

MEMORANDUM

CITY/BOROUGH OF JUNEAU
155 South Seward Street, Juneau, Alaska 99801

DATE:

August 6, 2013

TO:

Planning Commission

FROM:

Eric Feldt, Planner
Community Development Department



FILE NO.:

CSP2013 0020

PROPOSAL:

A City consistency permit to lease part of Eaglecrest Ski Area for a new cell tower.

GENERAL INFORMATION

Applicant: General Communications Inc. (GCI)

Property Owner: City and Borough of Juneau

Property Address: 3000 Fish Creek Road

Legal Description: SECTION 31 T 41 S R 67 E CRM [EAGLECREST]

Parcel Code No.: 3-D10-210-0-001-0

Site Size: + 400 square feet of lease area

Comprehensive Plan Future Land Use Designation: Resource Development (RD)

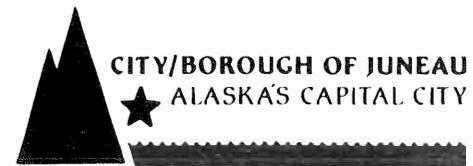
Zoning: Rural Reserve (RR)

Utilities: On-site Water & Sewer

Access: Fish Creek Road

Existing Land Use: Eaglecrest Ski Area

Surrounding Land Use: North - RR; Vacant Forest Service Land
South - RR; Vacant City Land
East - RR; Vacant State of Alaska
West - RR; Vacant State of Alaska



VICINITY MAP



ATTACHMENTS

Attachment A Memo from Eaglecrest Ski Area Manager to City Lands Committee
Attachment B Construction Drawings

PROPOSAL

General Communications Inc. (GCI), phone, TV, and internet service company, seeks to provide cell phone and data coverage at the Eaglecrest Ski Area with the construction of a 50-foot tall tower next to the Porcupine Chair Lift. This requires an approved lease by the City Lands Committee, an approved Building permit, and a City Consistency Permit review by the Planning Commission and Assembly. The vicinity map shows the project location.

BACKGROUND

Due to the mountainous terrain, changes in topography, and remoteness of the Eaglecrest Ski Area, cell phone service is spotty to none. Matt Lillard, Director of the Eaglecrest Ski Area, explains that the lower mountain suffers a black hole in cell phone availability. There is some service gained once higher up the mountain. The ski lodge offers WiFi only, no cell phone service. Therefore, phone service by cell phone is not available.

According to CBJ § 49.10.170 (c), all City land disposals (such as leases) shall be reviewed by the Planning Commission for consistency with adopted plans and provide a recommendation to the Assembly.

On July 29, 2013, the City Lands Committee reviewed this project. Mr. Lillard provided a memo to the Committee explaining the need for the project (Attachment A). Greg Chaney, City Lands & Resources Manager, provided the following summary of that meeting.

“At the Assembly Lands Committee meeting of July 29th, GCI’s proposed wireless communications tower was on the agenda. Eaglecrest Manager, Matt Lillard was scheduled to attend but was unable to make it at the last minute so I presented a broad overview of the topic. The Lands Committee did not object to the installation and the comments were generally positive, but a motion of support was not put forward. After the meeting, GCI supplied significant additional information including construction elevations and site plans. Since there is now additional information, the item will be heard again at the August 26th Lands meeting and it is anticipated that the Committee will make a formal recommendation at that time.”

Although, there seemed to be general support of the project by the Lands Committee, formal action was not taken. Additional material will be presented during the August 26 meeting.

ANALYSIS

As mentioned earlier, the review of the 50-foot tower and associated ground equipment will be through the Building permitting process and will not require Planning Commission approval. This process will ensure compliance with all Building and Land Use Codes. Construction plans of the tower and equipment are provided under Attachment B.

Mr. Lillard explains that having cell phone and data coverage will increase safety. This could pave the way for future cell phone carriers to provide additional service. Mr. Lillard also states that the location of the tower will not impede users nor visually disrupt the experience of the ski area. Eaglecrest Ski Area will also have a financial gain by leasing the land to GCI.

Staff asked Mr. Lillard if there were other options of elevating the antenna other than on a new tower. Mr. Lillard stated that installing the antenna on a chair lift tower would lead to additional wind loading issues, maintenance complications, access, and other challenges. Placing it on the roof top of the ski lodge was not preferred by GCI. Therefore, a new stand-alone tower proved to be the best option.

Community Development Department staff solicited comments from the Juneau International Airport (JIA) manager as to whether the tower would obstruct aviation traffic since the Fish Creek Valley is a route for helicopters and small planes. The JIA manager said that they have no concerns with the tower's height, location, or lack of aviation marking.

CONFORMITY WITH ADOPTED PLANS

According to the Land Use Code, a 50-foot telecommunication tower is permitted in the Rural Reserve district through the Building permitting process. The location of the tower meets all yard setbacks and will be built to withstand wind and snow load per the Building Code.

Per the 2012 Eaglecrest Ski Area Master Plan, the location of the tower is in the Resort Development Recreation Land Use Classification. This classification is defined as an area intended for lower mountain guest services and accommodations in close proximity to existing infrastructure (roads, utilities, etc.). The project is close to the parking lot and can use nearby electrical utilities. Further, the Plan lists facilities allowed in the Resort Development area which include Operations Building, Snowmaking System Improvements, Learning Center, etc. Therefore, the project is in an area dedicated to future buildings and utilities associated with the Eaglecrest Ski Area and is consistent with the 2012 Eaglecrest Ski Area Master Plan.

The 2008 Comprehensive Plan designates the Eaglecrest Ski Area as a Resource Development land use classification. This is defined below.

Resource Development (RD). Land to be managed primarily to identify and conserve natural resources until specific land uses are identified and developed. Such specific uses may include, where appropriate, resource extraction and development, recreational and visitor-oriented facilities, and residential uses. The area outside the study area of this Comprehensive Plan is considered to be designated Resource Development.

Eaglecrest Ski Area has been in operation in this area since the 1970s and continues to grow with user demand. The project will introduce a telecommunication facility component and will aid in the overall communication between users and staff of ski area and emergency services outside the area. Therefore, the project is associated with the overall operations of the Eaglecrest Ski Area.

Although telecommunication towers are not specifically mentioned in the 2008 Comprehensive Plan, telecommunication is crucial for Juneau's remote location as the State Capital, regional hub, and connection with other parts of the Lower 49. The Comprehensive Plan states, "*As Alaska's Capital City, it is vital for the CBJ to offer modern transport and communication systems and facilities to Alaskan residents who wish to participate in State Legislative affairs.*" Telecommunication infrastructure is also a form of a communication utility. As stated in the Comprehensive Plan, "*Together with the transportation network and private utility and communication systems, public services and facilities provide the community's 'urban glue' and require efficient and timely provision.*"

Having cell phone and data coverage at Eaglecrest Ski Area will not only aid in one-to-one communication but also allow greater availability for internet access for various ski education and training on the mountain such as avalanche safety education or ski/ snowboard skill learning. The project is consistent with the 2008 Comprehensive Plan.

HABITAT

The applicant states that no wetlands will be filled in the area of the new tower. Further, no protected habitat stated under the Land Use Code will be affected by the new tower.

FINDINGS

The project is consistent with the Land Use Code, 2008 Comprehensive Plan, and 2012 Eaglecrest Ski Area Master Plan.

RECOMMENDATION

Staff recommends the Planning Commission adopt the Director's findings and analysis and recommend the CBJ Assembly approve the City lease for GCI's proposed 50-foot tower and associated equipment.

CITY/STATE PROJECT AND LAND ACTION REVIEW APPLICATION

Project Number	Project Name (15 characters)	Case Number	Date Received
		CSP 20130020	07/30/13

TYPE OF PROJECT REVIEW:

City Project Review City Land Acquisition /Disposal State Project Review

DESCRIPTION OF PROJECT

A 20'x20' Lease parcel to GCI for the purposes of contracting and maintaining a cell tower at Eaglecrest/CBJ land located adjacent to the Porcupine Chair lift

Please attach a cover letter to fully explain the project if there is not adequate space on this form.

CURRENT USE OF LAND OR BUILDING(S):

The proposed site is currently not used by Eaglecrest for winter or summer recreation. The proposed site is adjacent to the Porcupine Chair lift and there are no plans for any future uses of the site.

PROPOSED USE OF LAND OR BUILDING(S):

A 20'x20' area containing a 50' cellular tower and equipment to run and maintain cellular service in the Eaglecrest base area.

PROJECT NUMBERS ASSOCIATED WITH PROPOSAL:

Is this project associated with any other Land Use Permits? No Yes Case No.: _____

Capital Improvement Program # (CIP) N/A _____

Local Improvement District # (LID) N/A _____

State Project # M/A _____

ESTIMATED PROJECT COST: \$ 0.00

For more information regarding the permitting process and the submittals required for a complete application, please see the reverse side.

If you need any assistance filling out this form, please contact the Permit Center at 586-0770.

CITY/STATE PROJECT FEES		Fees	Check No.	Receipt	Date
Application Fees		\$	_____	_____	_____
Total Fee		\$ _____	_____	_____	_____

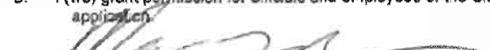
NOTE: MUST BE ACCOMPANIED BY DEVELOPMENT PERMIT APPLICATION FORM

&

EVEN IF THE PROPOSED PROJECT IS ASSOCIATE WITH OTHER LAND USE PERMITS, THIS APPLICATION MUST BE FILLED OUT

DEVELOPMENT PERMIT APPLICATION

Project Number <u>CSP20130020</u>	CITY and BOROUGH of JUNEAU	Date Received: <u>07/30/13</u>
Project Name (City Staff to Assign Name)		

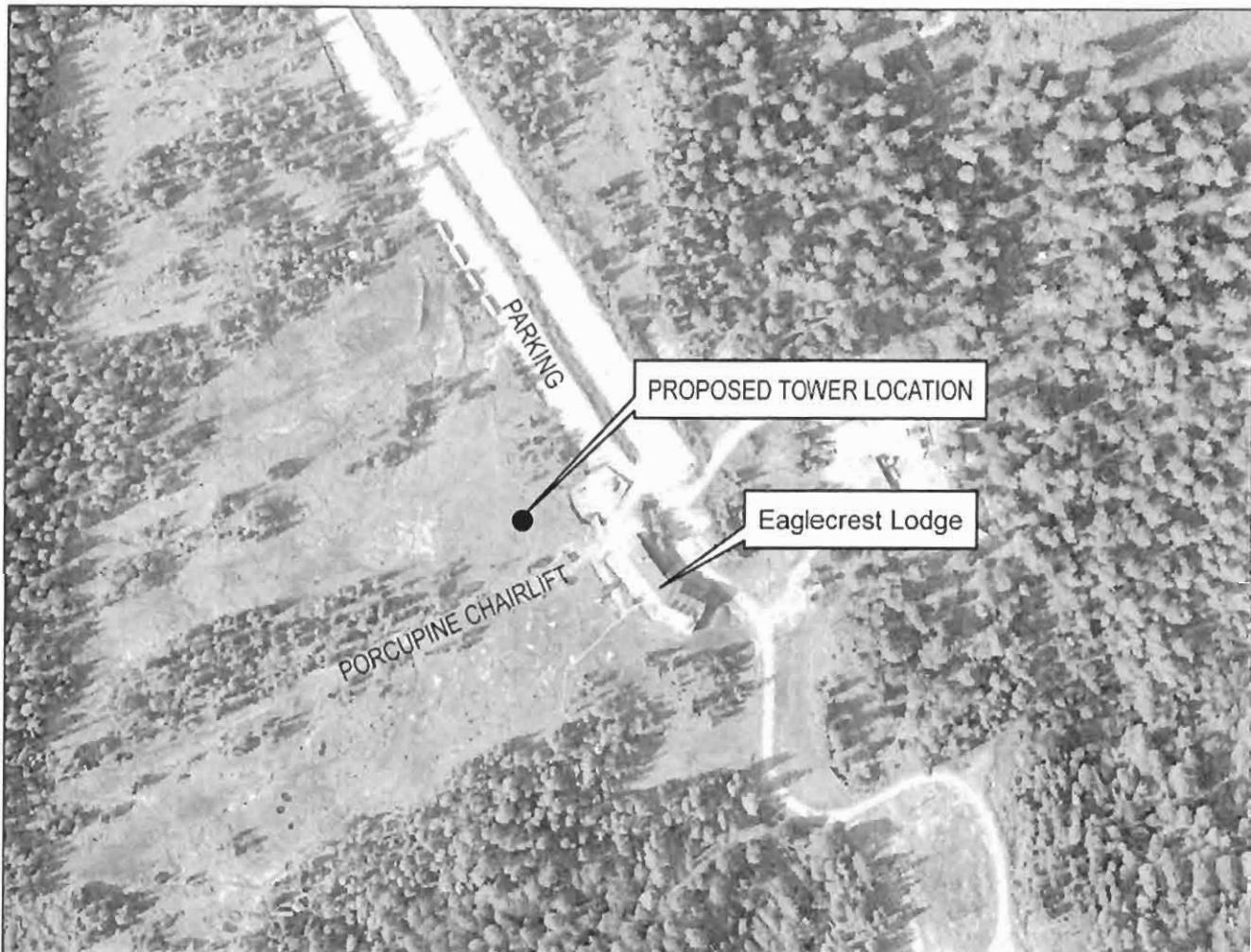
PROJECT / APPLICANT INFORMATION	Project Description New Telecommunications site to include a 50 foot wooden pole, platform and equipment cabinet.		
	PROPERTY LOCATION		
	Street Address Fish Creek Road	City/Zip Juneau, AK 99801	
	Legal Description(s) of Parcel(s) (Subdivision, Survey, Block, Tract, Lot) USS 1075 FR		
	Assessor's Parcel Number(s) <u>3D10210000 10</u>		
	LANDOWNER/ LESSEE		
	Property Owner's Name Eagle Crest Ski Area	Contact Person: Matt Lillard, GM	Work Phone: 907-790-2000 x211
	Mailing Address 155 South Seward Street, Juneau, AK 99801	Home Phone:	Fax Number: 907-586-4580
	E-mail Address matt.lillard@skijuneau.com	Other Contact Phone Number(s):	
	LANDOWNER/ LESSEE CONSENT ****Required for Planning Permits, not needed on Building/ Engineering Permits****		
I am (we are) the owner(s) or lessee(s) of the property subject to this application and I (we) consent as follows:			
<ul style="list-style-type: none"> A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission B. I (we) grant permission for officials and employees of the City and Borough of Juneau to inspect my property as needed for purposes of this application. 			
X 	7/23/13		
X _____ Landowner/Lessee Signature	Date		
X _____ Landowner/Lessee Signature	Date		
NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours and will attempt to contact the landowner in addition to the formal consent given above. Further, members of the Planning Commission may visit the property before the scheduled public hearing date.			
APPLICANT	If the same as OWNER, write "SAME" and sign and date at X below		
Applicant's Name GCI	Contact Person: David Rizk	Work Phone: 907-868-2529	
Mailing Address 6831 Arctic Blvd, Anchorage, AK 99518	Home Phone:	Fax Number:	
E-mail Address drizk@gci.com	Other Contact Phone Number(s): mobile 907-727-0192		
X _____ Applicant's Signature	Date of Application		

