

**MATANUSKA-SUSITNA BOROUGH  
PLANNING COMMISSION AGENDA**

Vern Halter, Mayor

**PLANNING COMMISSION**

Mary Anderson, District 1  
Thomas Healy, District 2  
John Klapperich, Chair, District 3  
Colleen Vague, District 4  
William Kendig, District 5  
Tomas Adams, District 6  
Vern Rauchenstein, District 7



John Moosey, Borough Manager

**PLANNING & LAND USE  
DEPARTMENT**

Eileen Probasco, Director of Planning &  
Land Use  
Sara Jansen, Acting Planning Services  
Chief  
Alex Strawn, Development Services  
Manager  
Fred Wagner, Planning Officer  
Mary Brodigan, Planning Clerk

*Assembly Chambers of the  
Dorothy Swanda Jones Building  
350 E. Dahlia Avenue, Palmer*

**August 15, 2016  
REGULAR MEETING  
6:00 p.m.**

- I. CALL TO ORDER, ROLL CALL, AND DETERMINATION OF QUORUM
- II. APPROVAL OF AGENDA
- III. PLEDGE OF ALLEGIANCE
- IV. CONSENT AGENDA

*Items on the consent agenda are considered to be routine and non-controversial by the Commission and will be approved by one motion. There will be no separate discussion of these items unless a Commission Member so requests, in which case the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda.*

A. MINUTES

1. August 1, 2016, regular meeting minutes

B. INTRODUCTION FOR PUBLIC HEARING: QUASI-JUDICIAL MATTERS

1. **Resolution 16-30**, a Conditional Use Permit (CUP) in accordance with MSB 17.67 – Tall Structures including Telecommunication Facilities, Wind Energy Conversion Systems, and Other Tall Structures, for a 180 foot tall telecommunication tower (NSL1), located at 23619 W. Parks Highway; MSB Tax ID # 18N04W11A001; within Township 18 North, Range 4 West, Section 11, Seward Meridian. Public Hearing: September 19, 2016. (Staff: Mark Whisenhunt)

2. **Resolution 16-31**, a Conditional Use Permit (CUP) in accordance with MSB 17.67 – Tall Structures including Telecommunication Facilities, Wind Energy Conversion Systems, and Other Tall Structures, for a 180 foot tall telecommunication tower (DLY1), located at 41238 W. Parks Highway; MSB Tax ID # 20N04W06C003; within Township 20 North, Range 4 West, Section 6, Seward Meridian. Public Hearing: September 19, 2016. *(Staff: Mark Whisenhunt)*
3. **Resolution 16-32**, a Conditional Use Permit (CUP) in accordance with MSB 17.67 – Tall Structures including Telecommunication Facilities, Wind Energy Conversion Systems, and Other Tall Structures, for a 180 foot tall telecommunication tower (KSH1), located at 15960 E. Kashwitna Road; MSB Tax ID # 23N04W29C006; within Township 23 North, Range 4 West, Section 29, Seward Meridian. Public Hearing: September 19, 2016. *(Staff: Mark Whisenhunt)*

C. INTRODUCTION FOR PUBLIC HEARING: LEGISLATIVE MATTERS

1. **Resolution 16-27**, recommending Assembly adoption of the FY 2018 – 2023 Capital Improvement Program. Public Hearing: September 19, 2016. *(Staff: Sara Jansen)*

V. COMMITTEE REPORTS

VI. AGENCY/STAFF REPORTS

VII. LAND USE CLASSIFICATIONS

VIII. AUDIENCE PARTICIPATION *(three minutes per person, for items not scheduled for public hearing)*

IX. PUBLIC HEARING: QUASI-JUDICIAL MATTERS *(Public Hearings shall not begin before 6:15 p.m.)*

***Commission members may not receive or engage in ex-parte contact with the applicant, other parties interested in the application, or members of the public concerning the application or issues presented in the application.***

*The Planning Commission members may submit questions to the Planning Commission Clerk concerning the following matters or request for more information from the applicant at the time of the introduction. All questions and requests submitted by the Commission shall be in writing and copies will be provided to the applicant and made available to all interested parties and the public upon request. Answers to questions and additional material requests will be addressed in the staff report for the public hearing.*

## X. PUBLIC HEARING: LEGISLATIVE MATTERS

- A. **Resolution 16-28**, recommending Assembly approval of an Interim Materials District (IMD) known as Denali Highway Mile 99, in accordance with MSB 17.28 – Interim Materials District, for the extraction of 500,000 cubic yards of earth material within a 69.91 acre parcel until the year 2060, located within Township 19 South, Range 2 West, Section 10 & 15, Fairbanks Meridian. (*Applicant: State of Alaska, Department of Transportation and Public Facilities, AKDOT&PF, Staff: Susan Lee*)

## XI. CORRESPONDENCE &amp; INFORMATION

- A. Superior Court Order Remanding the Planning Commission's Denial of CMS's Permit
- B. Ethics Board Advisory Opinion 15-01

## XII. UNFINISHED BUSINESS

## XIII. NEW BUSINESS

## XIV. COMMISSION BUSINESS

- A. Upcoming Planning Commission Agenda Items (*Staff: Alex Strawn*)

## XV. DIRECTOR AND COMMISSIONER COMMENTS

## XVI. ADJOURNMENT (Mandatory Midnight)

*In order to be eligible to file an appeal from a decision of the Planning Commission, a person must be designated an interested party. See MSB 15.39.010 for definition of "Interested Party." The procedures governing appeals to the Board of Adjustment & Appeals are contained in MSB 15.39.010-250, which is available on the Borough Internet home page, <http://www.matsugov.us>, in the Borough Clerk's office, or at various libraries within the Borough.*

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**INTRODUCTION FOR PUBLIC HEARING  
QUASI-JUDICIAL**

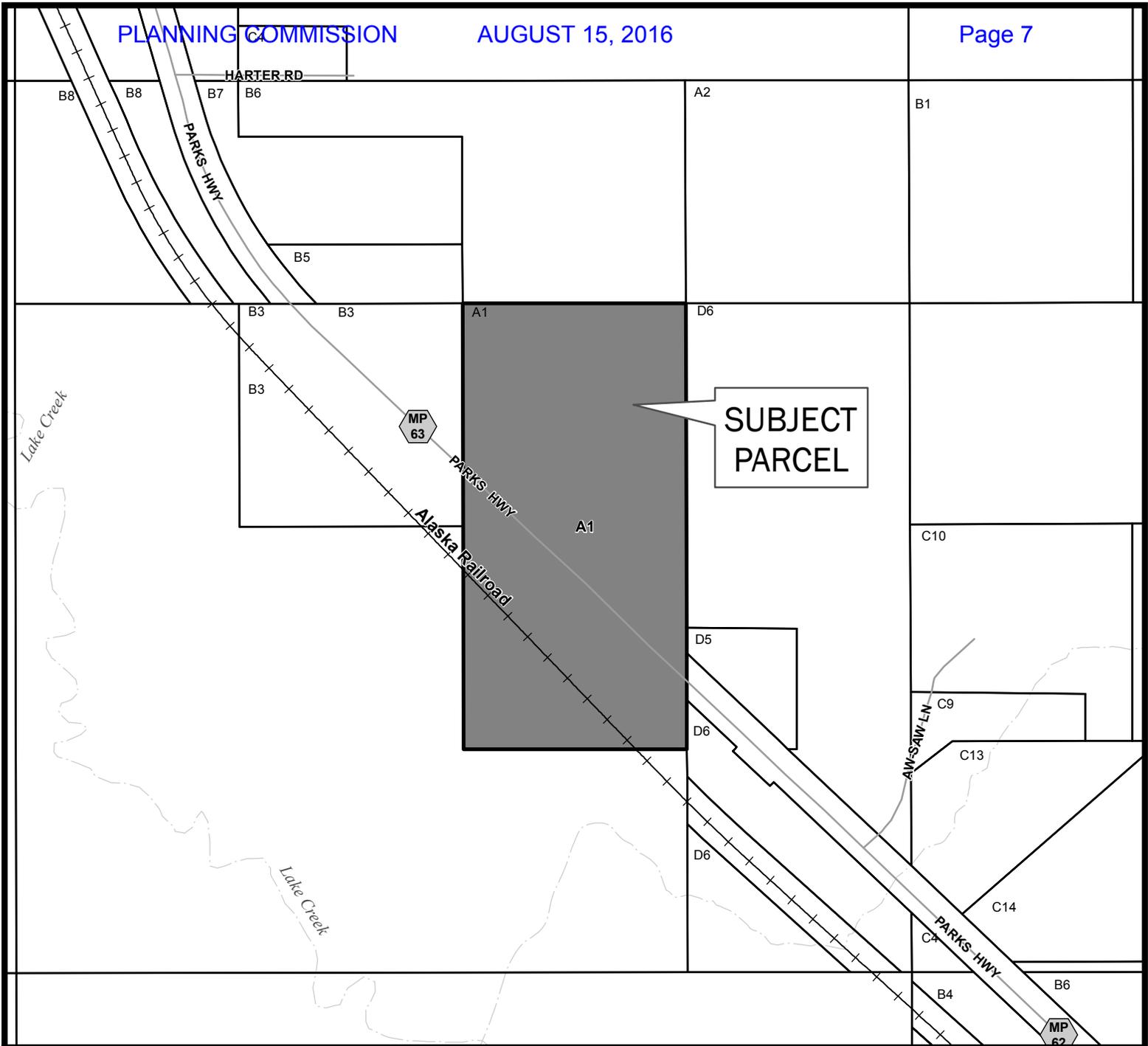
**Resolution No. 16-30**

**MTA Telecommunication Tower CUP (NSL1)  
23619 W. Parks Highway**

(Page 5 - 116)

**INTRODUCTION FOR PUBLIC HEARING**

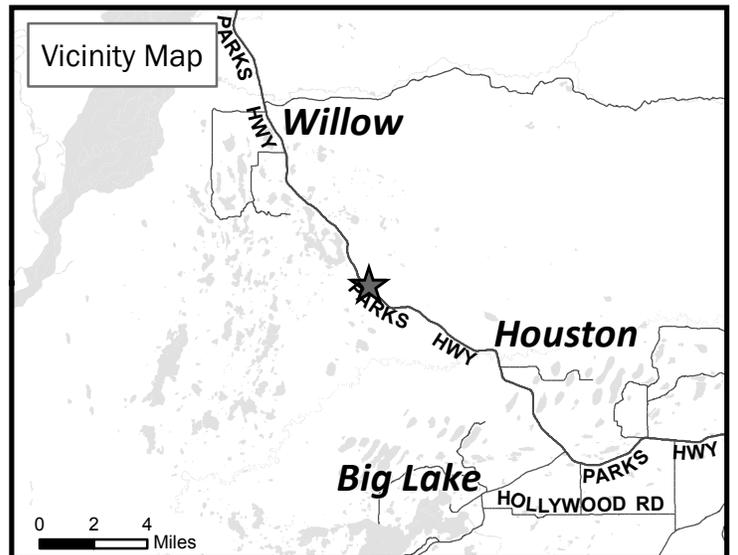




**18N04W11A001**



This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matanuska-Susitna Borough GIS Division at 907-861-7801.



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MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

Development Services Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822 • Fax (907) 861-7876

Email: [permitcenter@matsugov.us](mailto:permitcenter@matsugov.us)

RECEIVED  
JUL 07 2016  
PERMIT CENTER

NSL1

APPLICATION FOR A TALL STRUCTURE – MSB 17.67

Carefully read instructions and applicable borough code. Fill out forms completely. Attach information as needed. Incomplete applications will not be processed.

Application fee must be attached:

- \$1,000 for Conditional Use Permit - > 125 feet in height
- \$ 500 for Administrative Permit – 85' to 125' in height
- \$ 100 for Network Improvement Permit – In accordance with MSB 17.67.110.

Prior to the public hearing, the applicant must also pay the mailing and advertising fees associated with the application. Applicants will be provided with a statement of advertising and mailing charges. Payment must be made prior to the application presentation before the Borough Planning Commission or Planning Director decision.

**Subject Property** Township: 18N, Range: 4W, Section: 11, Meridian \_\_\_\_\_  
 MSB Tax Account # 18N04W11A001  
 SUBDIVISION: None BLOCK(S): \_\_\_\_\_, LOT(S): A1  
 STREET ADDRESS: 23619 W Parks Hwy  
 (US Survey, Aliquot Part, Lat. /Long. etc) \_\_\_\_\_

**Ownership** A written authorization by the owner must be attached for an agent or contact person, if the owner is using one for the application. Is authorization attached?  Yes  No  N/A

**Name of Property Owner**

Gerald Keene

Address: PO Box 958

Willow, Alaska 99688-0958

Phne: Hm \_\_\_\_\_ Fax \_\_\_\_\_

Wk \_\_\_\_\_ Cell \_\_\_\_\_

E-mail \_\_\_\_\_

**Name of Agent/ Contact for application**

Sherrie Greenshields

Address: 901 Cope Industrial Way

Palmer, Alaska 99645

Phne: Hm 907-761-6000 Fax 907-761-6001

Wk 907-761-6057 Cell 907-315-3201

E-mail Sgreenshields@nhtiusa.com

Special Land Use District (if applicable): \_\_\_\_\_

<b>Pre-Application Requirements for New Tall Structures that Require a Conditional Use Permit</b>	
<i>Prior to applying for a conditional use permit for a new tall structure, the applicant shall hold at least one community meeting.</i>	
1. The meeting shall be held at the nearest facility where community council meetings are regularly scheduled. If the facility is not available, the nearest available public facility that is capable of seating a minimum of 20 people shall be utilized.	
2. The meeting shall be held at least 15 calendar days after mailing of the notification.	
3. The meeting shall not start prior to 5:00 p.m. and no later than 7:00 p.m.	
4. Notification of the meeting shall, at a minimum, include the following: <ul style="list-style-type: none"> <li>• Legal description and map of the general parcel, or parcels, within the coverage area under consideration for the telecommunication facility.</li> <li>• Description of the proposed development including height, design, lighting, potential access to the site and proposed service.</li> <li>• Date, time, and location of the informational meeting.</li> <li>• Contact name, telephone number, and address of applicant.</li> <li>• Comment form created by the borough that has a comment submittal deadline and provides options for submitting comments.</li> </ul>	
5. At a minimum, the notification area for the meeting shall include the following: <ul style="list-style-type: none"> <li>• Property owners within one-half mile of the parcels under consideration for the proposed tall structure.</li> <li>• The nearest community council and any community council whose boundary is within 1200 feet of the parcels under consideration for the tall structure.</li> </ul>	
<i>A written report summarizing the results of the community meeting shall be prepared that includes the following information:</i>	<b>Attached</b>
1. Dates and locations of all meetings where citizens were invited to discuss the potential applicant's proposal.	<b>X</b>
2. Content, dates mailed, and numbers of mailings, including letters, meeting notices, newsletters and other publications.	<b>X</b>
3. Sign-in sheet(s) used at the meeting, that includes places for names, address, phone numbers and other contact information such as e-mail addresses.	<b>X</b>
4. A list of residents, property owners, and interested parties who have requested in writing that they keep informed of the proposed development through notices, newsletters, or other written materials.	<b>X</b>
5. The number of people who attended meetings.	<b>X</b>
6. Copies of written comments received at the meeting.	<b>X</b>
7. A certificate of mailing identifying all who were notified of the meeting.	<b>X</b>
8. A written summary that addresses the following: <ul style="list-style-type: none"> <li>• The substance of the public's written concerns, issues, and problems.</li> <li>• How the applicant has addressed, or intends to address, concerns, issues and problems expressed during the process.</li> <li>• Concerns issues, and problems the applicant has not addressed or does not intend to address and why.</li> </ul>	<b>X</b>

<b>General application requirements for <u>Administrative</u> and <u>Conditional Use Permits</u></b>	<b>Attached</b>
1. Design drawings for the proposed tall structure, drawn to scale, and certified by a registered engineer or architect.	X
2. Citizen participation report ( <i>if applying for a Conditional Use Permit</i> )	x
3. Certified site plan ( <i>As defined in MSB 17.125.010</i> )	x
4. Copy of a determination of no hazard to air navigation from the Federal Aviation Administration.	X
5. If breakpoint technology is intended to be utilized, a written statement specifying the height at which the engineered structural weakness will be located.	X

<b>In order to grant a <u>Conditional Use Permit</u> or <u>Administrative Permit</u> the Planning Commission or Planning Director must find that each of the following criteria has been met. Explain the following in detail:</b>	<b>Attached</b>
1. To the extent that is technically feasible and potentially available, the location of the tall structure is such that its negative effects on the visual and scenic resources of all surrounding properties have been minimized.	X
2. Visibility of the tall structure from public parks, trails recognized within adopted MSB plans, and waterbodies has been minimized to the extent that is technically feasible and potentially available.	X
3. The tall structure will not interfere with the approaches to any existing airport or airfield that are identified in the MSB Regional Aviation System Plan or by the Alaska State Aviation System Plan.	X
4. That granting the permit will not be harmful to the public health, safety, convenience, and welfare.	X

<b>Application requirements for a <u>Network Improvement Permit</u></b>	<b>Attached</b>
1. A description of the proposed modifications to the telecommunication tower, including a description of the height, type, and lighting of the new or modified structure and the existing structure.	
2. A certified site ( <i>as defined in MSB 17.125.010</i> ) for purposes of setback verification.	
3. Design drawings for the proposed modified or new structure, drawn to scale, and certified by a registered engineer or architect.	

<b>In order to grant a <u>Network Improvement Permit</u> the Planning Director must find that each of the following criteria has been met. Explain the following in detail.</b>	<b>Attached</b>
1. The proposed development conforms to setback requirements of MSB 17.55.	
2. The telecommunication tower being extended was lawfully constructed at the time of application for a Network Improvement Permit.	
3. The proposed modification does not violate permit conditions of any valid permits that have been issued to the existing facility, provided that the condition being violated does not limit height of the structure.	

<b>Operation Standards for New Tall Structures – Conditional Use Permit, Administrative Permit, and Network Improvement Permit</b>	<b>Attached</b>
1. The equipment compound shall meet minimum setback distances from all property lines in accordance with MSB 17.55	X
2. Setbacks shall be determined from the dimensions of the entire lot, even though the tower may be located on lease areas within the lot.	X
3. Adequate vehicle parking shall be provided on the subject property, outside of public use easements and rights-of-way to enable emergency vehicle access. No more than two spaces per provider shall be required.	X
4. Information signs for the purpose of identifying the tower such as the antenna structure registration number required by the Federal Communications Commission, as well as the party responsible for the operation and maintenance of the facility shall be visibly posted at the equipment compound.	X
5. If more than 220 volts are necessary for the operation of the facility, warning signs shall be located at the base of the facility and shall display in large, bold, high contrast letters the following: "HIGH VOLTAGE – DANGER".	X
6. A 24-hour emergency contact number shall be visibly posted at the equipment compound.	X
7. A fence or wall not less than six (6) feet in height with a secured gate shall be maintained around the base of the tower.	X

<b>Additional Standards for <u>Wind Energy Conversion Systems (WECS)</u> – In addition to the operations standards for new tall structures, the following standards shall apply to WECS</b>	<b>Attached</b>
1. WECS shall be equipped with an automatic overspeed control device designed to protect the system from sustaining structural failure such as splintered or thrown blades and the overturning or breaking of towers due to an uncontrolled condition brought on by high winds.	
2. WECS shall have a manually operable method that assures the WECS can be brought to a safe condition in high winds. Acceptable methods include mechanical or hydraulic brakes or tailvane deflection systems which turn the rotor out of the wind.	

**OWNER'S STATEMENT:** I am owner of the following property:

MSB Tax parcel ID #(s) 45528 and, I hereby apply for approval conditional use permit on that property as described in this application.

I understand all activity must be conducted in compliance with all applicable standards of MSB 17.67 and with all other applicable borough, state or federal laws.

I understand that other rules such as local, state and federal regulations, covenants, plat notes, and deed restrictions may be applicable and other permits or authorization may be required. I understand that the borough may also impose conditions and safeguards designed to protect the public's health, safety and welfare and ensure the compatibility of the use with other adjacent uses.

I understand that it is my responsibility to identify and comply with all applicable rules and conditions, covenants, plat notes, and deed restrictions, including changes that may occur in such requirements.

I understand that this permit and zoning status may transfer to subsequent owners of this land and that it is my responsibility to disclose the requirements of this status to the buyer when I sell the land.

I understand that changes from the approved conditional use permit may require further authorization by the Borough Planning Commission. I understand that failure to provide applicable documentation of compliance with approved requirements, or violation of such requirements will nullify legal status, and may result in penalties.

I grant permission for borough staff members to enter onto the property as needed to process this application and monitor compliance. Such access will at a minimum, be allowed when the activity is occurring and, with prior notice, at other times necessary to monitor compliance.

The information submitted in this application is accurate and complete to the best of my knowledge.

Signature: Property Owner

Printed Name

Date

*Sherrie Green Shields*

Sherrie Green Shields 7/7/2016

Signature: Agent

Printed Name

Date

**MSB USE ONLY**

Date application submitted: \_\_\_\_\_

Date application determined complete: \_\_\_\_\_

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**Susan Lee**

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**From:** Alex Strawn  
**Sent:** Monday, July 11, 2016 9:37 AM  
**To:** Susan Lee  
**Subject:** FW: KSH1 and NSL1 owner letters  
**Attachments:** KSH1 Owner authorization.pdf; NSL1 Owner Authorization.pdf

**From:** Sherrie Greenshields [<mailto:SGreenshields@nhtiusa.com>]  
**Sent:** Monday, July 11, 2016 9:00 AM  
**To:** Alex Strawn  
**Subject:** KSH1 and NSL1 owner letters

Alex,

Please see owner letters attached for KSH1 and NSL1 sites.

Sherrie

**From:** Rod Ewing [<mailto:rode@mtaonline.net>]  
**Sent:** Monday, July 11, 2016 7:03 AM  
**To:** Sherrie Greenshields <[SGreenshields@nhtiusa.com](mailto:SGreenshields@nhtiusa.com)>  
**Cc:** Julie Rowse <[jrowse@mta-telco.com](mailto:jrowse@mta-telco.com)>; [ANaylor@mta-telco.com](mailto:ANaylor@mta-telco.com)  
**Subject:** KSH1 and NSL1 owner letters

Sherrie,

Attached are copies of the signed owner authorization letters for NSL1 and KSH1 CUP applications. Alisha Naylor can assist you with the DLY1 authorization letter.

Rod

Rod Ewing  
Project Mgr  
MTA Communications, LLC  
907-354-7400  
[rode@mtaonline.net](mailto:rode@mtaonline.net)

July 8, 2016

Matanuska-Susitna Borough  
Planning and Land Use Department  
Development Services Division  
350 Ease Dahlia Avenue  
Palmer Alaska 99645

Re: Application for Tall Structure – MSB 17.67  
MTAC Site Name NLS1  
Legal – T18N R4W Section 11 Lot A1  
Address – 23619 W Parks Hwy  
MSB Parcel ID - 45528

Dear Sir/Madam,

Please consider this letter authorization for MTA Communications and their agent New Horizons Telecom, Inc. to apply for application of a Tall Structure under MSB 17.67 for property defined above.

As the landowner, we acknowledge restrictions associated with the permit application as defined under MSB 17.67.

Respectfully,



Gerald P. Keene

Alaska Department of Transportation & Public Facilities/ Division Name]



# Driveway and Approach Road Permit Application Display

### Application Information

Application Number: 26753

Status: Initial Status

### Customer Information

NHTI

Dale Browning

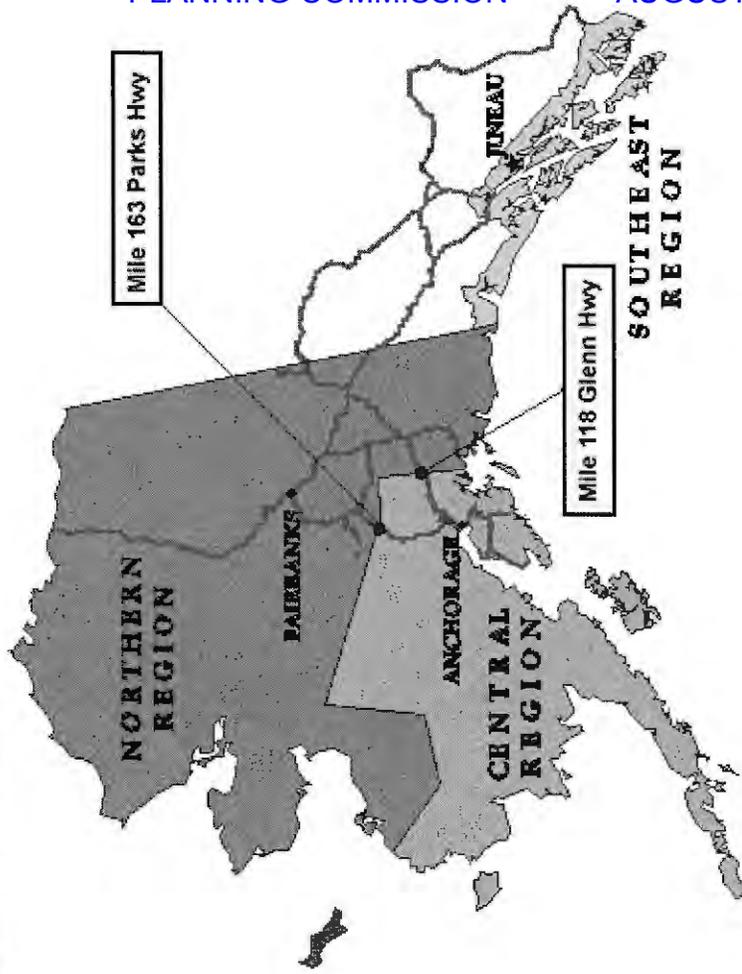
901 Cope Industrial Way

Palmer, AK 99645

(907) 761-6069

### Location Information

Central Region



Willow DW - 23619 W Parks Hwy Willow, AK 99688; MP 63 Tax ID: 45528 - Lot A1, T18N,R4W,SEC11

**Physical Address**

Street Number **23619**  
 Milepost **63**  
 Street Name **Parks Highway**  
 Address Line 2  
 City **Willow**  
 State **AK**  
 Zip **99688**

**Legal Description**

Survey Number	Meridian	Seward
Survey Number Type	Township	<b>18N</b>
Lot	Range	<b>4W</b>
Block	Section	<b>11</b>
Subdivision	Recording District	<b>No District</b>

Property Tax ID Number **45528**

Plat Number

**GPS Coordinates**

Latitude	Decimal	Degrees	Minutes	Seconds
	<b>61.6661</b>	<b>61</b>	<b>39</b>	<b>58</b>
Longitude	<b>149.9483</b>	<b>149</b>	<b>56</b>	<b>54</b>

**Driveway Information**

Is access available from other public rights of way: **NO**

Is driveway/road within a platted right of way: **YES**

How many lots will the driveway/road serve: **1**

Size of the tract served by driveway/road: **5625 square feet**

Is driveway located within a zoning authority: **NO**

Zoning designation:

Is the driveway/road proposed or existing: **Proposed**

Date applicant/permittee to complete work in accordance with attached plan: **11/30/2016**

Maximum number of vehicles which will use the driveway/road in any one hour: **1**

Driveway/approach road main use: **Commercial**

Speed Limit: **55 mph**

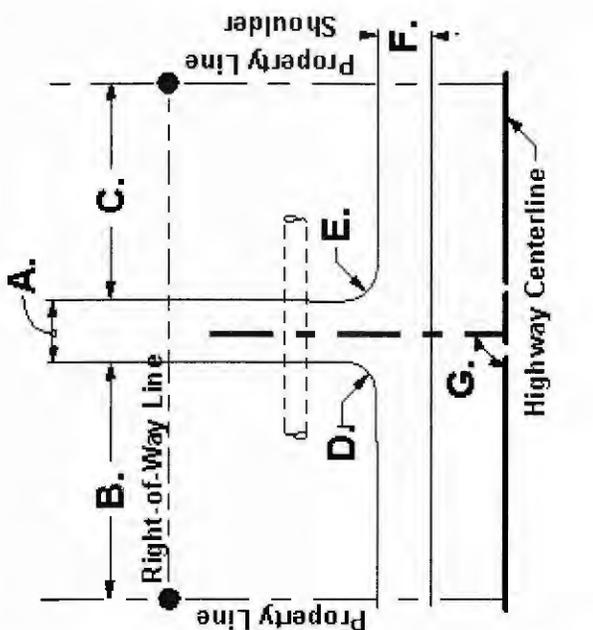
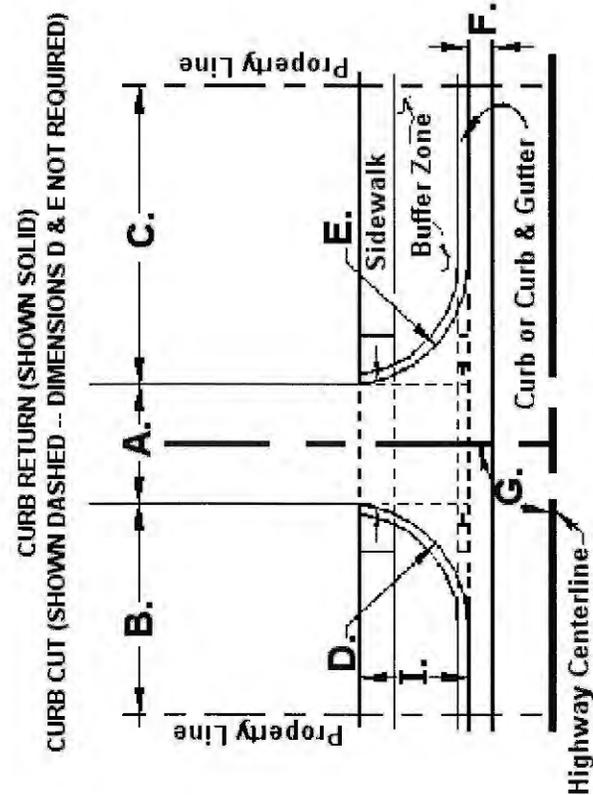
Sight distance left: **630 feet**

Sight distance right: **1600 feet**

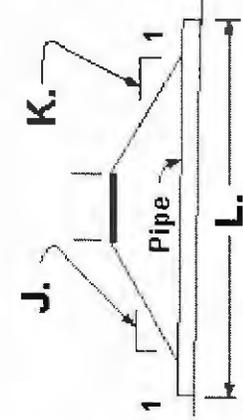
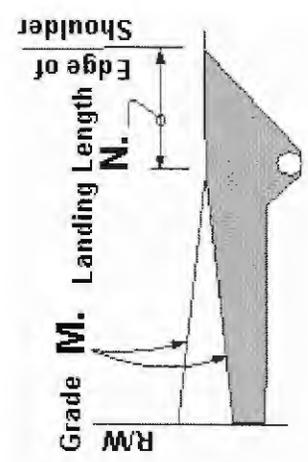
Proposed land use for tract served by driveway/road: **Communications Site**

**Driveway Specifications**





- A. Driveway width **14** feet
- B. Left edge clearance **53** feet
- C. Right edge clearance **1764** feet
- D. Left return radius **20** feet
- E. Right return radius **20** feet
- F. Shoulder width **2** feet
- G. Approach angle **90** degrees
- H. Curb type **None**
- I. Curb to sidewalk distance



- J. Left culvert foreslope **1:1**
- K. Right culvert foreslope **1:1**

- L. Culvert length **65** feet  
 M. Landing grade **2** percent  
 N. Landing length **30** feet  
 O. Culvert diameter **30** inches  
 P. Culvert type **Corrugated Metal Pipe (CMP)**  
 Q. Ditch depth **6** feet  
 R. Shoulder type **Gravel**  
 S. Road surface type **Paved**  
 T. Driveway landing surface type **Asphalt**

### Attachments

06/27/2016	Plat	AK_DOT_Permit_26753_MTA_NSL1_Land_Plats.pdf (211.89 KB)
06/27/2016	Photos	IMG_0001.jpg (161.96 KB)
06/27/2016	Photos	IMG_0006.jpg (283.14 KB)
06/27/2016	Photos	IMG_0007.jpg (402.29 KB)
06/27/2016	Photos	IMG_0057.jpg (246.58 KB)
06/27/2016	Photos	IMG_0931.jpg (190.19 KB)
06/27/2016	Proof of Ownership	26753_MTA_NSL1_Cell_Site_Land_Lease_Agreement.pdf (84.66 KB)
06/27/2016	Site Plan	160623_NSL1_IFC_REV_0.pdf (2.14 MB)
06/27/2016	Site Plan	160623_NSL1_IFC_REV_0.pdf (2.14 MB)
06/27/2016	Photos	26753_Photos_Initial.pdf (1.34 MB)

[Add Attachment](#)

### Provisions

This permit applies only to the State right of way.

This permit grants permission for a driveway allowing access to and from your property onto a State maintained highway. It does not permit the following within the right of way or within that portion of a driveway that is within the right of way: (1) Parking of vehicles "for sale"; (2) Obstructions of any kind (i.e. logs, cables, fencing, etc.); (3) Advertising signs or banners/flags; (4) Parking vehicles with signs/advertising on the side.

A driveway or approach road constructed under permit within a highway right-of-way is the property of the State, but all cost and liability arising from the construction, operation, or maintenance of a driveway or approach road is at the sole expense of those lands

served. The Department is not obligated to change its maintenance practices to accommodate a driveway or approach road constructed under a permit, or to incur any additional expense removing snow berms or other obstructions from a driveway or approach road within a right of way resulting from the Department's activities, or activities under a permit issued under 17 AAC 15.

## PLANNING COMMISSION

Permittee is responsible for adjusting or relocating the driveway or approach road without cost or liability to the Department if the use or safety of the highway requires that the driveway or approach road be adjusted or relocated.

This permit is not a property right but a temporary authorization, revocable by the State upon violation of any permit terms or conditions, or for other reasons. All reasonable attorney's fees and costs associated with legal or enforcement actions related to the terms and conditions of this permit will be borne by the Permittee.

Any survey monument or monument accessory that is disturbed or destroyed during construction or maintenance of the driveway will be restored or replaced by a Land Surveyor licensed in the State of Alaska.

The Permittee will be responsible for all necessary Federal, State, and Municipal permits and licenses required by law, pay all taxes and special assessments lawfully imposed upon the permitted area, and pay other fees and charges assessed under applicable law.

## AUGUST 15, 2016

Placement of fill material in waters of the U.S., including wetlands and streams, requires prior authorization from the U.S. Army Corps of Engineers. It is the responsibility of the owner to contact the Corps before filling activities take place.

The Permittee shall construct and maintain a driveway in such a manner that the highway, and all of the highway's appurtenances or facilities, including drainage facilities, pipes, culverts, ditches, traffic control devices, street lights, pathways, and sidewalks are not impaired or endangered in any way by the construction or maintenance. (17 AAC 10.020(b) If you damage any improvements within the State owned right of way, you will be responsible for returning them to their previous condition. The Department will inspect and approve the restored improvements. (17 AAC 10.065)

Permittee shall indemnify, defend and hold harmless the State, and its officers, employees, and contractors, from any and all claims or actions resulting from injury, death, loss, or damage sustained by any person or personal property resulting directly or indirectly from Permittee's use of or activities in the permitted area.

Landings from all paved roads must be paved and maintained from edge of the road to the length of the landing as stipulated in this permit.

If a culvert is required by this driveway permit, culvert ends must be installed at the time of installation and maintained continuously by the owner.

No person shall place, leave or deposit upon any street, avenue, alley, sidewalk or other public right of way any snow or ice which has been removed from a private driveway, private parking area, or the adjacent property. Permittee is responsible for his snow removal contractor's actions concerning placement of snow from Permittee's property.

If driveway construction or maintenance interferes with the public's safety and/or use of facilities within State owned right of way, you will be directed to stop work until adjustments are made.

While doing construction or maintenance activities do not park equipment or stockpile material on the shoulder during non-working hours.

Permittee is responsible for sight distance clearing of brush and obstructions adjacent to their property.

Driveway landings as stipulated in the permit must be paved and maintained from pavement edge on all paved roads.

Please contact the Department for information about acceptable driveway markers (i.e., size, materials, distance, etc.) for placement within the right of way.

The State will not change its maintenance practices to accommodate your driveway or incur additional expense to clear snow berms or other obstacles resulting from the Department's activities.

**Special Conditions**

**Fees and Payments Information**

Please make all checks payable to the **State of Alaska**.

Fee Type	Amount	When to pay
Application Fee	\$ 100.00	Submit with permit application.

**Payments**

Date	Fee Type	Payment Type	Amount
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Please send fees and attachments to the following address:

State of Alaska  
 Department of Transportation and Public Facilities  
 Right of Way Section  
 PO Box 196900

4111 Aviation Way

Attn:Right of Way - Mail Stop: 2525

Anchorage, AK 99519-6900

Attachments may be faxed to: (907) 248-9456

[Edit](#)

- **Edit:** Modify the data above

[Main Menu](#)

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Department of Transportation  
& Public Facilities

PO Box 112500

3132 Channel Drive

Juneau, Alaska 99811-2500

Phone: 907-465-3900 || 907-586-8365 (FAX)

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July 14, 2016

Matanuska-Susitna Borough  
Planning and Land Use Department  
Development Services Division  
350 East Dahlia Avenue  
Palmer, AK 99645

Matanuska - Susitna Borough  
Development Services

JUL 14 2016

Received

RE: Response to MSB Review Comments - Site NSL1 Conditional Use Application  
Location 18N04W11A001

MTA Communications, LLC (MTAC) responses to Matanuska-Susitna Borough review comments received July 12, 2016 are detail below.

1. What color is the proposed tower?

**Response: The tower will be galvanized steel which is a silvery gray.**

2. Will adequate power supply be installed to accommodate the number of carriers the tower is designed for?

**Response: The site will have a 3 gang meter base installed. This will allow 3 carriers to each have a separate 200 amp electrical service for the tower.**

3. MSB Code section 17.67.090(A)(2) states "Minimum setback for the tower base shall be a distance equal to the height of the tower. " The setback from the tower base to the west property line must be a minimum of 185 feet. The setback from the tower base to the west property line needs to be shown on the site plan.

**Response: Drawing C1.0 Rev\_2 Site Plan and Drawings C2.0 Rev\_2 Enlarged Site Plan have been revised to reflect the 185 ft. set back from the tower base to the property line.**

4. Section 2.2 Tower and Site Design of the application material states "The proposed site is located on a parcel of land which is undeveloped." The Borough Assessment record indicates that there is a cabin on the property.

**Response: The proposed site is located on a parcel of land that is developed which has a cabin located southeast of the proposed site. Please see new site plan Drawing C0.1 Rev\_0 Reduced Site Plan that shows the approximate location of the cabin**

MTA Communications, LLC  
1740 S. Chugach Street  
Palmer, Alaska 99645

907-745-3211  
www.mtasolutions.com

MTA Long Distance, MTA Wireless, MTA Solutions and MTA Vision are registered trade names of MTA Communications, LLC

Long Distance  
Wireless  
Business Solutions  
Internet  
Television

5. Provide a more zoomed out site plan that also shows the existing development on the property.

***Response: Drawing C0.1\_Rev\_0 Titled Reduced Site Plan has been created to reflect the approximately location of the cabin that is southeast of the project site.***

6. Exhibit E - Propagation Maps. Provide an explanation of the map titled Tower co-locations at existing AT&T sites. It is unclear as to what this map is trying to depict.

***Response: MTAC researched co-locating at the "Zero Lake" site and the "Nancy Lake" site. The two sites were originally built and owned by ATT Wireless. ATT still occupies the top most antenna locations with the existing co-locators mounted below. MTAC antennas would need to be mounted below the other carriers in order to avoid interfering with the existing carriers at both sites. Our study indicates the lower tower elevations would compromise our highway coverage with areas of dropped calls. Our propagation studies indicated gaps in coverage between the two existing sites in those areas marked 1 and 2 and between Zero Lake site and the VZW site in Houston. The mauve (pink) color represents the coverage from MTAC antennas if located on the existing Nancy Lake tower. While the aqua color represent predicted coverage from MTAC antennas if they were located on the Zero Lake tower. The White areas of no color represent areas of either no coverage or unacceptable weak coverage.***

7. Exhibit G- Summary Pages and Written Public Comments. There are written comments from Heidi Jenkins, however, her comments are not addressed in the Summary Sheet. The Summary Sheet also shows that Eric Moore, DNR submitted comments, however, a copy of his comments were not provided. Copies of all comments submitted must be provided and the Summary Sheet amended to show all the comments.

***Please reference attached Exhibit G Summary Pages and Written Public Comments. Incorrect Exhibit G was submitted in original application.***

MTAC appreciates the timely review of the original application. Please let us know if you have any questions or comments regarding the responses provided to MSB application information request.

Respectfully,

Sherrie Greenshields  
New Horizons Telecom, Inc.  
sgreenshields@nhtiusa.com  
907-761-6057

Eric Anderson  
MTA Communications  
Director of Engineering/Construction/Operations  
eanderson@mta-telco.com  
907-761-2795

Attachments:

- Drawing C1.0 Rev\_2 Site Plan
- Drawing C2.0 Rev\_2 Enlarged Site Plan
- Drawing C0.1 Rev 0 Reduced Site Plan
- Exhibit G Summary Page and Written Public Comments

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June 30, 2016

Matanuska-Susitna Borough  
Planning and Land Use Department  
Development Services Division  
350 East Dahlia Avenue  
Palmer, AK 99645

RE: MSB 17.67 Tall Structures – Site NSL1 Conditional Use Application

MTA Communications, LLC (MTAC) is proposing construction of a 185-foot antenna structure (180 foot tower and 5 foot lightning rod) at 23619 W Parks Hwy, Alaska on that property fully described as Township 18 N Range 4W Section 11 Lot A1.

Construction of this facility will fill a documented significant gap in cellular communications and wireless broadband to the surrounding area. The proposed facility is located on a parcel of land where towers over 125 feet in height are permitted under a conditional use permit. The proposed project is the least intrusive alternative to fill the existing gap in MTAC's coverage in the area.

The attached narrative describes the proposed tower project and responds to elements of MSB 17.67. Please accept this as a part of MTAC's permit application.

Should the Planning Commission have any questions regarding this project, please contact us at the information below.

Sincerely,

Sherrie Greenshields  
New Horizons Telecom, Inc.  
sgreenshields@nhtiusa.com  
907-761-6057

Eric Anderson  
MTA Communications  
Director of Engineering/Construction/Operations  
eanderson@mta-telco.com  
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Long Distance  
Wireless  
Business Solutions  
Internet  
Television

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## **Conditional Use Permit Application**

Township 18N Range 4W Section 11 Lot A1

Sherrie Greenshields  
New Horizons Telecom, Inc.  
sgreenshields@nhtiusa.com  
907-761-6057

Eric Anderson  
MTA Communications  
Director of Engineering/Construction/Operations  
eanderson@mta-telco.com  
907-761-2795



## 1.0 Introduction

MTA Communications (MTAC) is an Alaskan owned and operated telecommunications company that provides telecommunication service to the citizens of Alaska.

More than two in five (45.4%) American homes no longer use traditional landline telephone service and instead choose to be wireless only.<sup>1</sup> More than 50% of all adults aged 18-44 and of children under the age of 18 are living in wireless-only households. In Alaska, 31.8% of homes choose to be wireless-only households and another 21.1% are “wireless-mostly.”<sup>2</sup> The demand for data on provider networks also continues to grow exponentially. In light of this growing reliance on wireless communications and increased data demand, additional infrastructure has become essential to providing reliable service. The demand for access to wireless communications continues to grow exponentially across both Alaska and the continental United States.

As part of MTAC’s efforts to fill network gaps, MTAC is proposing construction of 185-foot antenna structure (180 foot tower with 5 foot lighting rod) at 23619 W Parks Hwy. The proposed construction will fill an existing significant gap in cellular and wireless broadband service coverage. The construction of communication towers is permitted pursuant to a Conditional Use Application. The proposed tower location is the least intrusive, reasonably available and technically feasible location for the proposed tower construction.

The below sections present a description of radio frequency science, applicable federal law governing telecommunications, and the decision logic used to meet Matanuska-Susitna Borough Planning Department requirements set forth in standards MSB 17.67.

## 1.1 Radio Frequency Description and Evolution

Wireless networks are a complex mesh of radio frequencies that have an exclusive license to operate by the Federal Communication Commission (FCC). This mesh of licensed frequencies allows cellular communications to be delivered at a wide variety of scales. The scale that can be covered by the frequencies is directly proportional to the type of spectrum being used and distance between each set of antennas delivering the signals.

Radio Frequency (RF) is a frequency or band of frequencies in the range  $10^4$  to  $10^{11}$  or  $10^{12}$  Hz at which radio waves are transmitted, and they’re suitable for use in telecommunications. Hertz (Hz) is the unit of RF and it refers to the number of cycles per second. Wavelength is the distance between successive crest of a wave, peaks of the electromagnetic waves. The relationship between RF and Wavelength is as follows:  $\text{Wavelength} = C/\text{Frequency}$  where C is the speed of light ( $3 \times 10^8$  m/s). Radio Frequencies are allocated and regulated by the FCC and are a part of the electromagnetic spectrum.

---

<sup>1</sup> “Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July-December 2014,” U.S. DHHS, CDC National Center for Health Statistics.

<sup>2</sup> CDC Wireless Substitution: State-level Estimates from the National Health Interview Survey (December 2014)

The FCC has established safety guidelines for Human Exposure to Radiofrequency Electromagnetic Fields that broadcaster/wireless carriers must adhere to.

A cellular network is a radio network distributed over land through cells where each cell includes a fixed location transceiver known as base station. Multiple cells together provide radio coverage over larger geographical areas.

Mobile communication operators use radio spectrum to provide mobile calling and data services. In order to keep up with a demand that is exponentially growing, the technology continues to evolve. Some Factors that affect wireless network performance

- Physical Obstructions – Wireless signals have difficulty penetrating solid objects such as hills, buildings, foliage, etc. The more obstructions there are between the transmitter and receiver the higher the chances of a poor signal level.
- Network Range and Distance between Devices – The way wireless signal propagates and with obstructions on the way, the further apart the devices are, the weaker the signal becomes. The signal strength decreases, roughly in an inverse cubic relation with respect to the distance between two devices (4Gon Solutions). For example, if the distance between two devices doubles, the signal becomes at least eight times weaker.
- Network Usage and Load – If the number of active users in the network increases due to a special event or something of that nature, the resources required to support them may not be available. This results in reducing network performance by decreased data speeds or reduced accessibility.

## 1.2 Telecommunications Act of 1996

The Telecommunications Act of 1996 was enacted to encourage the rapid deployment of new telecommunications technologies, while also preserving state and local control over zoning matters. *T-Mobile Northeast LLC v. City of Lawrence*, 755 F.Supp.2d 286, 290 (D. Mass. 2010) (internal citations omitted). The Act generally preserves state and local authority over the placement and construction of telecommunication tower facilities. The Act places several limitations on local control. Specifically, the Act dictates that:

- (1) A local government cannot unreasonably discriminate among providers of functionally equivalent services; and
- (2) A local government cannot prohibit or effectively prohibit the provision of personal wireless services; and
- (3) A local government cannot deny or limit an application for the construction of a wireless tower on the basis of the health or environmental effects of radio frequency emissions, as long as the proposed tower complies with FCC requirements for emissions; and
- (4) Any local government decision to deny a request to construct personal wireless facilities must be in writing and supported by substantial evidence.

Since the Act's adoption, federal courts have assessed the application of these limitations and concluded that "a significant gap in service (and thus an effective prohibition of service) exists whenever a provider is prevented from filling a significant gap in its own service coverage." *MetroPCS, Inc. v. City & Cnty. of San Francisco*, 400 F.3d 715, 733 (9th Cir. 2005). Essentially, the Act precludes a municipality from restricting the construction of new infrastructure required by a provider to fill a gap in its network, even if coverage is available from other providers

in the area. The fact that coverage is provided by another carrier in the area cannot be relied upon by a local land use commission to deny a permit application for a new tower.

Any decision by a local planning or zoning authority denying a land use permit required to construct a personal wireless services facility must be in writing and supported by substantial evidence. Where a provider has demonstrated a significant gap in its service coverage and proposed the least intrusive means to fill this gap, the burden of proof shifts to the zoning board to demonstrate that the record contains substantial evidence in support of its decision. When a provider has made a prima facie showing that a proposed tower is the least intrusive means of filling a significant gap in service, even if a zoning board's denial is supported by substantial evidence the Commission must also specifically show that there are some potentially available and technologically feasible alternatives for construction. *T-Mobile USA v. City of Anacortes*, 572 F.3d 987, 998 (9th Cir. 2009). The provider must then have an opportunity to dispute the availability and feasibility of the alternatives favored by the locality. *Id.*

## **2.0 Existing Significant Gap in MTAC Coverage**

The area of Mat-Su Borough in the vicinity of the proposed cell site is currently underserved by MTAC for both voice and data coverage, which results in a significant gap in coverage for the MTAC system.

Detailed Propagation maps are included under Exhibit E (Propagation Maps). Three heights for the tower were considered, 120 feet, 150 feet and 185 feet (180-foot tower with 5foot lightning rod. However, both the 120 and 150 foot elevations do not result in full coverage of the significant gaps.

### **2.1 Site Selection Process**

To fill the significant gaps in MTAC's service, MTAC's engineers used computer modeling to determine an idealized design point for tower construction and a surrounding search radius containing properties which, dependent upon topography and other surface interference, could serve as a build location. A potential tower location within the search ring would be ideal to fill the existing significant gap in MTAC's coverage.

MTAC's preference is to co-locate on existing towers wherever possible. There are two existing tower in the vicinity of the proposed tower. Propagation studies included under Exhibit E (Propagation Maps), show that the existing sites will not provide coverage of the significant gaps in service.

### **2.2 Tower and Site Design**

Through strategic choices in site design and tower height the proposed construction is designed to fill the significant gap in MTAC's coverage in the least intrusive manner possible. The proposed site is located on a parcel of land which is undeveloped. Surrounding area is mostly comprised of undeveloped lots and homes.

A detailed site plan for the tower construction is included with this application as Exhibit A. The drawings are certified by a licensed professional engineer demonstrating soundness and conformity with all applicable codes, as well as State and federal law. The tower complex will be surrounded by a six-foot chain link fence. The tower site will be access using a new driveway.

The tower structure is a lattice tower. Site placement allows existing trees to screen the site from adjacent properties.

### **2.3 Tower Height**

The tower is designed to be the minimum height necessary to assure that the significant gap in MTAC's service coverage can be filled.

The propagation maps are included in Exhibit E (Propagation Maps) depict the proposed tower at heights of 120 feet, 150 feet and 185 feet (180-foot tower with 5-foot lighting rod).

It is MTAC's policy to construct all wireless infrastructures to an engineering standard that allows multiple carriers to locate equipment on the structure. The proposed tower is designed and engineered to accommodate two additional sets of antennas, of equal or lesser specification to MTAC's proposed equipment, yielding the ability to co-locate two additional carriers on the structure. With the inclusion of the MTAC's antennas, the structure allows for a total of three carriers on the tower.

### **2.4 Tower Illumination**

MTAC prefers not to illuminate towers. Illumination is typically only installed when instructed by the FAA for the health and safety of aviators or when otherwise required by federal and state agencies, though there are instances where MTAC has voluntarily lit a piece of infrastructure at the request of the local community. The tower is not required to be illuminated. The FAA has determined that no marking or lighting is required for this tower location (FAA Determination of No Hazard). Documentation is attached to this application as Exhibit B. The document can also be searched and downloaded from the FAA's website using Aeronautical Study Number 2016-AAL-446-OE. MTAC will not install aviator illumination, or any other type of illumination, on this tower.

## **3.0 Application Criteria Matanuska-Susitna Borough 17.67**

As set forth above, MTAC's proposed tower requires a Conditional Use Permit Matanuska-Susitna Borough 17.67. The project will protect the public health, safety, and welfare, will not injure the lawful use with existing neighboring uses.

### **17.67.050 PRE-APPLICATION REQUIREMENTS FOR NEW TALL STRUCTURES THAT REQUIRE A CONDITIONAL USE PERMIT.**

(A) Prior to applying for a conditional use permit for a new tall structure, the potential applicant shall hold at least one community meeting:

- (1) The meeting shall be held at the nearest facility where community council meetings are regularly scheduled. If the facility is not available, the nearest available public facility that is capable of seating a minimum of 20 people shall be utilized;

- (2) The meeting shall be held at least 15 calendar days after mailing of the notification;
  - (3) The meeting shall not start prior to 5 p.m. and no later than 7 p.m.;
  - (4) Notification of the meeting shall, at a minimum, include the following:
    - (a) Legal description and map of the general parcel, or parcels, within the coverage area under consideration for the telecommunication facility;
    - (b) Description of the proposed development including height, design, lighting, potential access to the site, and proposed service;
    - (c) Date, time, and location of informational meeting;
    - (d) Contact name, telephone number, and address of applicant; and
    - (e) Comment form created by the borough that has a comment submittal deadline and provides options for submitting comments.
  - (5) At a minimum, the notification area for the meeting shall include the following:
    - (a) Property owners within one-half mile of the parcels under consideration for the proposed tall structure; and
    - (b) The nearest community council and any community council whose boundary is within 1,200 feet of the parcels under consideration for the tall structure.
- (B) A written report summarizing the results of the community meeting shall be prepared that includes the following information:
- (2) Dates and locations of all meetings where citizens were invited to discuss the potential applicant's proposal;
  - (3) Content, dates mailed, and numbers of mailings, including letters, meeting notices, newsletters, and other publications;
  - (4) Sign-in sheet(s) used at the meeting that includes places for names, addresses, phone numbers, and other contact information such as email addresses;
  - (5) A list of residents, property owners, and interested parties who have requested in writing that they be kept informed of the proposed development through notices,

newsletters, or other written materials;

- (6) The number of people who attended meetings;
- (7) Copies of written comments received at the meeting;
- (8) A certificate of mailing identifying all who were notified of the meeting; and
- (9) a written summary that addresses the following:
  - (a) The substance of the public's written concerns, issues, and problems;
  - (b) How the applicant has addressed, or intends to address, concerns, issues, and problems expressed during the process; and
  - (c) Concerns, issues, and problems the applicant has not addressed or does not intend to address and why.

***MTAC Response – Please refer to attached Exhibit F (Notification Letter, Mailing List, Meeting Sign-In, and Meeting Summary) and Exhibit G (Summary Page & Written Comments).***

#### **17.67.070 GENERAL APPLICATION REQUIREMENTS FOR ADMINISTRATIVE AND CONDITIONAL USE PERMITS.**

(A) An application for a conditional use or administrative permit to construct a new tall structure may be initiated by a property owner or the owner's authorized agent and shall include:

- (1) Completed application form provided by the department and signed by the property owner or authorized agent;

***MTAC Response – Please find application form attached to this narrative.***

- (2) Design drawings for the proposed tall structure, drawn to scale, and certified by a registered engineer or architect;

***MTAC Response – Please refer to Exhibit A (Site Document and Design Documents).***

- (3) Fee in the amount designated in MSB 17.99;

***MTAC Response – Fee amount will be paid.***

- (4) Citizen participation report in accordance with MSB 17.67.050(B);

*MTAC Response – Please refer to attached Exhibit F (Notification Letter, Mailing List, Meeting Sign-In, and Meeting Summary) and Exhibit G (Summary Page & Written Comments).*

- (5) a certified site plan,

*MTAC Response – Please refer to Exhibit A (Site Document and Design Documents)*

- (6) Copy of a determination of no hazard to air navigation from the Federal Aviation Administration; and

*MTAC Response – Please refer to Exhibit B (FAA Determination)*

- (7) If breakpoint technology is intended to be utilized, a written statement specifying the height at which the engineered structural weakness will be located.

*MTAC Response – breakpoint technology not applicable to this tower application.*

#### **17.67.080 STANDARDS FOR APPROVAL OF NEW TALL STRUCTURES.**

(A) A permit for a new tall structure may only be approved if it meets the requirements of this section in addition to any other applicable standards required by this chapter.

(B) In granting or denying a permit, the commission or director shall make findings on whether the applicant has demonstrated that:

- (1) To the extent that is technically feasible and potentially available, the location of the tall structure is such that its negative effects on the visual and scenic resources of all surrounding properties have been minimized;

*MTAC Response – the site is situated within a lot surrounded by existing trees. The access road is “dog-legged” in so the site is not visible from direct line of view from access road. The residences surrounding the lot have trees that will help screen the tower from view.*

- (2) Visibility of the tall structure from public parks, trails recognized within adopted borough plans, and water bodies has been minimized to the extent that is technically feasible and potentially available;

*MTAC Response – the site is situated within a lot surrounded by existing trees. The access road is “dog-legged” in so the site is not visible from direct line of view from access road. The residences surrounding the lot have trees that will help screen the tower from view.*

- (3) The tall structure will not interfere with the approaches to any existing airport or airfield that are identified in the borough’s regional aviation system plan or by the Alaska State Aviation System Plan; and

*MTAC Response – Please refer to Appendix B (FAA Determination). The site does not interfere with existing airports or airfields.*

- (4) Granting the permit will not be harmful to the public health, safety, convenience, and welfare.

*MTAC Response – the proposed site will not be harmful to the public health, safety, convenience and welfare.*

#### 17.67.090 OPERATION STANDARDS FOR NEW TALL STRUCTURES.

- (A) The following setback requirements shall apply to all new telecommunications towers regulated under this chapter:

- (1) The equipment compound shall meet minimum setback distances from all property lines in accordance with MSB 17.55.

*MTAC Response – The proposed site conforms to MSB 17.55.*

- (2) Minimum setback for the tower base shall be a distance equal to the height of the tower.

*MTAC Response – The proposed tower setback is a distance equal to the height of the tower.*

- (a) The commission, or director if it is an administrative permit, may reduce the setback to a distance less than the height of the tower, if the applicant demonstrates there is no risk to public health, safety, or welfare of adjacent property owners.

- (3) Setbacks shall be determined from the dimensions of the entire lot, even though the tower may be located on lease areas within the lot.

*MTAC Response – The proposed tower setback is a distance equal to the height of the tower.*

(B) For all tall structures regulated under this chapter, adequate vehicle parking shall be provided on the subject property, outside of public use easements and rights-of-way, to enable emergency vehicle access.

***MTAC Response – Refer to Exhibit A (Site Document and Design Documents). The site has adequate vehicle parking on subject property to enable emergency vehicle access.***

(1) No more than two spaces per provider shall be required.

(C) The following requirements apply to all new and existing telecommunication towers and wind energy conversion systems regulated under this chapter:

(1) The following signage shall be visibly posted at the equipment compound:

(a) Informational signs for the purpose of identifying the tower such as the antenna structure registration number required by the Federal Communications Commission, as well as the party responsible for the operation and maintenance of the facility;

***MTAC Response – MTAC will comply with signage requirements.***

(b) If more than 220 volts are necessary for the operation of the facility, warning signs shall be located at the base of the facility and shall display in large, bold, high contrast letters the following: “HIGH VOLTAGE – DANGER”; and

***MTAC Response – MTAC proposed service will be 240 volts. MTAW will comply with signage requirements.***

(c) A 24-hour emergency contact number.

***MTAC Response – a 24 hour contact number will be referenced on signage.***

(2) A fence or wall not less than six feet in height with a secured gate shall be maintained around the base of the tower.

***MTAC Response – Please refer to Appendix A (Site Document and Design Documents).***

#### **4.0 Conclusion**

MTAC's Matanuska-Borough network includes a significant gap in coverage in the proposed site vicinity as depicted in attached propagation studies in Exhibit E. After a search of available sites which could meet the technical requirements necessary to fill this coverage gaps, MTAC has identified 23619 W Parks Hwy, Alaska on that property fully described as Township 18N Range 4W Section 11 Lot A1 as the location which will allow for construction meeting network requirements. As described in detail in this application, this tower location is the least intrusive and most appropriate option to meet the significant gap in MTAC's coverage, which can only be met through placement of a new tower. Finally, MTAC's proposed tower will affirmatively protect the public health, safety, and welfare by providing cellular and wireless broadband services to a currently underserved area, impacting both area households and residents and transient customers seeking to access this technology from roadways and public spaces in the area. We believe we have exceeded the burden of proof outlined in MSB 17.67. for the requested Conditional Use Permit. Therefore, MTAC respectfully requests that the Matanuska-Susitna Planning Commission grant the Conditional Use Permit.

## **5.0 Exhibits**

Exhibit A: Site Document and Design Documents

Exhibit B: FAA Determination

Exhibit C: Balloon Flight

Exhibit D: Redacted Lease

**Exhibit E: Propagation Maps**

Exhibit F: Notification Letter, Mailing List, Meeting Sign In, and Meeting Summary

Exhibit G: Summary Page and Written Public Comments

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# Exhibit A

Site Document & Design  
Documnets





# NSL1 LTE SITE

## PROJECT INFORMATION

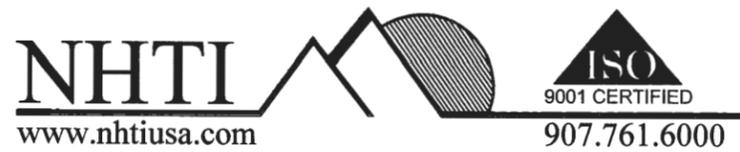
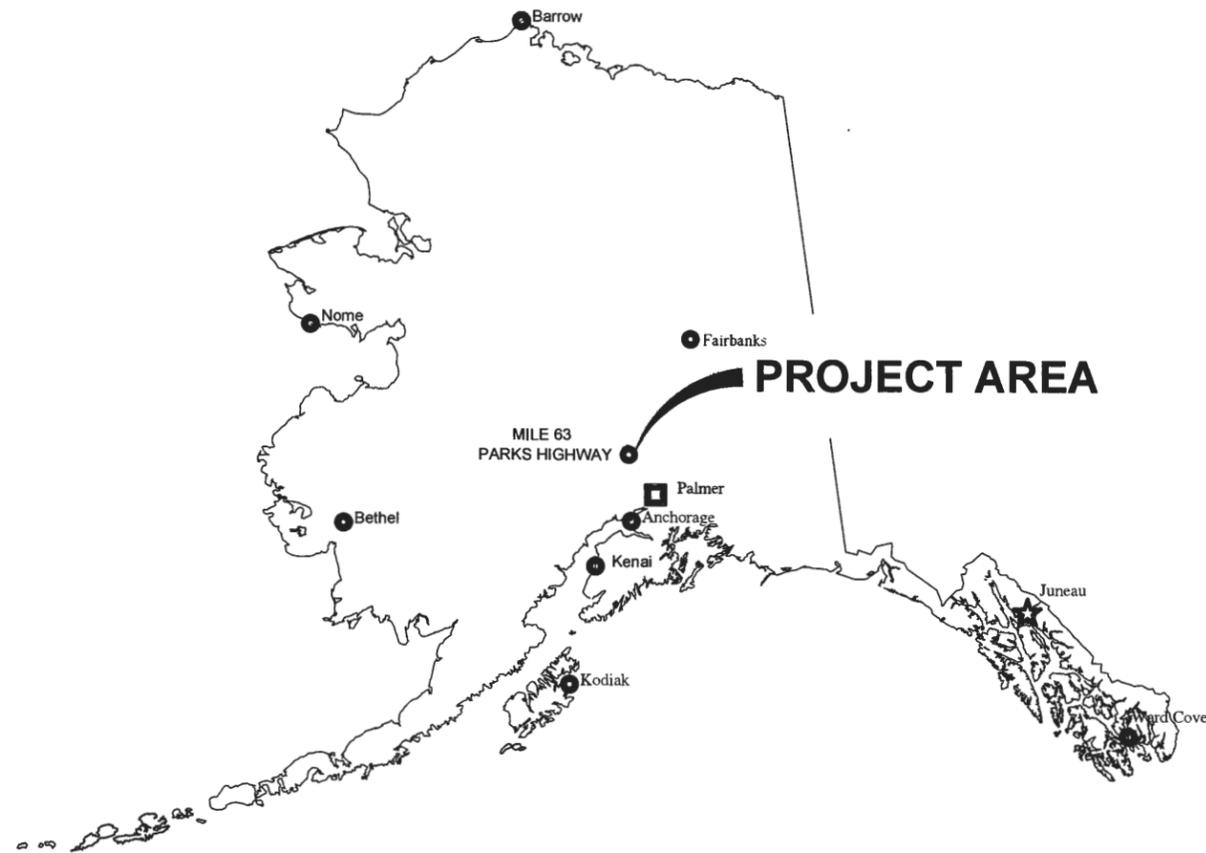
PROJECT LOCATION: 23619 W PARKS HIGHWAY  
NHTI PROJECT NUMBER: 16-0052-20

## CONTACT INFORMATION

CIVIL ENGINEER  
DALE R. BROWNING, PE, SE  
NHTI - (907) 761-6069  
901 COPE INDUSTRIAL WAY  
PALMER, ALASKA 99645

## Sheet List Table

SHEET #	TITLE	REV #
T1.0	COVER SHEET	0
C1.0	SITE PLAN	0
C1.1	SITE ELEVATION	0
C2.0	ENLARGED SITE PLAN	0
C2.1	DRIVEWAY AND PAD SECTIONS	0
S1.0	TOWER FOUNDATION PLAN	0
S1.1	TOWER FOUNDATION SECTION	0
S1.2	GRADE BEAM LAYOUT AND DETAILS	0



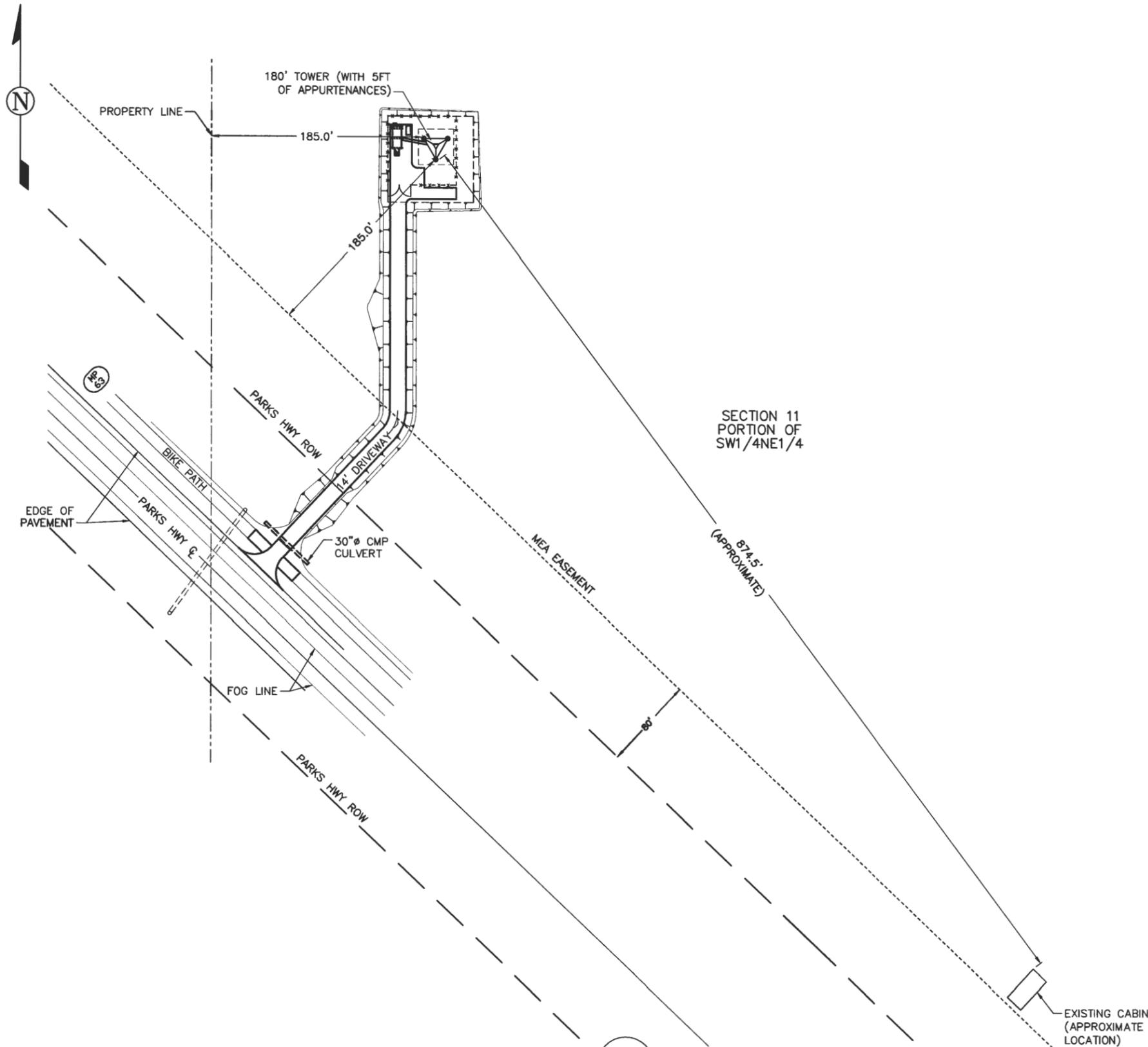
REV.	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	160623



MTA  
NSL1 LTE SITE  
COVER SHEET

T1.0

FILE: X:\16 JOBS\16-0052-20 MTA NAS1 LTE SITE DESIGN\05-CADD\DRAWING\ST1.0 COVER SHEET.DWG | PLOT DATE: 160623 | PLOT SCALE: 1:1



Matanuska - Susitna Borough  
Development Services

JUL 14 2016

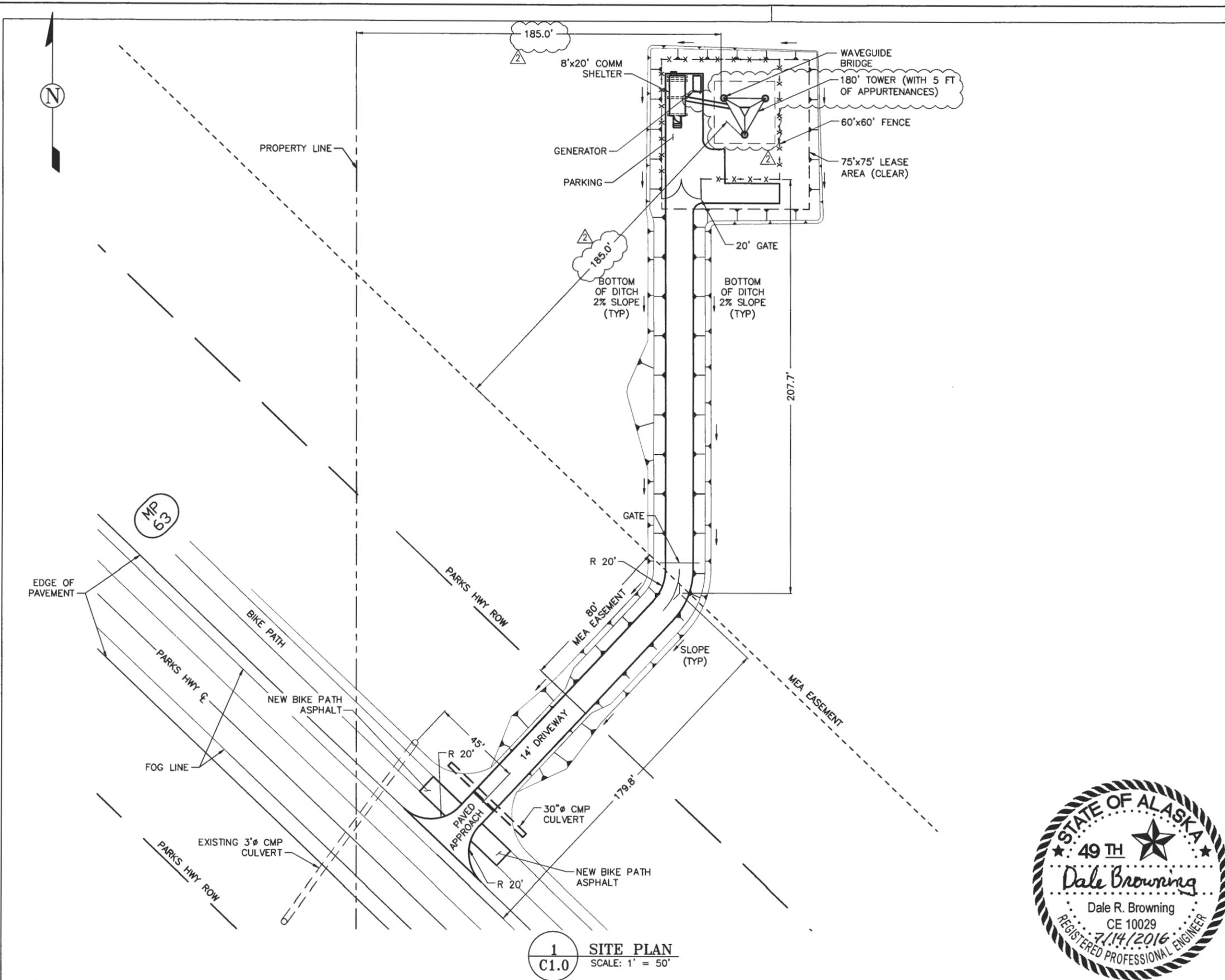
Received

1 REDUCED SITE PLAN  
C0.1 SCALE: 1" = 100'



0	ISSUED FOR CONSTRUCTION	160714
REV.	DESCRIPTION	DATE
MTA NSL1 LTE SITE REDUCED SITE PLAN		
DWN: JAA	CKD. DRB	APP. DRB
JOB #: 16-0052-20		DATE: 160714
C0.1		REV 0

FILE: X:\16 JOBS\16-0052-20 MTA NSL1 LTE SITE DESIGN\CADD\DRAWINGS\C0.1 REDUCED SITE PLAN.DWG | PLOT DATE: 160714 | PLOT SCALE: 1:1



- NOTE:**
1. CONSTRUCT BOTTOM OF DITCH TO DRAIN SITE PRIOR TO EXCAVATION OF TOWER FOOTING.
  2. PAVED APPROACH TO EXTEND 30 FT BEYOND EDGE OF ROAD PAVEMENT.

Matanuska - Susitna Borough  
Development Services

JUL 14 2016

Received

2	MOVED TOWER	160714
1	CLARIFIED DITCH SLOPES	160706
0	ISSUED FOR CONSTRUCTION	160623
REV.	DESCRIPTION	DATE



MTA  
NSL1 LTE SITE  
**SITE PLAN**

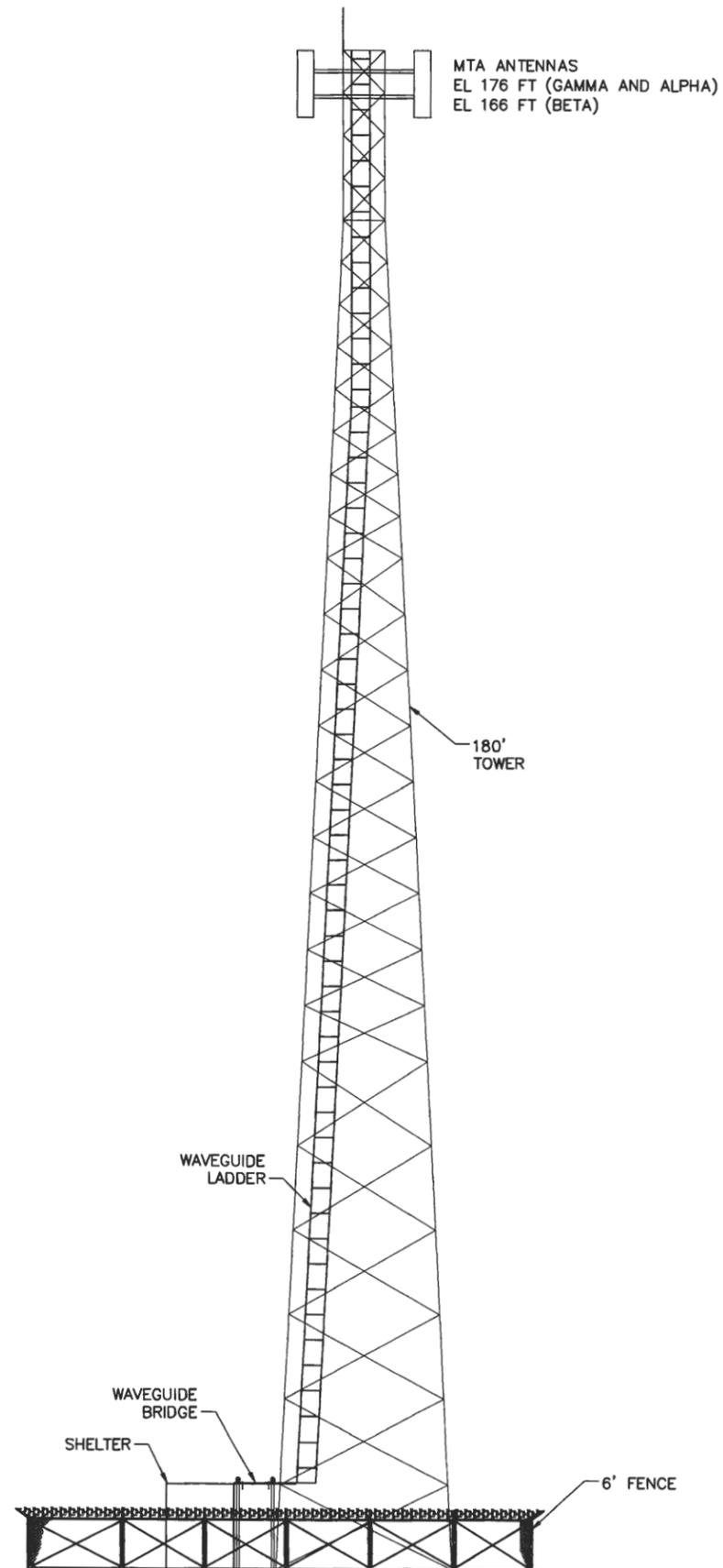
DWN: JAA CKD. DRB APP. DRB  
JOB #: 16-0052-20 DATE: 160623

C1.0 REV 2

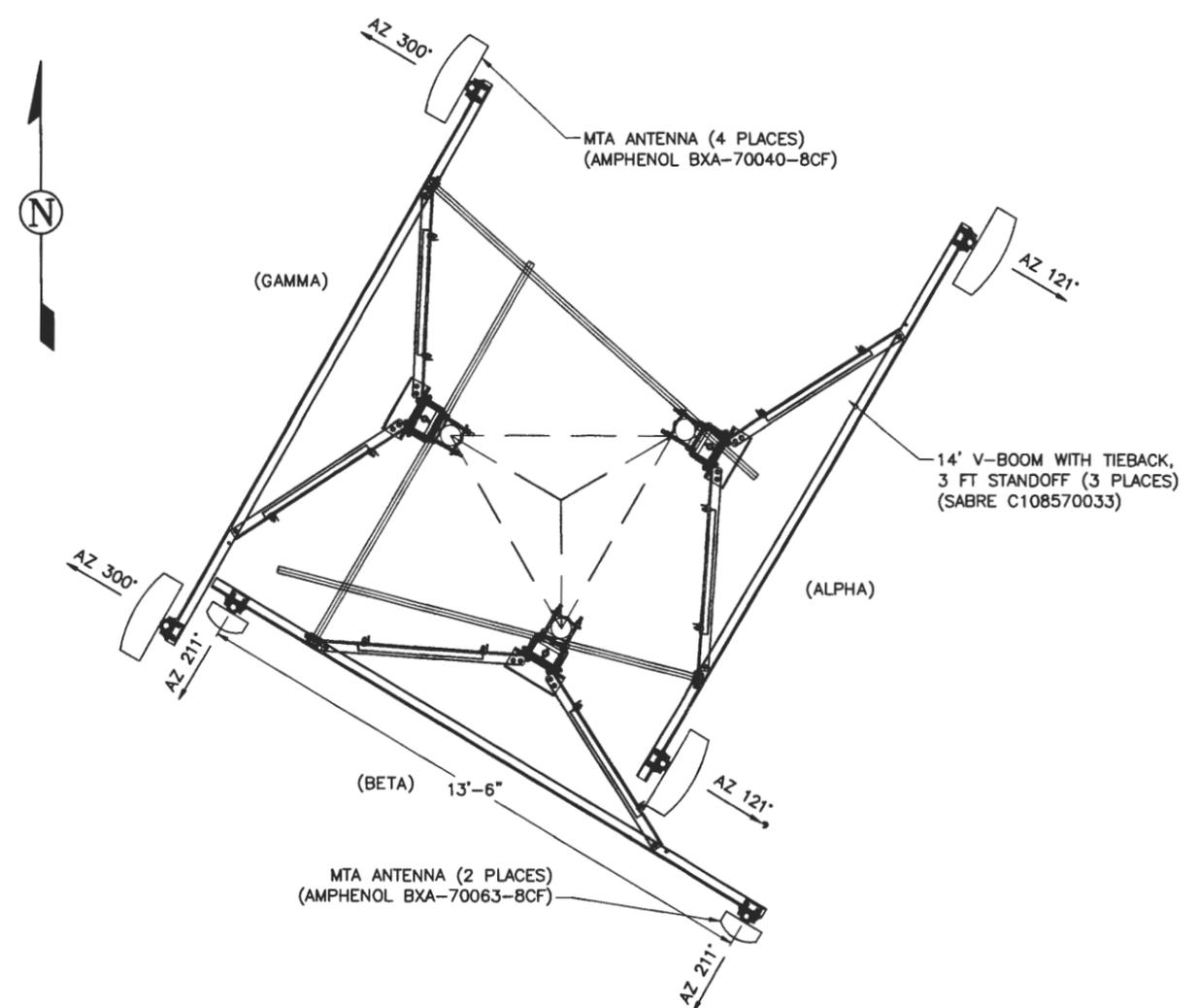


**1**  
C1.0 **SITE PLAN**  
SCALE: 1" = 50'

FILE: X:\16 JOBS\16-0052-20 MTA NSL1 LTE SITE DESIGN\05-CADD\DRAWINGS\C1.0 SITE PLAN.DWG | PLOT DATE: 160714 | PLOT SCALE: 1:1



**1**  
C1.1 **SITE ELEVATION**  
SCALE: 1" = 20'

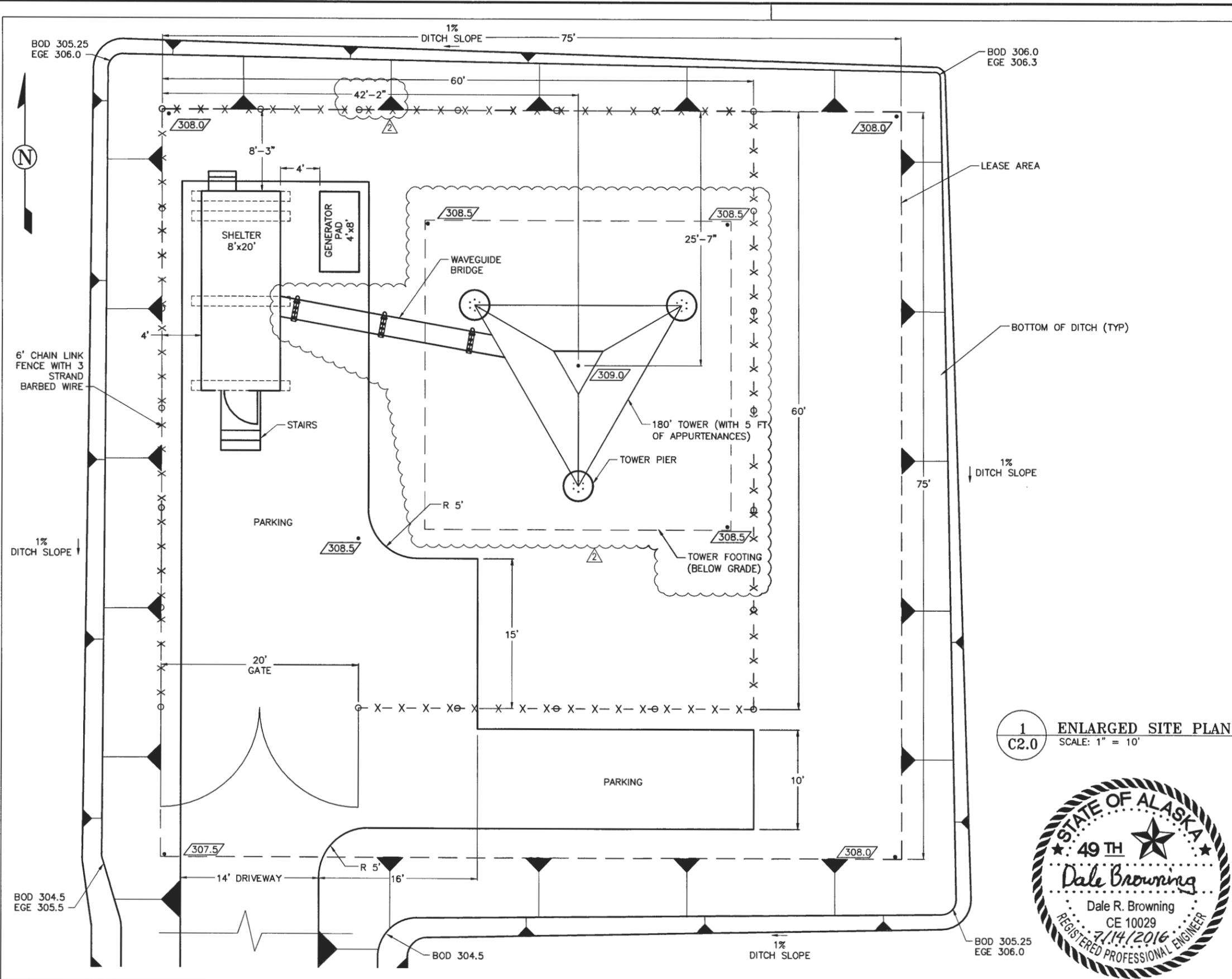


**2**  
C1.1 **MTA ANTENNA LAYOUT**  
SCALE: 1/4" = 1'-0"



0	ISSUED FOR CONSTRUCTION	160623
REV.	DESCRIPTION	DATE
MTA NSL1 LTE SITE <b>SITE ELEVATION</b>		
DWN: JAA	CKD. DRB	APP. DRB
JOB #: 16-0052-20	DATE: 160623	
<b>C1.1</b>		REV <b>0</b>

FILE: X:\6 JOBS\16-0052-20 MTA NAS1 LTE SITE DESIGN\05-CADD\DRAWINGS\C1.1 SITE ELEVATION.DWG | PLOT DATE: 160623 | PLOT SCALE: 1:1



**NOTES:**  
 1. FINAL GRADE OF LEASE AREA TO BE 2 FT MIN ABOVE EXISTING GRADE.

**LEGEND:**  
 BOD BOTTOM OF DITCH  
 XXX.X FINAL GRADE  
 EGE EXISTING GROUND ELEVATION

Matanuska - Susitna Borough  
 Development Services

JUL 14 2016

Received

1 ENLARGED SITE PLAN  
 C2.0 SCALE: 1" = 10'



2	MOVED TOWER	160714
1	PROVIDED EXISTING AND FINAL ELEVATIONS	160706
0	ISSUED FOR CONSTRUCTION	160623
REV.	DESCRIPTION	DATE

NEW HORIZONS TELECOM, INC.

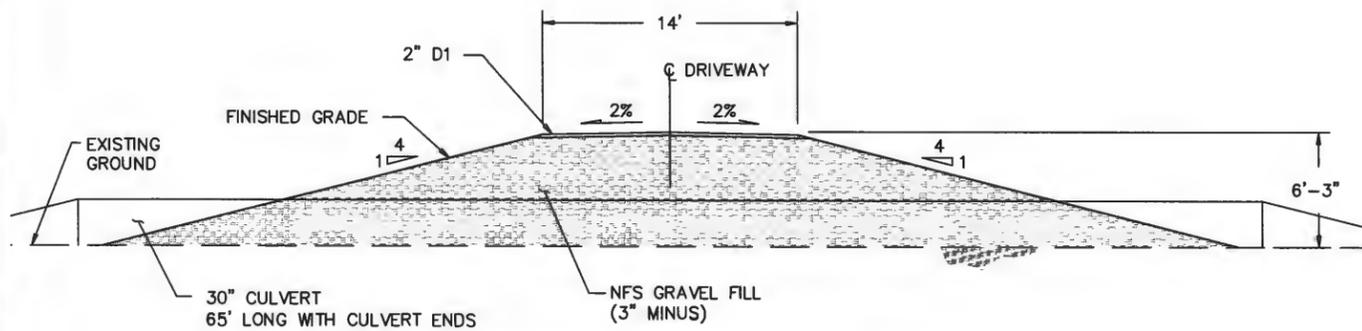
MTA  
 NSL1 LTE SITE  
 ENLARGED  
 SITE PLAN

DWN: JAA CKD. DRB APP. DRB  
 JOB #: 16-0052-20 DATE: 160623

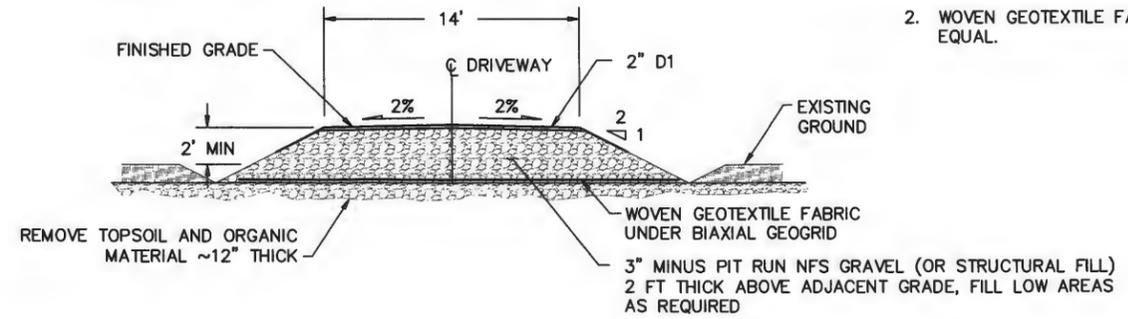
C2.0 REV 2

FILE: X:\16 JOBS\16-0052-20 MTA NSL1 LTE SITE DESIGN\05-CADD\DRAWINGS\C2.0 ENLARGED SITE PLAN.DWG | PLOT DATE: 160714 | PLOT SCALE: 1:1

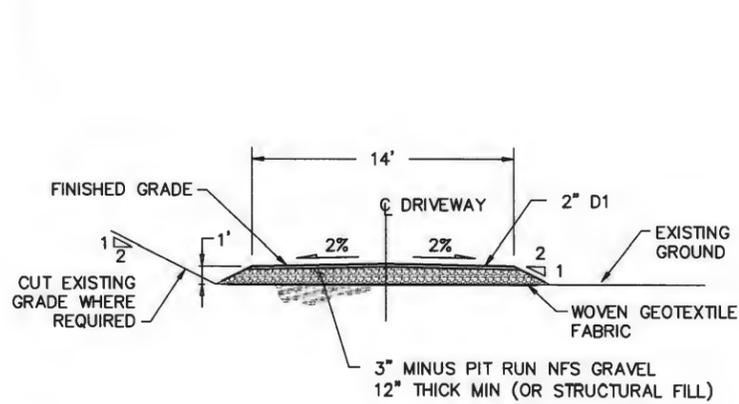
- NOTES:
1. BIAXIAL GEOGRID TO BE TENSAR BX4200 OR EQUAL.
  2. WOVEN GEOTEXTILE FABRIC TO BE WINFAB 315W OR EQUAL.



