TOWN OF JACKSON
PLANNING & BUILDING DEPARTMENT

TRANSMITTAL MEMO

Town of Jackson
- ☒ Public Works/Engineering
- ☒ Building
- ☐ Title Company
- ☒ Town Attorney
- ☒ Police

Joint Town/County
- ☒ Parks and Recreation
- ☒ Pathways
- ☒ Housing Department

Teton County
- ☐ Planning Division
- ☐ Engineer
- ☐ Surveyor- *Nelson*
- ☐ Assessor
- ☐ Clerk and Recorder
- ☐ Road and Levee

State of Wyoming
- ☐ Teton Conservation
- ☐ WYDOT
- ☐ TC School District #1
- ☐ Game and Fish
- ☐ DEQ

Federal Agencies
- ☐ Army Corp of Engineers

Utility Providers
- ☐ Qwest
- ☐ Lower Valley Energy
- ☐ Bresnan Communications

Special Districts
- ☒ START
- ☒ Jackson Hole Fire/EMS
- ☐ Irrigation Company

Date: September 18, 2018

Item #: P18-274

Planner: Tyler Valentine

Phone: 733-0440 ext. 1305

Fax: 734-3563

Email: tvalentine@jacksonwy.gov

Owner
The Apartments at Dusty Acres, LLC
PO Box 2075
Jackson, WY 83001

Applicant:
AT&T Wireless – Tamara Shiveley
1152 W. 2400 S. Suite C
West Valley City, UT 84119

REQUESTS:

The applicant is submitting a request for a Conditional Use Permit for an antenna for the property located at 1024 Gregory Lane, legally known as PT NE1/4NE1/4, SEC. 6, TWP. 40, RNG. 116.

For questions, please call Tyler Valentine at 733-0440, x1305 or email to the address shown below. Thank you.

Please respond by: **October 2, 2018 (Sufficiency)**
October 9, 2018 (with Comments)

RESPONSE: For Departments not using Trak-it, please send responses via email to:
tstolte@jacksonwy.gov

PLANNING PERMIT APPLICATION
Planning & Building Department
Planning Division

150 E Pearl Ave. | ph: (307) 733-0440
P.O. Box 1687 | fax: (307) 734-3563
Jackson, WY 83001 | www.townofjackson.com

For Office Use Only

Fees Paid_____
Check # _____ Credit Card_____ Cash_____
Application #s _____ _____ _____

PROJECT.

Name/Description: KSGT Relocation
Physical Address: 1024 Gregory Lane Jackson, WY
Lot, Subdivision: _____ PIDN: _____

OWNER.

Name: The Apartments at Dusty Acres, LLC Phone: Leanne Moore 307.690.2411
Mailing Address: PO Box 2015 Jackson, WY ZIP: 83001
E-mail: lsm@bresnan.net

APPLICANT/AGENT.

Name: AT&T Wireless - Tamara Shiveley Phone: 801.230.4877
Mailing Address: 1152 W. 2400 S. Suite C WVC, UT ZIP: 84119
E-mail: tamaras@shiveassoc.com

DESIGNATED PRIMARY CONTACT.

_____Owner ___X___Applicant/Agent

TYPE OF APPLICATION. *Please check all that apply; see Fee Schedule for applicable fees.*

Use Permit
_____Basic Use
___X___Conditional Use
_____Special Use

Relief from the LDRs
_____Administrative Adjustment
_____Variance
_____Beneficial Use Determination
_____Appeal of an Admin. Decision

Physical Development
_____Sketch Plan
_____Development Plan

Development Option/Subdivision
_____Development Option Plan
_____Subdivision Plat
_____Boundary Adjustment (replat)
_____Boundary Adjustment (no plat)

Interpretations
_____Formal Interpretation
_____Zoning Compliance Verification

Amendments to the LDRs
_____LDR Text Amendment
_____Zoning Map Amendment
_____Planned Unit Development
_____Other:_____

PRE-SUBMITTAL STEPS. *Pre-submittal steps, such as a pre-application conference, environmental analysis, or neighborhood meeting, are required before application submittal for some application types. See Section 8.1.5, Summary of Procedures, for requirements applicable to your application package. If a pre-submittal step is required, please provide the information below. If you need assistance locating the project number or other information related to a pre-submittal step, contact the Planning Department.* ***If this application is amending a previous approval, indicate the original permit number.***

Pre-application Conference #: P18-142 Environmental Analysis #: _____

Original Permit #: _____ Date of Neighborhood Meeting: _____

SUBMITTAL REQUIREMENTS. *Please ensure all submittal requirements are included. The Planning Department will not hold or process incomplete applications. Partial or incomplete applications will be returned to the applicant. Provide* ***one electronic copy*** *(via email or thumb drive), and* ***two hard copies*** *of the submittal packet.*

Have you attached the following?