OFFICE USE ONLY BELOW THIS LINE				
STAFF APPROVALS	Permit Type	SIGN	Date Received	Application Number(s)
	Building/Grading Permit			
	City/State Project Review and City Land Action		02/30/13	CSP 20130620
	Inquiry Case (Fee In Lieu, Letter of ZC, Use Not Listed)			
	Mining Case (Small, Large, Rural, Extraction, Exploration)			
	Sign Approval (If more than one, fill in all applicable permit #'s)			
	Subdivision (Minor, Major, PUD, St. Vacation, St. Name Change)			
	Use Approval (Allowable, Conditional, Cottage Housing, Mobile Home Parks, Accessory Apartment)			
	Variance Case (De Minimis and all other Variance case types)			
	Wetlands Permits			
Zone Change Application				
Other (Describe)				

***Public Notice Sign Form filled out and in the file.

NOTE: DEVELOPMENT PERMIT APPLICATION FORMS MUST ACCOMPANY ALL OTHER COMMUNITY DEVELOPMENT DEPARTMENT APPLICATIONS

NOTICE OF PUBLIC HEARING



PROPOSAL: A City consistency permit to lease part of Eaglecrest Ski Area for a cell phone new tower.

File No:	CSP2013 0020	Applicant:	GCI Communications
To:	Adjacent Property Owners	Property PCN:	3-D10-2-100-001-0
Hearing Date:	August 13, 2013	Owner:	CBJ
Hearing Time:	7:00 PM	Size:	+400 Sq. Ft. Lease Area
Place:	Assembly Chambers Municipal Building 155 South Seward Street Juneau, Alaska 99801	Zoned:	Rural Reserve
		Site Address:	3000 Fish Creek Road
		Accessed Via:	Fish Creek Road

PROPERTY OWNERS PLEASE NOTE:

You are invited to attend this Public Hearing and present oral testimony. The Planning Commission will also consider written testimony. You are encouraged to submit written material to the Community Development Department no later than 8:30 A.M. on the Wednesday preceding the Public Hearing. Materials received by this deadline are included in the information packet given to the Planning Commission a few days before the Public Hearing. Written material received after the deadline will be provided to the Planning Commission at the Public Hearing.

If you have questions, please contact Eric Feldt at eric_feldt@ci.juneau.ak.us or at 586-0764.

Planning Commission Agendas, Staff Reports and Meeting Results can be viewed at www.juneau.org/plancomm.

DATE: July 25, 2013

TO: Greg Chaney, Lands & Resources Manager
CBJ Lands Committee

FROM: Matt Lillard, Eaglecrest General Manager

SUBJECT: GCI Cellular Tower at Eaglecrest Ski Area

ATTACHMENTS: Site Plan and Draft Lease

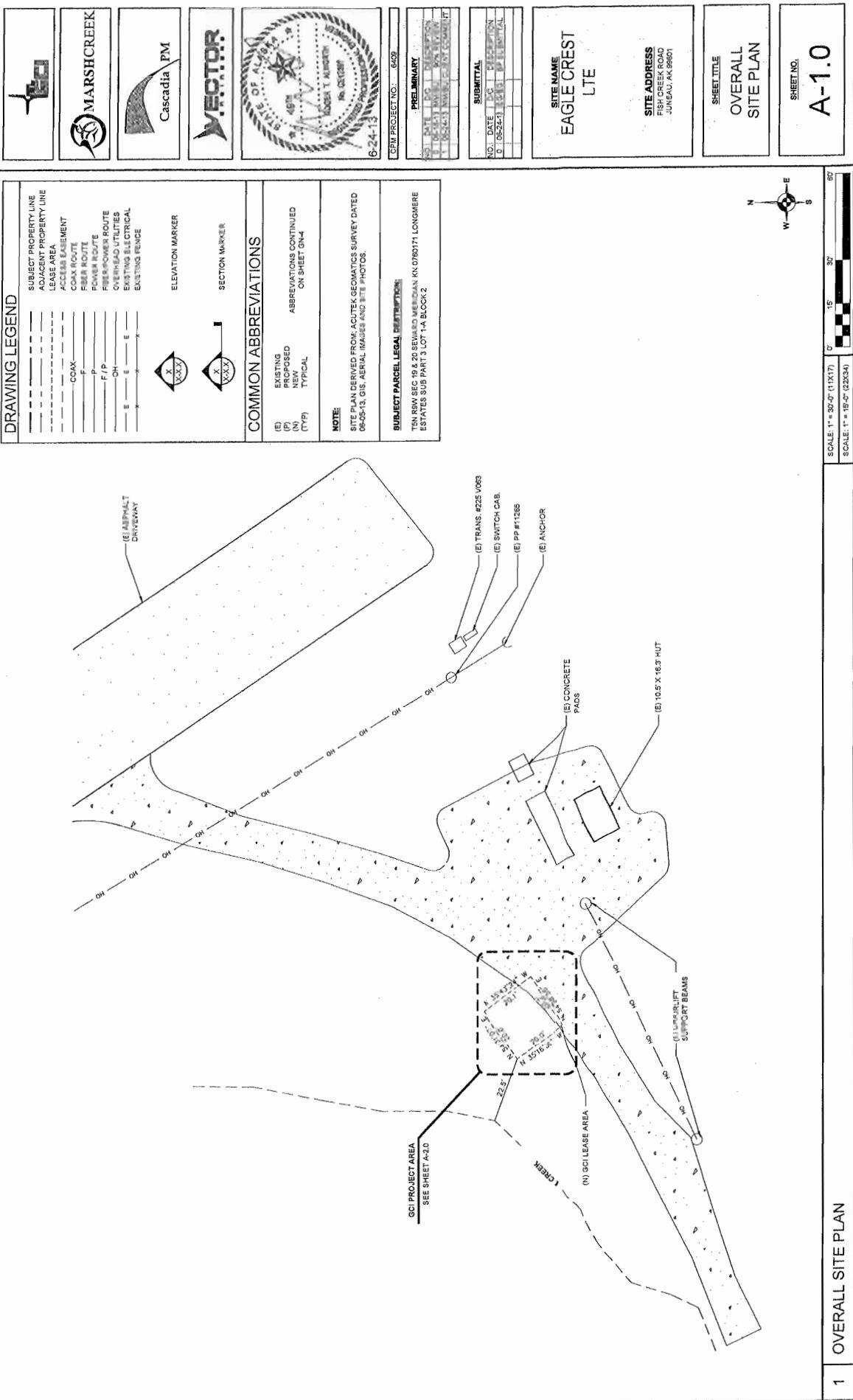
GCI is seeking to install a 50' wooden pole with cellular equipment on a 20'x20' lease parcel at Eaglecrest Ski Area beside the Porcupine Chair Lift. The project is a very positive improvement to Eaglecrest. First, the customer service and skier safety aspects of our ski area are vastly improved with reliable service in the base area where there is currently spotty coverage at best. Second is the added revenue for Eaglecrest and third is the addition of infrastructure to the mountain via the fiber optic cable being strung all the way up Fish Creek Rd to the base area. The location of the tower will be in a location that has minimal impact on the visual guest experience and is not hindering on the ski experience in any way. Attached to this memo is a site plan for the cellular site as well as a draft lease.

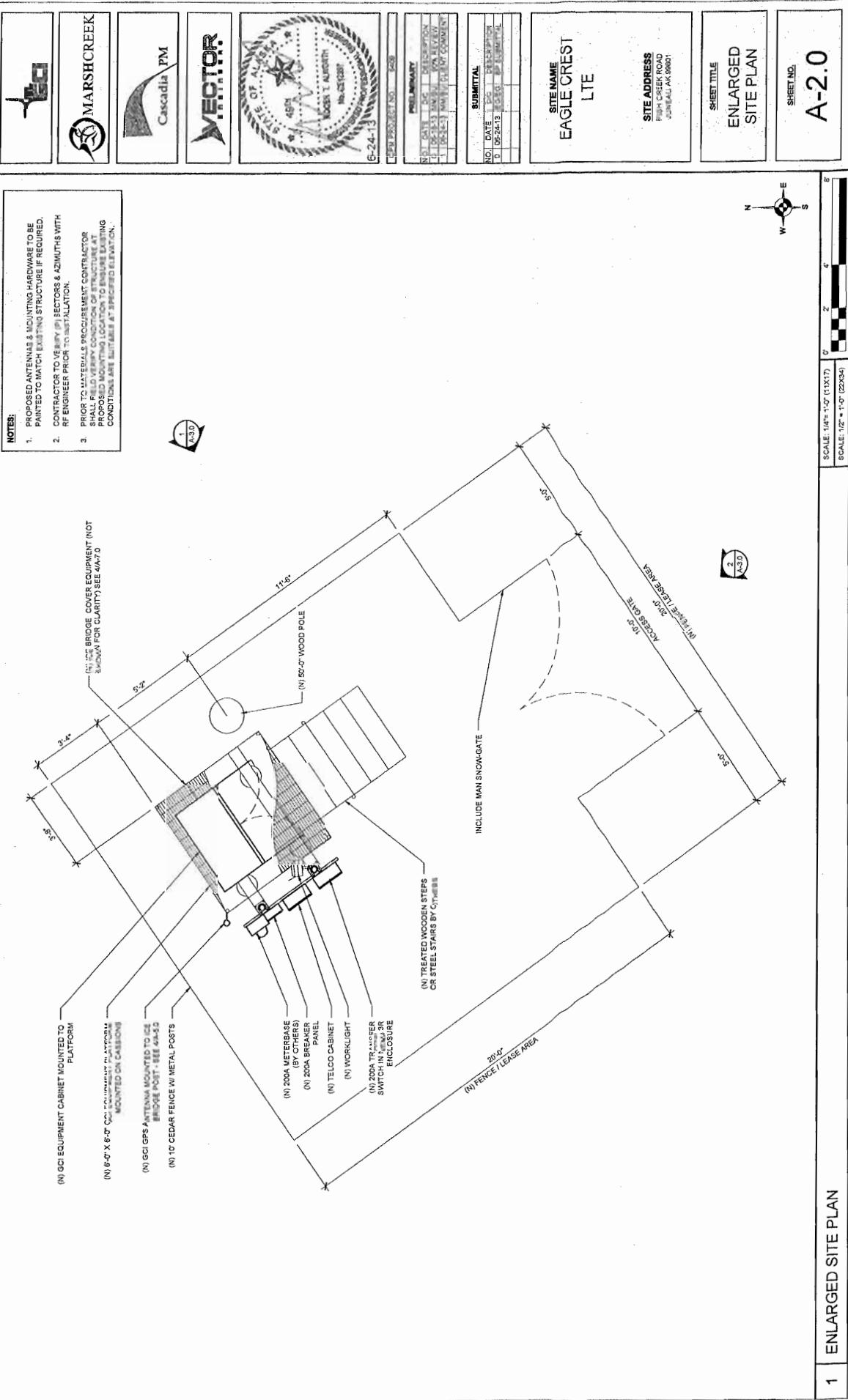
The Eaglecrest Board of Directors has approved the lease in principal at their June Meeting and will be approving the draft lease at the August meeting. The project is due to go in front of the Planning Commission at the August 6th Meeting.