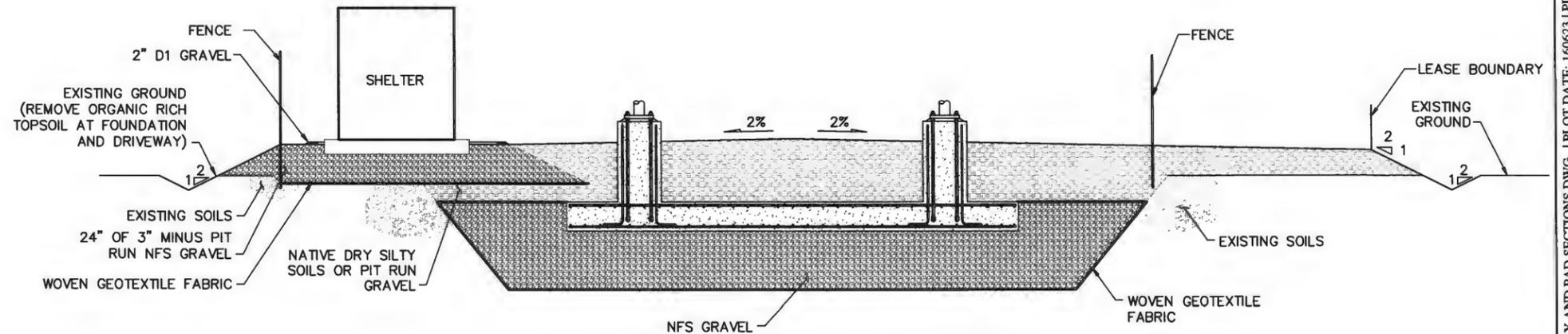
**1**  
C3.1 **DRIVEWAY SECTION AT CULVERT**  
SCALE: 1"=10'



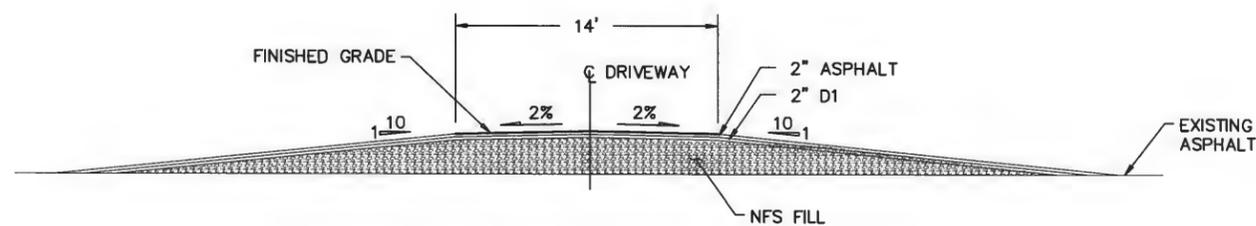
**2**  
C3.1 **DRIVEWAY SECTION (TYP WET AREAS)**  
SCALE: 1"=10'



**3**  
C3.1 **DRIVEWAY SECTION (TYP DRY AREAS)**  
SCALE: 1"=10'



**4**  
C3.1 **PAD SECTION**  
SCALE: 1"=10'

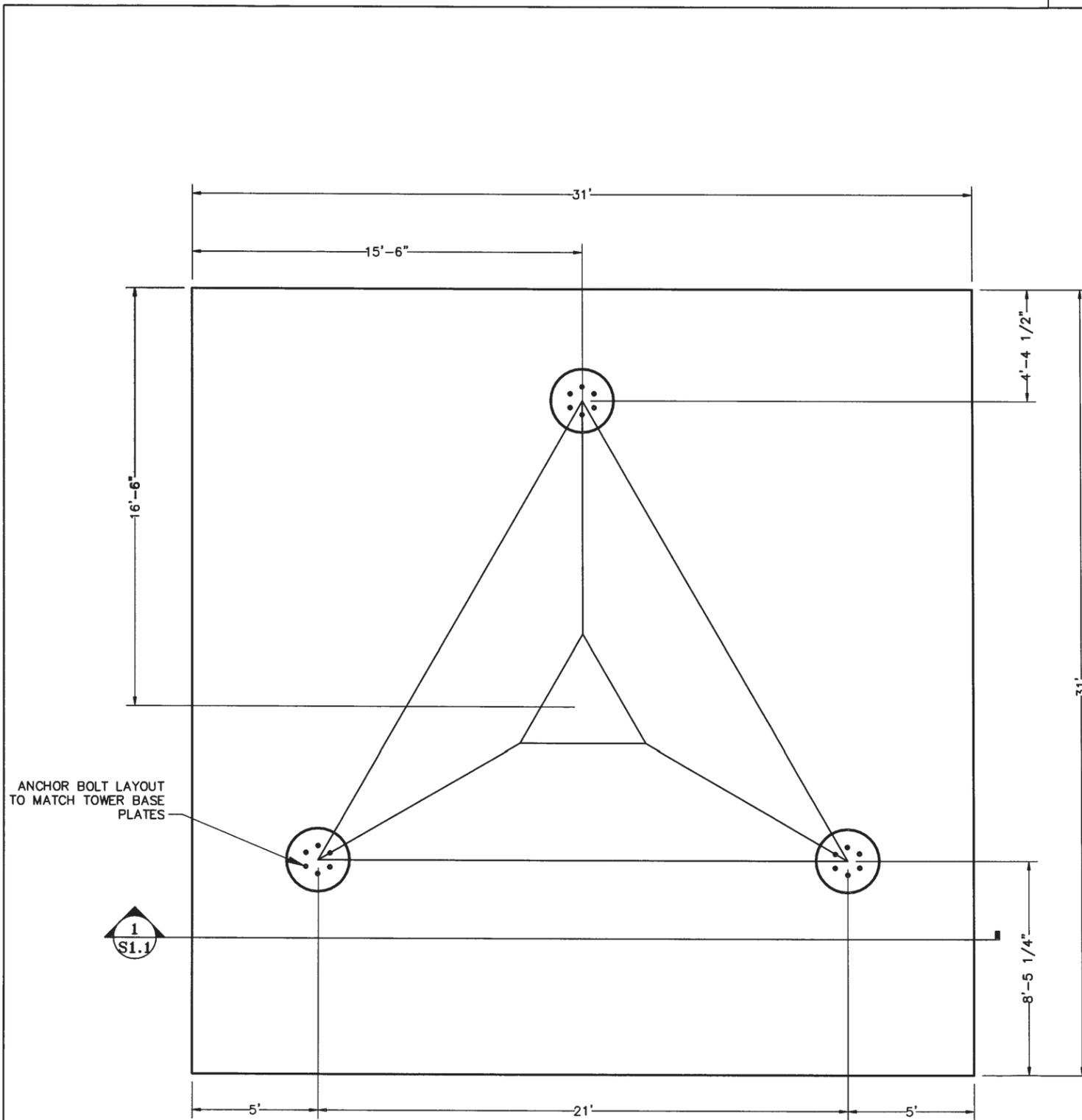


**5**  
C3.1 **DRIVEWAY SECTION AT BIKE PATH**  
SCALE: 1"=10'



0	ISSUED FOR CONSTRUCTION	160623
REV.	DESCRIPTION	DATE
MTA NSL1 LTE SITE <b>DRIVEWAY AND PAD                  SECTIONS</b>		
DWN: JAA	CKD: DRB	APP: DRB
JOB #: 16-0052-20	DATE: 160623	
C2.1		REV 0

FILE: X:\16 JOBS\16-0052-20 MTA NSL1 LTE SITE DESIGN\05-CADD\DRAWINGS\C2.1 DRIVEWAY AND PAD SECTIONS.DWG | PLOT DATE: 160623 | PLOT SCALE: 1:1



1 TOWER FOUNDATION PLAN VIEW  
S1.0 SCALE: 3/16" = 1'-0"

**DESIGN CRITERIA:**

**TOWER BASE REACTIONS (SABRE #140134)**  
 AXIAL LOAD: 87.46 KIPS  
 TOTAL SHEAR: 71.04 KIPS  
 O.T. MOMENT: 6,512.3 FT-KIPS  
 UPLIFT PER LEG: 327.0 KIPS  
 COMP PER LEG: 364.0 KIPS  
 SHEAR PER LEG: 40.88 KIPS  
 ALLOWABLE SOIL BEARING: 3000 psf (4 FT OF COMPACTED NFS GRAVEL FILL)

DESIGN WIND SPEED: 100 MPH  
 (3 SEC. GUST) PER TIA-222-G

EXPOSURE: C,  
 TOPO CATEGORY: 2, H=80'  
 STRUCTURE CLASS: II  
 IMPORTANCE FACTOR: 1.0  
 RADIAL ICE: 1/2 IN

**NOTES:**

**FARTHWORK:**

1. REMOVE ALL ORGANIC MATTER AND DELETERIOUS MATERIALS FROM THIS SITE AREA. EXCAVATE 8FT BELOW EXISTING GRADE. BOTTOM OF EXCAVATION TO BE 40FT x40FT. PLACE GEOTEXTILE FABRIC (WINFAB315W OR EQUAL) AT BOTTOM AND SIDES OF EXCAVATION. PLACE BUILDING FOUNDATION ON 2 FT MIN OF COMPACTED NFS STRUCTURAL FILL OVER GEOTEXTILE FABRIC.
2. ALL COMPACTED FILL TO BE COMPACTED TO 90% TO 95% MAXIMUM LABORATORY DENSITY IN 12 INCH LIFTS.
3. COMPACTED FILL AND OR EXCAVATION IS REQUIRED TO ALLOW DRAINAGE SO THAT NO STANDING WATER WILL ACCUMULATE ON THE SITE AS A RESULT OF THIS WORK.
4. ALL EXCAVATIONS SHALL BE SHORED OR SLOPED OR OTHERWISE SUPPORTED TO PROTECT PERSONNEL IN ACCORDANCE WITH OSHA, 29 CFR 1926, SUBPART P.

**CONCRETE:**

1. CONCRETE SHALL OBTAIN A 28-DAY COMPRESSIVE STRENGTH OF 4,500 PSI (F'c = 4,500 PSI). THE MIX SHALL CONTAIN A MINIMUM OF 6 SACKS CEMENT PER CUBIC YARD OF CONCRETE.
2. CEMENT SHALL CONFORM TO ASTM C150 TYPE I OR II.
3. AGGREGATE SHALL CONFORM TO ASTM C33. MAXIMUM AGGREGATE SIZE SHALL BE 3/4 INCH.
4. SLUMP SHALL BE BETWEEN 3 - 5 INCHES.
5. ADMIXTURE SHALL BE PROVIDED AS REQUIRED TO PROVIDE 5% - 8% AIR ENTRAINMENT WITH A MAXIMUM WATER/CEMENT RATIO OF 0.45.
6. CONCRETE SHALL BE KEPT FROM FREEZING FOR THE FIRST SEVEN DAYS AFTER PLACING. SURFACES TO RECEIVE CONCRETE SHALL BE NOT LESS THAN 40° F. THE TEMPERATURE OF THE CONCRETE WHEN PLACED SHALL NOT BE LESS THAN 50° F OR GREATER THAN 80° F.

**REINFORCING STEEL:**

1. ALL REINFORCING BARS SHALL BE DEFORMED AND CONFORM TO ASTM A615, GRADE 60.
2. ALL BOTTOM MAT REINFORCING BARS SHALL BE ACCURATELY PLACED AND SUPPORTED BY GALVANIZED METAL CHAIRS OR CONCRETE BLOCKS (WOODEN STAKES SHALL NOT BE USED).
3. SUPPORT TOP MAT OF REBAR WITH BENT #4 REBAR SPACERS (STANDIES) AT 4' O.C.
4. MINIMUM CONCRETE COVER FOR REBAR WHERE CONCRETE IS PLACED IN DIRECT CONTACT WITH SOIL IS 3 INCHES CLEAR, FOR ALL OTHER FORMED SURFACES IS 2 INCHES.
5. ALL REBAR SPLICES SHALL BE LAPPED 40 BAR DIAMETERS MIN.

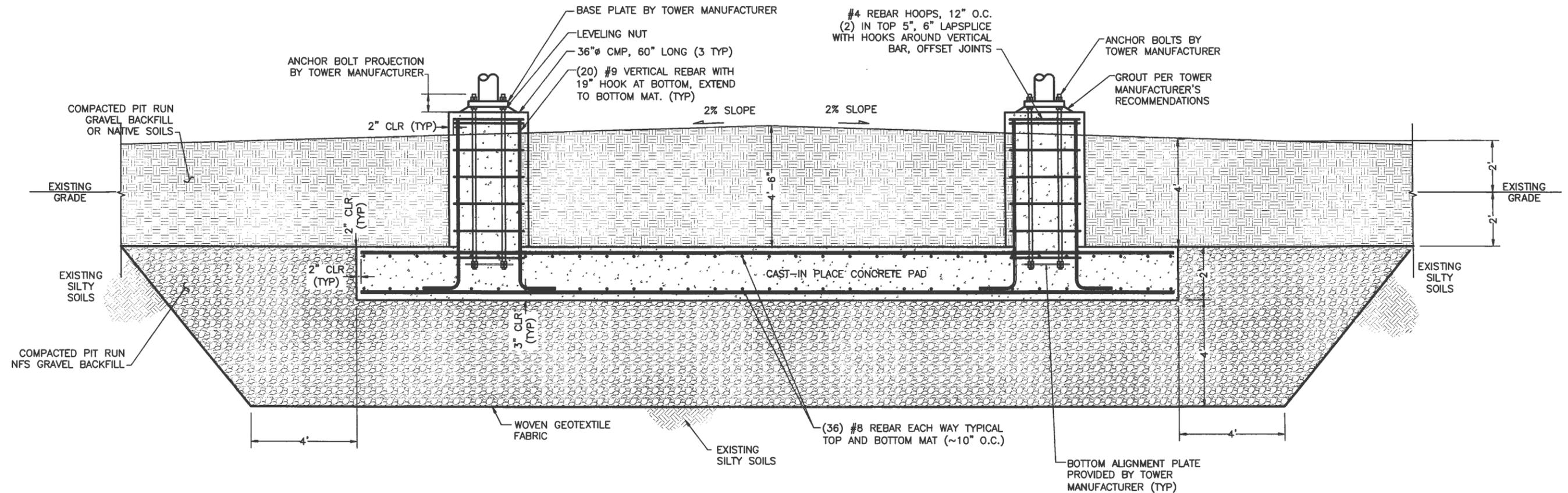
**STRUCTURAL STEEL:**

1. STRUCTURAL STEEL INCLUDING PLATES, ANGLES AND MISCELLANEOUS SHAPES SHALL BE ASTM A36.



0	ISSUED FOR CONSTRUCTION	160623
REV.	DESCRIPTION	DATE
MTA NSL1 LTE SITE <b>TOWER FOUNDATION PLAN</b>		
DWN: JAA	CKD. DRB	APP. DRB
JOB #: 16-0052-20	DATE: 160623	
S1.0		REV 0

FILE: X:\16 JOBS\16-0052-20 MTA NASL1 LTE SITE DESIGN\5-CADD\DRAWINGS\1.0 TOWER FOUNDATION.DWG | PLOT DATE: 160623 | PLOT SCALE: 1:1



**1**  
S1.1 **TOWER FOUNDATION SECTION**  
SCALE: NTS

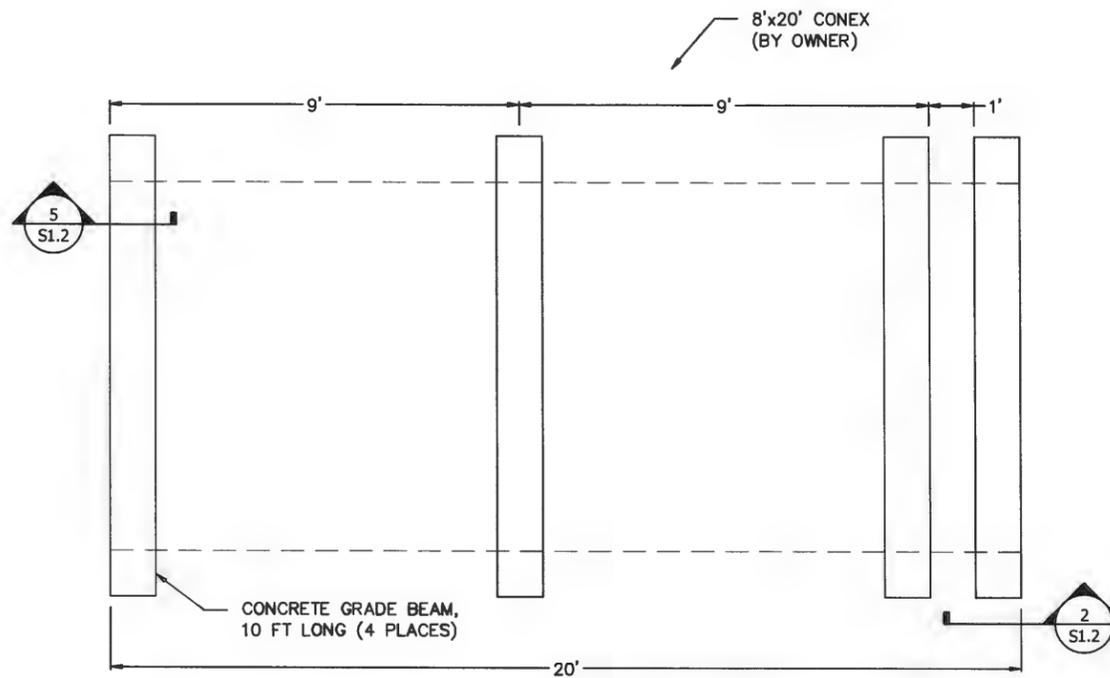
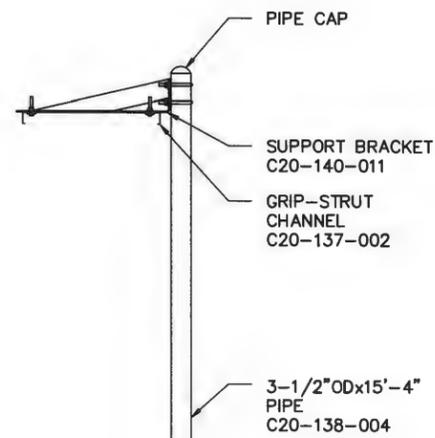
**NOTES:**

1. ON SITE TEST HOLE FOUND APPROXIMATELY 6" OF ORGANIC RICH TOPSOIL. THEN 1.5-2 FT OF SILTY SOILS. THEN 3 FT OF SANDY SOILS. THEN A LAYER OF NFS GRAVEL APPROXIMATELY 1-2 FT THICK. THEN SANDY GRAVEL.
2. BOTTOM OF TOWER FOUNDATION TO BE PLACED ON TOP OF OR APPROXIMATELY 6" INTO GRAVEL LAYER.
3. IF EXCAVATION FOR TOWER FOUNDATION REVEALS DIFFERENT SOIL CONDITIONS. CONTACT ENGINEER OF RECORD FOR DIRECTION. DO NOT PLACE TOWER FOUNDATION ON MATERIAL OTHER THAN NATIVE NFS GRAVEL.
4. PROOF ROLL BOTTOM OF EXCAVATION TO ENSURE THERE ARE NO SOFT SPOTS. CONTACT ENGINEER OF RECORD FOR DIFFERING CONDITIONS.

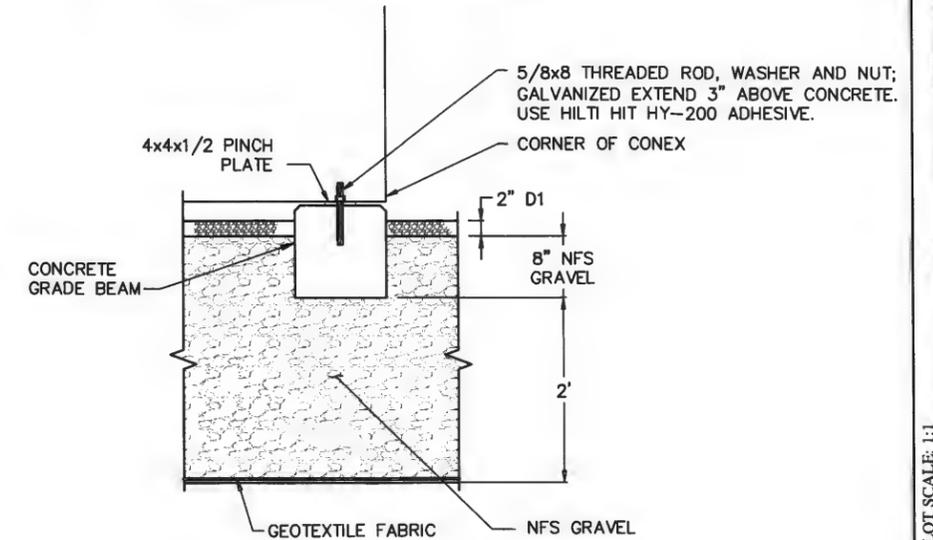


0	ISSUED FOR CONSTRUCTION	160623
REV.	DESCRIPTION	DATE
MTA NSL1 LTE SITE <b>TOWER                  FOUNDATION SECTION</b>		
DWN: JAA	CKD. DRB	APP. DRB
JOB #: 16-0052-20	DATE: 160623	
S1.1		REV <b>0</b>

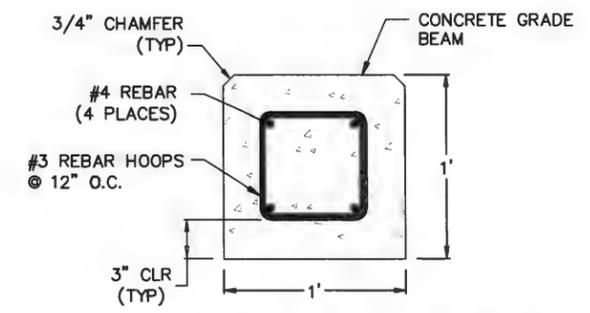
FILE: X:\16 JOBS\16-0052-20 MTA NAS1 LTE SITE DESIGN\CADD\DRAWINGS\S1.1 FOUNDATION SECTION.DWG | PLOT DATE: 160623 | PLOT SCALE: 1:1



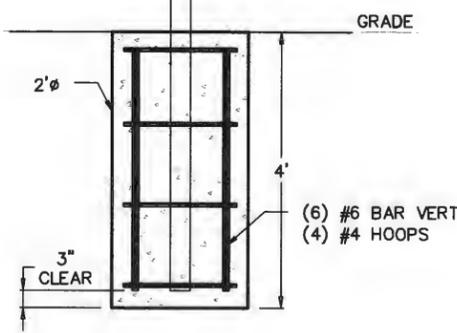
**1 GRADE BEAM LAYOUT**  
SCALE: 3/8" = 1'-0"



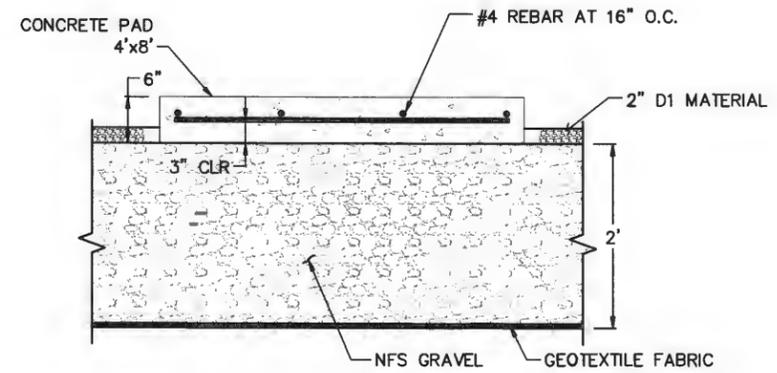
**2 GRADE BEAM CONNECTION DETAIL**  
SCALE: 1/2" = 1'-0"



**5 CROSS SECTION**  
SCALE: 1" = 1'-0"



**3 POST AND FOOTING DETAIL**  
SCALE: 3/8" = 1'-0"



**4 GENERATOR PAD DETAIL**  
SCALE: 1/2" = 1'-0"



0	ISSUED FOR CONSTRUCTION	160623
REV.	DESCRIPTION	DATE
MTA NSL1 LTE SITE <b>GRADE BEAM                  LAYOUT AND DETAILS</b>		
DWN: JAA	CKD. DRB	APP. DRB
JOB #: 16-0052-20	DATE: 160623	
S1.2		REV 0

FILE: X:\16\JOBS\16-0052-20\MTA NASI LTE SITE DESIGN\5-CADD\DRAWINGS\S1.2 GRADE BEAM LAYOUT AND DETAILS.DWG | PLOT DATE: 160623 | PLOT SCALE: 1:1

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# Exhibit B

FAA Determination





Mail Processing Center  
 Federal Aviation Administration  
 Southwest Regional Office  
 Obstruction Evaluation Group  
 10101 Hillwood Parkway  
 Fort Worth, TX 76177

Aeronautical Study No.  
 2016-AAL-446-OE

Issued Date: 06/21/2016

Rod Ewing  
 MTA Communications, Inc.  
 1740 S Chugach St  
 Palmer, AK 99645

**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower NSL1
Location:	Houston, AK
Latitude:	61-39-58.50N NAD 83
Longitude:	149-56-53.84W
Heights:	302 feet site elevation (SE) 185 feet above ground level (AGL) 487 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)  
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

**See attachment for additional condition(s) or information.**

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 L.

This determination expires on 12/21/2017 unless:

- the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- extended, revised, or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination does not constitute authority to transmit on the frequency(ies) identified in this study. The proponent is required to obtain a formal frequency transmit license from the Federal Communications Commission (FCC) or National Telecommunications and Information Administration (NTIA), prior to on-air operations of these frequency(ies).

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (800) 478-3576 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (907) 271-5863. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-AAL-446-OE.

**Signature Control No: 293634966-296361823**

( DNE )

Robert van Haastert  
Specialist

Attachment(s)  
Additional Information  
Frequency Data  
Map(s)

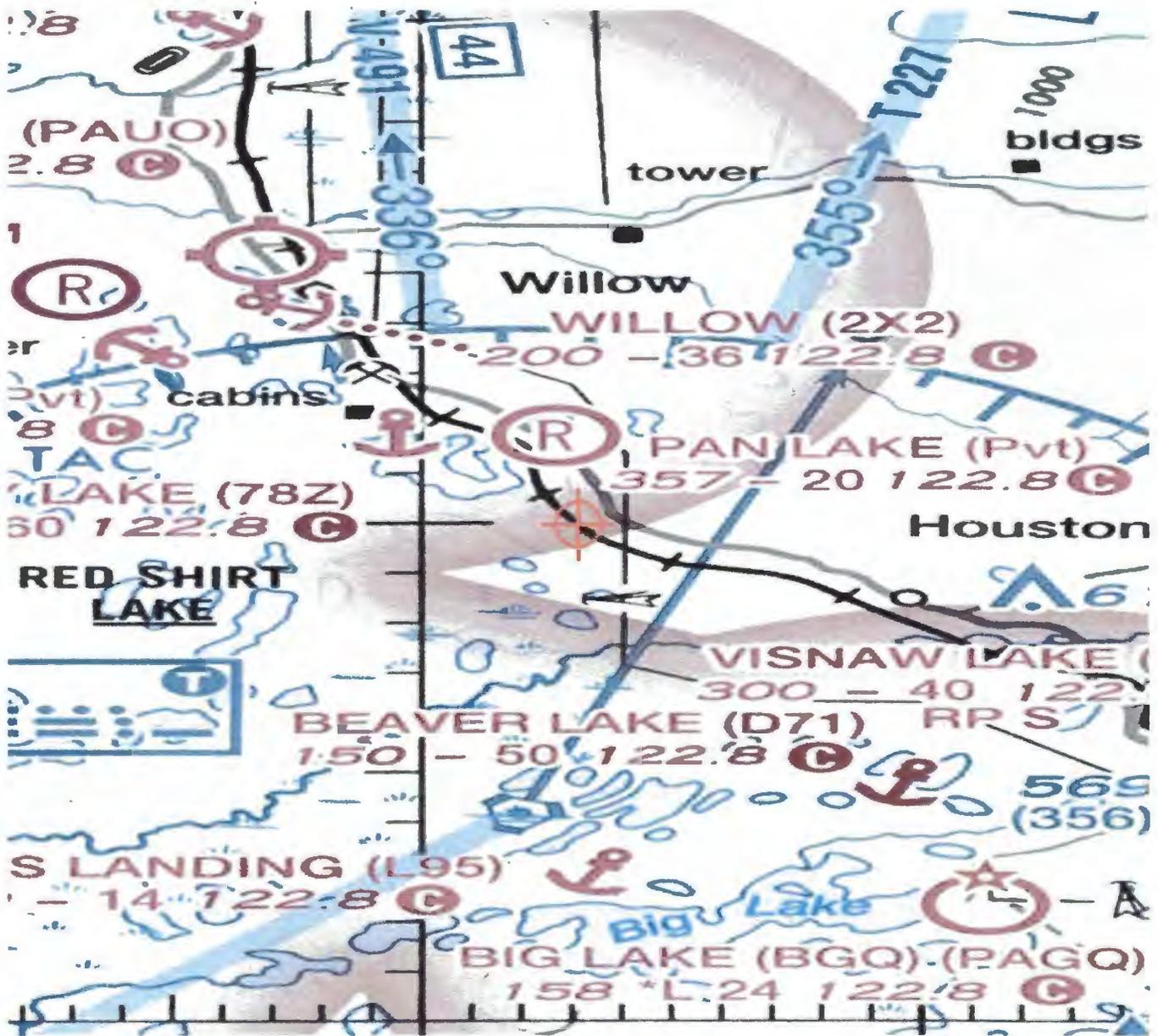
cc: FCC

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, the FAA has no objection to voluntary lighting of this structure in the interest of aviation safety. We recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-L.

Frequency Data for ASN 2016-AAL-446-02

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
698	806	MHz	1000	W





# Exhibit C

Balloon Flight



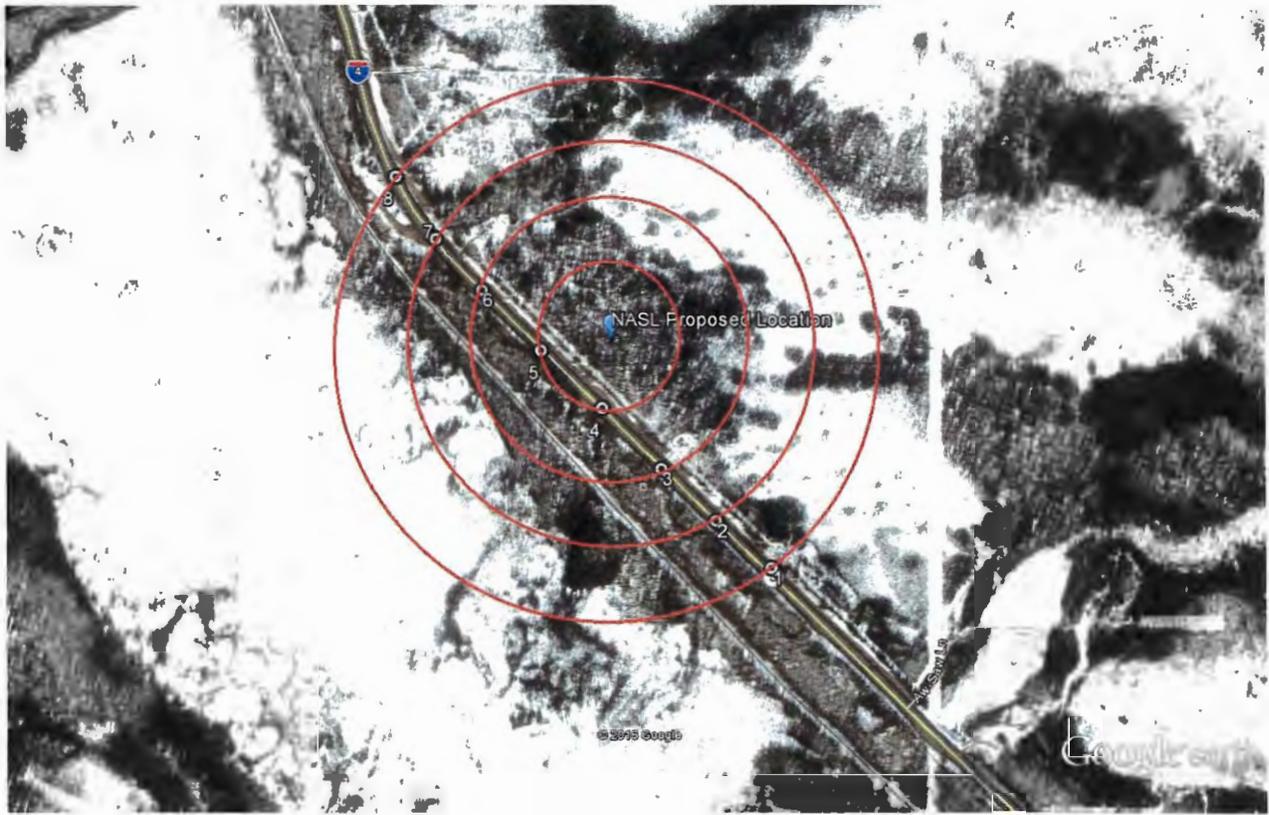
# **NSL1**

Talkeetna, AK

Balloon Test

June 17, 2016





Area overview with 500 ft, 1000 ft, 1500 ft and 2000 ft radius circles depicted.

Photograph numbers are referenced in relation to the plan view.



















This photograph is facing northwest from Heidi Jenkins house. Note opening through trees in the foreground.



Photo view from opening through trees Heidi Jenkins property.

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# Exhibit D

Redacted Lease



## LAND USE AGREEMENT

**THIS LAND USE AGREEMENT** (the “**Agreement**”) is made and entered into as of the 4<sup>th</sup> day of March, 2016 (“**Effective Date**”), between **Gerald Keene** (“**Grantor**”), whose address is PO Box 958, Willow, AK 99688-0958, and **MTA Communications, LLC** (“**MTA**”), with an office at 1740 South Chugach Street, Palmer, Alaska 99645. Hereinafter, Grantor and MTA may be individually referred to as “**Party**”, or collectively referred to as “**Parties**”.

**WHEREAS**, Grantor owns or controls a certain plot, parcel or tract of land, a portion of which MTA desires to lease subject to terms of this Agreement; and

**WHEREAS**, Grantor wishes to lease such property to MTA for the uses herein permitted for reasonable compensation.

**NOW, THEREFORE**, in consideration of the mutual covenants and conditions contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

**1. GRANT OF EASEMENTS.** Grantor hereby conveys to MTA an easement to the following parcel of real property owned or controlled by Grantor: An approximate sixty foot (60’) by sixty foot (60’) area for the site along with a twenty foot (20’) by two hundred ninety-five foot (295’) access drive (running parallel to the west of the property line) (the “**Property**”) situated within Section 11, Township 18N, Range 4W, Lot A1, Seward Meridian, Palmer Recording District, State of Alaska (the “**Parent Parcel**”). The access drive is to run perpendicular to highway, beginning near the intersection of the highway and property line or as close as the DOT driveway rules permit. The Property is more particularly described in the attached Site Plan attached hereto as Exhibit A and made a part of this Agreement. Upon installation of MTA’s facilities, systems, equipment and improvements to the Property, MTA will, at its expense, complete an as-built survey of the Property. Such survey, once completed, shall replace and supersede the Site Plan in Exhibit A. MTA shall further be granted rights of ingress and egress to the Property, an easement to enter upon the lands of Grantor and to construct, reconstruct, lay, maintain, operate, alter, repair, remove, and replace aerial or buried telecommunications and/or electrification cables, lines, poles, or systems and appurtenances thereto, and make changes and additions thereto, to cut and trim trees and shrubbery that may interfere with or threaten or endanger the operation and maintenance of said cables, lines, poles, tower, property leased around tower, access drive, or systems, under, upon, over, and through lands which Grantor owns or in which Grantor has an interest and/or in, upon, or under all private or underlying interest streets, roads or highways abutting said lands. Except for the Property to which MTA shall be permitted exclusive use thereof, Grantor may fully use and enjoy said lands provided that Grantor shall not construct or permit to be constructed any structures or obstructions on, under, or over that will interfere with the construction, maintenance or



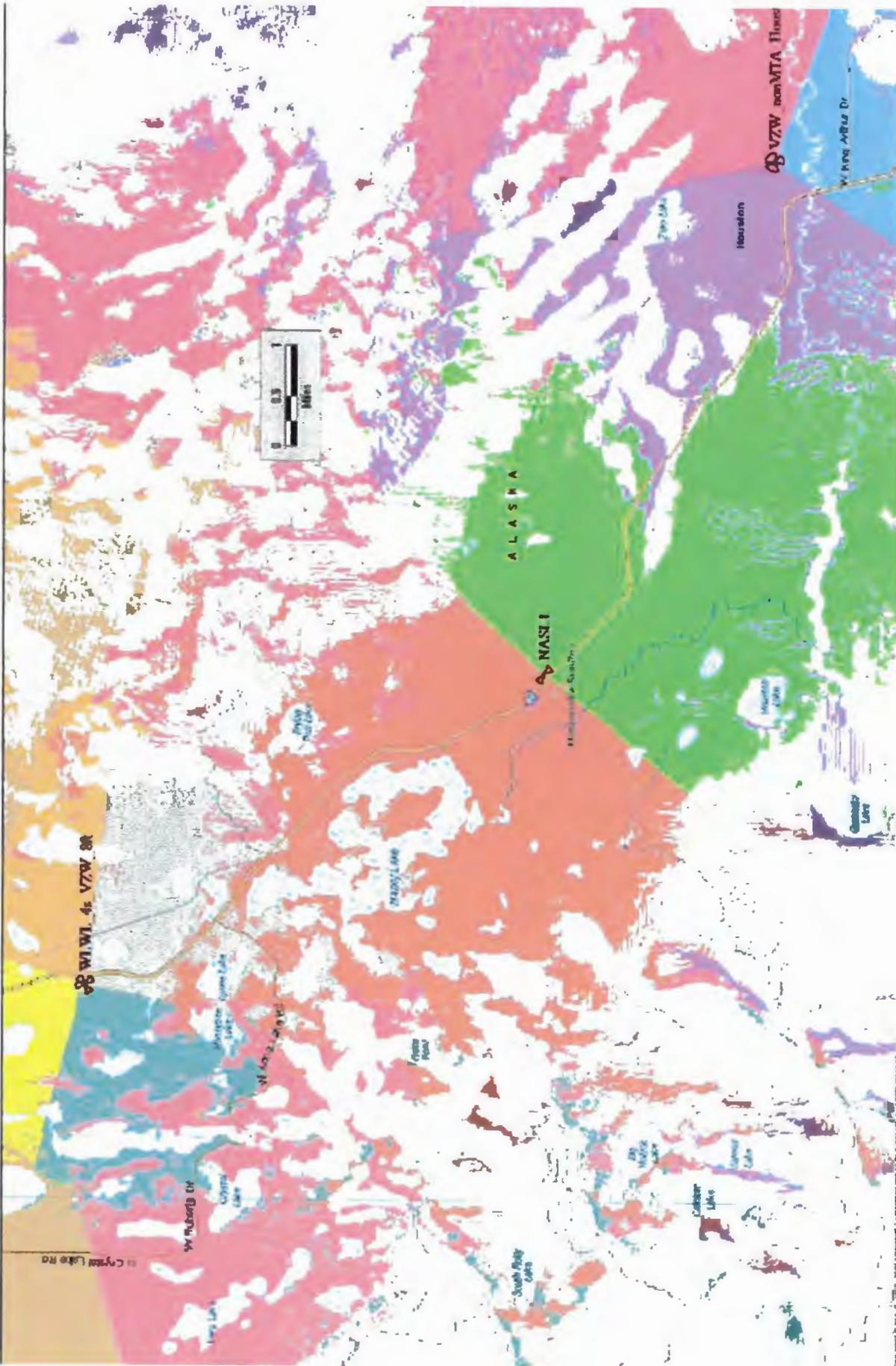
# Exhibit E

## Propagation Maps



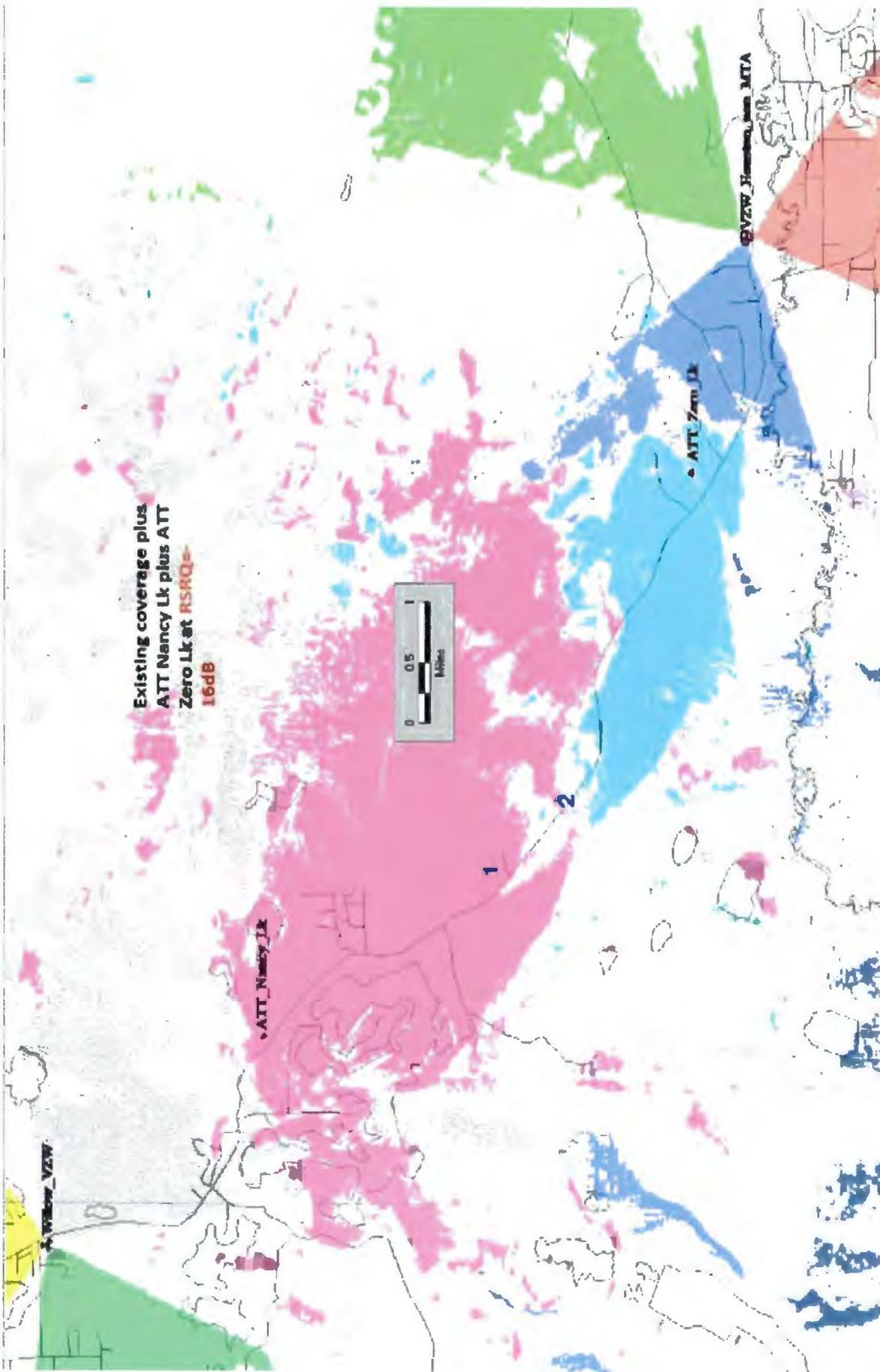






# NSL1 Site – 150 feet





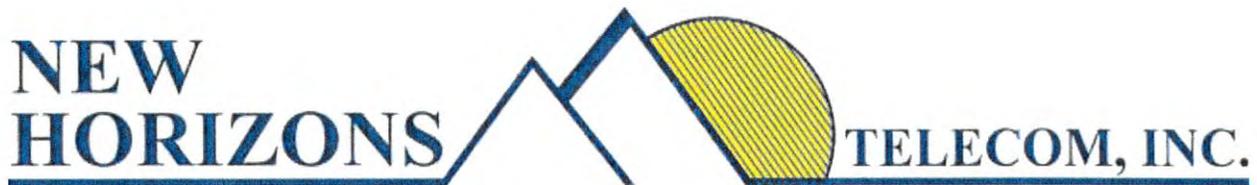
# Tower co-locations at existing AT&T sites

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# Exhibit F

Notification Letter, Mailing List,  
Meeting Sign in, and Meeting Summary





*Program & Project Management, Engineering Design, Permitting, Construction, Installation, Integration  
~ Your Turnkey Providers ~*

May 17, 2016

TO: Neighbors of 23619 W. Parks Hwy  
Legal Description - Township 18N Range 4W Section 11 Lot A1

Dear Property Owner:

This letter is a second notification to area Neighbors that MTA Communications (MTAC) will be making an application for Site NSL1, a Conditional Use Permit for the placement of a 185 foot tall lattice type self-supporting antenna structure (180 foot tower and 5 foot lightning rod) on the parcel referenced above. The attached Matanuska-Susitna Borough Land Information Parcel Report and google earth image, show both the parcel location and the proposed tower placement. Site access will be from a proposed driveway off the Parks Hwy. Potential tower lighting will be part of the discussion at the meeting.

MTAC will present the proposed placement on Wednesday, June 1, 2016, at the Willow Community Center. The meeting begins at 6PM and is located at 23557 West Willow Community Center Circle, Willow, Alaska.

The construction of this antenna structure will provide enhanced and improved wireless communications for personal, business and emergency service in the area. Representatives from MTAC will be present to answer questions or concerns from the community.

As a nearby property owner to the proposed facility you are entitled to this information pursuant to Matanuska Susitna Borough, Chapter 17.67.050 Borough Municipal Code. For your convenience, the language provided for this notification is as follows:

*Prior to applying for a conditional use permit for a new tall structure, the potential applicant shall hold at least one community meeting.*

New Horizons Telecom, Inc. is the agent for MTAC for this conditional use application. If you have any questions pertaining to the proposed notification, please contact Sherrie Greenshields; Site Acquisition Consultant, with New Horizons Telecom Inc., 901 Cope Industrial Way, Palmer, AK 99645, at the information below.

Respectfully,

Sherrie Greenshields, Site Acquisition Consultant  
sgreenshields@nhtiusa.com  
907-761-6057 office; 907-315-3201 cell

Attachments: Mat-Su Borough Comment Form; Permit Center ½ mile offset from Parcel; Antenna Structure Proposed Site Location

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FIRST CLASS MAIL

Comment form for Citizen Participation Process

**Matanuska-Susitna Borough Code Section:** MSB 17.67 – TALL STRUCTURES

**Application or Item:** Site Name NSL1 Conditional Use Permit - 185 ft lattice self supporting antenna structure

**Applicant:** MTA Communications (Agent - New Horizons Telecom, Inc. - Sherrie Greenshields)

**Applicant Phone#:** 907-760-6057 office; 907-315-3201 cell

**Applicant Address:** New Horizons Telecom, Inc. - 901 Cope Industrial Way, Palmer, AK 99645

**Meeting Date & Time:** Monday, April 18, 2016, 6 PM

**Meeting Location:** 23557 West Willow Community Center Circle, Willow, Alaska

**Legal Description of Project:** Township 18N Range 4W Section 11 Lot A1

*Description of the proposed development including height, design, lighting, potential access to the site and proposed service:*

***MTA Communications (MTAC) is making an application for Site NSL1 a Conditional Use Permit for the placement of a 185 foot tall lattice type self-supporting antenna structure (180 ft tower and 5 ft lightning rod on the parcel referenced above. The attached Mat-Su Borough Land Info Parcel Report and google earth image, show the parcel location and proposed tower placement. Site access will be from a proposed driveway off the Parks Hwy. Potential tower lighting will be part of the discussion at the meeting.***

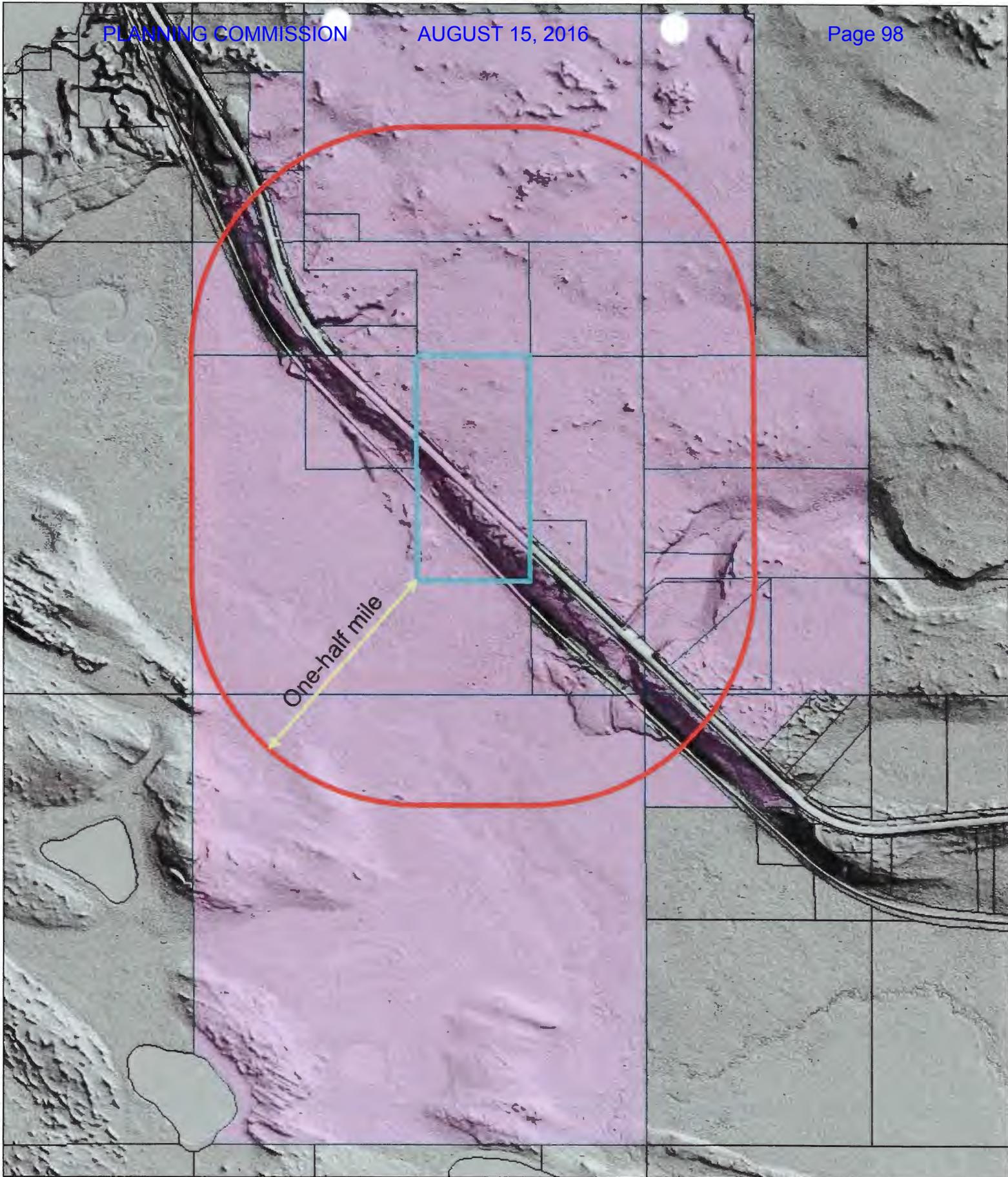
If you have any questions or, would like to send us comments, concerning the proposed action, this form may be used for your convenience by filling in the information below and mailing it to the Matanuska-Susitna Borough, Development Services Division, 350 East Dahlia, Palmer, Alaska 99645. You may fax comments to 861-7876 or e-mail to [permitcenter@matsugov.us](mailto:permitcenter@matsugov.us). Comments received prior to the meeting date will be included in the citizen participation report. Please be advised that comments received from the public after that date will not be included in the citizen participation report but will be included in the staff report to the Planning Commission. If there is not enough room below, please attach this sheet to another piece of paper.

**Name:** \_\_\_\_\_ **Address:** \_\_\_\_\_

**Location/Legal Description of your property:** \_\_\_\_\_

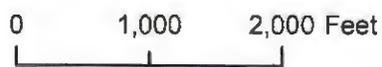
**Comments:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



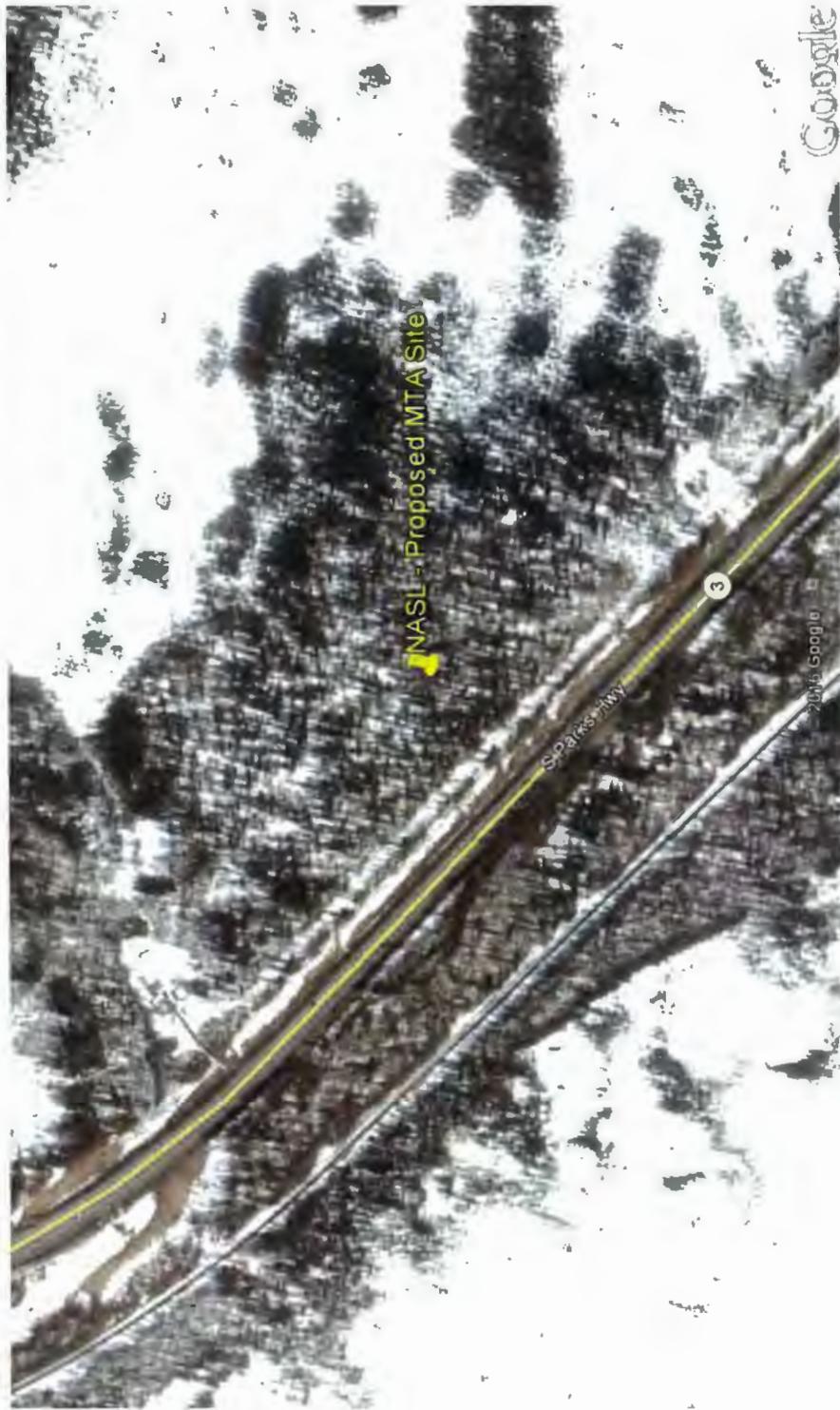
# Matanuska Susitna Borough Permit Center

Date: 3/24/2016



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**NSL1 – PROPOSED MTA COMMUNICATIONS SITE LOCATION**

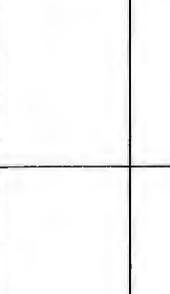


Yellow Pin depicts proposed antenna structure location on property.

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Certificate of Mailing — Firm (Domestic)

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here Postmark with Date of Receipt.	Postage	Fee	Special Handling	Parcel Airlift
UNITED STATES <b>POSTAL SERVICE®</b>  NEW HORIZONS TELECOM, INC. 901 COPE INDUSTRIAL WAY PALMER, AK 99645	27	27	  <b>US POSTAGE</b> <b>\$ 07.65</b> Mailed From 99645 05/17/2016 032A 0061807387				
USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)		Postmaster, per (name of receiving employee) <i>Kyra Mulkey</i>				

See Reverse for Instructions

*Mailing 160511  
16-0052-70*

218N04W11D006	○	1	218N04W11D005	○	2	218N04W02B008	○	3
ABDELNOOR JOSE ANTONIO 20233 EAGLE RIVER RD EAGLE RIVER AK 99577-6800			ADDINGTON GLENN A PO BOX 520411 BIG LAKE, AK 99652-0411			ARIEL LANDING TR % CARL HARDRICK 2752 E MIKEY CIR WASILLA AK 99654-8307		
218N04W02B007	○	3	218N04W11B008	○	4	218N04W01C001	○	5
ARIEL LANDING TR % CARL HARDRICK 2752 E MIKEY CIR WASILLA AK 99654-8307			BAGLEY IAN P & KATHERINE S PO BOX 921360 DUTCH HARBOR AK 99692-1360			BARELKA JOANN K TRE BARELKA JOANN K REV TR 36460 CHESTER RD AVON, OH 44011		
218N04W02C005	○	5	218N04W12B001	○	6	218N04W11B005	○	7
BARELKA JOANN K TRE BARELKA JOANN K REV TR 36460 CHESTER RD AVON, OH 44011			BARRETT G M & S E SEELEY J R & S DICKASON O E G & C STRONG J B & S 5886 BIG BEND LOOP ANCHORAGE AK 99502-4503			COPLIN LINDA L PO BOX 343 HOUSTON AK 99694-0343		
218N04W12C013	○	8	218N04W11A002	○	9	218N04W11B006	○	10
DILLON SUSANNE PO BOX 870994 WASILLA, AK 99687-0994			HARTER CHARLES W PO BOX 904 WILLOW, AK 99688-0904			HARTER CHAS W PO BOX 904 WILLOW, AK 99688-0904		
218N04W02C004	○	10	218N04W11B003	○	11	218N04W12C008	○	12
HARTER CHAS W PO BOX 904 WILLOW, AK 99688-0904			JAMES LESTER G& MARLISE A 5096 KINGSLEY RD NORTHPORT FL 34287-2311			JENKINS HEIDI RUH PO BOX 171 WILLOW, AK 99688-0171		
218N04W12C009	○	12	218N04W12C010	○	12	218N04W11A001	○	13
JENKINS HEIDI RUH PO BOX 171 WILLOW, AK 99688-0171			JENKINS HEIDI RUH PO BOX 171 WILLOW, AK 99688-0171			KEENE GERALD P PO BOX 958 WILLOW, AK 99688-0958		
218N04W12C012	○	14	218N04W12C014	○	14	218N04W11B007	○	15
OXLEY LINDA M PO BOX 908 WILLOW, AK 99688-0908			OXLEY LINDA M PO BOX 908 WILLOW, AK 99688-0908			PERSHALL VIOLA J ROBERTS VICTORIA J PO BOX 520105 BIG LAKE AK 99652-0105		
218N04W12C004	○	16	218N04W13B005	○	16	218N04W13B004	○	16
SMITH DALE & HEATHER A WILLIAMS DAVID P & WENDY A 7044 RILEY RD WARRENTON VA 20187-8940			SMITH DALE & HEATHER A WILLIAMS DAVID P & WENDY A 7044 RILEY RD WARRENTON VA 20187-8940			SMITH DALE & HEATHER A WILLIAMS DAVID P & WENDY A 7044 RILEY RD WARRENTON VA 20187-8940		

218N04W13B006

VIAL MICHAEL STEED SAMANTHA  
VIAL SUZANNE VIAL SANDRA VIAL STEVEN  
PO BOX 292  
WILLOW AK 99688-0292

218N04W02B006

WILLIS MATTHEW  
JOHNSON GREGORY D  
11828 CULBERT RD  
PITTSFORD MI 49271-9621



**Wednesday 6/1/16**

**MTAC Site NSL1**

**Township 18N Range 4W Section 11 Lot A1  
23619 W. Parks Hwy**

**MTAC Site DYL1**

**Township 20N Range 4W Section 6 Lot C3  
41238 W Parks Hwy**

**Meeting at Willow Community Center**

**Attendees**

Rod Ewing (MTA), Julie Rowse (MTA), Sherrie Greenshields (NHTI)

Heidi Jenkins (Local Landowner)

**Purpose of meeting**

The MTA team sent notification letters as required under Matanuska Susitna Borough, Chapter 17.67.050 Borough Municipal Code for a proposed tall tower, site name of NSL1 and DYL1.

MTA was present to hear concerns about the proposed tower structure.

**Comments received**

Discussion items included the following items.

Health concerns from cell site transmitting antennas.

*MTAC response – Antennas conform with FCC requirements for transmitting antennas.*

View obstruction concerns.

*MTAC response – Agreement to contact Heidi Jenkins when a balloon is flown at the proposed tower height at future date. MTAC will collect photographs from her property of the balloon. At the time if the meeting the site has not been cleared and it is questionable if a balloon can be threaded through the existing tree canopy.*

Matanuska - Susitna Borough  
Development Services

JUL 14 2016

Received

# Exhibit G

Summary Page & Written Public Comments

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Date	Comment Received	Commenter	Land Parcel	Concerns	Comments	Response
4/18/2016	Comment form from letter	Heidi Jenkins	218N04W12 CO08	Health concerns from the RF Radiation, worried it will affect the migratory birds, worried tower will obstruct view.	1 of 3 Comments Submitted	All transmitting antennas shall be installed as set forth by the manufacturer and by the Federal Communications Commission (FCC) as meeting the current American National Standards Institute (ANSI) standard for nonionizing electromagnetic radiation. The Federal Communications Commission adopted National Environmental Policy Act Compliance for Proposed Tower Registrations Effects of Communications Towers On Migratory Birds. Document Numbers: DA/FCC: FCC-11-181. An Environmental Assessment is required for any tower over 450 feet in height. This proposed tower is 185 feet tall (180 ft tower with 5 ft lightning rod). The tower is screened from view from the majority of vantage points by existing trees. There is a large clearing north of Heidi Jenkins house where the tower will be visible. From the balloon flight and photos collected the tower should not be visible from Heidi's house.
4/18/2016	Comment form from letter	Heidi Jenkins	218N04W12 CO09	Concerned that the tower will affect the B&B cabins located on this parcel i.e. the RF radiation ruining there rest. will obstruct views. Also concerned about the migratory birds.	2 of 3 Comments	All transmitting antennas shall be installed as set forth by the manufacturer and by the Federal Communications Commission (FCC) as meeting the current American National Standards Institute (ANSI) standard for nonionizing electromagnetic radiation. The Federal Communications Commission adopted National Environmental Policy Act Compliance for Proposed Tower Registrations Effects of Communications Towers On Migratory Birds. Document Numbers: DA/FCC: FCC-11-181. An Environmental Assessment is required for any tower over 450 feet in height. This proposed tower is 185 feet tall (180 ft tower with 5 ft lightning rod).
4/18/2016	Comment form from letter	Heidi Jenkins	218N04W12 CO10	Declined to lease land for the Antenna tower. Does not want close by due to RF Radiation. Very concerned about her health with one in close proximity.	3 of 3 Comments	All transmitting antennas shall be installed as set forth by the manufacturer and by the Federal Communications Commission (FCC) as meeting the current American National Standards Institute (ANSI) standard for nonionizing electromagnetic radiation. The Federal Communications Commission adopted National Environmental Policy Act Compliance for Proposed Tower Registrations Effects of Communications Towers On Migratory Birds. Document Numbers: DA/FCC: FCC-11-181. An Environmental Assessment is required for any tower over 450 feet in height. This proposed tower is 185 feet tall (180 ft tower with 5 ft lightning rod).
6/10/2016	E-mail	Melitta White	No Site Specified	Does not want more towers up in the Willow area.	No tower identified, concerns apply to all proposed sites.	Tower is required to fill significant gap in service.
6/15/2016	E-mail	Bonnie Church	No Site Specified	Does not want more towers up in the Willow area.	No tower identified, concerns apply to all proposed sites.	Tower is required to fill significant gap in service.

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FIRST CLASS MAIL

Comment form for Citizen Participation Process

**Matanuska-Susitna Borough Code Section: MSB 17.67 – TALL STRUCTURES**

**Application or Item:** Conditional Use Permit - 180 ft lattice self supporting antenna structure  
**Applicant:** MTA Communications (Agent - New Horizons Telecom, Inc. - Sherrie Greenshields)  
**Applicant Phone#:** 907-760-6057 office; 907-315-3201 cell  
**Applicant Address:** New Horizons Telecom, Inc. - 901 Cope Industrial Way, Palmer, AK 99645  
**Meeting Date & Time:** Monday, April 18, 2016, 6 PM  
**Meeting Location:** 23557 West Willow Community Center Circle, Willow, Alaska  
**Legal Description of Project:** Township 18N Range 4W Section 11 Lot A1

*Description of the proposed development including height, design, lighting, potential access to the site and proposed service:*

*MTA Communications (MTAC) will be making an application for a Conditional Use Permit for the placement of a 180 foot tall lattice type self-supporting antenna structure on the parcel referenced above. The attached Matanuska-Susitna Borough Land Information Parcel Report and google earth image, show both the parcel location and the proposed tower placement. Site access will be from a proposed driveway off the Parks Hwy. Potential tower lighting will be part of the discussion at the meeting.*

If you have any questions or, would like to send us comments, concerning the proposed action, this form may be used for your convenience by filling in the information below and mailing it to the Matanuska-Susitna Borough, Development Services Division, 350 East Dahlia, Palmer, Alaska 99645. You may fax comments to 861-7876 or e-mail to [permitcenter@matsugov.us](mailto:permitcenter@matsugov.us). Comments received prior to the meeting date will be included in the citizen participation report. Please be advised that comments received from the public after that date will not be included in the citizen participation report but will be included in the staff report to the Planning Commission. If there is not enough room below, please attach this sheet to another piece of paper.

Name: HEIDI JENKINS Address: P.O. Box 171, Willow, AK 99688

Location/Legal Description of your property: 218 NOYW12 C008

Comments: This property has so far been mostly used for recreational purposes, like walking, skiing, running sled dogs, watching ospreys, observing wildlife, migrating and nesting birds. The RF Radiation kills migrating birds and disturbs their navigation. I am worried that while doing healthy activities,

my health will get jeopardized by the radiation.  
The antenna tower would make for a big eye  
sore in this beautiful environment and  
therefore I do oppose.

see other comments C010 & C009

4-18-2016

Heidi Jenks



Matanuska-Susitna Borough  
Planning & Land Use Department  
Development Services Division  
350 East Dahlia Avenue  
Palmer, Alaska 99645

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Name: HEIDI JENKINS Address: P.O. Box 171, Willow, AK 99688

Location/Legal Description of your property: 2181104 W12 C009

Comments: On this property there are a couple of B&B Cabins for tourists to stay overnight or vacation away from the city in a countryside location. They come here to enjoy nature, wildlife, doing tours on scenic recreational trails and watching the northern lights.

This ugly man made construction would be a big distraction of the natural beauty of the Alaska environment.

It would disturb the scenic view while doing tours and gazing at the Aurora.

The RF Radiation could disturb the guests rest and they might be concerned about the effects on their health.

It also kills migrating birds and messes up their navigation.

I oppose the proposed antenna tower in such close proximity.

see other comments parcel C010

4-18-2016

Heidi Jenkins



FIRST CLASS MAIL

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Name: HEIDI JENKINS Address: P.O. Box 171, Willow, AK 99688

Location/Legal Description of your property: 218 N04W 12 C010

Comments: When I have been asked, if I would lease an area for an antenna tower, I declined because I did not want one close by.

The RF Radiation off the tower is a great concern for causing health issues. It can change the blood cells and

cell structure, affecting the brain, causing cancer, memory loss, Alzheimer's and is disturbing sleep.

Also it would be very much distracting the view from my house and property and when I am doing tours by myself or with clients on our pristine recreational trails.

I have chosen to live out here in a rather remote area to avoid the urban environment and influences.

How many cell towers do we really need? There is one at mile 59, another at mile 66 and 3 more at mile 69. So there would be a tower every 3 miles making for electronic pollution.

I do oppose the set up of this antenna tower in this vicinity and ask you to consider my request.

Should this project still go forward, I will have blood tests done before and then on a regular basis to detect any damages.

see also other comments parcel C008 & C008

References to movies:

Full Signal (hidden cost of cell phones)

Take back your power (electronic pollution)

4-18-2016

Heidi Jenkins

**Leann Krey**

---

**From:** Alex Strawn <Alex.Strawn@matsugov.us>  
**Sent:** Friday, June 10, 2016 9:22 AM  
**To:** Sherrie Greenshields  
**Cc:** Mark Whisenhunt  
**Subject:** FW: Cell towers along the Parks Highway

**From:** Michelle Olsen **On Behalf Of** Permit Center  
**Sent:** Friday, June 10, 2016 9:17 AM  
**To:** Theresa Taranto  
**Cc:** Alex Strawn  
**Subject:** FW: Cell towers along the Parks Highway

More comments for the file

Michelle Olsen, CFM  
Permit Technician  
Matanuska-Susitna Borough  
350 E Dahlia Ave  
Palmer, AK 99645  
(907) 861-7871

**From:** Melitta [<mailto:ted.melitta@yahoo.com>]  
**Sent:** Friday, June 10, 2016 8:57 AM  
**To:** Permit Center; Susan Morgan; Bonnie Imlach Shurtleff  
**Subject:** Cell towers along the Parks Highway

Enough already! I practically live under a recently constructed tower and my cell phone reception is worse than ever and it was not very good to start with.

In addition you are ruining our views. We live here to get away from living in a commercial zone and now you are bringing it to us.

We say NO! more cell tower construction on the Parks Highway. They spoil the view and the rural character of our neighborhood. We don't need or want them.

Sincerely,  
Ted and Melitta White  
Willow Residents

**Leann Krey**

---

**From:** Mark Whisenhunt <Mark.Whisenhunt@matsugov.us>  
**Sent:** Wednesday, June 15, 2016 10:50 AM  
**To:** Sherrie Greenshields  
**Subject:** FW: 3 cell towers in Willow

Respectfully,

Mark Whisenhunt  
Planner II  
Matanuska-Susitna Borough  
Office: (907) 861-8527  
Fax: (907) 861-7876  
mark.whisenhunt@matsugov.us

-----Original Message-----

From: Alex Strawn  
Sent: Wednesday, June 15, 2016 10:39 AM  
To: Mark Whisenhunt  
Subject: FW: 3 cell towers in Willow

-----Original Message-----

From: Michelle Olsen On Behalf Of Permit Center  
Sent: Wednesday, June 15, 2016 10:35 AM  
To: Alex Strawn; Theresa Taranto  
Subject: FW: 3 cell towers in Willow

For the files

Michelle Olsen, CFM  
Permit Technician  
Matanuska-Susitna Borough  
350 E Dahlia Ave  
Palmer, AK 99645  
(907) 861-7871

-----Original Message-----

From: Bonnie Church [mailto:getalong@mtaonline.net]  
Sent: Wednesday, June 15, 2016 10:31 AM  
To: Permit Center  
Subject: 3 cell towers in Willow

I am NOT in favor of 3 MORE cell towers going up in Willow. I don't understand why there have to be so many and I am totally against more being here in our community!!!  
Bonnie Church

**INTRODUCTION FOR PUBLIC HEARING  
QUASI-JUDICIAL**

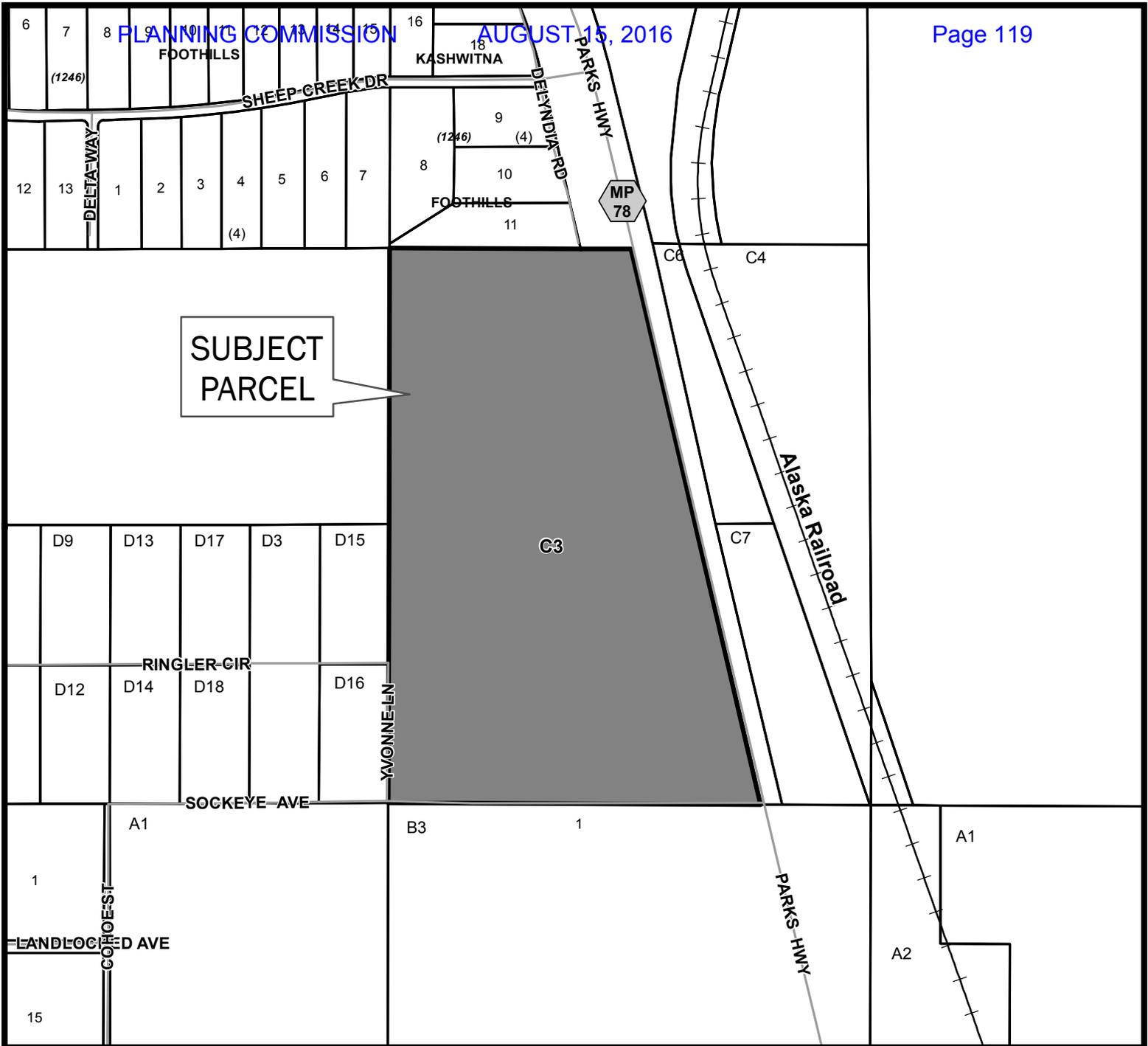
**Resolution No. 16-31**

**MTA Telecommunication Tower CUP (DLY1)  
41238 W. Parks Highway**

(Page 117 - 120)

**INTRODUCTION FOR PUBLIC HEARING**

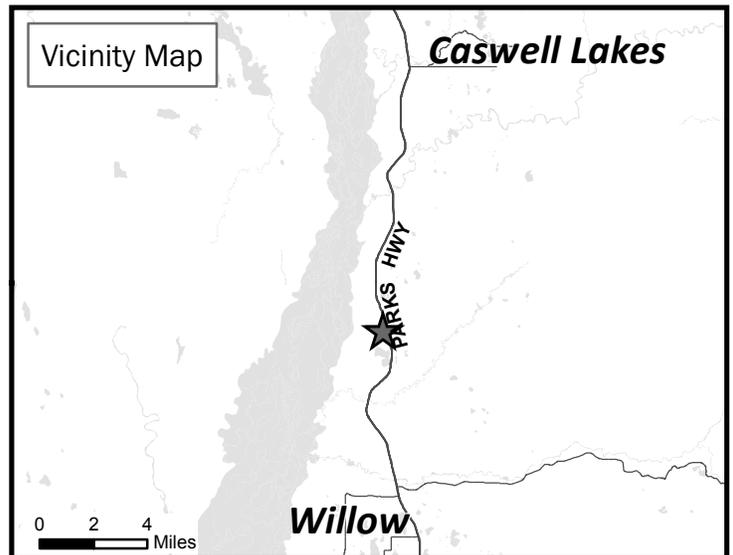




# 20N04W06C003



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MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department
Development Services Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822 • Fax (907) 861-7876

Email: permitcenter@matsugov.us

RECEIVED JUL 07 2016

PERMIT CENTER

DLY1

APPLICATION FOR A TALL STRUCTURE – MSB 17.67

Carefully read instructions and applicable borough code. Fill out forms completely. Attach information as needed. Incomplete applications will not be processed.

Application fee must be attached:

- x \$1,000 for Conditional Use Permit - > 125 feet in height
\$ 500 for Administrative Permit – 85' to 125' in height
\$ 100 for Network Improvement Permit – In accordance with MSB 17.67.110.

Prior to the public hearing, the applicant must also pay the mailing and advertising fees associated with the application. Applicants will be provided with a statement of advertising and mailing charges. Payment must be made prior to the application presentation before the Borough Planning Commission or Planning Director decision.

Subject Property Township: 20N, Range: 4W, Section: 6, Meridian
MSB Tax Account # 20N04W06C003
SUBDIVISION: BLOCK(S):, LOT(S): C3
STREET ADDRESS: 41238 W Parks Hwy
(US Survey, Aliquot Part, Lat. /Long. etc)

Ownership A written authorization by the owner must be attached for an agent or contact person, if the owner is using one for the application. Is authorization attached? Yes No N/A

Name of Property Owner
William & Sandra Bowers
Address: 305 S. Bartlett Circle
Wasilla, Alaska 99645
Phne: Hm Fax
Wk Cell
E-mail

Name of Agent/ Contact for application
Sherrie Greenshields
Address: 901 Cope Industrial Way
Palmer, Alaska 99645
Phne: Hm 907-761-6000 Fax 907-761-6001
Wk 907-761-6057 Cell 907-315-3201
E-mail Sgreenshields@nhtiusa.com

Special Land Use District (if applicable):

<b>Pre-Application Requirements for New Tall Structures that Require a Conditional Use Permit</b>	
<i>Prior to applying for a conditional use permit for a new tall structure, the applicant shall hold at least one community meeting.</i>	
1. The meeting shall be held at the nearest facility where community council meetings are regularly scheduled. If the facility is not available, the nearest available public facility that is capable of seating a minimum of 20 people shall be utilized.	
2. The meeting shall be held at least 15 calendar days after mailing of the notification.	
3. The meeting shall not start prior to 5:00 p.m. and no later than 7:00 p.m.	
4. Notification of the meeting shall, at a minimum, include the following: <ul style="list-style-type: none"> <li>• Legal description and map of the general parcel, or parcels, within the coverage area under consideration for the telecommunication facility.</li> <li>• Description of the proposed development including height, design, lighting, potential access to the site and proposed service.</li> <li>• Date, time, and location of the informational meeting.</li> <li>• Contact name, telephone number, and address of applicant.</li> <li>• Comment form created by the borough that has a comment submittal deadline and provides options for submitting comments.</li> </ul>	
5. At a minimum, the notification area for the meeting shall include the following: <ul style="list-style-type: none"> <li>• Property owners within one-half mile of the parcels under consideration for the proposed tall structure.</li> <li>• The nearest community council and any community council whose boundary is within 1200 feet of the parcels under consideration for the tall structure.</li> </ul>	
<i>A written report summarizing the results of the community meeting shall be prepared that includes the following information:</i>	<b>Attached</b>
1. Dates and locations of all meetings where citizens were invited to discuss the potential applicant's proposal.	X
2. Content, dates mailed, and numbers of mailings, including letters, meeting notices, newsletters and other publications.	X
3. Sign-in sheet(s) used at the meeting, that includes places for names, address, phone numbers and other contact information such as e-mail addresses.	X
4. A list of residents, property owners, and interested parties who have requested in writing that they keep informed of the proposed development through notices, newsletters, or other written materials.	X
5. The number of people who attended meetings.	x
6. Copies of written comments received at the meeting.	x
7. A certificate of mailing identifying all who were notified of the meeting.	x
8. A written summary that addresses the following: <ul style="list-style-type: none"> <li>• The substance of the public's written concerns, issues, and problems.</li> <li>• How the applicant has addressed, or intends to address, concerns, issues and problems expressed during the process.</li> <li>• Concerns issues, and problems the applicant has not addressed or does not intend to address and why.</li> </ul>	X

<b>General application requirements for <u>Administrative and Conditional Use Permits</u></b>	<b>Attached</b>
1. Design drawings for the proposed tall structure, drawn to scale, and certified by a registered engineer or architect.	X
2. Citizen participation report (if applying for a Conditional Use Permit)	x
3. Certified site plan (As defined in MSB 17.125.010)	x
4. Copy of a determination of no hazard to air navigation from the Federal Aviation Administration.	X
5. If breakpoint technology is intended to be utilized, a written statement specifying the height at which the engineered structural weakness will be located.	X

<b>In order to grant a <u>Conditional Use Permit</u> or <u>Administrative Permit</u> the Planning Commission or Planning Director must find that each of the following criteria has been met. Explain the following in detail:</b>	<b>Attached</b>
1. To the extent that is technically feasible and potentially available, the location of the tall structure is such that its negative effects on the visual and scenic resources of all surrounding properties have been minimized.	X
2. Visibility of the tall structure from public parks, trails recognized within adopted MSB plans, and waterbodies has been minimized to the extent that is technically feasible and potentially available.	X
3. The tall structure will not interfere with the approaches to any existing airport or airfield that are identified in the MSB Regional Aviation System Plan or by the Alaska State Aviation System Plan.	X
4. That granting the permit will not be harmful to the public health, safety, convenience, and welfare.	X

<b>Application requirements for a <u>Network Improvement Permit</u></b>	<b>Attached</b>
1. A description of the proposed modifications to the telecommunication tower, including a description of the height, type, and lighting of the new or modified structure and the existing structure.	
2. A certified site (as defined in MSB 17.125.010) for purposes of setback verification.	
3. Design drawings for the proposed modified or new structure, drawn to scale, and certified by a registered engineer or architect.	

<b>In order to grant a <u>Network Improvement Permit</u> the Planning Director must find that each of the following criteria has been met. Explain the following in detail.</b>	<b>Attached</b>
1. The proposed development conforms to setback requirements of MSB 17.55.	
2. The telecommunication tower being extended was lawfully constructed at the time of application for a Network Improvement Permit.	
3. The proposed modification does not violate permit conditions of any valid permits that have been issued to the existing facility, provided that the condition being violated does not limit height of the structure.	

<b>Operation Standards for New Tall Structures – Conditional Use Permit, Administrative Permit, and Network Improvement Permit</b>	<b>Attached</b>
1. The equipment compound shall meet minimum setback distances from all property lines in accordance with MSB 17.55	X
2. Setbacks shall be determined from the dimensions of the entire lot, even though the tower may be located on lease areas within the lot.	X
3. Adequate vehicle parking shall be provided on the subject property, outside of public use easements and rights-of-way to enable emergency vehicle access. No more than two spaces per provider shall be required.	X
4. Information signs for the purpose of identifying the tower such as the antenna structure registration number required by the Federal Communications Commission, as well as the party responsible for the operation and maintenance of the facility shall be visibly posted at the equipment compound.	X
5. If more than 220 volts are necessary for the operation of the facility, warning signs shall be located at the base of the facility and shall display in large, bold, high contrast letters the following: "HIGH VOLTAGE – DANGER".	X
6. A 24-hour emergency contact number shall be visibly posted at the equipment compound.	X
7. A fence or wall not less than six (6) feet in height with a secured gate shall be maintained around the base of the tower.	X

<b>Additional Standards for <u>Wind Energy Conversion Systems (WECS)</u> – In addition to the operations standards for new tall structures, the following standards shall apply to WECS</b>	<b>Attached</b>
1. WECS shall be equipped with an automatic overspeed control device designed to protect the system from sustaining structural failure such as splintered or thrown blades and the overturning or breaking of towers due to an uncontrolled condition brought on by high winds.	
2. WECS shall have a manually operable method that assures the WECS can be brought to a safe condition in high winds. Acceptable methods include mechanical or hydraulic brakes or tailvane deflection systems which turn the rotor out of the wind.	

**OWNER'S STATEMENT:** I am owner of the following property:

MSB Tax parcel ID #(s) 68523 and,  
I hereby apply for approval conditional use permit on that property as described in this application.

I understand all activity must be conducted in compliance with all applicable standards of MSB 17.67 and with all other applicable borough, state or federal laws.

I understand that other rules such as local, state and federal regulations, covenants, plat notes, and deed restrictions may be applicable and other permits or authorization may be required. I understand that the borough may also impose conditions and safeguards designed to protect the public's health, safety and welfare and ensure the compatibility of the use with other adjacent uses.

I understand that it is my responsibility to identify and comply with all applicable rules and conditions, covenants, plat notes, and deed restrictions, including changes that may occur in such requirements.

I understand that this permit and zoning status may transfer to subsequent owners of this land and that it is my responsibility to disclose the requirements of this status to the buyer when I sell the land.

I understand that changes from the approved conditional use permit may require further authorization by the Borough Planning Commission. I understand that failure to provide applicable documentation of compliance with approved requirements, or violation of such requirements will nullify legal status, and may result in penalties.

I grant permission for borough staff members to enter onto the property as needed to process this application and monitor compliance. Such access will at a minimum, be allowed when the activity is occurring and, with prior notice, at other times necessary to monitor compliance.

The information submitted in this application is accurate and complete to the best of my knowledge.

Signature: Property Owner

Printed Name

Date

*Sherrie Greenshields*

Sherrie Greenshields

7/7/2016

Signature: Agent

Printed Name

Date

**MSB USE ONLY**

Date application submitted:

Date application determined complete: \_\_\_\_\_

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July 8, 2016

Matanuska-Susitna Borough  
Planning and Land Use Department  
Development Services Division  
350 Ease Dahlia Avenue  
Palmer Alaska 99645

Matanuska - Susitna Borough  
Development Services

JUL 14 2016

Received

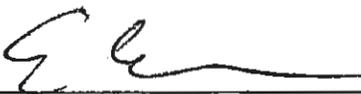
Re: Application for Tall Structure – MSB 17.67  
MTAC Site Name DLY1  
Legal – T20N R4W Section 6 Lot C3  
Address – 41238 W Parks Hwy  
MSB Parcel ID - 68523

Dear Sir/Madam,

Please consider this letter authorization for MTA Communications agent, New Horizons Telecom, Inc. to apply for application of a Tall Structure under MSB 17.67 for property defined above.

As the landowner, we acknowledge restrictions associated with the permit application as defined under MSB 17.67.

Respectfully,



---

MTA Communications

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July 14, 2016

Matanuska-Susitna Borough  
Planning and Land Use Department  
Development Services Division  
350 East Dahlia Avenue  
Palmer, AK 99645

Matanuska - Susitna Borough  
Development Services

JUL 14 2016

Received

RE: Response to MSB Review Comments - Site DLY1 Conditional Use Application  
Location 20N04W06C003

MTA Communications, LLC (MTAC) responses to Matanuska-Susitna Borough review comments received July 12, 2016 are detail below.

1. A written letter of authorization by the owner must be provided. A copy of the lease is not sufficient.

***Response: Find letter of authorization from landowner attached.***

2. What color is the proposed tower?

***Response: The tower will be galvanized steel which is a silvery gray***

3. Will adequate power supply be installed to accommodate the number of carriers the tower is designed for?

***Response: The site will have a 3 gang meter base installed. This will allow 3 carriers to each have a separate 200 amp electrical service for the tower.***

4. Exhibit G - Summary Page and Written Public Comments. The Sign-In sheet for the June 1, 2016 shows that Heidi Jenkins attended the meeting. If she submitted comments regarding this tower, a copy of those comments must be provided and the Summary Sheet amended. Copies of all comments submitted must be provided and the Summary Sheet amended to show all the comments.

***Please reference attached Exhibit G Summary Pages and Written Public Comments. Incorrect Exhibit G was submitted in original application.***

MTA Communications, LLC  
1740 S. Chugach Street  
Palmer, Alaska 99645

907-745-3211  
www.mtasolutions.com

MTA Long Distance, MTA Wireless, MTA Solutions and MTA Vision are registered trade names of MTA Communications, LLC

Long Distance  
Wireless  
Business Solutions  
Internet  
Television

MTAC appreciates the timely review of the original application. Please let us know if you have any questions or comments regarding the responses provided to MSB application information request.

Respectfully,

Sherrie Greenshields  
New Horizons Telecom, Inc.  
sgreenshields@nhtiusa.com  
907-761-6057

Eric Anderson  
MTA Communications  
Director of Engineering/Construction/Operations  
eanderson@mta-telco.com  
907-761-2795

Attachments:

- Owner Letter of Authorization
- Exhibit G Summary Page and Written Public Comments



## ACKNOWLEDGMENT OF APPLICATION

### PERMIT # P016398 TAX PARCEL ID # 220N04W06C003

This is NOT a permit. This is an acknowledgment of your application and information on the normal sequence of events.

- 1) The proposed location of the driveway must be marked with flagging.
- 2) The Inspector will conduct a site visit (normally within 2 weeks)
- 3) The **AUTHORIZATION TO CONSTRUCT** letter will be sent, detailing what is needed to construct your driveway to Borough standards.
- 4) Upon completion of driveway, call 861-7822. Leave a message stating the P# at the top of this form and that the driveway is ready for final inspection.
- 5) The Inspector will conduct a site visit (normally within 2 weeks)
- 6) A **FINAL DRIVEWAY ACCEPTANCE LETTER** will be sent to notify you the process is complete and the driveway is acceptable to the Borough.
- 7) Please be aware that if this property is in a Special Flood Hazard Area a **Flood Plain Development Permit** is Required. Please contact the Permit Center to help determine if you are in a Designated Flood Plain Area.

Thank you for your submittal. If you have further questions please contact The Permit Center at 861-7822 or [permitcenter@matsugov.us](mailto:permitcenter@matsugov.us).

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June 30, 2016

Matanuska-Susitna Borough  
Planning and Land Use Department  
Development Services Division  
350 East Dahlia Avenue  
Palmer, AK 99645

RE: MSB 17.67 Tall Structures – Site DLY1 Conditional Use Application

MTA Communications, LLC (MTAC) is proposing construction of a 185-foot antenna structure (180 foot tower and 5 foot lightning rod) at 41238 W Parks Hwy, Alaska on that property fully described as Township 20N Range 4W Section 6 Lot C3.

Construction of this facility will fill a documented significant gap in cellular communications and wireless broadband to the surrounding area. The proposed facility is located on a parcel of land where towers over 125 feet in height are permitted under a conditional use permit. The proposed project is the least intrusive alternative to fill the existing gap in MTAC's coverage in the area.

The attached narrative describes the proposed tower project and responds to elements of MSB 17.67. Please accept this as a part of MTAC's permit application.

Should the Planning Commission have any questions regarding this project, please contact us at the information below.

Sincerely,

Sherrie Greenshields  
New Horizons Telecom, Inc.  
sgreenshields@nhtiusa.com  
907-761-6057

Eric Anderson  
MTA Communications  
Director of Engineering/Construction/Operations  
eanderson@mta-telco.com  
907-761-2795

MTA Communications, LLC  
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Long Distance  
Wireless  
Business Solutions  
Internet  
Television

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## **Conditional Use Permit Application**

Township 20N Range 4W Section 6 Lot C3

Sherrie Greenshields  
New Horizons Telecom, Inc.  
sgreenshields@nhtiusa.com  
907-761-6057

Eric Anderson  
MTA Communications  
Director of Engineering/Construction/Operations  
eanderson@mta-telco.com  
907-761-2795



## 1.0 Introduction

MTA Communications (MTAC) is an Alaskan owned and operated telecommunications company that provides telecommunication service to the citizens of Alaska.

More than two in five (45.4%) American homes no longer use traditional landline telephone service and instead choose to be wireless only.<sup>1</sup> More than 50% of all adults aged 18-44 and of children under the age of 18 are living in wireless-only households. In Alaska, 31.8% of homes choose to be wireless-only households and another 21.1% are “wireless-mostly.”<sup>2</sup> The demand for data on provider networks also continues to grow exponentially. In light of this growing reliance on wireless communications and increased data demand, additional infrastructure has become essential to providing reliable service. The demand for access to wireless communications continues to grow exponentially across both Alaska and the continental United States.