✓ **Application Fee.** Fees are cumulative. Applications for multiple types of permits, or for multiple permits of the same type, require multiple fees. See the currently adopted Fee Schedule in the Administrative Manual for more information.

✓ **Notarized Letter of Authorization.** A notarized letter of consent from the landowner is required if the applicant is not the owner, or if an agent is applying on behalf of the landowner. If the owner is a partnership or corporation, proof that the owner can sign on behalf of the partnership or corporation is also required. Please see the Letter of Authorization template in the Administrative Manual for a sample.

✓ **Response to Submittal Requirements.** The submittal requirements can be found on the TOJ website for the specific application. If a pre-application conference is held, the submittal requirements will be reviewed at the conference followed by a written summary. The submittal requirements on the TOJ website are intended as a reference to assist you in submitting a sufficient application.

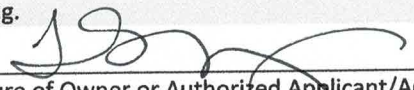
FORMAT.

The main component of any application is demonstration of compliance with all applicable Land Development Regulations (LDRs) and Resolutions. The submittal checklists are intended to identify applicable LDR standards and to outline the information that must be submitted to sufficiently address compliance with those standards.

For some submittal components, minimum standards and formatting requirements have been established. Those are referenced on the checklists where applicable. For all other submittal components, the applicant may choose to make use of narrative statements, maps, drawings, plans and specifications, tables and/or calculations to best demonstrate compliance with a particular standard.

Note: Information provided by the applicant or other review agencies during the planning process may identify other requirements that were not evident at the time of application submittal or a Pre-Application Conference, if held. Staff may request additional materials during review as needed to determine compliance with the LDRs.

Under penalty of perjury, I hereby certify that I have read this application and associated checklists and state that, to the best of my knowledge, all information submitted in this request is true and correct. I agree to comply with all county and state laws relating to the subject matter of this application, and hereby authorize representatives of Teton County to enter upon the above-mentioned property during normal business hours, after making a reasonable effort to contact the owner/applicant prior to entering.



Signature of Owner or Authorized Applicant/Agent

9.12.18
Date

Tamara Shiveley
Name Printed

site acquisition agent
Title

222077 215

GENERAL DYNAMICS INFORMATION TECHNOLOGY, INC.

32-1/1110

DATE 4/19/18

PAY TO THE ORDER OF Town of Jackson $ 2,500.00

Two Thousand Five Hundred Dollars and no/100 DOLLARS

Security Features Included. Details on Back.

VOID AFTER 270 DAYS

Bank of America.

Customer Connection

FOR Bennevile Fire K6 ST Radio - 505225-1121

MP

⑈222077021⑈ ⑆111000012⑆ 445 122 5621⑈

LETTER OF AUTHORIZATION

The Apartments at Dusty Acres, LLC ,"Owner" whose address is: 1024 Gregory Lane, Jackson, Teton County, Wyoming 83001

(NAME OF ALL INDIVIDUALS OR ENTITY OWNING THE PROPERTY)

Robert E. Moore, Jr. and Leanne Staley Moore , as the owner of property more specifically legally described as: PT NE1/4NE1/4, Sec. 6, TWP40, RNG.116

(If too lengthy, attach description)