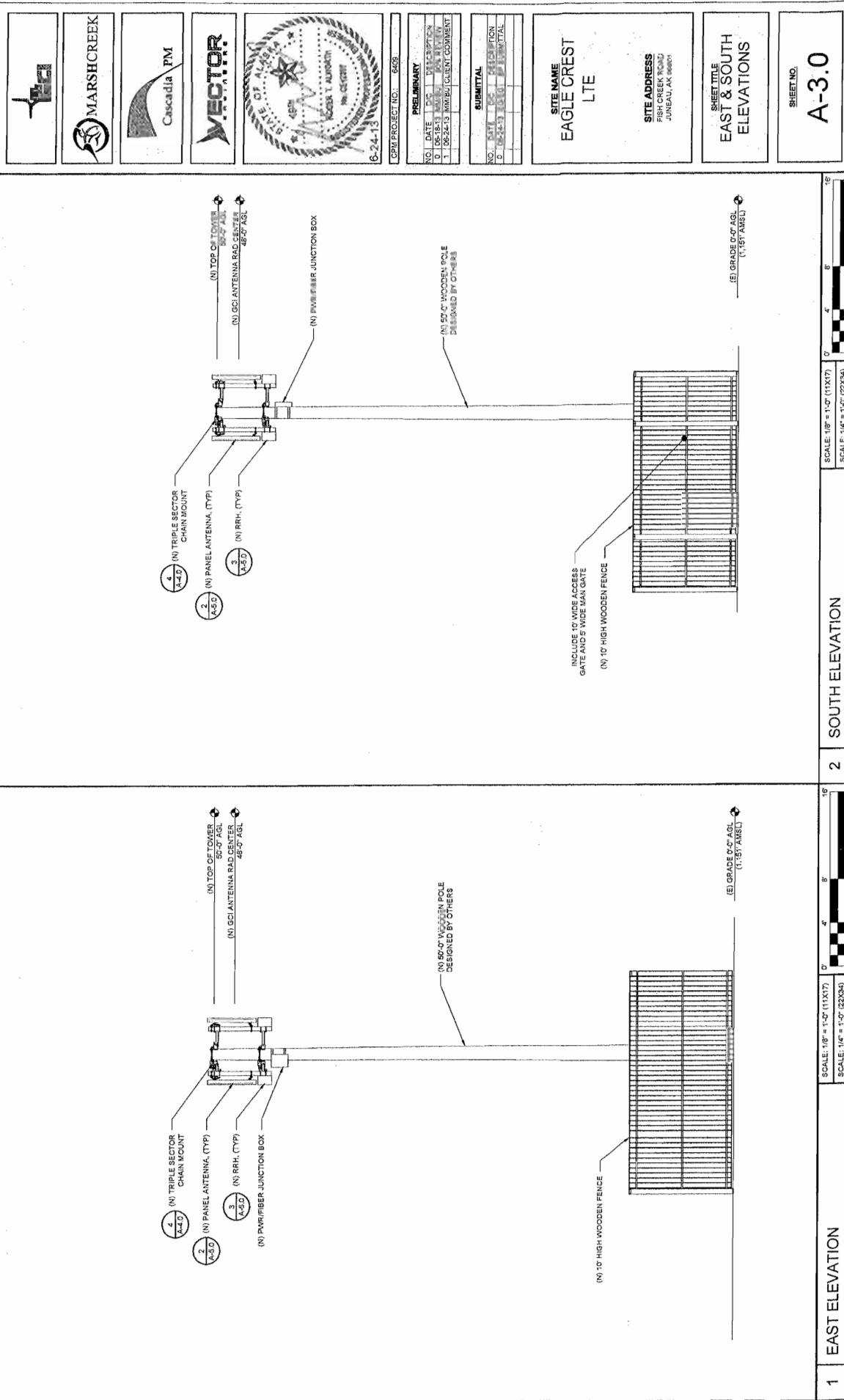


EAGLE CREST CONSTRUCTION DRAWINGS

PROJECT DATA		PROJECT CONTACTS		DRAWING INDEX	
SHEET	DESCRIPTION	SHEET	DESCRIPTION	SHEET	DESCRIPTION
<p>TERMINUS OF FISH CREEK ROAD JUNEAU, AK 99801 41S, 67E, S1 58°19'35.67" N 134°37'00.57" W WD 83 S2C</p> <p>CITY OF JUNEAU GROUND ELEVATION: 1151' AMSL 50' AGL</p> <p>JURISDICTION: TOP OF IN WOOD POLE: OCCUPANCY GROUP: CONSTRUCTION TYPE:</p> <p>STRUCTURAL ENGINEER 8198 S STATE ST. SUITE 101 BENSON & ALLEN LTD. ROGER T. ALLEN, P.E. PH: 821-3884/1775</p>		<p>APPLICANT MARSH CREEK, LLC 2000 E 40TH AVE. ANCHORAGE, AK 99507 VIA: NEVELL PH: 907-258-0550</p> <p>PROPERTY OWNER EAGLE CREST SUGAR AREA 158 SOUTH SEWARD STREET JUNEAU, AK 99801 (907) 786-2000</p> <p>TOWER OWNER ATT TOWER INC 12855 CIRCULAR WAY SUITE 1500 ALPHARETTA, GA 30004 402-580-7009</p> <p>POWER PROVIDER LASTIC ELECTRIC LIGHT & POWER 5601 TOSSARD CT., JUNEAU, AK 99801 PH: 907-785-2222</p>		<p>PRELIMINARY</p> <p>T-1.0 TITLE SHEET A-1.0 OVERALL SITE PLAN A-2.0 ENLARGED SITE PLAN A-3.0 EAST & SOUTH ELEVATIONS A-4.0 CONSTRUCTION DETAILS A-5.0 ANTENNA DETAILS A-6.0 FENCE DETAILS A-7.0 CRIB/BUTTRESS DETAILS S-1.0 PLATFORM GRADE BEAMS E-1.0 ELECTRICAL SITE PLAN E-2.0 ORDNANCE SITE PLAN E-3.0 ELECTRICAL DETAILS E-4.0 ORDNANCE DETAILS GN-1 GENERAL NOTES GN-2 GENERAL NOTES GN-3 GENERAL NOTES GN-4 GENERAL NOTES</p> <p>SUBMITTAL</p> <p>NO. DATE DESCRIPTION 1 0 6/13/13 MARSH CREEK 1 0 6/13/13 MARSH CREEK 1 0 6/13/13 MARSH CREEK</p>	
PROJECT SUMMARY		DRIVING DIRECTIONS		APPROVAL LIST	
<p>THIS PROJECT INCLUDES THE FOLLOWING SCOPE OF WORK: 1. PROPOSED CONSTRUCTION OF A NEW GCI WIRELESS TELECOMMUNICATIONS FACILITY.</p> <p>2. PROPOSED GCI OUTDOOR RF EQUIPMENT TO BE INSTALLED ON 6' X 6' X 8' PLATFORM ON CASSIERS PLANS WITHIN A PROPOSED 20 X 20 LEASE AREA.</p> <p>3. PROPOSED INSTALLATION OF THREE (3) PANEL ANTENNAS ON THE NEW 50'-0" WOODEN POLE, ONE (1) GPS ANTENNA TO BE INSTALLED ON ICE BRIDGE.</p> <p>4. PROPOSED INSTALLATION OF (N) 20A ELECTRICAL SERVICE FOR GCI.</p>		<p>FROM JUNEAU INTERNATIONAL AIRPORT:</p> <p>1. HEAD EAST ON SHELL SIMONS DR TOWARD YANDURN DR (0.2 MI) 1. SLIGHT RIGHT ONTO YANDURN DR (0.9 MI) 1. CONTINUE ONTO EGAN DR (6.5 MI) 1. CONTINUE ONTO W 10TH ST (SIGNS FOR DOUGLAS 0.1 MI) 6. AT THE TRAFFIC CIRCLE, TAKE THE 1ST EXIT ONTO 3RD ST (DOUGLAS AV) HEADING TO N DOUGLAS CONTINUE TO FOLLOW DOUGLAS AVWY 6.0 MI 7. TURN LEFT ONTO EAGLE CREST RODFISH CREEK RD DESTINATION WILL BE ON THE RIGHT ESTIMATED TIME: 25 MINUTES ESTIMATED DISTANCE: 12 MILES</p>		<p>SITE ADDRESS FISH CREEK ROAD JUNEAU, AK 99801</p> <p>SHEET TITLE TITLE SHEET</p> <p>LESSORS LEGAL DESCRIPTION: USS 1075 FR</p> <p>CALL BEFORE YOU DIG! 1-800-477-3121 HTTP://WWW.AGORILLA.COM/CONTACT.HTM</p>	
PROJECT VICINITY MAP				<p>LEGAL DESCRIPTION</p> <p>N W E S</p> <p>PROJECT LOCATION</p>	
				<p>SHEET NO. T-1.0</p>	









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CPM PROJECT NO.:		PRELIMINARY					
		DATE	CC	DESCRIPTION	U	V	W
1	05-24-13	WU	J	WATER	Y	N	N
2	05-24-13	WU	J	WATER	Y	N	N
3	05-24-13	WU	J	WATER	Y	N	N

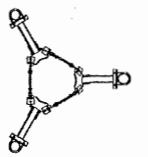
SITE NAME
EAGLE CREST
LTE

SITE ADDRESS
FISH CREEK ROAD
JUNEAU, AK 99801

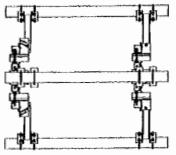
SHEET TITLE CONSTRUCTION DETAILS

A-4.0
SHEET NO.

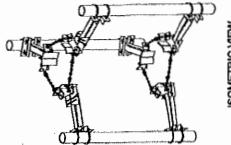
SCALE: NTS (1:250,000)



