Species Evidence Observed:	No evidence or occurrences of Threatened or Endangered Species, or other wildlife, were observed on or adjacent to the Site.

**Conclusions:** Based on visual observations, various maps, and publicly available information it is DEA's opinion that:

- 1) The above designated facility is not located in an officially designated wilderness area.
- 2) The Site is not designated as "Critical Habitat" as defined in 50 CFR.
- 3) The facility is not located in an officially designated wildlife preserve.
- 4) This facility will not likely effect listed threatened or endangered species or designated critical habitats.
- 5) The facility is not likely to jeopardize the continued existence of any proposed endangered or threatened species or result in the destruction of, or adverse modification of proposed critical habitats.

Minimization of impacts to migratory birds will be been accomplished by adhering to the USFWS guidelines for telecommunications towers to the extent practical.

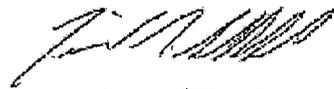
- 1) The proposed project involves the construction of a new communications tower facility, including a 100' tall self-support tower.
- 2) Based on the proposed height of the tower, no lighting will be required.
- 3) The tower will not be constructed with guy wires.

While a more comprehensive and/or a long term study may provide different results, based on the efforts undertaken during this IBA, we have concluded that there is minimal potential for the proposed tower to have a significant effect on migratory bird species.

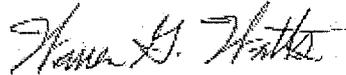
Based on information provided herein, it is our current opinion that the proposed project is not expected to significantly impact Threatened or Endangered Species nor migratory birds and we request your concurrence.

We trust that this information is suitable for your needs. Should you have any questions, please do not hesitate to call.

Very truly yours,  
**Dynamic Environmental  
Associates, Inc.**



Timothy M. Gilliland  
Project Manager



Warren G. Watts  
Senior Environmental Biologist

enc: Table 1 - Species List  
Color Photographs  
Site Location Map  
USGS Topographic Map  
Biologist CV

21002006 - IBA

**Table 1 - State/Federal Endangered, Threatened, or Candidate Species**

**Antelope Butte Site**

**Sidney, Richland County, Montana**

Site Conditions					
The Site is open grassland.					
Common Name	Scientific Name	Fed.	St.	Habitat/Range Requirements	Potential Impacts
Piping Plover	<i>Charadrius melodus</i>	T	LS	Sandy upper beaches, especially where scattered grass tufts are present, and sparsely vegetated shores and islands of shallow lakes, ponds, rivers, and impoundments. Nests may also be built on sandy open flats among shells or cobble behind dunes.	No Effect. No habitat exists onsite or in the general area.
Interior Least Tern	<i>Sterna antillarum athalassos</i>	E	LS	Interior populations nest mainly on riverine sandbars or salt flats that become exposed during periods of low water (Hardy 1957). As a result of vegetational succession and/or erosion, preferred nesting habitat typically is ephemeral. Hardy (1957) implied that breeding in riverine situations depends on the presence of sandbars, favorable water levels during nesting season, and sufficient food. Nests are usually located at higher elevations and away from the water. Water levels determine the size of sand bars and the extent of nesting areas (USFWS 1990).	No Effect. No habitat exists onsite or in the general area.
Whooping Crane	<i>Grus americana</i>	E		Freshwater marshes and wet prairies, in migration and winter also in grain and stubble fields and on shallow lakes and lagoons (AOU 1983). Winters on salt flats, marshes, and along barrier islands (Matthews and Moseley 1990). Radio-marked migrants roosted primarily in palustrine wetlands, many of which were smaller than 0.5 ha (Howe 1989). Migration habitat includes mainly sites with good horizontal visibility, water depth of 30 cm or less, and minimum wetland size of 0.04 ha for roosting.	No Effect. No habitat exists onsite or in the general area.

**Table 1 - State/Federal Endangered, Threatened, or Candidate Species  
Antelope Butte Site  
Sidney, Richland County, Montana**

<b>Site Conditions</b>	The Site is open grassland.				
<b>Common Name</b>	<b>Scientific Name</b>	<b>Fed.</b>	<b>St.</b>	<b>Habitat/Range Requirements</b>	<b>Potential Impacts</b>
Great Blue Heron	<i>Ardea herodias</i>		LS	Freshwater and brackish marshes, along lakes, rivers, bays, lagoons, ocean beaches, mangroves, fields, and meadows. Nests commonly high in trees in swamps and forested areas, less commonly in bushes, or on ground, rock ledges, and coastal cliffs.	No Effect. No habitat exists onsite or in the general area.
Nannyberry	<i>Viburnum lentago</i>		LS	Openings in riparian forests on the plains.	No Effect. No habitat exists onsite or in the general area.