As part of MTAC’s efforts to fill network gaps, MTAC is proposing construction of 185-foot antenna structure (180 foot tower with 5 foot lighting rod) at 41238 W Parks Hwy. The proposed construction will fill an existing significant gap in cellular and wireless broadband service coverage. The construction of communication towers is permitted pursuant to a Conditional Use Application. The proposed tower location is the least intrusive, reasonably available and technically feasible location for the proposed tower construction.

The below sections present a description of radio frequency science, applicable federal law governing telecommunications, and the decision logic used to meet Matanuska-Susitna Borough Planning Department requirements set forth in standards MSB 17.67.

## 1.1 Radio Frequency Description and Evolution

Wireless networks are a complex mesh of radio frequencies that have an exclusive license to operate by the Federal Communication Commission (FCC). This mesh of licensed frequencies allows cellular communications to be delivered at a wide variety of scales. The scale that can be covered by the frequencies is directly proportional to the type of spectrum being used and distance between each set of antennas delivering the signals.

Radio Frequency (RF) is a frequency or band of frequencies in the range  $10^4$  to  $10^{11}$  or  $10^{12}$  Hz at which radio waves are transmitted, and they’re suitable for use in telecommunications. Hertz (Hz) is the unit of RF and it refers to the number of cycles per second. Wavelength is the distance between successive crest of a wave, peaks of the electromagnetic waves. The relationship between RF and Wavelength is as follows:  $\text{Wavelength} = C/\text{Frequency}$  where C is the speed of light ( $3 \times 10^8$  m/s). Radio Frequencies are allocated and regulated by the FCC and are a part of the electromagnetic spectrum.

The FCC has established safety guidelines for Human Exposure to Radiofrequency Electromagnetic Fields that broadcaster/wireless carriers must adhere to.

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<sup>1</sup> “Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July-December 2014,” U.S. DHHS, CDC National Center for Health Statistics.

<sup>2</sup> CDC Wireless Substitution: State-level Estimates from the National Health Interview Survey (December 2014)

A cellular network is a radio network distributed over land through cells where each cell includes a fixed location transceiver known as base station. Multiple cells together provide radio coverage over larger geographical areas.

Mobile communication operators use radio spectrum to provide mobile calling and data services. In order to keep up with a demand that is exponentially growing, the technology continues to evolve. Some Factors that affect wireless network performance

- Physical Obstructions – Wireless signals have difficulty penetrating solid objects such as hills, buildings, foliage, etc. The more obstructions there are between the transmitter and receiver the higher the chances of a poor signal level.
- Network Range and Distance between Devices – The way wireless signal propagates and with obstructions on the way, the further apart the devices are, the weaker the signal becomes. The signal strength decreases, roughly in an inverse cubic relation with respect to the distance between two devices (4Gon Solutions). For example, if the distance between two devices doubles, the signal becomes at least eight times weaker.
- Network Usage and Load – If the number of active users in the network increases due to a special event or something of that nature, the resources required to support them may not be available. This results in reducing network performance by decreased data speeds or reduced accessibility.

## 1.2 Telecommunications Act of 1996

The Telecommunications Act of 1996 was enacted to encourage the rapid deployment of new telecommunications technologies, while also preserving state and local control over zoning matters. *T-Mobile Northeast LLC v. City of Lawrence*, 755 F.Supp.2d 286, 290 (D. Mass. 2010) (internal citations omitted). The Act generally preserves state and local authority over the placement and construction of telecommunication tower facilities. The Act places several limitations on local control. Specifically, the Act dictates that:

- (1) A local government cannot unreasonably discriminate among providers of functionally equivalent services; and
- (2) A local government cannot prohibit or effectively prohibit the provision of personal wireless services; and
- (3) A local government cannot deny or limit an application for the construction of a wireless tower on the basis of the health or environmental effects of radio frequency emissions, as long as the proposed tower complies with FCC requirements for emissions; and
- (4) Any local government decision to deny a request to construct personal wireless facilities must be in writing and supported by substantial evidence.

Since the Act's adoption, federal courts have assessed the application of these limitations and concluded that "a significant gap in service (and thus an effective prohibition of service) exists whenever a provider is prevented from filling a significant gap in *its own* service coverage." *MetroPCS, Inc. v. City & Cnty. of San Francisco*, 400 F.3d 715, 733 (9th Cir. 2005). Essentially, the Act precludes a municipality from restricting the construction of new infrastructure required by a provider to fill a gap in its network, even if coverage is available from other providers in the area. The fact that coverage is provided by another carrier in the area cannot be relied upon by a local land use commission to deny a permit application for a new tower.

Any decision by a local planning or zoning authority denying a land use permit required to construct a personal wireless services facility must be in writing and supported by substantial evidence. Where a provider has demonstrated a significant gap in its service coverage and proposed the least intrusive means to fill this gap, the burden of proof shifts to the zoning board to demonstrate that the record contains substantial evidence in support of its decision. When a provider has made a prima facie showing that a proposed tower is the least intrusive means of filling a significant gap in service, even if a zoning board's denial is supported by substantial evidence the Commission must also specifically show that there are some potentially available and technologically feasible alternatives for construction. *T-Mobile USA v. City of Anacortes*, 572 F.3d 987, 998 (9th Cir. 2009). The provider must then have an opportunity to dispute the availability and feasibility of the alternatives favored by the locality. *Id.*

## **2.0 Existing Significant Gap in MTAC Coverage**

The area of Mat-Su Borough in the vicinity of the proposed cell site is currently underserved by MTAC for both voice and data coverage, which results in a significant gap in coverage for the MTAC system.

Detailed Propagation maps are included under Exhibit E (Propagation Maps). Three heights for the tower were considered, 120 feet, 150 feet and 185 feet (180-foot tower with 5foot lightning rod. However, both the 120 and 150 foot elevations do not result in full coverage of the significant gaps.

### **2.1 Site Selection Process**

To fill the significant gaps in MTAC's service, MTAC's engineers used computer modeling to determine an idealized design point for tower construction and a surrounding search radius containing properties which, dependent upon topography and other surface interference, could serve as a build location. A potential tower location within the search ring would be ideal to fill the existing significant gap in MTAC's coverage.

MTAC's preference is to co-locate on existing towers wherever possible. There were no existing towers or buildings co-location sites in the general vicinity.

### **2.2 Tower and Site Design**

Through strategic choices in site design and tower height the proposed construction is designed to fill the significant gap in MTAC's coverage in the least intrusive manner possible. The proposed site is located on a parcel of land which is undeveloped. Surrounding area is comprised of undeveloped lots and homes.

A detailed site plan for the tower construction is included with this application as Exhibit A. The drawings are certified by a licensed professional engineer demonstrating soundness and conformity with all applicable codes, as well as State and federal law. The tower complex will be surrounded by a six-foot chain link fence. The tower site will be access using a new driveway.

The tower structure is a lattice tower. Site placement allows existing trees to screen the site from adjacent properties.

## 2.3 Tower Height

The tower is designed to be the minimum height necessary to assure that the significant gap in MTAC's service coverage can be filled.

The propagation maps are included in Exhibit E (Propagation Maps) depict the proposed tower at heights of 120 feet, 150 feet and 185 feet (180-foot tower with 5-foot lighting rod).

It is MTAC's policy to construct all wireless infrastructures to an engineering standard that allows multiple carriers to locate equipment on the structure. The proposed tower is designed and engineered to accommodate two additional sets of antennas, of equal or lesser specification to MTAC's proposed equipment, yielding the ability to co-locate two additional carriers on the structure. With the inclusion of the MTAC's antennas, the structure allows for a total of three carriers on the tower.

## 2.4 Tower Illumination

MTAC prefers not to illuminate towers. Illumination is typically only installed when instructed by the FAA for the health and safety of aviators or when otherwise required by federal and state agencies, though there are instances where MTAC has voluntarily lit a piece of infrastructure at the request of the local community. The tower is not required to be illuminated. The FAA has determined that no marking or lighting is required for this tower location (FAA Determination of No Hazard). Documentation is attached to this application as Exhibit B. The document can also be searched and downloaded from the FAA's website using Aeronautical Study Number 2016-AAL-445-OE. MTAC will not install aviator illumination, or any other type of illumination, on this tower.

## 3.0 Application Criteria Matanuska-Susitna Borough 17.67

As set forth above, MTAC's proposed tower requires a Conditional Use Permit Matanuska-Susitna Borough 17.67. The project will protect the public health, safety, and welfare, will not injure the lawful use with existing neighboring uses.

### 17.67.050 PRE-APPLICATION REQUIREMENTS FOR NEW TALL STRUCTURES THAT REQUIRE A CONDITIONAL USE PERMIT.

- (A) Prior to applying for a conditional use permit for a new tall structure, the potential applicant shall hold at least one community meeting:
  - (1) The meeting shall be held at the nearest facility where community council meetings are regularly scheduled. If the facility is not available, the nearest available public facility that is capable of seating a minimum of 20 people shall be utilized;
  - (2) The meeting shall be held at least 15 calendar days after mailing of the notification;

- (3) The meeting shall not start prior to 5 p.m. and no later than 7 p.m.;
  - (4) Notification of the meeting shall, at a minimum, include the following:
    - (a) Legal description and map of the general parcel, or parcels, within the coverage area under consideration for the telecommunication facility;
    - (b) Description of the proposed development including height, design, lighting, potential access to the site, and proposed service;
    - (c) Date, time, and location of informational meeting;
    - (d) Contact name, telephone number, and address of applicant; and
    - (e) Comment form created by the borough that has a comment submittal deadline and provides options for submitting comments.
  - (5) At a minimum, the notification area for the meeting shall include the following:
    - (a) Property owners within one-half mile of the parcels under consideration for the proposed tall structure; and
    - (b) The nearest community council and any community council whose boundary is within 1,200 feet of the parcels under consideration for the tall structure.
- (B) A written report summarizing the results of the community meeting shall be prepared that includes the following information:
- (2) Dates and locations of all meetings where citizens were invited to discuss the potential applicant's proposal;
  - (3) Content, dates mailed, and numbers of mailings, including letters, meeting notices, newsletters, and other publications;
  - (4) Sign-in sheet(s) used at the meeting that includes places for names, addresses, phone numbers, and other contact information such as email addresses;
  - (5) A list of residents, property owners, and interested parties who have requested in writing that they be kept informed of the proposed development through notices,

newsletters, or other written materials;

- (6) The number of people who attended meetings;
- (7) Copies of written comments received at the meeting;
- (8) A certificate of mailing identifying all who were notified of the meeting; and
- (9) a written summary that addresses the following:
  - (a) The substance of the public's written concerns, issues, and problems;
  - (b) How the applicant has addressed, or intends to address, concerns, issues, and problems expressed during the process; and
  - (c) Concerns, issues, and problems the applicant has not addressed or does not intend to address and why.

***MTAC Response – Please refer to attached Exhibit F (Notification Letter, Mailing List, Meeting Sign-In, and Meeting Summary) and Exhibit G (Summary Page & Written Comments).***

#### **17.67.070 GENERAL APPLICATION REQUIREMENTS FOR ADMINISTRATIVE AND CONDITIONAL USE PERMITS.**

(A) An application for a conditional use or administrative permit to construct a new tall structure may be initiated by a property owner or the owner's authorized agent and shall include:

- (1) Completed application form provided by the department and signed by the property owner or authorized agent;

***MTAC Response – Please find application form attached to this narrative.***

- (2) Design drawings for the proposed tall structure, drawn to scale, and certified by a registered engineer or architect;

***MTAC Response – Please refer to Exhibit A (Site Document and Design Documents).***

- (3) Fee in the amount designated in MSB 17.99;

***MTAC Response – Fee amount will be paid.***

- (4) Citizen participation report in accordance with MSB 17.67.050(B);

***MTAC Response – Please refer to attached Exhibit F (Notification Letter, Mailing List, Meeting Sign-In, and Meeting Summary) and Exhibit G (Summary Page & Written Comments).***

- (5) a certified site plan,

***MTAC Response – Please refer to Exhibit A (Site Document and Design Documents)***

- (6) Copy of a determination of no hazard to air navigation from the Federal Aviation Administration; and

***MTAC Response – Please refer to Exhibit B (FAA Determination)***

- (7) If breakpoint technology is intended to be utilized, a written statement specifying the height at which the engineered structural weakness will be located.

***MTAC Response – breakpoint technology not applicable to this tower application.***

#### **17.67.080 STANDARDS FOR APPROVAL OF NEW TALL STRUCTURES.**

(A) A permit for a new tall structure may only be approved if it meets the requirements of this section in addition to any other applicable standards required by this chapter.

(B) In granting or denying a permit, the commission or director shall make findings on whether the applicant has demonstrated that:

- (1) To the extent that is technically feasible and potentially available, the location of the tall structure is such that its negative effects on the visual and scenic resources of all surrounding properties have been minimized;

***MTAC Response – the site is situated within a lot surrounded by existing trees. The access road is “dog-legged” in so the site is not visible from direct line of view from access road. The residences surrounding the lot have trees that will help screen the tower from view.***

- (2) Visibility of the tall structure from public parks, trails recognized within adopted borough plans, and water bodies has been minimized to the extent that is technically feasible and potentially available;

***MTAC Response – the site is situated within a lot surrounded by existing trees. The access road is “dog-legged” in so the site is not visible from direct line of view from access road. The residences***

*surrounding the lot have trees that will help screen the tower from view.*

- (3) The tall structure will not interfere with the approaches to any existing airport or airfield that are identified in the borough's regional aviation system plan or by the Alaska State Aviation System Plan; and

***MTAC Response – Please refer to Appendix B (FAA Determination). The site does not interfere with existing airports or airfields.***

- (4) Granting the permit will not be harmful to the public health, safety, convenience, and welfare.

***MTAC Response – the proposed site will not be harmful to the public health, safety, convenience and welfare.***

#### **17.67.090 OPERATION STANDARDS FOR NEW TALL STRUCTURES.**

- (A) The following setback requirements shall apply to all new telecommunications towers regulated under this chapter:

- (1) The equipment compound shall meet minimum setback distances from all property lines in accordance with MSB 17.55.

***MTAC Response – The proposed site conforms to MSB 17.55.***

- (2) Minimum setback for the tower base shall be a distance equal to the height of the tower.

***MTAC Response – The proposed tower setback is a distance equal to the height of the tower.***

- (a) The commission, or director if it is an administrative permit, may reduce the setback to a distance less than the height of the tower, if the applicant demonstrates there is no risk to public health, safety, or welfare of adjacent property owners.

- (3) Setbacks shall be determined from the dimensions of the entire lot, even though the tower may be located on lease areas within the lot.

***MTAC Response – The proposed tower setback is a distance equal to the height of the tower.***

- (B) For all tall structures regulated under this chapter, adequate vehicle parking shall be provided on the subject property, outside of public use easements and rights-of-way,

to enable emergency vehicle access.

***MTAC Response – Refer to Exhibit A (Site Document and Design Documents). The site has adequate vehicle parking on subject property to enable emergency vehicle access.***

(1) No more than two spaces per provider shall be required.

(C) The following requirements apply to all new and existing telecommunication towers and wind energy conversion systems regulated under this chapter:

(1) The following signage shall be visibly posted at the equipment compound:

(a) Informational signs for the purpose of identifying the tower such as the antenna structure registration number required by the Federal Communications Commission, as well as the party responsible for the operation and maintenance of the facility;

***MTAC Response – MTAC will comply with signage requirements.***

(b) If more than 220 volts are necessary for the operation of the facility, warning signs shall be located at the base of the facility and shall display in large, bold, high contrast letters the following: “HIGH VOLTAGE – DANGER”; and

***MTAC Response – MTAC proposed service will be 240 volts. MTAW will comply with signage requirements.***

(c) A 24-hour emergency contact number.

***MTAC Response – a 24 hour contact number will be referenced on signage.***

(2) A fence or wall not less than six feet in height with a secured gate shall be maintained around the base of the tower.

***MTAC Response – Please refer to Appendix A (Site Document and Design Documents).***

## 4.0 Conclusion

MTAC's Matanuska-Borough network includes a significant gap in coverage in the proposed site vicinity as depicted in attached propagation studies in Exhibit E. After a search of available sites which could meet the technical requirements necessary to fill this coverage gaps, MTAC has identified 41238 W Parks Hwy, Alaska on that property fully described as Township 20N Range 4W Section 6 Lot C3 as the location which will allow for construction meeting network requirements. As described in detail in this application, this tower location is the least intrusive and most appropriate option to meet the significant gap in MTAC's coverage, which can only be met through placement of a new tower. Finally, MTAC's proposed tower will affirmatively protect the public health, safety, and welfare by providing cellular and wireless broadband services to a currently underserved area, impacting both area households and residents and transient customers seeking to access this technology from roadways and public spaces in the area. We believe we have exceeded the burden of proof outlined in MSB 17.67. for the requested Conditional Use Permit. Therefore, MTAC respectfully requests that the Matanuska-Susitna Planning Commission grant the Conditional Use Permit.

## **5.0 Exhibits**

Exhibit A: Site Document and Design Documents

Exhibit B: FAA Determination

Exhibit C: Balloon Flight

Exhibit D: Redacted Lease

Exhibit E: Propagation Maps

Exhibit F: Notification Letter, Mailing List, Meeting Sign In, and Meeting Summary

Exhibit G: Summary Page and Written Public Comments

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# Exhibit A

Site Document & Design  
Documents





# DLY1 LTE SITE

## PROJECT INFORMATION

PROJECT LOCATION: APPROXIMATE MP 78 PARKS HWY, ALASKA  
NHTI PROJECT NUMBER: 16-0073-20

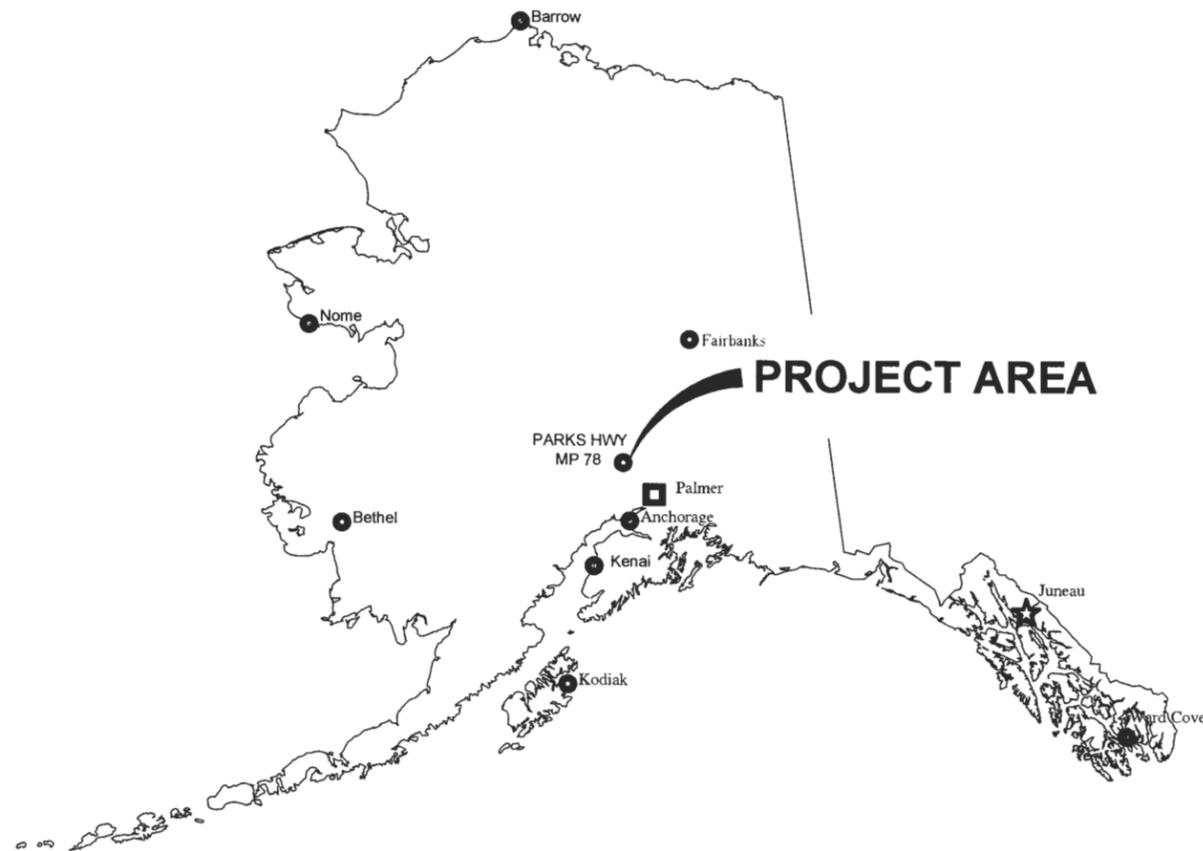
## CONTACT INFORMATION

CIVIL ENGINEER  
DALE R. BROWNING, PE, SE  
NHTI - (907) 761-6069  
901 COPE INDUSTRIAL WAY  
PALMER, ALASKA 99645

## Sheet List Table

SHEET #	TITLE
T1.0	COVER SHEET
C1.0	SITE PLAN
C1.1	SITE ELEVATION
C2.0	ENLARGED SITE PLAN
C2.1	ROAD AND PAD SECTIONS
S1.0	TOWER FOUNDATION PLAN
S1.1	TOWER FOUNDATION SECTION
S1.2	GRADE BEAM LAYOUT AND DETAILS

REV #
1
1
1
1
0
0
0
1



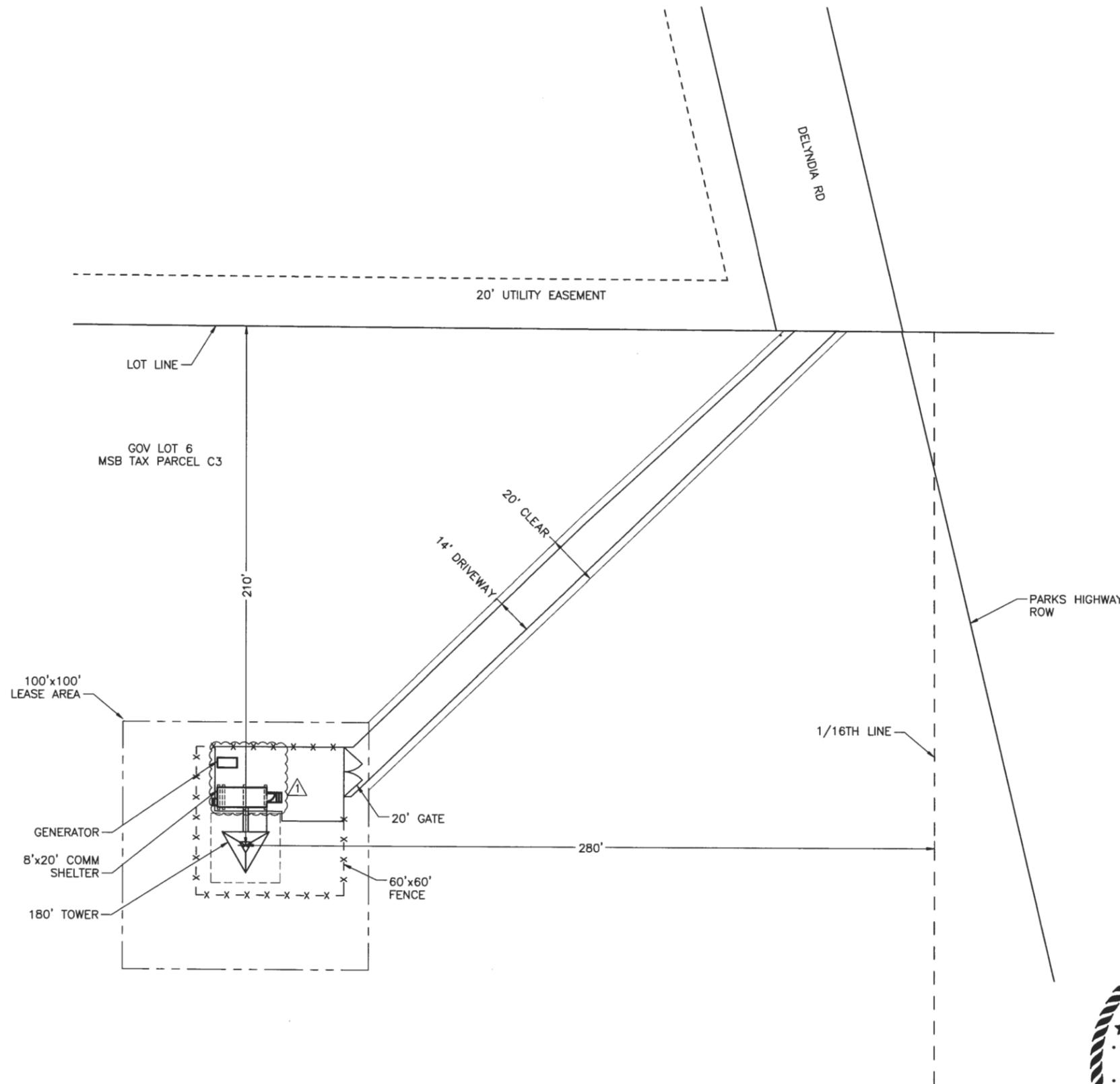
1	CHANGED GRADE BEAM LAYOUT	160622
0	ISSUED FOR CONSTRUCTION	160614
REV.	DESCRIPTION	DATE



MTA  
DLY1 LTE SITE  
COVER SHEET

T1.0

FILE: X:\16 JOBS\16-0073-20 MTA DLY1 LTE SITE DESIGN\05-CADD\DRAWINGS\T1.0 COVER SHEET.DWG | PLOT DATE: 160623 | PLOT SCALE: 1:1



NOTES:  
 1. THIS DRAWING DEVELOPED FROM MTA CONCEPTUAL DRAWING "PROPOSED WIRLESS TOWER EWBC", REVISED 3-28-16.

**1** SITE PLAN  
 C1.0 SCALE: 1" = 50'



1	CHANGED GRADE BEAM LAYOUT	160622
0	ISSUED FOR CONSTRUCTION	160614
REV.	DESCRIPTION	DATE

**NEW HORIZONS TELECOM, INC.**

MTA  
 DLY1 LTE SITE  
**SITE PLAN**

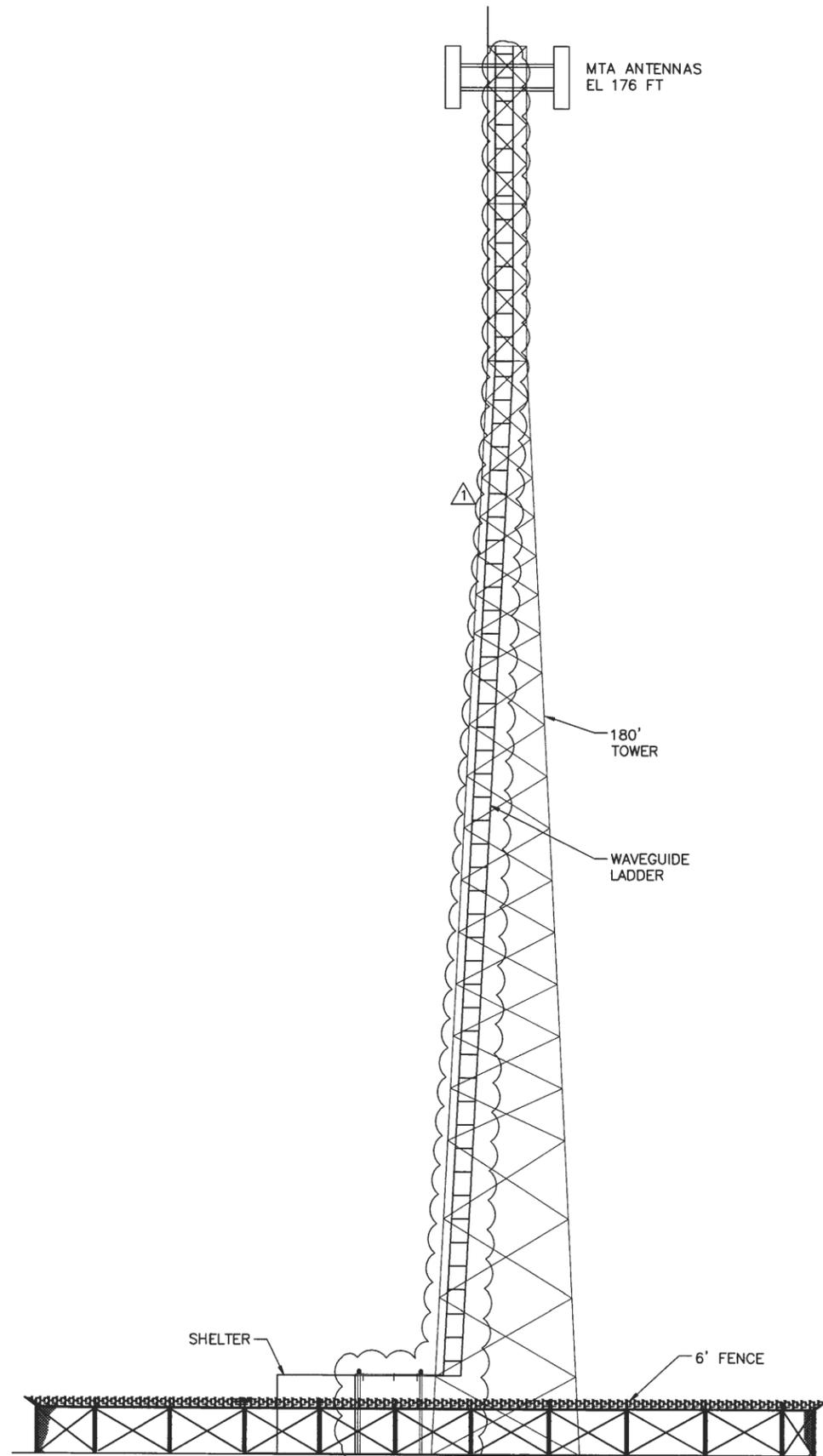
DWN: JAA CKD: DRB APP: DRB

JOB #: 16-0073-20 DATE: 160614

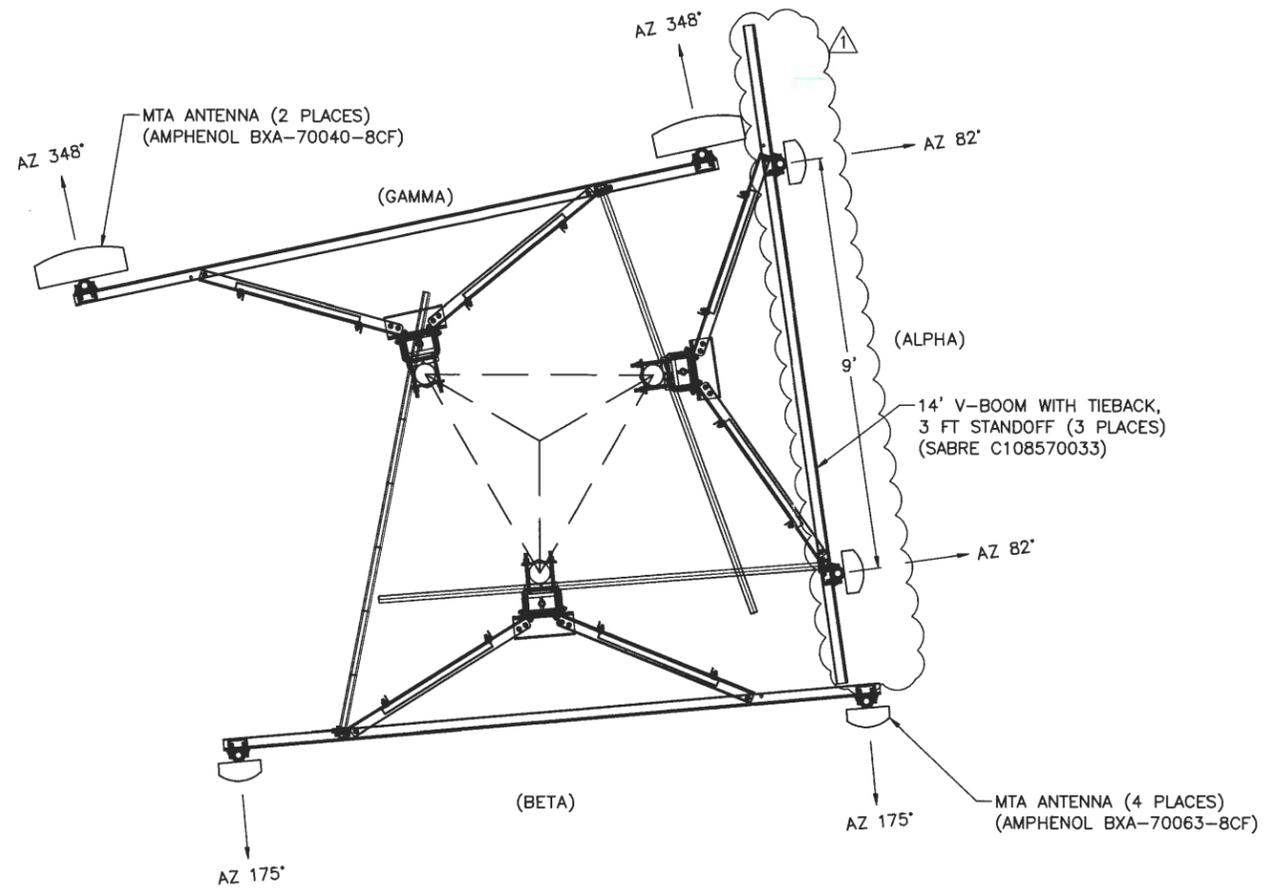
C1.0

REV 1

FILE: X:\G:\JOBS\16-0073-20\MTA DLY1 LTE SITE DESIGN\05-CADD\DRAWINGS\C1.0 SITE PLAN.DWG | PLOT DATE: 160623 | PLOT SCALE: 1:1



**1**  
C1.1 SITE ELEVATION  
SCALE: 1"=20'



**2**  
C1.1 MTA ANTENNA LAYOUT  
SCALE: 1/4" = 1'-0"

1	MOVED ALPHA ANTENNAS	160622
0	ISSUED FOR CONSTRUCTION	160614
REV.	DESCRIPTION	DATE

**NEW HORIZONS TELECOM, INC.**

MTA  
DLY1 LTE SITE  
SITE  
ELEVATION

DWN: JAA CKD: DRB APP: DRB

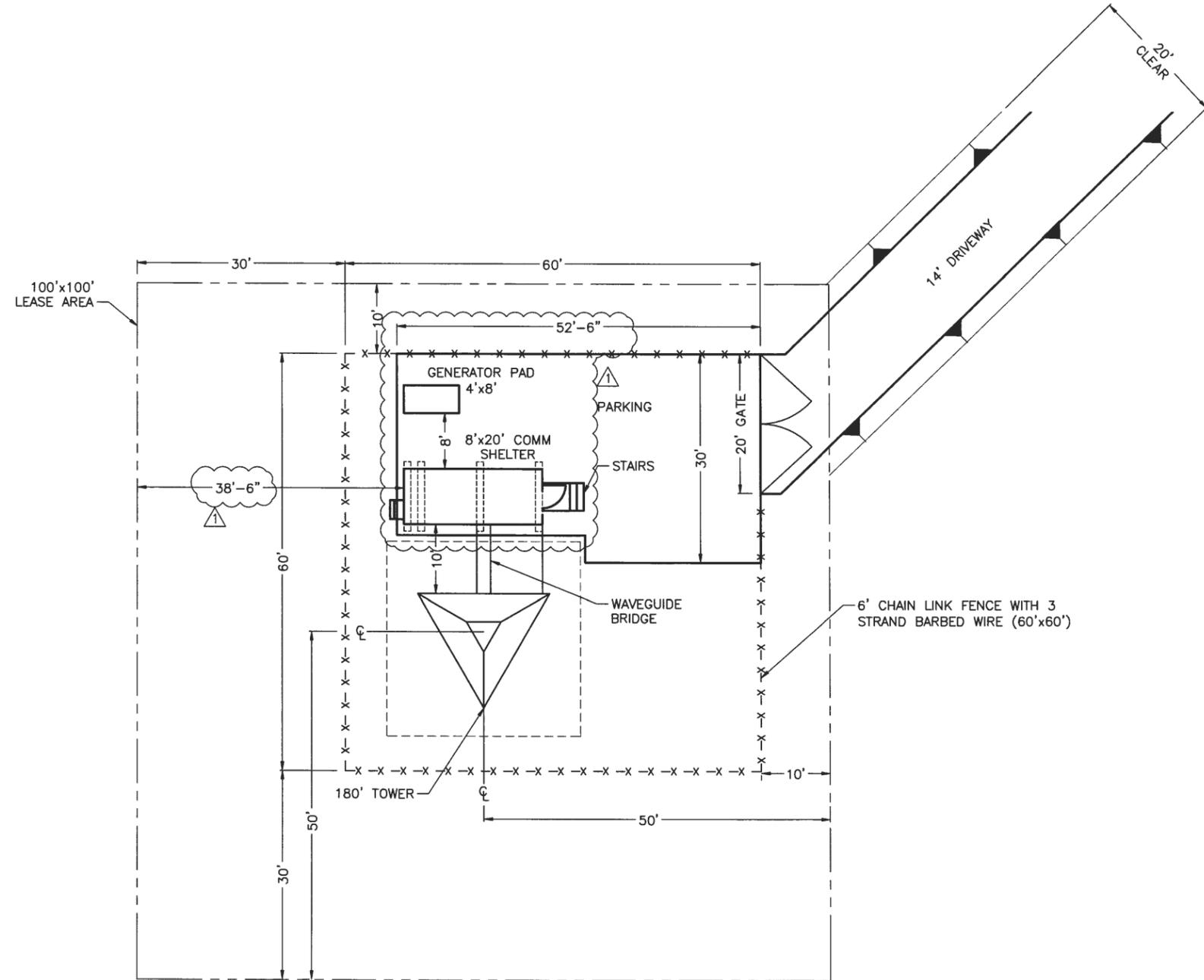
JOB #: 16-0073-20 DATE: 160614

C1.1

REV  
1



FILE: X:\16 JOBS\16-0073-20 MTA DLY1 LTE SITE DESIGN\05-CADD\DRAWINGS\C1.1 SITE ELEVATION.DWG | PLOT DATE: 160623 | PLOT SCALE: 1:1



**1**  
C2.0 **ENLARGED SITE PLAN**  
SCALE: 1' = 20'



1	CHANGED GRADE BEAM LAYOUT	160622
0	ISSUED FOR CONSTRUCTION	160614
REV.	DESCRIPTION	DATE

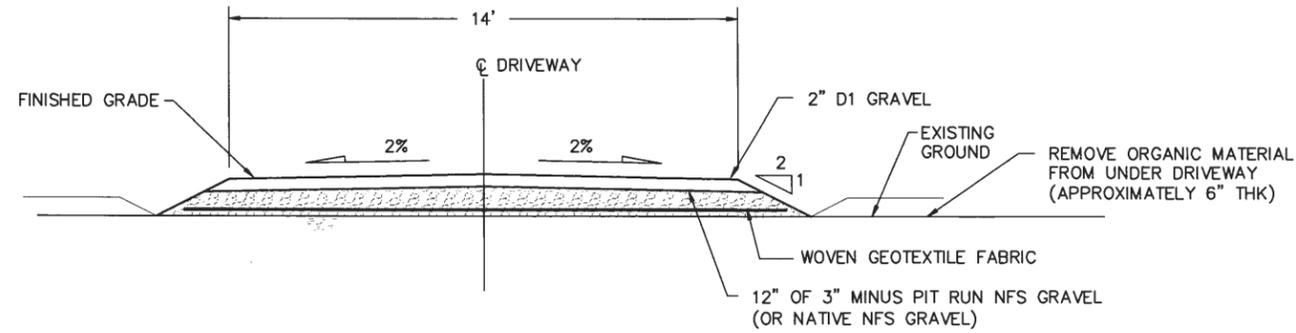


MTA  
DLY1 LTE SITE  
**ENLARGED  
SITE PLAN**

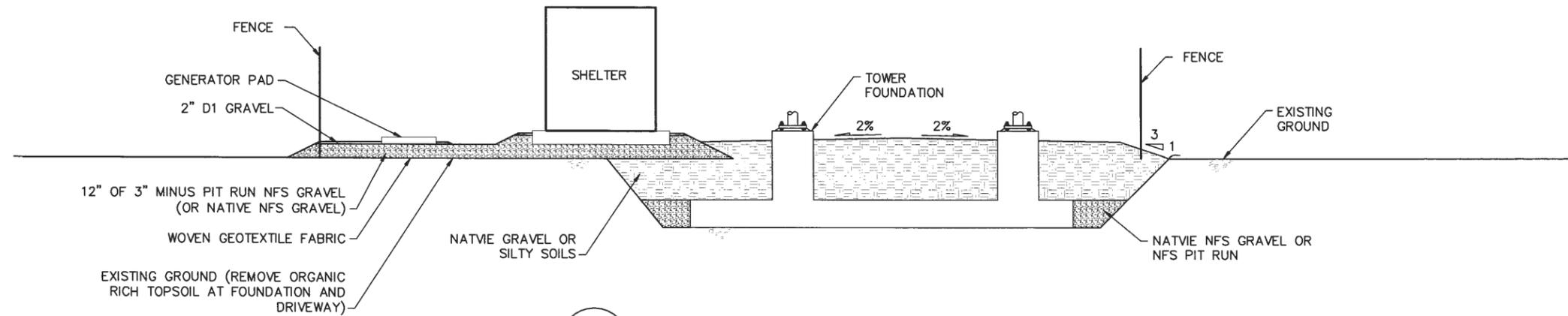
DWN: JAA      CKD. DRB      APP. DRB  
JOB #: 16-0073-20      DATE: 160614

C2.0	REV <b>1</b>
------	-----------------

FILE: X:\16 JOBS\16-0073-20 MTA DLY1 LTE SITE DESIGN\05-CADD\DRAWINGS\C2.0 ENLARGED SITE PLAN.DWG | PLOT DATE: 160623 | PLOT SCALE: 1:1



**1**  
**C2.1** DRIVEWAY SECTION (TYP) (PARKING SIMILAR)  
SCALE: 1"=20'



**2**  
**C2.1** PAD SECTION  
SCALE: 1"=10'



0	ISSUE FOR CONSTRUCTION	160614
REV.	DESCRIPTION	DATE
MTA DLY1 LTE SITE ROAD AND PAD SECTIONS		
DWN: JAA	CKD: DRB	APP: DRB
JOB #: 16-0073-20	DATE: 160614	
C2.1		REV 0

FILE: X:\16 JOBS\16-0073-20 MTA DLY1 LTE SITE DESIGN\CADD\DRAWINGS\C2.1 ROAD AND PAD SECTIONS.DWG | PLOT DATE: 160614 | PLOT SCALE: 1:1

**DESIGN CRITERIA:**

**TOWER BASE REACTIONS (SABRE #141609)**

AXIAL LOAD: 78.72 KIPS  
 TOTAL SHEAR: 55.72 KIPS  
 O.T. MOMENT: 5,606 FT-KIPS  
 UPLIFT PER LEG: 311.0 KIPS  
 COMP PER LEG: 345.0 KIPS  
 SHEAR PER LEG: 32.71 KIPS

ALLOWABLE SOIL BEARING: 4000 psf (GRAVEL)

DESIGN WIND SPEED: 100 MPH  
 (3 SEC. GUST) PER TIA-222-G

EXPOSURE: C,  
 TOPO CATEGORY: 1  
 STRUCTURE CLASS: II  
 IMPORTANCE FACTOR: 1.0  
 RADIAL ICE: 1/2 IN

**NOTES:**

**EARTHWORK:**

1. REMOVE ALL ORGANIC MATTER AND DELETERIOUS MATERIALS FROM UNDER FOOTINGS AND DRIVEWAY. EXCAVATE 5FT BELOW EXISTING GRADE FOR TOWER FOUNDATION.
2. ALL COMPACTED FILL TO BE COMPACTED TO 90% TO 95% MAXIMUM LABORATORY DENSITY IN 12 INCH LIFTS.
3. COMPACTED FILL AND OR EXCAVATION IS REQUIRED TO ALLOW DRAINAGE SO THAT NO STANDING WATER WILL ACCUMULATE ON THE SITE AS A RESULT OF THIS WORK.
4. ALL EXCAVATIONS SHALL BE SHORED OR SLOPED OR OTHERWISE SUPPORTED TO PROTECT PERSONNEL IN ACCORDANCE WITH OSHA, 29 CFR 1926, SUBPART P.

**CONCRETE:**

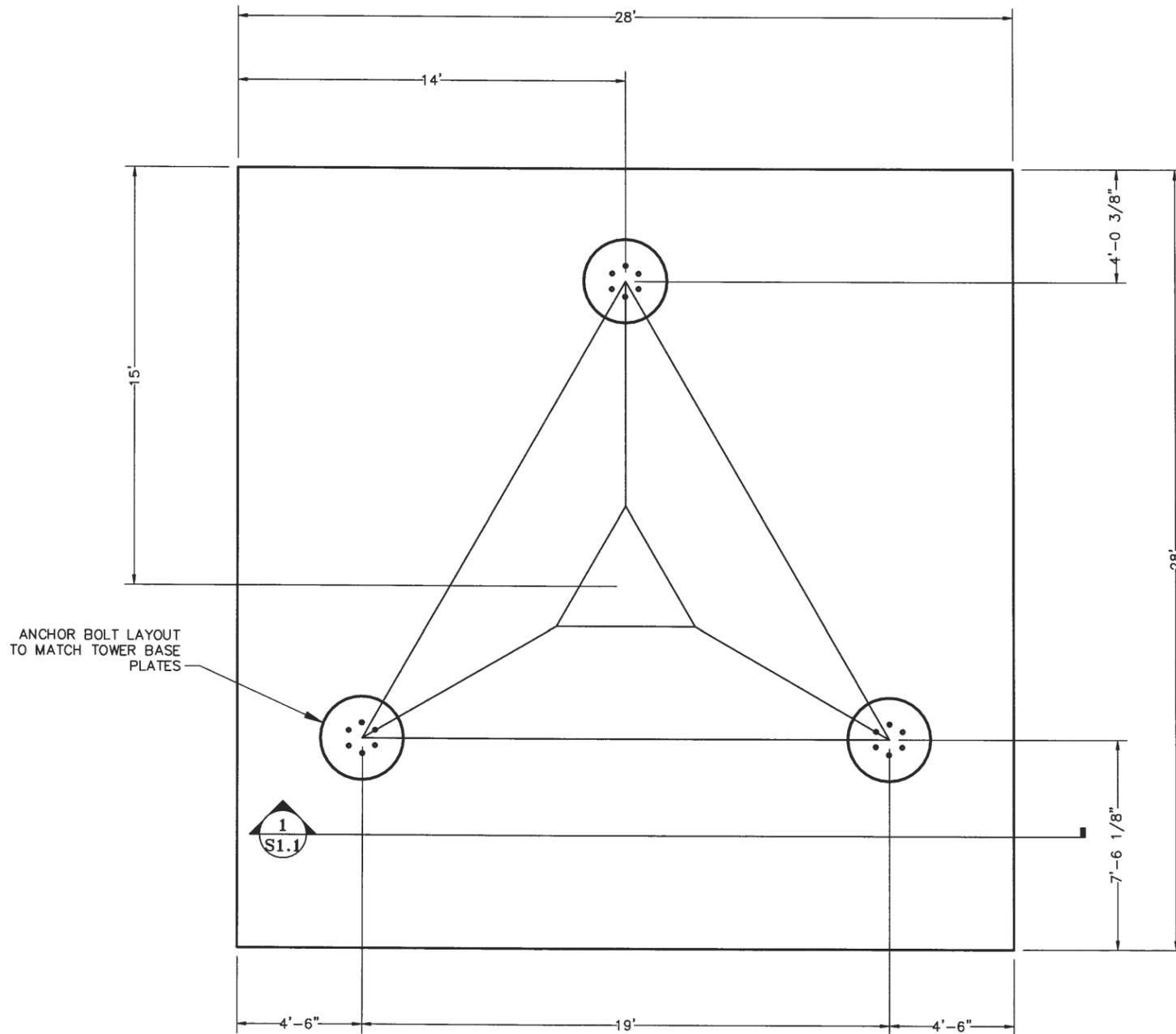
1. CONCRETE SHALL OBTAIN A 28-DAY COMPRESSIVE STRENGTH OF 4,500 PSI (F'c = 4,500 PSI). THE MIX SHALL CONTAIN A MINIMUM OF 6 SACKS CEMENT PER CUBIC YARD OF CONCRETE.
2. CEMENT SHALL CONFORM TO ASTM C150 TYPE I OR II.
3. AGGREGATE SHALL CONFORM TO ASTM C33. MAXIMUM AGGREGATE SIZE SHALL BE 3/4 INCH.
4. SLUMP SHALL BE BETWEEN 3 - 5 INCHES.
5. ADMIXTURE SHALL BE PROVIDED AS REQUIRED TO PROVIDE 5% - 8% AIR ENTRAINMENT WITH A MAXIMUM WATER/CEMENT RATIO OF 0.45.
6. CONCRETE SHALL BE KEPT FROM FREEZING FOR THE FIRST SEVEN DAYS AFTER PLACING. SURFACES TO RECEIVE CONCRETE SHALL BE NOT LESS THAN 40° F. THE TEMPERATURE OF THE CONCRETE WHEN PLACED SHALL NOT BE LESS THAN 50° F OR GREATER THAN 80° F.

**REINFORCING STEEL:**

1. ALL REINFORCING BARS SHALL BE DEFORMED AND CONFORM TO ASTM A615, GRADE 60.
2. ALL BOTTOM MAT REINFORCING BARS SHALL BE ACCURATELY PLACED AND SUPPORTED BY GALVANIZED METAL CHAIRS OR CONCRETE BLOCKS (WOODEN STAKES SHALL NOT BE USED).
3. SUPPORT TOP MAT OF REBAR WITH #4 BENT REBAR SPACERS (STANDIES) AT 4' O.C.
4. MINIMUM CONCRETE COVER FOR REBAR WHERE CONCRETE IS PLACED IN DIRECT CONTACT WITH SOIL IS 3 INCHES CLEAR, FOR ALL OTHER FORMED SURFACES IS 2 INCHES.
5. ALL REBAR SPLICES SHALL BE LAPPED 40 BAR DIAMETERS MIN.

**STRUCTURAL STEEL:**

1. STRUCTURAL STEEL INCLUDING PLATES, ANGLES AND MISCELLANEOUS SHAPES SHALL BE ASTM A36.

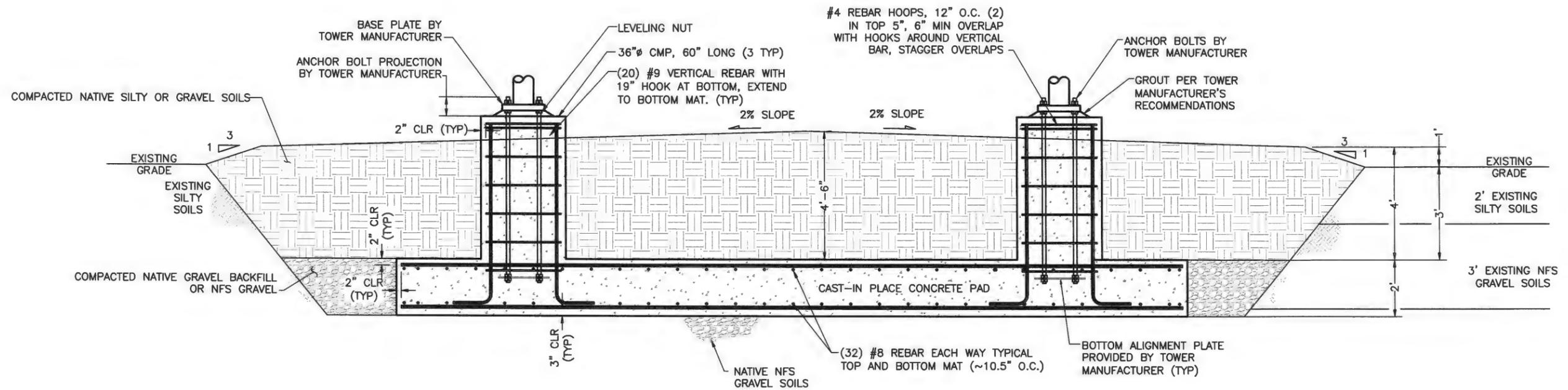


**1 TOWER FOUNDATION PLAN VIEW**  
 S1.0 SCALE: 3/16" = 1'-0"



0	ISSUE FOR CONSTRUCTION	160614
REV.	DESCRIPTION	DATE
MTA DLY1 LTE SITE <b>TOWER FOUNDATION PLAN</b>		
DWN: JAA	CKD: DRB	APP: DRB
JOB #: 16-0073-20	DATE: 160614	
S1.0		REV 0

FILE: X:\16 JOBS\16-0073-20 MTA DLY1 LTE SITE DESIGN\05-CADD\DRAWINGS\1.0 TOWER FOUNDATION.DWG | PLOT DATE: 160614 | PLOT SCALE: 1:1



**1**  
**S1.1** TOWER FOUNDATION SECTION  
SCALE: NTS

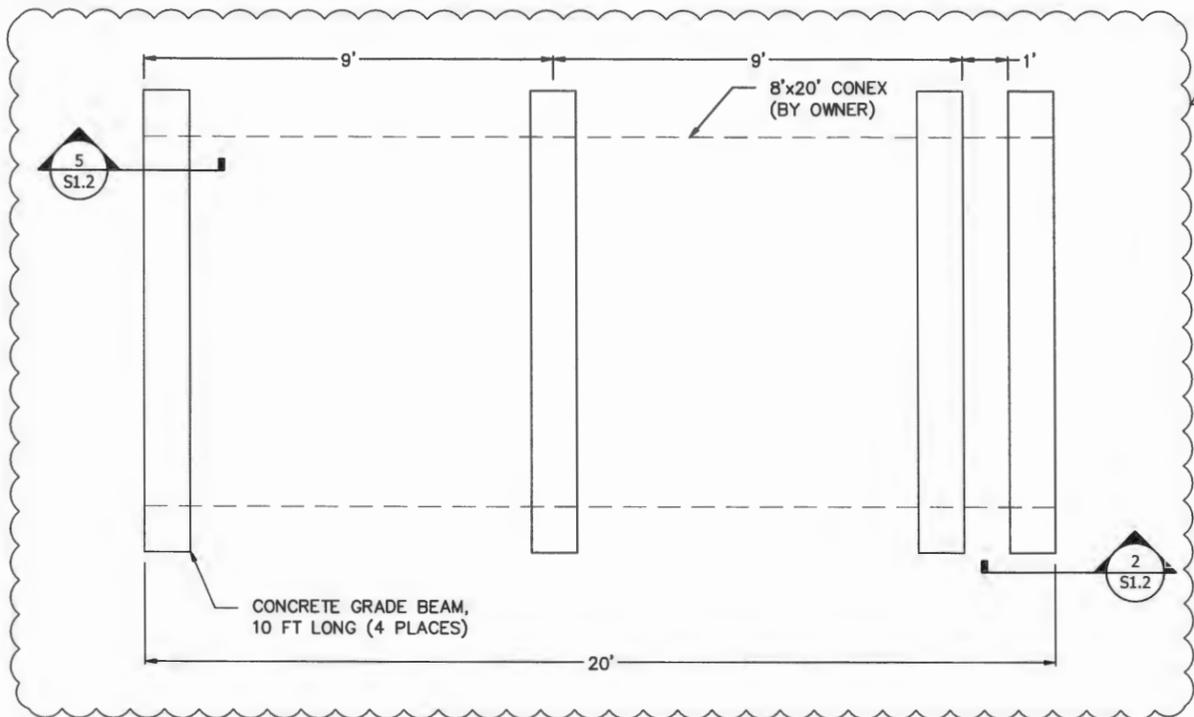
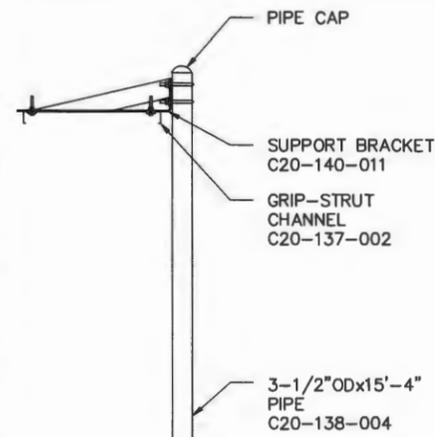
**NOTES:**

1. ON SITE TEST HOLE FOUND APPROXIMATELY 6" OF ORGANIC RICH TOPSOIL. THEN 1.5 FT OF SILTY SOILS. THEN NFS GRAVEL SOILS TO BOTTOM OF TEST HOLE AT 8FT.
2. BOTTOM OF TOWER FOUNDATION TO BE PLACED IN THE GRAVEL LAYER.
3. IF EXCAVATION FOR TOWER FOUNDATION REVEALS DIFFERENT SOIL CONDITIONS. CONTACT ENGINEER OF RECORD FOR DIRECTION. DO NOT PLACE TOWER FOUNDATION ON MATERIAL OTHER THAN NATIVE NFS GRAVEL.
4. PROOF ROLL BOTTOM OF EXCAVATION TO ENSURE THERE ARE NO SOFT SPOTS. CONTACT ENGINEER OF RECORD FOR DIFFERING CONDITIONS.

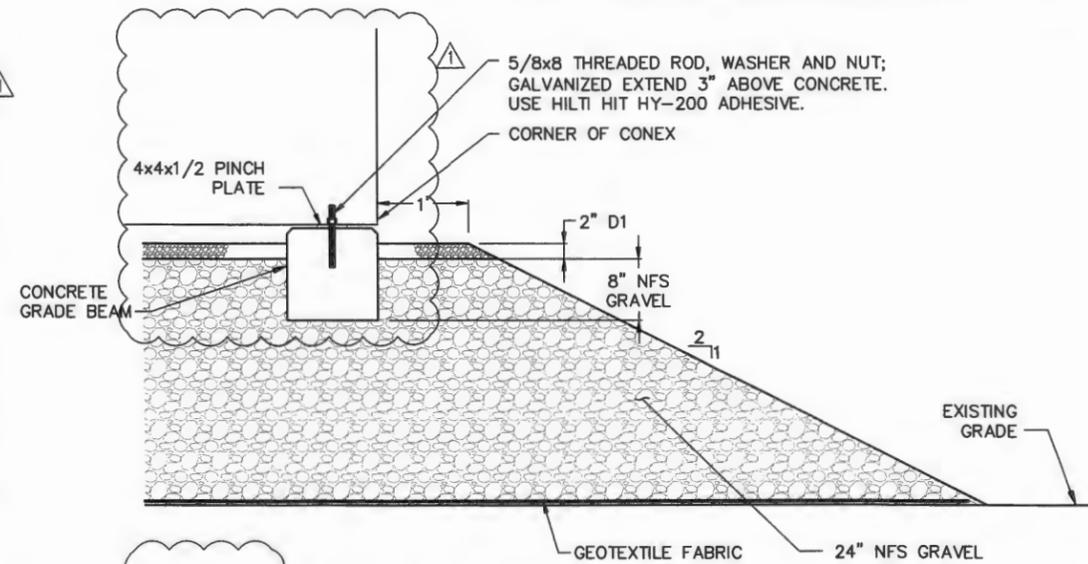


0	ISSUE FOR CONSTRUCTION	160614
REV.	DESCRIPTION	DATE
MTA DLY1 LTE SITE <b>TOWER                  FOUNDATION SECTION</b>		
DWN: JAA	CKD: DRB	APP: DRB
JOB #: 16-0073-20	DATE: 160614	
<b>S1.1</b>	REV	<b>0</b>

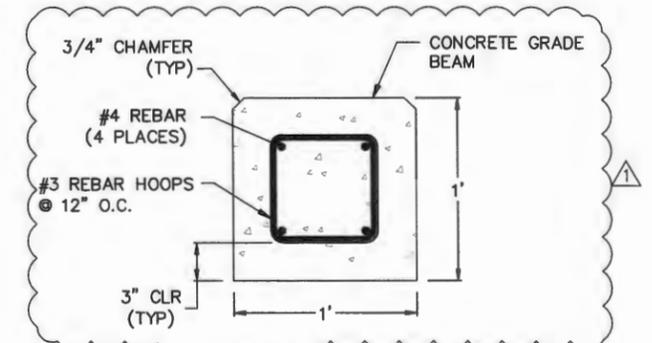
FILE: X:\16 JOBS\16-0073-20 MTA DLY1 LTE SITE DESIGN\5-CADD\DRAWINGS\S1.1 FOUNDATION SECTION.DWG | PLOT DATE: 160614 | PLOT SCALE: 1:1



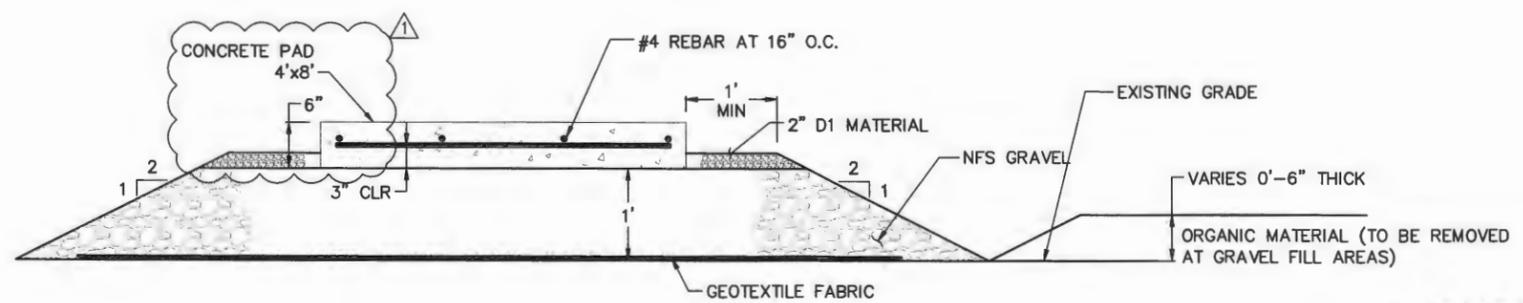
**1**  
S1.2 **GRADE BEAM LAYOUT**  
SCALE: 1/4" = 1'-0"



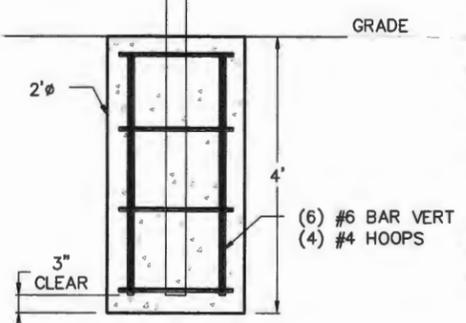
**2**  
S1.2 **GRADE BEAM CONNECTION DETAIL**  
SCALE: 1/2" = 1'-0"



**5**  
S1.2 **CROSS SECTION**  
SCALE: 1" = 1'-0"



**4**  
S1.2 **GENERATOR PAD SECTION**  
SCALE: 1/2" = 1'-0"



**3**  
S1.2 **POST AND FOOTING DETAIL**  
SCALE: 3/8" = 1'-0"

1	GRADE BEAM LAYOUT AND DETAILS	160622
0	ISSUED FOR CONSTRUCTION	160614
REV.	DESCRIPTION	DATE



MTA  
DLY1 LTE SITE  
**GRADE BEAM  
LAYOUT AND DETAILS**

DWN: JAA	CKD: DRB	APP: DRB
JOB #: 16-0073-20	DATE: 160614	



<b>S1.2</b>	<b>REV 1</b>
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FILE: X:\16 JOBS\16-0073-20 MTA DLY1 LTE SITE DESIGN\05-CADD\DRAWINGS\S1.2 GRADE BEAM LAYOUT AND DETAILS.DWG | PLOT DATE: 160623 | PLOT SCALE: 1:1

# Exhibit B

FAA Determination





Mail Processing Center  
Federal Aviation Administration  
Southwest Regional Office  
Obstruction Evaluation Group  
10101 Hillwood Parkway  
Fort Worth, TX 76177

Aeronautical Study No.  
2016-AAL-445-OE

Issued Date: 06/21/2016

Rod Ewing  
MTA Communications, Inc.  
1740 S Chugach St  
Palmer, AK 99645

**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Antenna Tower DLY1  
Location: Willow, AK  
Latitude: 61-51-05.65N NAD 83  
Longitude: 150-04-51.94W  
Heights: 231 feet site elevation (SE)  
185 feet above ground level (AGL)  
416 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)  
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

**See attachment for additional condition(s) or information.**

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 L.

This determination expires on 12/21/2017 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination does not constitute authority to transmit on the frequency(ies) identified in this study. The proponent is required to obtain a formal frequency transmit license from the Federal Communications Commission (FCC) or National Telecommunications and Information Administration (NTIA), prior to on-air operations of these frequency(ies).

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (800) 478-3576 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (907) 271-5863. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-AAL-445-OE.

**Signature Control No: 293631863-296315005**

( DNE )

Robert van Haastert  
Specialist

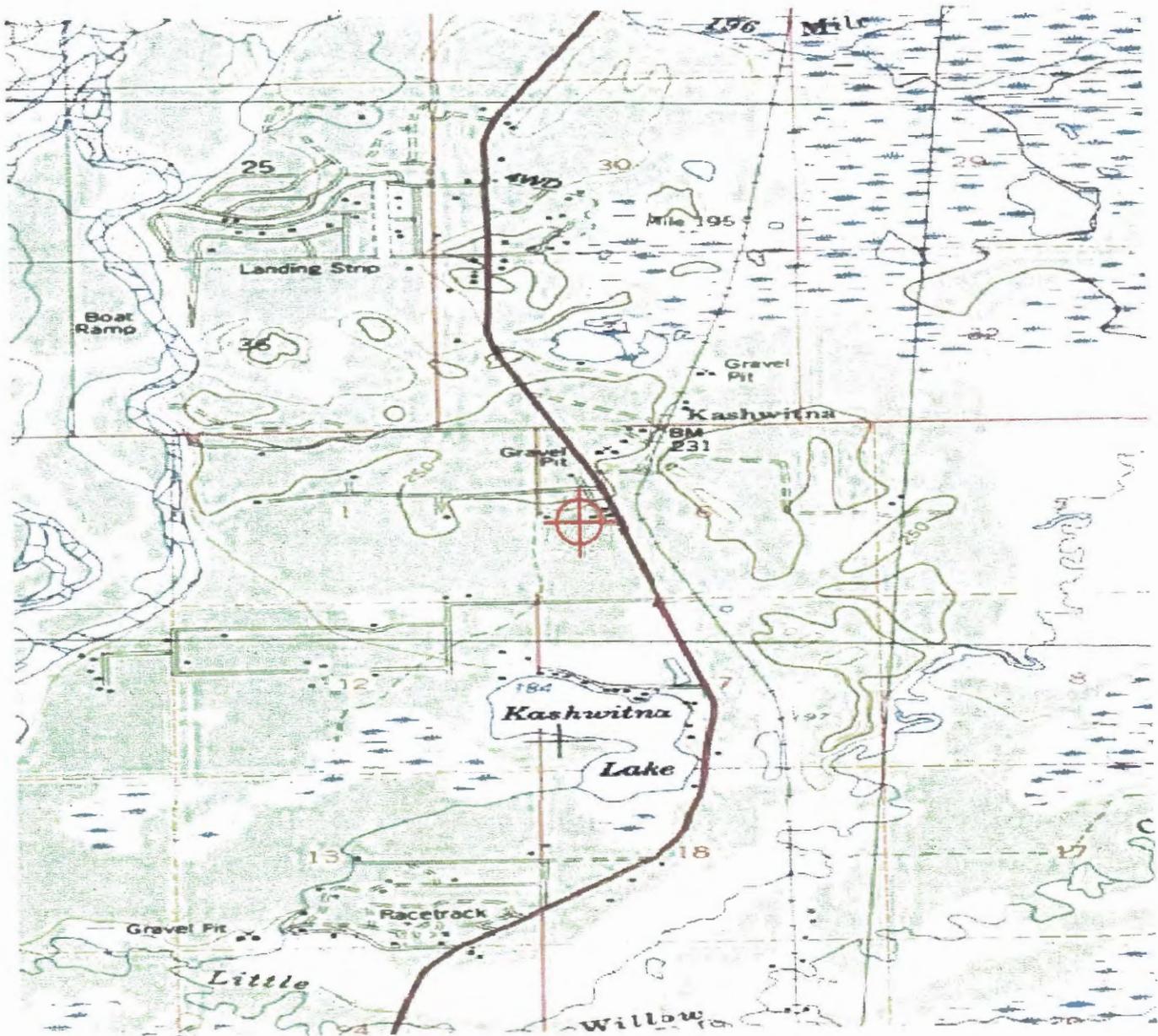
Attachment(s)  
Additional Information  
Frequency Data  
Map(s)

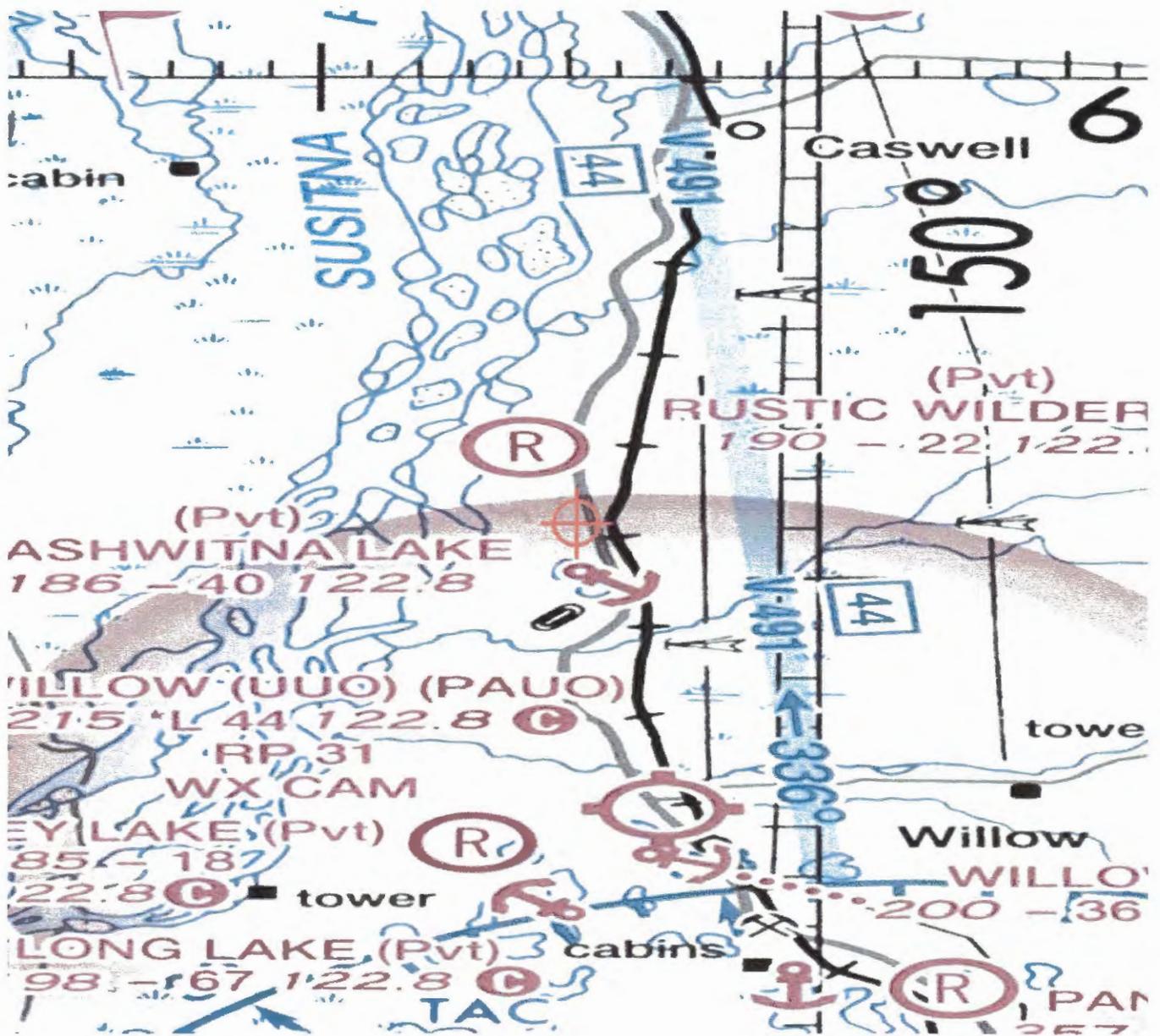
cc: FCC

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, the FAA has no objection to voluntary lighting of this structure in the interest of aviation safety. We recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-L.

Frequency Data for ASN 2016-AAL-445-G...

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
698	806	MHz	1000	W





# Exhibit C

Balloon Flight



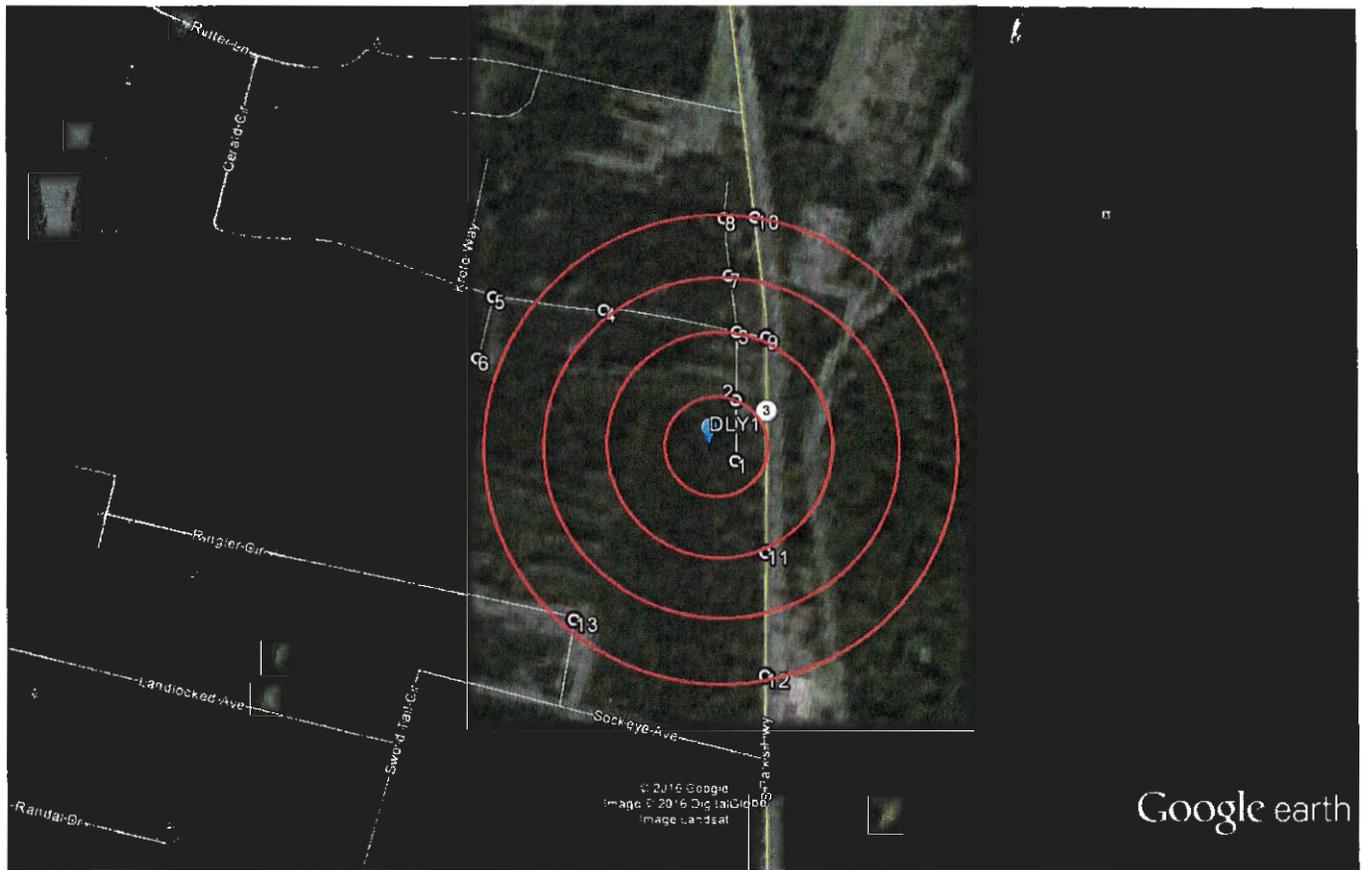
# **DSL1**

Talkeetna, AK

Balloon Test

May 24, 2016





Area overview with 500 ft, 1000 ft, 1500 ft and 2000 ft radius circles depicted.

Photograph numbers are referenced in relation to the plan view.



1

























# Exhibit D

Redacted Lease



**51636 PG  
ATGA****WARRANTY DEED**  
**A.S. 34.15.030**

The Grantor,

WILLIAM H. BOWERS and SANDRA L. BOWERS, husband and wife, whose address is 305 S. Bartlett Circle, Wasilla, AK 99654, for and in consideration of Ten Dollars (\$10.00), and other good and valuable consideration, in hand paid, the receipt of which is hereby acknowledged, conveys and warrants to the Grantee,

MTA COMMUNICATIONS, LLC, an Alaska limited liability company, whose address is 1740 S. Chugach Street, Palmer, AK 99645, the following described real property:

Government Lot Six (6) in Section 6, Township 20 North, Range 4 West, Seward Meridian, according to the official Bureau of Land Management Survey thereof, being located in the Palmer Recording District, Third Judicial District, State of Alaska.

Subject to:

Reservations and exceptions as contained in the U.S. Patent Number 1227909, recorded August 15, 1962, Book 43 Page 31, and/or in Acts authorizing the issuance thereof.

Selections by the State of Alaska to all oil, gas and mineral rights, as reserved in an instrument, recorded May 10, 1967, Book 65D Page 195, and re-recorded April 4, 2006, as Instrument No. 2006-008602-0. [NOTE: There may be leases, grants, exceptions or reservations of interests that are not listed.]

Reservation of section line easement 33 feet in width along each side of the section line as provided by 43 U.S.C. 932, which affects the West 33 feet.

Reservation of an easement for highway purposes as disclosed by Public Land Order No. 601, dated August 10, 1949 and amended by Public Land Order No. 757, dated October 10, 1959; Public Land Order No. 1613, dated April 7, 1958; and Department of the Interior Order No. 2665, dated October 16, 1951, Amendment No. 1, thereto, dated July 17, 1952 and Amendment No. 2, thereto, dated September 15, 1956, filed in the Federal Register.



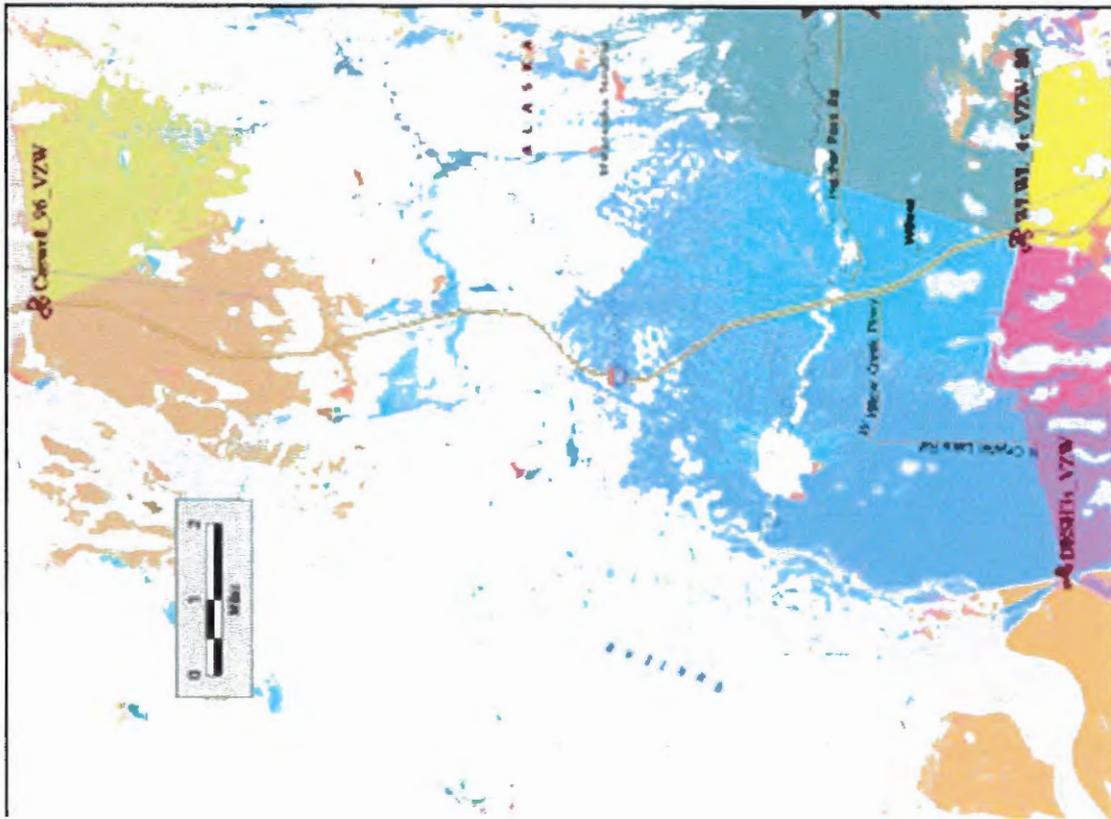




# Exhibit E

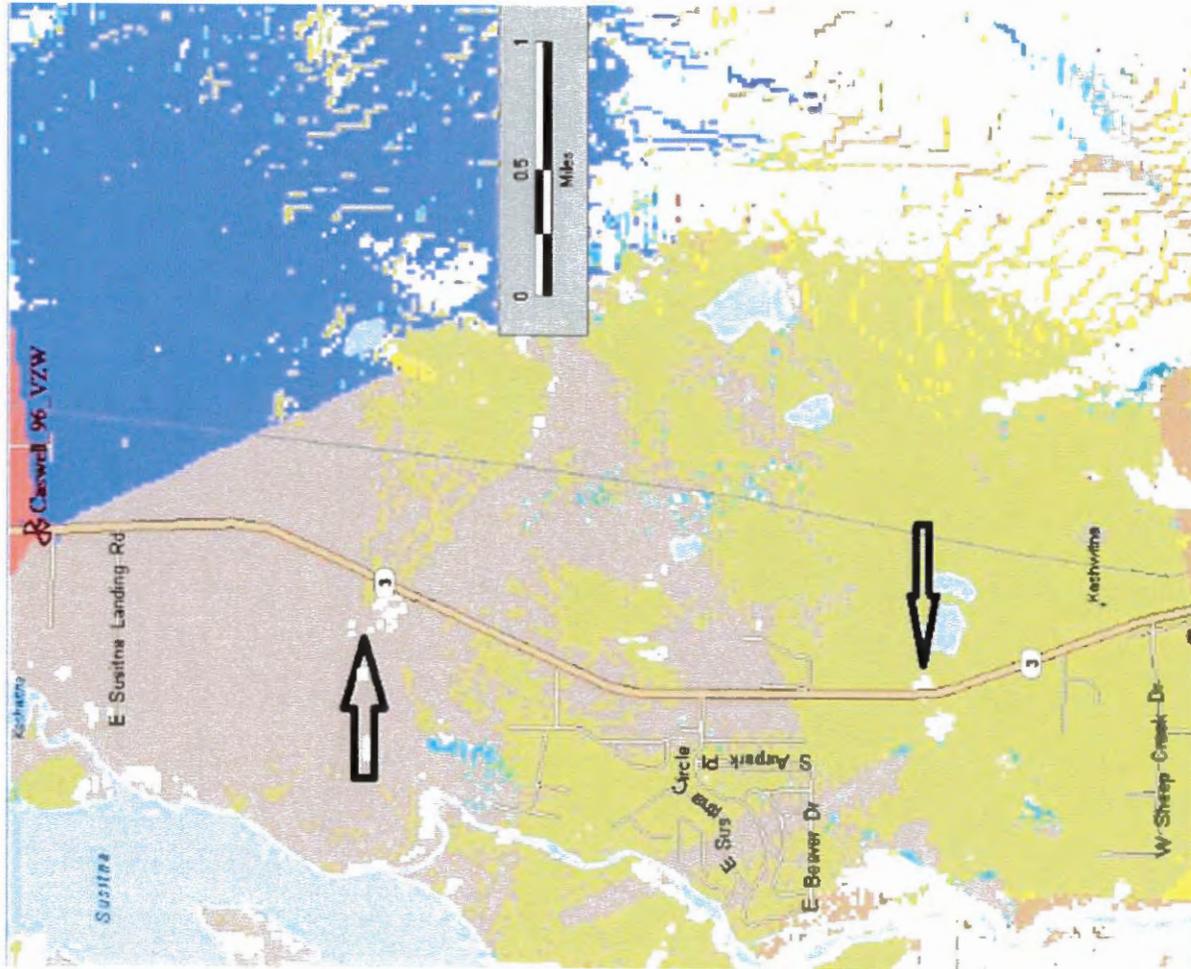
## Propagation Maps





# DLY1 Site – Inactive (current coverage)





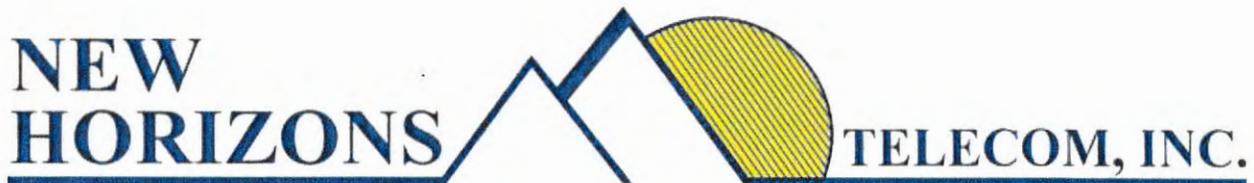
# DLY1 Coverage Gaps North at 150 ft



# Exhibit F

Notification Letter, Mailing List,  
Meeting Sign in, and Meeting Summary





*Program & Project Management, Engineering Design, Permitting, Construction, Installation, Integration  
~ Your Turnkey Providers ~*

May 17, 2016

TO: Neighbors of 41238 W Parks Hwy  
Legal Description - Township 20N Range 4W Section 6 Lot C3

This letter is to notify area Neighbors that MTA Communications (MTAC) will be making an application for Site DLY1, a Conditional Use Permit for the placement of a 185 foot tall lattice type self-supporting antenna structure (180 foot tower and 5 foot lightning rod) on the parcel referenced above. The attached Matanuska-Susitna Borough Land Information Parcel Report and google earth image, show both the parcel location and the proposed tower placement. Site access will be from a proposed driveway off the south end of N Delyndia Road. Potential tower lighting will be part of the discussion at the meeting.

MTAC will present the proposed placement on Wednesday, June 1, 2016, at the at the Willow Community Center. The meeting begins at 6PM and is located at 23557 West Willow Community Center Circle, Willow, Alaska.

The construction of this antenna structure will provide enhanced and improved wireless communications for personal, business and emergency service in the area. Representatives from MTAC will be present to answer questions or concerns from the community.

As a nearby property owner to the proposed facility you are entitled to this information pursuant to Matanuska Susitna Borough, Chapter 17.67.050 Borough Municipal Code. For your convenience, the language provided for this notification is as follows:

*Prior to applying for a conditional use permit for a new tall structure, the potential applicant shall hold at least one community meeting.*

New Horizons Telecom, Inc. is the agent for MTAC for this conditional use application. If you have any questions pertaining to the proposed notification, please contact Sherrie Greenshields; Site Acquisition Consultant, with New Horizons Telecom Inc., 901 Cope Industrial Way, Palmer, AK 99645, at the information below.

Respectfully,

Sherrie Greenshields, Site Acquisition Consultant  
sgreenshields@nhtiusa.com  
907-761-6057 office; 907-315-3201 cell

Attachments: Mat-Su Borough Comment Form; Permit Center ½ mile offset from Parcel; Antenna Structure Proposed Site Location



FIRST CLASS MAIL

Comment form for Citizen Participation Process

**Matanuska-Susitna Borough Code Section: MSB 17.67 – TALL STRUCTURES**

**Application or Item:** Site Name DLY1, Conditional Use Permit - 185 ft lattice self supporting antenna structure

**Applicant:** MTA Communications (Agent - New Horizons Telecom, Inc. - Sherrie Greenshields)

**Applicant Phone#:** 907-760-6057 office; 907-315-3201 cell

**Applicant Address:** New Horizons Telecom, Inc. - 901 Cope Industrial Way, Palmer, AK 99645

**Meeting Date & Time:** Wednesday, June 01, 2016, 6 PM

**Meeting Location:** 23557 West Willow Community Center Circle, Willow, Alaska

**Legal Description of Project:** Township 20N Range 4W Section 6 Lot C3

*Description of the proposed development including height, design, lighting, potential access to the site and proposed service:*

***MTA Communications (MTAC) is making an application for Site DLY1 a Conditional Use Permit for the placement of a 185 foot tall lattice type self-supporting antenna structure (180 ft tower with 5 ft lightning rod) on the parcel referenced above. The attached MatSu Borough Land Info Parcel Report and google earth image, show the parcel location and proposed tower placement. Site access will be from a proposed driveway off the south end of N Delyndia Road. Potential tower lighting will be part of the discussion at the meeting.***

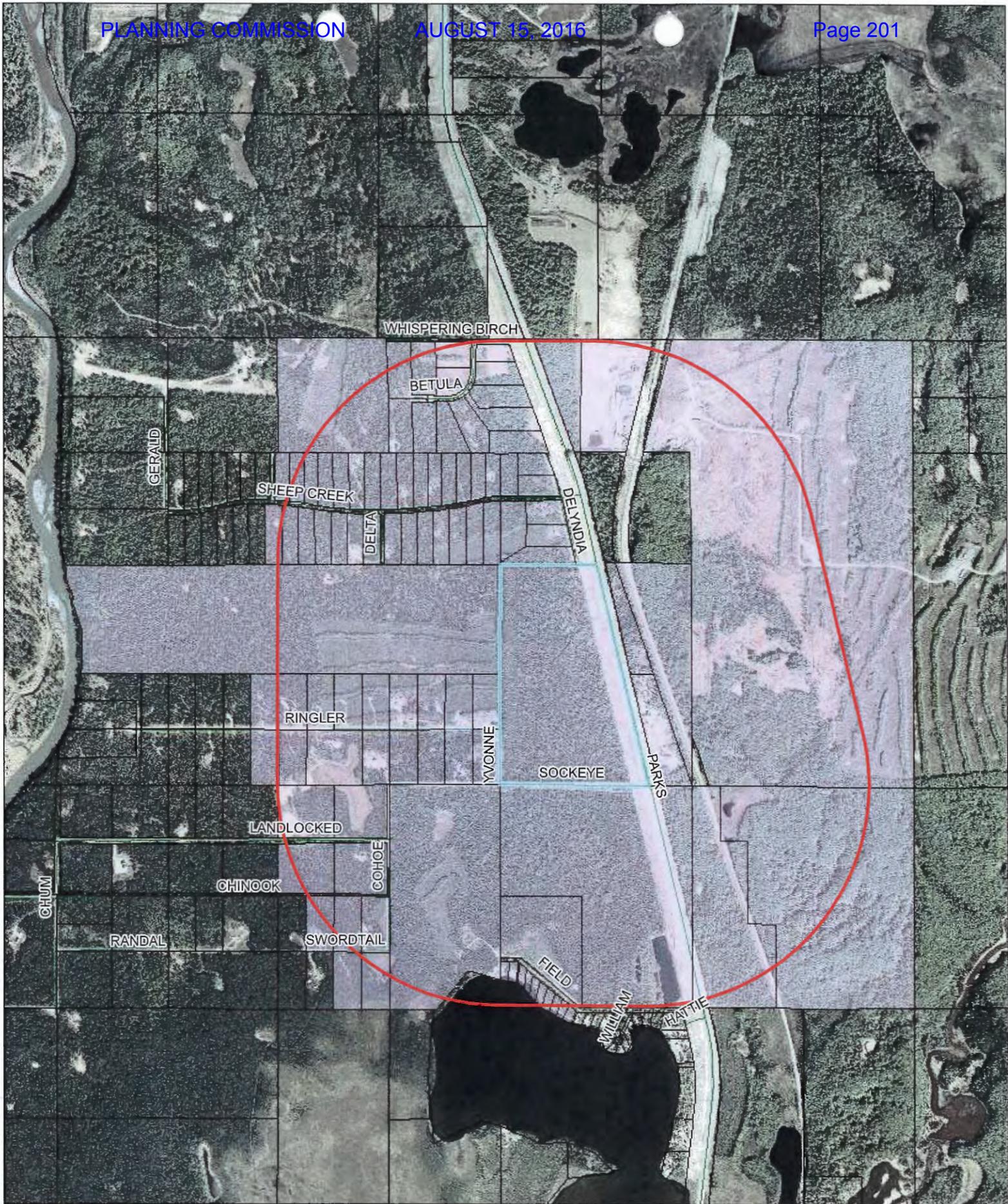
If you have any questions or, would like to send us comments, concerning the proposed action, this form may be used for your convenience by filling in the information below and mailing it to the Matanuska-Susitna Borough, Development Services Division, 350 East Dahlia, Palmer, Alaska 99645. You may fax comments to 861-7876 or e-mail to [permitcenter@matsugov.us](mailto:permitcenter@matsugov.us). Comments received prior to the meeting date will be included in the citizen participation report. Please be advised that comments received from the public after that date will not be included in the citizen participation report but will be included in the staff report to the Planning Commission. If there is not enough room below, please attach this sheet to another piece of paper.