PLAN VIEW



ELEVATION VIEW

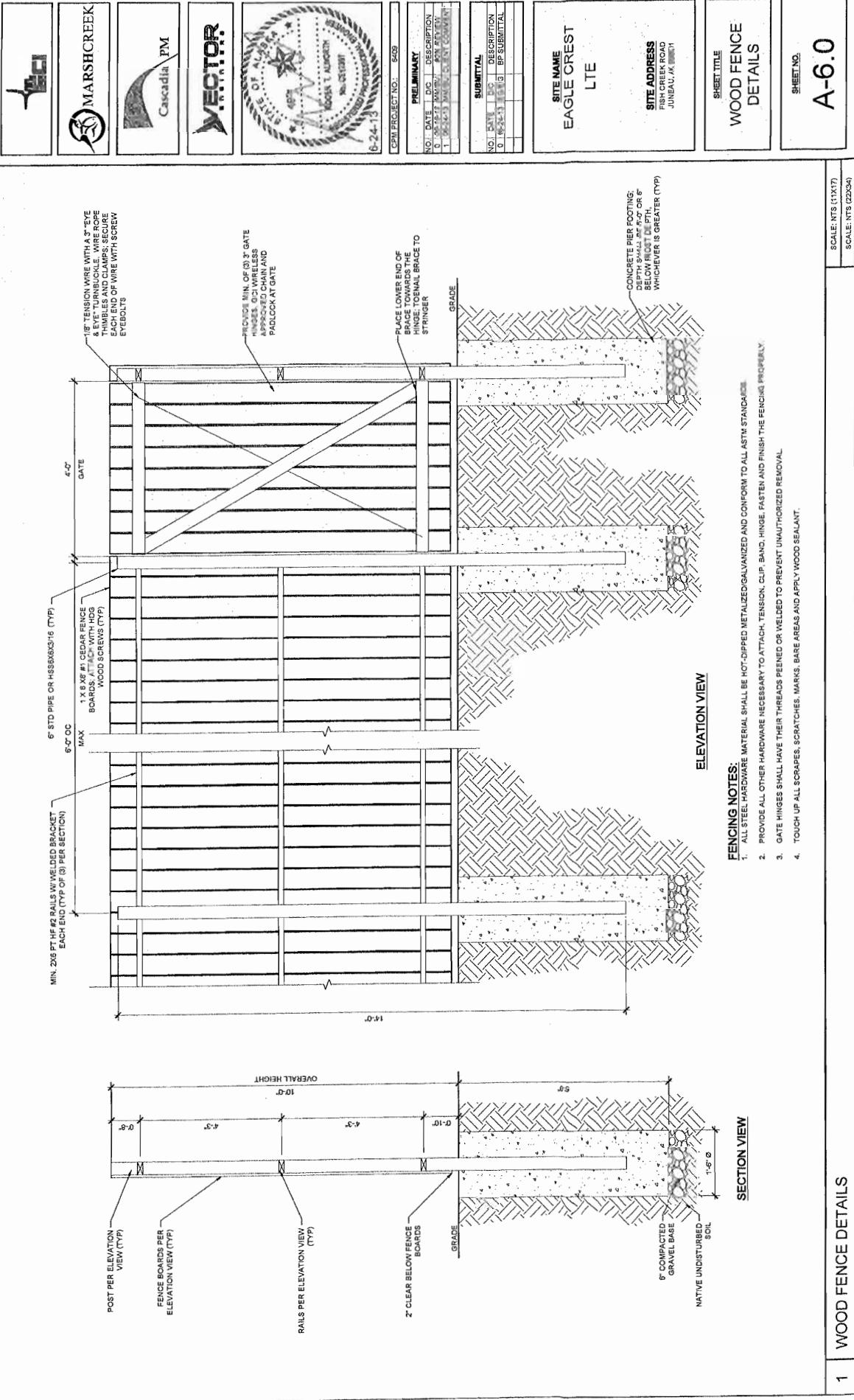


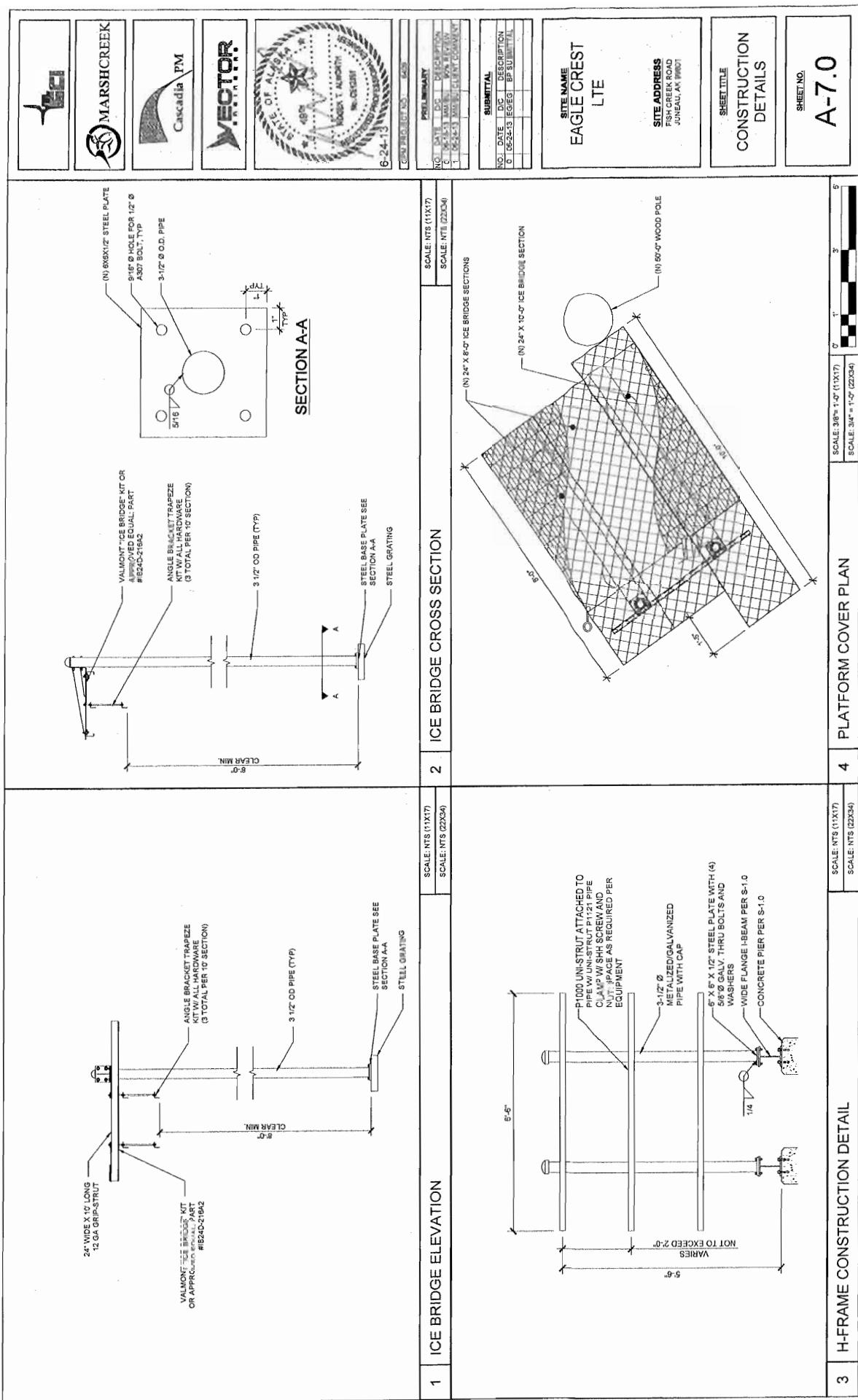
ISOMETRIC VIEW

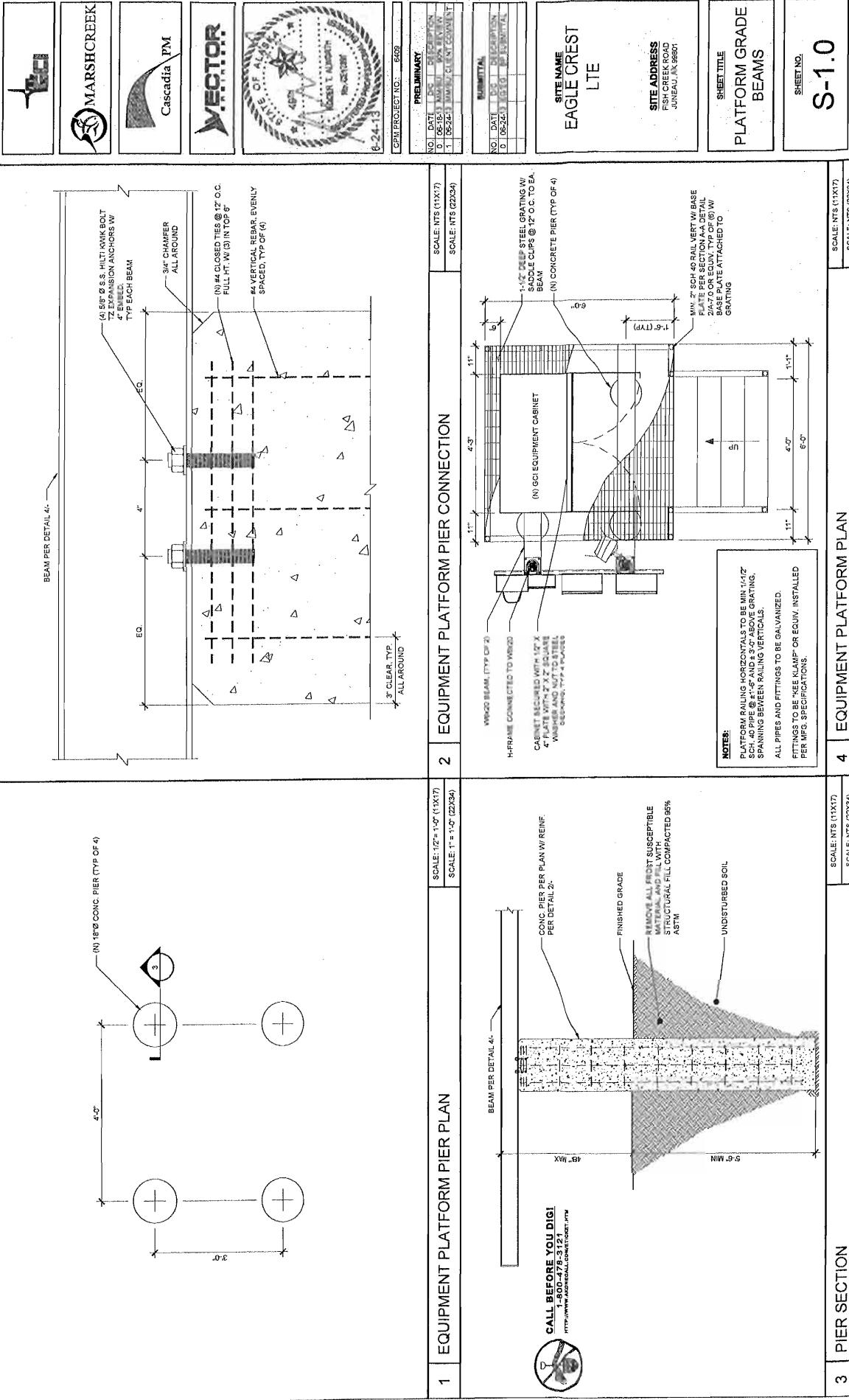
MANUFACTURER:
 VAILOMNT
 PART NUMBER:
 TCM-3-L
 DESCRIPTION:
 TAPER ADJUSTABLE CHAIN MOUNT
STANDOFF:
 2"
FITS ROUND POLES 6-1/2"-36"

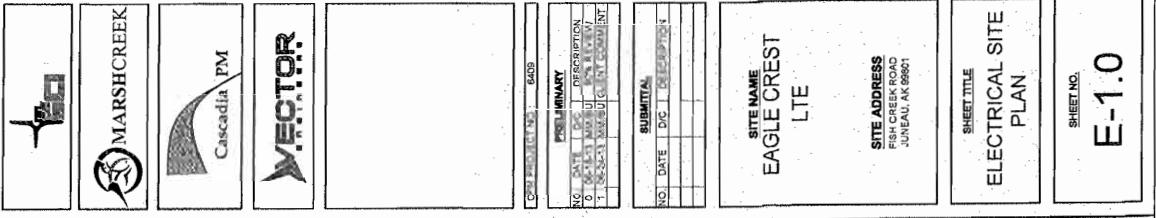
		SCALE: NTS (11X17)	SCALE: NTS (11X17)
		SCALE: NTS (22X34)	SCALE: NTS (22X34)
3	NOT USED	4	ANTENNA MOUNT