<b>Federal Status</b>	<b>State Status</b>
E - Endangered	E - Endangered
T - Threatened [(S/A) similar appearance]	T - Threatened
C - Candidate	S - Sensitive
SC - Species of Concern	C - Candidate
PT - Proposed Threatened	LS - Species of Special Concern
PE - Proposed Endangered	

**Notes:**

1. Fish, marine mammals, and other amphibian species were excluded from assessment as not applicable to this project.

**Sources:**

1. NatureServe Online database. Association for Biodiversity Information. <http://www.natureserve.org/>
2. Montana Natural Heritage Program. <http://mtnhp.org/>
3. U.S. Fish & Wildlife Service, Montana Ecological Services Field Office. [http://www.fws.gov/montanafieldoffice/Endangered\\_Species.html](http://www.fws.gov/montanafieldoffice/Endangered_Species.html)



# United States Department of the Interior

FISH AND WILDLIFE SERVICE

Washington, D.C. 20240



In Reply Refer To:  
FWSIFHC/DHCIBFA

## Memorandum

To: Regional Directors, Regions 1-7

From: Director **/s/ Jamie Rappaport Clark** SEP 14

Subject: Service Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers

Construction of communications towers (including radio, television, cellular, and microwave) in the United States has been growing at an exponential rate, increasing at an estimated 6 percent to 8 percent annually. According to the Federal Communication Commission's *2000 Antenna Structure Registry*, the number of lighted towers greater than 199 feet above ground level currently number over 45,000 and the total number of towers over 74,000. By 2003, all television stations must be digital, adding potentially 1,000 new towers exceeding 1,000 feet AGL.

The construction of new towers creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. Communications towers are estimated to kill 4-5 million birds per year, which violates the spirit and the intent of the Migratory Bird Treaty Act and the Code of Federal Regulations at Part 50 designed to implement the MBTA. Some of the species affected are also protected under the Endangered Species Act and Bald and Golden Eagle Act.

Service personnel may become involved in the review of proposed tower sitings and/or in the evaluation of tower impacts on migratory birds through National Environmental Policy Act review; specifically, sections 1501.6, opportunity to be a cooperating agency, and 1503.4, duty to comment on federally-licensed activities for agencies with jurisdiction by law, in this case the MBTA, or because of special expertise. Also, the National Wildlife Refuge System Improvement Act requires that any activity on Refuge lands be determined as compatible with the Refuge system mission and the Refuge purpose(s). In addition, the Service is required by the ESA to assist other Federal agencies in ensuring that any action they authorize, implement, or fund will not jeopardize the continued existence of any federally endangered or threatened species.

**This is your future. Don't leave it blank. - Support the 2000 Census.**

A Communication Tower Working Group composed of government agencies, industry, academic researchers and NGO's has been formed to develop and implement a research protocol to determine the best ways to construct and operate towers to prevent bird strikes. Until the research study is completed, or until research efforts uncover significant new mitigation measures, all Service personnel involved in the review of proposed tower sitings and/or the evaluation of the impacts of towers on migratory birds should use the attached interim guidelines when making recommendations to all companies, license applicants, or licensees proposing new tower sitings. These guidelines were developed by Service personnel from research conducted in several eastern, midwestern, and southern States, and have been refined through Regional review. They are based on the best information available at this time, and are the most prudent and effective measures for avoiding bird strikes at towers. We believe that they will provide significant protection for migratory birds pending completion of the Working Group's recommendations. As new information becomes available, the guidelines will be updated accordingly.

Implementation of these guidelines by the communications industry is voluntary, and our recommendations must be balanced with Federal Aviation Administration requirements and local community concerns where necessary. Field offices have discretion in the use of these guidelines on a case by case basis, and may also have additional recommendations to add which are specific to their geographic area.

Also attached is a Tower Site Evaluation Form which may prove useful in evaluating proposed towers and in streamlining the evaluation process. Copies may be provided to consultants or tower companies who regularly submit requests for consultation, as well as to those who submit individual requests that do not contain sufficient information to allow adequate evaluation. This form is for discretionary use, and may be modified as necessary.

The Migratory Bird Treaty Act (16 U.S.C. 703-712) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. While the Act has no provision for allowing an unauthorized take, it must be recognized that some birds may be killed at structures such as communications towers even if all reasonable measures to avoid it are implemented. The Service's Division of Law Enforcement carries out its mission to protect migratory birds not only through investigations and enforcement, but also through fostering relationships with individuals and industries that proactively seek to eliminate their impacts on migratory birds. While it is not possible under the Act to absolve individuals or companies from liability if they follow these recommended guidelines, the Division of Law Enforcement and Department of Justice have used enforcement and prosecutorial discretion in the past regarding individuals or companies who have made good faith efforts to avoid the take of migratory birds.

Please ensure that all field personnel involved in review of FCC licensed communications tower proposals receive copies of this memorandum. Questions regarding this issue should be directed to Dr. Benjamin N. Tuggle, Chief, Division of Habitat Conservation, at (703)358-2161, or

Jon Andrew, Chief, Division of Migratory Bird Management, at (703)358-1714. These guidelines will be incorporated in a Director's Order and placed in the Fish and Wildlife Service Manual at a future date.