**Name:** \_\_\_\_\_ **Address:** \_\_\_\_\_

**Location/Legal Description of your property:** \_\_\_\_\_

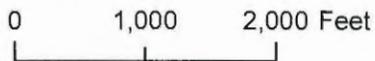
**Comments:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



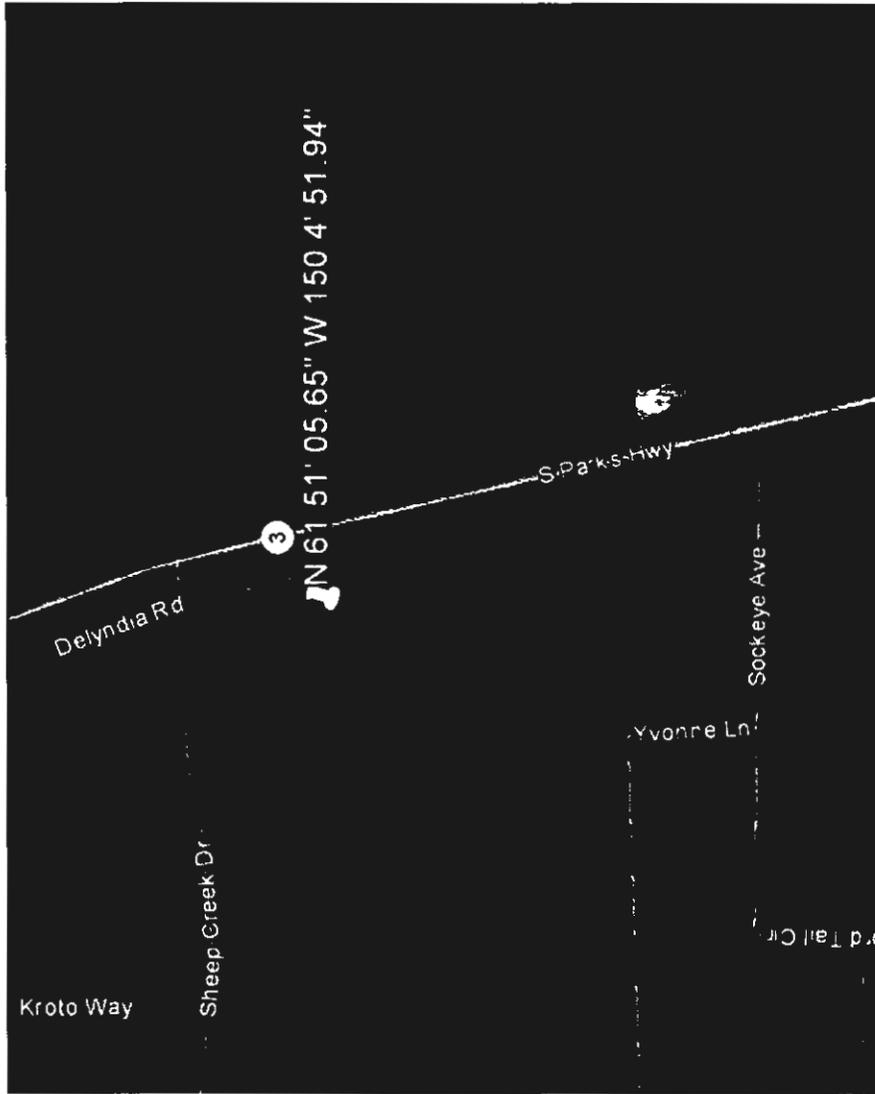
**Matanuska Susitna Borough  
Permit Center**

Date: 5/9/2016



This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matanuska-Susitna Borough GIS Division at 907-745-4801.

DLY1 -- Proposed MTA Communication Site Location



Yellow Pin depicts proposed antenna structure on property



UNITED STATES POSTAL SERVICE®

Certificate of Mailing — Firm (Domestic)

Name and Address of Sender	TOTAL NO of Pieces Listed by Sender	TOTAL NO of Pieces Received at Post Office™	Affix Stamp Here Postmark with Date of Receipt.	Postage	Fee	Special Handling	Parcel Airift
NEW HORIZONS TELECOM, INC. 901 COPE INDUSTRIAL WAY PALMER, AK 99645	102	102	   <p>Mailed From 99645 05/17/2016 032A 0061807387</p>				
USPS® Tracking Number Firm-specific Identifier							
Address (Name, Street, City, State, and ZIP Code™)							

220N04W07B003  
ALASKA STATE OF, DEPT OF  
NATURAL RESOURCES, STE 1050A  
550 W 7<sup>TH</sup> AVE  
ANCHORAGE, AK 99501-3579

55395000L007  
ALVARDO IGNACIO & TERESA  
PO BOX 876841  
WILLOW, AK 99501-3579

56336000L014  
BAILEY ANTHONY & CORISSA  
BINDER JASON & CARRIE  
7615 ISLAND DR  
ANCHORAGE, AK 99504-2724

51246B02L014  
BAIRD RANDALL B  
PO BOX 875  
WILLOW, AK 99688-0875

51246B04L001  
BATES THOS W & PATRICIA J  
8217 RACE CIR  
ANCHORAGE, AK 99504-4747

55395000L013  
BEACHY DAVID M  
BEACHY TERESA FERN  
HC 89 BOX 222  
WILLOW, AK 99688-9703

51246B04L004  
BELL JORDON L  
SKARDA AMYEE L  
108 CHATHAM LN  
OAK RIDGE, TN 37830

55395000L005  
BERRY TED & JEAN LVG TRUST  
PO BOX 49  
WILLOW, AK 99688-0049

55395000L004  
BERRY TED & JEAN LVG TRUST  
PO BOX 49  
WILLOW, AK 99688-0049

55395000L006  
BERRY TED & JEAN A  
PO BOX 49  
WILLOW, AK 99688-0049

55395000L012  
BERRY TED & JEAN A  
PO BOX 49  
WILLOW, AK 99688-0049

220N05W01D014  
BINKOWSKI MABLE K  
LEAKANOFF LOUISE M  
PO BOX 744  
WILLOW, AK 99688-0744

220N05W01D012  
BINKOWSKI MABLE K  
YARO GEORGE B  
PO BOX 744  
WILLOW, AK 99688-0744

220N04W06C003  
BOWERS WM H & SANDRA L  
305 S BARTLETT CIR  
WASILLA, AK 99654

220N05W01D018  
BROOKS K C GAM TR  
BROOKS KENNETH J & MARIA C O TRE  
421 SW 356 ST  
FEDERAL WAY, WA 98023-7303

51246B02L001  
BRUSO JAS W & BINNIE P  
9008 165<sup>TH</sup> ST E  
PUYALLUP, WA 98373

220N04W06B005  
COLASKA INC  
240 W 68<sup>TH</sup> AVE  
ANCHORAGE, AK 99518

220N04W06D001  
COLASKA INC  
240 W 68<sup>TH</sup> AVE  
ANCHORAGE, AK 99518-1752

220N04W06C004  
COLASKA INC  
240 W 68<sup>TH</sup> AVE  
ANCHORAGE, AK 99518-1752

220N05W01C002  
COOK INLET REGION INC  
PO BOX 93330  
ANCHORAGE, AK 99509-3330

5636000L015  
DEWALL ROCKLYN & AMY  
4271 W LAKE CIR  
ANCHORAGE, AK 99502-4907

51246B02L011  
DOWELL KENNETH L  
10129 N PALMER FISHHOOK RD  
PALMER, AK 99645-9245

55395000L003  
EDWARDS BRUCE L & JOAN C  
PO BOX 884  
WILLOW, AK 99688

5621000L022  
EITERER CHRISTIAN & H  
A-6561 ISCH G L 280  
HOTEL CARNI FLIANA  
TIROL AUSTRIA

220N05W01D013  
ELDRED STEPHEN D & BARBARA  
HC 89 BOX 294  
WILLOW, AK 99688-9703

51246B03L013  
ENGEN DAVID O & JODY K  
PO BOX 56863  
NORTH POLE, AK 99705-1863

51246B04L007  
ENGEN DAVID O & JODY K  
PO BOX 56863  
NORTH POLE, AK 99705-1863

51246B02L013  
EVANS JANET L  
E104  
8871 CENTENNIAL CIR  
ANCHORAGE, AK 99504-5032

56212000L023  
GAUSMANN PAUL E  
5135 RAYMOND RD  
MAYSLICK, KY 41055-8903

51246B04L009  
MANNONS KENNETH R JR&JA  
PO BOX 0181  
WILLOW, AK 99688-0181

51246B03L007  
HUFFORD CHERI  
PO BOX 520891  
BIG LAKE, AK 99652-0891

51246B02L007  
JENSEN RICKY A  
PO BOX 873334  
WASILLA, AK 99687-3334

51246B02L012  
KOORENNY ELEANOR E TR TRE  
C/O STACY EVANS  
1835 PRENTISS DR  
DOWNERS GROVE, IL 60516-2425

55395000L002  
KREIN TODD E  
HC 89 BOX 211  
WILLOW, AK 99688-9703

220N05W12B017  
LOFTIN CELESTE LEFFINGWELL  
C/O CARL W LOFTIN  
160 STRATFORD RD  
ASHEVILLE, NC 28804-1452

56212000L019  
MAAKESTAD WALTER & MOLLY  
PO BOX 70  
LAKE MINCHUMINA, AK 99757

220N05W01A004  
EVANS JEFFERY L & DARLA L  
HC 89 BOX 225  
WILLOW, AK 99688-9703

220N04W06C007  
GRIFFIN JOS D & PAMELA J  
PO BOX 696  
WILLOW, AK 99688-0696

56212000L024  
HARRISON PATRICK & TERESA L  
23302 NE 211ST  
BATTLE GROUND, WA 98604-3900

51246B02L009  
HUNTER CRAIG A & VIRGINIA D  
HC 89 BOX 202  
WILLOW, AK 99688-9703

51246B02L008  
JENSEN RICKY A  
PO BOX 873334  
WASILLA, AK 99687-3334

51246B04L005  
KOZAK CHESTER B II  
DOLSBERRY LINDA A  
727 N WILD PLUM CT  
LAWRENCE, KS 66049

220N05W01D003  
LARKIN CONRAD A  
PO BOX 711314  
MOUNTAIN VIEW, HI 96771-1314

51246B02L006  
LYSENG TODD L  
PO BOX 994  
WILLOW, AK 99688-0994

56212000L025  
MALINGOWSKI JAMES WALTER  
MALINGOWSKI CARLA COOKSON  
2944 EASTERN SHORE DR  
HAMPTON COVE, AL 35763-9339

220N04W07B002  
FIELD JUDITH A DEC OF TR  
FIELD JUDITH A TRE  
2700 JEFFORD PL  
ANCHORAGE, AK 99517-1038

220N05W01D009  
GUINTU RANDY & CHELSEA  
6930 ROVENNA ST  
ANCHORAGE, AK 99518-2170

220N05W12B019  
HENDERSON SAMUEL A  
HAMPTON MELANIE A, #2  
11910 JOHNS RD  
ANCHORAGE, AK 99515-3437

220N05W01D006  
IMIG ERIC A  
IMIG GREG L, #100  
2611 FAIRBANKS ST  
ANCHORAGE, AK 99503

220N05W01D008  
JOHNSTON HERBERT B & SUSAN  
15630 SE 178<sup>TH</sup> ST  
RENTON, WA 98058-9003

55395000L001  
KREIN TODD E  
HC 89 BOX 211  
WILLOW, AK 99688-9703

51246B02L015  
LARSEN CORRY B, #19  
1400 W 25<sup>TH</sup> AVE  
ANCHORAGE, AK 99503

56212000L020  
MAAKESTAD TALLAK DANIEL  
MAAKESTAD ELIZABETH RUTH  
17620 PIONEER DR  
EAGLE RIVER, AK 99577-9343

220N04W07A001  
MATANUSKA-SUSITNA BOROUGH  
350 E DAHLIA AVE  
PALMER, AK 99645-6488

220N04W07A002  
MATANUSKA-SUSITNA BOROUGH  
350 E DAHLIA AVE  
PALMER, AK 99645-6488

56336000L001  
MCCLAIN JOSHUA J & NAOMI J  
4040 S BIRCH COVE DR  
WASILLA, AK 99623-9456

51246B03L009  
MCCORD JAVIN W  
4516 NE PACIFIC AVE  
VANCOUVER, WA 98663-1818

220N05W01D007  
MCCOY BERNARD N SR  
513 HUNT LN  
SEVEN BAYS, WA 99122-8737

51246B03L008  
MCKINNEY ARCHIE L EST  
130 FRANKLIN AVE  
BECKLEY, WV 25801-6001

56212000L021  
MICHAUD DANIEL R & SUSAN L  
PO BOX 873161  
WASILLA, AK 99687-7361

56212000L026  
MICHAUD DANIEL R & SUSAN L  
PO BOX 873161  
WASILLA, AK 99687-7361

51246B02L010  
MULLINS GERALD C & MARY A  
7814 N THATCHER AVE  
TAMPA, FL 33614

220N05W12B018  
MURPHY PATRICK L & MARGARET  
K & K REV FAMILY TR  
1780 N WILLIWAW WAY  
WASILLA, AK 99654-5907

51246B03L011  
OKUBO TAKASHI & SANAE  
1-26-5 IGUSA  
SUGINAMI-KU  
TOKYO 167

51246B04L011  
PAAPKE JAMES H  
PO BOX 6153  
HILO, HI 96720

51246B04L010  
PAAPKE JAMES H  
PO BOX 6153  
HILO, HI 96720

51246B04L011  
PAAPKE JAMES H  
PO BOX 6153  
HILO, HI 96720

55395000L011  
PARENT TOBIN J  
HC 89 BOX 220  
WILLOW, AK 99688-9703

51246B02L004  
PARMETER MICHAEL WALTER  
PO BOX 837  
WILLOW, AK 99688

220N05W01D016  
PATTERSON SCOTT & BETTY  
HC 89 BOX 205  
WILLOW, AK 99688-9703

51246B04L003  
RAGAN JOHN C & MARTY S  
PO BOX 7592  
NIKISKI, AK 99635-7592

51246B02L017  
RENCE KEVIN  
PO BOX 1149  
WILLOW, AK 99688

51246B02L018  
RENCE KEVIN  
PO BOX 1149  
WILLOW, AK 99688

51246B02L016  
RENCE KEVIN  
PO BOX 1149  
WILLOW, AK 99688

220N05W12B021  
RICHARDS SUSAN R LVG TR  
RICHARDS SUSAN R TRE  
12540 ATHERTON RD  
ANCHORAGE, AK 99516-2911

51246b02I002  
RICHTER DORATHY  
158 PINE VALLEY DR  
PAIGE, TX 78659-4954

51246B03L012  
ROBERTS ROBERT EDWARD  
3035 SERVIAN PL  
SAN DIEGO, CA 92117-6163

55395000L009  
ROBERTSON PHILIP A & c A  
PO BOX 769  
WILLOW, AK 99688-0769

55395000L010  
ROBERTSON PHILIP A & c A  
PO BOX 769  
WILLOW, AK 99688-0769

55395000L008  
ROBERTSON PHILIP A & c A  
PO BOX 769  
WILLOW, AK 99688-0769

51246B04L006  
SAHR L V LVG TR TRE  
C/O LORRAINE V BELL  
857 GWYNE AVE  
SANTA BARBARA, CA 93111-2418

51246B02L003  
 SCHWANKL JAMES B & VERONICA L  
 PO BOX 709  
 WILLOW, AK 99688-0709

562000L028  
 SHOGREN SUANNE  
 C/O SUANNE GOJENOLA  
 9756 E TANGERINE RD  
 FLORENCE, AZ 85132-7386

220N04W06C006  
 SJOBERG JANET P #40  
 16940 S OAKLEY RD  
 CHESANING, MI 48616

220N05W01D015  
 SMTHE REX G & BECKY S  
 PO BOX 875416  
 WASILLA, AK 99687-5416

51246B02L005  
 STANKO JAS & JOANNE  
 PO BOX 772797  
 STEAMBOAT SPGS, CO 80477-2797

51246B04L002  
 STEPHAN LESTER # 5  
 7505 BOUNDARY AVE  
 ANCHORAGE, AK 99504-1244

220N05W12B020  
 STEVENS MICHAEL S  
 GRAY AMBER C  
 4508 S CARILLION DR  
 WASILLA, AK 99654

56336000L002  
 TAVIS RITA C TR TRE  
 C/O GENE M TAVIS #6  
 3206 S HOPKINS AVE  
 TITUSVILLE, FL 32780-5667

51246B03L010  
 TURNER EVADINE M TRE  
 TURNER EVADINE M DEC TR  
 PO BOX 870877  
 WASILLA, AK 99687-0877

56212000L027  
 WALKER CAMMIE L  
 ALFORD JAMES P  
 PO BOX 896  
 WILLOW, AK 99688-0896

220N05W01C007  
 WALL DOUGLAS A  
 DOUTHIT WM L HART JEFFERY D  
 16989 FOOTHILL AVE  
 EAGLE RIVER, AK 99577

220N04W06B004  
 WALLACE MANUAL A  
 6 NEW MEXICO WAY  
 HENDERSON, NV 89015-7212

220N05W01C011  
 WOOD CHARLES & KATHLEEN  
 PO BOX 201126  
 ANCHORAGE, AK 99520-1126

220N05W01D010  
 WOOD CHARLES & KATHLEEN  
 PO BOX 201126  
 ANCHORAGE, AK 99520-1126

220N05W01D011  
 WOOD CHAS L SR & KATHLEEN  
 PO BOX 201126  
 ANCHORAGE, AK 99520-1126

220N05W01D017  
 ZAMORA WILLIE & ERLINDA  
 3201 W 28<sup>TH</sup> CT  
 ANCHORAGE, AK 99517

220N05W12A001  
 ZIETLOW THOS D & THERESA M  
 6201 PETRIFIED TREE CIR  
 ANCHORAGE, AK 99507-6719

WILLOW COMMUNITY COUNCIL  
 23625 W. Willow Community Center Circle  
 Willow, AK 99688

STATE OF ALASKA  
 LAND DEVELOPMENT  
 550 W. 7th AVE. SUITE 1260  
 ANCHORAGE, AK 99501-3557

Willow Area Community Organization  
 Willow Community Council  
 23635 W. Willow Community Center Circle  
 Willow, AK 99688

ALASKA RAILROAD  
 LAND DEVELOPMENT  
 PO BOX 107500  
 ANCHORAGE, AK 99510

*Total: 102*

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MTA Communications – NSL1 and DLY1 Proposed Sites  
 Community Meeting – June 1, 2016

Name	Address	Phone number	Email
Heidi Denbedus	P.O. Box 171, 99688	495-6562	hladuv@mtaonline.net



**Wednesday 6/1/16**

**MTAC Site NSL1  
Township 18N Range 4W Section 11 Lot A1  
23619 W. Parks Hwy**

**MTAC Site DYL1  
Township 20N Range 4W Section 6 Lot C3  
41238 W Parks Hwy**

**Meeting at Willow Community Center**

**Attendees**

Rod Ewing (MTA), Julie Rowse (MTA), Sherrie Greenshields (NHTI)

Heidi Jenkins (Local Landowner)

**Purpose of meeting**

The MTA team sent notification letters as required under Matanuska Susitna Borough, Chapter 17.67.050 Borough Municipal Code for a proposed tall tower, site name of NSL1 and DYL1.

MTA was present to hear concerns about the proposed tower structure.

**Comments received**

Discussion items included the following items.

Health concerns from cell site transmitting antennas.

*MTAC response – Antennas conform with FCC requirements for transmitting antennas.*

View obstruction concerns.

*MTAC response – Agreement to contact Heidi Jenkins when a balloon is flown at the proposed tower height at future date. MTAC will collect photographs from her property of the balloon. At the time if the meeting the site has not been cleared and it is questionable if a balloon can be threaded through the existing tree canopy.*

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Matanuska - Susitna Borough  
Development Services

JUL 14 2016

Received

# Exhibit G

Summary Page & Written Public Comments



Date	Comment Received	Commenter	Land Parcel	Concerns	Comments	Response
5/20/2016	E-mail	Eric Moore(DNR)	None	The DNR has not concerns about this tower as long as the proposed tower does not block or interfere with travel on any State managed easements.	Is in reference to CUP	No response from MTAC
6/10/2016	E-mail	Melitta White	No Site Specified	Does not want more towers up in the Willow area.	No tower identified, concerns apply to all proposed sites.	Tower is required to fill significant gap in service.
6/15/2016	E-mail	Bonnie Church	No Site Specified	Does not want more towers up in the Willow area.	No tower identified, concerns apply to all proposed sites.	Tower is required to fill significant gap in service.

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**From:** Moore, Eric A (DNR) [<mailto:eric.moore@alaska.gov>]  
**Sent:** Friday, May 20, 2016 12:44 PM  
**To:** Permit Center  
**Cc:** Cox, Clark A (DNR)  
**Subject:** DLY1 - Conditional Use Permit for MTA Communications

The Department of Natural Resources, Division of Mining, Land and Water, Southcentral Regional Office has no objection to the requested permit under the following condition(s):

1) The proposed tower and related infrastructure may not block or interfere with travel on Section Line Easements or any other State-managed easements or rights-of-way.

Sincerely,

**Eric Moore**  
Natural Resource Manager II  
Department of Natural Resources  
Division of Mining, Land & Water  
550 W 7th Ave, Suite 900C  
Anchorage, AK 99501  
(907)269-8548  
[eric.moore@alaska.gov](mailto:eric.moore@alaska.gov)

**Leann Krey**

---

**From:** Alex Strawn <Alex.Strawn@matsugov.us>  
**Sent:** Friday, June 10, 2016 9:22 AM  
**To:** Sherrie Greenshields  
**Cc:** Mark Whisenhunt  
**Subject:** FW: Cell towers along the Parks Highway

**From:** Michelle Olsen **On Behalf Of** Permit Center  
**Sent:** Friday, June 10, 2016 9:17 AM  
**To:** Theresa Taranto  
**Cc:** Alex Strawn  
**Subject:** FW: Cell towers along the Parks Highway

More comments for the file

Michelle Olsen, CFM  
Permit Technician  
Matanuska-Susitna Borough  
350 E Dahlia Ave  
Palmer, AK 99645  
(907) 861-7871

**From:** Melitta [<mailto:ted.melitta@yahoo.com>]  
**Sent:** Friday, June 10, 2016 8:57 AM  
**To:** Permit Center; Susan Morgan; Bonnie Imlach Shurtleff  
**Subject:** Cell towers along the Parks Highway

Enough already! I practically live under a recently constructed tower and my cell phone reception is worse than ever and it was not very good to start with.

In addition you are ruining our views. We live here to get away from living in a commercial zone and now you are bringing it to us.

We say NO! more cell tower construction on the Parks Highway. They spoil the view and the rural character of our neighborhood. We don't need or want them.

Sincerely,  
Ted and Melitta White  
Willow Residents

**Leann Krey**

---

**From:** Mark Whisenhunt <Mark.Whisenhunt@matsugov.us>  
**Sent:** Wednesday, June 15, 2016 10:50 AM  
**To:** Sherrie Greenshields  
**Subject:** FW: 3 cell towers in Willow

Respectfully,

Mark Whisenhunt  
Planner II  
Matanuska-Susitna Borough  
Office: (907) 861-8527  
Fax: (907) 861-7876  
mark.whisenhunt@matsugov.us

-----Original Message-----

**From:** Alex Strawn  
**Sent:** Wednesday, June 15, 2016 10:39 AM  
**To:** Mark Whisenhunt  
**Subject:** FW: 3 cell towers in Willow

-----Original Message-----

**From:** Michelle Olsen On Behalf Of Permit Center  
**Sent:** Wednesday, June 15, 2016 10:35 AM  
**To:** Alex Strawn; Theresa Taranto  
**Subject:** FW: 3 cell towers in Willow

For the files

Michelle Olsen, CFM  
Permit Technician  
Matanuska-Susitna Borough  
350 E Dahlia Ave  
Palmer, AK 99645  
(907) 861-7871

-----Original Message-----

**From:** Bonnie Church [mailto:getalong@mtaonline.net]  
**Sent:** Wednesday, June 15, 2016 10:31 AM  
**To:** Permit Center  
**Subject:** 3 cell towers in Willow

I am NOT in favor of 3 MORE cell towers going up in Willow. I don't understand why there have to be so many and I am totally against more being here in our community!!!  
Bonnie Church

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**INTRODUCTION FOR PUBLIC HEARING  
QUASI-JUDICIAL**

**Resolution No. 16-32**

**MTA Telecommunication Tower CUP (KSH1)  
15960 E. Kashwitna Road**

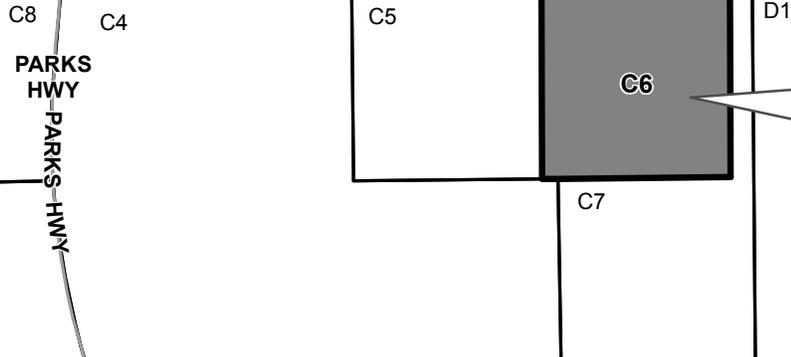
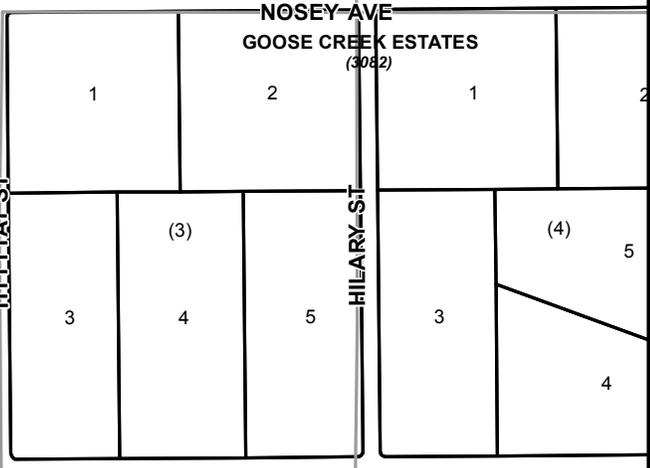
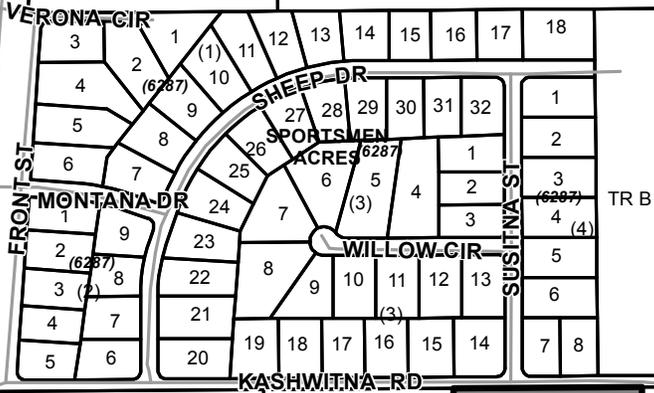
(Page 221 - 336)

**INTRODUCTION FOR PUBLIC HEARING**

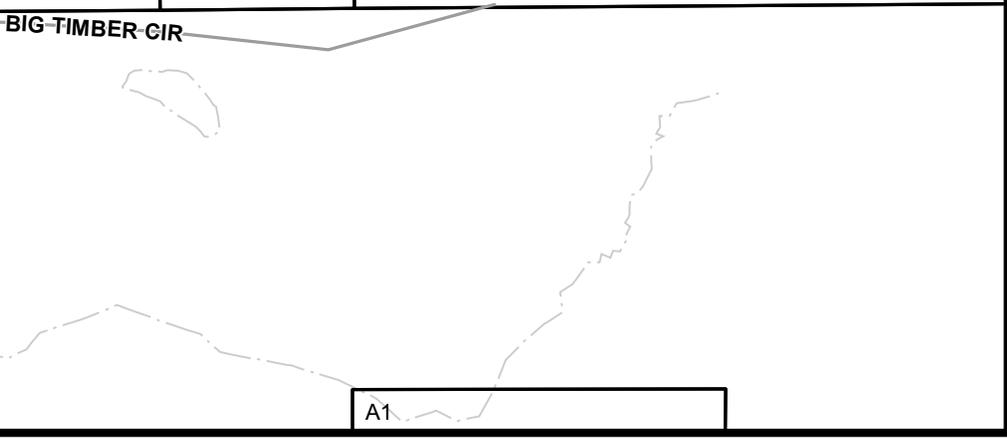
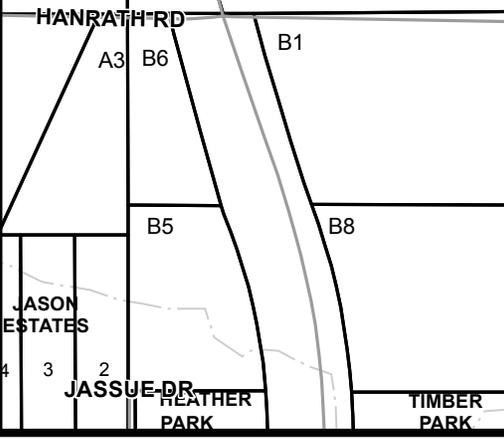




(1856)



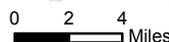
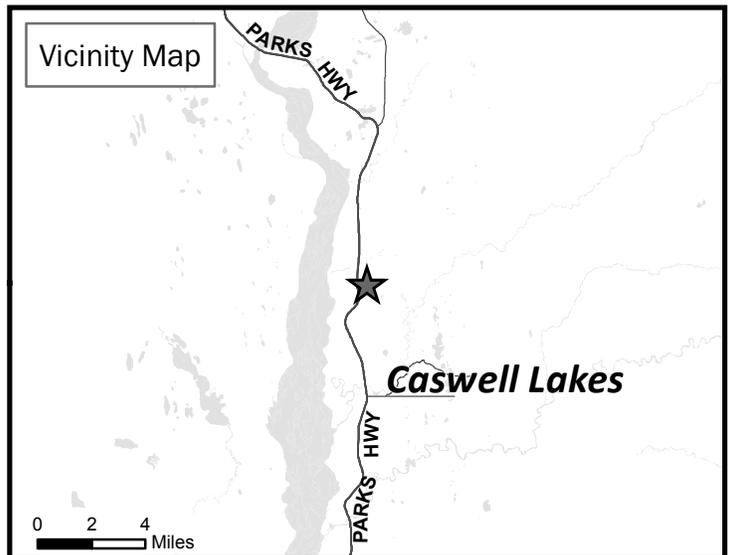
SUBJECT PARCEL



# 23N04W29C006



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MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department
Development Services Division

350 East Dahlia Avenue • Palmer, AK 99645
Phone (907) 861-7822 • Fax (907) 861-7876
Email: permitcenter@matsugov.us

RECEIVED
JUL 07 2016
PERMIT CENTER

KSH1

APPLICATION FOR A TALL STRUCTURE – MSB 17.67

Carefully read instructions and applicable borough code. Fill out forms completely. Attach information as needed. Incomplete applications will not be processed.

Application fee must be attached:

- x \$1,000 for Conditional Use Permit - > 125 feet in height
\$ 500 for Administrative Permit – 85' to 125' in height
\$ 100 for Network Improvement Permit – In accordance with MSB 17.67.110.

Prior to the public hearing, the applicant must also pay the mailing and advertising fees associated with the application. Applicants will be provided with a statement of advertising and mailing charges. Payment must be made prior to the application presentation before the Borough Planning Commission or Planning Director decision.

Subject Property Township: 23N, Range: 4W, Section: 29, Meridian
MSB Tax Account # 23N04W29C006
SUBDIVISION: BLOCK(S):, LOT(S): C6
STREET ADDRESS: 15960 E Kashwitna Road
(US Survey, Aliquot Part, Lat. /Long. etc)

Ownership A written authorization by the owner must be attached for an agent or contact person, if the owner is using one for the application. Is authorization attached? o Yes o No o N/A

Name of Property Owner
Ramon & Ada Gutierrez
Address: HC 89 Box 492
Willow, Alaska 99688-9705
Phne: Hm Fax
Wk Cell
E-mail

Name of Agent/ Contact for application
Sherrie Greenshields
Address: 901 Cope Industrial Way
Palmer, Alaska 99645
Phne: Hm 907-761-6000 Fax 907-761-6001
Wk 907-761-6057 Cell 907-315-3201
E-mail Sgreenshields@nhtiusa.com

Special Land Use District (if applicable):

<b>Pre-Application Requirements for New Tall Structures that Require a Conditional Use Permit</b>	
<i>Prior to applying for a conditional use permit for a new tall structure, the applicant shall hold at least one community meeting.</i>	
1. The meeting shall be held at the nearest facility where community council meetings are regularly scheduled. If the facility is not available, the nearest available public facility that is capable of seating a minimum of 20 people shall be utilized.	
2. The meeting shall be held at least 15 calendar days after mailing of the notification.	
3. The meeting shall not start prior to 5:00 p.m. and no later than 7:00 p.m.	
4. Notification of the meeting shall, at a minimum, include the following: <ul style="list-style-type: none"> <li>• Legal description and map of the general parcel, or parcels, within the coverage area under consideration for the telecommunication facility.</li> <li>• Description of the proposed development including height, design, lighting, potential access to the site and proposed service.</li> <li>• Date, time, and location of the informational meeting.</li> <li>• Contact name, telephone number, and address of applicant.</li> <li>• Comment form created by the borough that has a comment submittal deadline and provides options for submitting comments.</li> </ul>	
5. At a minimum, the notification area for the meeting shall include the following: <ul style="list-style-type: none"> <li>• Property owners within one-half mile of the parcels under consideration for the proposed tall structure.</li> <li>• The nearest community council and any community council whose boundary is within 1200 feet of the parcels under consideration for the tall structure.</li> </ul>	
<i>A written report summarizing the results of the community meeting shall be prepared that includes the following information:</i>	<b>Attached</b>
1. Dates and locations of all meetings where citizens were invited to discuss the potential applicant's proposal.	X
2. Content, dates mailed, and numbers of mailings, including letters, meeting notices, newsletters and other publications.	X
3. Sign-in sheet(s) used at the meeting, that includes places for names, address, phone numbers and other contact information such as e-mail addresses.	X
4. A list of residents, property owners, and interested parties who have requested in writing that they keep informed of the proposed development through notices, newsletters, or other written materials.	X
5. The number of people who attended meetings.	X
6. Copies of written comments received at the meeting.	X
7. A certificate of mailing identifying all who were notified of the meeting.	X
8. A written summary that addresses the following: <ul style="list-style-type: none"> <li>• The substance of the public's written concerns, issues, and problems.</li> <li>• How the applicant has addressed, or intends to address, concerns, issues and problems expressed during the process.</li> <li>• Concerns issues, and problems the applicant has not addressed or does not intend to address and why.</li> </ul>	X

<b>General application requirements for <u>Administrative</u> and <u>Conditional Use Permits</u></b>	<b>Attached</b>
1. Design drawings for the proposed tall structure, drawn to scale, and certified by a registered engineer or architect.	X
2. Citizen participation report (if applying for a Conditional Use Permit)	x
3. Certified site plan (As defined in MSB 17.125.010)	x
4. Copy of a determination of no hazard to air navigation from the Federal Aviation Administration.	X
5. If breakpoint technology is intended to be utilized, a written statement specifying the height at which the engineered structural weakness will be located.	X

<b>In order to grant a <u>Conditional Use Permit</u> or <u>Administrative Permit</u> the Planning Commission or Planning Director must find that each of the following criteria has been met. Explain the following in detail:</b>	<b>Attached</b>
1. To the extent that is technically feasible and potentially available, the location of the tall structure is such that its negative effects on the visual and scenic resources of all surrounding properties have been minimized.	X
2. Visibility of the tall structure from public parks, trails recognized within adopted MSB plans, and waterbodies has been minimized to the extent that is technically feasible and potentially available.	X
3. The tall structure will not interfere with the approaches to any existing airport or airfield that are identified in the MSB Regional Aviation System Plan or by the Alaska State Aviation System Plan.	X
4. That granting the permit will not be harmful to the public health, safety, convenience, and welfare.	X

<b>Application requirements for a <u>Network Improvement Permit</u></b>	<b>Attached</b>
1. A description of the proposed modifications to the telecommunication tower, including a description of the height, type, and lighting of the new or modified structure and the existing structure.	
2. A certified site (as defined in MSB 17.125.010) for purposes of setback verification.	
3. Design drawings for the proposed modified or new structure, drawn to scale, and certified by a registered engineer or architect.	

<b>In order to grant a <u>Network Improvement Permit</u> the Planning Director must find that each of the following criteria has been met. Explain the following in detail.</b>	<b>Attached</b>
1. The proposed development conforms to setback requirements of MSB 17.55.	
2. The telecommunication tower being extended was lawfully constructed at the time of application for a Network Improvement Permit.	
3. The proposed modification does not violate permit conditions of any valid permits that have been issued to the existing facility, provided that the condition being violated does not limit height of the structure.	

<b>Operation Standards for New Tall Structures – Conditional Use Permit, Administrative Permit, and Network Improvement Permit</b>	<b>Attached</b>
1. The equipment compound shall meet minimum setback distances from all property lines in accordance with MSB 17.55	X
2. Setbacks shall be determined from the dimensions of the entire lot, even though the tower may be located on lease areas within the lot.	X
3. Adequate vehicle parking shall be provided on the subject property, outside of public use easements and rights-of-way to enable emergency vehicle access. No more than two spaces per provider shall be required.	X
4. Information signs for the purpose of identifying the tower such as the antenna structure registration number required by the Federal Communications Commission, as well as the party responsible for the operation and maintenance of the facility shall be visibly posted at the equipment compound.	X
5. If more than 220 volts are necessary for the operation of the facility, warning signs shall be located at the base of the facility and shall display in large, bold, high contrast letters the following: "HIGH VOLTAGE – DANGER".	X
6. A 24-hour emergency contact number shall be visibly posted at the equipment compound.	X
7. A fence or wall not less than six (6) feet in height with a secured gate shall be maintained around the base of the tower.	X

<b>Additional Standards for <u>Wind Energy Conversion Systems (WECS)</u> – In addition to the operations standards for new tall structures, the following standards shall apply to WECS</b>	<b>Attached</b>
1. WECS shall be equipped with an automatic overspeed control device designed to protect the system from sustaining structural failure such as splintered or thrown blades and the overturning or breaking of towers due to an uncontrolled condition brought on by high winds.	
2. WECS shall have a manually operable method that assures the WECS can be brought to a safe condition in high winds. Acceptable methods include mechanical or hydraulic brakes or tailvane deflection systems which turn the rotor out of the wind.	

**OWNER'S STATEMENT:** I am owner of the following property:

MSB Tax parcel ID #(s) 48461 and,  
I hereby apply for approval conditional use permit on that property as described in this application.

I understand all activity must be conducted in compliance with all applicable standards of MSB 17.67 and with all other applicable borough, state or federal laws.

I understand that other rules such as local, state and federal regulations, covenants, plat notes, and deed restrictions may be applicable and other permits or authorization may be required. I understand that the borough may also impose conditions and safeguards designed to protect the public's health, safety and welfare and ensure the compatibility of the use with other adjacent uses.

I understand that it is my responsibility to identify and comply with all applicable rules and conditions, covenants, plat notes, and deed restrictions, including changes that may occur in such requirements.

I understand that this permit and zoning status may transfer to subsequent owners of this land and that it is my responsibility to disclose the requirements of this status to the buyer when I sell the land.

I understand that changes from the approved conditional use permit may require further authorization by the Borough Planning Commission. I understand that failure to provide applicable documentation of compliance with approved requirements, or violation of such requirements will nullify legal status, and may result in penalties.

I grant permission for borough staff members to enter onto the property as needed to process this application and monitor compliance. Such access will at a minimum, be allowed when the activity is occurring and, with prior notice, at other times necessary to monitor compliance.

The information submitted in this application is accurate and complete to the best of my knowledge.

Signature: Property Owner

Printed Name

Date

*[Handwritten Signature]*

Sherrie Greenfields

7/7/2016

Signature: Agent

Printed Name

Date

**MSB USE ONLY**

Date application submitted:

Date application determined complete: \_\_\_\_\_

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**Susan Lee**

---

**From:** Alex Strawn  
**Sent:** Monday, July 11, 2016 9:37 AM  
**To:** Susan Lee  
**Subject:** FW: KSH1 and NSL1 owner letters  
**Attachments:** KSH1 Owner authorization.pdf; NSL1 Owner Authorization.pdf

**From:** Sherrie Greenshields [<mailto:SGreenshields@nhtiusa.com>]  
**Sent:** Monday, July 11, 2016 9:00 AM  
**To:** Alex Strawn  
**Subject:** KSH1 and NSL1 owner letters

Alex,

Please see owner letters attached for KSH1 and NSL1 sites.

Sherrie

**From:** Rod Ewing [<mailto:rode@mtaonline.net>]  
**Sent:** Monday, July 11, 2016 7:03 AM  
**To:** Sherrie Greenshields <[SGreenshields@nhtiusa.com](mailto:SGreenshields@nhtiusa.com)>  
**Cc:** Julie Rowse <[jrowse@mta-telco.com](mailto:jrowse@mta-telco.com)>; [ANaylor@mta-telco.com](mailto:ANaylor@mta-telco.com)  
**Subject:** KSH1 and NSL1 owner letters

Sherrie,

Attached are copies of the signed owner authorization letters for NSL1 and KSH1 CUP applications. Alisha Naylor can assist you with the DLY1 authorization letter.

Rod

Rod Ewing  
Project Mgr  
MTA Communications, LLC  
907-354-7400  
[rode@mtaonline.net](mailto:rode@mtaonline.net)

July 8, 2016

Matanuska-Susitna Borough  
Planning and Land Use Department  
Development Services Division  
350 Ease Dahlia Avenue  
Palmer, Alaska 99645

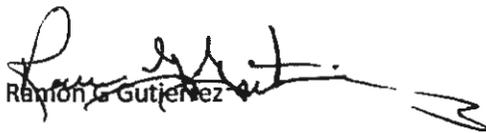
Re: Application for Tall Structure – MSB 17.67  
MTAC Site Name KSH1  
Legal – T23N R4W Section 29 Lot C6  
Address – 15960 E Kashwitna Road  
MSB Parcel ID - 48461

Dear Sir/Madam,

Please consider this letter authorization for MTA Communications and their agent New Horizons Telecom, Inc. to apply for application of a Tall Structure under MSB 17.67 for property defined above.

As the landowner, we acknowledge restrictions associated with the permit application as defined under MSB 17.67.

Respectfully,

  
Ramon J. Gutierrez

  
Ada K Gutierrez



July 14, 2016

Matanuska-Susitna Borough  
Planning and Land Use Department  
Development Services Division  
350 East Dahlia Avenue  
Palmer, AK 99645

Matanuska - Susitna Borough  
Development Services

JUL 14 2016

Received

RE: Response to MSB Review Comments - Site KSH1 Conditional Use Application  
Location 23N04W29C008

MTA Communications, LLC (MTAC) responses to Matanuska-Susitna Borough review comments received July 12, 2016 are detail below.

1. What color is the proposed tower?

**Response: The tower will be galvanized steel which is a silvery gray.**

2. Will adequate power supply be installed to accommodate the number of carriers the tower is designed for?

**Response: The site will have a 3 gang meter base installed. This will allow 3 carriers to each have a separate 200 amp electrical service for the tower.**

3. M5B Code section 17.67.090(A)(2) states "minimum setback for the tower base shall be a distance equal to the height of the tower". The setback from the tower back to the property lines must be a minimum of 185 feet. The setback distances to the north and west property lines is to the center of the tower, not the base of the tower. The site plan will need to be revised.

**Response; please see Drawing C2.0\_Rev\_2 Enlarged Site Plan and Drawing C1.0\_Rev\_2 Site Plan for the revision that reflect the 185 ft set back from property lines.**

4. Exhibit E- Propagation Maps. The propagation maps do not show a gap in coverage at 120 feet. Why does this proposed tower need to be 180 feet in height?

**Response: There are Parks Hwy coverage gaps with the 120 foot tower at KSH1. Going north 3.5 miles from the Caswell cell site there is a 1.5 mile long area of no coverage and**

MTA Communications, LLC  
1740 S. Chugach Street  
Palmer, Alaska 99645

907-745-3211  
www.mtasolutions.com

MTA Long Distance, MTA Wireless, MTA Solutions and MTA Vision are registered trade names of MTA Communications, LLC

Long Distance  
Wireless  
Business Solutions  
Internet  
Television

***fringed unreliable poor coverage. Caswell north sector is depicted in Red on the map. Going south 3 miles from the KSH1 site there is a ¼ mile stretch of no coverage fringed by poor unreliable signal. KSH1 south sector coverage is in Aqua color. The White areas depict areas without useable coverage. With the proposed KSH1 tower at 180 feet the coverage becomes acceptable.***

MTAC appreciates the timely review of the original application. Please let us know if you have any questions or comments regarding the responses provided to MSB application information request.

Respectfully,

Sherrie Greenshields  
New Horizons Telecom, Inc.  
sgreenshields@nhtiusa.com  
907-761-6057

Eric Anderson  
MTA Communications  
Director of Engineering/Construction/Operations  
eanderson@mta-telco.com  
907-761-2795

Attachments:

- Drawing C2.0 Rev\_2 Enlarged Site Plan
- C1.0 Rev\_2 Site Plan



## ACKNOWLEDGMENT OF APPLICATION

### PERMIT # P016397 TAX PARCEL ID # 223N04W29C006

This is NOT a permit. This is an acknowledgment of your application and information on the normal sequence of events.

- 1) The proposed location of the driveway must be marked with flagging.
- 2) The Inspector will conduct a site visit (normally within 2 weeks)
- 3) The **AUTHORIZATION TO CONSTRUCT** letter will be sent, detailing what is needed to construct your driveway to Borough standards.
- 4) Upon completion of driveway, call 861-7822. Leave a message stating the P# at the top of this form and that the driveway is ready for final inspection.
- 5) The Inspector will conduct a site visit (normally within 2 weeks)
- 6) A **FINAL DRIVEWAY ACCEPTANCE LETTER** will be sent to notify you the process is complete and the driveway is acceptable to the Borough.
- 7) Please be aware that if this property is in a Special Flood Hazard Area a **Flood Plain Development Permit** is Required. Please contact the Permit Center to help determine if you are in a Designated Flood Plain Area.

Thank you for your submittal. If you have further questions please contact The Permit Center at 861-7822 or [permitcenter@matsugov.us](mailto:permitcenter@matsugov.us).

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June 30, 2016

Matanuska-Susitna Borough  
Planning and Land Use Department  
Development Services Division  
350 East Dahlia Avenue  
Palmer, AK 99645

RE: MSB 17.67 Tall Structures – Site KSH1 Conditional Use Application

MTA Communications, LLC (MTAC) is proposing construction of a 185-foot antenna structure (180 foot tower and 5 foot lightning rod) at 15960 E Kashwitna Road, Alaska on that property fully described as Township 23 N Range 4W Section 29 Lot C6.

Construction of this facility will fill a documented significant gap in cellular communications and wireless broadband to the surrounding area. The proposed facility is located on a parcel of land where towers over 125 feet in height are permitted under a conditional use permit. The proposed project is the least intrusive alternative to fill the existing gap in MTAC's coverage in the area.

The attached narrative describes the proposed tower project and responds to elements of MSB 17.67. Please accept this as a part of MTAC's permit application.

Should the Planning Commission have any questions regarding this project, please contact me at the information below.

Sincerely,

Sherrie Greenshields  
New Horizons Telecom, Inc.  
sgreenshields@nhtiusa.com  
907-761-6057

Eric Anderson  
MTA Communications  
Director of Engineering/Construction/Operations  
eanderson@mta-telco.com  
907-761-27

MTA Communications, LLC  
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Long Distance  
Wireless  
Business Solutions  
Internet  
Television

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## **Conditional Use Permit Application**

Township 23N Range 4W Section 29 Lot C6

Sherrie Greenshields  
New Horizons Telecom, Inc.  
sgreenshields@nhtiusa.com  
907-761-6057

Eric Anderson  
MTA Communications  
Director of Engineering/Construction/Operations  
eanderson@mta-telco.com  
907-761-2795



## 1.0 Introduction

MTA Communications (MTAC) is an Alaskan owned and operated telecommunications company that provides telecommunication service to the citizens of Alaska.

More than two in five (45.4%) American homes no longer use traditional landline telephone service and instead choose to be wireless only.<sup>1</sup> More than 50% of all adults aged 18-44 and of children under the age of 18 are living in wireless-only households. In Alaska, 31.8% of homes choose to be wireless-only households and another 21.1% are “wireless-mostly.”<sup>2</sup> The demand for data on provider networks also continues to grow exponentially. In light of this growing reliance on wireless communications and increased data demand, additional infrastructure has become essential to providing reliable service. The demand for access to wireless communications continues to grow exponentially across both Alaska and the continental United States.

As part of MTAC’s efforts to fill network gaps, MTAC is proposing construction of 185-foot antenna structure (180 foot tower with 5 foot lighting rod) at 15960 E Kashwitna Road. The proposed construction will fill an existing significant gap in cellular and wireless broadband service coverage. The construction of communications towers is permitted pursuant to a Conditional Use Application. The proposed tower location is the least intrusive, reasonably available and technically feasible location for the proposed tower construction.

The below sections present a description of radio frequency science, applicable federal law governing telecommunications, and the decision logic used to meet Matanuska-Susitna Borough Planning Department requirements set forth in standards MSB 17.67.

## 1.1 Radio Frequency Description and Evolution

Wireless networks are a complex mesh of radio frequencies that have an exclusive license to operate by the Federal Communication Commission (FCC). This mesh of licensed frequencies allows cellular communications to be delivered at a wide variety of scales. The scale that can be covered by the frequencies is directly proportional to the type of spectrum being used and distance between each set of antennas delivering the signals.

Radio Frequency (RF) is a frequency or band of frequencies in the range  $10^4$  to  $10^{11}$  or  $10^{12}$  Hz at which radio waves are transmitted, and they’re suitable for use in telecommunications. Hertz (Hz) is the unit of RF and it refers to the number of cycles per second. Wavelength is the distance between successive crest of a wave, peaks of the electromagnetic waves. The relationship between RF and Wavelength is as follows:  $\text{Wavelength} = C/\text{Frequency}$  where C is the speed of light ( $3 \times 10^8$  m/s). Radio Frequencies are allocated and regulated by the FCC and are a part of the electromagnetic spectrum.

The FCC has established safety guidelines for Human Exposure to Radiofrequency Electromagnetic Fields that broadcaster/wireless carriers must adhere to.

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<sup>1</sup> “Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July-December 2014,” U.S. DHHS, CDC National Center for Health Statistics.

<sup>2</sup> CDC Wireless Substitution: State-level Estimates from the National Health Interview Survey (December 2014)

A cellular network is a radio network distributed over land through cells where each cell includes a fixed location transceiver known as base station. Multiple cells together provide radio coverage over larger geographical areas.

Mobile communication operators use radio spectrum to provide mobile calling and data services. In order to keep up with a demand that is exponentially growing, the technology continues to evolve. Some Factors that affect wireless network performance

- Physical Obstructions – Wireless signals have difficulty penetrating solid objects such as hills, buildings, foliage, etc. The more obstructions there are between the transmitter and receiver the higher the chances of a poor signal level.
- Network Range and Distance between Devices – The way wireless signal propagates and with obstructions on the way, the further apart the devices are, the weaker the signal becomes. The signal strength decreases, roughly in an inverse cubic relation with respect to the distance between two devices (4Gon Solutions). For example, if the distance between two devices doubles, the signal becomes at least eight times weaker.
- Network Usage and Load – If the number of active users in the network increases due to a special event or something of that nature, the resources required to support them may not be available. This results in reducing network performance by decreased data speeds or reduced accessibility.

## 1.2 Telecommunications Act of 1996

The Telecommunications Act of 1996 was enacted to encourage the rapid deployment of new telecommunications technologies, while also preserving state and local control over zoning matters. *T-Mobile Northeast LLC v. City of Lawrence*, 755 F.Supp.2d 286, 290 (D. Mass. 2010) (internal citations omitted). The Act generally preserves state and local authority over the placement and construction of telecommunication tower facilities. The Act places several limitations on local control. Specifically, the Act dictates that:

- (1) A local government cannot unreasonably discriminate among providers of functionally equivalent services; and
- (2) A local government cannot prohibit or effectively prohibit the provision of personal wireless services; and
- (3) A local government cannot deny or limit an application for the construction of a wireless tower on the basis of the health or environmental effects of radio frequency emissions, as long as the proposed tower complies with FCC requirements for emissions; and
- (4) Any local government decision to deny a request to construct personal wireless facilities must be in writing and supported by substantial evidence.

Since the Act's adoption, federal courts have assessed the application of these limitations and concluded that "a significant gap in service (and thus an effective prohibition of service) exists whenever a provider is prevented from filling a significant gap in *its own* service coverage." *MetroPCS, Inc. v. City & Cnty. of San Francisco*, 400 F.3d 715, 733 (9th Cir. 2005). Essentially, the Act precludes a municipality from restricting the construction of new infrastructure required by a provider to fill a gap in its network, even if coverage is available from other providers in the area. The fact that coverage is provided by another carrier in the area cannot be relied upon by a local land use commission to deny a permit application for a new tower.

Any decision by a local planning or zoning authority denying a land use permit required to construct a personal wireless services facility must be in writing and supported by substantial evidence. Where a provider has demonstrated a significant gap in its service coverage and proposed the least intrusive means to fill this gap, the burden of proof shifts to the zoning board to demonstrate that the record contains substantial evidence in support of its decision. When a provider has made a prima facie showing that a proposed tower is the least intrusive means of filling a significant gap in service, even if a zoning board's denial is supported by substantial evidence the Commission must also specifically show that there are some potentially available and technologically feasible alternatives for construction. *T-Mobile USA v. City of Anacortes*, 572 F.3d 987, 998 (9th Cir. 2009). The provider must then have an opportunity to dispute the availability and feasibility of the alternatives favored by the locality. *Id.*

## 2.0 Existing Significant Gap in MTAC Coverage

The area of Mat-Su Borough in the vicinity of the proposed cell site is currently underserved by MTAC for both voice and data coverage, which results in a significant gap in coverage for the MTAC system.

Detailed Propagation maps are included under Exhibit E (Propagation Maps). Three heights for the tower were considered, 120 feet, 150 feet and 185 feet (180-foot tower with 5foot lightning rod. However, both the 120 and 150 foot elevations do not result in full coverage of the significant gaps.

### 2.1 Site Selection Process

To fill the significant gaps in MTAC's service, MTAC's engineers used computer modeling to determine an idealized design point for tower construction and a surrounding search radius containing properties which, dependent upon topography and other surface interference, could serve as a build location. A potential tower location within the search ring would be ideal to fill the existing significant gap in MTAC's coverage.

MTAC's preference is to co-locate on existing towers wherever possible. There were no existing towers or buildings co-location sites in the general vicinity.

### 2.2 Tower and Site Design

Through strategic choices in site design and tower height the proposed construction is designed to fill the significant gap in MTAC's coverage in the least intrusive manner possible. The proposed site is located on a parcel of land which is undeveloped. Surrounding area is comprised of undeveloped lots and homes.

A detailed site plan for the tower construction is included with this application as Exhibit A. The drawings are certified by a licensed professional engineer demonstrating soundness and conformity with all applicable codes, as well as State and federal law. The tower complex will be surrounded by a six-foot chain link fence. The tower site will be accessed using a new driveway.

The tower structure is a lattice tower. Site placement allows existing trees to screen the site from adjacent properties.

## 2.3 Tower Height

The tower is designed to be the minimum height necessary to assure that the significant gap in MTAC's service coverage can be filled.

The propagation maps are included in Exhibit E (Propagation Maps) depict the proposed tower at heights of 120 feet, 150 feet and 185 feet (180-foot tower with 5-foot lighting rod).

It is MTAC's policy to construct all wireless infrastructures to an engineering standard that allows multiple carriers to locate equipment on the structure. The proposed tower is designed and engineered to accommodate two additional sets of antennas, of equal or lesser specification to MTAC's proposed equipment, yielding the ability to co-locate two additional carriers on the structure. With the inclusion of the MTAC's antennas, the structure allows for a total of three carriers on the tower.

## 2.4 Tower Illumination

MTAC prefers not to illuminate towers. Illumination is typically only installed when instructed by the FAA for the health and safety of aviators or when otherwise required by federal and state agencies, though there are instances where MTAC has voluntarily lit a piece of infrastructure at the request of the local community. The tower is not required to be illuminated. The FAA has determined that no marking or lighting is required for this tower location (FAA Determination of No Hazard). Documentation is attached to this application as Exhibit B. The document can also be searched and downloaded from the FAA's website using Aeronautical Study Number 2016-AAL-433-OE. MTAC will not install aviator illumination, or any other type of illumination, on this tower.

The Susitna Community Council has requested the tower be lighted due to concerns with local aviation. Therefore, the tower be illuminated.

## 3.0 Application Criteria Matanuska-Susitna Borough 17.67

As set forth above, MTAC's proposed tower requires a Conditional Use Permit Matanuska-Susitna Borough 17.67. The project will protect the public health, safety, and welfare, will not injure the lawful use with existing neighboring uses.

### 17.67.050 PRE-APPLICATION REQUIREMENTS FOR NEW TALL STRUCTURES THAT REQUIRE A CONDITIONAL USE PERMIT.

- (A) Prior to applying for a conditional use permit for a new tall structure, the potential applicant shall hold at least one community meeting:
  - (1) The meeting shall be held at the nearest facility where community council meetings are regularly scheduled. If the facility is not available, the nearest

available public facility that is capable of seating a minimum of 20 people shall be utilized;

(2) The meeting shall be held at least 15 calendar days after mailing of the notification;

(3) The meeting shall not start prior to 5 p.m. and no later than 7 p.m.;

(4) Notification of the meeting shall, at a minimum, include the following:

(a) Legal description and map of the general parcel, or parcels, within the coverage area under consideration for the telecommunication facility;

(b) Description of the proposed development including height, design, lighting, potential access to the site, and proposed service;

(c) Date, time, and location of informational meeting;

(d) Contact name, telephone number, and address of applicant; and

(e) Comment form created by the borough that has a comment submittal deadline and provides options for submitting comments.

(5) At a minimum, the notification area for the meeting shall include the following:

(a) Property owners within one-half mile of the parcels under consideration for the proposed tall structure; and

(b) The nearest community council and any community council whose boundary is within 1,200 feet of the parcels under consideration for the tall structure.

(B) A written report summarizing the results of the community meeting shall be prepared that includes the following information:

(2) Dates and locations of all meetings where citizens were invited to discuss the potential applicant's proposal;

(3) Content, dates mailed, and numbers of mailings, including letters, meeting notices, newsletters, and other publications;

(4) Sign-in sheet(s) used at the meeting that includes places for names, addresses, phone numbers, and other contact information such as email addresses;

- (5) A list of residents, property owners, and interested parties who have requested in writing that they be kept informed of the proposed development through notices, newsletters, or other written materials;
- (6) The number of people who attended meetings;
- (7) Copies of written comments received at the meeting;
- (8) A certificate of mailing identifying all who were notified of the meeting; and
- (9) a written summary that addresses the following:
  - (a) The substance of the public's written concerns, issues, and problems;
  - (b) How the applicant has addressed, or intends to address, concerns, issues, and problems expressed during the process; and
  - (c) Concerns, issues, and problems the applicant has not addressed or does not intend to address and why.

***MTAC Response – Please refer to attached Exhibit F (Notification Letter, Mailing List, Meeting Sign-In, and Meeting Summary) and Exhibit G (Summary Page & Written Comments).***

#### **17.67.070 GENERAL APPLICATION REQUIREMENTS FOR ADMINISTRATIVE AND CONDITIONAL USE PERMITS.**

(A) An application for a conditional use or administrative permit to construct a new tall structure may be initiated by a property owner or the owner's authorized agent and shall include:

- (1) Completed application form provided by the department and signed by the property owner or authorized agent;

***MTAC Response – Please find application form attached to this narrative.***

- (2) Design drawings for the proposed tall structure, drawn to scale, and certified by a registered engineer or architect;

***MTAC Response – Please refer to Exhibit A (Site Document and Design Documents).***

- (3) Fee in the amount designated in MSB 17.99;

***MTAC Response – Fee amount will be paid***

- (4) Citizen participation report in accordance with MSB 17.67.050(B);

***MTAC Response – Please refer to attached Exhibit F (Notification Letter, Mailing List, Meeting Sign-In, and Meeting Summary) and Exhibit G (Summary Page & Written Comments).***

- (5) a certified site plan,

***MTAC Response – Please refer to Exhibit A (Site Document and Design Documents)***

- (6) Copy of a determination of no hazard to air navigation from the Federal Aviation Administration; and

***MTAC Response – Please refer to Exhibit B (FAA Determination).***

- (7) If breakpoint technology is intended to be utilized, a written statement specifying the height at which the engineered structural weakness will be located.

***MTAC Response – breakpoint technology not applicable to this tower application.***

#### **17.67.080 STANDARDS FOR APPROVAL OF NEW TALL STRUCTURES.**

(A) A permit for a new tall structure may only be approved if it meets the requirements of this section in addition to any other applicable standards required by this chapter.

(B) In granting or denying a permit, the commission or director shall make findings on whether the applicant has demonstrated that:

- (1) To the extent that is technically feasible and potentially available, the location of the tall structure is such that its negative effects on the visual and scenic resources of all surrounding properties have been minimized;

***MTAC Response – the site is situated within a lot surrounded by existing trees. The access road is “dog-legged” in so the site is not visible from direct line of view from access road. The residences surrounding the lot have trees that will help screen the tower from view.***

- (2) Visibility of the tall structure from public parks, trails recognized within adopted

borough plans, and water bodies has been minimized to the extent that is technically feasible and potentially available;

***MTAC Response – the site is situated within a lot surrounded by existing trees. The access road is “dog-legged” in so the site is not visible from direct line of view from access road. The residences surrounding the lot have trees that will help screen the tower from view.***

(3) The tall structure will not interfere with the approaches to any existing airport or airfield that are identified in the borough’s regional aviation system plan or by the Alaska State Aviation System Plan; and

***MTAC Response – Please refer to Appendix B (FAA Determination). The site does not interfere with existing airports or airfields.***

(4) Granting the permit will not be harmful to the public health, safety, convenience, and welfare.

***MTAC Response – the proposed site will not be harmful to the public health, safety, convenience and welfare.***

#### **17.67.090 OPERATION STANDARDS FOR NEW TALL STRUCTURES.**

(A) The following setback requirements shall apply to all new telecommunications towers regulated under this chapter:

(1) The equipment compound shall meet minimum setback distances from all property lines in accordance with MSB 17.55.

***MTAC Response – The proposed site conforms to MSB 17.55.***

(2) Minimum setback for the tower base shall be a distance equal to the height of the tower.

***MTAC Response – The proposed tower setback is a distance equal to the height of the tower.***

(a) The commission, or director if it is an administrative permit, may reduce the setback to a distance less than the height of the tower, if the applicant demonstrates there is no risk to public health, safety, or welfare of adjacent property owners.

- (3) Setbacks shall be determined from the dimensions of the entire lot, even though the tower may be located on lease areas within the lot.

***MTAC Response – The proposed tower setback is a distance equal to the height of the tower.***

- (B) For all tall structures regulated under this chapter, adequate vehicle parking shall be provided on the subject property, outside of public use easements and rights-of-way, to enable emergency vehicle access.

***MTAC Response – Refer to Exhibit A (Site Document and Design Documents). The site has adequate vehicle parking on subject property to enable emergency vehicle access.***

- (1) No more than two spaces per provider shall be required.

- (C) The following requirements apply to all new and existing telecommunication towers and wind energy conversion systems regulated under this chapter:

- (1) The following signage shall be visibly posted at the equipment compound:

- (a) Informational signs for the purpose of identifying the tower such as the antenna structure registration number required by the Federal Communications Commission, as well as the party responsible for the operation and maintenance of the facility;

***MTAC Response – MTAC will comply with signage requirements.***

- (b) If more than 220 volts are necessary for the operation of the facility, warning signs shall be located at the base of the facility and shall display in large, bold, high contrast letters the following: "HIGH VOLTAGE – DANGER"; and

***MTAC Response – MTAC proposed service will be 240 volts. MTAW will comply with signage requirements.***

- (c) A 24-hour emergency contact number.

***MTAC Response – a 24 hour contact number will be referenced on signage.***

- (2) A fence or wall not less than six feet in height with a secured gate shall be maintained around the base of the tower.

***MTAC Response – Please refer to Appendix A (Site Document and Design Documents)***

## 4.0 Conclusion

MTAC's Matanuska-Borough network includes a significant gap in coverage in the proposed site vicinity as depicted in attached propagation studies in Exhibit E. After a search of available sites which could meet the technical requirements necessary to fill this coverage gaps, MTAC has identified 15960 E Kashwitna Road, Alaska on that property fully described as Township 23 N Range 4W Section 29 Lot C6. as the location which will allow for construction meeting network requirements. As described in detail in this application, this tower location is the least intrusive and most appropriate option to meet the significant gap in MTAC's coverage, which can only be met through placement of a new tower. Finally, MTAC's proposed tower will affirmatively protect the public health, safety, and welfare by providing cellular and wireless broadband services to a currently underserved area, impacting both area households and residents and transient customers seeking to access this technology from roadways and public spaces in the area. We believe we have exceeded the burden of proof outlined in MSB 17.67. for the requested Conditional Use Permit. Therefore, MTAC respectfully requests that the Matanuska-Susitna Planning Commission grant the Conditional Use Permit.

## **5.0 Exhibits**

Exhibit A: Site Document and Design Documents

Exhibit B: FAA Determination

Exhibit C: Balloon Flight

Exhibit D: Redacted Lease

Exhibit E: Propagation Maps

Exhibit F: Notification Letter, Mailing List, Meeting Sign In, and Meeting Summary

Exhibit G: Summary Page and Written Public Comments

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# Exhibit A

Site Document & Design  
Documents



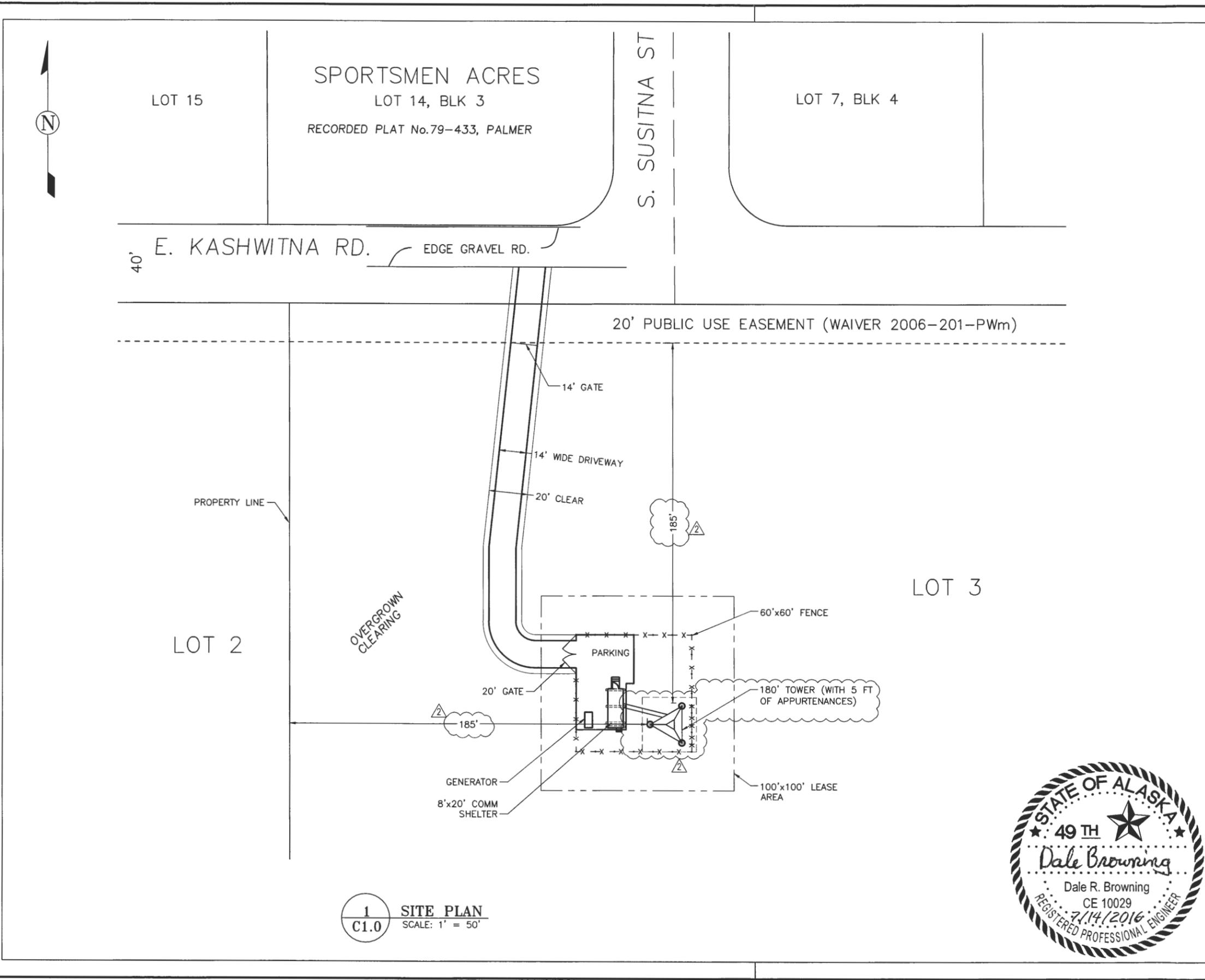
NOTES:

1. THIS SITE PLAN DEVELOPED FROM MTA DESIGN SURVEY "PROPOSED WIRELESS TOWER KSH1" DATED 4-7-2016.

Matanuska - Susitna Borough  
Development Services

JUL 14 2016

Received



1 SITE PLAN  
C1.0 SCALE: 1" = 50'



REV.	DESCRIPTION	DATE
2	MOVED TOWER	160714
1	MOVED SHELTER & GRADE BEAM LAYOUT	160622
0	ISSUED FOR CONSTRUCTION	160616

NEW HORIZONS TELECOM, INC.

MTA  
KSH1 LTE SITE  
SITE PLAN

DWN: JAA CKD. DRB APP. DRB  
JOB #: 16-0067-20 DATE: 160616

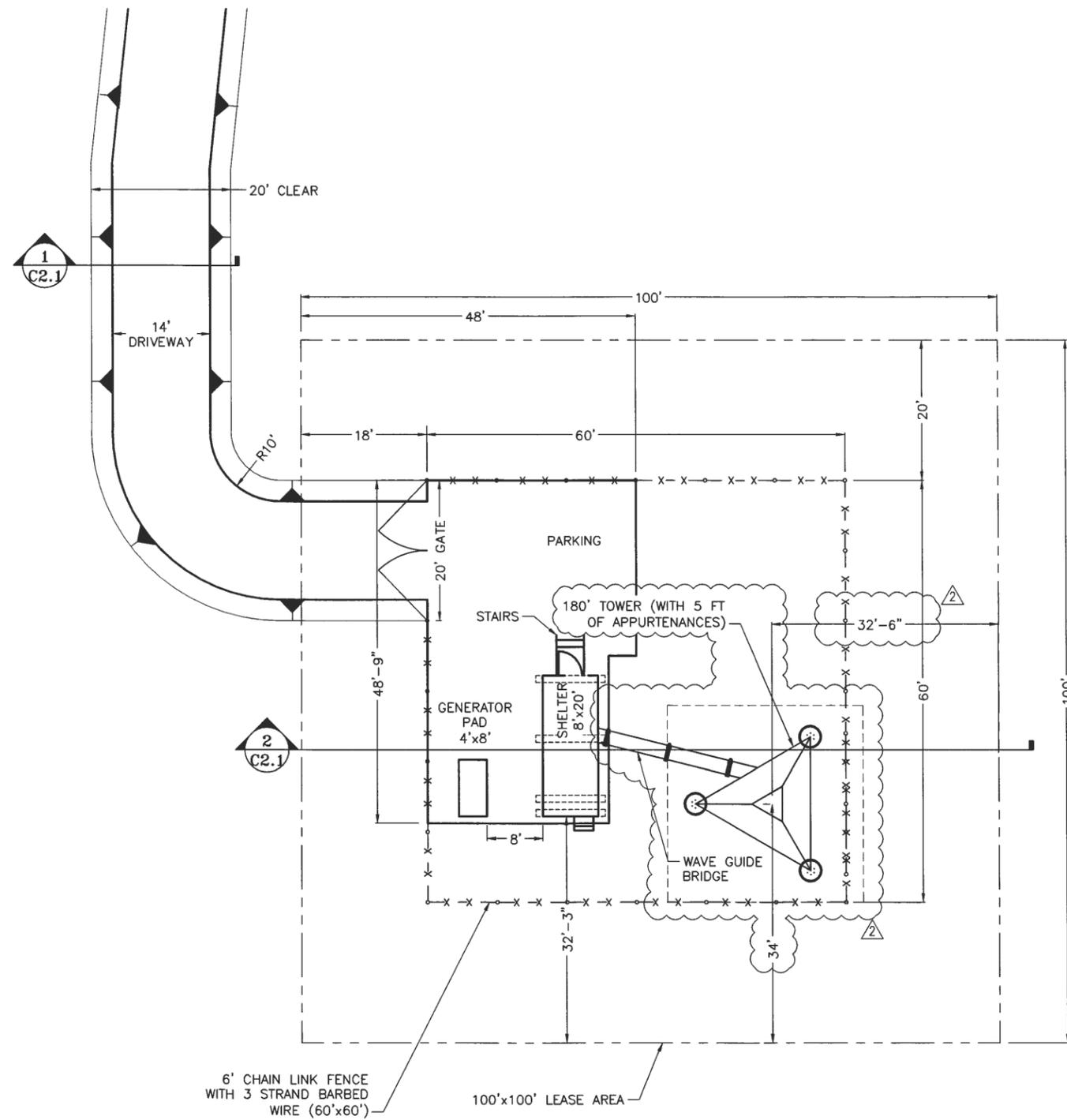
C1.0 REV 2

FILE: X:\16 JOBS\16-0067-20 MTA\AC KSH1 LTE SITE DSGN\05-CADD\DRAWINGS\C1.0 SITE PLAN.DWG | PLOT DATE: 160714 | PLOT SCALE: 1:1

Matanuska - Susitna Borough  
Development Services

JUL 14 2016

Received



6' CHAIN LINK FENCE  
WITH 3 STRAND BARBED  
WIRE (60'x60')

100'x100' LEASE AREA

**1**  
C2.0 ENLARGED SITE PLAN  
SCALE: 1" = 20'

2	MOVED TOWER	160714
1	MOVED SHELTER & GRADE BEAM LAYOUT	160622
0	ISSUED FOR CONSTRUCTION	160616
REV.	DESCRIPTION	DATE

**NEW HORIZONS TELECOM, INC.**

MTA  
KSH1 LTE SITE  
ENLARGED  
SITE PLAN

DWN: JAA CKD: DRB APP: DRB

JOB #: 16-0067-20 DATE: 160616

C2.0

REV  
2



FILE: X:\16 JOBS\16-0067-20 MTA\KSH1 LTE SITE DSGN\05-CADD\DRAWINGS\C2.0 ENLARGED SITE PLAN.DWG | PLOT DATE: 160714 | PLOT SCALE: 1:1



# KSH1 LTE SITE

## PROJECT INFORMATION

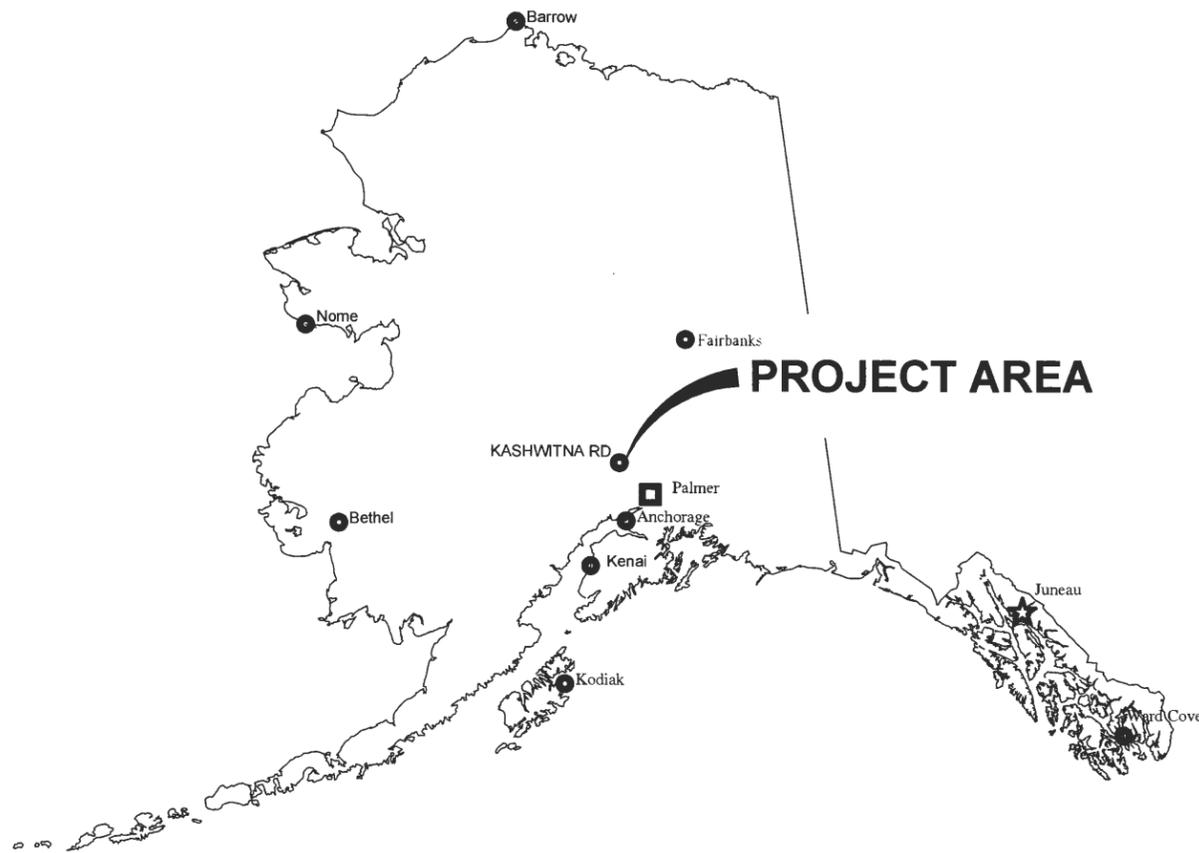
PROJECT LOCATION: 15960 E KASHWTNA RD  
NHTI PROJECT NUMBER: 16-0067-20

## CONTACT INFORMATION

CIVIL ENGINEER  
DALE R. BROWNING, PE, SE  
NHTI - (907) 761-6069  
901 COPE INDUSTRIAL WAY  
PALMER, ALASKA 99645

## Sheet List Table

SHEET #	TITLE	REV #
T1.0	COVER SHEET	1
C1.0	SITE PLAN	1
C1.1	SITE ELEVATION	1
C2.0	ENLARGED SITE PLAN	1
C2.1	ROAD AND PAD SECTIONS	0
S1.0	TOWER FOUNDATION PLAN	0
S1.1	TOWER FOUNDATION SECTION	0
S1.2	GRADE BEAM LAYOUT AND DETAILS	1

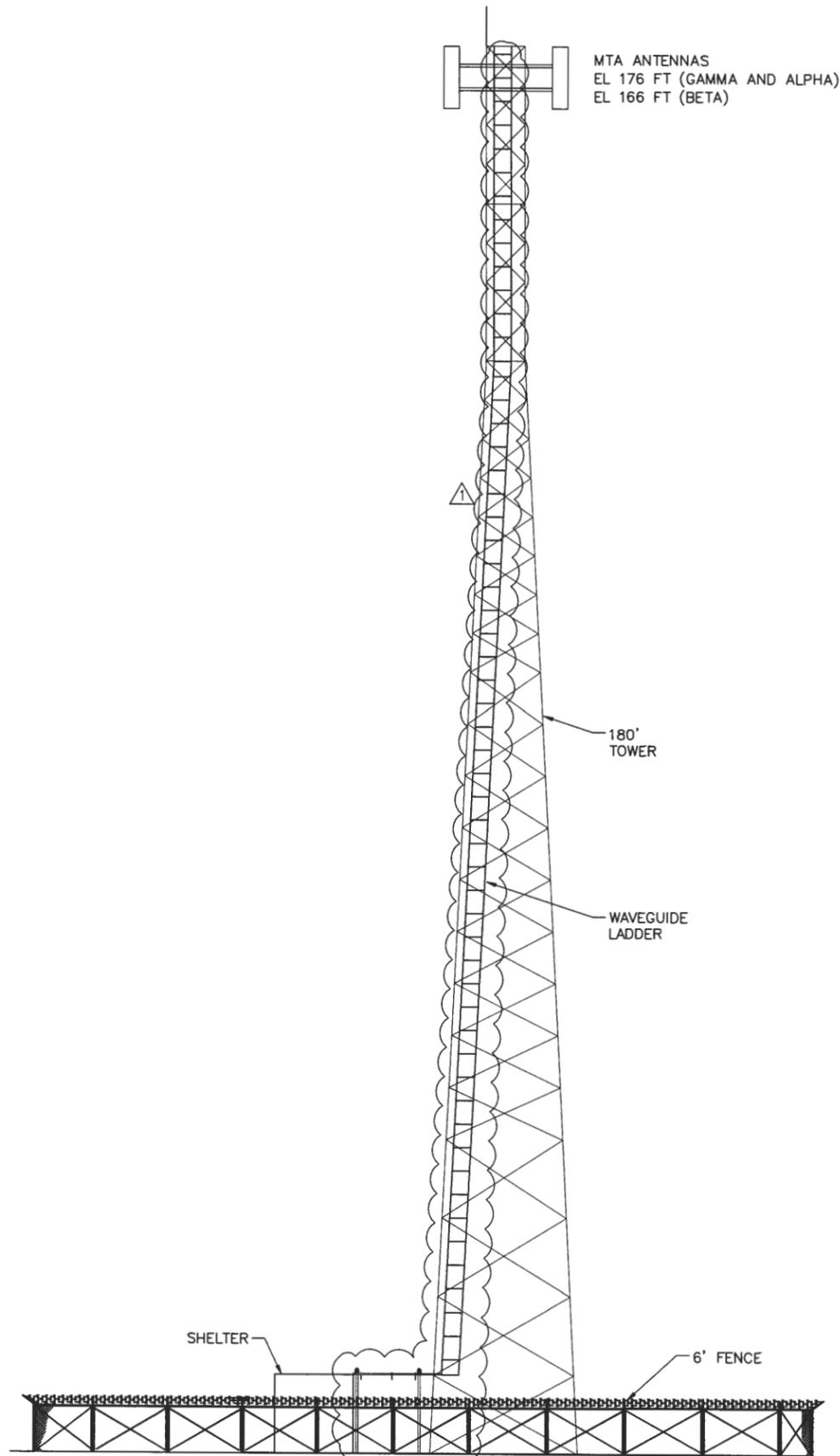


1	CHANGED GRADE BEAM LAYOUT	160622
0	ISSUED FOR CONSTRUCTION	160616
REV.	DESCRIPTION	DATE



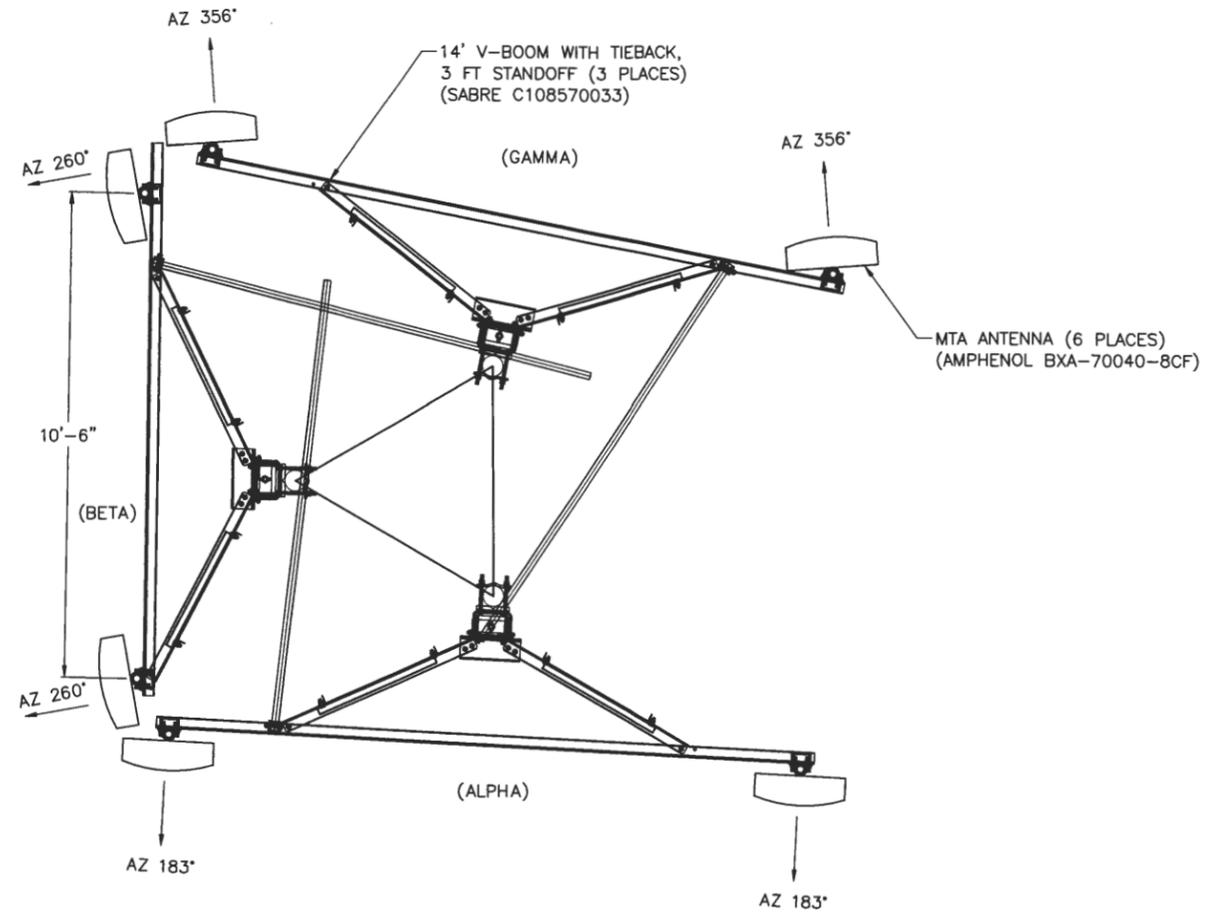
MTA  
KSH1 LTE SITE  
COVER SHEET  
T1.0

FILE: X:\16 JOBS\16-0067-20 MTAC KSH1 LTE SITE DSGN\05-CADD\DRAWINGS\T1.0 COVER SHEET.DWG | PLOT DATE: 160623 | PLOT SCALE: 1:1



MTA ANTENNAS  
EL 176 FT (GAMMA AND ALPHA)  
EL 166 FT (BETA)

**1**  
C1.1 **SITE ELEVATION**  
SCALE: 1"=20'



**2**  
C1.1 **MTA ANTENNA LAYOUT**  
SCALE: 1/4" = 1'-0"

1	MOVED WAVEGUIDE LADDER	160622
0	ISSUED FOR CONSTRUCTION	160616
REV.	DESCRIPTION	DATE

**NEW HORIZONS TELECOM, INC.**

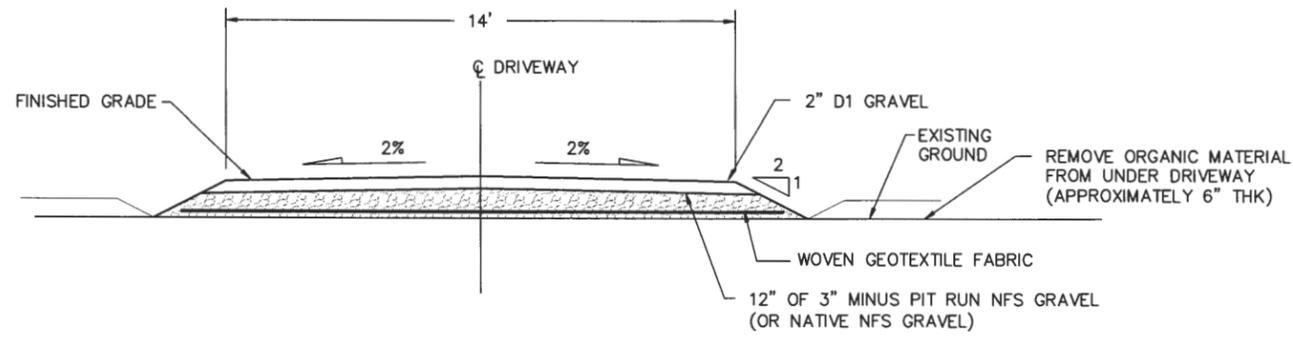
MTA  
KSH1 LTE SITE  
SITE  
ELEVATION

DWN: JAA CKD. DRB APP. DRB

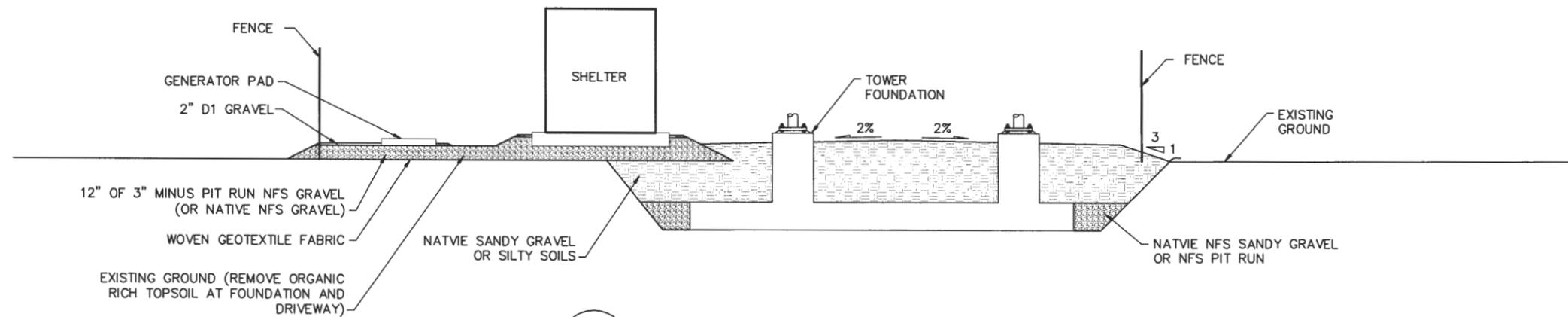
JOB #: 16-0067-20 DATE: 160616

C1.1 REV 1





**1**  
C2.1 **DRIVEWAY SECTION (TYP) (PARKING SIMILAR)**  
SCALE: 1"=20'



**2**  
C2.1 **PAD SECTION**  
SCALE: 1"=10'



0	ISSUED FOR CONSTRUCTION	160616
REV.	DESCRIPTION	DATE
MTA KSH1 LTE SITE <b>ROAD AND PAD                  SECTIONS</b>		
DWN: JAA	CKD. DRB	APP. DRB
JOB #: 16-0067-20	DATE: 160616	
C2.1		REV 0

FILE: X:\16 JOBS\16-0067-20 MTA\KSH1 LTE SITE DSGN\05-CADD\DRAWINGS\C2.1 ROAD AND PAD SECTIONS.DWG | PLOT DATE: 160616 | PLOT SCALE: 1:1

**DESIGN CRITERIA:**

**TOWER BASE REACTIONS (SABRE #141609)**

AXIAL LOAD: 78.52 KIPS  
 TOTAL SHEAR: 55.46 KIPS  
 O.T. MOMENT: 5,567.04 FT-KIPS  
 UPLIFT PER LEG: 309.0 KIPS  
 COMP PER LEG: 342.0 KIPS  
 SHEAR PER LEG: 32.49 KIPS

ALLOWABLE SOIL BEARING: 4000 psf (SANDY GRAVEL)  
 DESIGN WIND SPEED: 100 MPH (3 SEC. GUST) PER TIA-222-G

EXPOSURE: C,  
 TOPO CATEGORY: 1  
 STRUCTURE CLASS: II  
 IMPORTANCE FACTOR: 1.0  
 RADIAL ICE: 1/2 IN

**NOTES:**

**EARTHWORK:**

1. REMOVE ALL ORGANIC MATTER AND DELETERIOUS MATERIALS FROM UNDER FOOTINGS AND DRIVEWAY. EXCAVATE 5FT BELOW EXISTING GRADE FOR TOWER FOUNDATION.
2. ALL COMPACTED FILL TO BE COMPACTED TO 90% TO 95% MAXIMUM LABORATORY DENSITY IN 12 INCH LIFTS.
3. COMPACTED FILL AND OR EXCAVATION IS REQUIRED TO ALLOW DRAINAGE SO THAT NO STANDING WATER WILL ACCUMULATE ON THE SITE AS A RESULT OF THIS WORK.
4. ALL EXCAVATIONS SHALL BE SHORED OR SLOPED OR OTHERWISE SUPPORTED TO PROTECT PERSONNEL IN ACCORDANCE WITH OSHA, 29 CFR 1926, SUBPART P.