1 PANEL ANTENNA SPECIFICATIONS		2 PANEL ANTENNA MOUNTING DETAIL		3 RRH DETAIL		4 GPS ANTENNA MOUNTING		5 ANTENNA LAYOUT PLAN		6 ANTENNA & COAX SCHEDULE																																																			
<p>NOTE:</p> <ol style="list-style-type: none"> 1. IF REQUIRED PAINT TO MATCH THE EXISTING STRUCTURE AGAINST BARS WITH THE SURROUNDING AREAS USING N20 REFLECTIVE PAINT. 2. VARY FINAL IR CONFIGURATION WITH CLIENT REQUESTED SEE 1A-5.0 3. ALL ANTENNA INSTALLATION AND TESTING SHALL CONFORM TO CURRENT GCI STANDARDS. <p>MANUFACTURER: RFS INC PART NUMBER: APX16DWV16DWWS-E LENGTH: 55.9" WIDTH: 13" DEPTH: 3.15" WEIGHT: 40.7 LBS MOUNTING HARDWARE PART# D9580</p>		<p>ANTENNA MOUNTING PIPE MOUNT</p>		<p>RRH (TYPE 3) - SEE 3A-5.0</p> <p>GCI PANEL ANTENNA (TYPE OF 3) - SEE 1A-5.0</p>		<p>GPS ANTENNA (SEE 1A-5.0)</p>		<p>GCI WIRELESS ANTENNA INFORMATION</p> <table border="1"> <thead> <tr> <th>SECTOR</th> <th>QTY.</th> <th>ANTENNA MODEL</th> <th>TMA</th> <th>MICR. DOWNHILL</th> <th>AZIMUTH</th> <th>TIP HEIGHT</th> <th>COAX LENGTH</th> <th>COAX SIZE</th> <th>NUMBER OF COAX</th> </tr> </thead> <tbody> <tr> <td>ALPHA</td> <td>1</td> <td>APX16DWV16DWWS-E</td> <td>-</td> <td>T.B.D.*</td> <td>T.B.D.</td> <td>51'-0"</td> <td>80'-0"</td> <td>7/8"</td> <td>1</td> </tr> <tr> <td>BETA</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>GAMMA</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>GPS</td> <td>1</td> <td>APX16DWV16DWWS-E</td> <td>-</td> <td>T.B.D.*</td> <td>T.B.D.</td> <td>51'-0"</td> <td>80'-0"</td> <td>7/8"</td> <td>1</td> </tr> </tbody> </table>		SECTOR	QTY.	ANTENNA MODEL	TMA	MICR. DOWNHILL	AZIMUTH	TIP HEIGHT	COAX LENGTH	COAX SIZE	NUMBER OF COAX	ALPHA	1	APX16DWV16DWWS-E	-	T.B.D.*	T.B.D.	51'-0"	80'-0"	7/8"	1	BETA	-	-	-	-	-	-	-	-	-	GAMMA	-	-	-	-	-	-	-	-	-	GPS	1	APX16DWV16DWWS-E	-	T.B.D.*	T.B.D.	51'-0"	80'-0"	7/8"	1	<p>COAX CABLE NOTE:</p> <ul style="list-style-type: none"> * COAX CABLE LENGTHS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LENGTHS PER FINAL ICE BRIDGE CONTRACTOR CHART AND BY CONTRACTOR MOUNTED ROUTING. ** CONTRACTOR SHALL CONNECT COAX CABLES TO GCI ANTENNA AS SHOWN. *** ALL COAXIAL CABLE CONNECTIONS SHALL BE TIGHT AND SECURED. **** CONTRACTOR TO PROVIDE CHP LIQUIDATION AND SUPPORT WHERE NECESSARY. ALL COAXIAL CABLES TO BE MARKED WITH COLOR CODED TAPE TO INDICATE THE ANTENNA SECTOR. ***** COLORED ELECTRICAL TAPE SHALL MARK EACH END OF CABLE AND EACH END OF JUMPERS AS CLOSE TO EACH END AS POSSIBLE. (NOT TO INTERFERE WITH WEATHERPROOFING). 	
SECTOR	QTY.	ANTENNA MODEL	TMA	MICR. DOWNHILL	AZIMUTH	TIP HEIGHT	COAX LENGTH	COAX SIZE	NUMBER OF COAX																																																				
ALPHA	1	APX16DWV16DWWS-E	-	T.B.D.*	T.B.D.	51'-0"	80'-0"	7/8"	1																																																				
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<p>1 PANEL ANTENNA SPECIFICATIONS</p>		<p>2 PANEL ANTENNA MOUNTING DETAIL</p>		<p>3 RRH DETAIL</p>		<p>4 GPS ANTENNA MOUNTING</p>		<p>5 ANTENNA LAYOUT PLAN</p>		<p>6 ANTENNA & COAX SCHEDULE</p>																																																			
<p>NOTE:</p> <ol style="list-style-type: none"> 1. CONTRACTOR SHALL VERIFY FINAL ANTENNA AZIMUTH WITH CLIENT REPRESENTATIVE PRIOR TO ANTENNA INSTALLATION. 2. CONTRACTOR SHALL VERIFY COAX LENGTHS AND COAXIAL CONNECTIONS PRIOR TO LEAVING SITE. CONTRACTOR SHALL VERIFY SUITABILITY OF ANTENNA MOUNT AT SPECIFIED ELEVATION. 		<p>SITE NAME: EAGLE CREST</p> <p>LTE</p>		<p>SITE ADDRESS:</p> <p>FISH CREEK ROAD JUNEAU, AK (99801)</p>		<p>SHEET TITLE: ANTENNA DETAILS</p>		<p>SHEET NO. A-5.0</p>																																																					
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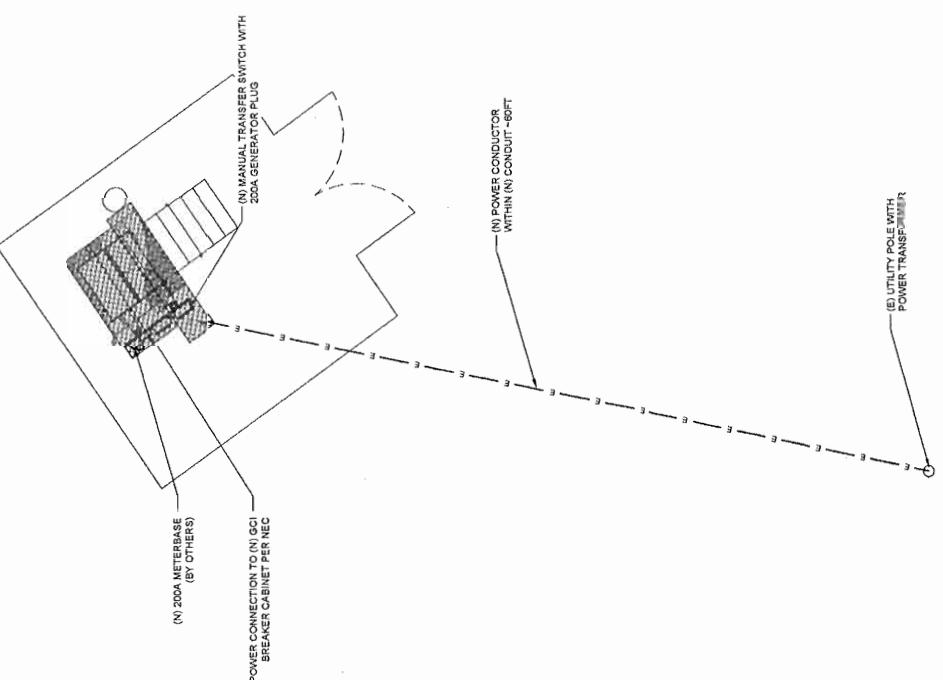




NOTE
THE LOCATION OF THE CONDUIT ROUTES
INDICATED ON THE PLANS ARE APPROXIMATE.
LINES WILL NOT BE ACCURATE AND ARE FOR THIS
CONTRACTOR'S USE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY WHETHER ANY
ADDITIONAL FACILITIES OTHER THAN THOSE
SHOWN ON THE PLANS MAY BE PRESENT.



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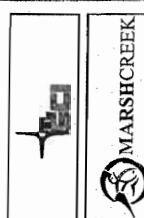
SITE NAME	EAGLE CREST
LT	E
SITE ADDRESS	FISH CREEK ROAD JUNEAU, AK 99801
SUBMISSION	
NO.	DATE

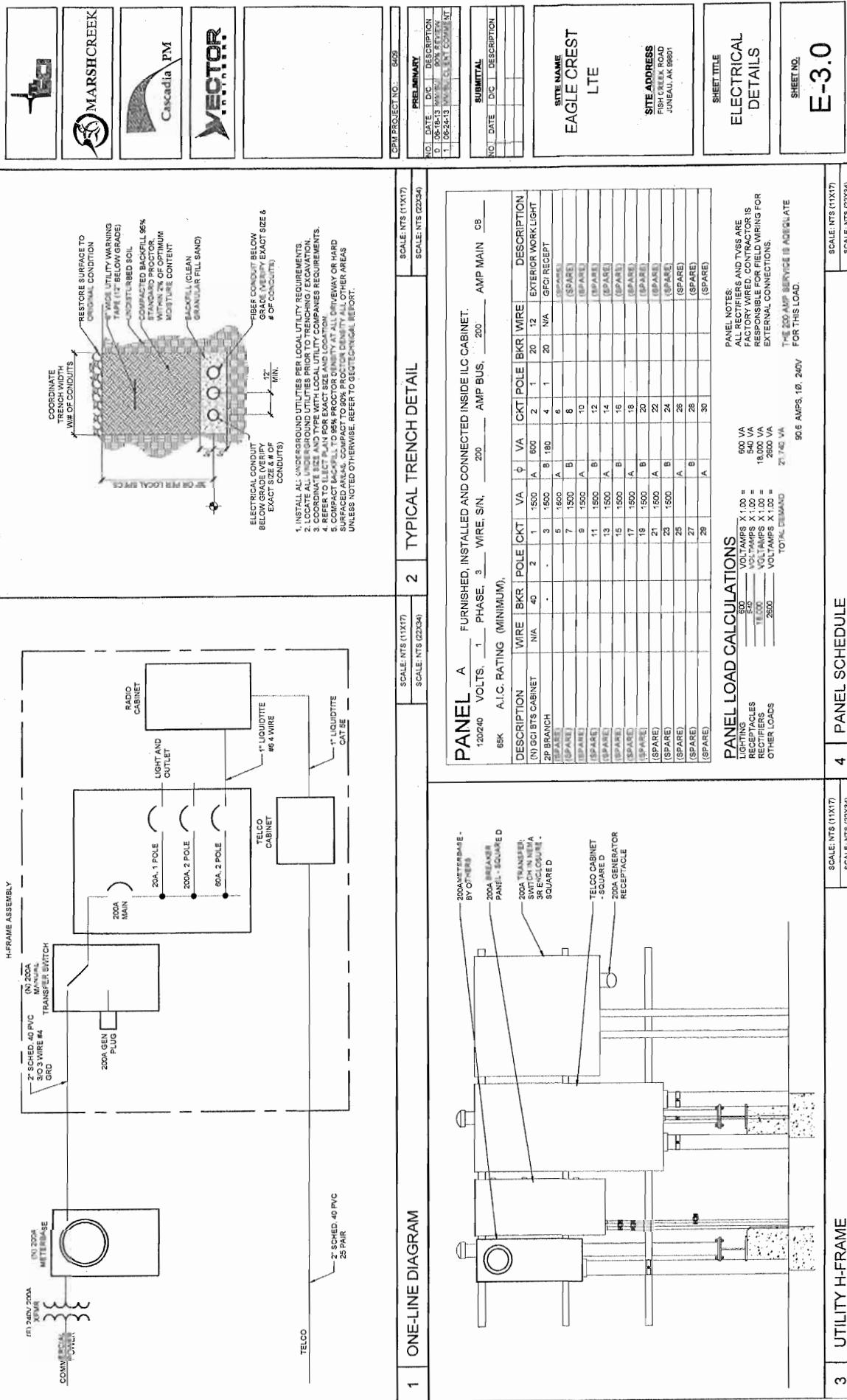
SHEET TITLE	ELECTRICAL SITE PLAN
SHEET NO.	E-1.0

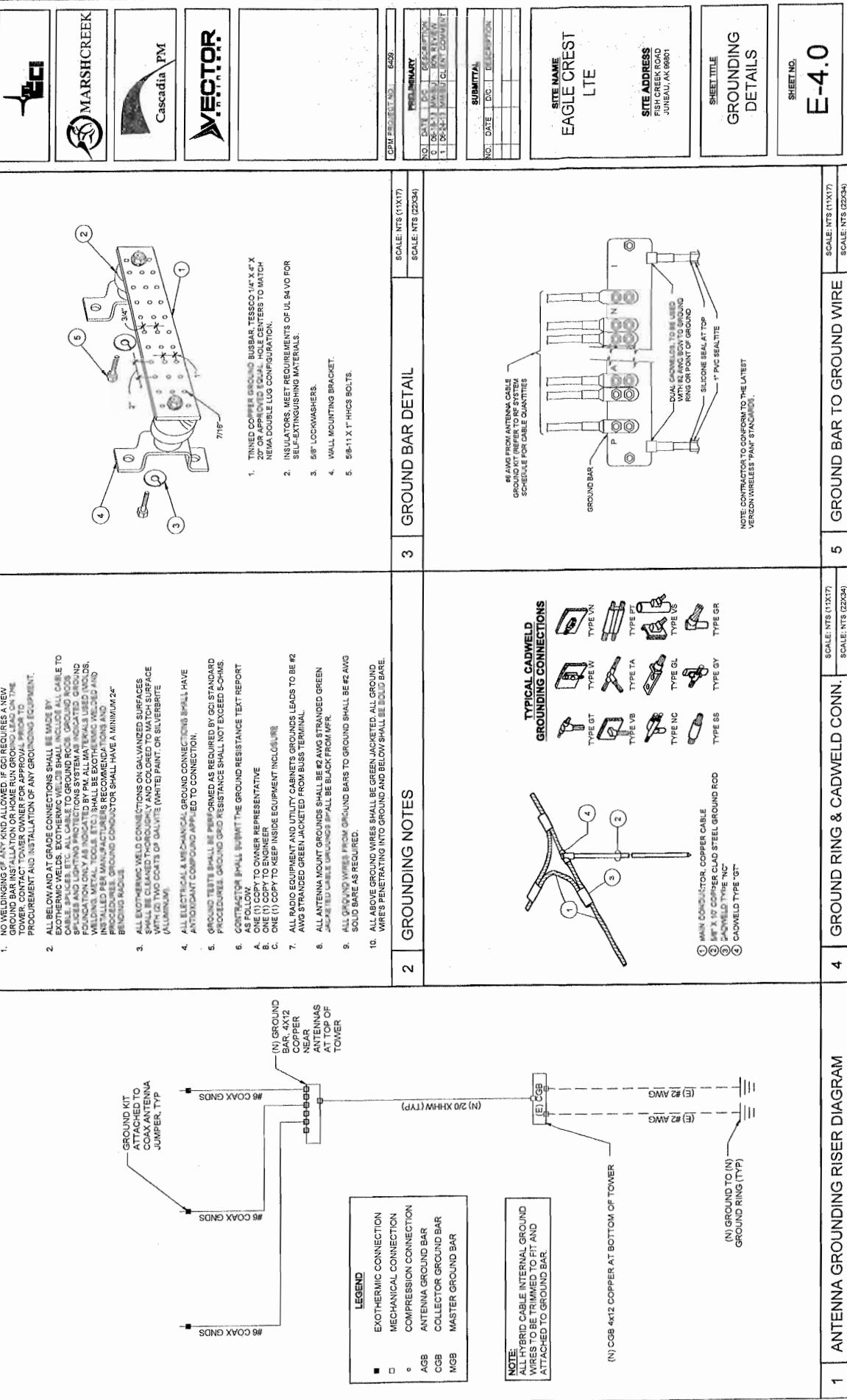


SCALE: 1/8" = 1'-0" (11X17)
SCALE: 1/4" = 1'-0" (22X34)