Attachment

cc: 3012-MIB-FWS/Directorate Reading File  
3012-MIB-FWS/CCU Files  
3245-MIB-FWS/AFHC Reading Files  
840-ARLSQ-FWS/AF Files  
400-ARLSQ-FWS/DHC Files  
400-ARLSQ-FWS/DHC/BFA Files  
400-ARLSQ-FWS/DHC/BFA Staff  
520-ARLSQ-FWS/LE Files  
634-ARLSQ-FWS/MBMO Files (Jon Andrew)

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**Service Interim Guidelines For Recommendations On  
Communications Tower Siting, Construction, Operation, and Decommissioning**

1. Any company/applicant/licensee proposing to construct a new communications tower should be strongly encouraged to collocate the communications equipment on an existing communication tower or other structure (e.g., billboard, water tower, or building mount). Depending on tower load factors, from 6 to 10 providers may collocate on an existing tower.

2. If collocation is not feasible and a new tower or towers are to be constructed, communications service providers should be strongly encouraged to construct towers no more than 199 feet above ground level, using construction techniques which do not require guy wires (e.g., use a lattice structure, monopole, etc.). Such towers should be unlighted if Federal Aviation Administration regulations permit.

3. If constructing multiple towers, providers should consider the cumulative impacts of all of those towers to migratory birds and threatened and endangered species as well as the impacts of each individual tower.

4. If at all possible, new towers should be sited within existing "antenna farms" (clusters of towers). Towers should not be sited in or near wetlands, other known bird concentration areas (e.g., State or Federal refuges, staging areas, rookeries), in known migratory or daily movement flyways, or in habitat of threatened or endangered species. Towers should not be sited in areas with a high incidence of fog, mist, and low ceilings.

5. If taller (>199 feet AGL) towers requiring lights for aviation safety must be constructed, the minimum amount of pilot warning and obstruction avoidance lighting required by the FAA should be used. Unless otherwise required by the FAA, only white (preferable) or red strobe lights should be used at night, and these should be the minimum number, minimum intensity, and minimum number of flashes per minute (longest duration between flashes) allowable by the FAA. The use of solid red or pulsating red warning lights at night should be avoided. Current research indicates that solid or pulsating (beacon) red lights attract night-migrating birds at a much higher rate than white strobe lights. Red strobe lights have not yet been studied.

6. Tower designs using guy wires for support which are proposed to be located in known raptor or waterbird concentration areas or daily movement routes, or in major diurnal migratory bird movement routes or stopover sites, should have daytime visual markers on the wires to prevent collisions by these diurnally moving species. (For guidance on markers, see *Avian Power Line Interaction Committee (APLIC)*. 1994. *Mitigating Bird Collisions with Power Lines: The State of the Art in 1994*. Edison Electric Institute, Washington, D.c., 78pp, and *Avian Power Line Interaction Committee (APLIC)*. 1996. *Suggested Practices/or Raptor Protection on Power Lines*. Edison Electric Institute/Raptor Research Foundation, Washington, D. C; 128pp. Copies can be obtained via the Internet at <http://www.eei.org/resources/pubcat/enviro/>. or by calling 1-800/334-5453).

7. Towers and appendant facilities should be sited, designed and constructed so as to avoid or minimize habitat loss within and adjacent to the tower "footprint." However, a larger tower footprint is preferable to the use of guy wires in construction. Road access and fencing should be minimized to reduce or prevent habitat fragmentation and disturbance, and to reduce above ground obstacles to birds in flight.

8. If significant numbers of breeding, feeding, or roosting birds are known to habitually use the proposed tower construction area, relocation to an alternate site should be recommended. If this is not an option, seasonal restrictions on construction may be advisable in order to avoid disturbance during periods of high bird activity.

9. In order to reduce the number of towers needed in the future, providers should be encouraged to design new towers structurally and electrically to accommodate the applicant/licensee's antennas and comparable antennas for at least two additional users (minimum of three users for each tower structure), unless this design would require the addition of lights or guy wires to an otherwise unlighted and/or unguyed tower.

10. Security lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of the site.

11. If a tower is constructed or proposed for construction, Service personnel or researchers from the Communication Tower Working Group should be allowed access to the site to evaluate bird use, conduct dead-bird searches, to place net catchments below the towers but above the ground, and to place radar, Global Positioning System, infrared, thermal imagery, and acoustical monitoring equipment as necessary to assess and verify bird movements and to gain information on the impacts of various tower sizes, configurations, and lighting systems.

12. Towers no longer in use or determined to be obsolete should be removed within 12 months of cessation of use.

In order to obtain information on the extent to which these guidelines are being implemented, and to identify any recurring problems with their implementation which may necessitate modifications, letters provided in response to requests for evaluation of proposed towers should contain the following request:

"In order to obtain information on the usefulness of these guidelines in preventing bird strikes, and to identify any recurring problems with their implementation which may necessitate modifications, please advise us of the final location and specifications of the proposed tower, and which of the measures recommended for the protection of migratory birds were implemented. If any of the recommended measures can not be implemented, please explain why they were not feasible."