**CONCRETE:**

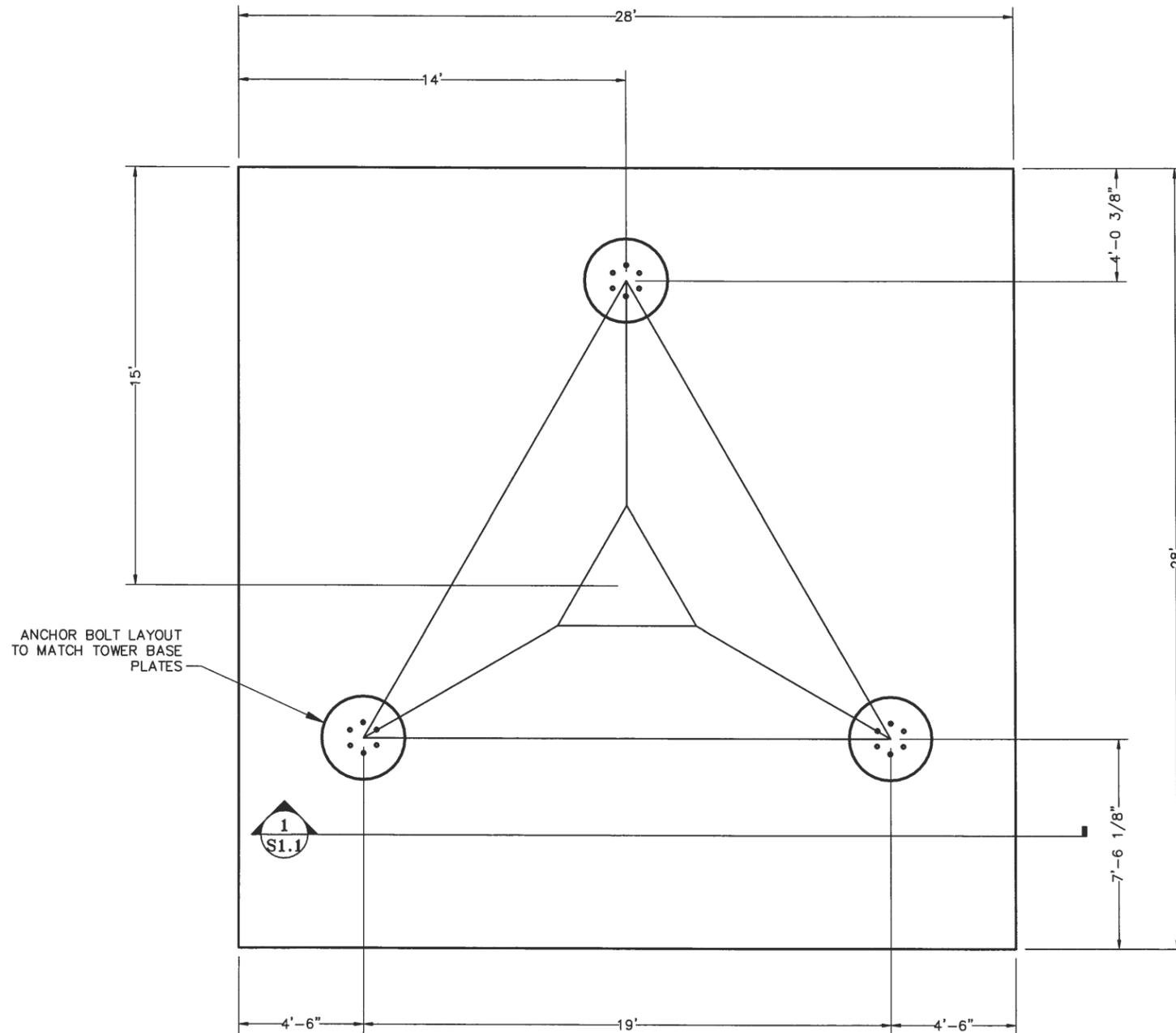
1. CONCRETE SHALL OBTAIN A 28-DAY COMPRESSIVE STRENGTH OF 4,500 PSI (F'c = 4,500 PSI). THE MIX SHALL CONTAIN A MINIMUM OF 6 SACKS CEMENT PER CUBIC YARD OF CONCRETE.
2. CEMENT SHALL CONFORM TO ASTM C150 TYPE I OR II.
3. AGGREGATE SHALL CONFORM TO ASTM C33. MAXIMUM AGGREGATE SIZE SHALL BE 3/4 INCH.
4. SLUMP SHALL BE BETWEEN 3 - 5 INCHES.
5. ADMIXTURE SHALL BE PROVIDED AS REQUIRED TO PROVIDE 5% - 8% AIR ENTRAINMENT WITH A MAXIMUM WATER/CEMENT RATIO OF 0.45.
6. CONCRETE SHALL BE KEPT FROM FREEZING FOR THE FIRST SEVEN DAYS AFTER PLACING. SURFACES TO RECEIVE CONCRETE SHALL BE NOT LESS THAN 40° F. THE TEMPERATURE OF THE CONCRETE WHEN PLACED SHALL NOT BE LESS THAN 50° F OR GREATER THAN 80° F.

**REINFORCING STEEL:**

1. ALL REINFORCING BARS SHALL BE DEFORMED AND CONFORM TO ASTM A615, GRADE 60.
2. ALL BOTTOM MAT REINFORCING BARS SHALL BE ACCURATELY PLACED AND SUPPORTED BY GALVANIZED METAL CHAIRS OR CONCRETE BLOCKS (WOODEN STAKES SHALL NOT BE USED).
3. SUPPORT TOP MAT OF REBAR WITH #4 BENT REBAR SPACERS (STANDIES) AT 4' O.C.
4. MINIMUM CONCRETE COVER FOR REBAR WHERE CONCRETE IS PLACED IN DIRECT CONTACT WITH SOIL IS 3 INCHES CLEAR, FOR ALL OTHER FORMED SURFACES IS 2 INCHES.
5. ALL REBAR SPLICES SHALL BE LAPPED 40 BAR DIAMETERS MIN.

**STRUCTURAL STEEL:**

1. STRUCTURAL STEEL INCLUDING PLATES, ANGLES AND MISCELLANEOUS SHAPES SHALL BE ASTM A36.

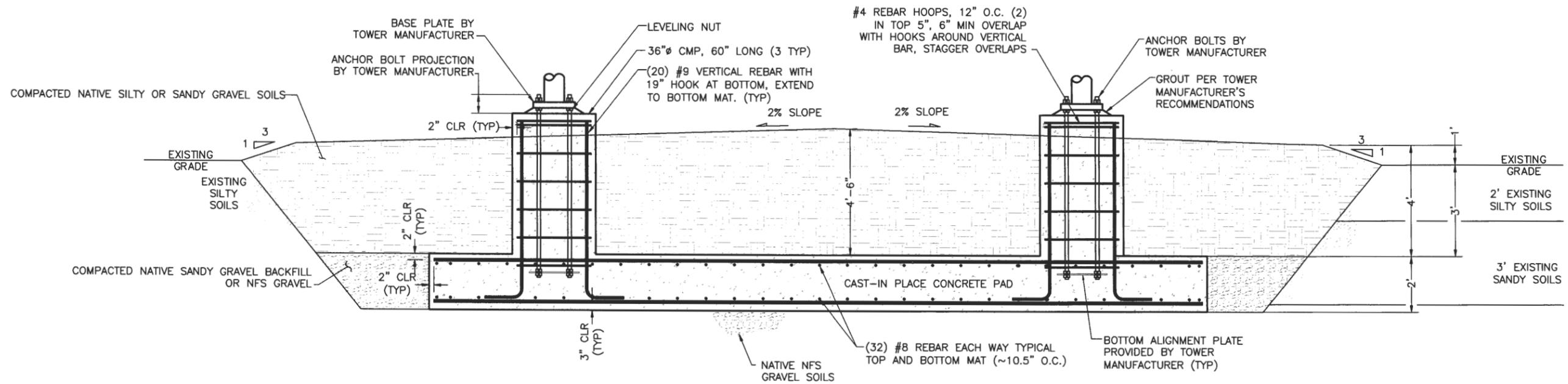


**1 TOWER FOUNDATION PLAN VIEW**  
 S1.0 SCALE: 3/16" = 1'-0"



0	ISSUED FOR CONSTRUCTION	160616
REV.	DESCRIPTION	DATE
MTA KSH1 LTE SITE <b>TOWER FOUNDATION PLAN</b>		
DWN: JAA	CKD. DRB	APP. DRB
JOB #: 16-0067-20	DATE: 160616	
S1.0		REV 0

FILE: X:\16 JOBS\16-0067-20 MTA\KSH1 LTE SITE DSGN\5-CADD\DRAWINGS\1.0 TOWER FOUNDATION.DWG | PLOT DATE: 160616 | PLOT SCALE: 1:1



**1**  
**S1.1** TOWER FOUNDATION SECTION  
SCALE: NTS

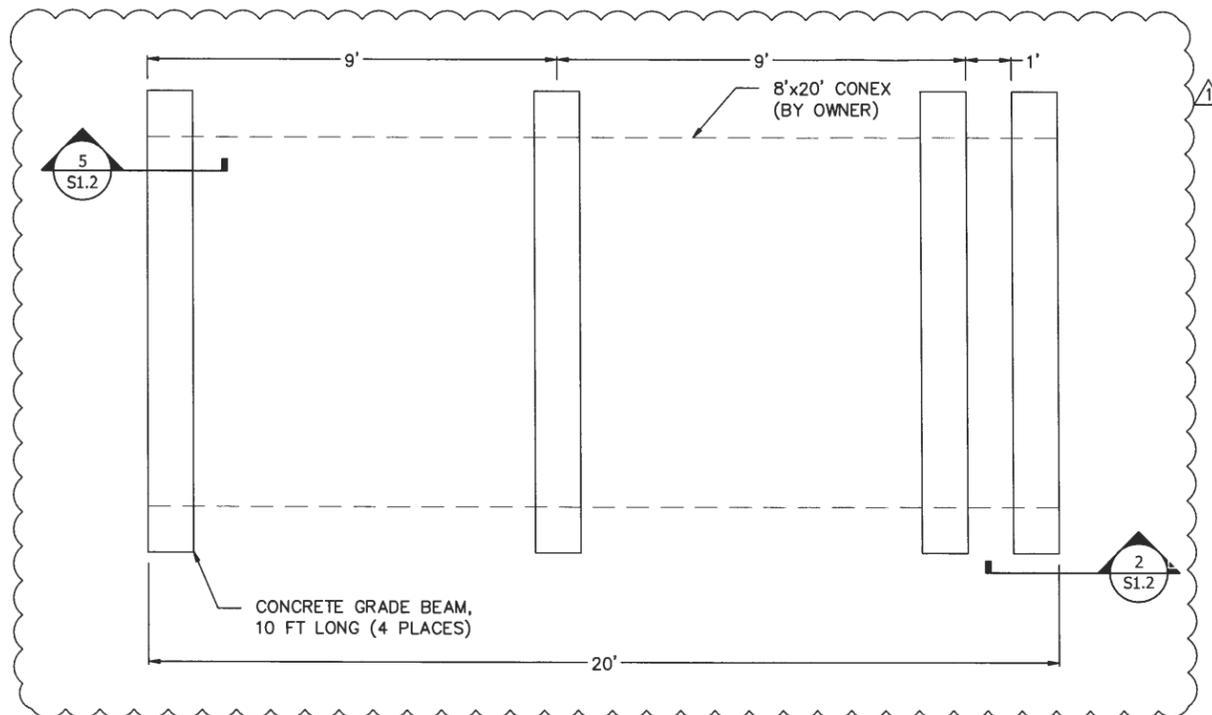
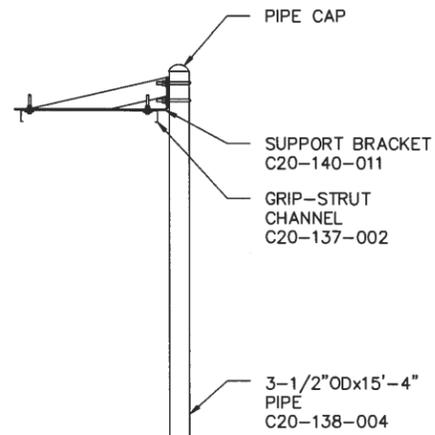
**NOTES:**

1. ON SITE TEST HOLE FOUND APPROXIMATELY 6" OF ORGANIC RICH TOPSOIL, THEN 1.5-2 FT OF SILTY SOILS, THEN 3 FT OF SANDY SOILS, THEN A LAYER OF NFS GRAVEL APPROXIMATELY 1-2 FT THICK, THEN SANDY GRAVEL.
2. BOTTOM OF TOWER FOUNDATION TO BE PLACED ON TOP OF OR APPROXIMATELY 6" INTO GRAVEL LAYER.
3. IF EXCAVATION FOR TOWER FOUNDATION REVEALS DIFFERENT SOIL CONDITIONS, CONTACT ENGINEER OF RECORD FOR DIRECTION. DO NOT PLACE TOWER FOUNDATION ON MATERIAL OTHER THAN NATIVE NFS GRAVEL.
4. PROOF ROLL BOTTOM OF EXCAVATION TO ENSURE THERE ARE NO SOFT SPOTS. CONTACT ENGINEER OF RECORD FOR DIFFERING CONDITIONS.

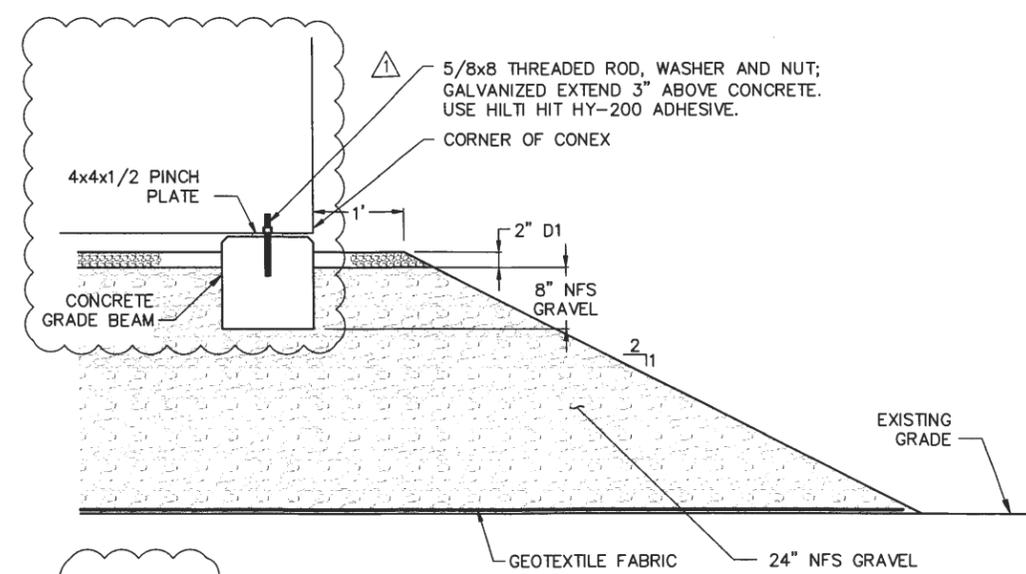


0	ISSUED FOR CONSTRUCTION	160616
REV.	DESCRIPTION	DATE
MTA KSH1 LTE SITE <b>TOWER FOUNDATION SECTION</b>		
DWN: JAA	CKD. DRB	APP. DRB
JOB #: 16-0067-20		DATE: 160616
S1.1		REV 0

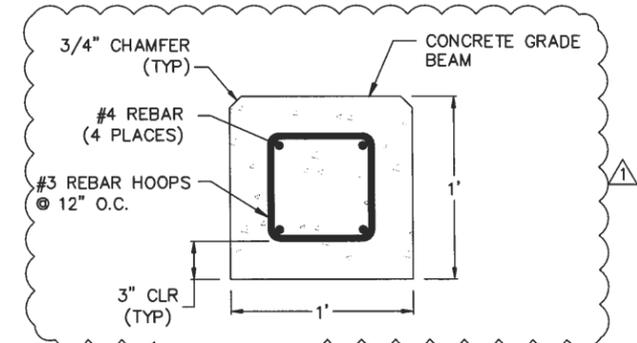
FILE: X:\16\JOBS\16-0067-20\MTAC KSH1 LTE SITE\DSGN\05-CADD\DRAWINGS\1.1 FOUNDATION SECTION.DWG | PLOT DATE: 160616 | PLOT SCALE: 1:1



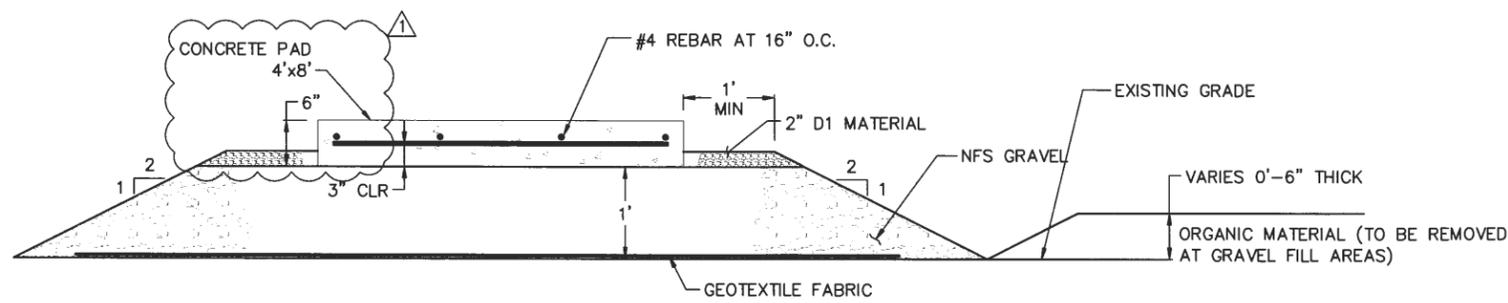
**1**  
S1.2 **GRADE BEAM LAYOUT**  
SCALE: 1/4" = 1'-0"



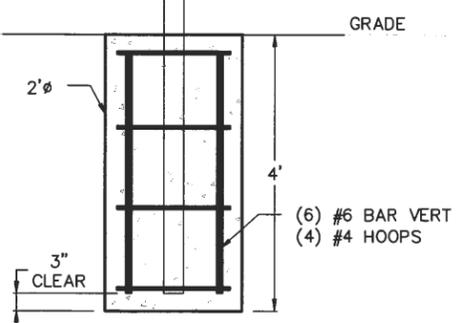
**2**  
S1.2 **GRADE BEAM CONNECTION DETAIL**  
SCALE: 1/2" = 1'-0"



**5**  
S1.2 **CROSS SECTION**  
SCALE: 1" = 1'-0"



**4**  
S1.2 **GENERATOR PAD SECTION**  
SCALE: 1/2" = 1'-0"



**3**  
S1.2 **POST AND FOOTING DETAIL**  
SCALE: 3/8" = 1'-0"



1	GRADE BEAM LAYOUT AND DETAILS	160622
0	ISSUED FOR CONSTRUCTION	160616
REV.	DESCRIPTION	DATE



MTA  
KSH1 LTE SITE  
**GRADE BEAM  
LAYOUT AND DETAILS**

DWN: JAA	CKD: DRB	APP: DRB
JOB #: 16-0067-20	DATE: 160616	

<b>S1.2</b>	REV <b>1</b>
-------------	-----------------

FILE: X:\16 JOBS\16-0067-20 MTA\KSH1 LTE SITE DSGN\05-CADD\DRAWINGS\S1.2 GRADE BEAM LAYOUT AND DETAILS.DWG | PLOT DATE: 160623 | PLOT SCALE: 1:1

# Exhibit B

FAA Determination





Mail Processing Center  
Federal Aviation Administration  
Southwest Regional Office  
Obstruction Evaluation Group  
10101 Hillwood Parkway  
Fort Worth, TX 76177

Aeronautical Study No.  
2016-AAL-433-OE

Issued Date: 05/31/2016

Rod Ewing  
MTA Communications, Inc.  
1740 S Chugach St  
Palmer, AK 99645

**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower KSH1
Location:	Talkeetna, AK
Latitude:	62-03-00.71N NAD 83
Longitude:	150-03-05.00W
Heights:	289 feet site elevation (SE) 185 feet above ground level (AGL) 474 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)  
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 L.

This determination expires on 12/01/2017 unless:

- the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- extended, revised, or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination does not constitute authority to transmit on the frequency(ies) identified in this study. The proponent is required to obtain a formal frequency transmit license from the Federal Communications Commission (FCC) or National Telecommunications and Information Administration (NTIA), prior to on-air operations of these frequency(ies).

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (800) 478-3576 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (907) 271-5863. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2016-AAL-433-OE.

**Signature Control No: 292692329-293954974**

( DNE )

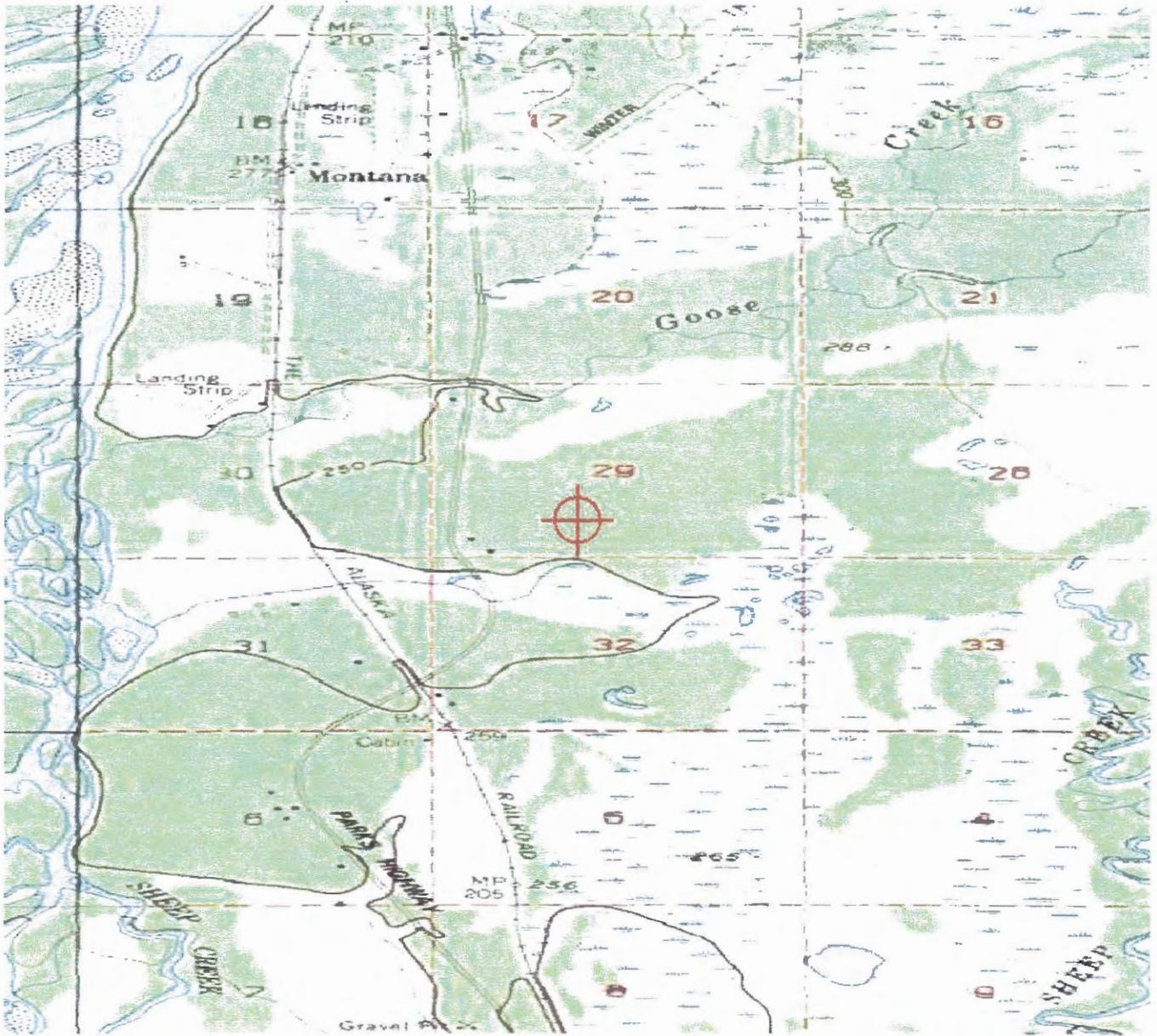
Robert van Haastert  
Specialist

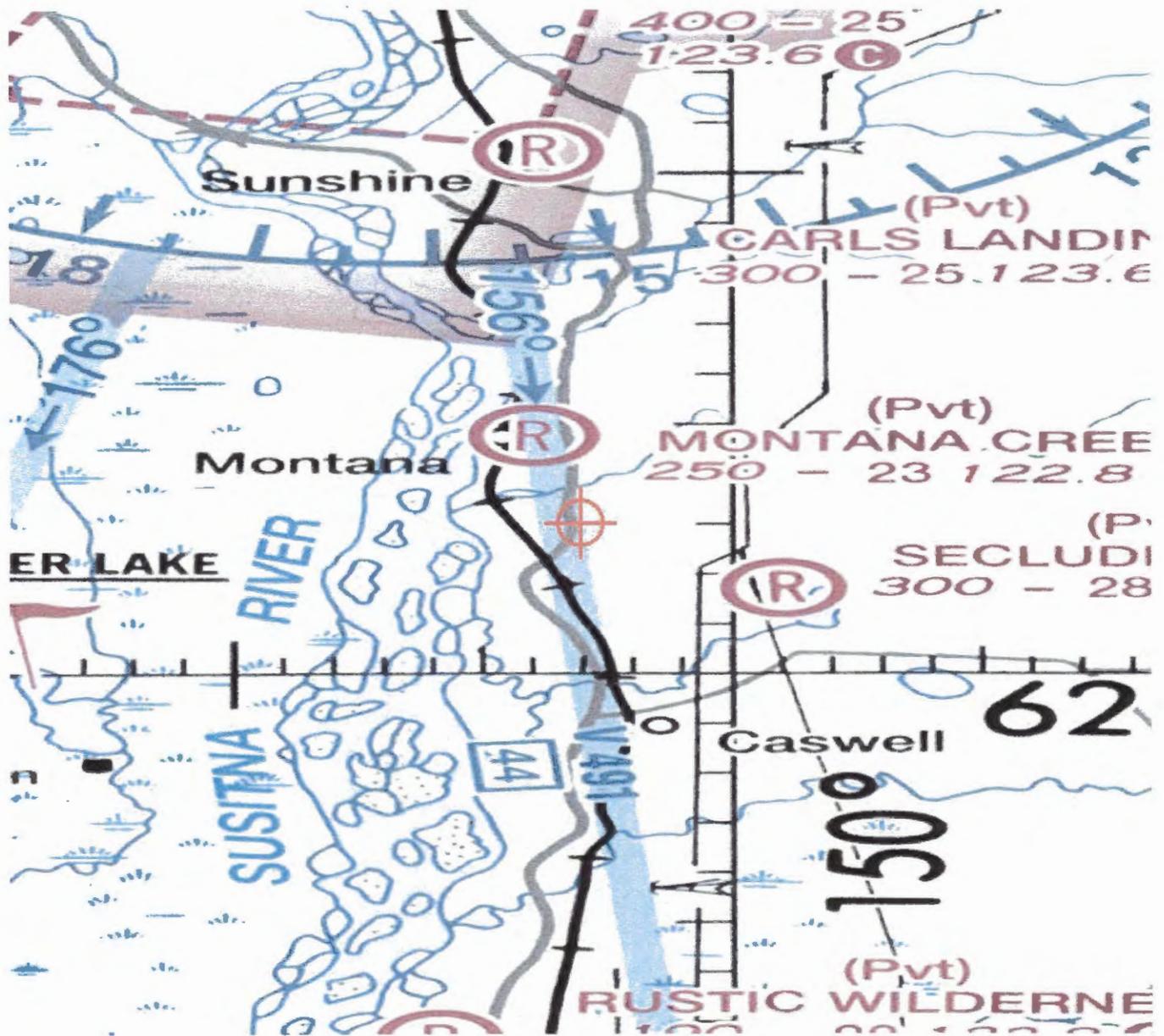
Attachment(s)  
Frequency Data  
Map(s)

cc: FCC

Frequency Data for ASN 2016-AAL-433-01

<b>LOW FREQUENCY</b>	<b>HIGH FREQUENCY</b>	<b>FREQUENCY UNIT</b>	<b>ERP</b>	<b>ERP UNIT</b>
698	806	MHz	1000	W





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# Exhibit C

Balloon Flight



# **KSH1**

Talkeetna, AK

Ballon Test

May 13, 2016





Area overview with 500 ft, 1000 ft, 1500 ft and 2000 ft radius circles depicted.

Photograph numbers are referenced in relation to the plan view.



1



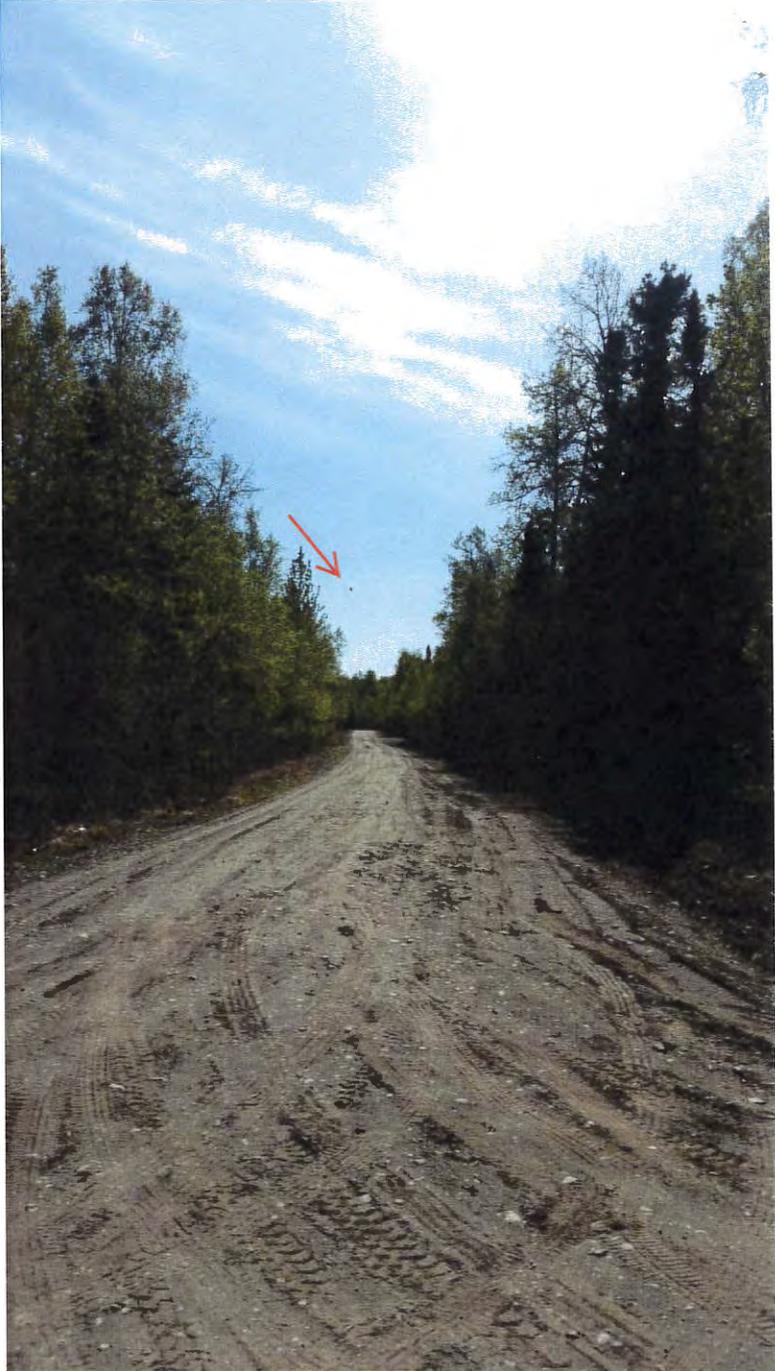
2



3



4





















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# Exhibit D

Redacted Lease



## LAND USE AGREEMENT

**THIS LAND USE AGREEMENT** (the "**Agreement**") is made and entered into as of the 6<sup>th</sup> day of April, 2016 ("**Effective Date**"), between **Ramon and Ada Gutierrez ("Grantor")**, whose address is HC 89 Box 492, Willow, Alaska 99688-9705, and **MTA Communications, LLC ("MTA")**, with an office at 1740 South Chugach Street, Palmer, Alaska 99645. Hereinafter, Grantor and MTA may be individually referred to as "**Party**", or collectively referred to as "**Parties**".

**WHEREAS**, Grantor owns or controls a certain plot, parcel or tract of land, a portion of which MTA desires to lease subject to terms of this Agreement; and

**WHEREAS**, Grantor wishes to lease such property to MTA for the uses herein permitted for reasonable compensation.

**NOW, THEREFORE**, in consideration of the mutual covenants and conditions contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

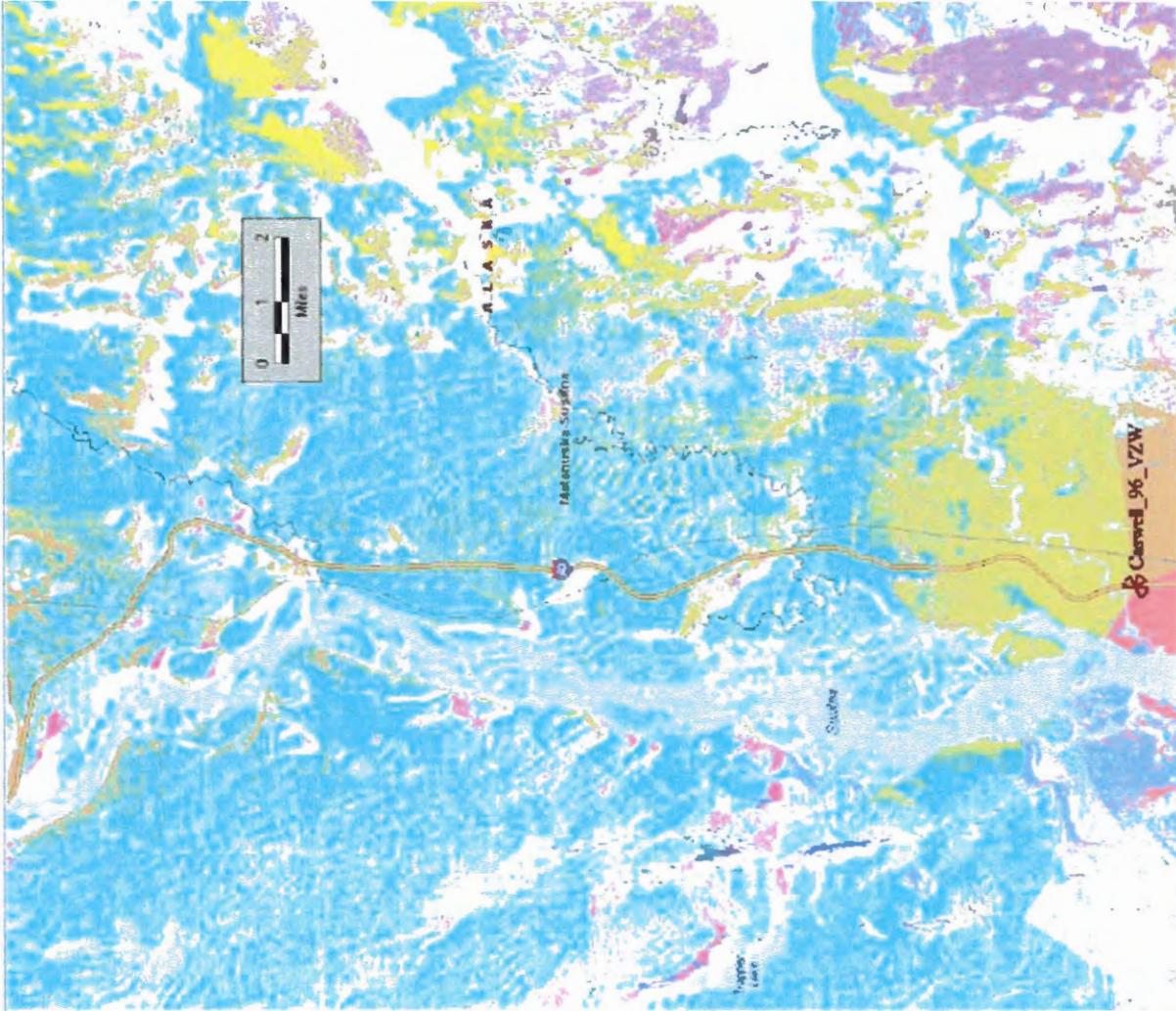
**1. GRANT OF EASEMENTS.** Grantor hereby conveys to MTA an easement to the following parcel of real property owned or controlled by Grantor: An approximate one hundred foot (100') by one hundred foot (100') area for the site along with a twenty foot (20') by one hundred ninety foot (190') access drive (entering from Kashwitna Road) (the "**Leased Property**") situated within Section 29, Township 23N, Range 4W, Lot C006, Seward Meridian, Palmer Recording District, State of Alaska (the "**Parent Parcel**"). The Leased Property is more particularly described in the attached Site Plan attached hereto as Exhibit A and made a part of this Agreement. Upon installation of MTA's facilities, systems, equipment and improvements to the Leased Property, MTA will, at its expense, complete an as-built survey of the Leased Property. Such survey, once completed, shall replace and supersede the Site Plan in Exhibit A. MTA shall further be granted rights of ingress and egress to the Leased Property, an easement to enter upon the lands of Grantor and to construct, reconstruct, lay, maintain, operate, alter, repair, remove, and replace aerial or buried telecommunications and/or electrification cables, lines, poles, or systems and appurtenances thereto, and make changes and additions thereto, to cut and trim trees and shrubbery that may interfere with or threaten or endanger the operation and maintenance of said cables, lines, poles, tower, property leased around tower, access drive or systems, under, upon, over, and through lands which Grantor owns or in which Grantor has an interest and/or in, upon, or under all private or underlying interest streets, roads or highways abutting said lands. Except for the Leased Property to which MTA shall be permitted exclusive use thereof, Grantor may fully use and enjoy said lands provided that Grantor shall not construct or permit to be constructed any structures or obstructions on, under, or over that will interfere with the construction, maintenance or operation of any telecommunications and/or electrification cables/lines or systems, or appurtenances constructed hereunder. MTA,



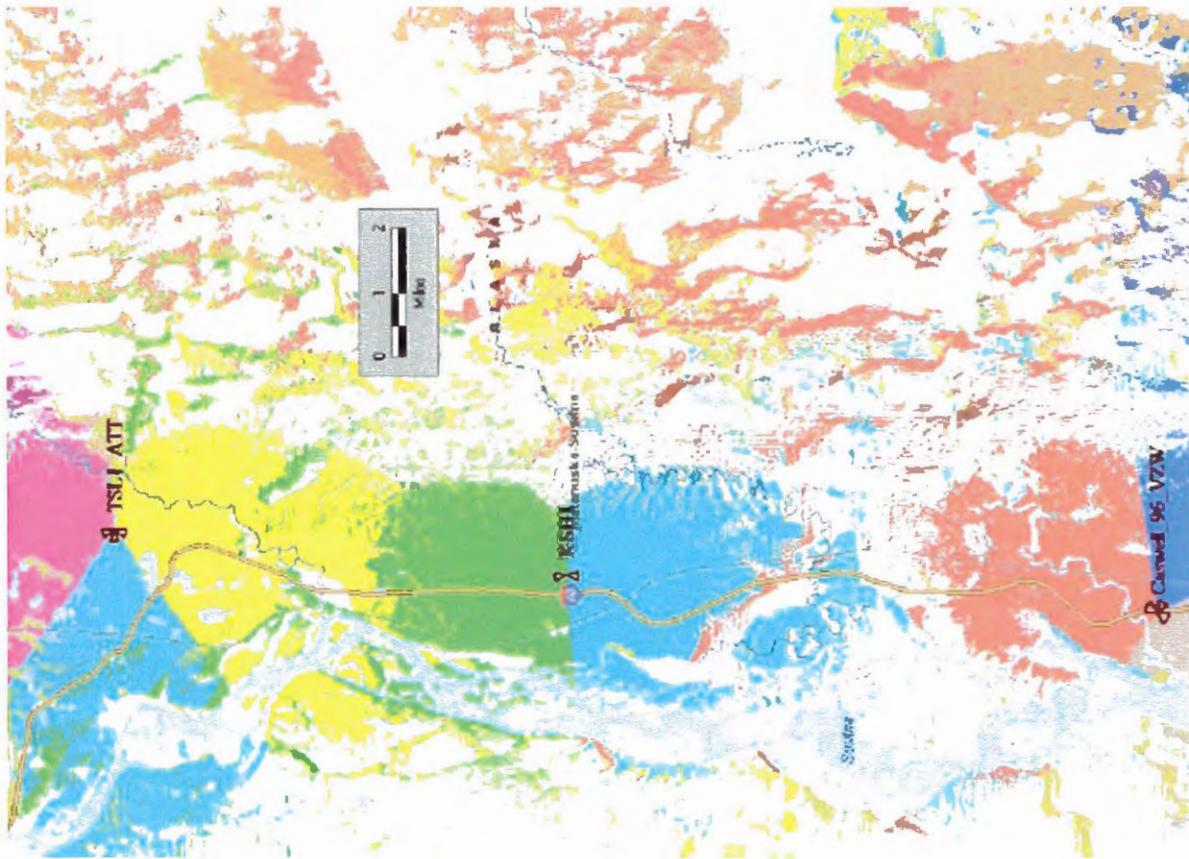
# Exhibit E

## Propagation Maps

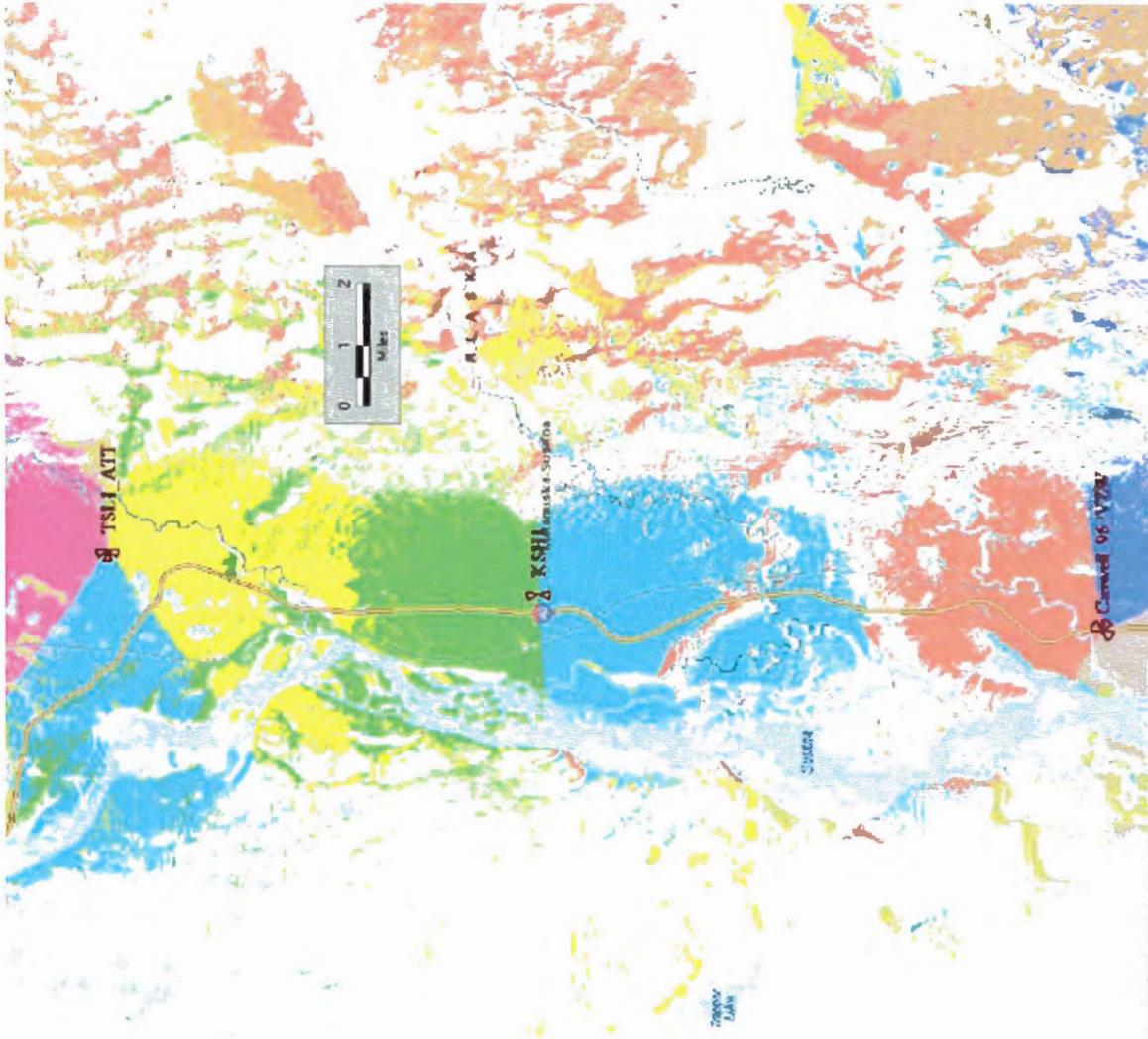




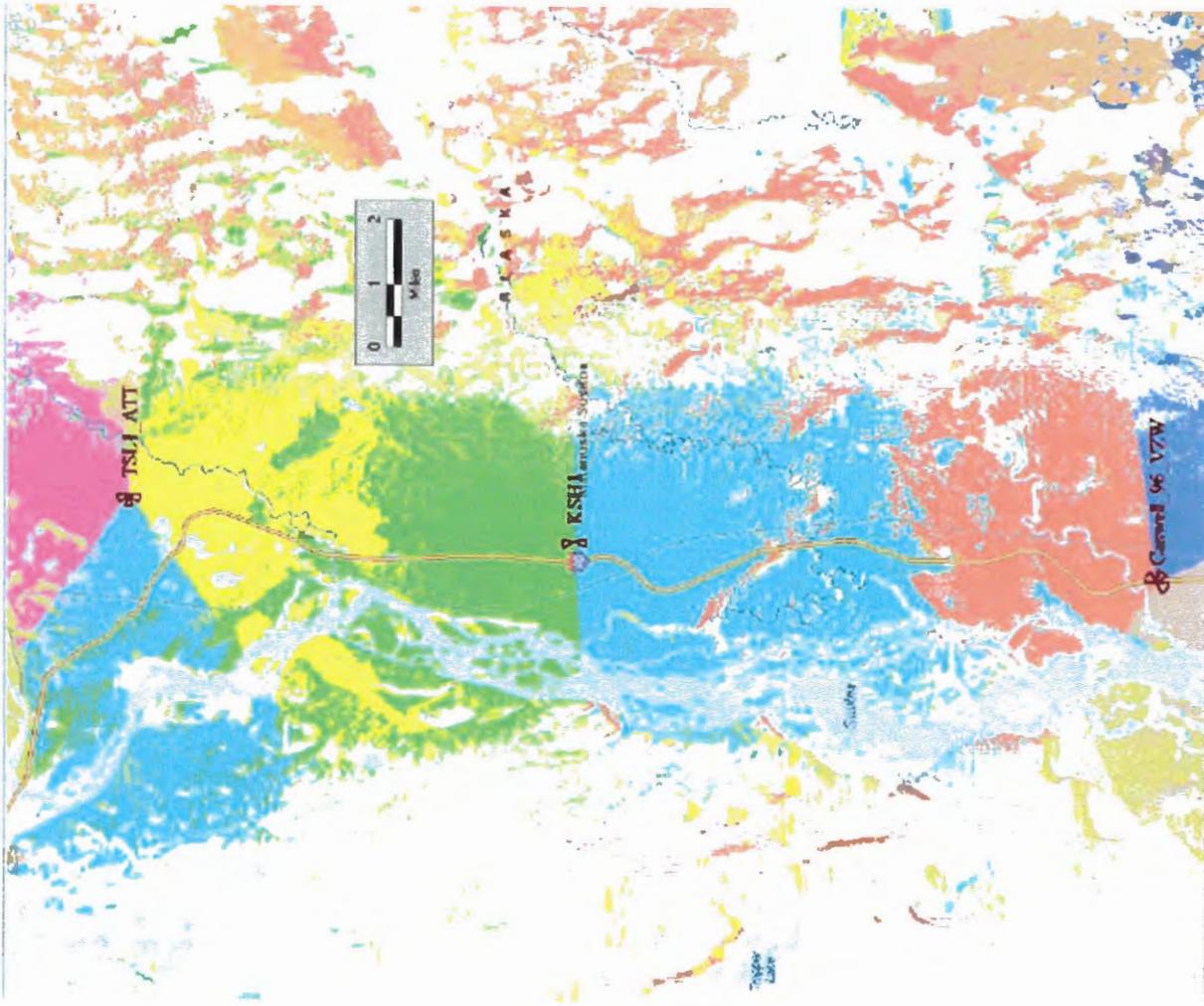
KSH1 with site inactive (current coverage)



# KSH1 Site – 120 feet



# KSH1 Site – 150 feet

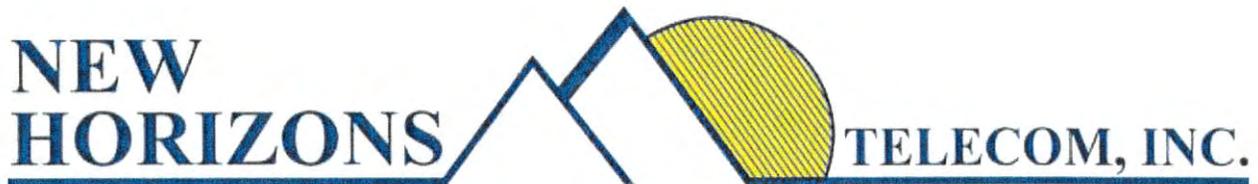


# KSH1 Site tower at 180 feet

# Exhibit F

Notification Letter, Mailing List,  
Meeting Sign in, and Meeting Summary





*Program & Project Management, Engineering Design, Permitting, Construction, Installation, Integration  
- Your Turnkey Providers -*

May 6, 2016

TO: Neighbors of 15960 E Kashwitna Road  
Legal Description - Township 23N Range 4W Section 29 Lot C6

This letter is to notify area Neighbors that MTA Communications (MTAC) will be making an application for a Conditional Use Permit for the placement of a 180 foot tall lattice type self-supporting antenna structure on the parcel referenced above. The attached Matanuska-Susitna Borough Land Information Parcel Report and google earth image, show both the parcel location and the proposed tower placement. Site access will be from a proposed driveway off Kashwitna road. Potential tower lighting will be part of the discussion at the meeting.

MTAC will present the proposed placement on Monday, May 23, 2016, at the Upper Susitna Senior/Community Center. The meeting begins at 6PM and is located at 16463 Helena Ave., Talkeetna, AK, 99676.

The construction of this antenna structure will provide enhanced and improved wireless communications for personal, business and emergency service in the area. Representatives from MTAC will be present to answer questions or concerns from the community.

As a nearby property owner to the proposed facility you are entitled to this information pursuant to Matanuska Susitna Borough, Chapter 17.67.050 Borough Municipal Code. For your convenience, the language provided for this notification is as follows:

*Prior to applying for a conditional use permit for a new tall structure, the potential applicant shall hold at least one community meeting.*

New Horizons Telecom, Inc. is the agent for MTAC for this conditional use application. If you have any questions pertaining to the proposed notification, please contact Sherrie Greenshields; Site Acquisition Consultant, with New Horizons Telecom Inc., 901 Cope Industrial Way, Palmer, AK 99645, at the information below.

Respectfully,

Sherrie Greenshields, Site Acquisition Consultant  
sgreenshields@nhtiusa.com  
907-761-6057 office; 907-315-3201 cell

Attachments: Mat-Su Borough Comment Form; Permit Center ½ mile offset from Parcel; Antenna Structure Proposed Site Location

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FIRST CLASS MAIL

Comment form for Citizen Participation Process

**Matanuska-Susitna Borough Code Section: MSB 17.67 – TALL STRUCTURES**

**Application or Item:** Conditional Use Permit - 180 ft lattice self supporting antenna structure

**Applicant:** MTA Communications (Agent - New Horizons Telecom, Inc. - Sherrie Greenshields)

**Applicant Phone#:** 907-760-6057 office; 907-315-3201 cell

**Applicant Address:** New Horizons Telecom, Inc. - 901 Cope Industrial Way, Palmer, AK 99645

**Meeting Date & Time:** Monday, May 23, 2016, 6 PM

**Meeting Location:** 16463 Helena Avenue, Talkeetna, Alaska

**Legal Description of Project:** Township 23N Range 4W Section 29 Lot C6

*Description of the proposed development including height, design, lighting, potential access to the site and proposed service:*

***MTA Communications (MTAC) will be making an application for a Conditional Use Permit for the placement of a 180 foot tall lattice type self-supporting antenna structure on the parcel referenced above. The attached Matanuska-Susitna Borough Land Information Parcel Report and google earth image, show both the parcel location and the proposed tower placement. Site access will be from a proposed driveway from Kashwitna Road. Potential tower lighting will be part of the discussion at the meeting.***

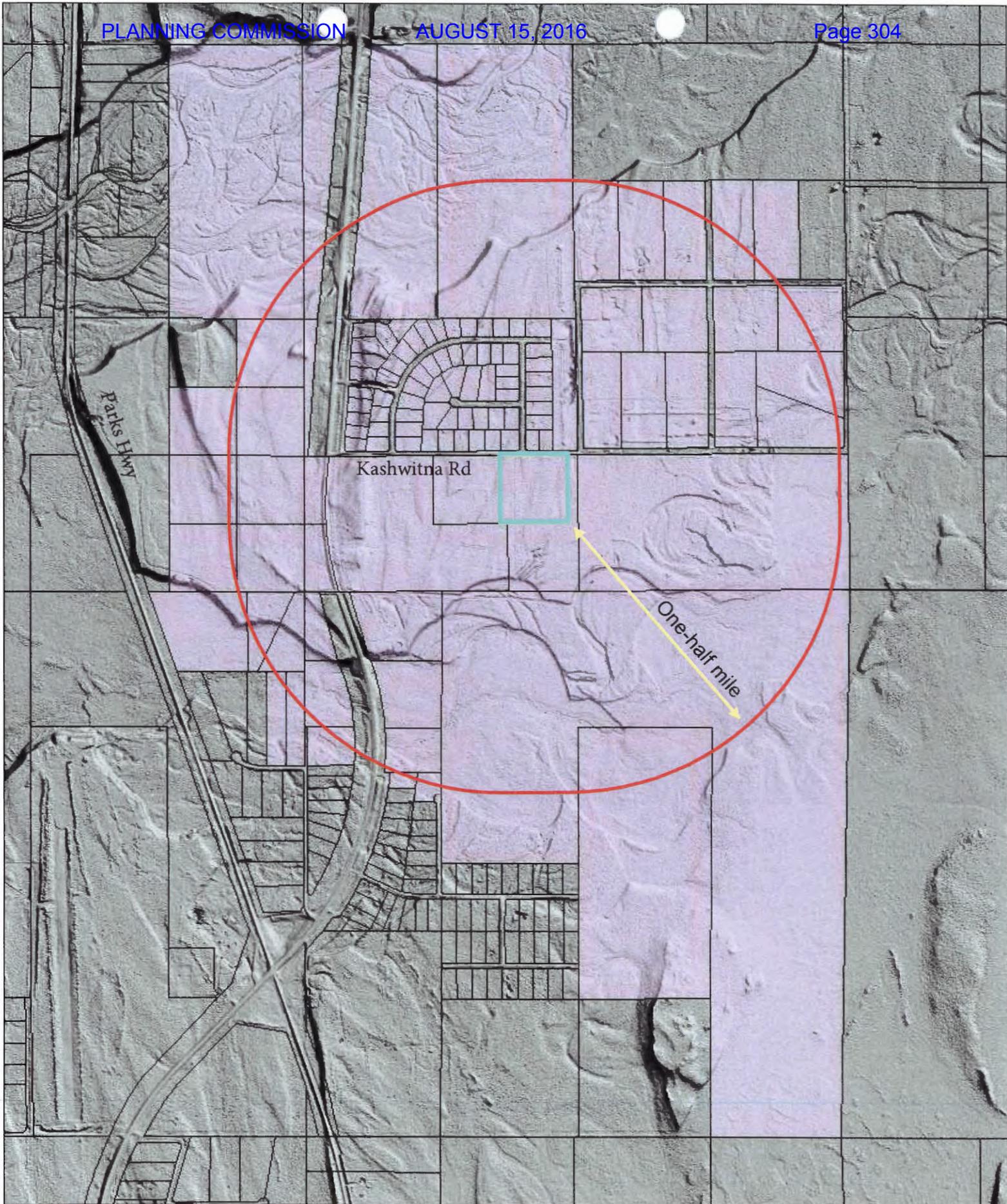
If you have any questions or, would like to send us comments, concerning the proposed action, this form may be used for your convenience by filling in the information below and mailing it to the Matanuska-Susitna Borough, Development Services Division, 350 East Dahlia, Palmer, Alaska 99645. You may fax comments to 861-7876 or e-mail to [permitcenter@matsugov.us](mailto:permitcenter@matsugov.us). Comments received prior to the meeting date will be included in the citizen participation report. Please be advised that comments received from the public after that date will not be included in the citizen participation report but will be included in the staff report to the Planning Commission. If there is not enough room below, please attach this sheet to another piece of paper.

**Name:** \_\_\_\_\_ **Address:** \_\_\_\_\_

**Location/Legal Description of your property:** \_\_\_\_\_

**Comments:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# Matanuska Susitna Borough Permit Center

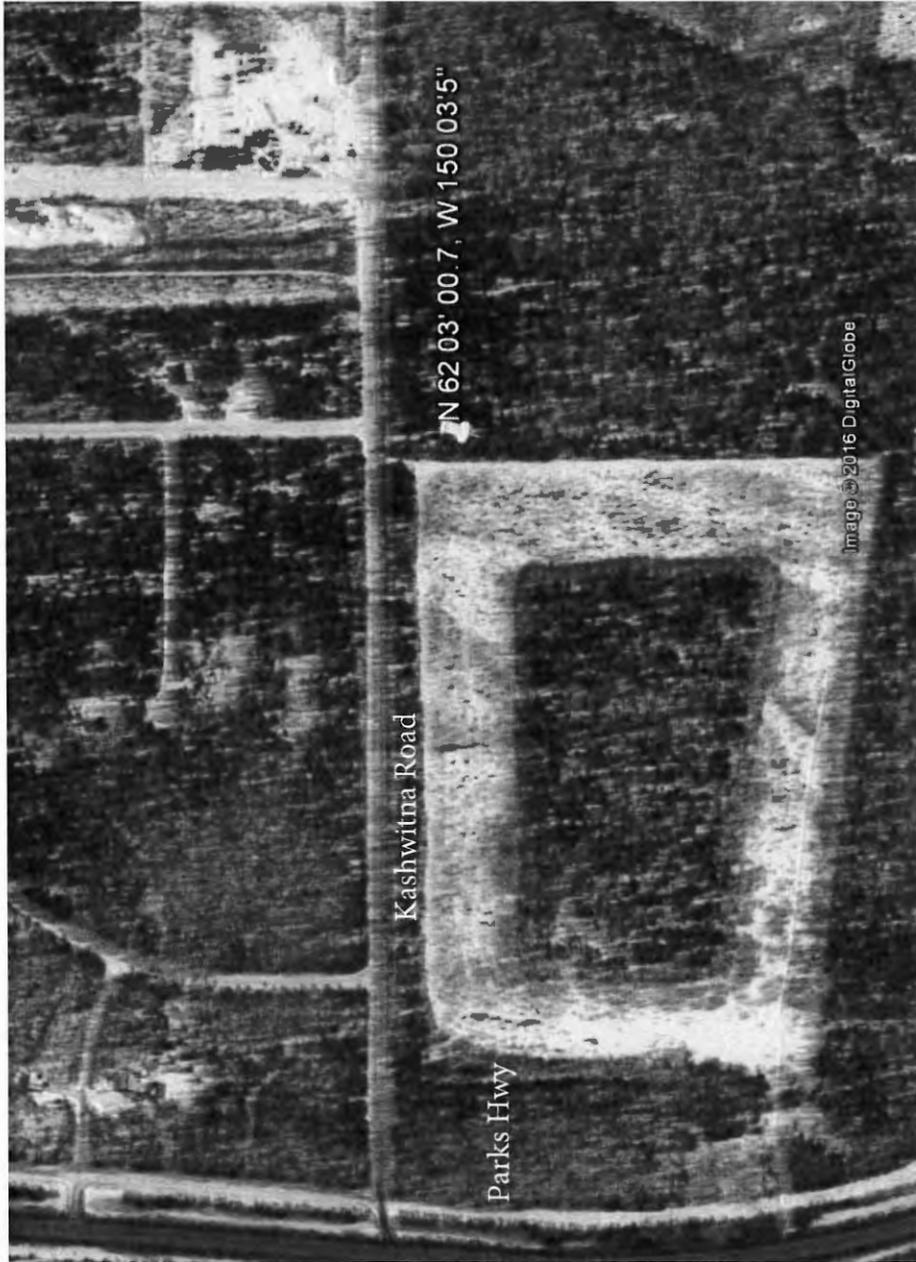
Date: 4/29/2016

0 500 1,000 Feet



This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matanuska-Susitna Borough GIS Division at 907-745-4801.

**KSH1 – Proposed MTA Communications Site Location**



Yellow Pin depicts proposed antenna structure on property

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*With Central Point Stamp 44507*  
*PL*

53082B03L003 ✓  
 ADKINS SARAH ELLEN  
 PO BOX 14122  
 TRAPPER CREEK AK 99683-4122

223N04W29D001 ✓  
 ARCTIC EXTREME ENV PRODUCTS LLC  
 PO BOX 13069  
 TRAPPER CREEK AK 99683-3069

56287B03L027 ✓  
 ARMSTRONG JEFF  
 102 W JONES ST  
 YACOLT, WA 98675

56287B03L026 ✓  
 ARMSTRONG JEFF  
 102 W JONES ST  
 YACOLT, WA 98675

56287B03L028 ✓  
 BAIR DEBORAH  
 2570 COTTINGTON CIR NW  
 NORTH CANTON OH 44720-5702

56287B01L007 ✓  
 BAIR MICHAEL D  
 3381 ORION ST NW  
 NORTH CANTON OH 44720-5633

53082B04L003 ✓  
 BAJEMA DANIEL  
 13371 PINWOOD ST  
 GOWEN MI 49326-9415

53082B03L005 ✓  
 BAJEMA DANIEL R  
 BRADLEY DANIELLE  
 L HC 89 BOX 585  
 WILLOW AK 99688-9707

56287B02L008 ✓  
 BARNES RICHARD  
 316 E BROWN AVE  
 FRESNO, CA 93704-5401

56287B02L007 ✓  
 BARNES RICHARD  
 316 E BROWN AVE  
 FRESNO, CA 93704-5401

56287B01L016 ✓  
 BEETER JOHN H & ROSIE  
 111 AGATE CIR  
 ANCHORAGE, AK 99504

56287B04L004 ✓  
 BEETER JOHN H & ROSIE  
 111 AGATE CIR  
 ANCHORAGE, AK 99504

56287B04L006 ✓  
 BEETER JOHN H & ROSIE  
 111 AGATE CIR  
 ANCHORAGE, AK 99504

52872B01L002 ✓  
 BENNETT BARRY G  
 HC 89 BOX 479  
 WILLOW AK 99688

53082B03L002 ✓  
 BONERTZ DAVID R  
 PO BOX 209  
 WILLOW AK 99688-0209

56287B03L029 BOWMAN ✓  
 FLORENCE H  
 % MAX T BABB  
 956 MCKINLEY RD E  
 TACOMA WA 98404-3234

56287B03L030 BOWMAN ✓  
 FLORENCE H  
 % MAX T BABB  
 956 MCKINLEY RD E  
 TACOMA WA 98404-3234

53082B01L003 ✓  
 BREEDEN JOHN K  
 9076 N 175TH E AVE  
 OWASSO OK 74055-5615

56287B01L012 ✓  
 BUDD DAVID  
 W67 N 388 GRANT AVE  
 CEDARBURG WI 53012

56287B01L011 ✓  
 BUDD DAVID  
 W67 N 388 GRANT AVE  
 CEDARBURG WI 53012

56287B03L024 ✓  
 BURNS BERNICE D  
 8430 REBEL RIDGE  
 ANCHORAGE AK 99504

56287B03L025 ✓  
 BURNS BERNICE D  
 8430 REBEL RIDGE  
 ANCHORAGE AK 99504

56287B01L018 ✓  
 BUSH LESLIE D  
 HC 89 BOX 496  
 WILLOW AK 99688-9705

223N04W32B005 ✓  
 BUTCHER ARLA CHARLENE  
 940 W 11TH AVE ANCHORAGE,  
 AK 99501-4307

56287B02L009 ✓  
 CARPENTER DANIEL E  
 CARPENTER ROBERT W  
 4577 CAMPBELL PARK LOOP  
 ANCHORAGE AK 99507-1165

53082B02L001 ✓  
 CASAGRANDA TANYA  
 LENI FOSS # E101  
 1877 E TUDOR RD  
 ANCHORAGE AK 99507-1055

56287B04L007 ✓  
 CASSADAS GILBERT  
 PO BOX 298302  
 WASILLA, AK 99629-8302



56287B04L008 ✓  
CASSADAS GILBERT  
PO BOX 298302  
WASILLA, AK 99629-8302

52914000L001 ✓  
CLARK RAYMOND E&CYNTHIA A  
HC 89 BOX 481  
WILLOW, AK 99688

223N04W29B002 ✓  
CONNEMARA ENTERPRISES LLC  
TRAHOS HERTA3326  
WESLEYAN DR  
ANCHORAGE AK 99508-4864

223N04W30A001 ✓  
CONNEMARA ENTERPRISES LLC  
TRAHOS HERTA3326  
WESLEYAN DR  
ANCHORAGE AK 99508-4864

223N04W32B006 ✓  
COOK INLET REGION INC  
PO BOX 93330  
ANCHORAGE, AK 99509-3330

223N04W32B008 ✓  
COOK INLET REGION INC  
PO BOX 93330  
ANCHORAGE, AK 99509-3330

223N04W31A003 ✓  
DAVENPORT DAVID B  
DAVIS GEORGIANNE  
HC 89 BOX 494  
WILLOW AK 99688

223N04W32A001 ✓  
DAVIDSON'S INV  
% CLIFFORD L DAVIDSON  
3311 WILEY POST LOOP  
ANCHORAGE, AK 99517

56287B01L008 ✓  
DAVIS STEVEN S  
# 1029  
1200 W DIMOND BLVD  
ANCHORAGE, AK 99502

56287B01L017 ✓  
DUCHANIN JAMES N  
3800 DOROSHIN AVE  
ANCHORAGE AK 99516-2836

223N04W30D013 ✓  
EDWARDS JAMES P  
2616 W 66TH AVE  
ANCHORAGE AK 99502-2207

56287B03L006 ✓  
FROELICH MURRAY & GRETA  
PO BOX 49  
TALKEETNA AK 99676-0049

56287B03L018 ✓  
FRY ALLEN  
LANFELL RONALD  
82510 N PACIFIC HWY  
CRESWELL OR 97426

56287B03L017 ✓  
FRY ALLEN  
LANFELL RONALD  
82510 N PACIFIC HWY  
CRESWELL OR 97426

56287B03L031 ✓  
GANGWER STEWART M & JANICE T  
PO BOX 204  
GLENALLEN AK 99588-0204

56562B01L001 ✓  
GODWIN SCOTT & KELLY  
15700 E CLARK RD  
PALMER, AK 99645

56287B03L012 ✓  
GOUBEUX SCOTTE  
6 SEMINOLE AVE  
ARCANUM OH 45304

56287B03L014 ✓  
GRENIER BRIAN J  
PO BOX 561  
WILLOW, AK 99688-0561

56287B01L010 ✓  
GUMAER GLENN F  
STE 101  
3190 STATE ST  
MEDFORD OR 97504

223N04W29C004 ✓  
GUTIERREZ RAMON G & ADA K  
HC 89 BOX 492  
WILLOW AK 99688-9705

223N04W29C006 ✓  
GUTIERREZ RAMON G & ADA K  
HC 89 BOX 492  
WILLOW AK 99688-9705

223N04W29C007 ✓  
GUTIERREZ RAMON G & ADA K  
HC 89 BOX 492  
WILLOW AK 99688-9705

53082B02L002 ✓  
HABLA MICHAEL J& JUDITH A  
PO BOX 324  
WILLOW, AK 99688-0324

56287B03L023 ✓  
HAGGARD VERLYN  
913 HEATHERWOOD LN  
OSSIAN IN 46777-9291

56287B03L022 ✓  
HALL WILLIAM  
HALL ELIZABETH  
F HC 89 BOX 497  
WILLOW AK 99688-9705

223N04W30D009 ✓  
HANSEN GARY D & NANCY J  
W1336 US HWY 10  
GRANTON WI 54436-8566

56287B01L009 ✓  
HEAL LAWRENCE EUGENE  
HEDLUND-SMITH TRACEY R  
1321 S WILLIWAU DR  
PALMER AK 99645-7020



56287B03L007 ✓  
HILL DAVID R  
2551 PALMER WASILLA HWY  
WASILLA, AK 99654

53082B01L002 ✓  
IRWIN CHAS E  
HC 89 BOX 406B  
WILLOW, AK 99688

56287B02L005 ✓  
JACQUES LESTER E  
PO BOX 1000  
STERLING, AK 99672-1000

56287B02L004 ✓  
JACQUES LESTER E  
PO BOX 1000  
  
STERLING, AK 99672-1000

53082B04L002 ✓  
JONES MICHAEL CARTER  
PO BOX 13242  
  
TRAPPER CREEK, AK 99683-3242

56287B03L032 ✓  
KELLY ANNA  
L PO BOX 108  
  
CASHMERE WA 98815-0108

56287B03L005 ✓  
KILGO MICHAEL JAMES  
KILGO HATTIE TY LABUFF  
HC 89 BOX 482  
WILLOW AK 99688

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KILGO MICHAEL JAMES  
KILGO HATTIE TY LABUFF  
HC 89 BOX 482  
WILLOW AK 99688

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KILGO MICHAEL JAMES  
KILGO HATTIE TY LABUFF  
HC 89 BOX 482  
WILLOW AK 99688

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KILGO MICHAEL JAMES  
KILGO HATTIE TY LABUFF  
HC 89 BOX 482  
WILLOW AK 99688

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KORDUS CRISTI SIMMONS  
14436 BRANDY CT  
YELM, WA 98597-9115

56287B03L001 ✓  
KORDUS CRISTI SIMMONS  
14436 BRANDY CT  
YELM, WA 98597-9115

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LABUFF HATTIE TY  
HC 89 BOX 482  
WILLOW AK 99688

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LABUFF HATTIE TY  
HC 89 BOX 482  
WILLOW AK 99688

223N04W32B001 ✓  
LISTON-CUNNINGHAM VANESSA  
PMB 655  
7362 W PARKS HWY  
WASILLA AK 99654-9132

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LOPEZ JULIANA  
705 W 47TH AVE  
ANCHORAGE AK 99503

53082B04L005 ✓  
MANFUL RICK  
PO BOX 8  
WILLOW, AK 99688-0008

53082B04L004 ✓  
MANFUL RICK  
PO BOX 8  
WILLOW, AK 99688-0008

223N04W32A002 ✓  
MATANUSKA-SUSITNA BOROUGH  
350 E DAHLIA AVE  
PALMER AK 99645-6488

56287B03L029 ✓  
MATANUSKA-SUSITNA BOROUGH  
LAND MANAGEMENT DIVISION  
350 E DAHLIA AVE  
PALMER, AK 99645-6488

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MATANUSKA-SUSITNA BOROUGH  
LAND MANAGEMENT DIVISION  
350 E DAHLIA AVE  
PALMER, AK 99645-6488

56287B02L001 ✓  
MCCABE MICHAEL W  
HC 89 BOX 473  
WILLOW, AK 99688

0 56

56287B02L002 ✓  
MCCABE MICHAEL W  
HC 89 BOX 473  
WILLOW, AK 99688

0 56

56562B01L016 ✓  
MCDANIEL JAMES G  
PO BOX 1002  
CORDOVA AK 99574-1002

0 57

56287B03L024 ✓  
METRO MTG & SEC CO INC  
% BERNICE BURNS PO  
BOX 311945  
ANCHORAGE AK 99521

56287B03L025 ✓  
METRO MTG & SEC CO INC  
% BERNICE BURNS PO  
BOX 311945  
ANCHORAGE AK 99521

56287B03L019 ✓  
MILLER BERNARD & MCDONNELL LOREN  
YOUNG ISABELLA  
13025 BATES CIR  
ANCHORAGE AK 99515-3860



223N04W30D011 ✓  
MILLER HANS J & KELLI M  
HC 89 BOX 489  
WILLOW AK 99688-9705

56287B04L003 ✓  
NORTHCUTT ROBERT & NANCY  
# 1  
1641 ELCADORE DR  
ANCHORAGE AK 99507-4520

56287B04L005 ✓  
OLSON DOUGLAS LOWELL  
1150 GOLDEN HILLS DR  
PALMER, AK 99645

56287000T00B ✓  
OWNERS OF SPORTSMEN ACRES  
GENERAL DELIVERY  
WILLOW, AK 99688-9999

56562B01L002 ✓  
PEARSON JAMES G & LISA  
9807 E NORTHSTAR CIR  
PALMER AK 99645-8810

56287B02L006 ✓  
PFEFFER ANDREA S  
2787 LAND PARK DR  
SACRAMENTO, CA 95818

56287B03L020 ✓  
RADKE R A III & MARILYN  
129 CARNEGIE WAY  
FAIRBANKS, AK 99709

56287B03L021 ✓  
RADKE R A III & MARILYN  
129 CARNEGIE WAY  
FAIRBANKS, AK 99709

56287B01L001 ✓  
RATHBURN JEFF WILLIAM  
PO BOX 401  
FRIDAY HARBOR WA 98250-0401

56287B01L002 ✓  
RATHBURN JEFF WILLIAM  
PO BOX 401  
FRIDAY HARBOR WA 98250-0401

56287B01L003 ✓  
RATHBURN JEFF WILLIAM  
PO BOX 401  
FRIDAY HARBOR WA 98250-0401

52872B01L001 ✓  
REICHERT LAWRENCE III  
HC 89 BOX 488  
WILLOW AK 99688-9705

53082B03L001 ✓  
SHOOK TYLAN & JODY  
PO BOX 151  
TALKEETNA AK 99676-0151

56287B03L018 ✓  
SMITH DONALD F  
PO BOX 101357  
ANCHORAGE, AK 99510-1357

56287B03L017 ✓  
SMITH DONALD F  
PO BOX 101357  
ANCHORAGE, AK 99510-1357

56287B01L004 ✓  
SPAULDING LOREN  
HC 89 BOX 465  
WILLOW, AK 99688

51856000T00A ✓  
SPAULDING LOREN A  
HC 89 BOX 465  
WILLOW AK 99688

223N04W29C005 ✓  
SPURLIN ADA K  
GUTIERREZ RAMON  
HC 89 BOX 492  
WILLOW AK 99688-9705

223N04W29C009 ✓  
SPURLIN WALTER & OLIVE  
% NANCY STAUBER  
3601 LAKESHORE DR  
ANCHORAGE AK 99517

223N04W30D007 ✓  
SPURLIN WALTER & OLIVE  
% NANCY STAUBER  
3601 LAKESHORE DR  
ANCHORAGE AK 99517

223N04W29C008 ✓  
SPURLIN WALTER & OLIVE  
% NANCY STAUBER  
3601 LAKESHORE DR  
ANCHORAGE AK 99517

223N04W30D008 ✓  
SPURLIN WALTER & OLIVE  
% NANCY STAUBER  
3601 LAKESHORE DR  
ANCHORAGE AK 99517

223N04W30D012 ✓  
SPURLIN WALTER K & OLIVE  
% NANCY STAUBER  
3601 LAKESHORE DR  
ANCHORAGE AK 99517-2756

52872B01L003 ✓  
STEENBLIK BRIAN W  
ANDERSON JULIA A  
554 W 2400 S  
SYRACUSE UT 84075-9390

56287B01L005 ✓  
STOWERS DOUGLAS T  
1051 E 26TH AVE ANCHORAGE,  
AK 99508-3901

223N04W31A004 ✓  
TAYLOR RONALD W & L M  
HC 89 BOX 485  
WILLOW, AK 99688-9705

56287B02L003 ✓  
THOM RICHARD J  
4401 E MARIAH DR  
WASILLA, AK 99654

160506  
Susitna Community Council  
HC 89 Box 8575  
Talkeetna, AK 99676



223N04W29B004  
TISCHER MAE&TISCHER B L/E  
TISCHER M R&D F& J A ETAL TISCHER KAT  
HC 89 BOX 500  
WILLOW, AK 99688

53082B01L001  
VARNEY PATRICK D  
PO BOX 187  
WILLOW, AK 99688-0187

56287B01L015  
WALLACE CARL V & KATHRYN  
5221 S GENOA WAY  
CENTENNIAL CO 80015-3758

56287B04L001  
WALLACE CARL V& KATHRYN V  
% JOANN ADKINS  
5221 S GENOA WAY  
CENTENNIAL CO 80015-3758

56287B03L003  
WALLACE CARL V& KATHRYN V  
% JOANN ADKINS  
5221 S GENOA WAY  
CENTENNIAL CO 80015-3758

56287B03L013  
WALLACE CARL V& KATHRYN V  
% JOANN ADKINS  
5221 S GENOA WAY  
CENTENNIAL CO 80015-3758

56287B04L002  
WALLACE CARL V& KATHRYN V  
% JOANN ADKINS  
5221 S GENOA WAY  
CENTENNIAL CO 80015-3758

53082B04L001  
WATERS JOSEPH A  
5532 ALORA LOOP  
ANCHORAGE AK 99504-1047

56287B01L014  
WEATHERUP MARTIN G  
HUNTER REX  
601 E CHICKALOON WAY  
WASILLA, AK 99654

56287B03L016  
ZARR ROBERT W  
2425 MERRILL FIELD DR  
ANCHORAGE, AK 99501

56287B01L006  
ZEDLITZ JAY W & BETTY L  
PO BOX 401  
WILLOW, AK 99688

56287B01L013  
WEATHERUP MARTIN G  
HUNTER REX  
601 E CHICKALOON WAY  
WASILLA, AK 99654

53082B03L004  
WINSLOW JEFFERY A & P L  
PO BOX 521564  
BIG LAKE, AK 99652-1564

56287B03L015  
ZARR HAROLD L JR  
703 79TH DR NE  
LAKE STEVENS WA 98258-3368

86



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MTA Communications – KSH1  
 Community Meeting – May 23, 2016

Name	Address	Phone number	Email
Ramon Gutierrez	HCSA Box 492 Willow AK 99688	(907) 244-2095	ramon.g.gutierrez@hotmail.com
Brian Greiner	POB 561 Willow 99688	495 8331	brigreiners@gmail.com

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**Monday 5/23/16**

**MTA Communications Site KSH1  
Township 23N Range 4W Section 29 Lot C6  
15960 E Kashwitna Road**

**Pre-Application Meeting at Upper Susitna Senior/Community Center**

**Attendees**

Rod Ewing (MTAC), Julie Rowse (MTA), Sherrie Greenshields (NHTI)

Brian Grenier (Local Landowner), Ramon Gutierrez and Ada Gutierrez (Local Landowners), Randall Kowalke (Assembly Member)

**Purpose of meeting**

The MTA Communications team sent notification letters as required under Matanuska Susitna Borough, Chapter 17.67.050 Borough Municipal Code for a proposed tall tower, site name of KSH1.

MTAC was present to hear concerns about the proposed tower structure.

**Comments received**

Discussion items included the following items.

Question regarding co-location on the proposed tower. Will this be allowed?

*Response – the tower is rated for a total of 4 carriers. MTAC will be the carrier at the top of the tower. Others can locate below the MTAC installation.*

Discussion about proximity lights vs standard tower lighting fixtures. *Response - Rod Ewing to investigate proximity lights (these are controlled by radar and activated when an aircraft enters a perimeter in the vicinity of the tower).*

Question about electrical service termination point. If the site is approved and electrical service is routed to the facility will the powerline continue to the far lot line beyond the tower site? *Response - Only if it is a MEA requirement.*

Brian Grenier expressed his objections to the proposed location of the tower. Refer to his written comments. *Response – MTA will consider this question.*

Question asked about mailings. Who received and reasons why the Talkeetna Community Council was not included. *Response – mailing conformed to Borough Municipal Code 17.67.050. Susitna Community Council included in the mailing.*

After discussions, copies of three tower notification letters with attachments given to Randall Kowalke (Assembly Member). These include notification letters for KSH1, DLY1, and NSL1.

# Exhibit G

Summary Page & Written Public Comments



Date	Comment Received	Commenter	Land Parcel	Concerns	Comments	Response
5/10/2016	E-mail	John Breeden	Goose Creek Estates Block 1 Lot 3	The view and environments being impacted, the land value due to RF Radiation.		Federal permits are part of the application process for the proposed tower. An Environmental Impact Statement is not required for this project. All transmitting antennas shall be installed as set forth by the manufacturer and by the Federal Communications Commission (FCC) as meeting the current American National Standards Institute (ANSI) standard for nonionizing electromagnetic radiation.
5/13/2016	E-mail	John Breeden	Goose Creek Estates Block 1 Lot 3	Environmental impacts and mention of concerns about RF Radiation.		No environmental assessment required for site. No additional studies for RF Radiation. All transmitting antennas shall be installed as set forth by the manufacturer and by the Federal Communications Commission (FCC) as meeting the current American National Standards Institute (ANSI) standard for nonionizing electromagnetic radiation.
5/13/2016	E-mail	John Breeden	Goose Creek Estates Block 1 Lot 3	Asking if a impact study (environmental and health risk) was completed and requesting a copy		No environmental assessment required for site.
5/16/2016	E-mail	Brian Grenier	No Site Specified	Concerned that the shadow from the tower will impact future installation of solar panels. Also that it will impact the value of his land due to EMF's and RF.		The proposed tower will have no significant impact to future solar panels. All transmitting antennas shall be installed as set forth by the manufacturer and by the Federal Communications Commission (FCC) as meeting the current American National Standards Institute (ANSI) standard for nonionizing electromagnetic radiation.
5/31/2016	Comment Form	Daniel Bajema	16283 E. Kashwina	Plans to build future landing strip in conflict with proposed tower placement		FAA determination processed. No conflict noted with airfields.
5/31/2016	Comment form from letter	Danielle Bradley	Goose Creek Estates Block 3 Lot	Cultivating land for agricultural purposes and says the tower will be in the landing pattern of future landing strip.		FAA determination processed. No conflicts noted with airfields.
6/10/2016	E-mail	Melita White	No Site Specified	Does not want more towers up in the Willow area.	No tower identified, concerns applying to all proposed sites.	Tower is required to fill significant gap in service.
6/15/2016	E-mail	Bonnie Church	No Site Specified	Does not want more towers up in the Willow area.	No tower identified, concerns applying to all proposed sites.	Tower is required to fill significant gap in service.

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From: John Breeden [mailto:jkbreeden@cox.net]  
Sent: Tuesday, May 10, 2016 2:03 PM  
To: Permit Center <PermitCenter@matsugov.us>  
Subject: New Horizons Lattice antenna on Kashwitna Road

I don't like the idea of a tower at this location, there are far less populated areas to place this tower. It adversely affects the scenery and environment. In my option it will lower the property value because of the fear of communication towers and cancer risk. There has been studies that link different forms of cancer to RF/ radiation . Even the low doses that are approved by the FCC. I'm sure you can show me studies that say it's safe but I'm not happy about it. I realize the importance of better communication for safety and convenience but I don't want it in my neighborhood and a permit shouldn't be granted.

John Breeden  
16285 E Nosey Ave  
Goose Creek Estates Block 1 Lot 3

**From:** John Breeden [mailto:jkbreeden@cox.net]  
**Sent:** Friday, May 13, 2016 8:08 AM  
**To:** Permit Center <PermitCenter@matsugov.us>  
**Subject:** New Horizons Lattice antenna on Kashwitna Road

I would like to know if New Horizons Telecom, Inc did a impact study on placing a tower in this location. There are many family's in this area with small children and it would be inappropriate for Mat-Su Borough to approve a permit in this location. If they did do a impact study I would like to see a copy of it.

Thank You

John Breeden

## Why are cell phone towers particularly dangerous?

The threat comes from the constant nature of the activity of the towers; they emit pulsed radio frequency radiation. This radiation has been shown in thousands of studies to cause biological damage to the body and to be a precursor to disease.

What are some of the dangers (besides cancer), which result from this damage and are associated with EMFs and cell phone antennae?

- Genetic mutations
- Memory disruptions
- Hindered learning
- ADD
- Insomnia
- Brain disorders
- Hormonal imbalances
- Infertility
- Dementia
- Heart complications

These dangers clearly make it imperative to take action.

Learn more:

[http://www.naturalnews.com/040905\\_cell\\_phone\\_towers\\_radiation\\_cancer.html#ixzz48YGvF66y](http://www.naturalnews.com/040905_cell_phone_towers_radiation_cancer.html#ixzz48YGvF66y)

John Breeden  
16285 E Nosey Ave  
Goose Creek Estates Block 1 Lot 3

From: John Breeden [mailto:[jkbreeden@cox.net](mailto:jkbreeden@cox.net)]

Sent: Friday, May 13, 2016 8:21 AM

To: Sherrie Greenshields <[SGreenshields@nhtiusa.com](mailto:SGreenshields@nhtiusa.com)>; [permitcenter@matsugov.us](mailto:permitcenter@matsugov.us)

Subject: New Horizons Lattice antenna on Kashwitna Road

This is regarding the cell tower permit you applied for on Kashwitna Road. I would like to know if you did a impact study (environmental and personal health risk) on the tower at this location. If so can you please send me a copy.

Thank You

John Breeden

[jkbreeden@cox.net](mailto:jkbreeden@cox.net)

16285 E Nosey Ave

Goose Creek Estates Block 1 Lot 3

**From:** Brian Grenier [mailto:brigreenears@gmail.com]  
**Sent:** Monday, May 16, 2016 8:46 AM  
**To:** Permit Center <PermitCenter@matsugov.us>  
**Subject:** Comment on 180' tall structure 23N4WS29LotC6

Comment on 180' tall structure 23N4WS29LotC6 for MTA Communications

This tower casts a literal and figurative shadow across my families' land.

As the next door neighbor across Kashwitna Street, my land value and salability will be severely impacted without payment. This point is true due not to possible carcinogenic results of the Electro Magnetic Frequency (EMFs), radio frequency (RF) and microwave emission waves emanating from this radio tower at such close proximity, but my personal experience is that land and home buyers perception of a problem with EMFs with such a structure nearby creates a loss of property value

The tower, as it is due south of me and close enough, will actually shade my property diminishing my plans for solar electric energy and solar thermal energy at this location as well as my view to the much needed southern exposure here in the Matsu borough

The tower, being so close, may impact my amateur radios including personal radio controlled toys CB's, TV and radio reception and cell phone reception

The distance from the road of this proposed 180' tall tower was not specified on the public notice

Please hold this application until the applicants can negotiate with me for proper compensation

Brian Grenier  
PO Box 561  
Willow, AK 99688

408 418 8862



**MAY 31 2016**

**Received**

FIRST CLASS MAIL

Comment form for Citizen Participation Process

**Matanuska-Susitna Borough Code Section: MSB 17.67 – TALL STRUCTURES**

**Application or Item:** Conditional Use Permit - 180 ft lattice self supporting antenna structure  
**Applicant:** MTA Communications (Agent - New Horizons Telecom, Inc. - Sherrie Greenshields)  
**Applicant Phone#:** 907-760-6057 office; 907-315-3201 cell  
**Applicant Address:** New Horizons Telecom, Inc. - 901 Cope Industrial Way, Palmer, AK 99645  
**Meeting Date & Time:** Monday, May 23, 2016, 6 PM  
**Meeting Location:** 16463 Helena Avenue, Talkeetna, Alaska  
**Legal Description of Project:** Township 23N Range 4W Section 29 Lot C6

*Description of the proposed development including height, design, lighting, potential access to the site and proposed service:*

**MTA Communications (MTAC) will be making an application for a Conditional Use Permit for the placement of a 180 foot tall lattice type self-supporting antenna structure on the parcel referenced above. The attached Matanuska-Susitna Borough Land Information Parcel Report and google earth image, show both the parcel location and the proposed tower placement. Site access will be from a proposed driveway from Kashwitna Road. Potential tower lighting will be part of the discussion at the meeting.**

If you have any questions or, would like to send us comments, concerning the proposed action, this form may be used for your convenience by filling in the information below and mailing it to the Matanuska-Susitna Borough, Development Services Division, 350 East Dahlia, Palmer, Alaska 99645. You may fax comments to 861-7876 or e-mail to [permitcenter@matsugov.us](mailto:permitcenter@matsugov.us). Comments received prior to the meeting date will be included in the citizen participation report. Please be advised that comments received from the public after that date will not be included in the citizen participation report but will be included in the staff report to the Planning Commission. If there is not enough room below, please attach this sheet to another piece of paper.