1 | ELECTRICAL SITE PLAN

 <p>MARSHCREEK</p> <p>VECTOR</p>	<p>NOTES:</p> <p>1. ALL ABOVE GROUND LEADS TO BE UNATTACHED IN CARELESSLY & FLEXIBLE CONDUIT OR CLOU. 2. DEPICTION OF GROUNDING ROUTING IS FOR CONCEPTUAL PURPOSES ONLY. CONTRACTOR TO DETERMINE FER E&I TRAVERS & CONN'TNS.</p> <p>GROUNDING LEGEND</p> <ul style="list-style-type: none"> ⊗ GROUND TEST WELL ◎ GROUND ROD ▲ MECHANICAL CONNECTION ■ CAD WELD CONNECTION ● CONNECT PER MANUFACTURER SPECIFICATIONS — GROUND BAR - - - EARTH GROUND <p>GROUNDING LEGEND</p> <ol style="list-style-type: none"> 1. GROUNDS SHALL COMPLY WITH LATEST EDITION OF THE NATIONAL ELECTRICAL CODE. 2. ALL GROUNDS SHALL CONFORM TO THE CURRENT GCI STANDARDS. 3. MINIMUM BENDING RADUS FOR GROUND CONDUCTOR IS 8". WHEN BENDING IS NECESSARY, GROUND CONDUCTORS ARE TO BE MAINTAINED AS FOLLOWS: 4. NO SPLICES PERMITTED IN GROUND CONDUCTORS. 5. ALL GROUNDS CONNECTIONS TO BE CLEAN AND FREE OF PAINT AT THEIR MATING SURFACE. TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. USE PENETRATOR OR EQUIVALENT ANTI-SEIZURE GREASE. 6. ALL GROUNDS AND CONNECTIONS ARE TO BE MADE IN A COMPRESSION TYPE STAINLESS STEEL GROUNDS. THAT IS ACCEPTABLE, BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BAR WILL BE PERMITTED. 7. ENSURE ALL MECHANICAL CONNECTIONS ARE TORQUED TO THE MANUFACTURER'S SPECIFIED VALUES. 8. MULTIPLE RODS ON GROUND RODS TO BE SEPARATED BY AT LEAST 6'. 9. MAXIMUM RESISTANCE OF THE COMBINED GROUND SYSTEM SHALL NOT EXCEED A RESISTANCE OF 5 OHMS TO EARTH. 10. GROUND WIRES SHALL NOT BE INSTALLED THROUGH HOLES IN ANY METAL OBJECTS OR SUPPORTS TO PRECLUDE ESTABLISHING A "CHOKE" POINT. 11. THE GROUND WIRE, WHICH WILL BE USED TO TEST THE GROUNDS, WILL NOT BE USED AS A GROUND WIRE. THAT IS, DO NOT COMPLETELY SURROUND THE GROUND WIRE OR PLASTIC CLIPS ARE ACCEPTABLE. 12. GROUND BARS SHALL NOT BE FIELD MODIFIED. 13. ALL HORIZONTAL FENCE SECTIONS TO BE GROUNDED WITH A SINGLE BARE GROUND STRAP. 14. GROUND RING BURIAL DEPTH SHALL BE 30' AND HAVE A NON-DIRECTIONAL SPICE. 15. IS CERTIFIED CONTRACTOR HAS BEEN TOLD OF REQUIREMENTS REGARDING THE GROUNDS. THAT IS, THAT THE GROUNDS MEASURED FOR EQUIVALENT, THAT ACCEPTABLE RESISTANCE MEASURED FOR THE GROUNDS, THAT THE GROUNDS SYSTEM WILL NOT EXCEED A RESISTANCE THREHOLD DISTANCE SHALL BE USED. DISTANCE IS TO BE MEASURED FROM THE CENTER OF THE GROUNDS TO THE CENTER OF THE GROUNDS. AT VARIETIES SHALL BE GIVEN 24 HOURS NOTICE BEFORE TESTING IS TO BE DONE. THE COST ASSOCIATED WITH GROUNDS TESTING WILL BE AT THE EXPENSE OF THE CONTRACTOR. 16. PROVIDE #2 TM GREEN JAWER FROM EACH WAVEGUIDE BRIDGE POST TO WAVEGUIDE BRIDGE CHANNEL. 17. ALL OUTDOOR CONNECTIONS TO BE EXOTHERMIC, APPLIED CRIMP TYPE UNLESS OTHERWISE SPECIFIED. <p>SITE NAME EAGLE CREST LTE</p> <p>SUBMITTAL</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">NO.</td> <td style="width: 10%;">DATE</td> <td style="width: 80%;">DESCRIPTION</td> </tr> <tr> <td>0</td> <td>06/13/2013</td> <td>NO. 1 GROUNDS</td> </tr> <tr> <td>1</td> <td>06/13/2013</td> <td>NO. 2 GROUNDS</td> </tr> </table> <p>SITE ADDRESS FISH CREEK ROAD JUNEAU, AK 99801</p> <p>SHEET TITLE GROUNDS SITE PLAN</p> <p>SHEET NO.</p> <p>E-2.0</p> <p>GENERAL GROUNDING NOTES</p> <p style="text-align: center;">N W E S</p> <p style="text-align: right;">4</p> <p style="text-align: right;">3</p> <p style="text-align: right;">2</p> <p style="text-align: right;">1'</p> <p style="text-align: right;">0'</p> <p style="text-align: right;">SCALE: 1/2" = 1'-0" (1X17)</p> <p style="text-align: right;">SCALE: 1" = 1'-0" (22X24)</p> <p>1 GROUNDS SITE PLAN</p> <p>PER UTILITY COMPANY SERVICE STANDARDS, INSTALL TWO INTERCONNECTED GROUND RODS SPACED 10' APART FOR SERVICE. EACH ROD IS TO BE 10' LONG. THE GROUNDS RODS ARE TO BE CONNECTED TO THE GROUNDS RODS. THE SECOND GROUND ROD TO THE SITE GROUND RING WITH A #2 SBTG CONDUCTOR. LEAVE THE TWO GROUND RODS EXPOSED UNTIL THE ELECTRICAL INSPECTION IS COMPLETED</p> <p>PROVIDE 5/8" X 10'-0" COPPER CLAD GROUND RODS. EXACT LOCATION OF GROUND RODS TO BE ESTABLISHED ON SITE. INSTALL APPROX. EVERY 10'-0" (6'-0" MAX / 15'-0" MAX).</p> <p>#2 AWG SBTG GROUND LEAD EACH ICE BRIDGE SUPPORT POST (TP)</p>	NO.	DATE	DESCRIPTION	0	06/13/2013	NO. 1 GROUNDS	1	06/13/2013	NO. 2 GROUNDS
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1	06/13/2013	NO. 2 GROUNDS								





1.8 METALS

- ALL LABOR, MATERIALS, FABRICATION AND WORKMANSHIP SHALL CONFORM TO THE CODES AND STANDARDS OF ASTA AND AINS.
- ALL WORK SHALL BE DONE BY A CERTIFIED WELLER, THE CONTRACTOR SHALL SUBMIT A COPY OF THE CERTIFICATION TO THE CONTRACTOR'S REPRESENTATIVE.
- ALL STEEL USED SHALL BE HOT DIPPED METALIZED/GALVANIZED AND FIELD METALIZED/GALVANIZED AS REQUIRED.

1.10 REINFORCING STEEL.

- REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615 GRADE 60.

1.11 ANTIENNS AND CABLES

- THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER STORAGE AND HANDLING OF ALL MATERIALS ONCE THEY HAVE BEEN RELEASED FROM THE WAREHOUSE.
- INSTALLATION OF ALL MATERIALS SHALL BE DONE IN STRICT ADHERENCE TO MANUFACTURERS' RECOMMENDATIONS.
- TOVER TECHNICIANS MUST BE CURRENT ANDREWS CERTIFIED FOR CABLE CONNECTOR INSTALLATIONS.
- THE CONTRACTOR SHALL RUN ALL LINES AND CONDUITS IN A NEAT, ORDERLY AND STRAIGHT FASHION PROVIDING ANCHORING AS RECOMMENDED BY THE MANUFACTURER AND WHEREVER NECESSARY TO SUPPORT THE LINES PROPERLY.

1.12 NOT USED

1.13 ELECTRICAL

- THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITTING, FLING, AND FEES IN CONJUNCTION WITH THE PROJECT.
- THE CONTRACTOR SHALL SCHEDULE ALL NECESSARY INSPECTIONS WITH THE PROPER AUTHORITIES AND INFORM THE PROJECT MANAGEMENT COMPANY 24 HOURS IN ADVANCE ALL TICKETS AND INSPECTION VERIFICATIONS WILL BE SUBMITTED TO CLIENTS AT THE INSPECTION HAS TAKE PLACE.
- ALL LABOR AND MATERIALS SHALL CONFORM TO ALL LOCAL, STATE, AND NATIONAL CODES, RULES, REGULATIONS AND STANDARDS.
- ALL EQUIPMENT, WIRING, AND MATERIALS MUST HAVE A UL LABEL.

5. ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER AND SHALL PROGRESS IN AN ORDERLY MANNER AND PERFORMED HOLD UP THE PROGRESS OF THE PROJECT.

6. THROUGH TEST ALL LINES, FEEDERS, EQUIPMENT, AND DEVICES WITH MAXIMUM LOADS

7. CONDUIT AND FITTINGS FOR OUTDOOR APPLICATIONS SHALL BE RIGID OR NON-METALLIC UNLESS OTHERWISE SPECIFIED. ALL CONDUIT AND FITTINGS SHALL BE NEW, UNPAINTED, AND PAINTED AS ABOVE AND AT EACH JOINT, WHERE NECESSARY, WITH PROTEC ANCHORING DEVICES.
8. ALL WIRES SHALL BE COPPER; USE OF ALUMINUM CONDUCTORS WILL NOT BE PERMITTED.
- SEE ELECTRICAL PLANS FOR SIZING AND LOCATION, USE PROPER SIZE CONNECTORS PER LOCAL, STATE, AND NATIONAL CODES.
9. CONDUCTOR LENGTHS SHALL BE CONTINUOUS FROM TERMINATION TO TERMINATION WITHOUT SPLICES.

10. PROVIDE FULL BOXES WHERE SHOWN AND WHERE REQUIRED BY CODES AND UTILITY COMPANIES.

11. ALL CONDUIT ROUGH IN SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION CONFLICTS. CONTRACTOR SHALL VERIFY ALL LOCATIONS.
12. ALL WIRES SHALL BE TAILED AT ALL PULL BOXES, J-BOXES, EQUIPMENT BOXES, AND CABINETS WITH APPROVED PLASTIC TAGS.

13. ALL BREAKERS IN LOAD CENTER SHALL BE IDENTIFIED WITH TYPE WRITTEN LABELS HEAVILY PLACED ALONG SIDE OF THE BREAKER.
14. ALL URGND BARS SHALL BE A MINIMUM SIZE OF 1/4" X 3" UNLESS OTHERWISE NOTED AND SHALL BE TINNED COPPER, AND LARGE ENOUGH TO ACCOMMODATE THE REQUIRED NUMBER OF OPENING CONNECTIONS. THE HARDWARE SECURING ALL GROUND BARS SHALL BOND THEM TO THE STRUCTURE TO WHICH THEY ARE FASTENED.

1.15 PENETRATIONS THROUGH WALLS, CEILINGS, FLOORS, ROOFS OR ANY OTHER SURFACE SHALL CORE DRILLED AND CLOSED WITH A UL LISTED FIRE SEALING ASSEMBLY. THE CONTRACTOR SHALL ASSUME A 1-HOUR RATING IF NOT REFERRED TO ON THE DRAWINGS, THEN THE CONTRACTOR SHALL ASSUME A 1-HOUR RATING.

1.16 THE MATERIALS AND EQUIPMENT INFORMATION ON THESE DRAWINGS IS BASED ON THE BEST AVAILABLE INFORMATION IN THE TIME THE DRAWINGS WERE ISSUED. CHANGES MAY OCCUR AND THE CONTRACTOR SHALL VERIFY ALL ITEMS PRIOR TO PLACEMENT, AND MAKE ANY CORRECTIONS AND UPDATES AS NEEDED.

17. ALL UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC SCHEDULE 80 PVC SCHEDULE 80. ALL CONDUIT CONDUITS SHALL BE RIGID METALIZED GALVANIZED STEEL OR PVC SCHEDULE 80. NO CONDUIT OR TERMINATING INTO A CLOSED AREA MUST BE SEALED TO PREVENT ENTRY OF ANY MOISTURE OR FOREIGN OBJECTS. ALL CONDUIT IS SERED TO INCLUDE SLIP TYPE GROUTING.

18. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL PLACE OF INSPECTION IS MADE.

4. REINFORCING SPLICES ARE TO BE CLASS 8 UNLESS NOTED OTHERWISE.

5. REINFORCING SPLICES SHALL BE MADE ONLY WHERE INDICATED ON THE DRAWINGS.

1.17 MATERIALS, FAIRINGS AND WORKMANSHIP SHALL CONFORM TO THE CODES AND STANDARDS OF ASTA AND AINS.

1.18 THE CONTRACTOR SHALL SUBMIT A COPY OF THE CERTIFICATION TO THE CONTRACTOR'S REPRESENTATIVE.

1.19 THE MATERIALS, FAIRINGS AND WORKMANSHIP SHALL CONFORM TO THE CODES AND STANDARDS OF ASTA AND AINS.

1.20 THE CONTRACTOR SHALL SUBMIT A COPY OF THE CERTIFICATION TO THE CONTRACTOR'S REPRESENTATIVE.

E. PULLING JUNCTION BOXES AND WIREWAYS UNLESS INDICATED OR OTHERWISE SPECIFIED. JUNCTION BOXES ARE TO BE UL LISTED. BOXES SHALL BE TINNED COPPER, AND PAINTED AS ABOVE. WIRES MUST BE UL LISTED, SHEET METAL, CONSTRUCTION WITH SEWING, CRIMP, FOR EXTERIOR AND DAMP OR WET INDOOR LOCATIONS, USE BOXES AND WIREWAYS APPROVED FOR SUCH USE.

F. PIPE SLEEVES: RIGID STEEL CONDUIT OR IRON PIPE.

G. CONDUIT SEALS FOR CAST-IN-PLACE CONCRETE APPLICATIONS: ACCEPTABLE GLASS FIBER REINFORCED PLASTIC (GFRP) OR EPOXY RESIN. THE SEAL "WITH TIN SEA WALL" CLENEBEN TYPE TEXT THINLINE CORPORATION "TIN SEA SEAL" WITH SEA WALL CLENEBEN TYPE TEXT THINLINE CORPORATION "TIN SEA SEAL". ACCEPTABLE MANUFACTURERS: CO2 / GEORGETTE TYP. CLASL / THINLINE CORP "TIN SEA SEAL".

H. SWEEPS: ALL SWEEPS FOR COMMUNICATION EQUIPMENT OR INTO CONCRETE PAD SHALL BE MIN. 24" RADUS.

2.3 CONDUCTORS - 600 VOLT AND BELOW

A. GENERAL: SINGLE CONDUCTOR 95% CONDUCTIVITY, ANNEALED, UNCOATED COPPER CONDUCTORS WITH BENDONIC RATED TYPE "XHHW" INSULATION.

B. CONNECTORS: NYLON SHELL INSULATED METAL SCREWON CONNECTORS FOR #14#10 AWG AND BLACK TEST PRESSURE OF 600 VOLTS. FOR COMPRESSION TYPE LUGS AND CONNECTORS WITH INSULATED CAVITIES AS SHOWN IN FIG. A AND LARGER.

2.4 HANGERS AND SUPPORTS

A. GENERAL: HANGERS, SUPPORTS, FASTENERS AND HARDWARE SHALL BE HOT-DIPPED METALIZED/GALVANIZED OR EQUIVALENT CORROSION RESISTANCE BY TREATMENT, AND SHALL BE MANUFACTURED PRODUCTS DESIGNED FOR THE APPLICATION.

B. TYPES: HANGERS, STRAPS, RISER SUPPORTS, CLAMPS, UCHANNEL, THREADED RODS, ETC. AS INDICATED OR AS REQUIRED.

2.5 ELECTRICAL IDENTIFICATION

A. NAMEPLATE: THREE-LAYER LAMINATED PLASTIC WITH MINIMUM 3/16" HIGH WHITE ENGRAVED CHARACTERS ON BLACK BACKGROUND AND PLACED FOR MECHANICAL FASTENERS.

B. FASTENERS: SELF-TAPPING STAINLESS STEEL SCREWS, NUMBER 10-32 STAINLESS STEEL MACHINE SCREWS WITH NUTS AND FLAT LOCK WASHERS.

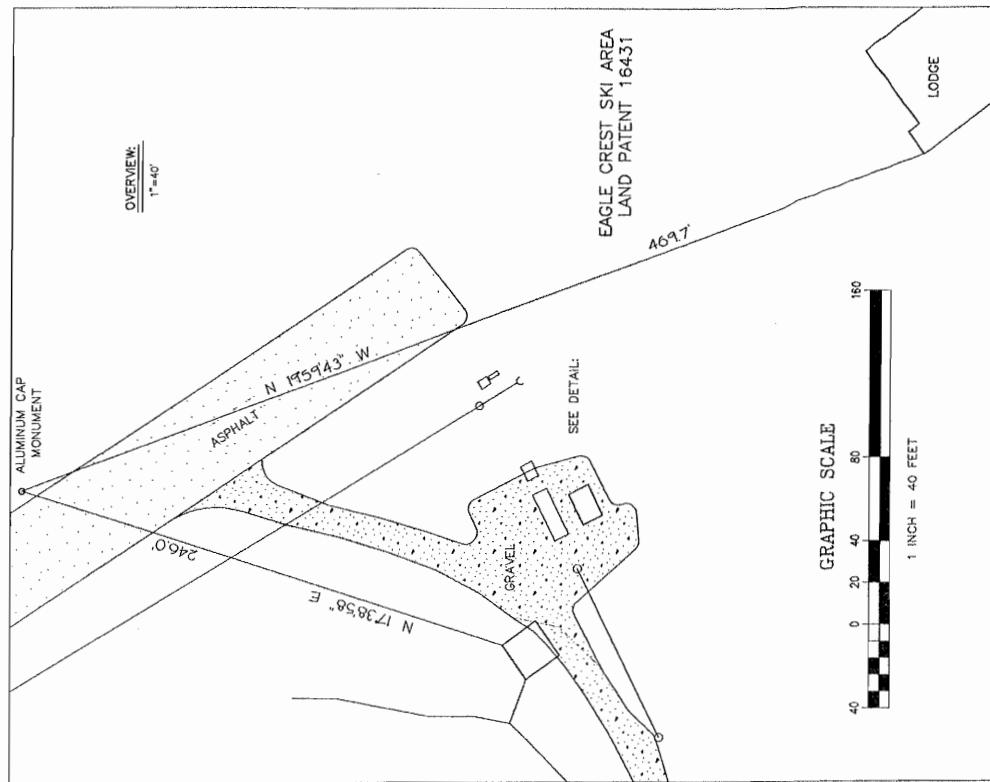
C. UNDERGROUND WARNING TAPE: SIX-INCH WIDE POLYETHYLENE TAPE, PERMANENTLY ATTACHED TO THE EXCAVATION DUGOUT LINE, INDICATING GENERAL LOCATION OF UNDERGROUND CONDUITS, REINFORCING BARS, AND ETC. COLOR AS FOLLOW: 11 = ELECTRIC, 2 = GAS, 3 = WATER, 4 = TELEPHONE, 5 = TELEGRAPH, 6 = CABLE, 7 = GAS, 8 = WATER, 9 = TELEPHONE, 10 = TELEGRAPH, 11 = TELEVISION, 12 = TELEGRAM, 13 = TELETYPE, 14 = TELEFAX, 15 = TELEDATA, 16 = TELEFAX, 17 = TELETYPE, 18 = TELEFAX, 19 = TELETYPE, 20 = TELETYPE, 21 = TELETYPE, 22 = TELETYPE, 23 = TELETYPE, 24 = TELETYPE, 25 = TELETYPE, 26 = TELETYPE, 27 = TELETYPE, 28 = TELETYPE, 29 = TELETYPE, 30 = TELETYPE, 31 = TELETYPE, 32 = TELETYPE, 33 = TELETYPE, 34 = TELETYPE, 35 = TELETYPE, 36 = TELETYPE, 37 = TELETYPE, 38 = TELETYPE, 39 = TELETYPE, 40 = TELETYPE, 41 = TELETYPE, 42 = TELETYPE, 43 = TELETYPE, 44 = TELETYPE, 45 = TELETYPE, 46 = TELETYPE, 47 = TELETYPE, 48 = TELETYPE, 49 = TELETYPE, 50 = TELETYPE, 51 = TELETYPE, 52 = TELETYPE, 53 = TELETYPE, 54 = TELETYPE, 55 = TELETYPE, 56 = TELETYPE, 57 = TELETYPE, 58 = TELETYPE, 59 = TELETYPE, 60 = TELETYPE, 61 = TELETYPE, 62 = TELETYPE, 63 = TELETYPE, 64 = TELETYPE, 65 = TELETYPE, 66 = TELETYPE, 67 = TELETYPE, 68 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TELETYPE.

1.19 METALS

- ALL LABOR, MATERIALS, FAIRINGS AND WORKMANSHIP SHALL CONFORM TO THE CODES AND STANDARDS OF ASTA AND AINS.
- ALL WORK SHALL BE DONE BY A CERTIFIED WELLER, THE CONTRACTOR SHALL SUBMIT A COPY OF THE CERTIFICATION TO THE CONTRACTOR'S REPRESENTATIVE.
- ALL STEEL USED SHALL BE HOT DIPPED METALIZED/GALVANIZED AS REQUIRED.

1.20 REINFORCING STEEL.</h

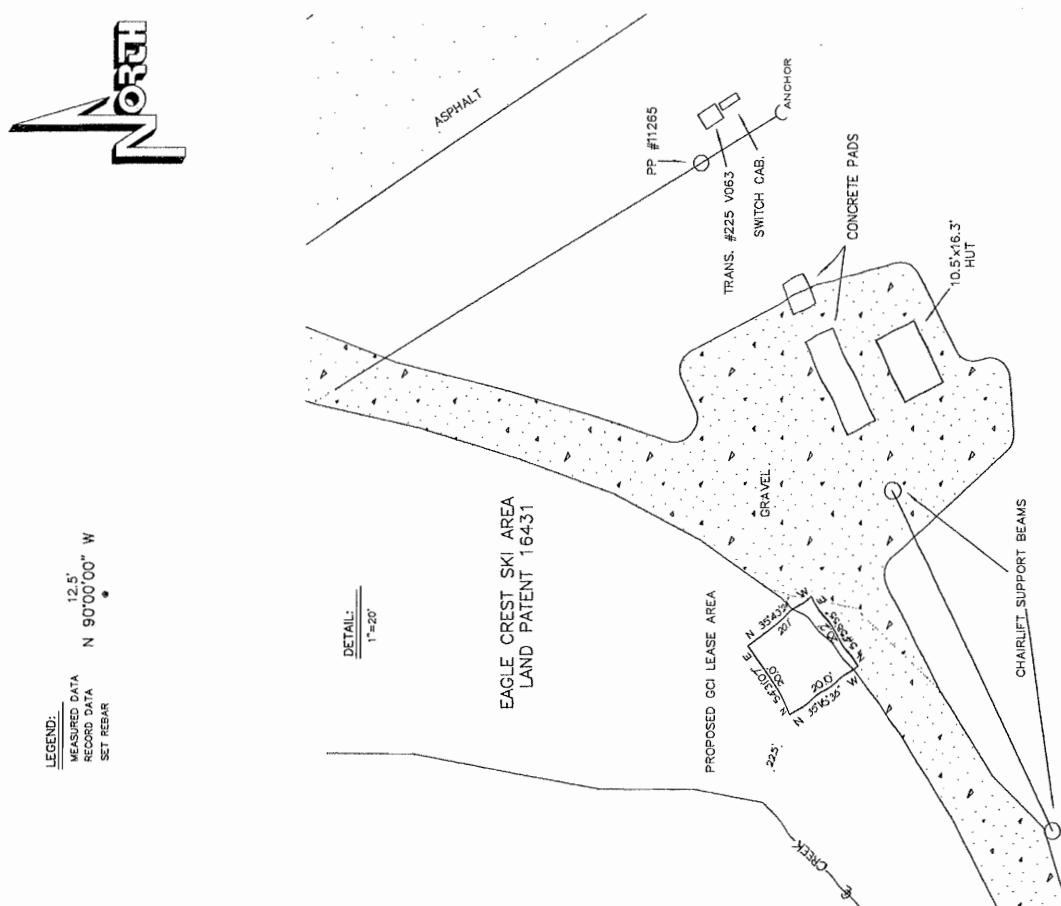
DRAWING ABBREVIATIONS	
AFF	ABOVE FINISH FLOOR
KGL	ABOVE GRADE LEVEL
AWG	AMERICAN WIRE GAUGE
AC	AIR CONDITIONING
ADJ.	ADJUSTABLE
APPROX	APPROXIMATELY
AZIMUTH	AZIMUTH
BLDG	BUILDING
CAM	CONSTRUCTION MANAGER
CABINET	CABINET
CAS	CASE
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CO	COPPER
CONC	CONCRETE
COND	CONDUXE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CRM	CASCADE RM
DIC	CHAPTER OF DIRECTOR
DIMO	DISCUSSION
DA	DATA
DIM	DIMENSION
DN	DOWN
DTL	DETAIL
DWG	DRAWINGS
EA	EACH
ELECT	ELECTRICAL
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
EXT	EXTERIOR
FIN	FINISH
FLR	FLOOR
FT	FOOT, FEET
Da	Gauge
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GWS	GROUNDING WALL SCREWS
GRADE	GRADE
GRND	GROUND
HVAC	HEATING, VENTING & AIR CONDITIONING
HORIZ	HORIZONTAL
HT	HEIGHT
IBC	INTERNATIONAL BUILDING CODE
ID	INSIDE DIAMETER
INCH	INCH
INSUL	INSULATION
INT	INTERIOR
JUNCTION BOX	JUNCTION BOX
LBS	POUNDS
LF	LINEAR FEET
MAX	MAXIMUM
MCH	Mechanical
MFR	MANUFACTURER
MGR	MANAGER
MN	MINIMUM
MSC	MISCELLANEOUS
MTL	METAL
MTEL	METALIC
MWDW	MICROWAVE
NBC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
N/A	NOT APPLICABLE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OP	OVERHEAD POWER
OT	OVERHEAD FIBER
OPP	COMPOSITE
PL	PROPERTY LINE
PMHO	PROJECT MANAGER
PM	PROJECT
PROJ	PROJECT
PROP	PROPERTY
PT	PRESSURE TREATED
RQ	ROUGH OPENING
ROW	RIGHT OF WAY
RRU	REMOTE RADIO UNIT
REQ	REQUIRED
SBC	SOLID BARE TINNED COPPER
SF	SQUARE FEET
SHT	SHEET
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STL	STEEL
STRUCT	STRUCTURE, STRUCTURAL
TOC	TOP OF CONCRETE
TOM	TOP OF MASONRY
THRU	THROUGH
TND	TINNED
UBC	UNIFORM BUILDING CODE
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
UP	UP
UF	UNDERGROUND POWER
VF	VIBRATION FIELD
VENT	VENTILATION
WP	WATERDROOF
W/O	WITHOUT