**Name:** Daniel Bayema **Address:** 16283 E. Kashwitna  
**Location/Legal Description of your property:** Goose Creek Est Block 3 lot 5+  
**Comments:** As a property owner within the 1/2 mile range radius I am highly apposed to this tower being erected at this site. I (as well as my neighbors) have intentions of putting in a landing strip in which this tower would be directly in the landing pattern. - Due to my presence at work I am not able to make the meeting.



**MAY 31 2016**

**Received**

FIRST CLASS MAIL

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**Name:** Danielle Bradley **Address:** 16283 E. Kashwitna

**Location/Legal Description of your property:** Goose Creek est Block 3 lot 5

**Comments:** I am very dissatisfied w/this proposal. We are cultivating our land for agriculture and will have an airstrip as a crucial part to our way of life. This tower would directly defeat our ability to move forward with our homesteading progress.

**Leann Krey**

---

**From:** Alex Strawn <Alex.Strawn@matsugov.us>  
**Sent:** Friday, June 10, 2016 9:22 AM  
**To:** Sherrie Greenshields  
**Cc:** Mark Whisenhunt  
**Subject:** FW: Cell towers along the Parks Highway

**From:** Michelle Olsen **On Behalf Of** Permit Center  
**Sent:** Friday, June 10, 2016 9:17 AM  
**To:** Theresa Taranto  
**Cc:** Alex Strawn  
**Subject:** FW: Cell towers along the Parks Highway

More comments for the file

Michelle Olsen, CFM  
Permit Technician  
Matanuska-Susitna Borough  
350 E Dahlia Ave  
Palmer, AK 99645  
(907) 861-7871

**From:** Melitta [<mailto:ted.melitta@yahoo.com>]  
**Sent:** Friday, June 10, 2016 8:57 AM  
**To:** Permit Center; Susan Morgan; Bonnie Imlach Shurtleff  
**Subject:** Cell towers along the Parks Highway

Enough already! I practically live under a recently constructed tower and my cell phone reception is worse than ever and it was not very good to start with.

In addition you are ruining our views. We live here to get away from living in a commercial zone and now you are bringing it to us.

We say NO! more cell tower construction on the Parks Highway. They spoil the view and the rural character of our neighborhood. We don't need or want them.

Sincerely,  
Ted and Melitta White  
Willow Residents

**Leann Krey**

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**From:** Mark Whisenhunt <Mark.Whisenhunt@matsugov.us>  
**Sent:** Wednesday, June 15, 2016 10:50 AM  
**To:** Sherrie Greenshields  
**Subject:** FW: 3 cell towers in Willow

Respectfully,

Mark Whisenhunt  
Planner II  
Matanuska-Susitna Borough  
Office: (907) 861-8527  
Fax: (907) 861-7876  
mark.whisenhunt@matsugov.us

-----Original Message-----

From: Alex Strawn  
Sent: Wednesday, June 15, 2016 10:39 AM  
To: Mark Whisenhunt  
Subject: FW: 3 cell towers in Willow

-----Original Message-----

From: Michelle Olsen On Behalf Of Permit Center  
Sent: Wednesday, June 15, 2016 10:35 AM  
To: Alex Strawn; Theresa Taranto  
Subject: FW: 3 cell towers in Willow

For the files

Michelle Olsen, CFM  
Permit Technician  
Matanuska-Susitna Borough  
350 E Dahlia Ave  
Palmer, AK 99645  
(907) 861-7871

-----Original Message-----

From: Bonnie Church [mailto:getalong@mtaonline.net]  
Sent: Wednesday, June 15, 2016 10:31 AM  
To: Permit Center  
Subject: 3 cell towers in Willow

I am NOT in favor of 3 MORE cell towers going up in Willow. I don't understand why there have to be so many and I am totally against more being here in our community!!!  
Bonnie Church

**Theresa Taranto**

---

**From:** Michelle Olsen on behalf of Permit Center  
**Sent:** Monday, May 23, 2016 7:26 AM  
**To:** Theresa Taranto  
**Cc:** Alex Strawn  
**Subject:** FW: DLY1 - Conditional Use Permit for MTA Communications

Michelle Olsen, CFM  
Permit Technician  
Matanuska-Susitna Borough  
350 E Dahlia Ave  
Palmer, AK 99645  
(907) 861-7871

---

**From:** Moore, Eric A (DNR) [<mailto:eric.moore@alaska.gov>]  
**Sent:** Friday, May 20, 2016 12:44 PM  
**To:** Permit Center  
**Cc:** Cox, Clark A (DNR)  
**Subject:** DLY1 - Conditional Use Permit for MTA Communications

The Department of Natural Resources, Division of Mining, Land and Water, Southcentral Regional Office has no objection to the requested permit under the following condition(s):

1) The proposed tower and related infrastructure may not block or interfere with travel on Section Line Easements or any other State-managed easements or rights-of-way.

Sincerely,

**Eric Moore**  
Natural Resource Manager II  
Department of Natural Resources  
Division of Mining, Land & Water  
550 W 7th Ave, Suite 900C  
Anchorage, AK 99501  
(907)269-8548  
[eric.moore@alaska.gov](mailto:eric.moore@alaska.gov)

**Theresa Taranto**

---

**From:** Michelle Olsen on behalf of Permit Center  
**Sent:** Wednesday, May 18, 2016 10:12 AM  
**To:** Theresa Taranto  
**Cc:** Alex Strawn  
**Subject:** FW: New Horizons Lattice antenna on Kashwitna Road

Michelle Olsen, CFM  
Permit Technician  
Matanuska-Susitna Borough  
350 E Dahlia Ave  
Palmer, AK 99645  
(907) 861-7871

-----Original Message-----

From: Sherrie Greenshields [<mailto:SGreenshields@nhtiusa.com>]  
Sent: Wednesday, May 18, 2016 9:33 AM  
To: John Breeden; Permit Center  
Subject: RE: New Horizons Lattice antenna on Kashwitna Road

Mr. Breeden,

I apologize for the delay in replying.

MTA will be at the Susitna Community Council meeting this Thursday 5/19/16.

There is also a meeting scheduled Monday, May 23, 2016, at the Upper Susitna Senior/Community Center to discuss the proposed tower. The meeting begins at 6PM and is located at 16463 Helena Ave., Talkeetna, AK.

MTA will be compiling a response to questions received during the permitting process. This response will be included in the final permit application.

Thank you for your questions.

Sherrie

Sherrie Greenshields  
New Horizons Telecom, Inc.  
907-761-6057 office  
907-315-3201 cell

-----Original Message-----

From: John Breeden [<mailto:jkbreeden@cox.net>]  
Sent: Friday, May 13, 2016 8:21 AM  
To: Sherrie Greenshields <[SGreenshields@nhtiusa.com](mailto:SGreenshields@nhtiusa.com)>; [permitcenter@matsugov.us](mailto:permitcenter@matsugov.us)  
Subject: New Horizons Lattice antenna on Kashwitna Road

This is regarding the cell tower permit you applied for on Kashwitna Road. I would like to know if you did a impact study (environmental and personal health risk) on the tower at this location. If so can you please send me a copy.

**Theresa Taranto**

---

**From:** Michelle Olsen  
**Sent:** Tuesday, May 17, 2016 11:02 AM  
**To:** Theresa Taranto  
**Cc:** Alex Strawn  
**Subject:** Tower Comments  
**Attachments:** New Horizons Lattice antenna on Kashwitna Road; New Horizons Lattice antenna on Kashwitna Road; Comment on 180' tall structure 23N4WS29LotC6; New Horizons Lattice antenna on Kashwitna Road

Here are the emails we received while I was out of the office.

Michelle Olsen, CFM  
Permit Technician  
Matanuska-Susitna Borough  
350 E Dahlia Ave  
Palmer, AK 99645  
(907) 861-7871

**Theresa Taranto**

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- Genetic mutations
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- Hormonal imbalances
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These dangers clearly make it imperative to take action.

Learn more: [http://www.naturalnews.com/040905\\_cell\\_phone\\_towers\\_radiation\\_cancer.html#ixzz48YGvF66y](http://www.naturalnews.com/040905_cell_phone_towers_radiation_cancer.html#ixzz48YGvF66y)

John Breeden

16285 E Nosey Ave

Goose Creek Estates Block 1 Lot 3

**Theresa Taranto**

---

**From:** Brian Grenier <brigreenears@gmail.com>  
**Sent:** Monday, May 16, 2016 8:46 AM  
**To:** Permit Center  
**Subject:** Comment on 180' tall structure 23N4WS29LotC6

23n04w29c006

Comment on 180' tall structure 23N4WS29LotC6 for MTA Communications

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PO Box 561  
Willow, AK 99688

--  
408 418 8862

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[jkbreeden@cox.net](mailto:jkbreeden@cox.net)

16285 E Nosey Ave  
Goose Creek Estates Block 1 Lot 3

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This email has been checked for viruses by Avast antivirus software.  
<https://www.avast.com/antivirus>

**Theresa Taranto**

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John Breeden

16285 E Nosey Ave

Goose Creek Estates Block 1 Lot 3

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This email has been checked for viruses by Avast antivirus software.

<https://www.avast.com/antivirus>

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**INTRODUCTION FOR PUBLIC HEARING  
LEGISLATIVE**

**Resolution No. 16-27**

FY 2018 – 2023 Capital Improvement Program (CIP)

(Page 337 - 344)

**INTRODUCTION FOR PUBLIC HEARING**





# MATANUSKA-SUSITNA BOROUGH

PLANNING AND LAND USE DEPARTMENT

Planning Division

350 East Dahlia Avenue - Palmer, Alaska 99645

Fax (907)861-8876 - Phone (907)861-8833

## STAFF MEMORANDUM

DATE: August 3, 2016

MEETING DATE: August 15, 2016

TO: Planning Commission

THRU: Eileen Probasco, Planning and Land Use Director *E. Probasco*

FROM: Sara Jansen, Acting Planning Services Chief *S. Jansen*

SUBJECT: **Resolution 16-27:** A Resolution of The Matanuska-Susitna Borough Planning Commission Recommending that the Matanuska-Susitna Borough Assembly Adopt the FY 2018-2023 Capital Improvement Program.

---

**BACKGROUND:** Each year the Matanuska-Susitna Borough compiles a Capital Improvement Program (CIP). This annual process combines input from Community Councils, Borough Advisory Boards, Cities, Mayor and Assembly Members, Staff, and the general public to identify capital projects that are needed or wanted within the Borough. The final CIP is provided to Assembly Members, Legislators, Federal Delegations, and is often used as a basis for grant funding.

Nominations are sought from the general public, Community Councils, Cities, agencies and Borough staff members prior to the March deadline. There are minimal criteria; the projects must be over \$50,000 and funds may not be used for general maintenance. The top ten projects in each category constitute the priority list; other projects are compiled into a needs list in the final document.

Compiling the priority list is a combined effort of staff, advisory boards, the Planning Commission and the Borough Assembly. Panels of at least three staff members review each nomination against a weighted matrix. Those scores are used to develop the priority lists which are then presented to the appropriate advisory Board for review. The Board may have additional information about the projects and re-order the priority list. The final determination is made by the Borough Assembly. Each year the Assembly passes an annual legislative priority list; any CIP projects on the Assembly's priority list, move to the top of their respective sections.

A full document containing all of the nominated projects will be provided to the Planning Commission prior to the September 19, 2016 PC meeting and posted on the Borough's website. Supporting documents will also be in the next Planning Commission packet once the Public Hearing has been set.

**RECOMMENDATION:** Recommend the Matanuska-Susitna Borough Planning Commission adopt Resolution 16-27, recommending adoption of the FY 2018-2023 Capital Improvement Program by the Matanuska-Susitna Borough Assembly.

---

Attachment:

Resolution 16-27 – A Resolution of the Matanuska-Susitna Borough Planning Commission Recommending that the Matanuska-Susitna Borough Assembly Adopt the FY 2018-2023 Capital Improvement Program

By: Sara Jansen  
Introduced: August 15, 2016  
Public Hearing: September 19, 2015  
Action:

**MATANUSKA-SUSITNA BOROUGH  
PLANNING COMMISSION RESOLUTION NO. 16-27**

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH PLANNING COMMISSION RECOMMENDING THAT THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY ADOPT THE FY 2018-2023 CAPITAL IMPROVEMENT PROGRAM.

WHEREAS, MSB 3.04.060 requires the Borough Planning Department to develop a six-year capital improvement plan for proposed Capital Improvement Program; and

WHEREAS, Chapter 3.04.060 of the Borough code requires the Planning Commission to review and comment on the proposed Capital Improvement Program each year; and

WHEREAS, the Capital Improvement Program includes aviation, transportation, transit, port, plans, general public facilities, emergency services equipment and facilities, recreational facilities, trails, water resources, and school projects; and

WHEREAS, outreach was made to the general public, Community Councils, Borough staff, and Advisory Boards to submit nominations; and

WHEREAS, the Matanuska-Susitna Borough Assembly passed Resolution 15-097 in September, 2015 approving state legislative priorities for 2015; and

WHEREAS, a total of 228 submitted projects were reviewed by staff and subject matter experts against the evaluation criteria

established for all nominations to the Capital Improvement Program to create prioritized lists for each section of the Capital Improvement Program; and

WHEREAS, the Matanuska-Susitna Borough Transportation Advisory Board and the Matanuska-Susitna Borough Aviation Advisory Board, and the Borough Port Commission reviewed the prioritized lists and contributed their expertise to the lists, necessitating some re-ordering of priorities; and

WHEREAS, the advisory boards passed resolutions demonstrating support for the projects and confirmed the top ten priority projects for each section; and

WHEREAS, nominations which did not fall under the purview of the advisory boards were reviewed by staff; and

WHEREAS, a FY 2018-2023 Capital Improvement Program document was compiled for the Planning Commission review; and

WHEREAS, the Matanuska-Susitna Borough Planning Commission has reviewed the proposed Capital Improvement Program for FY 2018-2023.

NOW, THEREFORE, BE IT RESOLVED, that the Matanuska-Susitna Borough Planning Commission hereby recommends to the Matanuska-Susitna Borough Assembly to adopt the FY 2018-2023 Capital Improvement Program.

/

/

ADOPTED by the Matanuska-Susitna Borough Planning Commission this \_\_\_ day of \_\_\_, 2016.

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JOHN KLAPPERICH, Chair

ATTEST

---

MARY BRODIGAN, Planning Clerk

(SEAL)

DRAFT

YES:

NO:

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**PUBLIC HEARING  
LEGISLATIVE**

**Resolution No. 16-28**

Denali Hwy Mile 99 IMD

(Page 345 - 494)

**PUBLIC HEARING**



# **STAFF REPORT**





## MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

Development Services Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822 • Fax (907) 861-7876

www.matsugov.us

### DEVELOPMENT SERVICES DIVISION STAFF REPORT

**File Number:** 172820150006

**Applicant:** State of Alaska, Department of Transportation & Public Facilities

**Property Owner:** State of Alaska

**Request:** Planning Commission Resolution 16-28

A resolution recommending Assembly approval of an Interim Materials District (IMD), known as Denali Highway Mile 99, in accordance with MSB 17.28 - Interim Materials District, for the extraction of up to 500,000 cubic yards of material within a 69.91 acre parcel of property

**Location:** Denali Highway, Mile 99; within Township 19 South, Range 2 West, Sections 10 and 15, Fairbanks Meridian

**Public Hearing:** August 15, 2016

**Planning Commission Action:** The planning commission shall conduct a public hearing and render a recommendation to Borough Assembly on a designation for an Interim Materials District

**Reviewed By:** Eileen Probasco, Planning & Land Use Director *E.P.*  
Alex Strawn, Development Services Manager *A*

**Staff:** Susan Lee, Planner II *Susan*

**Staff Recommendation:** Approval with conditions

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### EXECUTIVE SUMMARY

An Interim Materials District (IMD) application has been submitted for an IMD designation on the above referenced parcel where a mining operation is proposed. The request is to extract up to 500,000 cubic yards of material until the year 2060 within a 69.91 acre parcel of property. The Department of Transportation & Public Facilities (DOT&PF) proposes to use this site for

material extraction to improve and maintain the Denali Highway. Mining volumes will be less than 10,000 per year.

An IMD designation is required under MSB 17.28 for sites where extraction activities are greater than 20 acres. An IMD may be established on private or public parcels and where extraction activities occur on 20 contiguous acres or greater. The subject parcel is located in Assembly District 1.

## LAND USE

### **Existing Land Use:**

The subject parcel is currently undeveloped. The property is located on the south side of the Denali Highway.

### **Surrounding Land Uses:**

Surrounding property is owned by the State of Alaska and is primarily used for recreational purposes. About one-quarter of a mile to the west of this site is a privately owned five acre parcel of property that is used as a commercial lodge operation.

## COMPREHENSIVE PLAN

This property is not located within a community council planning area. A comprehensive plan has not been adopted for this area. Currently, the MSB Comprehensive Plan (2005 Update) is used for the general guidance of planning activities.

## REVIEW OF APPLICABLE CRITERIA AND FINDINGS

### **MSB 17.03 – Public Notification**

The notification area of an IMD is a one-mile radius of the proposed site. However, since this is a remote area, notices were mailed to the owners of the five tax parcels nearest the property that is the subject of the application, per the requirements of MSB 17.03.020(A)(2). Notices were mailed to six property owners. Notification of this request was published in the June 28, 2016 *Frontiersman*. The application material was also posted on the Borough website. The property is not located within a community council boundary. One written comment was submitted.

### **Section 17.28.040 Required Compliance With State And Federal Laws**

*(A) All applicants for interim materials district designation are required to demonstrate compliance with state and federal law. Prior to final approval of the interim materials district, the applicant or agent shall provide written documentation of compliance with the following:*

- (1) mining license as required by the Alaska State Department of Revenue, pursuant to A.S. 42.65;*
- (2) mining permit as required by the Alaska State Department of Natural Resources (ADNR) if extraction activities are to take place on state land;*
- (3) reclamation plan as required by ADNR, pursuant to A.S. 27.19;*
- (4) notice of intent (NOI) for construction general permit or multi-sector general permit and storm water pollution prevention plan, and other associated permits or plans*

*required by the Environmental Protection Agency (EPA) pursuant to the Alaska Pollutant Discharge Elimination System (APDES) requirements; and*  
*(5) United States Army Corps of Engineers permit pursuant to Section 404 of the Clean Water Act, 33 U.S.C. 1344, if material extraction activity is to take place within wetlands, lakes and streams.*

**Finding:** A State of Alaska Department of Revenue license is not required for this application because Alaska law was amended in 2012 and rock, sand and gravel quarries are now exempt from the requirement.

**Finding:** A State of Alaska Department of Natural Resources (ADNR) Mining and Reclamation Plan has been approved.

**Finding:** The application material states that DOT&PF will acquire the Notice of Intent (NOI) as applicable. An Alaska NOI will be filed as part of a larger construction project impacting more than one acre and needing an Alaska Construction General Permit. A Multi-Sector General Permit (MSGP) will be applied for if the State finds this is the preferred permit.

**Finding:** A United States Army Corps of Engineers permit pursuant to Section 404 of the Clean Water Act is not required for this application as the applicant is not proposing any extraction activity to take place within identified wetlands, lakes, streams, or other waterbodies. The applicant provided a copy of a wetlands delineation report that was conducted for this site.

**Finding:** The applicant had wetlands delineation report prepared which identified some wetland formations within one mile of the site.

**Conclusion of Law:** All of the requirements to demonstrate compliance with state and federal law have been met (MSB 17.28.040(A)).

**Section 17.28.050 Site Development Plan Required**

*(A) The application for an interim materials district shall include a site development plan. The site development plan shall include, but not be limited to the following, as required by the conditions of the site, and shall be consistent with the standards in MSB 17.28.060:*

*(1) identification of surrounding property owners, existing land uses, and wetlands and waterbodies within one-quarter mile of the site;*

**Finding:** Surrounding property is owned by the State of Alaska and is primarily used for recreational purposes. About one-quarter of a mile to the west of this site is a privately-owned five acre parcel of property that is used as a commercial lodge operation.

**Finding:** The applicant had a wetlands and waterbodies delineation and functional assessment report prepared for this site. (A copy of this report is included with the application material).

**Conclusion of Law:** The surrounding property ownership, existing land uses, and wetlands and waterbodies within the notification area have been identified (MSB 17.28.050(A)(1)).

*(2) planned location of permanent and semipermanent structures for verification of setback requirements;*

**Finding:** The application material states that no semi-permanent or permanent structures are planned for the site. However, a generator, conveyor, and crusher will be on-site for one-month.

**Finding:** The application material states that a generator, conveyor, and crusher will be mobilized to the site for temporary projects and will be located variably within the site limits, as needed. This equipment will be used for operational and safety requirements and will be demobilization upon completion.

**Finding:** The equipment used on site will be placed in compliance with the setback requirements of MSB 17.55.

**Conclusion of Law:** Equipment used will be used for about one-month durations and will be required to be sufficiently set back from property lines and right-of-ways to meet MSB 17.55 setback requirements (MSB 17.28.050(A)(2)).

*(3) proposed phases of mining activities;*

**Finding:** The proposed phases of mining have been identified in the site plan and application, which are included in the record showing the location of each phase of mining activity within the subject parcel.

**Finding:** Mining will occur in five acre cells and as the cell is depleted, it will be reclaimed and closed out.

**Finding:** The application material states that one cell will be fully developed, as much as practical, and reclaimed, before the next cell is opened. Parts of one or more cells may be left open to be used as staging/work areas as needed.

**Conclusion of Law:** Phases of proposed mining activities have been identified on the site plan (MSB 17.28.050(A)(3)).

*(4) roads and access plan;*

**Finding:** According to the application material, there will be one gravel driveway, approximately 30 feet wide, constructed to the extraction area and will be approximately 1,200 feet long.

**Finding:** The driveway will access directly onto the Denali Highway.

**Finding:** According to the application material, the intersection with the highway will have adequate site distances for safety.

**Finding:** Traffic generated from this site will be associated with the maintenance of the Denali Highway.

**Finding:** The application material states that no problems with road maintenance are anticipated, as ADOT is responsible for maintenance of the Denali Highway and this material site will be used to aid in those efforts.

**Conclusion of Law:** The proposed traffic route has been identified. Traffic generated from the proposed use will not exceed 100 vehicles during the morning or afternoon peak hours or more than 750 vehicles a day, as specified in MSB 17.61.090, Traffic Standards (MSB 17.28.050(A)(4)).

*(5) visual screening measures;*

**Finding:** Esker ridges near the road will be left intact to serve as a visual screen. A 100-foot wide undisturbed buffer will be maintained along the Denali Highway right-of-way and along the section line easement on the east boundary. A 50-foot wide undisturbed buffer will be maintained around the remaining perimeter of the site.

**Finding:** The application material states that if mining activities are to take place within 300 feet of the property boundaries, visual buffers a minimum of ten feet in height, including vegetative buffers and/or earthen berms will be employed.

**Conclusion of Law:** Natural vegetation, topography and berms will be used to meet the visual screening methods (MSB 17.28.050(A)(5)).

*(6) noise mitigation measures; and*

**Finding:** The site will be buffered with natural vegetation, topography, and berms

**Finding:** The site is remote with very low potential for disturbances from noise.

**Finding:** No blasting is planned at this site.

**Finding:** There are no identified significant or sensitive sound receptors within the vicinity of the proposed development.

**Finding:** The application material states that hours of operation may vary depending on the project schedule. However, the site may be utilized up to seven days a week from 7 am to 9 pm.

**Finding:** The site will be used May through September, depending on conditions and the project.

**Conclusion of Law:** Noise mitigation measures include retention of natural vegetation and topography. Proximity from sound receptors will ensure that sounds generated from earth material extraction activities do not exceed sound levels set forth in MSB 17.28.060(A)(5)(a). Noise levels exceeding the levels in 17.28.060(A)(5)(a) are prohibited.

*(7) proposed lighting.*

**Finding:** Most of the work will be conducted during the summer and operations will primarily occur during daylight hours.

**Finding:** If lighting is needed it will only be used to illuminate activities in the work area.

**Finding:** Any exterior lighting will be located and shielded to direct light towards the ground to minimize light spillage onto adjacent properties and upward into the night sky.

**Finding:** Illumination or other fixtures mounted higher than 20 feet or greater than 150 watts must have downward directional shielding.

**Conclusion of Law:** Based on the findings above, the applicant meets lighting standards in accordance with MSB 17.28.050(A)(7).

**Section 17.28.060 Site Development Standards**

*(A) Standards for the interim materials district site development plan are as follows:*

*(1) identification of surrounding property owners, existing land uses, and wetlands and waterbodies within one-quarter mile of the site;*

**Finding:** Surrounding property is owned by the State of Alaska and is primarily used for recreational purposes. About one-quarter of a mile to the west of this site is a privately-owned lodge on a five acre parcel of property.

**Finding:** The applicant had a wetlands and waterbodies delineation and functional assessment report prepared for this site. A copy of this report is included with the application material.

**Finding:** The proposed activities will not take place within any wetlands.

**Finding:** An undisturbed buffer of 100 linear feet will be maintained between all earth material extraction activities and all identified wetlands and waterbodies.

**Conclusion of Law:** Based on the above findings, the surrounding property ownership, existing land uses, and wetlands and water bodies within one mile have been identified (MSB 17.28.060(A)(1)).

*(2) phases of proposed mining activities including a map showing the area to be mined, a description of the topography and vegetation, approximate time sequence for mining at particular locations, and general anticipated location of semi-permanent equipment such as conveyor belts, crushers, dredges, batch plants, etc.*

**Finding:** The site contains several eskers, fluvial-glacial deposits formed into discrete ridges. Material in the eskers generally consists of sand and gravel with silt, cobbles and boulders.

**Finding:** Vegetation on the site consists of scattered spruce, dwarf birch, alder and tundra.

**Finding:** The proposed phases of mining have been identified in the site plan and application showing the location of each phase of mining activity within the subject parcel.

**Finding:** The applicant's planned location of the equipment conform to the setback requirements.

**Conclusion of Law:** Phases of proposed mining activities, description of the topography and vegetation, and approximate time sequence for the duration of the mining activity have been determined. Equipment will not be located within the required setbacks (MSB 17.28.60(A)(2)).

*(3) The road and access plan shall include anticipated routes and traffic volumes, and shall be approved by the director. If the level of activity exceeds the minimum levels specified in MSB 17.61.090, traffic standards, a traffic control plan consistent with state regulations may be required;*

**Finding:** According to the application material, there will be one driveway directly accessing the Denali Highway.

**Finding:** The traffic generated from this site will be for the maintenance of the Denali Highway.

**Conclusion of Law:** The proposed traffic route and traffic volumes have been identified. Traffic generated from the proposed use will not exceed 100 vehicles during the morning or afternoon peak hours or more than 750 vehicles a day, as specified in MSB 17.61.090, Traffic Standards (MSB 17.28.60(A)(3)).

*(4) visual screening measures shall include a detailed description of the type of visual screening to be utilized, and shall be maintained as necessary during the course of extraction activities. Visual screening may include, but is not limited to, berms, natural vegetation, solid fences, walls, evergreen hedges or other means as approved by the commission. If mining is planned to be conducted within 300 feet of the property line, berms or other visual screening methods shall be a minimum of ten feet in height. If mining is planned to be conducted greater than 300 feet from the property line, the applicant shall utilize commission-approved screening methods to minimize visual impacts of the mining operation. The commission shall adopt policies and procedures to assist applicants in developing screening plans. In its discretion, the commission may waive screening requirements where the topography of the property or the placement of natural barriers makes screening not feasible or not necessary. Screening requirements shall be required in consideration of and in accordance with existing uses of adjacent property at the time of designation of the interim materials district. An interim materials district shall not be required to screen the district from uses which arise after the designation of the interim materials district;*

**Finding:** Esker ridges near the road will be left intact to serve as a visual screen. A 100-foot wide undisturbed buffer will be maintained along the Denali Highway right-of-way and along the section line easement on the east boundary. A 50-foot wide undisturbed buffer will be maintained around the remaining perimeter of the site.

**Finding:** The application material states that if mining activities are to take place within 300 feet of property boundaries, visual buffers a minimum of 10 feet in height, including vegetative buffers and/or earthen berms will be employed.

**Finding:** All wetlands and waterbodies will be buffered by a 100 foot wide strip of natural vegetation.

**Conclusion of Law:** Natural vegetation, existing topography and berms will be used to meet the visual screening requirements (MSB 17.28.60(A)(4)).

*(5) noise mitigation measures shall include a description of measures to be taken by the applicant to mitigate or lessen noise impacts to surrounding properties and shall include, but not be limited to, hours of operation of noise-producing equipment, erecting noise barriers (i.e., berms a minimum of ten feet in height) between noise-producing equipment and adjacent uses, location of noise-producing equipment (i.e., below grade in excavated pit areas), and measures to utilize equipment with noise reduction features.*

*(a) no sound resulting from the earth materials extraction activities shall create a sound level that exceeds the limits set forth for the existing receiving land use category in Table 1 when measured at or within the property boundary of the receiving land us:*

**Table 1. Sound Levels by Receiving Land Use**

<b>Receiving Land Use Category</b>	<b>Time</b>	<b>Sound Level Limit (dB(A))</b>
<i>Residential Use</i>	<i>7 a.m. – 10 p.m.</i>	<i>60</i>
	<i>10 p.m. – 7 a.m.</i>	<i>50</i>
<i>Commercial Use</i>	<i>7 a.m. – 10 p.m.</i>	<i>70</i>
	<i>10 p.m. – 7 a.m.</i>	<i>60</i>
<i>Industrial Use or Undeveloped Land</i>	<i>At all times</i>	<i>80</i>

*(b) [Repealed by Ord. 08-150, § 2, 2008]*

*(c) for any sound that is of short duration, between the hours of 7 a.m. and 7 p.m. the levels established in Table 1 may be increased by:*

*(i) five dB(A) for a total of 15 minutes in any one hour; or*

*(ii) ten dB(A) for a total of five minutes in any hour; or*

*(iii) fifteen dB(A) for a total of one and one-half minutes in any one-hour period.*

*(d) an interim materials district or a conditional use permit for earth materials extraction activities shall not be required to provide noise mitigation measures to*

*mitigate or lessen noise impacts if a land use requiring lesser noise levels than for an industrial area arises on properties adjacent to earth materials extraction sites after the designation of the interim materials district or the effective date of the conditional use permit.*

**Finding:** The application material states that hours of operation may vary depending on the project schedule. However, the site may be utilized up to seven days a week from 7 am to 9 pm.

**Finding:** The site will be used May through September, depending on conditions and the project.

**Finding:** The site is located in a remote area along the Denali Highway.

**Finding:** The closest developed property is about one-quarter of a mile west of this site.

**Conclusion of Law:** Noise mitigation measures include retaining vegetation and topography to ensure that sounds generated from earth material extraction activities do not exceed sound levels set forth in MSB 17.28.060(A)(5)(a). Noise levels exceeding the levels in 17.28.060(A)(5)(a) are prohibited.

*(6) lighting standards are:*

*(a) exterior lighting shall be located and shielded to direct the light towards the ground, in order to minimize light spillage onto adjacent properties and upward into the night sky.*

*(b) illumination or other fixtures mounted higher than 20 feet or 150 watts or more shall have downward directional shielding.*

**Finding:** According to the application material most of the work will be conducted during the summer season and operations will primarily occur during daylight hours without the need for artificial lighting.

**Finding:** If lighting is needed it will only be used to illuminate activities in the work area.

**Finding:** Exterior lighting will be located and shielded to direct light towards the ground in order to minimize light spillage onto adjacent properties and upward into the night sky.

**Finding:** Illumination or other fixtures mounted higher than 20 feet, or greater than 150 watts must have downward directional shielding.

**Conclusion of Law:** Based on the above finding, the applicant meets lighting standards in accordance with MSB 17.28.060(A)(6).

*(7) Except as permitted by MSB 17.30.037, the following restrictions shall apply: an undisturbed buffer shall be left and no earth material extraction activities shall take place within 100 linear feet from a lake, river, stream, or other water body, including wetlands (unless permitted by U.S. Army Corps of Engineers 404 Permit, MSB 17.28.040(A)(5)).*

**Finding:** The applicant had a wetlands delineation report prepared and there are not any wetlands in the extraction site.

**Finding:** The proposed activities will not take place within any wetlands.

**Finding:** The application material indicates an undisturbed buffer of 100 linear feet will be maintained between all earth material extraction activities and all identified wetlands and waterbodies.

**Conclusion of Law:** Based on the above findings, the applicant will not conduct earth material extraction activities within 100 linear feet of any identified wetland, stream, river or other waterbody (MSB 17.28.60(A)(7)).

**Section 17.28.080 Procedures For Initiating An Interim Materials District (IMD)**

*17.28.080(C)(2) The commission shall report to the assembly on whether the applicant has met the standards delineated in MSB 17.28.050 and 17.28.060 and what effect the proposed interim materials district would have on the public health, safety, and general welfare of the Matanuska-Susitna Borough. The commission in its report to the assembly shall recommend to the assembly approval, denial, modifications, or conditions of approval for the proposed action, and shall include findings on the following:*

*(a) whether the proposed interim materials district is compatible with the goals and objectives of the comprehensive plan;*

**Finding:** The proposed site is not located within a community council boundary. A community comprehensive plan has not been adopted for this area.

**Finding:** The property reverts to the guidelines established in the MSB Comprehensive Plan (2005 Update). The Plan does not specifically address earth material extraction activities.

**Finding:** Land Use Goal LU-1: *Protect and enhance the public safety, health, and welfare of Borough residents.* Policy LU-1: Provide for consistent, compatible, effective, and efficient development within the Borough.

**Finding:** Community Quality Goal CQ-1: *Protect natural systems and features from the potentially negative impacts of human activities, including, but not limited to, land development.* Policy CQ1-2: Manage activities affecting air, vegetation, water, and the land to maintain or improve environmental quality, to preserve fish and wildlife habitat, to prevent degradation or loss of natural features and functions, and to minimize risks to life and property.

**Conclusion of Law:** Based on the above findings, the proposed IMD is consistent with the Matanuska-Susitna Borough Comprehensive Plan (2005 Update) (17.28.080(C)(2)(a)).

*(b) whether the proposed interim materials district negatively affects public health, safety or general welfare; and*

**Finding:** According to the application material, the operation will stay at a minimum four feet above the water table.

**Finding:** Test pits will be dug within each cell to ensure there is suitable depth of material four feet above the water table prior to commencement of mining operations; mining operations will be revised if necessary.

**Finding:** Slopes will be no steeper than 2H:1V to provide acceptable public safety, stability and erosion control.

**Finding:** Mining will occur in five acre cells and as the cell is depleted, it will be reclaimed and closed out.

**Finding:** Land uses within one mile of the site include undeveloped property owned by the State of Alaska and a privately owned five acre parcel that is used as a commercial lodge operation.

**Finding:** Dust control will be addressed as needed during operations by watering or other standard methods.

**Finding:** A Storm Water Pollution Prevention Plan (SWPPP) is not needed at this time. A SWPPP is only required if a single project will be disturbing one or more acres of ground and has the potential to discharge runoff to waters of the U.S. When a project is planned for the site that meets those criteria, a SWPPP and associated tasks will be implemented.

**Conclusion of Law:** Based on the information provided, the proposed use with conditions, will not be harmful to the public health, safety, convenience and welfare (MSB 17.28.080(C)(2)(b)).

*(c) whether the proposed interim materials district has met the site development standards of this chapter including compliance with all required local, state, and federal laws.*

**Finding:** All of the site plan and site development requirements have been provided.

**Conclusion of Law:** The applicant has met all of the requirements of MSB 17.28.050 and 17.28.060 and the applicant has demonstrated the ability to comply with State and Federal laws (17.28.080(C)(2)(c)).

## **STAFF RECOMMENDATIONS**

Staff recommends approval of the Interim Materials District with the following conditions:

1. The owner and/or operator shall comply with all other applicable federal, state, and local regulations.
2. All aspects of the operation shall comply with the description detailed in the application material and an amendment to the IMD shall be required prior to any alteration or expansions of the material extraction operation.
3. Material extraction shall be limited to the areas identified in the site plan received by the borough June 8, 2016.
4. Vehicles and equipment shall be staged at a designated location and all equipment shall be inspected by the operator for leaks at the end of each day.

5. On-site maintenance of vehicles shall be done in an area where all leaks can be contained with drip pans or other discharge prevention devices.
6. All hazardous materials, drips, leaks, or spills shall be promptly attended to and properly treated.
7. If a project is planned for the site that requires a Storm Water Pollution Prevention Plan (SWPPP), a copy of the approved SWPPP shall be provided to the Planning Department prior to operating.
8. All construction exits shall comply with standard Alaska Pollutant Discharge Elimination System requirements to minimize off-site vehicle tracking of sediments and discharges to storm water.
9. A four-foot vertical separation shall be maintained between all excavation and the seasonal high water table.
10. The operation shall comply with the maximum permissible sound level limits allowed in MSB Code, per the requirements of MSB 17.28.060(A)(5)(a) – Site Development Standards and MSB 8.52 – Noise, Amplified Sound, and Vibration.
11. If illumination devices are required, they shall not be greater than 20 feet in height, shall utilize downward directional shielding devices, and shall meet the requirements of MSB 17.28.060(A)(6) Lighting Standards.
12. If cultural remains are found during material extraction activities, the MSB Planning Department shall be contacted immediately so the remains can be documented.
13. Borough staff shall be permitted to enter onto any portion of the property to monitor compliance with permit requirements. Such access will at a minimum be allowed on demand when activity is occurring and, with prior verbal or written notice, and at other times as necessary to monitor compliance. Denial of access to Borough staff shall be a violation of the Interim Materials District.
14. The applicant and/or operator shall comply with the reclamation standards of MSB 17.28.067.
15. Visual screening shall be achieved and maintained by using a combination of the esker ridges near the Denali Highway and a 100-foot wide undisturbed buffer maintained along the Denali Highway right-of-way and along the section line easement on the east boundary. A 50-foot wide undisturbed buffer will be maintained around the remaining perimeter of the site.
16. If mining activities take place within 300 feet of the property boundaries, visual buffers a minimum of ten feet in height, including vegetative buffers and/or earthen berms shall be employed.
17. All activity shall be conducted in compliance with state or federal regulations governing the items listed in MSB 17.28.040(B)(1), 17.28.040(B)(2), and 17.28.040(B)(3).

The IMD must be approved by the Matanuska-Susitna Borough Assembly. If the Planning Commission chooses to recommend denial of this IMD, findings for denial must be prepared by the Commission.

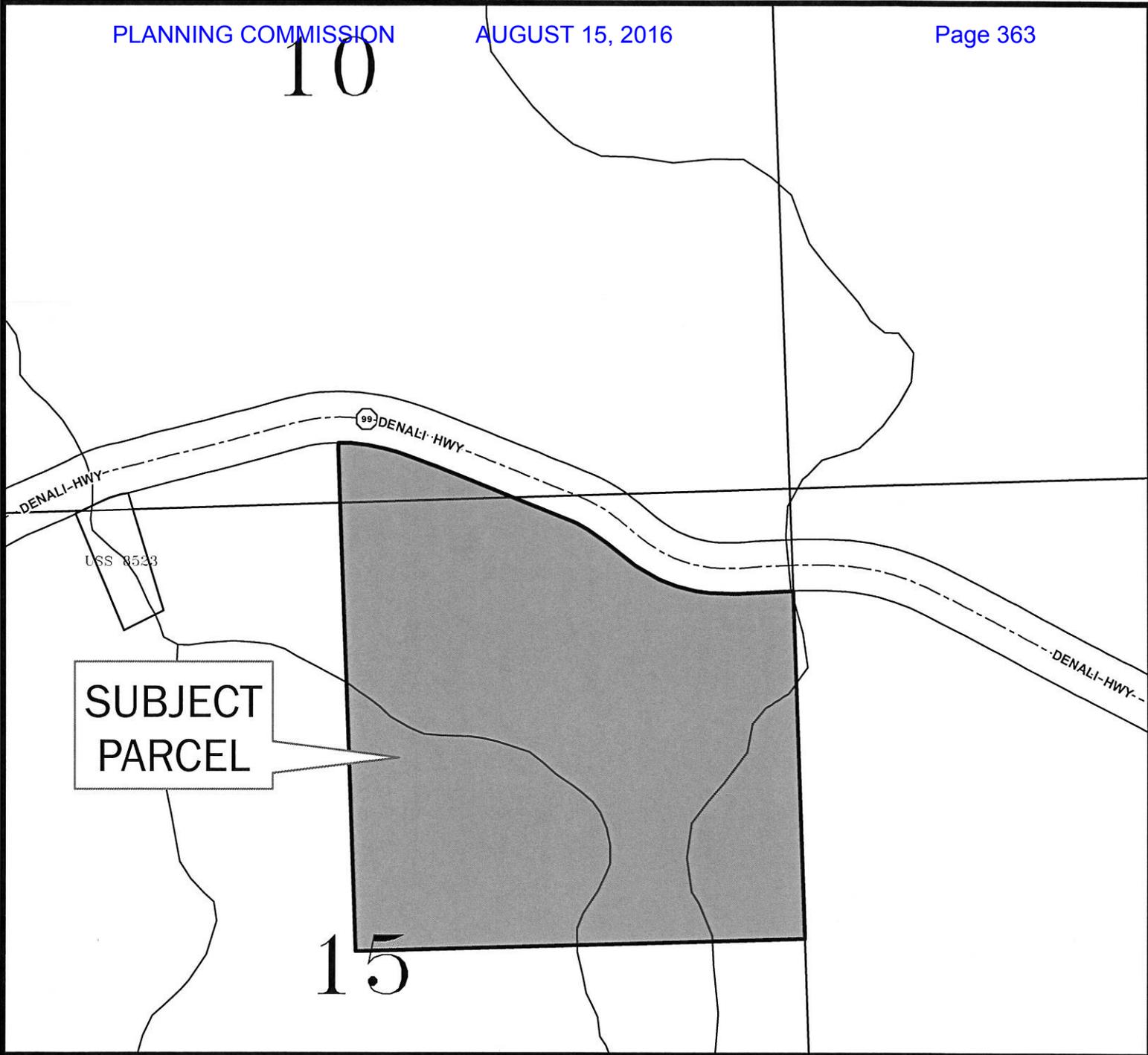
# VICINITY MAP

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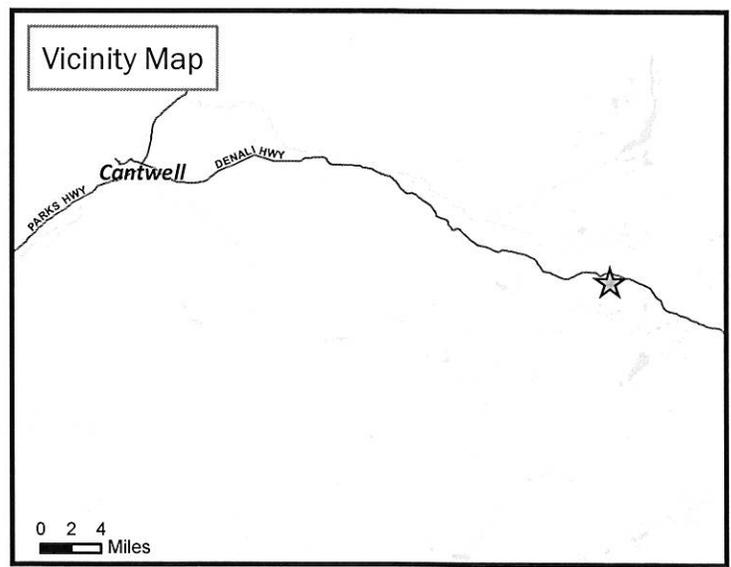


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19S02W10  
19S02W15



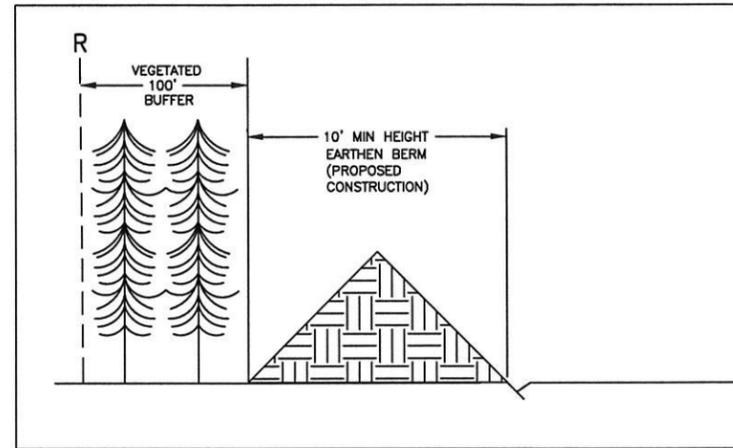
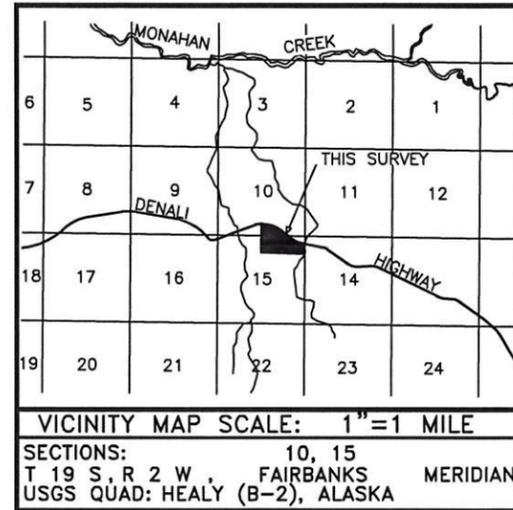
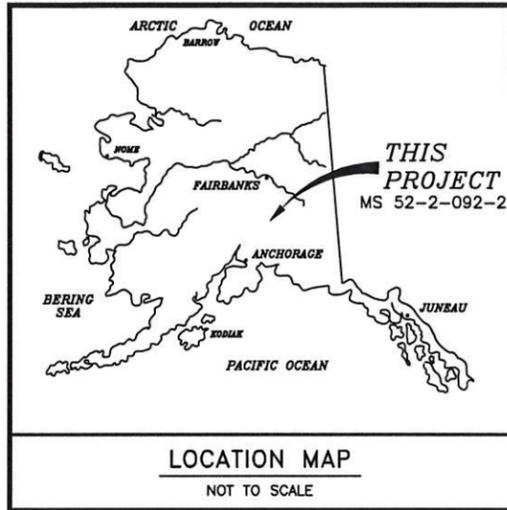
This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matanuska-Susitna Borough GIS Division at 907-861-7801.





# **SITE PLAN**





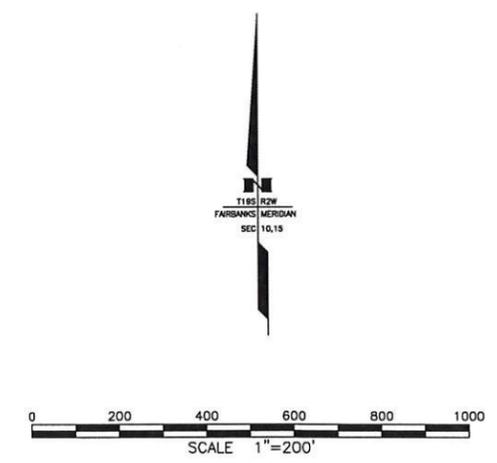
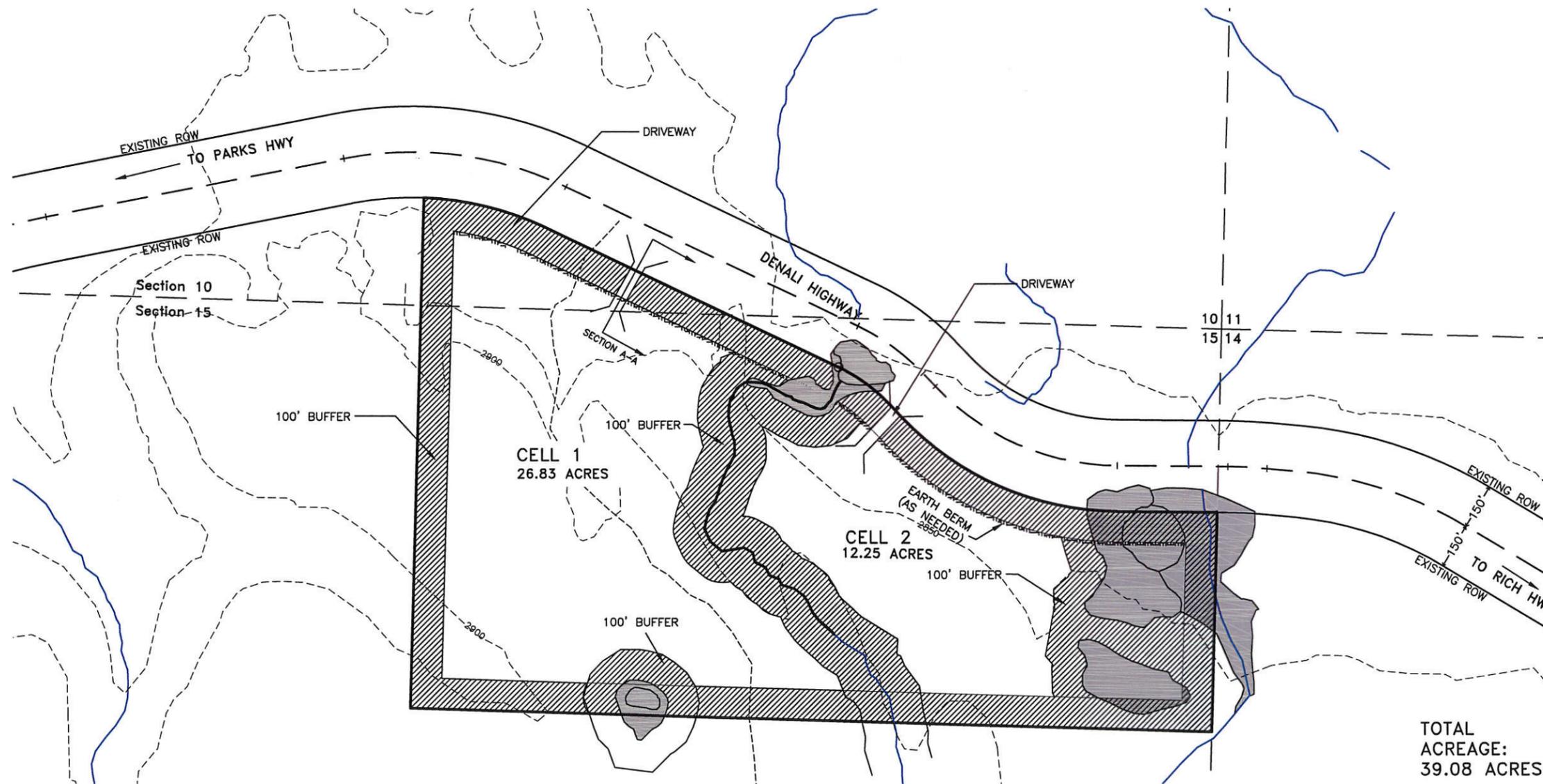
Matanuska - Susitna Borough  
Development Services

JUN 08 2016

Received

**NOTE:**

- CONTOURS ARE TAKEN FROM "USGS TOPOGRAPHY MAP"
- EARTHEN BERM TO BE CONSTRUCTED AS NEEDED.



TOTAL  
ACREAGE:  
39.08 ACRES  
CONTROL SHEET

DATE:			
NAME AND ADDRESS: Department of Transportation and Public Facilities (DOT&PF) 2301 Peger Road Fairbanks, Alaska 99709			
<b>SITE PLAN</b>			
DRAWING OF MS 52-2-092-2 DENALI HIGHWAY MATERIAL SITE M.P. 99 AKSAS PROJECT #62374 within UNSURVEYED SECTIONS 10 AND 15, T 19 S, R 2 W, FAIRBANKS MERIDIAN, ALASKA NENANA RECORDING DISTRICT			
DRAWN BY:	SCALE: 1"=200'	CHECKED BY:	FILE NO.:

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# **APPLICATION MATERIAL**





MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

350 East Dahlia, Palmer, Alaska 99645
(907)861-7822 \* fax (907)861-7876
PermitCenter@matsugov.us

Matanuska - Susitna Borough
Development Services

JUN 08 2016

APPLICATION
Earth Materials Extraction

Received

Carefully read instructions and applicable borough code. Fill out forms completely. Attach information as needed. Incomplete applications will not be processed.

THIS APPLICATION IS FOR MATERIALS EXTRACTION THAT DOES NOT OCCUR WITHIN FOUR FEET OF THE SEASONAL HIGH WATER TABLE. IF YOUR PLAN INCLUDES EXTRACTION WITHIN FOUR FEET OF THE SEASONAL HIGH WATER TABLE YOU MUST COMPLETE THE APPLICATION SPECIFIC TO THAT PURPOSE.

Application fee must be attached, check one:

- \$ 500 for Administrative Permit
\$1,000 for Conditional Use Permit
\$2,000 for Interim Materials District - earth materials extraction on sites greater than 20 acres

Prior to public hearing, the applicant must also pay for costs of advertising and mailing of public notices.

Subject property Township: 19S, Range: 2W, Section: 10 & 15, Meridian F

MSB Tax Account #

SUBDIVISION: BLOCK(S): LOT(S):

STREET ADDRESS:

(US Survey, Aliquot Part, Lat. /Long. etc) See attached site development plan and survey

\*\* A legal description must be provided for partial-lot Interim Materials Districts\*\*

Ownership If the applicant is different from the owner, then a Letter of Authorization must be included.

Is authorization attached? Yes No N/A

Name of Property Owner

Name of Agent/ Contact for application

State of Alaska, DNR

Northern Region ROW, DOT&PF

Address: 550 W. 7th Ave. Suite 900

Address: 2301 Peger Road MS 2553

Anchorage, Alaska 99501-3577

Fairbanks, Alaska 99709-5316

Phone: Hm Fax

Phone: Hm Fax

Wk 907 269-8560 Cell

Wk 907 451-5425 Cell

E-mail Chandler.porter@alaska.gov

E-mail kahlil.wilson@alaska.gov

Description What type(s) of material is being extracted?

sand, gravel, with silt, cobbles and boulders

Total acreage area of all parcels on which the activity will occur: 69.91

Total acreage area of earth material extraction activity: Dependant on Project needs

Total cubic yards extraction per year: Less than 10,000cy

Total projected cubic yards to be extracted: 500,000cy

What is the estimated final year extraction will occur? 2060

Required information

1. Attach a plan of sufficient detail to demonstrate compliance with the requirements of MSB 17.28.050 and MSB 17.28.060.

Plan of Operation	Attached
Provide seasonal start and end dates	X
Provide days of the week operations will take place.	X
Provide hours of operation.	X
Estimated end date of extraction	X
Estimated end date of reclamation	X
Describe all other uses occurring on the site	X
Describe methods used to prevent problems on adjacent properties, such as lateral support (steep slopes), water quality, drainage, flooding, dust control and maintenance of roads	X
Provide quantity estimates and topographical information such as cross section drawings depicting depth of excavation, slopes and estimated final grade	X

2. Submit a site plan. Drawings must be detailed and drawn to scale. Drawings under seal of an engineer or surveyor are recommended but not required.

SITE PLAN REQUIREMENTS	Attached
Identify location of permanent and semi-permanent structures on the site for verification of setback requirements. Include wells and septic systems.	X
Depict buffer areas, driveways, dedicated public access easements, and noise buffers (such as fences, berms or retained vegetated areas), and drainage control such as ditches, settling ponds etc.	X
Identify wetlands and waterbodies on site and within one mile	X
Identify existing surrounding land uses within one mile	X
Identify surrounding property ownership (i.e. public vs. private) within one mile of exterior boundaries	X
Show entire area intended for gravel/material extraction activity and the boundary of the lot(s) containing the operation. Identify areas used for past and future phases of the activity. Identify phases of proposed mining activities including a map showing the area to be mined, a description of the topography and vegetation, approximate time sequence for mining at particular locations, and general anticipated location of semi-permanent equipment such as conveyor belts, crushers, dredges, batch plants, etc.	X
Road and access plan that includes anticipated routes and traffic volumes. If the level of activity exceeds the minimum levels specified in MSB 17.61.090, traffic standards, a traffic control plan consistent with state regulations may be required	X
Visual screening measures that include a detailed description of the type of visual screening to be utilized. Visual screening may include, but is not limited to, berms, natural vegetation, solid fences, walls, evergreen hedges or other means as approved by the commission	X
Noise mitigation measures that include a description of measures to be taken by the applicant to mitigate or lessen noise impacts to surrounding properties. Measures shall include, but not be limited to, hours of operation of noise-producing equipment,	X

erecting noise barriers (i.e., berms a minimum of 10 feet in height) between noise-producing equipment and adjacent uses, location of noise-producing equipment (i.e., below grade in excavated pit areas), and measures to utilize equipment with noise reduction features	
Proposed lighting plan	X
Other (as required by MSB Planning Department)	X

3. Submit a reclamation plan including the following:

Reclamation Plan	Attached
Provided timeline for reclamation at particular locations	X
Provide copy of reclamation financial assurance filed with the State of Alaska (If exempt, provide qualifying documents for exemption)	X

4. Submit documentation of compliance with borough, state and federal laws:

COMPLIANCE WITH BOROUGH, STATE AND FEDERAL LAWS	Applied for (list file #)	Attached (list file #) or N/A
Mining license as required by the Alaska State Department of Revenue, pursuant to A.S.42.65		X
Mining permit as required by the Alaska State Department of Natural Resources (ADNR) if extraction activities are to take place on state land		X
Reclamation plan as required by ADNR, pursuant to A.S. 27.19		X
Notice of intent (NOI) for construction general permit or multi-sector general permit and storm water pollution prevention plan, and other associated permits or plans required by the Environmental Protection Agency (EPA) pursuant to the National Pollutant Discharge Elimination System (NPDES) requirements		X
United States Army Corps of Engineers permit pursuant to Section 404 of the Clean Water Act, 33 U.S.C. 1344, if material extraction activity is to take place within wetlands, lakes and streams.		X
Others (list as appropriate)		X

5. OWNER'S STATEMENT: I am owner of the following property:

MSB Tax parcel(s) ID #(s) Legal Description: See attached Site Development Plan and Survey  
and,

I hereby apply for approval of material extraction activity on that property as described in this application.

I understand all activity must be conducted in compliance with all applicable standards of MSB 17.28, MSB 17.30 and with all other applicable borough, state or federal laws, including but not limited to, air quality, water quality, and use and storage of hazardous materials, waste and explosives, per MSB 17.28.040.

I understand that other rules such as local, state and federal regulations, covenants, plat notes, and deed restrictions may be applicable and other permits or authorization may be required. I understand that the borough may also impose conditions and safeguards designed to protect the public's health, safety and welfare and ensure the compatibility of the use with other adjacent uses.

I understand that it is my responsibility to identify and comply with all applicable rules and conditions, covenants, plat notes, and deed restrictions, including changes that may occur in such requirements.

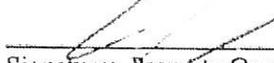
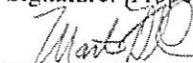
I understand that this permit and zoning status may transfer to subsequent owners of this land and that it is my responsibility to disclose the requirements of this status to operators on this property, and to the buyer when I sell the land.

I understand that changes from the approved operational plan may require further authorization by the borough planning commission or Assembly. I understand that failure to provide applicable documentation of compliance with approved requirements, or violation of such requirements will nullify legal status, and may result in penalties.

I understand it is my responsibility to provide the borough code compliance division with up to date reports, notification of proposed changes, and contact information for approved person(s) to whom I sell this property and to whom I assign responsibility for daily operations on the site.

I grant permission for borough staff members to enter onto the property as needed to process this application and monitor compliance with permit requirements. Such access will at a minimum, be allowed when the activity is occurring and, with prior notice, at other times necessary to monitor compliance.

The information submitted in this application is accurate and complete to the best of my knowledge.

	Clark Cox	5-6-16
Signature: Property Owner	Printed Name	Date
	MARTIN D SHURR	5-6-2016
Signature: Agent	Printed Name	Date

.....

\*\*\*\*\*  
**MSB USE ONLY: MSB file #** \_\_\_\_\_  
 Date complete application received: \_\_\_\_\_, Approved, Yes \_\_\_ No \_\_\_  
 Additional conditions: Yes \_\_\_ (see attached) No \_\_\_ Comments: \_\_\_\_\_  
 Planning Commission Action (date): \_\_\_\_\_ Resolution No.: \_\_\_\_\_  
 Assembly Action (date): \_\_\_\_\_ Ordinance No.: \_\_\_\_\_  
 Date permit (circle one) issued or denied: \_\_\_\_\_  
 \*\*\*\*\*

**State of Alaska  
Department of Transportation & Public Facilities**

**Mining and Reclamation Guidelines and  
Site Development Plan**

**Material Site 52-2-092-2  
Denali Highway Mile 99**

These guidelines are subject to the Matanuska-Susitna Borough Interim Materials District (MSB-IMD) requirements and standards and the Alaska Department of Natural Resources (DNR) Material Sale Contract ADL 230954 and stipulations contained therein.

**Legal Description**

T19S, R2W, FM:

Section 10: That portion of the SE  $\frac{1}{4}$  lying south of the Denali Highway;

Section 15: That portion of the N  $\frac{1}{2}$  NE  $\frac{1}{4}$  lying south of the Denali Highway.

The material site contains 69.91 acres.

**Purpose**

DOT&PF proposes to use this site for material extraction to improve and maintain the Denali Highway in the vicinity of the site. Maintenance will enhance road performance and safety for local residents as well as tourists. DOT&PF Maintenance & Operations (M&O) wish to utilize this site to provide crushed aggregate and borrow starting in the summer of 2016. Mining volumes for M&O will be less than 10,000 cubic yards per year. At this time, no major construction/road improvement project is planned, but if one is proposed in the future (ie. next 20 years), this site could provide a larger volume of material for such a project.

**General Information**

This site lies south of the Denali Highway at Mile 99. The site contains several eskers, fluvial-glacial deposits formed into discrete ridges. Material in the eskers generally consists of sand and gravel with silt, cobbles and boulders. DOT&PF conducted geotechnical exploration at the site in 1988. Vegetation consists of scattered spruce, dwarf birch, alder and tundra. Overburden consists of 6 to 12 inches of organic mat and 6 to 12 inches of silt. Permafrost was present. Perched groundwater was noted above frozen ground in some test holes. Additional site information is available at the DOT&PF Materials office, 2301 Peger Road, Fairbanks, Alaska 99709.

**Surrounding Property Owners**

1. State of Alaska
2. USS 8523 (Private property, 5 acres): located  $\frac{1}{4}$  mile west of proposed material site.

**Existing Land Uses**

The proposed material site is undeveloped. The surrounding land is pristine wilderness, used largely for recreational purposes.

**Wetlands and Water bodies**

The site generally slopes uphill from the highway. A Final Wetlands and Waterbodies Delineation and Functional Assessment Report of the material site and those lands within a one mile radius of the site, was completed in May 2015. There are two unnamed creeks on either side of the material site boundary (see site map). These are outside the target mining area and will not be affected.

A 100-foot-wide undisturbed buffer will be maintained along the identified creeks or water bodies. see site plan.

**Structures - none**

No semi-permanent or permanent structures are planned for the site. The following equipment will be on-site temporarily, for about one month duration: generator, conveyor, and crusher. Equipment mobilized to the site for a temporary project will be located variably within site limits as needed for operational and safety requirements and demobilized upon completion,

**Access Road**

A single gravel access road, approximately 30 feet wide, will be constructed to the extraction area at the south side of the site in the approximate location shown on the attached map. The road will be approximately 1200 feet long. The intersection with the highway will have adequate site distances for safety. Total road area within the material site is 1 acre.

**Visual Screen / Buffers**

Esker ridges near the road will be left intact to serve as a visual screen. A 100-foot-wide undisturbed buffer will be maintained along the Denali Highway right-of-way and along the section line on the east boundary. A 50-foot-wide undisturbed buffer will be maintained around the remaining perimeter of the site.

If mining activities are to take place within 300' of the property boundaries. Visual buffers a minimum of 10' in height, including vegetative buffers and/or earthen berms will be employed.

**Noise Mitigation Measures and Lighting**

The site is remote with very low potential for noise or lighting impacts. No blasting is planned. Lighting would likely not be required. If it is, the topography/screens are expected to contain it within the immediate work area.

**Dust Control**

Dust control will be addressed as needed during operations by watering or other standard methods. Any water used will be source via an approved Temporary Water Use Permit with ADNR.

**Water Table**

Test pits will be dug within each cell to ensure there is suitable depth of material 4' above the water table prior to commencement of mining operations; operations will be revised if necessary.

**Plan of Operation**

Site work would commence in June 2016. Work will consist of building a road and work pad, stripping in Cell 1, extraction of up to 10,000 cubic yards of gravel, and crushing the material. A stockpile of the crushed material will be placed on the work pad to be used for highway maintenance. When in operation, site would be utilized up to 7 days per week, from 7 am to 9 pm. Other than gravel extraction, processing (crushing), and stockpiling, no other uses are planned for this site. Mining volumes for DOT M&O will be up to 10,000 cubic yards per year. Crushing-related equipment will be removed after crushing is complete (est. July 31). Reclamation will be accomplished by August 31, 2016; the road, work pad and active mining area will be stabilized and remain usable for future operations.

**Compliance with Borough, State and Federal law**

1. Notice of Intent/Multi-Sector General Permit: DOT&PF will acquire as applicable. An Alaska NOI will be filed as part of a larger construction project impacting more than one acre and needing an Alaska Construction General Permit. An MSGP will be applied for if the State finds this is the preferred permit.
2. A 404/10 Wetlands permit will be acquired from the U.S. Army Corp of Engineers if the site is found to contain wetlands under USACE jurisdiction. This permit is routinely applied for as part of a construction project, or as an M&O maintenance activity prior to ground disturbing activities. This may be an Individual Permit or a Nationwide Permit, as determined by the USACE.
3. Coordination will take place with the State Historic Preservation Office for any needed cultural resources clearance prior to ground disturbing activities.
4. All mining and stockpiling activities shall be in accordance with applicable Construction General Permits and Storm Water Pollution Prevention Plans (SWPP).

**Site Development Plan**

The proposed mining area is the large esker at the south part of the site, as shown on the attached map. Mining will occur in 5 acre cells. As a cell is depleted, it will be reclaimed and closed out.

1. The contractor or user shall locate the material site boundaries to verify work areas are within the site.
2. Maintain undisturbed buffers and mark buffer lines in work areas. Do not disturb buffers or place any debris or material in them.
3. Stockpile surface vegetation and organic soils separately, if possible, from overburden and place for future reclamation or use directly for reclamation of mined-out areas.

4. Do not place organics or overburden piles in future mining area or where they would need to be moved again.
5. Inactive working faces shall not exceed 1H:1V. Final reclaimed slopes shall not exceed 3H:1V.
6. No mining shall occur within 4 vertical feet of the water table.
7. Grade pit floor to a gently-sloping shape to match surrounding terrain. Do not allow drainage to escape the site
8. After each use, remove all equipment and non-native debris or waste from the site. No construction debris may be placed, stored, or abandoned in the site.
9. All mining and stockpiling activities shall be in accordance with applicable Construction General Permits and Storm Water Pollution Prevention Plans.

### **Reclamation Objectives and Guidelines**

The reclamation plan has several objectives:

5. To not preclude or hinder future development of un-mined areas.
6. To blend with previous reclamation and surrounding topography.
7. To prevent erosion and sediment transport to surrounding, undisturbed areas.
8. To allow reestablishment of native vegetation and wildlife habitat.
9. To leave the site in a safe condition that does not endanger people or wildlife.

Reclamation activities will include:

1. Grading slopes just inside the perimeter buffers or where future development is not anticipated at 3H: 1V or flatter.
2. Grade pit floor smooth and gently sloping into the pit. Do not allow drainage to exit the pit.
3. Spread available overburden and then organic material on reclaimed slopes. Site will revegetate naturally; do not place seeds or fertilizers.

### **Project Mining and Reclamation Plan**

Prior to use of the site for construction or crushing projects, the contractor or user shall submit a Project Mining and Reclamation Plan, in accordance with AS 27.19 and 11 AAC 97 to DNR for approval, subject to review by DOT&PF. The Plan describes the proposed plan of operation and shall be in compliance with guidelines listed here. Upon approval, the Plan will be followed by the contractor or user and if applicable, the DOT&PF Project Engineer. The plan should include the following:

#### **Sketch Map**

The sketch map shall include:

1. Site boundaries
2. Proposed extraction area, working limits and buffers, to be marked on the ground
3. Organic debris and overburden stockpile areas
4. Work pad, material stockpile locations, processing facilities.

5. Scale of drawing, north arrow, and specific dimensions as appropriate

**Narrative**

The narrative shall include:

1. Methods of operation
2. Estimated quantities for removal
3. Estimated areal extents (acreage)
4. Length and times of operation (day, month, year, and working hours)
5. Air and water pollution control measures
6. Reclamation measures

**Supplements and amendments**

Supplements and amendments to an approved mining and reclamation plan may be initiated by the contractor, user or the DOT&PF Project Engineer, when conditions warrant such action. Supplements and amendments must be mutually agreed upon and proper approval obtained prior to commencement of work of a changed nature.

1. Minor changes are those that affect details of the operation, but remain in compliance with the development guidelines. These changes may be authorized by the DOT&PF Project Engineer.
2. Major changes are those which cause the final outcome of the site to be significantly different from the approved mining and reclamation plan or are not in compliance with the development guidelines. These require approval by DNR, subject to review by the DOT&PF Project Engineer.

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THE STATE  
of **ALASKA**  
GOVERNOR BILL WALKER

Department of Transportation and  
Public Facilities

NORTHERN REGION  
Right of Way Division

2301 Peger Road  
Fairbanks, AK 99709-5399  
Main: 907.451.5400  
TDD: 907-451-2363  
Fax : 907-451-5411  
Toll Free: 1-800-475-2464

May 6, 2016

Susan Lee

Planner II  
Planning and Land Use Department  
350 East Dahlia  
Palmer, Alaska 99645

**Re: Material site application MS 52-2-092-2, MP 99 of the Denali Highway.**

On November 17, 2015 DOT&PF receive a letter from your office regarding our application the material site at mile 99 of the Denali Highway. The letter stated that our application was incomplete and listed 18 points that DOT&PF needed to address before the MSB would continue processing of our application. Below are DOT&PF's responses to the points raised in your letter.

1. The Site Plan has been revised accordingly. **See Attached, SITEPLAN-52-2-092-2\_Denali\_MP99\_Final**
2. There are no semi-permanent structures of any kind planned to be located on site. In the event that this changes, the MSB will be notified appropriately. Any equipment mobilized to the site for temporary mining and crushing activities will be located variably within the site limits as needed for operational and safety requirements; and demobilized upon completion of work. This equipment cannot practically be indicated on a mining plan at this time.
3. Mining activity will be conducted in cells, as shown on the site plan. One cell will be fully developed, as much as practical, and reclaimed, before the next cell is opened. Parts of one or more cells may be left open to be used as staging/work areas as needed, but this will be minimized.
4. A working face of 2:1 is impractical. When temporary work activities are completed, slopes will be graded back to the natural angle of repose or a 2:1 slope, whichever is shallower. When a cell is closed out, the sloped will be graded back to 3:1 or shallower. **See Typical Cross Section attached to the revised M&R, 52-2-092-2 M&R V2**
5. The Mining and Reclamation Plan (M&RP) has been revised accordingly and approved by DNR-SCRO on 4/22/2016.
6. Cells will be reclaimed as they are no longer actively needed. The timeline for reclamation will depend on future maintenance needs on the Denali Highway, and final reclamation is not anticipated for many years.

7. The M&RP has been filed and approved by DNR. A copy of the DNR approved M&R was provided to the MSB on 4/22/2016.
  8. Total area of the material site is 69.91 acres. Anticipated ultimate total mining area is 39.08 acres.
  9. Dust control will be addressed as needed during operations by watering or other standard methods. Any water used will be sourced via an approved Temporary Water Use Permit with ADNR.
  10. No problems with road maintenance are anticipated. ADOT is responsible for maintenance on the Denali Highway, and this material site will be used to aid in those efforts. Access roads within the material site will be maintained as needed for safe operations, but will not be open to the public.
  11. Wetlands are identified on the attached report, **FINAL\_MS52-2-092-2\_DenaliMP99\_Wetland Report**
  12. See above. A wetlands permit is not required at this time as no work currently planned will disturb any identified wetland areas. If and when disturbance of wetlands is required for operations within the site, a permit will be obtained from the Corps of Engineers.
  13. Buffer zones have been depicted on the site plan. Perimeter control, such as vegetative buffers and/or spoil berms, and other BMPs as necessary will be implemented and maintained as needed to protect the identified creeks.
  14. A SWPPP is not needed at this time. Per the Construction General Permit, a SWPPP is only required if a single project will be disturbing one or more acres of ground –and has the potential to discharge runoff to waters of the U.S. When a project is planned for the site that meets those criteria, a SWPPP and associated tasks will be implemented. **Refer to the memo from the Regional Stormwater Engineer in the revised M&R, 52-2-092-2 M&R V2 .**
  15. Test pits will be dug within each cell to ensure there is suitable depth of material above the water table prior to commencement of mining operations; operations will be revised if necessary.
  16. Appropriate visual buffers, including vegetative buffers and/or berms will be employed if mining activities are to take place within 300' of the property boundaries, as shown on the revised site plan.
  17. Initial work within this site is anticipated to take place during the summer of 2016.
  18. A new application for an Interim Materials District for the proposed site is included with this letter.
- If you need any more information or have questions regarding the attached information please contact me.

Sincerely,

Kahlil Wilson, ROW Agent III  
DOT&PF  
2301 Peger Road, Fairbanks 99709  
907 451-5425  
907 978-2536

STATE OF ALASKA  
 DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF MINING, LAND & WATER  
 Southcentral Region  
 550 W. 7<sup>th</sup>, Suite 900C  
 Anchorage, Alaska 99501-3577

**NEGOTIATED MATERIAL SALE CONTRACT**  
**ADOT Material Sale ADL 230954 MS 52-2-092-2**  
**MP 99 Denali Highway**  
**Expires May 31, 2024**

Under AS 38.05.550-38.05.565 (Disposal of Materials) AS 38.05.125 and AS 38.05.810(a) and the regulations implementing these statutes, the State of Alaska, Department of Natural Resources, the seller, whose address is 550 W. 7<sup>th</sup> Avenue, Suite 900C, Anchorage, AK 99501-3577, agrees to sell, and the State of Alaska, Department of Transportation and Public Facilities (DOT&PF), the buyer, whose address is 2301 Peger Road Fairbanks Alaska 99709, agrees to buy, the material designated in this contract, subject to the provisions which follow:

1. Description: Location, Material, Quantity, and Price.

(a) The material sale area covered by this contract contains approximately 80 acres within Township 19 South Range 2 West, Section 10: that portion of the SE1/4 lying south of the Denali Highway and Section 15: that portion of the N1/2NE1/4 lying south of the Denali Highway, Fairbanks Meridian. ( **MATERIAL SITE ADL 231377** )for the removal of gravel . The area is further designated by the boundaries shown on the attached sale area map, which is made part of this contract, or as designated on the ground by the seller.

(b) The material to be removed and the price are:

Kind of Material	No. Of Units	Unit Price	Total Price
Gravel	up to 500,000 cy	\$.50/cubic yard	See 2(a) below

2. Payments and Deposits. No part of the materials sold under this contract may be extracted from the sale area by the buyer except in accordance with the following terms:

(a) In accordance with Director’s Policy File 93-06, Fee Schedule Section (17), Material Sales for Public Projects, Sale of materials to be used in constructing, reconstructing or maintaining a public project:

(1) for the first 5,000 cubic yards of material to be removed there will be no charge; for maintenance on an ongoing basis, a project is considered to last one year.

(2) for each cubic yard of material beyond 5,000 cubic yards, the base fee listed in the annual base price schedule under 11 AAC 71.090 will be charged. For the fiscal years 2013, the base price has been set at \$0.50 per cubic yard.

MP 99 Denali Hwy Material Sale  
ADL 230954  
Page 2 of 11

(b) Payment becomes due and payable on **December 31 of each subsequent year this contract is in effect**, without prior notice to the buyer, for the value of material extracted as of that date. The payment must be based on records required in paragraph 3 of this contract and must be submitted to the seller no later than the fifth working day following the date the installment is due.

(c) A final accounting and payment for material removed must be made no later than 30 days, following contract completion or termination of the contract by the seller or by operation of law. The Director of the Division of Mining, Land and Water will decide whether completion is satisfactory within 30 days after receiving the final accounting report.

(d) If the buyer fails to make a payment provided for in this contract, the seller may, under paragraph 8(b) of this contract, order all material extraction suspended immediately. Materials extracted by the buyer during any period of suspension are considered taken in trespass and are to be charged to and paid for by the buyer at triple the unit contract price. Resumption of the lawful taking of material may be authorized, in writing, by the Division of Mining, Land and Water only after the payments in arrears plus the penalty provided for in paragraph 2(f) have been made.

(e) A late-payment penalty equal to one and one-half percent of the amount due will be assessed for each month, or portion thereof, of any period a payment is delinquent.

(f) All payments and deposits must be remitted to the Division of Mining, Land and Water, Southcentral Region Office, 550 W. 7<sup>th</sup> Avenue, Suite 900c, Anchorage, AK 99501-3577 and must be made payable to the Alaska Department of Revenue.

(g) Special Provisions. The following special provisions also apply to payments and deposits under this contract: **N/A.**

### 3. Method of Volume Determination.

(a) Use records will be due to the Division of Mining, Land and Water, Southcentral Region Office, 550 W. 7<sup>th</sup> Avenue, Suite 900C, Anchorage, AK 99501-3577, with the final use records due 30 days following contract completion.

(b) The buyer shall keep accurate and up-to-date records of all materials extracted. These records are subject to verification by check measure and inspection of the buyer's books by the seller at any time without notice.

(c) Special Provisions. The following special provisions also apply to volume determinations under this contract: **N/A.**

### 4. Operating Requirements.

(a) Boundary Lines and Survey Monuments. No boundary mark of the sale area nor any survey line or witness tree for any survey corner or monument, may be severed or removed, nor may any survey corner or monument be damaged or destroyed. Any violation of this clause requires the buyer to bear the expense of re-establishing the line, corner, or monument by a registered surveyor in a manner approved by the seller.

MP 99 Denali Hwy Material Sale  
ADL 230954  
Page 3 of 11

- (b) Standard of Operations. The buyer shall properly locate himself and his improvements within the sale area, and may not commit waste, whether ameliorated or otherwise. In addition to complying with all laws, regulations, ordinances, and orders, the buyer shall maintain the land in a reasonably neat and clean condition, and shall take all prudent precautions to prevent or suppress grass, brush, or forest fires, and to prevent erosion or destruction of the land.
- (c) Erosion Control and Protection of Waters. Road construction or operations in connection with this contract must be conducted so as to avoid damage to streams, lakes, or other water areas and land adjacent to them. Vegetation and materials may not be deposited into any stream or other water area. Locations and improvements necessary for stream crossings for haul roads must be approved in advance by the seller. All roads to be abandoned must be treated with measures necessary to prevent erosion in a manner acceptable to the seller. Any damage resulting from failure to perform these requirements must be repaired by the buyer to the satisfaction of the seller. This includes waters defined in 5 AAC 95.010 - 5 AAC 95.050, Protection of Fish and Game Habitat.
- (d) Fire Protection. The buyer shall take all necessary precautions for the prevention of wild fires and is responsible for the suppression, and must bear the suppression costs, of all destructive or uncontrolled fires occurring in or outside the sale area resulting from any of the buyer's operations under this contract. The buyer shall comply with all laws, regulations, and ordinances promulgated by all governmental agencies responsible for fire protection in the area.
- (e) Roads. Before constructing any mainhaul, secondary, or spur road across state land, the buyer shall obtain written approval of the proposed location and construction standards of the road from the seller.
- (f) Supervision. The buyer shall maintain adequate supervision at all times when operations are in progress to insure that the provisions of this contract and all applicable federal, state, and local laws, regulations, and operations are in progress, the buyer or a person authorized by him to assume the responsibilities imposed by this contract, shall be present on the sale area.
- (g) Agents. The provisions of this contract apply with equal force upon an agent, employee, or contractor designated by the buyer to perform any of the operations relating to extraction of the materials sold under this contract. The buyer is liable for noncompliance caused by any such agent, employee, or contractor.
- (h) Location. The buyer is responsible for the accurate location of operations under this contract, including any survey that may be necessary for accurate location unless otherwise specified in this contract.
- (i) Access. The seller makes no representations that it will construct or maintain access to the land. Access over any route not under the seller's control is the responsibility of the buyer. The buyer agrees that any permanent access or right-of-way obtained over privately owned property will provide a permanent easement to the seller.

MP 99 Denali Hwy Material Sale  
ADL 230954  
Page 4 of 11

5. Indemnity of Seller and Bonding. N/A

(a) The buyer shall indemnify and hold the seller harmless from:

1. all claims and demands for loss or damage, including property damage, personal injury, wrongful death, and wage or employment claims, arising out of or in connection with the use or occupancy of the land or operations by the buyer or his successors, or at his invitation; and
2. any accident or fire on the land; and
3. any nuisance on the land; and
4. any failure of the buyer to keep the land in a safe and lawful condition consistent with applicable laws, regulations, ordinances, or orders; and
5. any assignment, sublease, or conveyance, attempted or successful, by the buyer which is contrary to the provisions of this contract.

The buyer will keep all goods, materials, furniture, fixtures, equipment, machinery, and other property on the land at his sole risk, and will hold the seller harmless from any claim of loss or damage to them by any cause.

(b) The buyer will be required to file a bond to insure the buyer's performance and to help protect the seller against any liability that may arise as a result of the activities of the buyer. The bond will also be applicable to the development/reclamation plan submitted to the state. A bond acceptable to the seller in the amount of \$ N/A must be filed with the seller at the time of execution of this contract to insure the buyer's performance and financial responsibility.

6. Improvements and Occupancy.

(a) Any improvements or facilities including crushers, mixing plants, buildings, bridges, roads, etc., constructed by the buyer in connection with this sale and within the sale area must be in accordance with plans approved by the seller.

(b) The buyer must, within 60 days after contract completion or termination of the contract by the seller or by operation of law, remove his equipment and other personal property from the sale area. After removal, the buyer must leave the land in a safe and clean condition, which is acceptable to the seller. If the buyer can demonstrate undue hardship, the time for removal of the improvements under this paragraph may be extended at the seller's discretion.

(c) If any of the buyer's property having an appraised value in excess of \$10,000, as determined by the seller, is not removed within the time allowed, that property may, upon 30 days notice to the buyer, be sold at public auction under the direction of the seller. The proceeds of the sale will inure to the buyer after satisfaction of the expense of the sale and deduction of all amounts than owed to the seller. If there are no other bidders at the sale, the seller may bid on the property, and the seller will acquire all rights, both legal and equitable, which any other purchaser could acquire through a sale and purchase.

(d) If any of the buyer's property having an appraised value of \$10,000 or less, as determined by the seller, is not removed within the time allowed, title to that property automatically vests in the seller.

MP 99 Denali Hwy Material Sale  
ADL 230954  
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(e) Special Provisions. The following special provisions also apply to improvements and occupancy under this contract: **N/A**

7. Inspection.

(a) The seller must be accorded access, at all times, to the sale area and to the books and records of the buyer, his contractors, and any subcontractors relating to operations under this contract for purposes of inspection to assure the faithful performance of the provisions of this contract and other lawful requirements.

(b) At all times when construction or operations are in progress, the buyer shall have a representative readily available to the area of operations who is authorized to receive, on behalf of the buyer, any notices and instructions given by the seller in regard to performance under this contract, and to take appropriate action as is required by this contract.

8. Termination and Suspension.

(a) The seller may terminate the buyer's rights under this contract if the buyer breaches the contract and fails to correct this breach within 30 days after written notice of the breach is served upon the buyer.

(b) If the buyer fails to comply with any of the provisions of this contract, the seller may shut down the buyer's operations upon issuance of written notice, until corrective action, as specified by the seller in its notice, is taken. If this corrective action is not taken within 30 days after written notice is served upon the buyer, the seller may terminate the contract under paragraph 8(a) of this contract. The buyer's failure to take immediate corrective action when ordered to remedy dangerous conditions or unwarranted damage to natural resources may be corrected by the seller to prevent danger or additional damage. Any cost incurred by the seller as a result of this corrective action, or by the buyer's failure to take corrective action, must be paid by the buyer.

(c) This contract may also be terminated by mutual agreement of both parties on terms agreed to in writing by both parties.

9. Reservations. The seller reserves the right to permit other compatible uses, including the sale of materials, on the land in the sale area if the seller determines that those uses will not unduly impair the buyer's operations under this contract. Under AS 38.05.125 the seller further expressly reserves to itself, and its successors, forever,

(a) All oil, gas, coal, ores, minerals, fissionable materials, geothermal resources, and fossils of every kind, which may be in or upon the land described above, or any part of it; and

(b) The right to explore the land for oil, gas, coal, ores, minerals, fissionable materials, geothermal resources, and fossils; and

(c) The right to enter by itself or its agents, attorneys, and servants on the land, or any part of it, at any time for the purpose of opening, developing, drilling, and working mines or wells on this or other land and taking out and removing from it all oil, gas, coal, ores, minerals, fissionable materials, geothermal resources, and fossils; and

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(d) The right by itself or its agents, attorneys, and servants at any time

- (1) to construct, maintain, and use all buildings, machinery, roads, pipelines, power lines, and railroads;
- (2) to sink shafts, drill wells, and remove soil; and
- (3) to occupy as much of the land as may be necessary or convenient for these purposes; and

(e) Generally all rights to and control of the land, which are reasonably necessary or convenient to make beneficial and efficient the complete enjoyment of the property and rights, which are expressly reserved.

10. Inclusion of Application Laws and Regulations. The buyer shall comply with all laws and regulations applicable to operations under this contract, including the Alaska Fire Control Act, the provisions of AS 38.05.110 - 38.05.120, material sale regulations 11 AAC Chapter 71, state fish and game regulations pertaining to the protection of wildlife and wildlife habitat, and state regulations pertaining to safety, sanitation, and the use of explosives. These laws and regulations are, by this reference, made a part of this contract, and a violation of them is cause for termination or suspension of this contract in addition to any penalties prescribed by law. These laws and regulations control if the terms of this contract are in conflict with them in any regard.

11. Assignment. This contract may not be assigned by the buyer without the seller's prior written consent to the assignment.

12. Permits. Any permits necessary for operations under this contract must be obtained by the buyer before commencing those operations.

13. Passage of Title. All right, title and interest in or to any material included in the contract shall remain in the State until it has been paid for; provided however that the right, title and interest in or to any material which has been paid for but not removed from the sale area by the buyer within the period of the contract or any extension thereof as provided for in this contract shall vest in the seller.

14. Expiration and Extension. This contract expires **May 31, 2024** unless an extension is granted by the seller in accordance with 11 AAC 71.210 (Material Sale Regulations).

15. Warranties. This sale is made without any warranties, express or implied, as to quantity, quality, merchantability, profitability, or fitness for a particular use, of the material to be extracted from the area under contract.

16. Valid Existing Rights. This contract is entered into and made subject to all valid existing rights, including easements, rights-of-way, reservations, or other interests in land, in existence on the date the contract is entered into.

17. Notices. All notices and other writings required or authorized under this contract must be made by certified mail, postage prepaid, to the parties at the following address:

To the Seller: Alaska Department of Natural Resources  
Southcentral Region, Division of Mining, Land and Water  
550 W. 7<sup>th</sup> Avenue, Suite 900C  
Anchorage, Alaska 99501-3577

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To the Buyer: Alaska Department of Transportation and Public Facilities  
2301 Peger Road  
Fairbanks AK 99709

18. Integration and Modification. This contract, including all laws and documents which by reference are incorporated in it or made a part of it, contains the entire agreement between the parties.

This contract may not be modified or amended except by a document signed by both parties to this contract. Any amendment or modification which is not in writing, signed by both parties, and notarized is of no legal effect.

19. Severability of Clauses of Sale Contract. If any provision of this contract is adjudged to be invalid, that judgment does not affect the validity of any other provision of this contract, nor does it constitute any cause of action in favor of either party as against the other.

20. Construction. Words in the singular number include the plural, and words in the plural number include the singular.

21. Headings. The headings of the numbered paragraphs in this contract shall not be considered in construing any provision of this contract.

22. "Extracted", "Extraction". In this contract, use of the terms "extracted" and "extraction" encompasses the severance or removal, as well as extraction, by the buyer of any materials covered by this contract.

23. Waiver. No agent, representative or employee of the seller has authority to waive any provision of this contract unless expressly authorized to do so in writing by the director of the Division of Mining, Land and Water.

MP 99 Denali Hwy Material Sale  
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**ADL 230954 ADOT&PF Contract Special Stipulations  
Attachment "B"**

The Material Sale Contract will be subject to the following Special Stipulations:

1. **Extraction Area.** This contract authorizes removal of material only from the area defined in Section 1(a) of this contract. The buyer is responsible for properly locating the material site area and the working limits within that area.
2. **Use of Material.** This contract authorizes the excavation and use of up to *500,000 cy* of material for the express purpose of *providing material for reconstruction and maintenance of Denali Highway*. The buyer is required to provide DNR with records of material usage.
3. **Site Operations.** The buyer is responsible for all aspects of material extraction and transport. Any survey stakes or markers that are removed must be replaced at the buyer's expense. The work area will be maintained in a neat, clean condition, free of any solid waste, debris or litter. The disposal of hazardous substances or hydrocarbons is prohibited. After completion, expiration, or termination of the contract, the site will be left in a condition that is acceptable to the seller, and reclaimed in accordance with the approved reclamation plan.
4. **Screening:** Material sites along the Denali Highway should be screened from roads, residential areas, recreational areas and other areas of significant human use. Material Site ADL 231377 shall have the following screenings: a 100 foot- treed buffer shall be maintained along the Denali Highway right-of-way and along the section line on the east boundary. A 50 foot wide undisturbed buffer will be maintained around the remaining perimeter of the site. A 100 foot wide undisturbed buffer will be maintained along the identified creeks or water bodies.
5. **Compliance.** All operations of the buyer, including completion, must comply with the contract and with the approved Mining and Reclamation Plan for this material site. The Special Stipulations of the contract take precedence over the approved Mining and Reclamation plan should a contradiction exist. The buyer shall inform and ensure compliance with the provisions of this contract by its agents, employees and contractors, including subcontractors, at any level.
6. **Reclamation.** Upon completion, expiration, or termination of the contract, the site will be left in a condition that is acceptable to the Division of Mining, Land and Water and reclaimed in accordance with the approved Mining and Reclamation plan. Reclamation shall be to the standards of the Division and shall include repair of access roads to and within the site, disposal of remaining stockpiles, other procedures that will be used to stabilize and reclaim the area and any other site specific measures that may be necessary. During the term of the contract, mining activities shall occur as described in the buyer's DNR-approved Mining and Reclamation plan.
7. **Fill.** No construction material, fill, waste asphalt, damaged culverts, pavement planning or any other debris shall be stockpiled, stored or disposed of within pit boundaries. Stockpiled material shall not be placed in wetlands.
8. **Alaska Historic Preservation Act.** The buyer will consult the Alaska Heritage Resources Survey (907) 269-8721 so that known historic, archaeological and paleontological sites may be avoided. The Alaska Historic Preservation Act (AS 41.35.200) prohibits the appropriation, excavation, removal, injury or destruction of any state-owned historic, prehistoric (paleontological) or archaeological site without a permit from the commissioner. Should any sites be discovered during the course of field operations, activities that may damage the site will cease and the Office of History and Archaeology in the Division of Parks and Outdoor Recreation (907) 269-8721 and will be notified immediately. Alaska Statute also prohibits the removal or disturbing of human remains or burial artifacts (AS

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11.46.482(3)(B)). If human remains are discovered, immediately contact the Alaska State Troopers and the Office of History and Archaeology.

9. **Vehicle Maintenance.** Vehicle maintenance will be performed only over an effective impermeable barrier.
10. **Fuel and Hazardous Substances.** Secondary containment shall be provided for fuel or hazardous substances.
- Container marking.** All independent fuel and hazardous substance containers shall be marked with the contents and the permittee's or contractor's name using paint or a permanent label.
  - Fuel or hazardous substance transfers.** Secondary containment or a surface liner must be placed under all container or vehicle fuel tank inlet and outlet points, hose connections, and hose ends during fuel or hazardous substance transfers. Appropriate spill response equipment must be on hand during any transfer or handling of fuel or hazardous substances to respond to a spill of up to five gallons. Trained personnel shall attend transfer operations at all times. Vehicle refueling shall not occur within the annual floodplain or tidelands.
  - Storing containers within 100 feet of waterbodies.** Containers with a total capacity larger than 55 gallons, which contain fuel or hazardous substances, shall **NOT** be stored within 100 feet of a waterbody.
  - Exceptions.** The Authorized Officer may under unique or special circumstances grant exceptions to this stipulation on a case-by-case basis. Requests for exceptions should be made to the Authorized Officer.
  - Definitions.**

**"Containers"** means any item that is used to hold fuel or hazardous substances. This includes tanks, drums, double-walled tanks, portable testing facilities, fuel tanks on small equipment such as light plants and generators, flow test holding tanks, slop oil tanks, bladders, and bags. Manifolder tanks or any tanks in a series must be considered as single independent containers. Vehicles, including mobile seismic tanks, are not intended to be included under this definition.