2013©

PROJECT NAME	EAGLE CREST	STATE OF ALASKA	AK
DESIGNER	J. S. NICHOLSON	REG. NO.	497
DATE	05/20/13	EXPIRATION DATE	13-01-53
PLAT NO.	N/A	PERIODIC INSPECTION	TERMINUS
STREET ADDRESS	COPPER RIVER MINE		
TERRITORY OF FAIRBANKS, TERMINUS OF FISH GREEK ROAD			
TERRITORY OF FAIRBANKS, TERMINUS OF FISH GREEK ROAD			

SITE PLAN

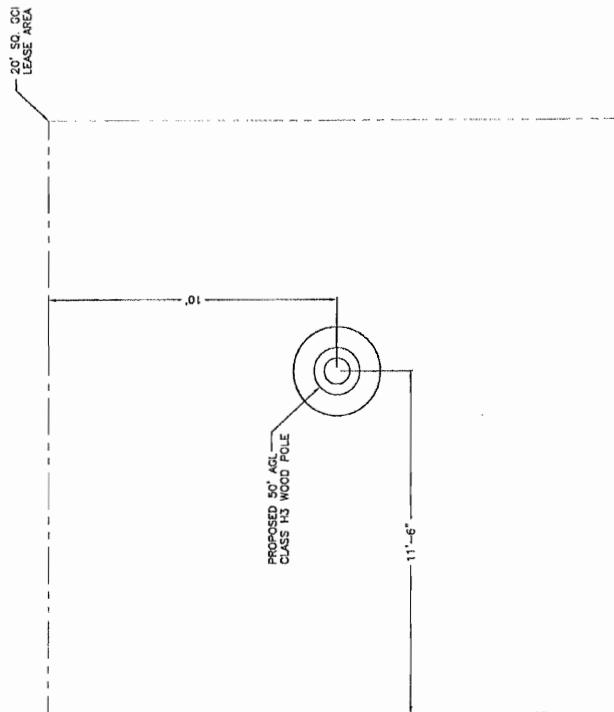


IFC
ISSUED FOR CONSTRUCTION
130715



GCI
EAGLES CREST
SITE
PLAN

DRAWN BY: AMR
DESIGNED BY: RWL
JOB #: 13-0084-20
SCALE: AS SHOWN
SHEET: 1 OF: 3
C1.0



1
C1.0
SITE PLAN
SCALE: 1/4" = 1'-0"



IFC
ISSUED FOR CONSTRUCTION
130715

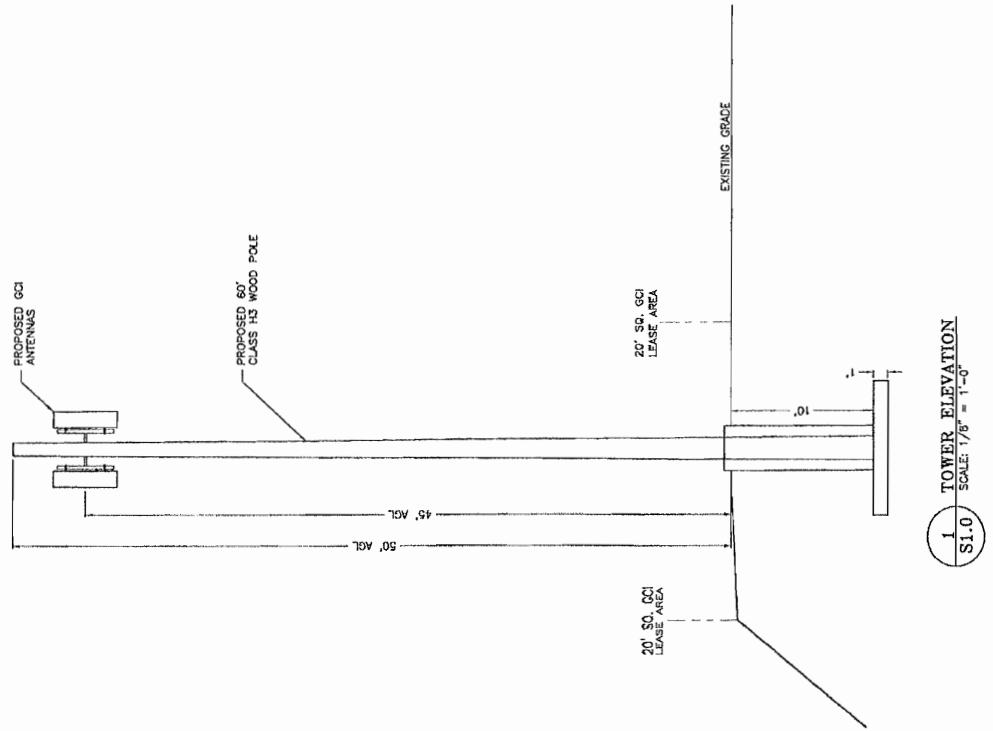


GCI
EAGLES CREST
TOWER
ELEVATION

DRAWN BY: ASR
JOB #: 13-0084-20
SHEET: 2
SCALE: AS SHOWN
OF: 3
S1.0



Ross W. Lappin
CE 18680
7-55-10/3
REGISTERED PROFESSIONAL ENGINEER



NOTES:

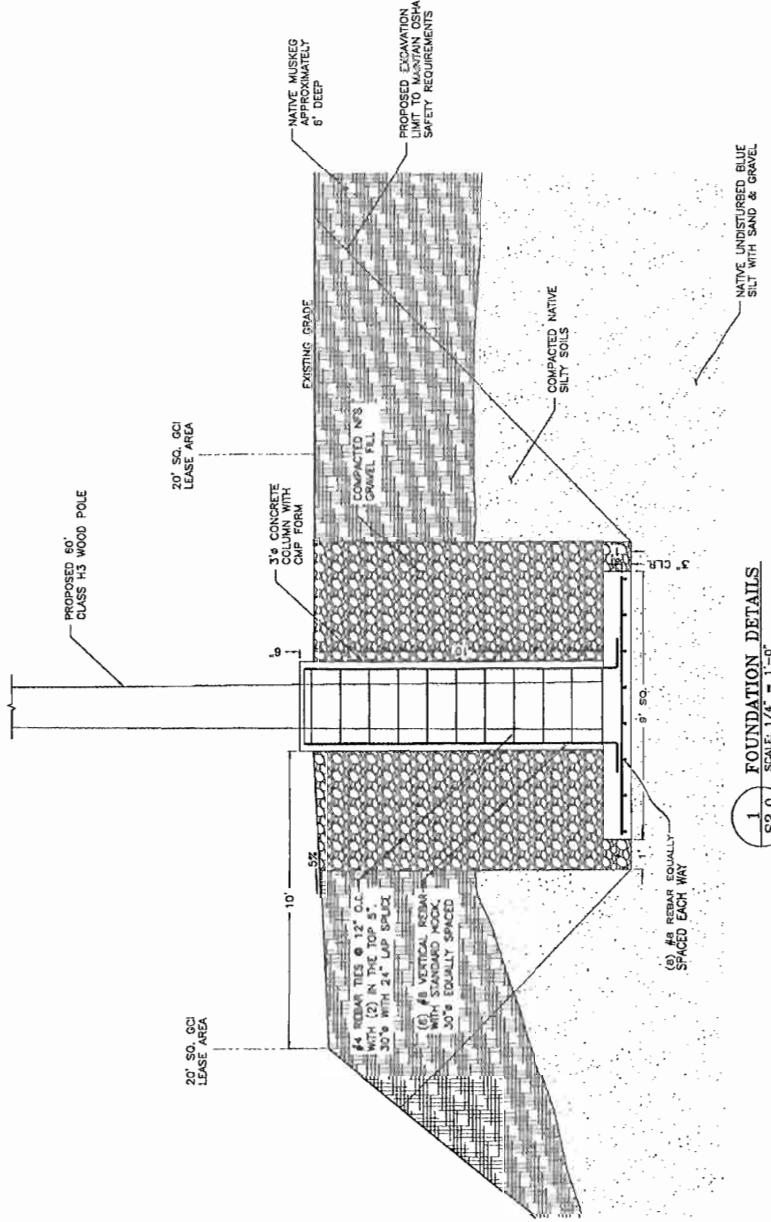
1. NATIVE SOILS AT THE BOTTOM OF THE FOUNDATION SHALL BE PROOF ROLED.
2. ALL COMPACTED FILL TO BE COMPACTED TO 95% MAXIMUM LABORATORY DENSITY IN 10 INCH LIFTS.
3. COMPACTED FILL AND OR EXCAVATION IS REQUIRED TO ALLOW DRAINAGE SO THAT NO STANDING WATER WILL ACCUMULATE AS A RESULT OF THIS WORK.
4. ALL EXCAVATIONS SHALL BE SHORED OR SLOPED OR OTHERWISE SUPPORTED TO PROTECT PERSONNEL IN ACCORDANCE WITH OSHA, 29 CFR 1226, SUBPART P.

CONCRETE:

1. CONCRETE SHALL OBTAIN A 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI ($F'_c = 4,000$ 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 CHARS OR CONCRETE BLOCKS (WOODEN STAKES SHALL NOT BE USED).
3. REINFORCING BARS SHALL BE PLACED IN ACCORDANCE WITH ACI 318-08 STANDARDS.
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 1.5 INCHES.
5. ALL REBAR SPLICES SHALL BE LAPPED 48 BAR DIAMETERS.



IFC
ISSUED FOR CONSTRUCTION
130715



DRAWN BY: RVL
DESIGNED BY: RVL
JOB #: 13-0084-20
SCALE: AS SHOWN
SHEET: 3 OF: 3
S2.0

ST. 49TH ANNIVERSARY
REGISTRATION NUMBER
PROFESSIONAL ENGINEER
PRACTICING IN THE STATE OF ALASKA
REGISTRATION NUMBER
PROFESSIONAL ENGINEER
PRACTICING IN THE STATE OF ALASKA

Ross W. Leppin
CE 13850
7-15-2012
REGISTERED PROFESSIONAL ENGINEER
PRACTICING IN THE STATE OF ALASKA