**"Hazardous substances"** are defined under AS 46.03.826(5) as (a) an element or compound which, when it enters the atmosphere, water, or land, presents an imminent and substantial danger to the public health or welfare, including fish, animals, or vegetation; (b) oil; or (c) a substance defined as a hazardous substance under 42 U.S.C. 9601(14).

**"Secondary containment"** means an impermeable diked area or portable impermeable containment structure capable of containing 110 percent of the volume of the largest independent container. Double-walled tanks do not qualify as secondary containment unless an exception is granted for a particular tank.

**"Surface liner"** means any safe, non-permeable container (e.g., drips pans, fold-a-tanks, etc.) designed to catch and hold fluids for the purpose of preventing spills. Surface liners should be of adequate size and volume based on worst-case spill risk.
11. **Spill Notification.** The permittee shall notify the Department of Natural Resources of all spills that must be reported under 18 AAC 75.300 under timelines of 18.AAC 75.300. These requirements can be found at the following website: <http://www.dec.state.ak.us/spar/spillreport.htm#requirements>.

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All fires and explosions must be reported to DNR immediately. The DNR 24 hour spill report number is (907) 451-2678; the fax number is (907) 451-2751. The DEC oil spill report number is (800) 478-9300. DNR and DEC shall be supplied with all follow-up incident reports.

12. **Destruction of Markers.** All survey monuments, witness corners, reference monuments, mining claim posts, bearing trees, and un-surveyed lease corner posts shall be protected against damage, destruction and obliteration. The permittee shall notify the Authorized Officer of any damaged, destroyed or obliterated markers and shall reestablish the markers at the permittee's expense in accordance with accepted survey practices of the Division of Mining, Land and Water.
13. **Water Quality.** The buyer shall comply with the State of Alaska water quality standards pursuant to 18 AAC 70, including discharge standards when conducting material washing operations.
14. **Potential Processing Activities and Other Authorizations.** The issuance of this authorization does not alleviate the necessity of the purchaser to obtain authorizations required by other agencies for this activity. Any asphalt processing or related activities and associated structures will not be allowed without prior approval from DNR, the Department of Environmental Conservation and other agencies that require authorizations from the buyer.
15. **Survey.** If a survey is requested by the SCRO manger, the contract holder shall submit a material site boundary survey acceptable to the standards of the Division of Mining, Land and Water. This survey shall depict the dimensions of each side of the material site, and the acreage of the modified material site boundaries.
16. **Failure to Report.** An annual report is due by January 31<sup>st</sup> of each year, without prior notice to the buyer that details the volume of material removed during the calendar year of January 1 through December 31. This report shall be filed regardless of whether material was removed during the reporting period. Failure to submit the required report may subject the permitted site to a final inspection. The contract holder shall be assessed a fee for this inspection per 11 AAC 05.010(a)(7)(M).

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BY SIGNING THIS CONTRACT, the State of Alaska, as seller, and the buyer, agree to be bound by its provisions as set out above.

[Signature] Date: 5-9-2014 | [Signature] Date: 5/9/14  
for Kevin L. Smith

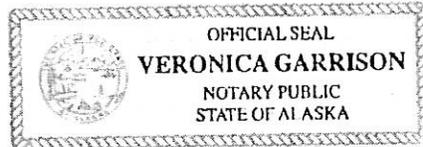
BUYER: STATE OF ALASKA  
Right of Way  
Northern Region

SELLER: STATE OF ALASKA  
Regional Manager  
Southcentral Region

STATE OF ALASKA )  
Fourth )ss.  
Third Judicial District )

This is to certify that on May 9<sup>th</sup>, 2014, before me appeared Martin Shurr known by me to be the person named in and who executed this Negotiated Material Sale Contract and acknowledged voluntarily signing it as **buyer**.

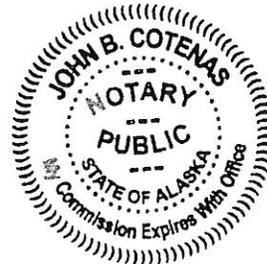
[Signature]  
Notary Public in and for the State of Alaska  
My commission expires: with office



STATE OF ALASKA )  
 )ss.  
Third Judicial District )

This is to certify that on May 9, 2014, before me appeared Sandra Singh known by me to be the Acting Regional Manager Southcentral Regional Office, Division of Mining, Land and Water, Department of Natural Resources, and who executed this Negotiated Material Sale Contract voluntarily signing it on behalf of the State of Alaska as **seller**.

[Signature]  
Notary Public in and for the State of Alaska  
My commission expires: with office



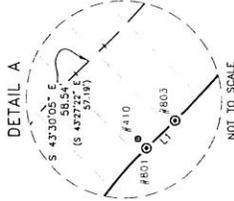
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I HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND LICENSED TO SURVEY AND THAT THIS SURVEY WAS MADE BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT THE MONUMENTS SHOWN HEREON ACTUALLY EXIST AND ARE IN THE PLACE AND EXTENT SHOWN HEREON.  
 DATE: 5/15/16 REGISTRATION NUMBER: 4469-5  
 (NAME) DAVID E. HEALY REGISTERED LAND SURVEYOR

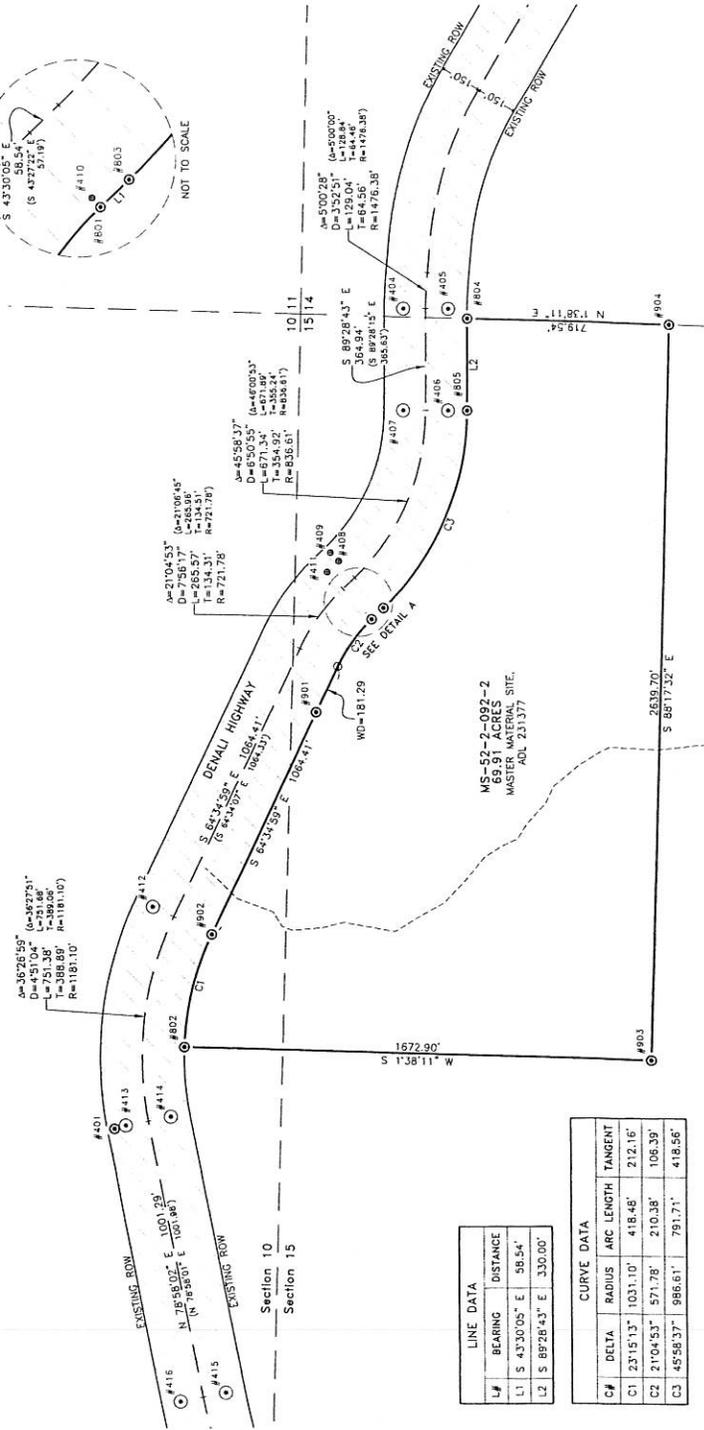
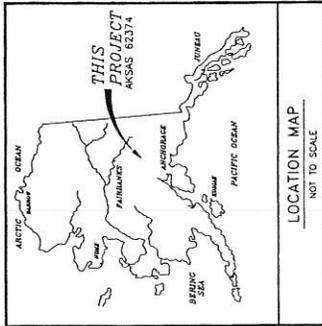
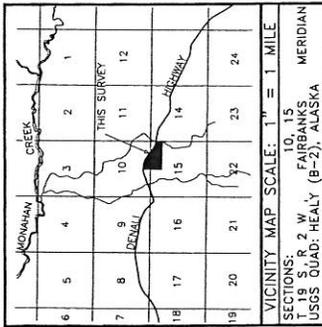
LEGEND

- RECOVERED REBAR AND CAP
- RECOVERED REBAR
- SET ALUMINUM CAP ON 5/8" REBAR
- POINT NOT SET
- UNSURVEYED LINE
- COMPUTED RIGHT-OF-WAY LINE
- TRAIL (6' WIDE)
- MEASURED THIS SURVEY
- RECORD - DENALI HIGHWAY MILEPOST 80-104, PLAT 2004-1, NENANA RECORDING DISTRICT (384.97)



NOTES

- ALL DISTANCES SHOWN ARE GROUND DISTANCES. IN US SURVEY FEET DISTANCES MEASURED FROM ALASKA STATE PLANE ZONE 3 GRID DISTANCES TO GROUND DISTANCES USING SCALE FACTOR 0.99987620 AT POINT #401.
- THE BASIS OF COORDINATES FOR THIS SURVEY IS AN ORBIT SOLUTION FOR POINT #401. THE POINT #401 COORDINATES FOR POINT #401 ARE: NORTING: 3394831.9509, EASTING: 1324936.7957
- THE BASIS OF BEARINGS FOR THIS SURVEY IS A GRID AZIMUTH OF ALASKA STATE PLANE ZONE 3. BEARINGS MATCH CLOSELY TO RECORD BEARINGS ON DENALI HIGHWAY MILEPOST 80-104, PLAT 2004-1, NENANA RECORDING DISTRICT.
- PROTRACTED SECTION LINES SHOWN HEREIN WERE LOCATED AT THE PROTRACTED BASIS OF COORDINATES RELATIVE TO THE RECORD NAD83 COORDINATES AT THE BASIS OF COORDINATES FOR THIS SURVEY.
- THE RIGHT-OF-WAY FOR THE DENALI HIGHWAY WAS COMPUTED FROM A "BEST FIT" CENTERLINE FROM FOUND AND/OT REFERENCE POINT MONUMENTS DEFINED BY DENALI HIGHWAY MILEPOST 80-104, PLAT 2004-1, NENANA RECORDING DISTRICT.
- THE NORTHERLY BOUNDARY OF US 52-2-092-2 IS THE SOUTHERLY RIGHT-OF-WAY LINE OF THE DENALI HIGHWAY AS DEFINED BY PLAT IN NOTE 5.
- THIS SURVEY DOES NOT CONSTITUTE A SUBDIVISION AS DEFINED BY AS 40.15.900(S).
- DOT&PF MATERIAL SALE CONTRACT ADL 230954, EXPIRES MAY 31, 2024.



LINE DATA

L#	BEARING	DISTANCE
L1	S 433005° E	58.54'
L2	S 892843° E	330.00'

CURVE DATA

C#	DELTA	RADIUS	ARC LENGTH	TANGENT
C1	23°15'13"	1031.10'	418.48'	212.16'
C2	21°04'53"	571.78'	210.38'	106.39'
C3	45°58'37"	986.61'	791.71'	418.58'

STATE BUSINESS - NO CHARGE FOR RECORDING DATE: 05/12/16

NAME AND ADDRESS: Department of Transportation, 2301 Paper Road, Fairbanks, Alaska 99709

DATE OF SURVEY: Beginning 07/27/13, Ending: 08/29/13

CONTROL DRAWING OF AS 52-2-092-2 DENALI HIGHWAY MATERIAL SITE M.P. 99 AKAS PROJECT #82374

UNSURVEYED SECTIONS 10 AND 15, FAIRBANKS MERIDIAN, ALASKA NENANA RECORDING DISTRICT

SCALE: 1"=250'

CHECKED BY: DEM/CLM

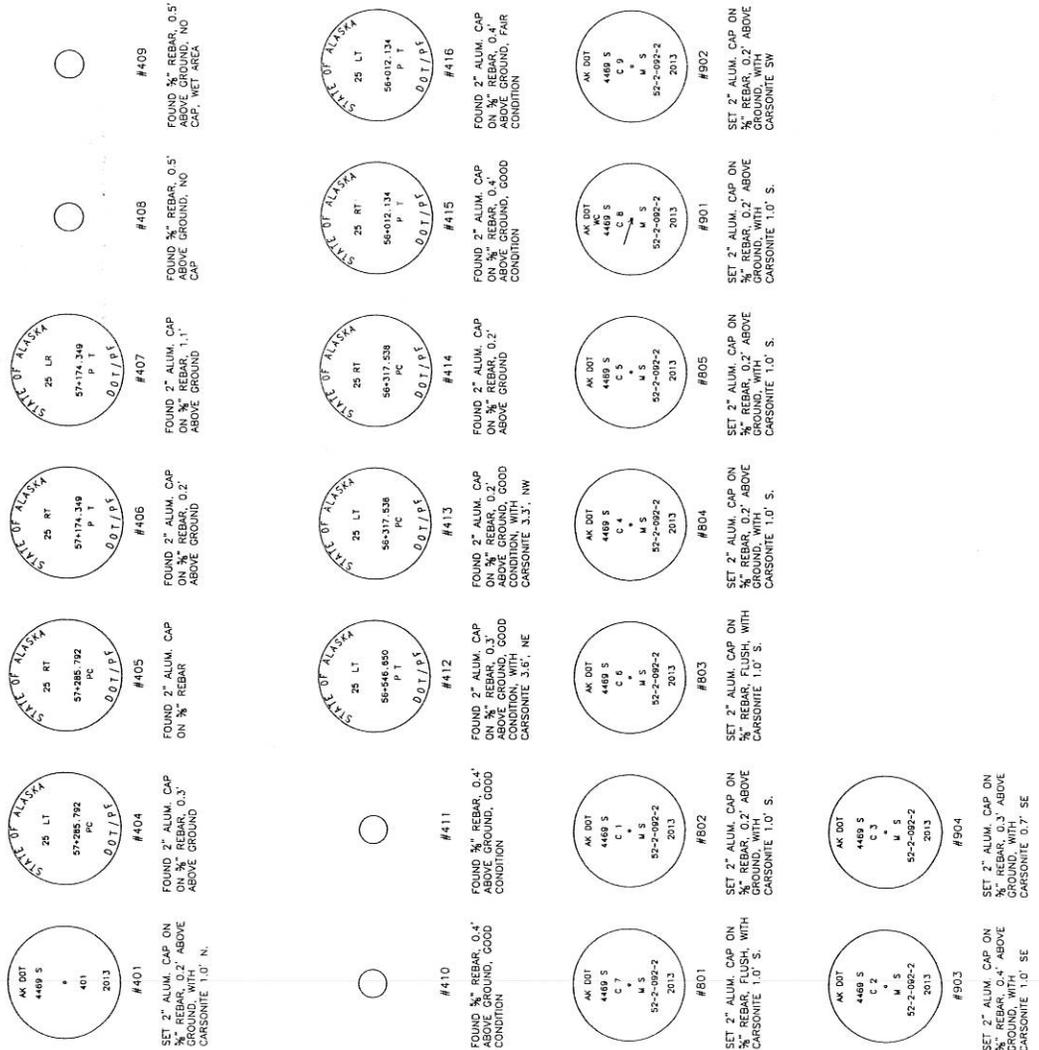
FILE NO.:

CONTROL SHEET 1 OF 2

PLAT 2014-8

RECOVERED MONUMENTS			
Point #	Northing	Eastng	Description
404	3393581.5642	1327877.3306	2" ALUMINUM CAP ON 5/8" REBAR
405	3393417.5624	1327875.9511	2" ALUMINUM CAP ON 5/8" REBAR
406	3393420.9010	1327510.4686	2" ALUMINUM CAP ON 5/8" REBAR
407	3393584.8990	1327511.7857	2" ALUMINUM CAP ON 5/8" REBAR
408	3393920.8884	1326971.5697	5/8" REBAR
409	3393850.2641	1327001.7530	5/8" REBAR
410	3393715.3029	1326777.1423	5/8" REBAR
411	3393662.3596	1326932.1696	5/8" REBAR
412	3394491.9107	1325732.5400	2" ALUMINUM CAP ON 5/8" REBAR
413	3394500.9987	1324948.7550	2" ALUMINUM CAP ON 5/8" REBAR
414	3394300.0275	1324980.2113	2" ALUMINUM CAP ON 5/8" REBAR
415	3394236.2342	1323996.9717	2" ALUMINUM CAP ON 5/8" REBAR
416	3394399.4156	1323965.7451	2" ALUMINUM CAP ON 5/8" REBAR

MONUMENTS SET THIS SURVEY			
Point #	Northing	Eastng	Description
401	3394631.9509	1324936.7957	2" ALUMINUM CAP ON 5/8" REBAR
801	3393702.7802	1326763.4439	2" ALUMINUM CAP ON 5/8" REBAR
802	3394381.5364	1325229.0945	2" ALUMINUM CAP ON 5/8" REBAR
803	3393660.3145	1326803.7444	2" ALUMINUM CAP ON 5/8" REBAR
804	3393349.8969	1327840.4016	2" ALUMINUM CAP ON 5/8" REBAR
805	3393352.9003	1327510.4110	2" ALUMINUM CAP ON 5/8" REBAR
901	3393903.4316	1326430.3616	2" ALUMINUM CAP ON 5/8" REBAR
902	3394282.4686	1325632.7246	2" ALUMINUM CAP ON 5/8" REBAR
903	3392709.3211	1325181.3237	2" ALUMINUM CAP ON 5/8" REBAR
904	3392930.6478	1327819.8550	2" ALUMINUM CAP ON 5/8" REBAR



DATE: 02/12/14

NAME AND ADDRESS:  
 DENALI HIGHWAY REPAIR  
 and Public Facilities (DOT&P)  
 1000 West 14th Avenue  
 Fairbanks, Alaska 99709

DATE OF SURVEY:  
 Beginning: 07/27/13  
 Ending: 08/04/13

PROJECT:  
 DENALI HIGHWAY REPAIR SITE M.P. 99  
 M.S. 52-2-092-2  
 UNSURVEYED SECTIONS 10 AND 15,  
 FARMBANKS 9, 10, 12, W. ALASKA  
 NEENAH RECORDING DISTRICT

SCALE: N/A

DRAWN BY: PJD/CLM

CHECKED BY: DEM/CLM

FILE NO.:

CONTROL SHEET 2 OF 2

Plot 2014.8

DRAWING NUMBER

DRAWING NUMBER

Sheet 2 of 2  
 Drawing 2477  
 Milehead Site 52-2-092-2  
 R05

DRAWING NUMBER

**Susan Lee**

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**From:** Porter, Chandler J (DNR) <chandler.porter@alaska.gov>  
**Sent:** Friday, April 22, 2016 2:14 PM  
**To:** Wilson, Kahlil A (DOT)  
**Cc:** Susan Lee  
**Subject:** Approved Reclamation Plan ADL 230954  
**Attachments:** ADL230954\_ADOTMP99Denali\_RecPlanAcceptance.pdf

Good Afternoon,

Attached is the approval document for the Mining & Reclamation (M&R) plan for the material site located at MP 99 Denali Highway.

Susan, please note that moving forward the Southcentral Regional Office (SCRO) will no longer supply LAS Abstracts displaying 'accepted' or 'approved' status for reclamation plans. Instead, we will issue an approval document similar to the one attached. We are aiming at being consistent across the regions.

Thank you,

***Chandler Porter***

Natural Resource Specialist II  
(907) 269-8560

Department of Natural Resources  
Division of Mining, Land & Water-Land Office  
550 West 7th Avenue Suite 900c  
Anchorage, AK 99501



THE STATE  
of **ALASKA**  
GOVERNOR SEAN PARNELL

Department of Natural Resources

Division of Mining, Land & Water  
Northern Regional Land Office

3700 Airport Way  
Fairbanks, Alaska 99709-4699  
Main: 907-451-2770  
Fax: 907-451-2751

April 22, 2016

Kahlil Wilson  
Alaska Department of Transportation & Public Facilities  
2301 Peger Road  
Fairbanks, AK 99709

Re: ADL 230954 – Material Sale Contract

To whom it may concern,

The Department of Natural Resources, Division of Mining, Land and Water, Southcentral Regional Office, received your Material Site Plan with attachments on April 22, 2016. The subject site is located on State-owned land in the SE1/4 of Section 10 and N1/2NE1/4 of Section 15, Township 19 South, Range 2 West, of the Fairbanks Meridian.

Thank you for submitting a Mining & Reclamation (M&R) plan for activities taking place during 2016-2024. After reviewing your reclamation plan, the Division has determined that the plan is acceptable, provided that the operation is conducted in a manner that will prevent unnecessary and undue degradation of land and water resources, and the operation shall be reclaimed using current reclamation methods so that the site is left in stable and safe condition. This includes making sure that the site has been regraded of depressions, no holes exist.

This acceptance letter does not alleviate the necessity to obtain authorizations required by other agencies and entities for this activity.

Please contact me if you have questions. I can be reached at (907) 269-8560 or at [chandler.porter@alaska.gov](mailto:chandler.porter@alaska.gov). We look forward to seeing how the site is developed and reclaimed.

Sincerely,

A handwritten signature in black ink, appearing to read "Chandler Porter".

Chandler Porter  
Natural Resource Specialist II

Electronic Cc: Susan Lee, Matsu Borough Planner

Susan Lee

---

**From:** Porter, Chandler J (DNR) <chandler.porter@alaska.gov>  
**Sent:** Friday, April 22, 2016 3:05 PM  
**To:** Wilson, Kahlil A (DOT)  
**Cc:** Susan Lee  
**Subject:** RE: Approved Reclamation Plan ADL 230954  
**Attachments:** ADL230954\_ADOT\_DevPlan\_2016\_MP99Denali.pdf; ADL230954\_ADOT\_ReclamationPlan.pdf

Additionally, attached is the M&R plan for your reference.

Thanks,

*Chandler Porter*

Natural Resource Specialist II  
(907) 269-8560

Department of Natural Resources  
Division of Mining, Land & Water-Land Office  
550 West 7th Avenue Suite 900c  
Anchorage, AK 99501

---

**From:** Wilson, Kahlil A (DOT)  
**Sent:** Friday, April 22, 2016 2:16 PM  
**To:** Porter, Chandler J (DNR) <chandler.porter@alaska.gov>  
**Subject:** RE: Approved Reclamation Plan ADL 230954

Thank you

---

**From:** Porter, Chandler J (DNR)  
**Sent:** Friday, April 22, 2016 2:14 PM  
**To:** Wilson, Kahlil A (DOT)  
**Cc:** [slee@matsugov.us](mailto:slee@matsugov.us)  
**Subject:** Approved Reclamation Plan ADL 230954

Good Afternoon,

Attached is the approval document for the Mining & Reclamation (M&R) plan for the material site located at MP 99 Denali Highway.

Susan, please note that moving forward the Southcentral Regional Office (SCRO) will no longer supply LAS Abstracts displaying 'accepted' or 'approved' status for reclamation plans. Instead, we will issue an approval document similar to the one attached. We are aiming at being consistent across the regions.

Thank you,

*Chandler Porter*

Natural Resource Specialist II  
(907) 269-8560

Department of Natural Resources  
Division of Mining, Land & Water-Land Office  
550 West 7th Avenue Suite 900c  
Anchorage, AK 99501

State of Alaska  
Department of Transportation & Public Facilities

Mining and Reclamation Guidelines and  
Site Development Plan

Material Site 52-2-092-2  
Denali Highway Mile 99

These guidelines are subject to the Matanuska-Susitna Borough Interim Materials District (MSB-IMD) requirements and standards and the Alaska Department of Natural Resources (DNR) Material Sale Contract ADL 230954 and stipulations contained therein.

**Legal Description**

T19S, R2W, FM:

Section 10: That portion of the SE ¼ lying south of the Denali Highway;

Section 15: That portion of the N ½ NE ¼ lying south of the Denali Highway.

The material site contains ~ 78.8 acres.

**Purpose**

DOT&PF proposes to use this site for material extraction to improve and maintain the Denali Highway in the vicinity of the site. Maintenance will enhance road performance and safety for local residents as well as tourists. DOT&PF Maintenance & Operations (M&O) wish to utilize this site to provide crushed aggregate and borrow starting in the summer of 2016. Mining volumes for M&O will be less than 10,000 cubic yards per year. At this time, no major construction/road improvement project is planned, but if one is proposed in the future (ie. next 20 years), this site could provide a larger volume of material for such a project.

**General Information**

This site lies south of the Denali Highway at Mile 99. The site contains several eskers, fluvial-glacial deposits formed into discrete ridges. Material in the eskers generally consists of sand and gravel with silt, cobbles and boulders. DOT&PF conducted geotechnical exploration at the site in 1988. Vegetation consists of scattered spruce, dwarf birch, alder and tundra. Overburden consists of 6 to 12 inches of organic mat and 6 to 12 inches of silt. Permafrost was present. Perched groundwater was noted above frozen ground in some test holes. Additional site information is available at the DOT&PF Materials office, 2301 Peger Road, Fairbanks, Alaska 99709.

**Surrounding Property Owners**

1. State of Alaska
2. USS 8523 (Private property, 5 acres): located ¼ mile west of proposed material site.

**Existing Land Uses**

The proposed material site is undeveloped. The surrounding land is pristine wilderness, used largely for recreational purposes.

**Wetlands and Water bodies**

The site generally slopes uphill from the highway. A Final Wetlands and Waterbodies Delineation and Functional Assessment Report of the material site and those lands within a one mile radius of the site, was completed in May 2015. There are two unnamed creeks on either side of the material site boundary (see site map). These are outside the target mining area and will not be affected.

A 100-foot-wide undisturbed buffer will be maintained along the identified creeks or water bodies. see site plan.

**Structures - none**

No semi-permanent or permanent structures are planned for the site. The following equipment will be on-site temporarily, for about one month duration: generator, conveyor, and crusher. Equipment mobilized to the site for a temporary project will be located variably within site limits as needed for operational and safety requirements and demobilized upon completion,

**Access Road**

A single gravel access road, approximately 30 feet wide, will be constructed to the extraction area at the south side of the site in the approximate location shown on the attached map. The road will be approximately 1200 feet long. The intersection with the highway will have adequate site distances for safety. Total road area within the material site is 1 acre.

**Visual Screen / Buffers**

Esker ridges near the road will be left intact to serve as a visual screen. A 100-foot-wide undisturbed buffer will be maintained along the Denali Highway right-of-way and along the section line on the east boundary. A 50-foot-wide undisturbed buffer will be maintained around the remaining perimeter of the site.

If mining activities are to take place within 300' of the property boundaries. Visual buffers a minimum of 10' in height, including vegetative buffers and/or earthen berms will be employed.

**Noise Mitigation Measures and Lighting**

The site is remote with very low potential for noise or lighting impacts. No blasting is planned. Lighting would likely not be required. If it is, the topography/screens are expected to contain it within the immediate work area.

**Dust Control**

Dust control will be addressed as needed during operations by watering or other standard methods. Any water used will be source via an approved Temporary Water Use Permit with ADNR.

**Water Table**

Test pits will be dug within each cell to ensure there is suitable depth of material 4' above the water table prior to commencement of mining operations; operations will be revised if necessary.

**Plan of Operation**

Site work would commence in June 2016. Work will consist of building a road and work pad, stripping in Cell 1, extraction of up to 10,000 cubic yards of gravel, and crushing the material. A stockpile of the crushed material will be placed on the work pad to be used for highway maintenance. When in operation, site would be utilized up to 7 days per week, from 7 am to 9 pm. Other than gravel extraction, processing (crushing), and stockpiling, no other uses are planned for this site. Mining volumes for DOT M&O will be up to 10,000 cubic yards per year. Crushing-related equipment will be removed after crushing is complete (est. July 31). Reclamation will be accomplished by August 31, 2016; the road, work pad and active mining area will be stabilized and remain usable for future operations.

**Compliance with Borough, State and Federal law**

1. Notice of Intent/Multi-Sector General Permit: DOT&PF will acquire as applicable. An Alaska NOI will be filed as part of a larger construction project impacting more than one acre and needing an Alaska Construction General Permit. An MSGP will be applied for if the State finds this is the preferred permit.
2. A 404/10 Wetlands permit will be acquired from the U.S. Army Corp of Engineers if the site is found to contain wetlands under USACE jurisdiction. This permit is routinely applied for as part of a construction project, or as an M&O maintenance activity prior to ground disturbing activities. This may be an Individual Permit or a Nationwide Permit, as determined by the USACE.
3. Coordination will take place with the State Historic Preservation Office for any needed cultural resources clearance prior to ground disturbing activities.
4. All mining and stockpiling activities shall be in accordance with applicable Construction General Permits and Storm Water Pollution Prevention Plans (SWPP).

**Site Development Plan**

The proposed mining area is the large esker at the south part of the site, as shown on the attached map. Mining will occur in 5 acre cells. As a cell is depleted, it will be reclaimed and closed out.

1. The contractor or user shall locate the material site boundaries to verify work areas are within the site.
2. Maintain undisturbed buffers and mark buffer lines in work areas. Do not disturb buffers or place any debris or material in them.
3. Stockpile surface vegetation and organic soils separately, if possible, from overburden and place for future reclamation or use directly for reclamation of mined-out areas.

4. Do not place organics or overburden piles in future mining area or where they would need to be moved again.
5. Inactive working faces shall not exceed 1H:1V. Final reclaimed slopes shall not exceed 3H:1V.
6. No mining shall occur within 4 vertical feet of the water table.
7. Grade pit floor to a gently-sloping shape to match surrounding terrain. Do not allow drainage to escape the site
8. After each use, remove all equipment and non-native debris or waste from the site. No construction debris may be placed, stored, or abandoned in the site.
9. All mining and stockpiling activities shall be in accordance with applicable Construction General Permits and Storm Water Pollution Prevention Plans.

### **Reclamation Objectives and Guidelines**

The reclamation plan has several objectives:

5. To not preclude or hinder future development of un-mined areas.
6. To blend with previous reclamation and surrounding topography.
7. To prevent erosion and sediment transport to surrounding, undisturbed areas.
8. To allow reestablishment of native vegetation and wildlife habitat.
9. To leave the site in a safe condition that does not endanger people or wildlife.

Reclamation activities will include:

1. Grading slopes just inside the perimeter buffers or where future development is not anticipated at 3H: 1V or flatter.
2. Grade pit floor smooth and gently sloping into the pit. Do not allow drainage to exit the pit.
3. Spread available overburden and then organic material on reclaimed slopes. Site will revegetate naturally; do not place seeds or fertilizers.

### **Project Mining and Reclamation Plan**

Prior to use of the site for construction or crushing projects, the contractor or user shall submit a Project Mining and Reclamation Plan, in accordance with AS 27.19 and 11 AAC 97 to DNR for approval, subject to review by DOT&PF. The Plan describes the proposed plan of operation and shall be in compliance with guidelines listed here. Upon approval, the Plan will be followed by the contractor or user and if applicable, the DOT&PF Project Engineer. The plan should include the following:

#### **Sketch Map**

The sketch map shall include:

1. Site boundaries
2. Proposed extraction area, working limits and buffers, to be marked on the ground
3. Organic debris and overburden stockpile areas
4. Work pad, material stockpile locations, processing facilities.

5. Scale of drawing, north arrow, and specific dimensions as appropriate

**Narrative**

The narrative shall include:

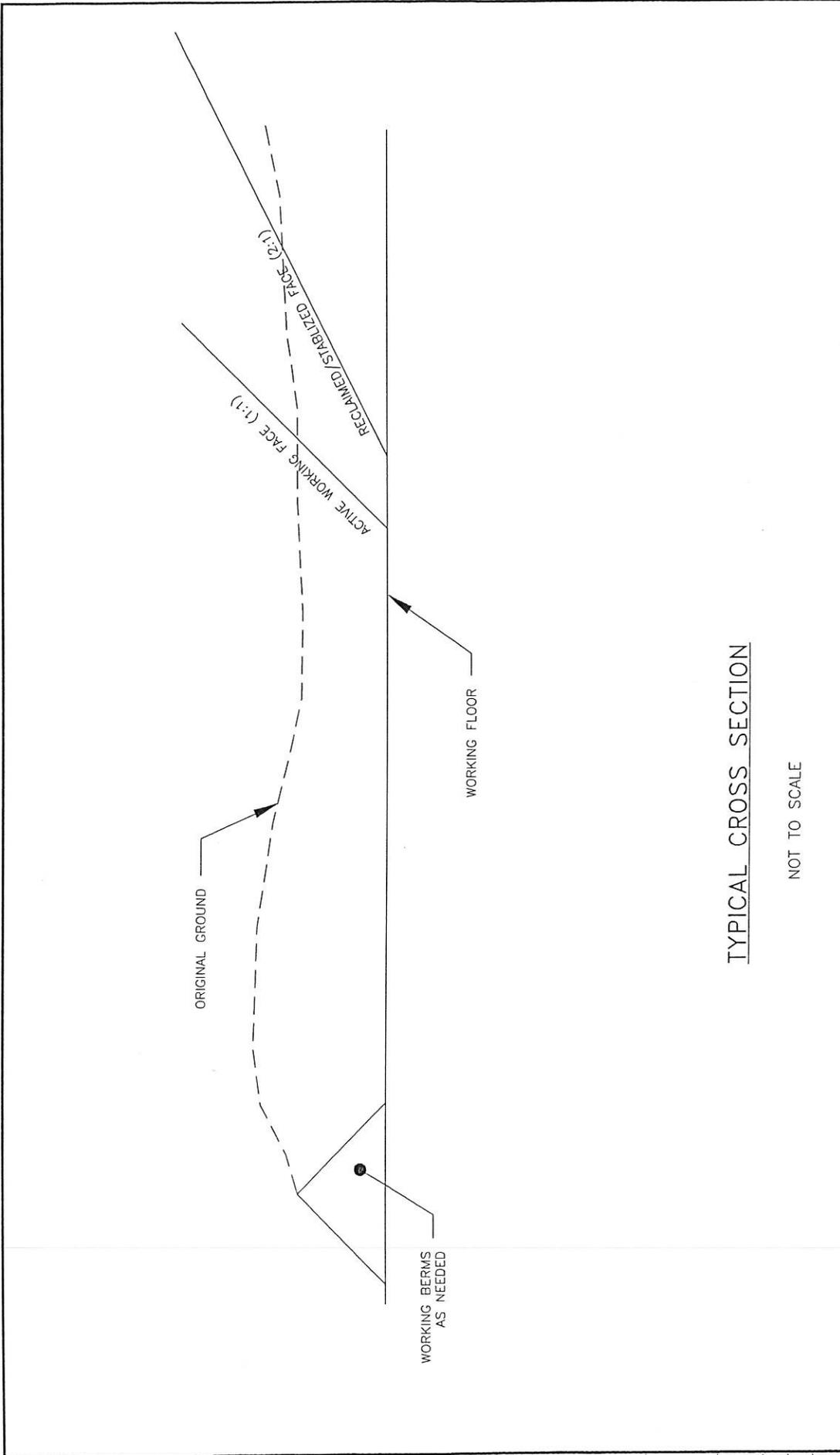
1. Methods of operation
2. Estimated quantities for removal
3. Estimated areal extents (acreage)
4. Length and times of operation (day, month, year, and working hours)
5. Air and water pollution control measures
6. Reclamation measures

**Supplements and amendments**

Supplements and amendments to an approved mining and reclamation plan may be initiated by the contractor, user or the DOT&PF Project Engineer, when conditions warrant such action. Supplements and amendments must be mutually agreed upon and proper approval obtained prior to commencement of work of a changed nature.

1. Minor changes are those that affect details of the operation, but remain in compliance with the development guidelines. These changes may be authorized by the DOT&PF Project Engineer.
2. Major changes are those which cause the final outcome of the site to be significantly different from the approved mining and reclamation plan or are not in compliance with the development guidelines. These require approval by DNR, subject to review by the DOT&PF Project Engineer.

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TYPICAL CROSS SECTION

NOT TO SCALE

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES	
DATA:	M.S. 52-2-092-2 MP 99 DENALI HIGHWAY TYPICAL SECTION
DRAWN:	BAM
APPROVED:	PROJECT NO.
DATE:	APRIL 2016

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STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF MINING, LAND AND WATER

Northern Region  
3700 Airport Way  
Fairbanks, AK 99709  
(907) 451-2740

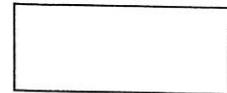
Southcentral Region  
550 W 7th Ave., Suite 900C  
Anchorage, AK 99501-3577  
(907) 269-8552

Southeast Region  
400 Willoughby, #400  
P.O. Box 111020  
Juneau, AK 99801  
(907) 465-3400

MATERIAL SITE RECLAMATION PLAN OR  
LETTER OF INTENT/ANNUAL RECLAMATION STATEMENT  
AS 27.19.030 – 27.19.050

Non-refundable filing fee for reclamation plan: \$100

In accordance with Alaska Statute 27.19, reclamation is required of all mining operations, including sand and gravel extraction. Completion of this form will meet the law's requirements for a reclamation plan (see below for filing requirements; due date: at least 45 days before mining is proposed to begin; requires approval by the Division of Mining, Land and Water). Completion of this form will also serve as a letter of intent for operations exempt from the plan requirement (due date: before mining begins). No approval is required for a letter of intent, but a miner who files a letter of intent must, before December 31, file an annual reclamation statement (Section 8 of this form).



Check applicable box:

A.. RECLAMATION PLAN (REQUIRED if the operation will disturb five or more acres this year, OR 50,000 cubic yards, OR if the operation has a cumulative disturbed area of five or more acres)

B. RECLAMATION PLAN—VOLUNTARY (for an operation below limits shown in Box A but wanting to qualify for the statewide bonding pool)

C. LETTER OF INTENT (less than five acres to be disturbed AND less than 50,000 cubic yards AND less than five acres unreclaimed area)  
NOTE: A miner who files a letter of intent is also required to file an annual reclamation statement at the end of the year.

THIS RECLAMATION PLAN/LETTER OF INTENT IS FOR CALENDAR YEAR 2016-2024.  
(IF YOU CHECKED EITHER BOX A OR B ABOVE AND PROPOSE A MULTI-YEAR PLAN, STATE ALL YEARS COVERED.)

1. **MINER INFORMATION** (IF THERE IS MORE THAN ONE MINER, ATTACH A LIST OF THE NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF ALL OTHER OWNERS, OPERATORS, OR LEASEHOLDERS OF THE MINING OPERATION)

Department of Transportation and Public Facilities

NAME OF MINER WHO WILL SERVE AS AGENT FOR NOTICE PURPOSES

2301 Peger Road

ADDRESS (NOTIFY THE DEPARTMENT OF ANY LATER CHANGE OF ADDRESS)

Fairbanks

AK

99709

907 451-5425

CITY

STATE

ZIP CODE

TELEPHONE

State of Alaska

NAME OF LANDOWNER (IF OTHER THAN MINER) OR PUBLIC LAND MANAGEMENT AGENCY

ADL 230954

FEDERAL OR STATE CASEFILE NUMBER (IF ANY) ASSIGNED TO THE SITE

2. LEGAL DESCRIPTION OF PROPOSED MINING SITE

Section 10: That portion of the SE1/4 lying South of the Denali Hwy

Section 15: That portion of the N1/2NE1/4 lying South of the Denali Hwy

19 South

2 West

Fairbanks

LEGAL SUBDIVISION/ SECTION/ QUARTER-SECTION	TOWNSHIP	RANGE	MERIDIAN
---	----------	-------	----------

3. DESCRIPTION OF THE MINING OPERATION (IF YOU CHECKED BOX A OR B ON P. 1 OF THIS FORM AND ARE PROPOSING A MULTI-YEAR RECLAMATION PLAN, ATTACH SEPARATE SHEETS AS NEEDED SHOWING ACREAGE TO BE MINED, VOLUME TO BE MINED, AND EXISTING ACREAGE OF MINED AREA FOR EACH YEAR COVERED BY THE PLAN)

- a. <10 acres Total acreage to be mined or disturbed during the year.
- b. up to 10,000 cu. yds. Estimated total volume to be mined or disturbed, including overburden.  
Sand & Gravel with silt, cobbles,
- c. and boulders Type of material (sand, gravel, peat, etc.).
- d. ~ 79 acres Existing acreage of mined area (disturbed area that has not yet been reclaimed, but counting only acreage disturbed after October 15, 1991)

4. DESCRIPTION OF THE RECLAMATION OPERATION

- a. The total acreage that will be reclaimed during the year (or each year, if for a multi-year reclamation plan) is: ~10 acres. See DOT&PF Mining and Reclamation Guidelines. In addition DOT&PF contractors will be required to provide DNR their project specific M&R Plan.
- b. Provide a list of equipment (type and quantity) to be used during the reclamation operation.  
See Mining and Reclamation Guidelines
- c. A time schedule of reclamation measures shall be included as part of the plan.  
See Mining and Reclamation Guidelines

The following measures must be considered in preparing and implementing the reclamation plan. Please mark those measures appropriate to your reclamation activity:

- Topsoil that is not promptly redistributed to an area being reclaimed will be separated and stockpiled for future use. This material will be protected from erosion and contamination by acidic or toxic materials and preserved in a condition suitable for later use.
- The area will be backfilled, graded and recontoured using strippings, overburden, and topsoil to a condition that allows for the reestablishment of renewable resources on the site within a reasonable period of time. It will be stabilized to a condition that will allow sufficient moisture to be retained for natural revegetation.
- Stockpiled topsoil will be spread over the reclaimed area to promote natural plant growth that can reasonably be expected to revegetate the area within five years.
- Stream channel diversions will be relocated to a stable location in the flood plain.
- Exploration trenches or pits will be backfilled. Brush piles, vegetation, topsoil, and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation.
- All buildings and structures constructed, used, or improved on land owned by the State of Alaska will be removed, dismantled, or otherwise properly disposed of at the completion of the mining operation.
- Any roads, airstrips or other facilities constructed to provide access to the mining operation shall be reclaimed (unless otherwise authorized) and included in the reclamation plan.
- Peat and topsoil mine operations shall ensure a minimum of two inches of suitable growing medium is left or replaced on the site upon completion of the reclamation activity.

- If extraction occurs within a flood plain, the reclamation activity shall reestablish a stable bed and bank profile such that river currents will not be altered and erosion and deposition patterns will not change.

NOTE: If you propose to use reclamation measures other than those shown above, or if the private landowner or public land manager of the site requires you to use stricter reclamation measures than those shown above, attach a list of those measures to this plan.

5. ALTERNATE POST-MINING LAND USE

- The mining site is public land. The land management agency's land use plan (if any) for post-mining land use is:  
\_\_\_\_\_.
- The mining site is public land. As allowed by AS 27.19.030(b), I propose to reclaim it to the following post-mining land use: Multiple Use.  
\_\_\_\_\_.
- The mining site is private property. The private landowner plans to use it for the following post-mining land use: \_\_\_\_\_  
\_\_\_\_\_.

6. ATTACHMENTS

- If the mining operation has additional owners, operators, or leaseholders not shown on p. 1 of this form, attach a list of their names, addresses, and telephone numbers.
- Attach a USGS map at a scale no smaller than 1:63,360 (inch to the mile) showing the general vicinity of the mining operation and the specific property to be mined. Option: If you checked Box C on the first page of this form and the mining site is adjacent to an airport or public highway, state the name of the airport or the name and milepost of the public highway.
- Attach a diagram of the mined area (this term includes the extraction site, stockpile sites, overburden disposal sites, stream diversions, settling ponds, etc.) and the mining operation as a whole (this term includes the roads you plan to build, your power lines, support facilities, etc.). Show and state the number of acres to be mined during the year. (If you checked Box A or B on the first page of this form and your plan covers more than one year, show each year's work.) Show the location corners or property boundaries of the site in relation to the reclamation work and any other areas affected by the operation.
- Attach a list of the equipment (type and quantity) to be used during the reclamation activity.
- A time schedule of events must be attached that includes dates and activities related to this reclamation plan.
- If the site is private land not owned by the miner, attach a signed, notarized statement from the landowner indicating the landowner's consent to the operation. The landowner may also use the consent statement to notify the department that the landowner plans a post-mining land use incompatible with natural revegetation and therefore believes that reclamation to the standard of AS 27.19.020 is not feasible.
- For those miners that are required to file an annual reclamation statement, attach photographs and/or videotapes dated and described as to location of the reclamation activity that was completed.
- If you propose to use reclamation measures other than those listed on this form, or if the private landowner or public land manager of the site requires you to use stricter reclamation measures, attach a list of those measures.

7. RECLAMATION BONDING (REQUIRED ONLY IF YOU CHECKED BOX A or B ON THE FIRST PAGE OF THIS FORM)

The total acreage of my mining operation that is subject to the bonding requirement for the current year is \_\_\_\_\_ acres (add acreages stated in Section 3(a) and 3(d) of this form).

The per-acre bond amount is \$750/acre or a total bond amount of \$\_\_\_\_\_.

Please check the appropriate bonding method that you will apply toward this reclamation plan:

- Participation in the statewide bonding pool.
- Posting a corporate surety bond.
- Posting a personal bond accompanied by a letter of credit, certificate of deposit, or a deposit of cash or gold.
- Posting a bond or financial guarantee with another government agency that has jurisdiction over the mining operation, as allowed by a cooperative management agreement between that agency and the Division of Mining, Land and Water.
- Posting a general performance bond with a state agency that meets the requirements of 11 AAC 97.400(4).

---

The above reclamation plan/letter of intent and all attachments are correct and complete to the best of my knowledge.



\_\_\_\_\_  
Signature of Miner

4-22-2016

\_\_\_\_\_  
Date

AS 27.19.030 and AS 27.19.050 require a miner either to file a reclamation plan for approval or to file a letter of intent followed by an annual reclamation statement. AS 38.05.035(a) authorizes the director to decide what information is needed to process an application for the sale or use of state land and resources. This information is made a part of the state public land records and becomes public information under AS 40.25.110 and 40.25.120 (unless the information qualifies for confidentiality under AS 38.05.035(a)(9) and confidentiality is requested). Public information is open to inspection by you or any member of the public. A person who is the subject of the information may challenge its accuracy or completeness under AS 44.99.310, by giving a written description of the challenged information, the changes needed to correct it, and a name and address where the person can be reached. False statements made in an application for a benefit are punishable under AS 11.56.210.

8. ANNUAL RECLAMATION STATEMENT—REQUIRED IF YOU FILED A LETTER OF INTENT (CHECKED BOX C ON THE FIRST PAGE) FOR THIS OPERATION. DUE DATE: DECEMBER 31, \_\_\_\_\_. YOU MUST FILE EVEN IF THE MINING DESCRIBED IN YOUR LETTER OF INTENT DID NOT TAKE PLACE.

This \_\_\_\_\_ annual reclamation statement is for:  
(year)

- a. \_\_\_\_\_ acres Total acreage mined.
- b. \_\_\_\_\_ cu. yds. Total volume mined or disturbed, including overburden.
- c. \_\_\_\_\_ acres Total acreage reclaimed.
- d. \_\_\_\_\_ acres Cumulative total of unreclaimed acreage.
- e. Reclamation measures that were used (check appropriate measures from Section 4, DESCRIPTION OF THE RECLAMATION OPERATION, and attach list of additional or stricter measures if applicable).

The above annual reclamation statement and all attachments are correct and complete to the best of my knowledge.

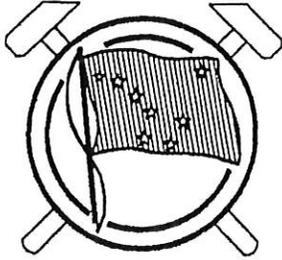


4-22-2016

Signature of Miner

Date

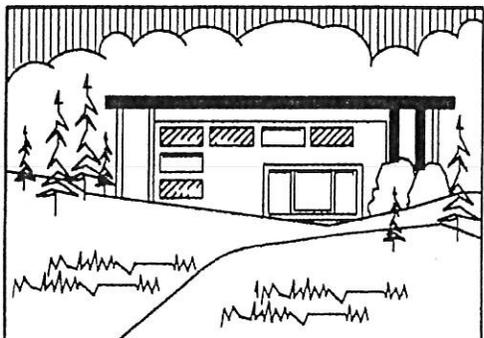
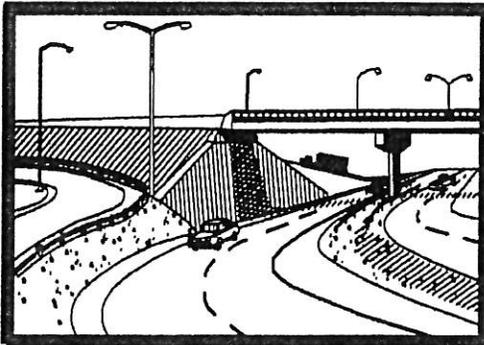
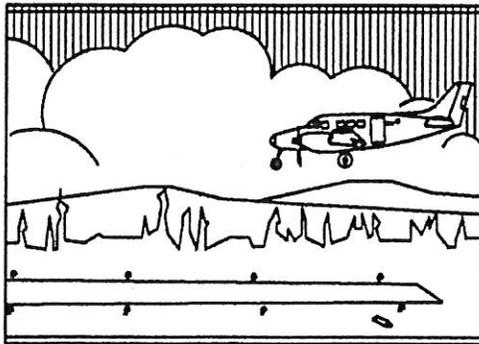
AS 27.19.030 and AS 27.19.050 require a miner either to file a reclamation plan for approval or to file a letter of intent followed by an annual reclamation statement. This information is made a part of the state public land records and becomes public information under AS 40.25.110 and 40.25.120 (unless the information qualifies for confidentiality under AS 38.05.035(a)(9) and confidentiality is requested). Public information is open to inspection by you or any member of the public. A person who is the subject of the information may challenge its accuracy or completeness under AS 44.99.310, by giving a written description of the challenged information, the changes needed to correct it, and a name and address where the person can be reached. False statements made in an application for a benefit are punishable under AS 11.56.210.



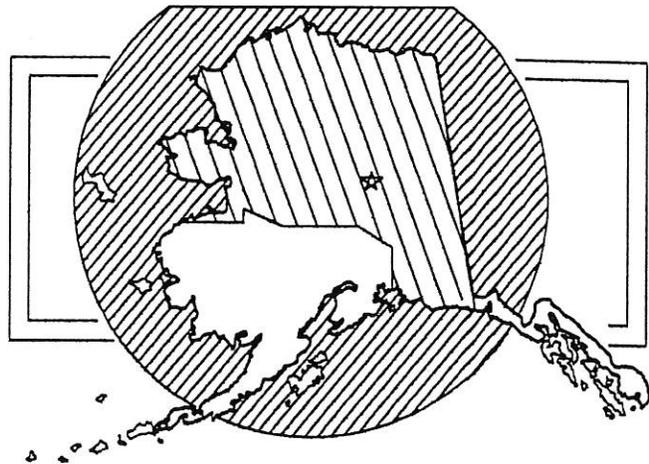
# GEOTECHNICAL REPORT

## DENALI HIGHWAY 80 MILE WEST

FEDERAL PROJECT NO, RS-0750(7), STATE PROJECT NO. 63388



STATE OF ALASKA  
Department of Transportation  
and Public Facilities



Prepared By  
**NORTHERN REGION**

ENGINEERING SERVICES  
GEOLOGY

APRIL 1992

**GEOTECHNICAL REPORT  
MATERIAL SITES  
DENALI HIGHWAY, 80 MILE WEST REHABILITATION  
FEDERAL PROJECT NUMBER RS-0750(7)  
STATE PROJECT NUMBER 63388  
NORTHERN REGION**

**INTRODUCTION**

The Alaska Department of Transportation and Public Facilities (DOT&PF) intends to rehabilitate the roadbed and place subbase on the surface of the Denali Highway between the Susitna River and Cantwell. This report discusses the material sites between the Susitna River and Brushkana Creek. (See the location sketch).

At the request of Joe Keeney, Project Manager, existing geotechnical information on material sites within the project limits was reviewed. It was determined additional information on the existing sites was needed and that some new borrow sites would be required to satisfy current project and long term borrow requirements.

The geotechnical field investigation was conducted from July 19 to August 1, 1988; August 11 to 30, 1989; September 25 to 28, 1990; and August 12 to 15, 1991.

A Central Mine Equipment (CME) 45B drill was used in 1988 and in 1990. The drill was equipped with a 6-inch diameter, solid-stem, continuous-flight auger. A Caterpillar D-5 tractor equipped with a blade and backhoe was used in the 1989 exploration. Seismic data was collected with a Bison Model 1570B signal-enhancement seismograph in 1989. A Brunton compass and 300-foot tape were used in 1991 to locate the holes and test trenches in each site.

The 1988 and 1989 test hole and test trench work was under the direction of Peter J. Ondra, Engineering Geologist. A. Isaacson and J. Manthey, Drillers, operated the drill and the backhoe. Gary Brazo, Engineering Geologist, directed the 1989 seismograph work, the 1990 drilling and the 1991 location work. T. Johnson and J. Nelson helped with the seismic study while Manthey and Nelson operated the drill in 1990 and assisted with the 1991 location work. A total of 125 test holes and trenches were logged for this report. Samples were taken directly from the auger flight, the backhoe bucket or with hand tools and were visually identified in the field by the geologist.

A total of 136 samples were taken and transported to the Northern Region Materials Laboratory for further analysis and testing. All of the laboratory test results, the test hole and test trench logs and the results of the seismic survey are presented in this report.

**LOCATION**

The beginning of the project (BOP) is located at the west end of the Susitna River Bridge, about Mile 79.5 of the Denali Highway. The end of the project (EOP) is at the Brushkana Creek Bridge at approximately Mile 104.5. The Denali Highway is about 200 miles south of Fairbanks and approximately 250 miles north of Anchorage and enables travellers to drive between the towns of Cantwell on the Parks Highway and Paxson on the Richardson Highway.

MS 52-2-092-2LOCATION AND ACCESS

This site is located south of and adjacent to the Denali Highway ROW near Mile 99.0. An existing "two track" trail connects the highway and the site. An improved access could be built at some convenient location in the vicinity of Mile 99.0. Small eskers screen much of the site from the immediate view of the highway.

DESCRIPTION

The bulk of this site of approximately 120 acres is comprised of a 75 to 100-foot high hill that is 600 to 1000 feet wide and about a half mile long. The hill is part of the ice contact deposits of the kame and esker terrain resulting from glacial retreat and alluvial outwash deposition in the immediate project vicinity. A small kame and 2 small eskers lie between the larger hill and the highway and should be left undisturbed to aid in screening the site.

The alluvial material present in the larger hill includes layered or bedded sand, gravelly sand, and sandy gravel. Cobbles and boulders to about 18 inches in diameter were noted in the test trenches and on the surface and should be anticipated throughout this site.

The large hill is undeveloped, however, some borrow activity has occurred from the smaller eskers on the south side of the highway.

CLEARING AND STRIPPING

Vegetation on the hill contains clumps to dense stands of 3 to 5-foot high dwarf birch bushes. Alder bushes to 6 feet high grow in small channels and depressions. Ground cover is grass, lichen and blueberry bushes. Spruce trees to 8 inches in diameter are widely scattered over the hill.

Overburden consists of a 6 to 12-inch thick organic mat and 6 to 12 inches of organic silt.

WATER TABLE

A water table was noted 6 to 8 feet beneath surface in test holes from the east to west end of the hill. The water was generally perched 1 to 2 feet above frozen soil. In two cases, water was noted sandwiched between frozen soils, 8 to 9.5 feet and 12 to 16 feet beneath the surface. The occurrence of water above and between frozen layers is not unusual and should be expected elsewhere in the site.

Surficial drainage is generally away from the hill. An existing drainageway bounds the south side of the hill. A closed depression near the east end of the hill contains a small pond.

FROZEN GROUND

Frozen materials were noted 5 to 10 feet beneath the surface in nearly all of

the test holes and test trenches. As mentioned above, water was present between frozen layers in a few testholes. Most test holes reaching frozen material continued in frozen materials to their full depth.

#### LAND STATUS

The land this site occupies is administered by the BLM. The DOT&PF has made application for the use of this site.

#### QUALITY OF MATERIALS

Laboratory test results of materials taken from this site indicate the sand, gravelly sand and sandy gravel generally meet the requirements for Selected Material, Type A, B, and C. With a reduction in the degradation requirement to a minimum of 25, the sandy gravel will meet the requirements for subbase.

#### MINING PLAN GUIDELINES

Burn clearing debris and place stripped overburden between the kame and esker. Excavate the interior of the hill leaving a ridge of material surrounding the excavation sufficient to screen the work area. Paralleling the hillside contour will accomplish this. Use 1½:1 backslopes for stability. Do not block the existing drainage on the south side of the hill.

#### REHABILITATION PLAN GUIDELINES

It is anticipated this large site will be developed in stages, i.e. in parcels, or cells, as project and maintenance requirements demand. After each parcel has been mined to the practical depth limits of available material and backslope requirements, shape and smooth the backslopes to conform to the surrounding terrain. Spread overburden on the excavated slopes. Slope the site floor to drain. Seed if necessary to prevent erosion, otherwise allow to revegetate naturally. Leave suitable access for future use.

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Maintenance and Operations, Denali District  
Material Site 52-2-092-2

Final Wetlands and Waterbodies  
Delineation and  
Functional Assessment Report  
Denali Highway,  
Milepost 99, Alaska

*May 2015*

Prepared for:  
Alaska Department of Transportation and Public Facilities,  
Northern Region  
2301 Peger Road, MS-2550  
Fairbanks, Alaska 99709





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Appendix A: Wetland Determination Forms and Photographs

Appendix B: Observation Points—Photographs

Appendix C: Wetland and Waterbody Function and Services Assessment Forms

Appendix D: Plant Species List



## ACRONYMS AND ABBREVIATIONS

AWC	<i>Anadromous Waters Catalog</i>
CFR	Code of Federal Regulations
DOT&PF	Alaska Department of Transportation and Public Facilities
GIS	Geographic Information System
GPS	Global Positioning System
HDR	HDR, Inc.
HGM	Hydrogeomorphic
MP	Milepost
MS	Material Site
MSB	Matanuska-Susitna Borough
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
RGL	Regulatory Guidance Letter
SPN	Special Public Notice
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service



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## 1.0 Introduction and Purpose

The State of Alaska Department of Transportation and Public Facilities (DOT&PF) Maintenance and Operations, Denali District is evaluating development of a new material site (MS) 52-2-092-2 at approximately Milepost (MP) 99 of the Denali Highway. Development of MS 52-2-092-2 would support DOT&PF's upcoming work and routine maintenance activities.

This wetlands and waters delineation and functional assessment report identifies locations within the study area that are potentially subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) under authority of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899. Information presented here complies with the USACE guidance for jurisdictional determination reports, Special Public Notice (SPN) 2010-45 (USACE 2010).

The proposed MS 52-2-092-2 is located approximately 35 miles east of the community of Cantwell, Alaska and 99 miles west of the community of Paxon, Alaska, within the Matanuska-Susitna Borough (MSB; Figure 1). MS 52-2-092-2 is located in the vicinity of Monahan Creek, within the Headwaters of Nenana River watershed (Hydrologic Unit Code 1904050802). The legal description of the proposed material site is Sections 10 and 15 of Township 19 South and Range 2 West, Fairbanks Meridian.

The field-investigation study area is located within the boundaries of DOT&PF's proposed material site area. The proposed material site area encompasses approximately 119 acres. Additional office-based wetland and waterbody mapping includes the area within 1 mile of the proposed material site to meet MSB Earth Materials Extraction permitting requirements. The MSB permit wetland and waterbody mapping area comprises approximately 3,250 acres.

The study area is characterized by rolling topography with numerous solifluction features. Elevations range roughly from 2,750 feet to 2,900 feet above sea level. The area includes dry swales, ridges, and three creek drainages. Two unnamed perennial streams flow south to north into Monahan Creek. One unnamed intermittent stream flows from south to north and discharges into a pond located adjacent to the study area.

A consideration for siting and selection of a material site is the presence of waters of the U.S., including wetlands. By federal law and associated policy, it is necessary to first avoid project impacts to wetlands wherever practicable, minimize impacts that cannot be avoided, and, in some cases, compensate for unavoidable impacts. Wetlands, waterbodies, and uplands (non-wetlands), as referenced in this report, are defined as follows:

*Wetlands:* "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 Code of Federal Regulations [CFR] Part 328.3(b)). Wetlands are a subset of "waters of the U.S." Note that the "wetlands" definition does not include unvegetated areas such as streams and ponds. As defined in the 1987 *Corps of Engineers Wetlands Delineation Manual (Wetlands Delineation Manual)* and in the 2007 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual, Alaska Region (Regional Supplement; USACE 1987, 2007)*, wetlands must possess the following



three characteristics: (1) a vegetation community dominated by plant species that are typically adapted for life in saturated soils, (2) inundation or saturation of the soil during the growing season, and (3) soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions.

Waterbodies: Waterbodies are defined as open water areas that do not support an abundance of vegetation that extends above the water surface. These include rivers, lakes, ponds, and streams.

Uplands: Non-water and non-wetland areas are called uplands.

The USACE Regulatory Branch must also consider impacts to wetland functions and services when evaluating Section 404/10 permit applications. Wetland functions are defined as the chemical, physical, and biological processes or attributes that contribute to the self-maintenance of a wetland and relate to the ecological significance of wetland properties without regard to subjective human values (American Society for Testing and Materials 1999). Services and values are the benefits that human populations receive from functions that occur in ecosystems, such as the use of wetlands for recreation or flood control. Not all wetlands perform all functions, nor do they perform all functions to the same extent. For example, a wetland's geographic location may determine its habitat functions, and the location of a wetland within a watershed may determine hydrologic or water quality functions. The principal factors that determine how a wetland performs these functions are climatic conditions, quantity and quality of water entering and leaving the wetland, and disturbances or alteration within the wetland or the surrounding ecosystem (Novitzki et al. 1997).

## 2.0 Methods

### 2.1 Field Work

On August 12 and August 14, 2014, HDR, Inc. (HDR) wetland scientists Irina Lapina and Alena Gerlek conducted an on-site investigation of wetlands and waterbodies within the 119.0-acre study area (Figure 1). Soil conditions, hydrology, and plant communities were studied using methods described in the 1987 *Wetlands Delineation Manual* and 2007 *Regional Supplement* (USACE 1987, 2007). When it was feasible, wetland/upland boundaries were determined by completing paired data plots. This process involved completing standard USACE Wetland Determination Forms (taken from the 2007 *Regional Supplement*) near observable transition zones between wetter and drier areas. A data form was completed in the wet area to verify its wetland status, and then a second plot was completed in the drier area to verify its upland status. The wetland/upland boundary between the two data plots was then identified and marked on field maps. The field work occurred within the USACE's recommended growing season (May 24 to October 3) for the Alaska Range ecoregion in which the study area is located (USACE 2007).

Standard USACE Wetland Determination Forms were completed at seven sites. Wetland Determination Forms and photographs taken at each site are included in Appendix A. Photographs and observational data were collected at 19 additional locations (Observation Points) to document sites that were similar to those for which a Wetland Determination Form had already been completed, or to document the presence (or absence) of a waterbody or stream. Photographs taken at these Observation Points are included in Appendix B. Locations of Wetland Determination Form sites and Observation Points were logged into a



handheld global positioning system (GPS) unit and then loaded to a GIS map. In total, 26 locations were visited during the 2-day site visit. Site locations are shown on Figure 2.

## 2.2 Wetland Mapping and Classification

Upon returning from the field, scientists analyzed field-collected data and reviewed the following datasets to help delineate and classify wetlands and waterbodies in the study area:

- Color digital ortho-rectified aerial photography with a ground pixel resolution of 1 foot (DigitalGlobe 2010)

Other data sets typically referenced for wetland delineations (e.g., Natural Resource Conservation Service [NRCS] area-specific soil survey mapping, U.S. Fish and Wildlife Service [USFWS] National Wetland Inventory [NWI] mapping) are not currently available for the study area.

GPS locations of field-visited sites were overlain on the aerial photography to identify and classify wetlands and other waters of the U.S. present within the study area. Aerial photography vegetation signatures from these field-visited sites were then extrapolated to similar locations throughout the study area and wetland/upland boundaries were digitized into GIS. Delineating wetlands from aerial photography includes the following methods:

- Vegetation clues: Scientists examine aerial photographs for saturation-adapted vegetation communities; indicative canopy structure and height; and presence of hydrophytic plant species.
- Evidence of soil saturation: A site's proximity to streams, open water habitat, and marshes can be indicative of shallow subsurface water. Scientists, therefore, look for visible evidence of wetland hydrology, including surface water and darker areas of photos indicating surface saturation.
- Topography: Evidence of topographic high points, sloped surfaces that would allow soils to drain, and dry drainages supported classifying those areas as upland. Topographic depressions and flat topography serve as indicators of potentially poor soil drainage.

Wetlands were classified based on a review of field notes, data forms, and site photographs. GIS polygons were attributed with NWI mapping codes based on the USFWS *Classification of Wetlands and Deepwater Habitats of the U.S.* (Cowardin et al. 1979). Streams were mapped as polygons when a stream channel was visible on aerial imagery; otherwise, stream features were mapped as line features. The acreage of line features was calculated based the feature length and the width of the stream channel observed in the field. This area was then subtracted from surrounding uplands and wetlands to prevent double-counting acreage.

In addition to the field-verified delineation of the proposed material site area, office-based wetland and waterbody mapping was prepared for an area within one-mile of the proposed material site to meet MSB Earth Materials Extraction permitting requirements.

## 2.3 Functional Assessment

An assessment of wetland functions was performed using *The Highway Methodology Workbook Supplement: Wetland Functions and Values (Highway Methodology)* published by the USACE New England District (USACE 1999), which provides a qualitative approach for documenting the physical



characteristics of wetlands and waterbodies and evidence of functions and services performed. This assessment evaluates 14 functions and services, including:

- Groundwater recharge
- Flood flow alteration
- Fish and shellfish habitat
- Sediment and toxicant reduction
- Nutrient removal
- Production export
- Sediment and shoreline stability
- Wildlife habitat
- Recreation
- Education and scientific value
- Uniqueness and heritage
- Visual quality and aesthetics
- Endangered species habitat
- Other

Physical features that may contribute to or prevent certain functions from occurring were also evaluated for the wetlands and waterbodies within the study area. Examples of such indicators include the wetland's proximity to waterbodies, the wetland's vegetation type, the amount of open water present, and the wetland's topographic position and location in the watershed. For each wetland type, scientists considered these indicators and observations across the study area to complete a Wetland Function and Services Assessment Form. Wetland data sheets, site photographs, and GIS data layers were also used to help identify indicators of wetland function and complete the forms. Wetland Function and Services Assessment Forms are included in Appendix C.

*Highway Methodology* allows wetland evaluators to use best professional judgment to place each wetland assessed into a management category. In accordance with the 2009 USACE Alaska District's *Regulatory Guidance Letter (RGL) No. 09-01* (USACE 2009) and subsequent changes to the wetland categories proposed by USACE (USACE 2014), wetlands and waters within the study area were categorized based on their functional performance, as follows:

**Category I – High functioning wetlands:** These are wetlands that: (1) provide habitat for threatened or endangered species that has been documented; (2) represent a high quality example of a rare wetland type; (3) are rare within a given region; (4) provide habitat for very sensitive or important wildlife or plants; and/or (5) are undisturbed and contain ecological attributes that are impossible to replace within a human lifetime, if at all. Examples of the latter are mature, very productive forested wetlands unique to an ecoregion that may take a century to develop, and certain bogs and fens with their special plant populations that have taken centuries to develop. The position and function of the wetland in the landscape plays an integral role in overall watershed health.

**Category II – Moderate functioning wetlands:** [These wetlands] can be important for a variety of wildlife species and can be critical for the watershed depending on where they are located. In contrast to Category I wetlands, Category II wetlands do not provide critical habitat for any threatened or endangered species or species of concern. Generally these wetland are pristine, not fragmented; common but more productive and sustain higher biodiversity compared to Category III wetlands.

**Category III – Low functioning wetlands:** These wetlands are usually plentiful in the watershed often with the least biodiversity. Category III wetlands are not rare or unique and overall productivity and species diversity in Category III wetlands are relatively low. These wetlands may be impacted by man (or by fire or other natural events) and are not considered to be “pristine” examples and as a result in some cases require less than 1:1 [compensation].



### 3.0 Summary of Wetland Indicators

The vegetation, hydrology, and soil conditions described below are based on the field investigation conducted by HDR on August 12 and August 14, 2014. Wetland conditions were recorded at four of the seven Wetland Determination Form sites visited. The remaining three sites had hydrophytic vegetation and/or wetland hydrology conditions, but did not meet all three criteria to be considered a wetland. These three sites were classified as upland. Table 1 summarizes the data collected at Wetland Determination Form sites. Completed Wetland Determination Forms and site photographs are included in Appendix A.

Plot Number	Latitude	Longitude	NWI Code <sup>a</sup>	HGM Class <sup>b</sup>	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology
020	63.276075	-147.919943	PSS1/EM1C	Depressional	Y	Y	Y
021	63.276094	-147.919631	U	N/A	Y	N	Y
023	63.276902	-147.921599	PSS1F	Slope	Y	Y	Y
043	63.276705	-147.906783	PSS1C	Riverine	Y	Y	Y
045	63.276643	-147.907669	PFO4/SS1C	Riverine	Y	Y	Y
047	63.276900	-147.909287	U	N/A	Y	N	N
048	63.275275	-147.907111	U	N/A	Y	N	N

<sup>a</sup> Cowardin subclasses documented in the study area. P: palustrine; FO4: needle-leaved evergreen forested; SS1: broad-leaved deciduous scrub-shrub; EM1: persistent emergent; U: upland. Water regimes C: seasonally flooded; F: semi-permanently flooded. (Cowardin et al. 1979). Y: yes; N: no.

<sup>b</sup> Brinson 1993

In addition to the seven Wetland Determination Form sites visited, 19 Observation Points were also documented. Observation data were collected at these points to document the wetland or upland status of an area that exhibited characteristics similar to those of areas where a data form had already been completed, or to document the presence (or absence) of a waterbody or stream feature. A summary of the data collected at Observation Points, including the NWI code and hydrogeomorphic (HGM) class, is summarized in Table 2. Observation Point photographs are included in Appendix B.

Site Number	Latitude	Longitude	NWI Code <sup>a</sup>	HGM Class <sup>b</sup>
022	63.275839	-147.921357	U	N/A
024	63.276573	-147.921082	U	N/A
025	63.277335	-147.914723	U	N/A
026	63.276538	-147.914607	U	N/A
044	63.276779	-147.907330	R3UBH	N/A
046	63.276770	-147.908317	PSS1B	Slope
049	63.274743	-147.907269	PSS1C	Slope
050	63.274587	-147.907578	U	N/A
051	63.274544	-147.908186	R4SBC	N/A
052	63.273282	-147.908329	U	N/A
053	63.272117	-147.909740	PSS1/EM1C	Depressional



**Table 2. Summary of Observation Point Data**

Site Number	Latitude	Longitude	NWI Code <sup>a</sup>	HGM Class <sup>b</sup>
054	63.272194	-147.912779	U	N/A
055	63.273347	-147.911974	U	N/A
056	63.274329	-147.915933	U	N/A
057	63.273199	-147.917684	U	N/A
058	63.273013	-147.920976	R3UBH	N/A
059	63.273059	-147.920713	U	N/A
060	63.274738	-147.921175	U	N/A
061	63.274911	-147.917954	U	N/A

<sup>a</sup> Cowardin subclasses documented in the study area. SS1: broad-leaved deciduous scrub-shrub; EM1: persistent emergent; R3UB: upper perennial with unconsolidated bottom; R4SB intermittent riverine streambed; U: upland. Water regimes B: saturated; C: seasonally flooded; H: permanently flooded. (Cowardin et al. 1979). Y: yes; N: no.

<sup>b</sup> Brinson 1993

### 3.1 Vegetation

Vegetation communities in the study area vary based on slope, aspect, and proximity to waterbodies. Vegetation within the study area is predominantly low shrub and dwarf shrub communities, with some woodlands and tall shrubs within the riparian corridors, and grass-dominated meadows in low-lying features and depressions. The Denali Highway crosses the study area from east to west roughly parallel to the northern boundary. Numerous gravel pullouts along the highway are regularly used and lack significant vegetation. The highway and pullouts constitute approximately 5 percent of the study area. Table 3 lists dominant plant species observed at the seven locations where Wetland Determination Forms were completed. A list of all plant species observed during the field visit and the total percent cover at each site is included in Appendix D.

**Table 3. Summary of Dominant Plants at Data Collection Locations**

Species	Common Name	Indicator Status <sup>a</sup>	Species	Common Name	Indicator Status <sup>a</sup>
<i>Betula glandulosa</i>	Resin Birch	FAC	<i>Equisetum arvense</i>	Field Horsetail	FAC
<i>Calamagrostis canadensis</i>	Bluejoint Reedgrass	FAC	<i>Picea glauca</i>	White Spruce	FACU
<i>Carex aquatilis</i>	Leafy Tussock Sedge	OBL	<i>Rubus chamaemorus</i>	Cloudberry	FACW
<i>Carex bigelowii</i>	Bigelow Sedge	FAC	<i>Salix alaxensis</i>	Felt-Leaf Willow	FAC
<i>Carex canescens</i>	Hoary Sedge	FAC <sup>b</sup>	<i>Salix barclayi</i>	Barclay's Willow	FAC
<i>Carex saxatilis</i>	Russet Sedge	FACW	<i>Salix pulchra</i>	Diamond-Leaf Willow	FACW
<i>Carex viridula</i>	Little Green Sedge	OBL	<i>Vaccinium uliginosum</i>	Alpine Blueberry	FAC
<i>Dasiphora fruticosa</i>	Shrubby Cinquefoil	FAC			

<sup>a</sup> Wetland Indicator Status (Lichvar 2013): FAC: Facultative: species equally likely to occur in wetlands and non-wetlands; FACU: Facultative Upland: species usually occurs in non-wetlands; FACW: Facultative Wetland: species usually occurs in wetlands; OBL: Species almost always occurs under natural conditions in wetlands.

<sup>b</sup> Subregional indicator status for Interior Alaska Mountains Subregion.



Low shrub communities are the predominant vegetation type in the study area. These communities commonly occur on moderately to steeply sloped shoulders, terraces, and hillsides, and in shallow swales that characterize a large portion of the study area. The low shrub communities were closed and open low shrub birch scrub (Insets 1 and 2, respectively), closed and open low willow scrub (Inset 3 and 4, respectively), and closed and open mixed low shrub birch-willow scrub (Inset 5 and 6, respectively). These communities were documented at five of the seven Wetland Determination Form sites and at 11 Observation Points. At all sites where Wetland Determination Forms were completed, low shrub-scrub communities were determined to have hydrophytic vegetation. Dominant shrub species were resin birch (*Betula glandulosa*), diamond-leaf willow (*Salix pulchra*), felt-leaf willow (*S. alaxensis*), and Barclay's willow (*S. barclayi*). Other low shrub species observed included shrubby cinquefoil (*Dasiphora fruticosa*), marsh Labrador-tea (*Rhododendron tomentosum*), and alpine blueberry (*Vaccinium uliginosum*).

White spruce woodland was documented at two sites, both located within stream drainage (Sites 045 and 048, Inset 7). The woodland understory was formed by tall shrubs, such as felt-leaf willow, diamond-leaf willow, and Barclay's willow. There was a prominent herbaceous layer of field horsetail (*Equisetum arvense*) with bluejoint reedgrass (*Calamagrostis canadensis*), and leafy tussock sedge (*Carex aquatilis*). Both white spruce woodland communities sampled were found to have hydrophytic vegetation.

In areas within stream drainage, the percentage of white spruce cover declines and tall willows become dominant forming a closed tall willow shrub layer. Closed tall willow communities were documented at two Observation Point sites (Site 049 and 051, Inset 8). The shrub and herbaceous strata in this vegetation community were formed by the same plant species as in white spruce woodland. White spruce trees were still present, but at a percent cover of less than 10 percent.



**Inset 1: Typical closed low shrub birch scrub (Site 047).**



**Inset 2: Typical open low shrub birch scrub (Site 057).**



**Inset 3: Typical closed low willow scrub (Site 021).**



**Inset 4: Open low willow scrub around the pond (Site 053).**



**Inset 5: Typical closed low shrub birch-willow scrub (Site 052).**



**Inset 6: Typical open low shrub birch-willow scrub (Site 025).**



**Inset 7: Wet white spruce woodland (Site 045).**



**Inset 8: Closed tall willow shrub community along a dry stream channel (Site 051).**

An ericaceous dwarf scrub community was documented at two Observation Points (Sites 046 and 056, Inset 9). This dwarf scrub vegetation was observed throughout the study area on slopes and windswept ridges with well-drained mineral soils. It was dominated by alpine blueberry, black crowberry (*Empetrum nigrum*), and black torpedoberry (*Arctous alpinus*). Prostrate net-vein willow (*S. reticulata*) was also



common. It was determined that both sites where an ericaceous dwarf scrub community was documented were uplands.

Two dry fescue meadows were documented at Observation Points (Sites 026 and 054, Inset 10), with rough fescue (*Festuca altaica*), Rocky Mountain goldenrod (*Solidago multiradiata*), and tall Jacob's-ladder (*Polemonium acutiflorum*) as the dominant plant species. It was determined that both fescue meadows were uplands.



**Inset 9: Typical ericaceous dwarf scrub (Site 056).**



**Inset 10: Typical dry graminoid meadow (Site 026).**

### 3.2 Soils

According to the Alaska State soil survey, the majority of the study area is located in the zone of the Interior Alaska Mountains-Boreal Glaciated Plains and Hills Soils, and the southwest corner, which constitutes less than 3 percent of the study area, is located within the Interior Alaska Mountains-Boreal Alpine-Rounded Mountains Soils (NRCS 2014). No NRCS area-specific soil mapping exists for the study area.

Site-specific soil characteristics were documented at each of the seven Wetland Determination Form locations and at eight of the Observation Points. Within the study area, hydric soils were found at four of the seven Wetland Determination Form locations. Hydric soil indicators observed at each site are shown in Table 4. Appendix A includes specific characteristics of the sampled soils, including color and texture, and photographs showing soil conditions for each site.



**Table 4. Hydric Soil Indicators at Data Collection Locations**

Site	Histosol or Histel	Hydrogen Sulfide	Alaska Redox with 2.5Y Hue	Hydric Soil Present? (Y/N)
020		X		Y
021				N
023		X		Y
043			X	Y
045	X	X		Y
047				N
048				N
<b>TOTAL</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>4</b>

A histosol was observed at one location within the white spruce woodland in a stream drainage complex (Site 045). The site was characterized by 16 inches of organic material, which was saturated at the ground surface (Inset 11). This site had surface water in microlows between hummocks, and in channelized features through the plot. Hydrogen sulfide odor within was detected at the soil surface.

At two other sites, hydrogen sulfide odor within 12 inches of the soil surface was also detected (Sites 020 and 023). Both sites were located in the northwest corner of the study area adjacent to the Denali Highway. Hydrogen sulfide was noted at 6 inches below the soil surface at Site 02 (Inset 12), and at 1 inch below the soil surface at Site 023. Soils with a hydrogen sulfide odor recorded were determined to be hydric.



**Inset 11: Soil profile meeting the histosol and hydrogen sulfide odor hydric soil indicators (Site 045).**



**Inset 12: Soil profile meeting the hydrogen sulfide odor hydric soil indicator (Site 020).**

One site had Alaska Redox with 2.5Y Hue indicator for problem soils (Site 043, Inset 13). This site had a mineral layer with a dominant hue of 2.5Y with a chroma of 2 based on colors from the *Munsell Soil-Color Chart* (Munsell Color 2009), with 15 percent of prominent redox concentrations occurring in matrix and pore linings. This layer starts at 7 inches from the soil surface. The site had hydrophytic vegetation and evidence of primary indicators of wetland hydrology, which meet the requirements for a problematic hydric soil situation. Therefore, soils at this site were determined to be hydric. All hydric soils were characterized as very poorly drained, except for one that was characterized as poorly drained.



**Inset 13: Soil profile meeting the Alaska Redox with 2.5Y Hue problematic hydric soil indicator (Site 043).**



**Inset 14: Typical non-hydric soil profile (Site 048).**

In addition to the hydric soils described above, non-hydric soils were found in the study area (Inset 14). Non-hydric soils were documented at three of the seven sites where Wetland Determination Forms were completed. Two sites with non-hydric soils had a relatively thin horizon of organic material (up to 4 inches) underlain by sand or sandy loam mineral soil with cobbles. The mineral horizons were mostly 10YR in hue, based on colors from the *Munsell Soil-Color Chart* (Munsell Color 2009). One site (Site 021) was observed to have 8 inches of organic material that was not saturated at the time of the field visit. This site did not meet the criteria to satisfy wetland problematic situations and the site was determined to be upland. Non-hydric soils were characterized as moderately well to well drained.

### 3.3 Hydrology

In order to determine the degree to which any recent climatic events (e.g., abnormal wet or dry conditions) may have influenced field hydrology, recent precipitation data can be compared with normal totals according to the NRCS *Engineering Field Handbook* method (NRCS 1997). This method requires recent and historical climate data. These data were not available at any weather station in close enough proximity to the study area to have precipitation trends that would be assumed to be similar.

Wetland hydrology (at least one primary indicator or two secondary indicators) was documented at five of the seven sites where Wetland Determination Forms were completed. The remaining two sites (Sites 047 and 048) had evidence of only one secondary wetland hydrology indicator, and therefore did not meet the wetland hydrology standard. Hydrology indicators observed at each site are shown in Table 5.



**Table 5. Hydrology Indicators at Data Collection Locations**

Site	Primary Indicators						Secondary Indicators					Wetland Hydrology Present? (Y/N)
	Surface Water	High Water Table	Saturation	Inundation Visible on Aerial Imagery	Iron Deposits	Hydrogen Sulfide Odor	Drainage patterns	Presence of Reduced Iron	Geomorphic Position	Microtopographic Relief	FAC-Neutral Test	
020	X	X	X	X		X		X	X	X	X	Y
021							X		X		X	Y
023	X	X	X		X	X				X	X	Y
043	X	X	X						X	X		Y
045	X	X	X			X			X	X		Y
047									X			N
048									X			N
<b>TOTAL</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>6</b>

The most common primary wetland hydrology indicators observed were surface water (Inset 15), high water table (within 12 inches of the soil surface; Inset 16), and saturation. Hydrogen sulfide odor, inundation visible on aerial imagery, and iron deposits were also recorded.

The most common secondary indicators observed were geomorphic position, microtopographic relief, and the FAC-neutral test. Geomorphic positions conducive to the collection and retention of water within the study area were depressions, toeslopes, and floodplains (Inset 17). The presence of hummocks (Inset 18) and drainage patterns at several sites indicated that surface water had been present for some period of time. Reduced iron in soils, as indicated by a positive alpha, alpha-dipyridyl color change, was found at one site (Site 020). One sites (Site 021) had no primary hydrology indicators, but at least two secondary indicators were recorded. A single secondary hydrology indicator was recorded at Sites 047 and 048, which is insufficient for meeting the criteria for wetland hydrology.



**Inset 15: Surface water (Site 023).**



**Inset 16: High water table observed in a soil pit (Site 046).**



**Inset 17: Geomorphic position (depression)  
(Site 021).**



**Inset 18: Microtopographic relief (hummocks)  
(Site 020).**

Not every Wetland Determination Form site where wetland hydrology was observed was determined to be a wetland. Only four of the five sites that were found to exhibit wetland hydrology were also determined to have hydric soils and hydrophytic vegetation, and thus be classified as wetland.

Specific information about the different indicators (e.g., depth to saturation within the soil pit) can be found on the data forms included in Appendix A. These indicators are further described in the 2007 *Regional Supplement* (USACE 2007).

### 3.4 Wetland and Waterbody Classes Observed

Wetlands were identified where wetland scientists observed indicators of hydrophytic vegetation, wetland hydrology, and hydric soils. If any of these three requirements were not met under normal conditions, the site did not meet the USACE criteria for being classified as a wetland, and therefore would not be subject to Section 404 regulations. Wetland/upland determinations were made at seven sites where Wetland Determination Forms were completed and at an additional 16 sites where Observation Points were documented. Three waterbody Observation Points were also completed.

#### **Evergreen Forested/Deciduous Scrub-Shrub Wetland**

A needle-leaved evergreen forested/deciduous scrub-shrub wetland was documented at one Wetland Determination Form site (Site 045). This white spruce woodland wetland is located in the northeastern corner of the study area within the floodplain of the unnamed stream. This wetland type was characterized by 20 percent white spruce trees and saplings and an understory of tall willows and low ericaceous shrubs. Soil at this site contained 16 inches of organic material that was saturated to the top of the soil surface. This site had strong indicators of wetland hydrology, including surface water in microlows and side channels, high water table (5 inches of the soil surface), hydrogen sulfide odor at the soil surface, geomorphic position, and microtopographic relief. This site appeared to receive overbank flooding from the adjacent perennial stream.

#### **Deciduous Scrub-Shrub Wetlands**

Scrub-scrub wetland were documented at two of the seven sites where Wetland Determination Forms were completed (Sites 023 and 043), and at two of the 19 Observation Points (Sites 046 and 049). These



wetlands were dominated by resin birch with diamond-leaf willow, felt-leaf willow, and Barclay's willow. Bluejoint reedgrass, leafy tussock sedge, and purple marshlocks (*Comarum palustre*) were the dominant herbaceous species. Three sites were located at the toeslopes of a bench and had surface water in the microlows. Site 043 was located within the floodplain channel in the northeast corner of the study area. Water regimes at these deciduous scrub-shrub wetlands varied from saturated to semipermanently flooded.

### Scrub-Shrub/Emergent Wetlands

A mixed deciduous scrub-shrub/emergent wetland was documented at one of the seven sites where a Wetland Determination Form was completed (Site 020) and at one Observation Point (Site 053). Both sites were located within small isolated depressions. These wetlands contained a significant percentage of both shrub and herbaceous species. Shrubs were predominantly diamond-leaf willow and herbaceous species were hoary sedge and russet sedge. Hydrogen sulfide was detected within the upper 12 inches of the soil profile and the presence of reduced iron was indicated by a positive alpha, alpha-dipyridyl color change at both sites. Site 020 was located in northwest portion of the study area, immediately south of the highway. The site was hummocky and was inundated at the lowest point due to very recent flooding. One Observation Point (Site 053) was located within a vegetated margin of pond in the southeast portion of the study area. This site appeared to be semipermanently flooded.

### Streams

Two perennial streams and one intermittent stream drainage were documented at three Observation Points. An active channel of the unnamed stream that flows from south to north in the southwest corner of the study area was documented at one Observation Point (Site 058). This unnamed stream was approximately 10 feet wide and up to 2 feet deep, with gravel and cobble substrate and occasional boulders (Inset 19). The banks of this stream were clearly defined, approximately 2 to 5 feet above the water level. The drainage corridor was vegetated with felt-leaf willow, resin birch, and alpine blueberry. No fish were observed at time of the field visit.

An unnamed intermittent stream that flows from south to north along the easternmost boundary of the study area was documented at one Observation Point (Site 051). This dry stream bed was up to 5 feet wide and was located at the bottom of a deep (up to 10 feet) gulch with steep sides. The dry streambed was made of large cobbles. Evidence of past inundation, such as watermarks on the bark of woody stems and vegetation litter deposits were observed. The stream banks are upland, with tall shrubs dominated by felt-leaf willow (Inset 8). Multiple signs of ground water discharge were observed at the lower reaches of the stream around the Site 049. Irregular channelized features discharge into a pond located just outside the study area.

Although the pond is located outside the study area, the perennial outlet originates from the pond entering the study area and flows roughly to north through mixed forested/scrub-shrub wetland in the northeast corner of the study area. Site 044 documents the unnamed perennial stream originating from the pond. This stream had well-defined streambed and stream banks, with very mucky substrate underlain with cobbles (Inset 20). The stream channel had notably irregular width and depth, which varied from several inches to 2 feet in places. Numerous pools of different size and side channels with fast-moving water were documented within the stream drainage. Floating mats of vegetation was observed at this site.



**Inset 19: Unnamed perennial stream (Site 058).**



**Inset 20: Unnamed perennial stream (Site 044).**

### Lakes and Ponds

Small portions of two perennial ponds are located within the study area (Figure 2). The edges of the ponds within the study area constitute approximately 0.06 acre of open water.

### Uplands

Uplands account for the majority of the study area. Uplands were documented at three sites where Wetland Determination Forms were completed and at 13 Observation Points.

## 4.0 Wetland Mapping Results

Wetlands were identified where HDR scientists observed indicators of hydrophytic vegetation, wetland hydrology, and hydric soils. Areas that appear on aerial photographs to be similar to wetlands identified in the field were also identified as wetlands.

Approximately 6.0 acres of wetlands were identified within the 119.0-acre study area. Wetland types are needle-leaved evergreen forest and deciduous broad-leaved scrub-shrub, broad-leaved deciduous scrub-shrub, and needle-leave deciduous scrub-shrub and persistent emergent. An additional 0.4 acre (<0.5 percent) of the study area was identified as waterbodies. The waterbody types included upper perennial and intermittent riverine systems and ponds, although it should be noted that ponds are located largely outside the study area. The remaining 112.7 acres (approximately 95 percent) of the study area were identified as upland. Wetland and waterbody classes found within the study area and acreages of each NWI classification are provided in Table 6.

Figure 2 displays wetland, upland, and waterbody boundaries, the boundaries between different wetland and waterbody types identified in the study area. Locations of the Wetland Determination Form sites and Observation Points are also shown.

Additional office-based wetland and waterbody mapping completed within the MSB Earth Materials Extraction permitting area is shown on Figure 3.



**Table 6. Mapping Summary**

Map Code	Description	Representative Data Form Sites	Representative Observation Points	Acres
<b>Forested</b>				
PFO4/SS1C	Seasonally flooded needle-leaved evergreen forest – broad-leaved deciduous scrub-shrub wetland	045	-	2.81
<b>Scrub-Shrub Wetlands</b>				
PSS1B	Saturated broad-leaved deciduous scrub-shrub wetland	-	046	0.23
PSS1C	Seasonally flooded broad-leaved deciduous scrub-shrub wetland	043	049	0.83
PSS1F	Semipermanently flooded broad-leaved deciduous scrub-shrub wetland	023	-	1.90
<b>Scrub-Shrub/Emergent Wetlands</b>				
PSS1/EM1C	Seasonally flooded broad-leaved deciduous scrub-shrub and persistent emergent wetland	020	053	0.20
<b>Total Wetland Area <sup>a</sup></b>				<b>5.95</b>
<b>Waterbodies</b>				
R3UBH	Permanently flooded upper perennial stream with an unconsolidated bottom	-	044, 058	0.17
R4SBC	Seasonally flooded intermittent stream bed	-	051	0.17
PUBH	Permanently flooded pond with an unconsolidated bottom	-	-	0.03
PABH	Permanently flooded pond with aquatic bed	-	053	0.03
<b>Total Other Waters of the U.S. <sup>a</sup></b>				<b>0.41</b>
U	Upland	047, 048	021, 022, 024, 025, 026, 050, 052, 054, 055, 056, 057, 059, 060, 061	112.67
<b>Total Mapped Area <sup>a</sup></b>				<b>119.03</b>

<sup>a</sup> Total acreage present may not reflect the sum of the individual cells due to rounding

## 5.0 Summary of Wetland Functions Observed

A total of 6.36 acres of wetlands and waterbodies were evaluated for their contributions to the local ecosystem. Vegetation type, knowledge of hydrological inputs and outputs, HGM class, wildlife information, and topographic settings were used to complete the Wetland Function and Services Assessment Forms and assess functions for each wetland type. The following sections describe the functions and services identified at each site. Completed data forms, including explanation for the ranking of functions and services at specific sites, are included in Appendix C.

### 5.1 Evergreen Forested and Deciduous Scrub-Shrub Wetland

Approximately 2.8 acres of needle-leaved evergreen forest –broad-leaved deciduous scrub-shrub wetlands occur within the study area. The assessment of functions and services present in the needle-leaved



evergreen forest - deciduous scrub-shrub wetland was documented at Site 045. This wetland complex was documented as having a Riverine HGM class. The position of this wetland along the creek provides the opportunity for the wetland to perform functions at a high or moderate level. Functions provided include flood flow alteration, sediment/toxicant reduction, sediment/shoreline stability, wildlife habitat, and visual quality/aesthetics. Overall, this wetland is not considered to be exceptional based on the relatively common occurrence of this wetland type in the region. This wetland was determined to be moderate functioning. A summary of functions observed at evergreen forested and scrub-shrub wetland is shown in Table 7.

<b>Table 7. Wetland Functions for Evergreen Forested and Scrub-Shrub Wetland</b>	
Site	045
NWI Code	PFO4/SS1C
HGM Class	Riverine
Function or Service	Degree Function or Service Notably Present
Groundwater Recharge	-
Flood flow Alteration	High
Fish and Shellfish Habitat	-
Sediment and Toxicant Reduction	High
Nutrient Removal	-
Production Export	-
Sediment/Shoreline Stability	High
Wildlife Habitat	Moderate
Recreation	-
Education and Scientific Value	-
Uniqueness and Heritage	-
Visual Quality and Aesthetics	Moderate
Endangered Species Habitat	-
Wetland Functional Category	Category II

## 5.2 Deciduous Scrub-Shrub and Deciduous Scrub-Shrub/Persistent Emergent Wetlands

Approximately 3.1 acres of deciduous scrub-shrub and deciduous scrub-shrub/persistent emergent wetlands occur within the study area. The assessment of functions and services present in the deciduous scrub-shrub wetlands was completed at two Wetland Determination Form sites (Sites 023 and 043).

The scrub-shrub wetland at Site 023 was located at a toeslope within the upper portion of an extensive scrub-shrub wetland complex that expands into a large area north outside the study area. This wetland was determined to have a Slope HGM class. It was found to serve multiple functions at a high or moderate level. These include groundwater flood flow alteration, sediment/toxicant reduction, recreational opportunities, and visual quality/aesthetics. The wetland was also found to provide nutrient



removal, although at a low level. The scrub-shrub wetland documented at Site 043 is part of riverine wetland complex. This wetland serves several functions at a high level, including flood flow alteration, sediment and toxicant reduction, and wildlife habitat. It also serves functions of recreational opportunities and aesthetic value at low and moderate degrees, respectively. Overall, the wetlands documented at Sites 023 and 043 were found to be moderate functioning, as they are not considered exceptional based on the relatively common occurrence of this wetland type in the region.

A Wetland Function and Services Assessment Form was completed at Site 020, a deciduous scrub-shrub—persistent emergent wetland. Due to its proximity to the road fill and gravel pullouts, as well as its location in isolated depression, the site performed the functions of ground water recharge at a moderate level and wildlife habitat at low level.

A summary of functions observed at the scrub-shrub wetland and scrub-shrub/persistent emergent wetland sites is shown in Table 8.

<b>Table 8. Wetland Functions for Deciduous Scrub-Shrub Wetlands</b>			
<b>Site(s)</b>	020	023	043
NWI Code	PSS1/EM1C	PSS1F	PSS1C
HGM Class	Depressional	Slope	Riverine
<b>Function or Service</b>	<b>Degree Function or Service Notably Present</b>		
Groundwater Recharge	Moderate	-	
Flood flow Alteration	-	Moderate	High
Fish and Shellfish Habitat	-	-	-
Sediment and Toxicant Reduction	-	Moderate	High
Nutrient Removal	-	Low	-
Production Export	-	-	-
Sediment/Shoreline Stability	-	-	-
Wildlife Habitat	Low	-	High
Recreation	-	Moderate	Low
Education and Scientific Value	-	-	-
Uniqueness and Heritage	-	-	-
Visual Quality and Aesthetics	-	Moderate	Moderate
Endangered Species Habitat	-	-	-
Wetland Functional Category	Category III	Category II	Category II

Although a Wetland Function and Services Assessment Form was not completed at each scrub-shrub wetland within the study area, these wetlands are expected to serve similar functions at the same degree as those evaluated at Sites 023 and 043. Other scrub-shrub wetlands in the study area were determined to be moderately functioning.

In total, 3.0 acres of deciduous scrub-shrub and deciduous scrub-shrub/persistent emergent wetlands found within the study area were categorized as Category II. An additional 0.1 acre of deciduous scrub-shrub/persistent emergent wetlands was categorized as Category III.



### 5.3 Waterbodies

Monahan Creek is the only named perennial stream in the vicinity. It is not listed as a stream providing habitat for anadromous fish by the State of Alaska's *Anadromous Waters Catalog* (ADF&G 2014a), but is documented to support species of resident fish, including Arctic grayling and slimy sculpin (ADF&G 2014a, 2014b).

Two unnamed perennial streams in the study area were categorized as Category II because these sites likely serve several functions at a high level, including fish and shellfish habitat, flood flow alteration, production export, and wildlife habitat. The intermittent stream within the study area was categorized as Category III because it does not provide fish habitat, and likely performs flood flow alteration and wildlife habitat functions at a moderate or low degree.

Two perennial ponds are located in the project vicinity. Only small portions of these ponds are situated within the study area. These ponds do not provide anadromous fish habitat, but are likely to support resident fish species. Both ponds are assumed to serve several functions at a moderate to high level, and thus both ponds were categorized as Category II. Functions include fish and shellfish habitat, groundwater recharge, flood flow alteration, wildlife habitat, and visual quality. The pond located to the east of the study area is part of a wetland complex that extends upstream and downstream. An intermittent stream flows into this pond and a perennial stream flows from the pond to the north.

Streams and small portions of the ponds within the study area were evaluated for their contributions to the local ecosystem and were categorized Category II and III based on their functional performance. Figure 4 displays streams and ponds mapped within the study area by functional category. Perennial streams make up approximately 0.17 acre, and an intermittent stream makes up 0.17 acre within the study area.

## 6.0 Functional Assessment Mapping Results

A total of 6.36 acres of wetlands and waterbodies were evaluated for their contributions to the local ecosystem. Data from Wetland Determination Forms, Observation Points, and Function and Services Assessment Forms were evaluated accounting for vegetation type, hydrological inputs and outputs, wildlife information, and topographic settings. Wetlands and waterbodies within the study area were categorized as Category II or III based on their functional performance (USACE 2009). The evergreen forest and deciduous scrub-shrub wetland, deciduous scrub-shrub wetlands, one deciduous scrub-shrub/persistent emergent wetland, two perennial streams, and two perennial ponds were classified as Category II. One isolated deciduous scrub-shrub/persistent emergent wetland and one intermittent stream were classified as Category III. Figure 4 displays wetlands and waterbodies mapped within the study area by functional category. The total acreage of wetland and waterbodies within each functional category within the study area is provided in Table 9.

Category II wetlands within the study area were evergreen forested and deciduous scrub-shrub, deciduous scrub-shrub, and deciduous scrub-shrub/persistent emergent wetlands located within larger wetland complexes that have a hydrological connection to or are in close proximity to streams. These sites performed several functions at a high or moderate level, but are relatively common within the region.



<b>Table 9. Total Wetlands and Waterbodies Present in Study Area, by Category</b>	
<b>Functional Category</b>	<b>Total Acreage</b>
Category II	6.08
Category III	0.28

Two areas were categorized as Category III wetlands and waterbodies; an isolated deciduous scrub-shrub/persistent emergent wetland and an intermittent stream. This wetland and stream serve multiple functions, but at lower levels than the Category II wetlands and waterbodies.



## 7.0 References

- Alaska Department of Fish and Game (ADF&G). 2014a. *Anadromous Waters Catalog*. Accessed at <http://www.adfg.alaska.gov/sf/SARR/AWC/> on November 11, 2014.
- ADF&G. 2014b. *Alaska Freshwater Fish Inventory*. Accessed at <http://www.adfg.alaska.gov/index.cfm?adfg=ffinVENTORY.main> on November 11, 2014.
- American Society for Testing Material. 1999. *Standard Guide for Assessment of Wetland Functions*. Subcommittee E50.05.
- Brinson, M.M. 1993. *A hydrogeomorphic classification for wetlands, Technical Report WRP-DE-4*. U.S. Army Corps of Engineers Engineer Waterways Experiment Station, Vicksburg, MS.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. Office of Biological Services, U.S. Fish and Wildlife Service. Washington, DC.
- DigitalGlobe. 2010. *Color ortho-rectified aerial imagery*. Provided by Alaska Department of Transportation and Public Facilities.
- Lichvar, R.W. 2013. *The National Wetland Plant List: Alaska 2012 Final Regional Wetland Plant List*. ERDC/CRREL TR-12-11. Hanover, NH: U.S. Army Corps of Engineers, Cold Regions Research and Engineering Laboratory.
- Munsell Color. 2009. *Munsell Soil-Color Charts*. Grand Rapids, MI.
- Natural Resource Conservation Service (NRCS). 1997. *Hydrology tools for wetland determination: Engineering Field Handbook*, Chapter 19. Washington D.C.
- NRCS, 2014. *Soil Survey Geographic database for Matanuska-Susitna Borough, Alaska*. U.S. Department of Agriculture, Natural Resource Conservation Service. Available online at: <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed November 1, 2014.
- Novitzki, R.P., Smith, R.D., and J.D. Fretwell. 1997 *Restoration, Creation, and Recovery of Wetlands; Wetland Functions, Values and Assessment. National Water Summary on Wetland Resources*. U.S. Geological Survey Water Supply Paper 2425.
- U.S. Army Corps of Engineers (USACE) Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Wetlands Research Program Technical Report Y-87-1. Vicksburg, MS.
- USACE, New England District. 1999. *The Highway Methodology Workbook Supplement: Wetland Functions and Values*. NAEEP-360-1-30a. Concord, MA.
- USACE Environmental Laboratory. 2007. *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Alaska Region*. ERDC/EL TR-07-24. Vicksburg, MS.



- USACE, Alaska District. 2009. *Alaska District Regulatory Guidance Letter RGL ID No. 09-01*. CEPOA-RD.
- USACE, Alaska District. 2010. *Special Public Notice (SPN) 2010-45*. Corps of Engineers Regulatory Program, Consultant-Supplied Jurisdictional Determination Reports. Anchorage, AK.
- USACE, Alaska District. 2014. *Description of Wetland Categories and Ratios for Compensatory Mitigation*. Available online at:  
<http://www.poa.usace.army.mil/Portals/34/docs/regulatory/HOWWetlandCategoriesRatios.pdf>.  
Accessed September 27, 2014.
- U.S. Fish and Wildlife Service (USFWS). 2012. *National Wetland Inventory Mapping*. Available online at: <http://enterprise.nwi.fws.gov/shapedata/alaska/>. Accessed November 1, 2014.



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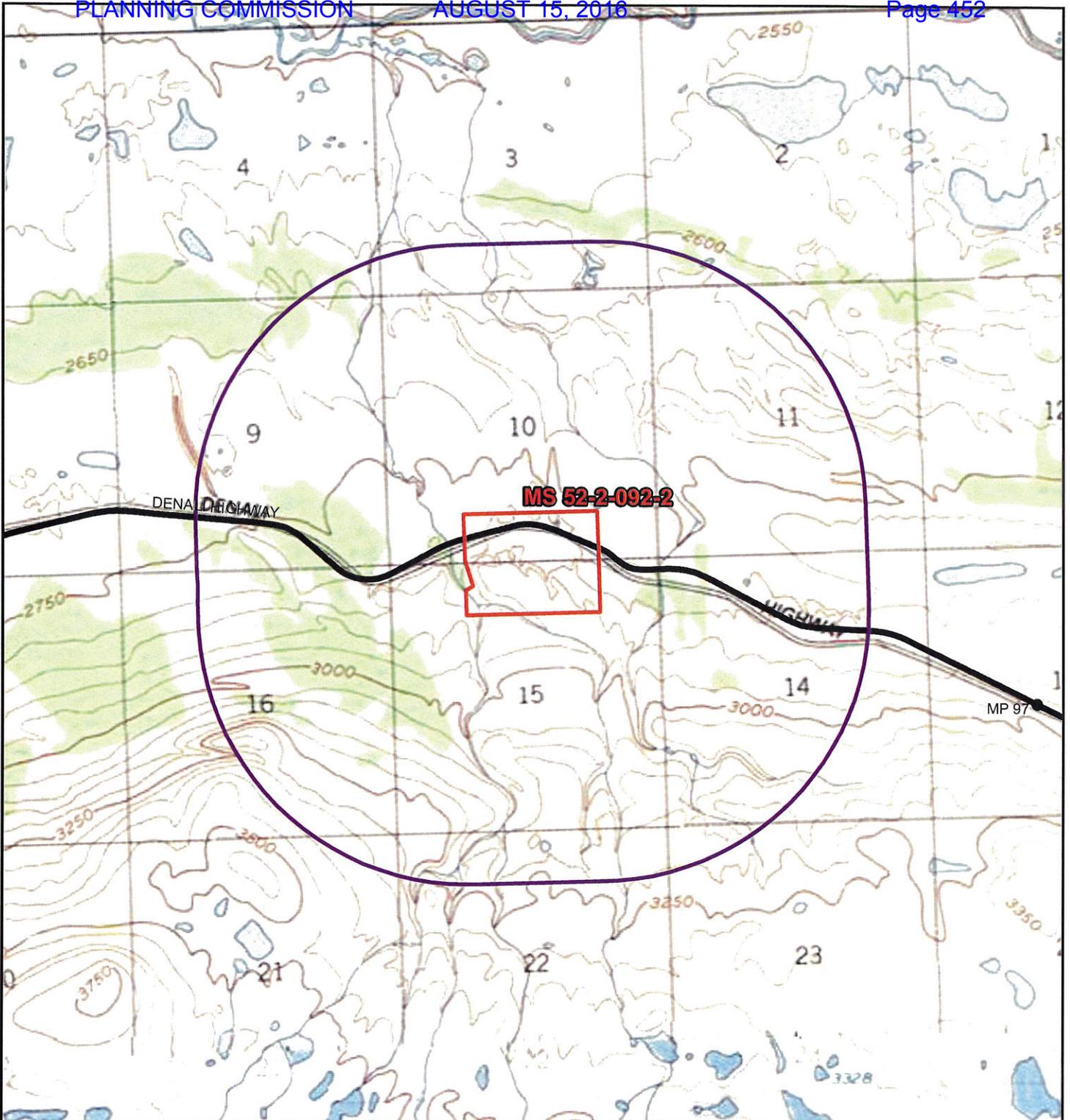


## Figures

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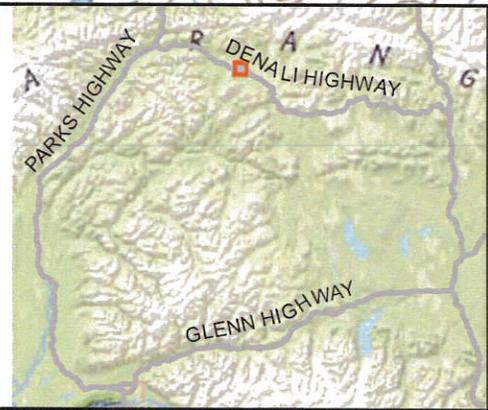


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**LEGEND**

- Material Site Study Area
- MSB Permit Area



ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

**Figure 1: Study Area and Project Vicinity**

Denali Highway, Alaska

N

0 0.5 1 Miles

Created by HDR, May 20, 2015



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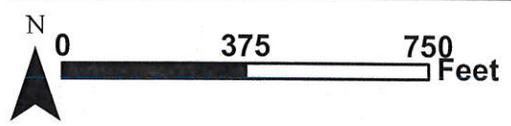
**MS 52-2-092-2**



<b>LEGEND</b>	Study Area	<b>Data Collection Points</b>
	Mapped Stream	Data Form, Upland
	Perennial	Data Form, Wetland
	Intermittent	Observation Point, Upland
	<b>Mapped Wetland</b>	Observation Point, Wetland
	Mapped Waterbody	Stream Crossing
	Mapped Wetland	

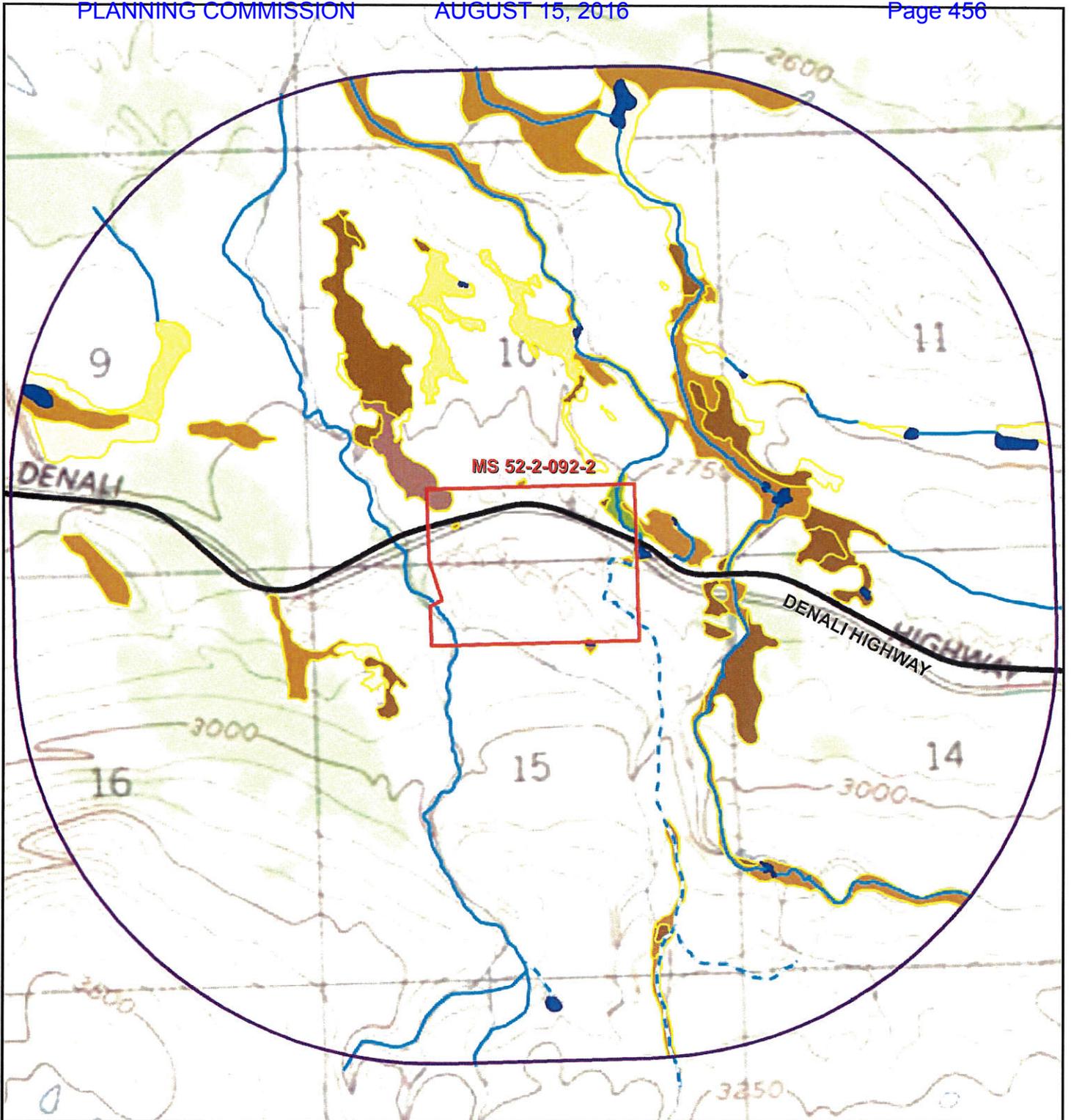
ALASKA DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
**Figure 2: Wetland  
and Waterbody Mapping**

Denali Highway, Alaska





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**LEGEND**

- Study Area
- MSB Permit Area

**Mapped Wetlands**

**Emergent**

- Emergent, saturated
- Emergent, permanently flooded
- Emergent, semipermanently flooded
- Emergent, seasonally flooded
- Emergent-scrub-shrub, seasonally flooded

**Waterbody**

- Waterbody, permanently flooded
- Waterbody, semipermanently flooded

**Scrub-Shrub**

- Scrub-shrub, saturated
- Scrub-shrub, semipermanently flooded
- Scrub-shrub, seasonally flooded
- Scrub-shrub, temporarily flooded

**Forested**

- Forested, saturated
- Forested, seasonally flooded
- Forested, temporarily flooded

**Stream**

- Perennial
- Intermittent

\*Topographic base map to be used for general reference only

ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

**Figure 3. Wetland and Waterbody Mapping MSB Permit Area**

Denali Highway, Alaska

N

0 0.25 0.5 Miles

Created by HDR, May 21, 2015





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MS 52-2-092-2

DENALI HIGHWAY

023

020

045

043

**LEGEND**

	Study Area		Stream Functional Categories
	Functional Data Collection Site		Category III
<b>Wetland and Waterbody Functional Categories</b>			
	Category II		
	Category III		

**ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**  
**Figure 4. Wetland and Waterbody Functional Categories**  
 Denali Highway, Alaska

N 0 375 750 Feet

Created by HDR, May 20, 2015 

# **SITE PHOTOGRAPHS**









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# COMMENTS





## MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

Cultural Resources Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 745-9859 • Fax (907) 745-9876

Matanuska - Susitna Borough  
Development Services

JUN 22 2016

Received

### MEMORANDUM

**DATE:** 21 June 2016  
**TO:** Susan Lee, Planner II  
**FROM:** Sandra Cook, Cultural Resources  
**SUBJECT:** Interim Materials District  
**TITLE:** Mile 99 Denali Highway—ADOT&PF  
**LEGAL:** Section 10 & 15, T19S, R02W, FM  
**TAX MAP:** DH00

### NO OBJECTION --CAUTION

Cultural Resources Division staff has reviewed the above application and finds there is are known *recorded* sites on said property. This conclusion was derived through research of the documented sites on file in the Cultural Resources Division of the Matanuska-Susitna Borough and sites documented in Alaska Heritage Resource files at the State Office of History and Archaeology.

While we have no objection to the proposed action on the said property, we recommend caution during construction or related activities in the event cultural remains may come to light or be recovered. If cultural resources are found as a result of the above mentioned activity we would appreciate the chance to document them to augment our knowledge of local history. Cultural remains may include features such as cache pits, house pits, garbage pits, depressions and/or other non removable indications of human activity, as well as, artifacts, buildings, machinery, etc.

Recording of cultural resources or other remains does not change ownership status of materials found, they belong to the property owner, nor does it prohibit your activity request. If cultural remains are located please contact this office at (907) 861-8655 as soon as possible. This would enable us to photograph and record any cultural materials that may be observed. Thank you for your cooperation. We appreciate you helping us learn more about our past.

Sincerely

Sandra Cook  
Cultural Resources

NOTE§A.S.11.46.482 (a) of the Alaska Statutes states that

A person commits the crime of criminal mischief in the third degree if, having not right to do so or any reasonable grounds to believe the person have such a right...

(3) If a person knowingly

(A) defaces, damages or desecrates a cemetery or the contents of a cemetery or a tomb, grave, or memorial regardless of whether the tomb, grave, or memorial is in a cemetery or whether the cemetery, tomb, grave, or memorial appears to be abandoned, lost, or neglected; (B) removes human remains or associated burial artifacts from a cemetery, tomb grave, or memorial regardless of whether the cemetery, tomb, grave, or memorial appears to be abandoned, lost or neglected.

**Susan Lee**

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**From:** Theresa Taranto  
**Sent:** Thursday, June 23, 2016 10:33 AM  
**To:** Susan Lee  
**Subject:** RE: Denali Highway IMD

This area is not mapped.  
No other comments.

Thanks,

Theresa Taranto  
Development Services  
Administrative Specialist

Mat-Su Borough  
350 E Dahlia Ave.  
Palmer, Alaska 99645  
907-861-8574

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**From:** Susan Lee  
**Sent:** Thursday, June 16, 2016 10:04 AM  
**To:** [allen.kemplen@alaska.gov](mailto:allen.kemplen@alaska.gov); [kevin.vakalis@alaska.gov](mailto:kevin.vakalis@alaska.gov); [tucker.hurn@alaska.gov](mailto:tucker.hurn@alaska.gov); [melanie.nichols@alaska.gov](mailto:melanie.nichols@alaska.gov); Mike Bethe ([mike.bethe@alaska.gov](mailto:mike.bethe@alaska.gov)); Elizabeth Weiant; Sandra Cook; [regpagemaster@usace.army.mil](mailto:regpagemaster@usace.army.mil); Theresa Taranto; Eileen Probasco; [jimsykesdistrict1@gmail.com](mailto:jimsykesdistrict1@gmail.com)  
**Subject:** Denali Highway IMD

Hi all:

The State of Alaska, Department of Transportation & Public Facilities has submitted an Interim Materials District (IMD) application for the extraction of up to 500,000 cubic yards of material until the year 2060 within a 69.91 acre parcel of property. The proposed material extraction site is located at Mile 99 of the Denali Highway; within Township 19 South, Range 2 West, Sections 10 & 15, Fairbanks Meridian.

The Planning Commission will conduct a public hearing concerning this application on Monday, August 15, 2016.

Please review and submit any comments you may have to me by **July 27, 2016**. If you have any questions or require additional information please let me know.

Susan

Susan Lee  
Planner II

Matanuska-Susitna Borough  
907-861-7862 (Direct Line)  
907-861-7876 (FAX)



**AUGUST 15, 2016**



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Matanuska - Susitna Borough  
 Development Services

4U08523000000  
 LIBBEY ROBERT M & KAROL J.  
 LIBBEY ROBERT J  
 14901 WILDIEN DR  
 ANCHORAGE, AK 99516

5 JUL 26 2016

**Received**

FIRST CLASS MAIL

The Planning Director of the Matanuska-Susitna Borough will consider the following:

- Application:** Application for an Interim Materials District (IMD)
- MSB Code Section:** MSB 17.28 – Interim Materials District
- Applicant/Property Owner:** State of Alaska, Department of Transportation & Public Facilities
- Location:** Mile 99 Denali Highway; within Township 19 South, Range 2 West, Sections 10 and 15, Fairbanks Meridian.
- Request:** An application for an Interim Materials District (IMD) has been submitted for the extraction of up to 500,000 cubic yards of material until the year 2060 within a 69.91 acre parcel of property.

The Planning Commission will conduct a public hearing in the Borough Assembly chambers, Palmer, Alaska, on this item on **August 15, 2016**. The meeting begins at 6:00 p.m. **Public hearing begin at 6:15 p.m.** This may be the only presentation of this item before the Planning Commission and you are invited to attend.

Application material may be viewed online at [www.matsugov.us](http://www.matsugov.us) and clicking on 'Public Notices'. Application material may also be reviewed in the Borough Permit Center. If you have any questions or would like to send us comments concerning the proposed action, this form may be used for your convenience by filling in the information below and mailing it to the Matanuska-Susitna Borough, Development Services Division, 350 E. Dahlia Avenue, Palmer, Alaska 99645. You may fax comments to 861-7876 or e-mail to [slee@matsugov.us](mailto:slee@matsugov.us). For more information, please contact Susan Lee at 861-7862. Comments received prior to **July 27, 2016** will be included in the Planning Commission packet for the Commissioner's review and information. Please be advised that comments received from the public after that date will not be included in the staff report to the Planning Commission. If there is not enough room below, please attach this sheet to another piece of paper.

Name: Robert & Karol Libbey Mail Address: 14901 Wildien Drive, Anchorage, AK 99516

Location/Legal Description of your property: Mile 100, Denali Hwy

Comments: We were advised that the permit would apply only to gravel south of the Denali Hwy. On the north side, at approximately Mile 99, are some "world class" examples of recent glacial activities in the region in the form of eskers, that clearly demonstrate the influence of margining glaciers moving in different directions. Because of the elevation, all this remains clearly visible. People are fascinated by this, and they are on tour packages originating at Denali NP. It would be reckless to destroy these eskers just for a little gravel - which is abundant along almost the entire length

Note: Vicinity Map Located on Reverse Side of the Denali Hwy.

**Susan Lee**

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**From:** Bohner, Christina M (DNR) <christina.bohner@alaska.gov>  
**Sent:** Tuesday, April 15, 2014 11:20 AM  
**To:** Sullivan, Joe P (DOT); Stevens, Deanne S P (DNR); Palmer, Charley (DEC); Vanderhoek, Richard (DNR); Susan Lee; DNR Land Sales (DNR sponsored)  
**Cc:** Bohner, Christina M (DNR)  
**Subject:** Final Finding MP 99 Denali Highway  
**Attachments:** SCRO Land001.pdf

Attached is the final finding.

Thanks for your participation during the comment period..

Chris

Christina Bohner ( Chris)  
Material Girl  
ADNR/SCRO  
550 W. 7th Avenue Suite 900C  
Anchorage AK 99501  
P: 907-269-8560  
F: 907-269-8913

Do good and good will come to you.

-----Original Message-----

**From:** [dnrscro@alaska.gov](mailto:dnrscro@alaska.gov) [mailto:[dnrscro@alaska.gov](mailto:dnrscro@alaska.gov)]  
**Sent:** Tuesday, April 15, 2014 11:49 AM  
**To:** Bohner, Christina M (DNR)  
**Subject:** SCRO Land

Please open the attached document. It was scanned and sent to you using a Xerox multifunction device.

Attachment File Type: pdf

multifunction device Location: machine location not set  
Device Name: XRX\_0000AAFA128B

SCRO Land

State of Alaska  
Department of Natural Resources  
Division of Mining, Land and Water  
Southcentral Regional Office

**Final Finding and Decision**  
ADL 231377 ADNR Material Site  
ADL 230954 ADOT Material Contract

**Proposed Action:** Under AS 38.05.550- AS 38.05.565, and AS 38.05.035(e) The Division of Mining, Land and Water (DMLW) proposes to establish a material site (ADL 231377) under AS 38.05.550 (b) for the continuous use as a site for the extraction and sale of materials as defined under AS 38.05.965 (10). Once designated, this site will remain open for material sales indefinitely or until closed by the department. Contracts for the sale of material may be issued by the department either by negotiated, competitive or limited and public and charitable material sale methods. Contracts issued under the authority of AS 38.05.810 (a) Public and Charitable will be issued at less than Fair Market Value (FMV).

**ADL 231377:** The establishment of an 80 acre material site to sell in the future negotiated, competitive, and limited material sale contracts as well as public and charitable sales under the authority of AS 38.05.810(a) at less than FMV.

**ADL 230954:** Issue a ten (10 year) material sale contract to ADOT&PF for the extraction of material for public projects

**Authority:** This material sale application is being adjudicated pursuant to AS 38.05.550 - AS38.05.565, AS 38.05.035(e), AS 38.05.945, 11 AAC 71, AS 27.19, and 11 AAC 97.

**Administrative Record:** ADL 231377 and ADL 230954 and the statutes and regulations that implement them.

**Legal Description:** Township Range 19 South Range 2 West, Section 10: that portion of the SE1/4lying south of the Denali Highway and Section 15: that portion of the N1/2ME1/4 lying south of the Denali Highway, Fairbanks Meridian. (Attachment A)

**General Location:** At approximately MP 99 of the Denali Highway

**Borough:** Matanuska Susitna Borough

**USGS Map:** Healy A2 A3 B2 B3 (Attachment A)

**Regional Corporation:** Ahtna, Inc.

**Public Notice:** Notice was posted on the State of Alaska's public notice webpage <http://dnr.alaska.gov/commis/pic/pubnotfrm.htm> from February 21 to April 1 2014. Copies of the PD were sent to state, federal and local agencies and Ahtna Inc. Notice was also posted in the Cantwell Alaska post office.

**Comments Received:**

***DNR-DGGS***

*The proposed material site is located in the zone of discontinuous permafrost, so perennally-frozen ground may be encountered during excavation. Surficial materials in this area are glacialigenic and are likely to be composed of a wide variety of grain sized and degree of sorting. Ice-contact deposits may include local concentrations of well-washed, well-sorted gravel and sand. Fine-grained materials may be ice-rich. The material site is located approximately 30 miles (48 KM) from the Susitna Glacier fault, which last ruptured in 2002.*

*None of these considerations are significant limitations to development of a material site at this location.*

***ADEC-Division of Environmental Health-Drinking Water***

*The proposed material site is not near a public water system (PWS). However, we recommend that the project adhere to the requirements and recommendations found in the DEC "User's Manual of BMPs for Gravel/Rock Extraction" ( September 2012).*

***DNR-Land Sales***

*No concerns regarding the material site.*

***ADNR-SHPO***

*According to OHA's AHRS records the archaeological site HEA-00272 lies inside the boundary of the proposed sale, not to the west of the parcel as stated in the ADOT response. We do concur with the ADOT Environmental assessment that the parcel should have an archaeological survey before any ground-disturbing activities take place.*

**ADNR Response**

*Before any ADOT& PF site specific project occurs at the site, an archeological survey of the site will be performed.*

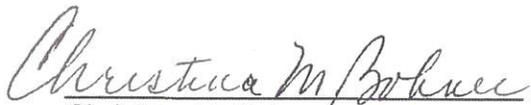
**Matanuska Susitna Borough**

*In 2012 ADOT submitted an Interim Materials District (IMD) application for this proposed material site. The application was deemed incomplete and a letter was sent to ADOT noting the application deficiencies. To date, ADOT has not submitted any additional information for the IMD application.*

**ADNR Response**

*It is the responsibility of ADOT to obtain any state, federal or local permits before extracting materials from the site.*

**Finding and Decision:** I find that all applicable statutes and regulations have been met thus far, and it is in the best interest of the State of Alaska to open a material site for negotiated, competitive, limited and public and charitable material sale contracts and to issue a ten-year (10 ) public and charitable material contract to ADOT&PF.

  
 Christina M. Bohner  
 Natural Resource Specialist II

Date April 7, 2014

  
 Southcentral Regional Manager

Date 4-15-14

A person affected by this decision may appeal it in accordance with 11 AAC 02. Any appeal must be received within 20 days of issuance as defined in 11 AAC 02.040(c) and (d) and may be mailed or delivered to The Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918, or sent by e-mail to [dnr.appeals@alaska.gov](mailto:dnr.appeals@alaska.gov). This decision takes effect immediately. If no appeal is filed by the appeal deadline, this decision becomes a final administrative order and decision of the department on the 31st day after issuance. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to the Superior Court.

A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources.

STATE OF ALASKA  
Department of Natural Resources  
Division of Mining, Land and Water  
Southcentral Region

AS 38.05.945 Public Notice  
Preliminary Finding and Decision  
Designated Master Material Site ADL 231377

**Proposed Action**

The Department of Natural Resources (DNR), Division of Mining, Land and Water (DMLW), Southcentral Regional Office (SCRO) received an application (ADL 230954) from the Alaska Department of Transportation and Public Facilities (ADOT&PF) for the development of a new Master Material Site (MMS) and the purchase of material for public purposes. The proposed material site is located at approximately MP 99 of the Denali Highway.

**Master Material Site Designation (MMS)**

This Preliminary Finding and Decision proposes to designate the MP 99 Denali Highway site as a MMS ADL 231377. The designation as a MMS under AS 38.05.550(b) will allow, if deemed appropriate, the use and operation of the material site for the long-term sale and extraction of materials until closed by the DMLW. Contracts for the sale of material may be issued by DMLW either by negotiated, competitive, limited, or public and charitable material sale methods. Contracts issued under AS 38.05.550-565, material sales, will be issued at a representative sale price per cubic yard determined by the DNR Commissioner or at fair market value determined by appraisal. Some sales under AS 38.05.565, Sale or Disposal of Materials for Special Purposes, may be without cost. Contracts issued under the authority of AS 38.05.810(a) Public and Charitable will be issued at less than fair market value.

Although the DMLW may continuously sell materials without further finding or notice once the site is designated as a MMS, the DMLW must also ensure that state land and natural resources be available for the maximum use consistent with the public interest. To the end, the DMLW will continue to carefully review individual sale requests and operation plans once sites have been designated, to ensure resource consideration and multiple use issues are appropriately evaluated.

**Public and Charitable Sale**

The Preliminary Finding and Decision also proposes to allow ADOTPF to extract material and purchase the materials for use in public projects. The material would be sold at less than fair market value established under AS 38.05.550(d)(1). The current representative regional sales

price for material contracts issued under the authority of AS 38.05.810(a) is .50 cubic yard. A ten year contract will be issued to ADOT &PF.

### **Legal Description**

Township 19 South Range 2 West, Section 10: That portion of the SE ¼ lying south of the Denali Highway and Section 15: That portion of the N1/2 NE1/4 lying south of the Denali Highway, Fairbanks Meridian at approximately MP 99 of the Denali Highway

The public is invited to comment on the Preliminary Finding and Decision regarding the MMS designation and the Public and Charitable Material Sale. The case file and Preliminary Finding and Decision are available for review at the address listed above. The SCRO must receive, in writing, any comments, objections, or expression of interest concerning the proposed action, no later than **5:00 PM April 1, 2014**. To be eligible to appeal, a person must provide written comment during the comment period. Notification of the Final Finding and Decision will be sent to any person who comments on the Preliminary Finding and Decision. If you have any questions, please contact Christina Bohner, at [christina.bohner@alaska.gov](mailto:christina.bohner@alaska.gov) or at (907)269-8560 or fax (907)269-8913.

If public comment in response to this notice indicates the need for significant change in the decision, additional public notice will be given. If no significant change is required, the decision, including any minor changes, will be issued as a final decision.

All programs and services provided by the State of Alaska are available to all qualified individuals regardless of age, race, social and economic status or gender, or disability. The State of Alaska, Department of Natural Resources, complies with Title II of the Americans with Disabilities Act of 1990. The State is prepared to accommodate individuals with disabilities by providing auxiliary aids when requested. Individuals with audio impairments who wish to respond to the decision by telephone may call the DNR Public Information Center in Anchorage between the hours of 10:00 a.m. and 5:00 p.m., M-F at TDD (907) 269-8411

The Division of Mining, Land and Water reserves the right to waive technical defects in this notice.

Southcentral Regional Manager, Division of Mining, Land and Water  
Publish Date: February 21, 2014

State of Alaska, Department of Natural Resources  
Division of Mining, Land & Water  
Southcentral Regional Office

### **Preliminary Finding and Decision**

Master Material Site ADL 231377  
Mile 99 of the Denali Highway

The Alaska Department of Natural Resources (DNR), Division of Mining, Land and Water (MLW), Southcentral Region (SCRO) is accepting public comment on the following Preliminary Decision (PD) document for the establishment of a material site. **Written comments must be received by 5:00 p.m April 1, 2014.** Only the applicant and those who submit written comments have the right to appeal the Final Finding and Decision (FD)

**Proposed Action:** The Alaska Department of Transportation and Public Facilities (ADOT&PF) Northern Region has submitted and application (ADL 230954) to extract material from MP 99 of the Denali Highway for public road purposes.

MLW proposes to designate a Master Material Site (MMS ADL 231377) under AS 38.05.035 (e), authorizing development of the site. Once designated, as per AS 38.05.550(b), MLW may approve contracts for material sales, including the Public and Charitable Sale at less than Fair Market Value (FMV) to ADOT&PF. This document serves as the State's best interest finding regarding this material site.

### **Scope of Review and Proposed Finding**

The scope of the administrative review, under AS 38.05.035 (e) (1)-(2), is limited to the opening of an 80acre material site for the continuous sale and extraction of materials, by purchasers until the site is closed by the division. Contracts for the sale of material may be issued by MLW either by negotiated, competitive, limited and public and charitable material sale methods. Contracts issued under AS 38.05.550-565 will be issued at a representative sale price per cubic yard determined by the commissioner or a FMV determined by appraisal. Some sales under AS 38.05.565 may be without cost. Contracts issued under the authority of AS 38.05.810(a) Public and Charitable will be issued at less than FMV.

The material extraction site is located at approximately MP 99 of the Denali Hwy. Material sale authorizations will include standard state material sale contract stipulation and site- specific stipulations in the "Special Stipulations Section" of the contract.

### **Background:**

ADOT & PF submitted an application ( ADL 230954- MS 52-2-092-2) for a material sale contract for material to be used in future Denali Highway road projects. There are limited areas for material extraction along the highway. Opening a material sale site will be to the benefit of the public and will generate revenue for the State of Alaska from the sale of natural resources.

### **Authority:**

The designation of this MMS ADL 231377 is being adjudicated pursuant to AS 38.05.035(e) AS 38.05.550- AS 38.05.565, AS 38.05.945, 11 AAC 71, 11 AAC 97 and AS 27.19. The authority to execute the PD, the MMS, and any material sale contract is delegated to the Southcentral Regional Manager, MLW, SCRO.

### **Administrative Record**

The Division considered the following documentation in compiling this PD : The Division's Material Site File ADL 231377, ADL 230954 (ADOT Material Sale Application) ADOT & PF TWUP A2011-64 ( Temporary Water Use Permit) (Matsu-Borough Earth Materials Extraction Permit) (ADFG Permit) comprises the administrative record for this case.

**Location and Legal Description**

**Legal Description:** Township 19 South Range 2 West, Section 10: That portion of the SE ¼ lying south of the Denali Highway and Section 15: That portion of the N ½ NE ¼ lying south of the Denali Highway, Fairbanks Meridian Alaska.

**General Location:** MP 99 Denali Highway

**Borough:** Located within the Matanuska Susitna Borough.

**USGS Map:** Healy A2, A3, B2, B3 Attachment A Site Map

**Regional Corporation:** Ahtna, Inc.

**Title:** GS 5203 November 10, 1986 TA Land and Minerals

**Restrictions:** Standard reservations.

**Other Conflicts and Pending Interests:** No third party interests or know conflicts exist at the time of the PD.

**Planning and Classification**

**Land Management Plan and Classification:** Susitna Area Plan-Talkeetna Mountains, Management Unit 1-C Denali Highway Classification SC-86-014 is classified PUR and WHB.

Subunit 1 C: The federal and state lands that constitute the remainder of the area should be managed for multiple use including habitat protection, mining, and public recreation.

Material sites should be screened from roads, residential areas, and recreational areas and other areas of significant human use. (Stipulation 4)

Material extraction is consistent with the intent of the area plan.

**Zoning:** Matanuska Susitna Borough

**Reclamation Plan:**

In accordance with AS 27.19. reclamation is required for all mining operations. Each applicant for a material sale purchase will be required to submit a reclamation plan with the material sale application, and that application will be made a part of that individual material sale file.

**Access:**

Access along the Denali Highway.

**Survey and Appraisal**

**Survey:** There is no survey required at this time. The Southcentral Regional Manager reserves the right to have a contract holder perform a survey if deemed necessary.

**Appraisal:** An appraisal is not required to sell materials to ADOT/PF. 11 AAC 05.10(e)(16) requires government agencies to pay for materials used in construction, reconstruction or maintaining a public project as follows: a) for the first 5,000 cy of material to be used on a project per year, there is no charge; b) for materials in excess of 5,000 cy, the unit price is listed in the administrative base price schedule established under 11 AAC 71.090. The 2014 price is \$0.50 cy.

**Environmental Risk:**

As part of each individual material sale contract application process, the applicant will be required to submit a signed environmental risk questionnaire. The questionnaire asks for information on potentially hazardous materials that may be stored or used on the designated site. Based on the information provided in the questionnaire, MLW will develop site-specific stipulations to be included in the material sale contract.

**Method of Excavation:**

Methods for the excavation of the material from designated sites will be stipulated in the individual material sale contract issued under AS 38.05.550-565 and AS 38.05.810(a).

**Other Permits or Authorizations:**

It is the material sale applicant's responsibility to obtain other local, state or federal permits that may be necessary to extract materials under a sale contract from a designated site.

**Water Quality:**

Each permittee authorized from the material site will be required to comply with the requirements of the Alaska Pollutant Discharge Elimination System (APDES), and if applicable, to maintain and operate the site in accordance with an approved Storm Water Pollution Prevention Plan (SWPPP) if necessary.

**Performance Guarantee and Insurance**

Performance guarantees, including a bond and deposit, apply to private contractors prior to the MLW entering into a material sale contract. Performance guarantees ensure that the terms and conditions of the contract are fulfilled and that funds are in place necessary to remedy any damage resulting from a permittee's failure to meet contract conditions. The MLW will also require permittee's to carry comprehensive general liability insurance and provide proof thereof to the MLW. Each permittee is expected to consult with a licensed insurance professional, secure appropriate insurance policies and coverage, and ensure that the State of Alaska is included as an additional insured. However, under 11 AAC 96.060-065, no bonding will be required for the ADOT&PF contract.

**Agency Comments and Public Notice**

**Agency Review:** Agency review was conducted from May 1 through May 18, 2012. The following agency comments were received:

**Matanuska Susitna Borough Planning:** Requested information regarding reclamation. ADOT will address their concerns directly through the Interim Mining District Application.

**Rich Vanderhoek- ADNR- SHPO:** The proposed material site will require an archaeological survey. One archaeological site (HEA-272) has been reported from the property of the material sale, and other sites have been found nearby. These sites were found because they have cultural material exposed on the surface. It is probable that other sites are present.

**ADNR/ADOT Response:** ADOT & PF Environmental inspected the site in 1994. The report identified Archeological Site (HEA 272), consisting of one lithic flake and one projectile point fragment. HEA 272 lies west of the proposed boundary of the subject material site. Environmental also reported high archeological potential in the local ridges, some of which extend into the proposed material site area. He recommended that an archeological survey be accomplished, particularly along the ridges and overlooks.

Before any ADOT& PF site specific project occurs at the site, an archeological survey of the site will be performed.

**Merry Johnson: Water Resources Section- ADNR:** The Water Resources Section has no objection to the opening of Material Site ADL 231377 or ADL Contract 230954. If work out of this site requires a significant amount of water withdrawal a Temporary Water Use Permit will be required. ADOT's authorization is TWUP A2011-64.

**Public Notice:**

Public notice according to AS 38.05.945 will be initiated and posted on the Alaska Online Public Notice System website. Notice will be sent to post offices located in the area, state and federal agencies, local governing authorities and native organizations. This PD is subject to agency and public comments. If significant changes occur due to comments received in response to the notice, the FD will address those changes and additional notice may be sent to those who provided written comments during this decision period. Only those who provided written comments during the comment period will be eligible to appeal the FD.

**Discussion**

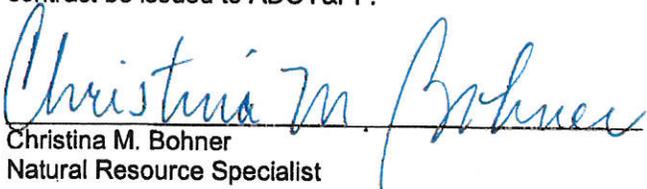
The Alaska State Constitution directs the DNR to provide for a variety of uses on state land while conserving natural resources. DNR is directed to establish a balanced combination of land available for public and private purposes. It directs that the land and natural resources be available for the maximum use consistent with public interest. To that end, MLW will continue to carefully review individual material sale requests and operation plans once sites have been designated, to ensure resource considerations and multiple use issues are appropriately evaluated. .

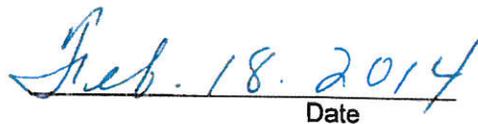
**Recommendation**

MLW, SCRO has completed a review of the information in the case file and application provided by ADOT&PF and an examination of the documents and associated information germane to the proposed action. This decision considers ownership of the site, the need for reasonable access to material sources in the region and project site, agency concerns, and project specific needs. The use of this material will enhance the development of the state's natural resources, assist with maintaining public infrastructure and facilitate the need for material along the Denali Highway.

The Division shall continue to sell material from the above-described site. The site will be deemed a "designated site" under AS 38.05.550-565 and subject to the provisions therein and forthcoming regulations. The recommendation is subject to the following special stipulations. The Regional Manager reserves the right, at any time, to amend these stipulations and other general stipulations contained in the material sale contracts.

It is my recommendation to the regional manager that a material site for 80 acres is created, and a 10 year material sales contract be issued to ADOT&PF.

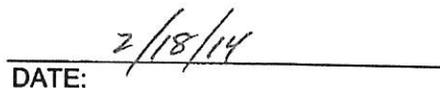
  
Christina M. Bohner  
Natural Resource Specialist

  
Date

I concur

I do not concur

  
SCRO Regional Manager

  
DATE:



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**ADL 230954 ADOT&PF Contract Special Stipulations  
Attachment "B"**

The Material Sale Contract will be subject to the following Special Stipulations:

1. **Extraction Area.** This contract authorizes removal of material only from the area defined in Section 1(a) of this contract. The buyer is responsible for properly locating the material site area and the working limits within that area.
2. **Use of Material.** This contract authorizes the excavation and use of up to **500,000 cy** of material for the express purpose of **providing material for reconstruction and maintenance of Denali Highway**. The buyer is required to provide DNR with records of material usage.
3. **Site Operations.** The buyer is responsible for all aspects of material extraction and transport. Any survey stakes or markers that are removed must be replaced at the buyer's expense. The work area will be maintained in a neat, clean condition, free of any solid waste, debris or litter. The disposal of hazardous substances or hydrocarbons is prohibited. After completion, expiration, or termination of the contract, the site will be left in a condition that is acceptable to the seller, and reclaimed in accordance with the approved reclamation plan.
4. **Screening:** Material sites along the Denali Highway should be screened from roads, residential areas, recreational areas and other areas of significant human use. Material Site ADL 231377 shall have the following screenings: a 100 foot-treed buffer shall be maintained along the Denali Highway right-of-way and along the section line on the east boundary. A 50 foot wide undisturbed buffer will be maintained around the remaining perimeter of the site. A 100 foot wide undisturbed buffer will be maintained along the identified creeks or water bodies.
5. **Compliance.** All operations of the buyer, including completion, must comply with the contract and with the approved Mining and Reclamation Plan for this material site. The Special Stipulations of the contract take precedence over the approved Mining and Reclamation plan should a contradiction exist. The buyer shall inform and ensure compliance with the provisions of this contract by its agents, employees and contractors, including subcontractors, at any level.
6. **Reclamation.** Upon completion, expiration, or termination of the contract, the site will be left in a condition that is acceptable to the Division of Mining, Land and Water and reclaimed in accordance with the approved Mining and Reclamation plan. Reclamation shall be to the standards of the Division and shall include repair of access roads to and within the site, disposal of remaining stockpiles, other procedures that will be used to stabilize and reclaim the area and any other site specific measures that may be necessary. During the term of the contract, mining activities shall occur as described in the buyer's DNR-approved Mining and Reclamation plan.
7. **Fill.** No construction material, fill, waste asphalt, damaged culverts, pavement planning or any other debris shall be stockpiled, stored or disposed of within pit boundaries. Stockpiled material shall not be placed in wetlands.
8. **Alaska Historic Preservation Act.** The buyer will consult the Alaska Heritage Resources Survey (907) 269-8721 so that known historic, archaeological and paleontological sites may be avoided. The Alaska Historic Preservation Act (AS 41.35.200) prohibits the appropriation, excavation, removal, injury or destruction of any state-owned historic, prehistoric (paleontological) or archaeological site without a permit from the commissioner. Should any sites be discovered during the course of field operations, activities that may damage the site will cease and the Office of History and Archaeology in the Division of Parks and Outdoor Recreation (907) 269-8721 and will be notified immediately. Alaska Statute also prohibits the removal or disturbing of human remains or burial artifacts (AS 11.46.482(3)(B)). If human remains are discovered, immediately contact the Alaska State Troopers and the Office of History and Archaeology.
9. **Vehicle Maintenance.** Vehicle maintenance will be performed only over an effective impermeable barrier.
10. **Fuel and Hazardous Substances.** Secondary containment shall be provided for fuel or hazardous substances.
  - a. **Container marking.** All independent fuel and hazardous substance containers shall be marked with the contents and the permittee's or contractor's name using paint or a permanent label.

- b. **Fuel or hazardous substance transfers.** Secondary containment or a surface liner must be placed under all container or vehicle fuel tank inlet and outlet points, hose connections, and hose ends during fuel or hazardous substance transfers. Appropriate spill response equipment must be on hand during any transfer or handling of fuel or hazardous substances to respond to a spill of up to five gallons. Trained personnel shall attend transfer operations at all times. Vehicle refueling shall not occur within the annual floodplain or tidelands.
- c. **Storing containers within 100 feet of waterbodies.** Containers with a total capacity larger than 55 gallons, which contain fuel or hazardous substances, shall **NOT** be stored within 100 feet of a waterbody.
- d. **Exceptions.** The Authorized Officer may under unique or special circumstances grant exceptions to this stipulation on a case-by-case basis. Requests for exceptions should be made to the Authorized Officer.
- e. **Definitions.**

"Containers" means any item that is used to hold fuel or hazardous substances. This includes tanks, drums, double-walled tanks, portable testing facilities, fuel tanks on small equipment such as light plants and generators, flow test holding tanks, slop oil tanks, bladders, and bags. Manifolder tanks or any tanks in a series must be considered as single independent containers. Vehicles, including mobile seismic tanks, are not intended to be included under this definition.

"Hazardous substances" are defined under AS 46.03.826(5) as (a) an element or compound which, when it enters the atmosphere, water, or land, presents an imminent and substantial danger to the public health or welfare, including fish, animals, or vegetation; (b) oil; or (c) a substance defined as a hazardous substance under 42 U.S.C. 9601(14).

"Secondary containment" means an impermeable diked area or portable impermeable containment structure capable of containing 110 percent of the volume of the largest independent container. Double-walled tanks do not qualify as secondary containment unless an exception is granted for a particular tank.

"Surface liner" means any safe, non-permeable container (e.g., drips pans, fold-a-tanks, etc.) designed to catch and hold fluids for the purpose of preventing spills. Surface liners should be of adequate size and volume based on worst-case spill risk.

- 11. **Spill Notification.** The permittee shall notify the Department of Natural Resources of all spills that must be reported under 18 AAC 75.300 under timelines of 18 AAC 75.300. These requirements can be found at the following website: <http://www.dec.state.ak.us/spar/spillreport.htm#requirements>.

All fires and explosions must be reported to DNR immediately. The DNR 24 hour spill report number is (907) 451-2678; the fax number is (907) 451-2751. The DEC oil spill report number is (800) 478-9300. DNR and DEC shall be supplied with all follow-up incident reports.

- 12. **Destruction of Markers.** All survey monuments, witness corners, reference monuments, mining claim posts, bearing trees, and un-surveyed lease corner posts shall be protected against damage, destruction and obliteration. The permittee shall notify the Authorized Officer of any damaged, destroyed or obliterated markers and shall reestablish the markers at the permittee's expense in accordance with accepted survey practices of the Division of Mining, Land and Water.
- 13. **Water Quality.** The buyer shall comply with the State of Alaska water quality standards pursuant to 18 AAC 70, including discharge standards when conducting material washing operations.
- 14. **Potential Processing Activities and Other Authorizations.** The issuance of this authorization does not alleviate the necessity of the purchaser to obtain authorizations required by other agencies for this activity. Any asphalt processing or related activities and associated structures will not be allowed without prior approval from DNR, the Department of Environmental Conservation and other agencies that require authorizations from the buyer.

15. **Survey.** If a survey is requested by the SCRO manger, the contract holder shall submit a material site boundary survey acceptable to the standards of the Division of Mining, Land and Water. This survey shall depict the dimensions of each side of the material site, and the acreage of the modified material site boundaries.
16. **Failure to Report.** An annual report is due by January 31<sup>st</sup> of each year, without prior notice to the buyer that details the volume of material removed during the calendar year of January 1 through December 31. This report shall be filed regardless of whether material was removed during the reporting period. Failure to submit the required report may subject the permitted site to a final inspection. The contract holder shall be assessed a fee for this inspection per 11 AAC 05.010(a)(7)(M).

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**PLANNING COMMISSION  
RESOLUTION**



By: Susan Lee  
Introduced: August 1, 2016  
Public Hearing: August 15, 2016  
Action:

**MATANUSKA-SUSITNA BOROUGH  
PLANNING COMMISSION RESOLUTION NO. 16-28**

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH PLANNING COMMISSION RECOMMENDING ASSEMBLY APPROVAL OF AN INTERIM MATERIALS DISTRICT, KNOWN AS DENALI HIGHWAY MILEPOST 99, LOCATED WITHIN TOWNSHIP 19 SOUTH, RANGE 2 WEST, SECTIONS 10 AND 15, FAIRBANKS MERIDIAN.

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WHEREAS, an application for an Interim Materials District (IMD) was submitted by the State of Alaska, Department of Transportation & Public Facilities (DOT&PF) to extract up to 500,000 cubic yards of material within a 69.91 acre parcel of property located within Township 19 South, Range 2 West, Sections 10 and 15, Fairbanks Meridian; and

WHEREAS, it is the intent of the Matanuska-Susitna Borough to recognize the value and importance of promoting the utilization of natural resources within its boundaries; and

WHEREAS, the purpose of MSB 17.28 is to establish an Interim Materials District within the Borough to allow resource extraction activities as an interim use of land while promoting the public health, safety, order, prosperity, and general welfare of the borough through regulation of land use to reduce the adverse impacts of land uses and development between and among properties; and

WHEREAS, it is the further purpose of MSB 17.28 to promote compatible and orderly development; and

WHEREAS, the Planning Commission has reviewed this application, associated materials, and the staff report, with respect to standards set forth in MSB 17.28; and

WHEREAS, findings of fact and conclusions of law have been listed in the staff report; and

WHEREAS, the Planning Commission conducted a public hearing on August 15, 2016, regarding this IMD request; and

WHEREAS, the Planning Commission finds that the proposed Interim Materials District is compatible with the goals and policies of the Matanuska-Susitna Borough Comprehensive Plan (2005 Update); and

WHEREAS, the Planning Commission finds that the proposed Interim Materials District will not be harmful to the public health, safety, or general welfare; and

WHEREAS, the Planning Commission finds that the proposed Interim Materials District has met the site development standards of this chapter including compliance with all required local, state, and federal laws; and

NOW, THEREFORE, BE IT RESOLVED, that the Matanuska-Susitna Borough Planning Commission hereby finds that this application does meet the standards of MSB 17.28 and adopts the findings of fact and conclusions of law within the staff report and hereby

recommends approval of the designation of Interim Material District known as Denali Highway Milepost 99, with the following conditions:

1. The owner and/or operator shall comply with all other applicable federal, state, and local regulations.
2. All aspects of the operation shall comply with the description detailed in the application material and an amendment to the IMD shall be required prior to any alteration or expansions of the material extraction operation.
3. Material extraction shall be limited to the areas identified in the site plans received by the borough June 8, 2016.
4. Vehicles and equipment shall be staged at a designated location and all equipment shall be inspected by the operator for leaks at the end of each day.
5. On-site maintenance of vehicles shall be done in an area where all leaks can be contained with drip pans or other discharge prevention devices.
6. All hazardous materials, drips, leaks, or spills shall be promptly attended to and properly treated.
7. If a project is planned for the site that requires a Storm Water Pollution Prevention Plan (SWPPP), a copy

of the approved SWPPP shall be provided to the Planning Department prior to operating.

8. All construction exits shall comply with standard Alaska Pollutant Discharge Elimination System requirements to minimize off-site vehicle tracking of sediments and discharges to storm water.
9. A four-foot vertical separation shall be maintained between all excavation and the seasonal high water table.
10. The operation shall comply with the maximum permissible sound level limits allowed in MSB Code, per the requirements of MSB 17.28.060(A)(5)(a) - Site Development Standards and MSB 8.52 - Noise, Amplified Sound, and Vibration.
11. If illumination devices are required, they shall not be greater than 20 feet in height, shall utilize downward directional shielding devices, and shall meet the requirements of MSB 17.28.060(A)(6) Lighting Standards.
12. If cultural remains are found during material extraction activities, the MSB Planning Department shall be contacted immediately so the remains can be documented.

13. Borough staff shall be permitted to enter onto any portion of the property to monitor compliance with permit requirements. Such access will at a minimum be allowed on demand when activity is occurring and, with prior verbal or written notice, and at other times as necessary to monitor compliance. Denial of access to Borough staff shall be a violation of the Interim Materials District.
14. The applicant and/or operator shall comply with the reclamation standards of MSB 17.28.067.
15. Visual screening shall be achieved and maintained by using a combination of the esker ridges near the Denali Highway and a 100-foot wide undisturbed buffer maintained along the Denali Highway right-of-way and along the section line easement on the east boundary. A 50-foot wide undisturbed buffer will be maintained around the remaining perimeter of the site.
16. If mining activities take place within 300 feet of the property boundaries, visual buffers a minimum of ten feet in height, including vegetative buffers and/or earthen berms shall be employed.
17. All activity shall be conducted in compliance with state or federal regulations governing the items

listed in MSB 17.28.040(B)(1), 17.28.040(B)(2), and 17.28.040(B)(3).

NOW, THEREFORE, BE IT RESOLVED, that the Matanuska-Susitna Borough Planning Commission recommends approval of the designation of Interim Materials District for the Denali Highway Milepost 99 Pit.

ADOPTED by the Matanuska-Susitna Borough Planning Commission this \_\_\_ day of \_\_\_, 2016.

\_\_\_\_\_  
JOHN KLAPPERICH, Chair

ATTEST

\_\_\_\_\_  
MARY BRODIGAN, Planning Clerk

(SEAL)

YES:

NO:

## **CORRESPONDENCE & INFORMATION**

Superior Court Order  
Ethics Board Advisory Opinion

(Page 495 – 514)

## **CORRESPONDENCE & INFORMATION**



IN THE SUPERIOR COURT FOR THE STATE OF ALASKA

THIRD JUDICIAL DISTRICT AT PALMER

CENTRAL MONOFILL SERVICES, )  
 INC. )  
 )  
 Appellant, )  
 vs. )  
 )  
 MATANUSKA-SUSITNA BOROUGH )  
 BOARD OF ADJUSTMENTS, )  
 )  
 Appellee. )  
 \_\_\_\_\_ )

CASE NO. 3PA-15-01925 CI

ORDER

The Matanuska-Susitna Borough Board of Adjustments filed a Limited Motion to Reconsider, asking the court to reconsider its July 5, 2016 order as to the number of votes necessary for a motion to recuse. Because the court mistakenly stated that the necessary vote to recuse an individual under Robert's Rules was a two-thirds vote rather than a majority vote, the court will grant the motion and issue an amended order.

As the Borough correctly indicates, motions for recusal are not included in the list of motions which require a two-thirds vote according to Robert's Rules of Order, Newly Revised (11th ed.). Absent a rule that provides otherwise, the basic requirement for approval of an action by the assembly is a majority vote. RONR (11th ed.), § 44. Under MSB 15.08.075, "the majority vote required shall be four." Therefore, the correct

vote required for recusal is a majority vote, which here, is four votes.

For the foregoing reasons, it is ORDERED that the Matanuska-Susitna Borough Board of Adjustments Limited Motion to Reconsider is GRANTED. The court will issue an amended order with the correct voting requirement.

Dated at Palmer, Alaska, this 8<sup>th</sup> day of July, 2016.

Eric Smith  
ERIC SMITH  
SUPERIOR COURT JUDGE

I certify that on 7/8/16  
a copy of this document was sent to  
 (C/S)  Attorney(s) of record  
 Plaintiff  Defendant  Other  
At the address(es) of record:  
Eric'd Jnl Eric Smith  
Deputy Clerk

IN THE SUPERIOR COURT FOR THE STATE OF ALASKA

THIRD JUDICIAL DISTRICT AT PALMER

CENTRAL MONOFILL SERVICES, )  
 INC. )  
 )  
 Appellant, )  
 vs. )  
 )  
 MATANUSKA-SUSITNA BOROUGH )  
 BOARD OF ADJUSTMENTS, )  
 )  
 Appellee. )  
 \_\_\_\_\_ )

CASE NO. 3PA-15-01925 CI

AMENDED ORDER

Central Monofill Services ("CMS"), a corporation, appeals the denial of a conditional use permit by the Matanuska-Susitna Board of Adjustment and Appeals ("BOAA"). Because the Commission did not follow the proper procedures governing recusal, the court will reverse the denial of the permit and remand the case for further proceedings.

I. Facts and Proceedings

CMS applied for a conditional use permit for the operation of an inert monofill on two Mat-Su Borough land parcels totaling 118 acres in size. The Matanuska-Susitna Borough Planning Commission held a public hearing on the permit on December 1, 2014. In response to an inquiry from the Commission Chairman as to whether any of the Commissioners in attendance had any potential conflicts of interest, Commissioner Kendig disclosed that his business had sold scrap to Central Environmental, Inc.

("CEI"), a corporation owned by the same individuals as the ones who own CMS. Kendig stated that the most recent sale occurred in late summer or early fall of 2014, but prior to that transaction, he had not done business with CEI in "four or five years." Appellant's Excerpt of Record, p. 168. He further stated that he was "confident in saying that I can be impartial" with respect to CMS's application, and that he did not view occasional sales to CEI to constitute a conflict of interest. Id., p. 172.

The Deputy Borough Attorney informed the Commissioners that Kendig's sale of scrap to CEI raised the question of whether he should recuse himself under MSB 2.71.080, which provides that an official must recuse himself from acting in any proceeding "that involves any person who is, or has been, a client of the official or the official's firm or partnership within the 12-month period immediately preceding the date of the action." The Borough Clerk advised the Commission in this respect that "it's up to the Commission to determine whether or not [Kendig] can stay," thereby framing the issue before the Commission as requiring the Commission to determine whether to allow Kendig to participate in the permit application hearing and voting. Counsel for CMS and the Deputy Borough Attorney informed the Commission that the vote should address whether Kendig should be required to recuse himself, as opposed to whether he could stay.

The Commission decided to follow the Clerk's advice. It also concluded that Kendig should not be allowed to vote on the question of whether he would be allowed to participate. The Chair accordingly called for and received a motion "to allow Mr. Kendig to remain in the discussion [of] Resolution 14-33." Four affirmative votes are required to pass a motion. MSB 15.08.075 ("All board actions shall be by vote of a majority of the board's authorized membership; the majority vote required shall be four."); Appellant's Excerpt of Record, pp. 197, 200. When the motion in question was heard, there were five commissioners of seven in attendance. One of those present was Kendig, who was not allowed to participate. Of the four participants deemed eligible to vote, three voted to allow Kendig to participate and one voted against Kendig's participation.<sup>1</sup> Kendig therefore was precluded from participating in discussing and voting on CMS's permit application.

The Commission then proceeded with the December 1, 2014 public hearing regarding CMS's application, but was unable to complete the hearing on that date. It held a second hearing on December 15, 2014. At the beginning of the December 15th hearing, counsel for CMS re-raised the issue that the motion regarding Kendig's participation had been improperly framed and that recusal was not required under MSB 2.71.080. Counsel also

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<sup>1</sup> Commissioner Endle dissented.

called attention to an email from the Borough Clerk to the Commission in which she had stated that the vote should instead have been properly framed as "does Mr. Kendig have a conflict of interest." The Chair declined to revisit the issue.

At the conclusion of the December 15, 2014 hearing, the Commission voted on whether to pass the resolution to approve CMS's conditional use permit. The vote was three in favor and three against<sup>2</sup>, which meant that the permit application was denied after it did not receive the four favorable votes required to pass.

After the vote, the Deputy Borough Attorney advised the Commission that it was required to issue written findings and conclusions, and that because the application was denied based on a 3-3 vote, both those in favor and those against should submit proposed findings and conclusions. At a January 5, 2015 hearing, the Commission voted to adopt and approve the findings of fact and conclusions of law to support the Commission's denial of CMS's application, with four votes in favor and two opposed.<sup>3</sup> The Commission did not present for adoption any findings of fact and conclusions of law in support of the vote to approve CMS's application.

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<sup>2</sup> Commissioners Kapperich, Rauehnstein and Walden voted in favor of the resolution, and Commissioners Endle, Adams, and Healy voted against it.

<sup>3</sup> Commissioner Walden voted to approve the findings and conclusions supporting the denial of the conditional use permit, even though he had voted to approve the permit.

CMS timely appealed to the Board of Adjustment and Appeals ("BOAA"). On March 31, 2015, BOAA issued its Notice of Right to Appeal and Final Decision, unanimously affirming the Commission's denial of CMS's application. CMS timely filed this appeal on April 30, 2015.

## II. Standard of Review

AS 22.10.020(d) provides this court with jurisdiction over appeals from administrative agency decisions. The court applies the "substitution of judgment standard to questions of law where no agency expertise is involved," Davis Wright Tremaine LLP v. State, Dep't of Admin., 324 P.3d 293, 299 (Alaska 2014), or "where the agency's specialized knowledge and experience would not be particularly probative as to the meaning of the statute." Tesoro Alaska Petroleum Co. v. Kenai Pipe Line Co., 746 P.2d 896, 903 (Alaska 1987). Under the substitution of judgment standard, the court may "substitute [its] own judgment for that of the agency even if the agency's decision had a reasonable basis in law." Id. (internal citations omitted). Courts also "review an agency's application of its own regulations for whether the agency's decision was 'arbitrary, unreasonable, or an abuse of discretion,'" which "requires [courts] to give deference to an administrative determination 'if it has a reasonable basis in law and fact.'" Alaska Cmty. Action on Toxics

v. Hartig, 321 P.3d 360, 366 (Alaska 2014) (internal citations omitted).

The initial issue to be resolved in this appeal is whether the Commission properly followed its own procedures for recusal of a board member. This is a question of law to which no deference is required. The Borough's decision to deny the permit is subject to the more deferential standard of review.

### III. Analysis

#### A. The Motion Presented to the Commission on Commissioner Kendig's Recusal Was Improperly Framed

A key issue raised by CMS is that the Commission improperly framed the motion before it when it voted on Kendig's recusal. According to CMS, the proper motion would have been a motion to disallow Kendig's participation in the hearing, as opposed to whether Kendig should be allowed to participate in the hearing. CMS further claims that the Commission should have presumed as true Kendig's own conclusion that he could be fair and impartial when voting on CMS's permit application, unless they decided that, based on the evidence in the record, a vote on recusal was necessary. And CMS argues that Kendig should have been allowed to vote on his recusal because Robert's Rules of Order ("Robert's Rules") specifically allows a member to vote on questions affecting himself, including whether that member should be recused.

The Borough responds that the court should refrain from addressing whether the Commission properly followed its own parliamentary procedures preceding Kendig's recusal because "parliamentary rules are merely procedural and not substantive" and "[h]ence, they may be waived or disregarded by the legislative body." Appellee's Brief, pp. 41-42 (citing 59 Am. Jur. 2d Parliamentary Law § 5). The Borough also relies on Jefferson v. City of Anchorage, 513 P.2d 1099 (Alaska 1973) (finding that the city council could, by its customary practice, waive a procedural requirement) in support of this claim.

Contrary to the Borough's claim, the court has jurisdiction to address the procedures used by the Commission in voting on the recusal issue. Courts typically and properly review decisions of administrative agencies to determine whether the agency followed its own procedures. See, e.g., Copeland v. Ballard, 210 P.3d 1197, 1201 (Alaska 2009); In re Hanson, 532 P.2d 303, 305 (Alaska 1975). The authority cited by the Borough, by contrast, involved procedural decisions by legislative and municipal bodies, not executive branch agencies. In particular, the Am. Jur. treatise cited by the Borough states:

The courts will not annul an act of a legislature or an ordinance of a municipal council, merely because one or the other was enacted in disregard of the rules that the legislature or the municipal council...had prescribed for its own government...unless they have proceeded in

violation of the law of the land, or of the charter of the municipality, which is their organic law.

59 Am. Jur. 2d Parliamentary Law § 5 (emphasis added). And Jefferson, the Alaska Supreme Court was asked to review a procedural action of the Anchorage City Council, again, a legislative body.

The Commission is an executive branch agency and by the Borough's own admission, a quasi-judicial body. The procedural decisions of the Commission may thereby properly be reviewed by the court. (The Court also notes that unlike Jefferson, there is no indication from the record that the Commission voted in this instance (nor was it the Commission's regular practice) to suspend the applicability of Robert's Rules when voting on Kendig's recusal.)

The Commission consists of seven members who are registered to vote on matters before it. MSB 15.08.010. Four votes, which constitutes a majority of the seven members, are required for the Commission to take action. MSB 15.08.075. In the absence of a majority of the number of authorized board seats (defined as a "quorum") present at a meeting, any business transacted is null and void. MSB 4.05.080(B).

When voting on a matter before the Commission, a Commissioner may not take or withhold an official action in order to affect a matter in which the municipal officer has a

substantial financial interest, MSB 2.71.070(A)(2)(d), or "participate in deliberation or vote on question if the commission member...has a substantial financial interest in any property affected by the decision...or could foreseeably profit in any material way through a favorable or unfavorable decision." MSB 15.08.150(A). If the specific conflict of interest involves a person who has been a "client" of one of the officials in the past year, MSB 2.71.080(a) requires that that official recuse himself:

"A municipal officer shall recuse himself from acting on any matter or proceeding coming before a borough-elected body, board, commission, or committee of which the official is a member when the matter or proceeding involves any person who is, or has been, a client of the official or the official's firm or partnership within the 12-month period immediately preceding the date of the action."

MSB 4.05.080(A) provides that "[a]ll meetings shall be conducted in accordance with the current edition of Robert's Rules of Order, Newly Revised." See also MSB 15.080100 ("Meetings shall be conducted under the current edition of Robert's Rule of Order Newly Revised, and such modified or amended rules as may be adopted by the commission."). As to whether a commissioner may vote on matters that involve potential conflicts of interest, Robert's Rules states: "It is a general rule that no one can vote on a question in which he has a direct personal or pecuniary interest." RONR (11th ed.), Ch. 46. However, Robert's Rules provides limited exceptions to this

rule, such as matters that affect more than one person at a time, like salary increases of board members. Id. It is in the context of these limited exceptions that Robert's Rules states: "If a member could in no case vote on a question affecting himself, it would be impossible...for a legislature to vote salaries to members, or for the majority to prevent a small minority from preferring charges against them and suspending or expelling them." Id. Finally, Robert's Rules reiterates: "A sense of delicacy usually prevents a member from exercising this right of voting in matters affecting himself except where his vote might affect the result." Id.

The plain language of MSB 2.71.080 requires the Commission to determine whether a Commissioner should be recused from participating in a proceeding. This requires an affirmative vote on recusal by the Commission, not an indirect vote on whether the Commissioner may remain. In other words, the issue properly framed for the Commission's vote was whether Kendig should be recused. Instead, as stated earlier, the Commission improperly framed the issue as whether to allow Kendig to participate in deliberations, which thereby allowed one vote to prevent Kendig's participation in the hearing on CMS's permit application, rather than the majority vote required by Robert's Rule's. RONR (11th ed.), Ch. 48.

The Commission did, however, properly decide that Kendig could not vote on his own recusal. Kendig clearly has a direct personal interest in his recusal, for as an active, appointed commissioner, Kendig certainly has a personal interest in his own involvement via continued participation and deliberation on matters before the Commission. Nor is the issue one that, despite Kendig's own personal or pecuniary interest, affects more than just him. Kendig therefore should not vote on the issue of his recusal. Cf. AS 22.20.020(c) (another judge must review a judge's decision to deny recusal).

B. Relief

CMS requests that the court simply order the Commission to hold a vote on the recusal issue, and if Kendig is allowed to participate, to have him vote based on the record developed at the December 2014 hearings. The Borough contends that if the court decides that the Commission failed to follow the correct procedure on remand, then the overall decision must be vacated and a new hearing held.

The court agrees with the Borough. The Commission voted 3-3 on the permit application, which means that the Commission's procedurally incorrect decision on Kendig's recusal had a significant effect on the outcome. This requires the permit decision to be vacated altogether, which in turn entails that all of the other challenges raised by CMS to the permit denial

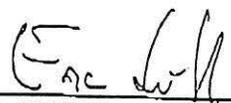
are moot and need not be addressed by this court. The court notes in this respect that the CMS permit was very controversial - if CMS' proposed procedure were to be followed, then if Kendig were allowed to participate, he may well vote to grant the permit, which would raise serious and substantial legal issues regarding whether anyone opposed to the permit would have an opportunity to challenge that decision either before the BOAA or in court.

The court accordingly will remand this case to the Commission with an order that it revisit the recusal issue in a manner consistent with this order and then revisit CMS's permit application. The Commission should prepare findings of fact and conclusions of law as to any recusal decision it may make, as well as on the merits of CMS' permit application.

IV. Conclusion

For the foregoing reasons, it is ORDERED that the Borough's decision to deny CMS's permit is REVERSED and this case is remanded to the Commission for further proceedings consistent with this order.

Dated at Palmer, Alaska this 8<sup>th</sup> day of July, 2016.

  
 ERIC SMITH  
 SUPERIOR COURT JUDGE

I certify that on 7/8/16  
 a copy of this document was sent to  
 CSSD  Attorney(s) of record  
 Plaintiff  Defendant  Other  
 At the address(es) of record:  
 Rec'd Jnl AM  
 Deputy Clerk Inga



## MATANUSKA-SUSITNA BOROUGH

### Board of Ethics

c/o Office of the Borough Clerk  
350 E. Dahlia Avenue • Palmer, Alaska 99645-6488  
Phone (907) 861-8684 • Fax (907) 861-7845

Advisory Opinion No. 15-01

August 27, 2015

On July 14, 2015, the Board of Ethics received a Request for an Advisory Opinion from Mr. Bill Kendig, who is a member of the Planning Commission. The Board of Ethics met in a special meeting at 5 p.m. on August 27, 2015, to consider the request of Mr. Kendig.

#### *Specific Question for the Board of Ethics*

Mr. Kendig has requested an Advisory Opinion from the Board on the following question:

Should Mr. Kendig recuse himself from discussion and voting on Planning Commission Resolution Serial No. 15-26?

#### *Findings*

The Board of Ethics finds that Per MSB 2.71.080 Mr. Kendig was recused from voting on Planning Commission Resolution No. 14-33 regarding a conditional use permit (CUP) as he had done business within the last 12-month period with a corporation that was related to Central Monofill Services (CMS), which is the company that applied for the CUP.

The Board of Ethics finds that Planning Commission Resolution No. 14-33 denied a conditional use permit for a monofill (private landfill) for CMS. The resolution failed with three Planning Commissioners voting in support and three voting opposed. Mr. Kendig was recused due to his prior business relations.

The Board of Ethics finds that CMS appealed the denial of the CUP to the Board of Adjustment and Appeals (BOAA); the BOAA unanimously affirmed the Planning Commissions' denial of the CUP.

The Board of Ethics finds that CMS appealed the BOAA decision to the Superior Court, which is current and ongoing.

The Board of Ethics finds that the Planning Commission currently has Planning Commission Resolution No. 15-26 before them, which would recommend that the Assembly adopt legislation that would prohibit private landfills within the core area.

The Board of Ethics finds that in his request, Mr. Kendig states "that it could be argued that [Planning Commission Resolution No.] 15-26 would affect the applicants [CMS] if they were to win there [sic] appeal."

The Board of Ethics finds that Mr. Kendig would like an advisory opinion on whether he should recuse himself from Planning Commission Resolution No. 15-26.

### *Conclusions*

1. The Board of Ethics concludes that Mr. Kendig is eligible to sit on the Planning Commission under MSB 4.10.030.
2. The Board of Ethics concludes that Mr. Kendig is subject to the Borough code, under MSB 4.10.030.
3. The Board of Ethics concludes that the code of ethics applies to Mr. Kendig as a municipal official under MSB 2.71.030.
4. The Board of Ethics concludes that as a Planning Commission Member Mr. Kendig does have the ability to take official action as he does vote in support or opposition of Planning Commission resolutions; however, the official action is advisory in nature only and does not provide him with a substantial financial interest.
5. The Board of Ethics concludes that MSB 2.71.080, Recusal, did apply in relation to Planning Commission Resolution No. 14-33, but that Mr. Kendig was properly recused and that resolution is not at issue for this request.
6. The Board of Ethics concludes that MSB 2.71.070, does not apply in relation to Planning Commission Resolution No. 15-26, because only the Borough's legislative body, which is the Borough Assembly, may take official legislative action that could potentially impact an appeal at the Superior Court level.

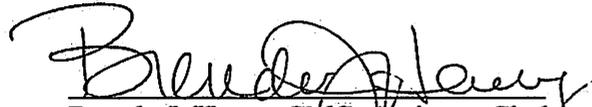
### *Summary of Opinion*

The Board of Ethics has determined that Mr. Kendig does not have a conflict under MSB 2.71.070, Conflict of Interest; Prohibited Acts, as it relates to Planning Commission Resolution No. 15-26.

MATANUSKA-SUSITNA BOROUGH  
BOARD OF ETHICS

  
\_\_\_\_\_  
David Wilson, Chair

Attest:

  
\_\_\_\_\_  
Brenda J. Henry, CMC, Assistant Clerk

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**COMMISSION BUSINESS**  
**Upcoming PC Agenda Items**

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**COMMISSION BUSINESS**



**MATANUSKA-SUSITNA BOROUGH****Planning and Land Use Department**

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7833 • Fax (907) 861-7876

Email: [planning@matsugov.us](mailto:planning@matsugov.us)**MEMORANDUM**

DATE: August 5, 2016

TO: Planning Commissioners

FROM: Eileen Probasco, Director of Planning and Land Use

SUBJECT: Items tentatively scheduled for future PC Meetings or Administrative Actions and Updates on PC items sent to the Assembly

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**September 19, 2016** (*MSB Assembly Chambers*)

**Introduction for Public Hearing Quasi-Judicial**

- **Resolution 16-29**, a request for a Conditional Use Permit in accordance with MSB 17.70, Regulation of Alcoholic Beverage Uses, for the expansion of the Knik Super Store Liquor package store, located at Lot 1, Settlers Bay Lodge Subdivision; 5721 S. Knik Goose Bay Road; within Township 17 North, Range 2 West, Section 34, Seward Meridian. Public Hearing: October 3, 2016. (*Staff: Susan Lee, Applicant: Mark Button RMB, LLC*)
- **Resolution 16-34**, a request for a variance in accordance with MSB 17.65 – Variances, regarding a proposed variance to MSB 17.55 – Setbacks and Screening Easements, allowing a guest cabin to be built 10 feet from the South Rory Circle public right-of-way, located on Lot 6, Rocky Lake Subdivision, Palmer Recording District; within Township 17 North, Range 3 West, Section 21, Seward Meridian. Public Hearing: October 3, 2016. (*Applicant: Michael Solmonson, Staff: Mark Whisenhunt,*)

**Introduction for Public Hearing Legislative**

(None)

**Agency/Staff Reports**

(None)

**Land Use Classifications**

(None)

**Public Hearing Quasi-Judicial**

- **Resolution 16-30**, a Conditional Use Permit (CUP) in accordance with MSB 17.67 – Tall Structures including Telecommunication Facilities, Wind Energy Conversion Systems, and Other Tall Structures, for a 180 foot tall telecommunication tower (NSL1), located at 23619 W. Parks Highway; MSB Tax ID # 18N04W11A001; within Township 18 North, Range 4 West, Section 11, Seward Meridian. (*Staff: Mark Whisenhunt*)
- **Resolution 16-31**, a Conditional Use Permit (CUP) in accordance with MSB 17.67 – Tall Structures including Telecommunication Facilities, Wind Energy Conversion Systems, and Other Tall Structures, for a 180 foot tall telecommunication tower (DLY1), located at 41238 W. Parks Highway; MSB Tax ID # 20N04W06C003; within Township 20 North, Range 4 West, Section 6, Seward Meridian. (*Staff: Mark Whisenhunt*)
- **Resolution 16-32**, a Conditional Use Permit (CUP) in accordance with MSB 17.67 – Tall Structures including Telecommunication Facilities, Wind Energy Conversion Systems, and Other Tall Structures, for a 180 foot tall telecommunication tower (KSH1), located at 15960 E. Kashwitna Road; MSB Tax ID # 23N04W29C006; within Township 23 North, Range 4 West, Section 29, Seward Meridian. (*Staff: Mark Whisenhunt*)

**Public Hearing Legislative**

- **Resolution 16-27**, recommending Assembly adoption of the FY 2018 – 2023 Capital Improvement Program. (*Staff: Sara Jansen*)

**Unfinished Business**

(None)

**New Business**

(None)

**Commission Business**

(None)

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October 3, 2016 (*MSB School District Board Room*)

**Introduction for Public Hearing Quasi-Judicial**

- **Resolution 16-33**, a request for a variance in accordance with MSB 17.65 – Variances, regarding a proposed variance to MSB 17.55 – Setbacks and Screening Easements, allowing a garage to be built 5.7 feet from the Palmdale Drive right-of-way, located on Block 2, Lot 12, Longbeach Subdivision, Division 2, Palmer Recording District; Township 17 North, Range 1 West, Section 1, Seward Meridian. Public Hearing: October 17, 2016. (*Applicant: Denny & Rebecca Nelson, Staff: Susan Lee*)

**Introduction for Public Hearing Legislative**

(None)

(None)

**Land Use Classifications**

(None)

**Public Hearing Quasi-Judicial**

- **Resolution 16-29**, a request for a Conditional Use Permit in accordance with MSB 17.70, Regulation of Alcoholic Beverage Uses, for the expansion of the Knik Super Store Liquor package store, located at Lot 1, Settlers Bay Lodge Subdivision; 5721 S. Knik Goose Bay Road; within Township 17 North, Range 2 West, Section 34, Seward Meridian. (Staff: Susan Lee, Applicant: Mark Button RMB, LLC)
- **Resolution 16-34**, a request for a variance in accordance with MSB 17.65 – Variances, regarding a proposed variance to MSB 17.55 – Setbacks and Screening Easements, allowing a guest cabin to be built 10 feet from the South Rory Circle public right-of-way, located on Lot 6, Rocky Lake Subdivision, Palmer Recording District; within Township 17 North, Range 3 West, Section 21, Seward Meridian. (Applicant: Michael Solmonson, Staff: Mark Whisenhunt,)

**Public Hearing Legislative**

(None)

**Unfinished Business**

(None)

**New Business**

(None)

**Commission Business**

(None)

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**October 17, 2016** (MSB Assembly Chambers)

**Introduction for Public Hearing Quasi-Judicial**

(None)

**Introduction for Public Hearing Legislative**

(None)

**Agency/Staff Reports**

(None)

**Land Use Classifications**

(None)

- **Resolution 16-33**, a request for a variance in accordance with MSB 17.65 – Variances, regarding a proposed variance to MSB 17.55 – Setbacks and Screening Easements, allowing a garage to be built 5.7 feet from the Palmdale Drive right-of-way, located on Block 2, Lot 12, Longbeach Subdivision, Division 2, Palmer Recording District; Township 17 North, Range 1 West, Section 1, Seward Meridian. (*Applicant: Denny & Rebecca Nelson, Staff: Susan Lee*)

**Public Hearing Legislative**  
(None)

**Unfinished Business**  
(None)

**New Business**  
(None)

**Commission Business**  
(None)

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**Upcoming PC Actions**

Quasi-Judicial

- Central Monofill Services CUP remanded back to Planning Commission by Superior Court. (*Staff: Alex Strawn*)
- Victor Damyan junkyard CUP, 17N02W27B006. (*Staff: Susan Lee*)
- Earth Materials Extraction CUP, 18N02W27D009. (*Applicant: T&J Gravel, Staff: Susan Lee*)
- Burnett Variance. (*Applicant: Stephen Spence, Staff: Susan Lee*)
- 907 Club CUP. (*Staff: Mark Whisenhunt*)
- MTA Tall Structure CUP, 25N04W19A006. (*Staff: TBD*)
- Forks Roadhouse Beverage Dispensary CUP. (*Staff: TBD*)

Legislative

- Title 17 Consolidation. (*Staff: Sara Jansen*)

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**Other Upcoming Administrative Actions (Not going to the PC)**

- Nash/Chijuk Creek NRMU Timber Transportation Permit. (*Staff: Susan Lee*)
- Minnick Earth Materials Extraction Administrative Permit. (*Staff: Mark Whisenhunt*)
- Trapper Creek Bluegrass Festival August Special Event Permit. (*Staff: Susan Lee*)
- Psenak Earth Material Extraction Administrative Permit. (*Staff: Mark Whisenhunt*)

**PC Decisions Currently Under Appeal**

- Central Monofill Services Application for a CUP Remanded by to the Planning Commission by Superior Court. (*Staff: Alex Strawn*)

**Updates on PC items going to the Assembly (Pending)**

Planning Commission		Assembly	
Reso		ORD/Reso #	IM
<b>Resolution 16-05</b> , A resolution recommending Assembly adoption of the Seldon Road Extension Corridor Access Management Plan. ( <i>Staff: Mike Campfield</i> )		ORD # 16-__	IM # 16-__
Actions:	01/08/16 – PC Introduction 02/01/16 – PC Public Hearing – Approved		

Planning Commission		Assembly	
Reso		ORD/Reso #	IM
<b>Resolution 16-19</b> , recommending Assembly adoption of an Ordinance establishing Riparian Buffer Standards on High Priority Salmon Streams. Referred by the Assembly to the PC on April 20, 2016, for 90 days. ( <i>Staff: Frankie Barker</i> )		ORD # 16-051	IM # 16-057
Actions:	05/02/16 – PC Introduction 05/16/16 – PC Public Hearing – Failed 08/02/16 – Assembly Introduction – Pulled from the agenda		

**Updates on PC items going to the Assembly (Complete)**

Planning Commission		Assembly	
Reso		ORD/Reso #	IM
<b>Resolution 16-13</b> , a resolution recommending the Assembly adopt MSB 8.41, Marijuana Related Facility License Referrals. Referred to the Planning Commission by the Assembly on February 16, 2016, and due back by May 16, 2016. ( <i>Staff: Alex Strawn</i> )		ORD # 16-021	IM # 16-027
Actions:	03/07/16 – PC Introduction 03/21/16 – PC Public Hearing – Approved 05/17/16 – Assembly Introduction 06/07/16 – Assembly Public Hearing – Postponed until 8/2/16 08/02/16 – Assembly Public Hearing – Amended/Adopted		

Planning Commission		Assembly	
Reso		ORD/Reso #	IM
<b>Resolution 16-21</b> , recommending Assembly approval of an Interim Materials District (IMD) at the MSB Central Landfill in accordance with MSB 17.28 – Interim Materials District, for the extraction of 3,120,000 cubic yards of earth material from 45 acres within a 120-acre area, located within Township 17 North, Range 1 East, Section 1, Tax Parcel D5 (17N01E01D005). ( <i>Applicant: MSB Land Management, Staff: Mark Whisenhunt</i> )		ORD # 16-090	IM # 16-128
Actions:	05/02/16 – PC Introduction 05/16/16 – PC Public Hearing – Amended/Approved 06/21/16 – Assembly Introduction 08/02/16 – Assembly Public Hearing - Adopted		

Planning Commission		Assembly	
Reso		ORD/Reso #	IM
<b>Resolution 16-22</b> , recommending amendments to Assembly Ordinance 16-003, an Ordinance Amending MSB 17.60 to Include Permit Requirements and Standards for Marijuana Related Facilities. Referred by the Assembly to the PC on April 5, 2016, for 90 days. ( <i>Staff: Alex Strawn</i> )		ORD # 16-003(SUB)	IM # 16-001
Actions:	02/02/16 – Assembly Introduction 03/01/16 – Assembly Public Hearing – Postponed to 03/15/16 04/05/16 – Assembly Unfinished Business – Postponed to 04/05/16 04/05/16 – Assembly Unfinished Business – Referred to MAC and PC for 90 days 05/02/16 – PC Introduction 05/16/16 – PC Public Hearing – Continued to 06/06/16 06/06/16 – PC Public Hearing – Postponed to 06/20/16 06/20/16 – PC Unfinished Business - Amended/Approved		