HEREBYAUTHORIZES Tamara Shiveley in behalf of AT&T as agent to represent and act for Owner in making application for and receiving and accepting on Owners behalf, any permits or other action by the Town of Jackson, or the Town of Jackson Planning, Building, Engineering and/or Environmental Health Departments relating to the modification, development, planning or replatting, improvement, use or occupancy of land in the Town of Jackson. Owner agrees that Owner is or shall be deemed conclusively to be fully aware of and to have authorized and/or made any and all representations or promises contained in said application or any Owner information in support thereof, and shall be deemed to be aware of and to have authorized any subsequent revisions, corrections or modifications to such materials. Owner acknowledges and agrees that Owner shall be bound and shall abide by the written terms or conditions of issuance of any such named representative, whether actually delivered to Owner or not. Owner agrees that no modification, development, platting or replatting, improvement, occupancy or use of any structure or land involved in the application shall take place until approved by the appropriate official of the Town of Jackson, in accordance with applicable codes and regulations. Owner agrees to pay any fines and be liable for any other penalties arising out of the failure to comply with the terms of any permit or arising out of any violation of the applicable laws, codes or regulations applicable to the action sought to be permitted by the application authorized herein.

Under penalty of perjury, the undersigned swears that the foregoing is true and, if signing on behalf of a corporation, partnership, limited liability company or other entity, the undersigned swears that this authorization is given with the appropriate approval of such entity, if required.

OWNER: Leanne Staley Moore

(SIGNATURE) (SIGNATURE OF CO-OWNER)

Title: Owner / Partner

(if signed by officer, partner or member of corporation, LLC (secretary or corporate owner) partnership or other non-individual Owner)

STATE OF WYOMING)
)SS.
COUNTY OF TETON)

The foregoing instrument was acknowledged before me by Leanne Staley Moore this 25th day of April, 2018.

WITNESS my hand and official seal.

Karin M Larson (Seal)

(Notary Public)

My commission expires: 8.22.2020

KARIN M. LARSON - NOTARY PUBLIC
COUNTY OF TETON STATE OF WYOMING
MY COMMISSION EXPIRES AUGUST 22, 2020

CONDITIONAL USE PERMIT APPLICATION FOR WIRELESS COMMUNICATION FACILITY

Submitted to Town of Jackson
Planning Division
September 12, 2018

1. GENERAL INFORMATION

Applicant:	New Cingular Wireless, PCS LLC **("AT&T" or the "Applicant")** 4393 Riverboat Road, Ste. 400 Taylorsville, UT 84123
Representative:	Tamara Shiveley tamaras@shiveassoc.com 801-230-4877
Property Owner:	The Apartments at Dusty Acres, LLC a Wyoming Limited Liability Company
Site Address:	1024 Gregory Lane Jackson, WY 83001
APN:	22-40-16-06-1-00-031
Name of Project:	KSGT Relo IDL04405 FA 14471313
Zoning:	Business Park (BP)

AT&T is submitting this application pursuant to a Letter of Authorization from The Apartments at Dusty Acres, LLC Leanne Moore Registered Agent. *See Letter of Authorization*

2. PROJECT DESCRIPTION

Request and Justification: AT&T is upgrading equipment all over the Jackson area and throughout the State of Wyoming in order to support the federal directive to build FirstNet capable sites. FirstNet is a dedicated communication network for first responders. After 9/11, the 9/11 Commission recommended the establishment of a single, interoperable network for public safety and FirstNet was created as a result. FirstNet's mission is to build and deploy the first-ever high-speed nationwide wireless broadband network dedicated to first responders. FirstNet helps first responders respond effectively and efficiently and stay safe while helping others during day-to-day operations and disaster response and recover and when managing large events. In order to deploy FirstNet service, wireless infrastructure is required. The proposed facility will include FirstNet antennas and broadcast FirstNet service.

In addition to the FirstNet directive, AT&T is attempting to improve the coverage and capacity in the Town of Jackson to meet the increase in demand. As you know, Jackson is a desirable vacation destination and each summer large amounts of tourists visit the area bringing with them their wireless devices. These devices require large amounts of data to transmit videos, photos, emails and downloads. This increased demand for data requires wireless carriers to upgrade wireless equipment to meet the ever changing technology.

New Cingular Wireless, PCS LLC ("AT&T") currently has a wireless communication facility located in this area on the radio tower at 1525 Martin Lane; however, the current tower will not support any new technology equipment resulting in the need for AT&T to relocate the existing site to a different location.

The only allowable zone for wireless communication near this site suitable for a replacement is the Business Park (BP) zone. Within this zone, there is a very limited area in which AT&T can go in order to meet the coverage objective along Highway 89 and in the commercial area to the northeast. This new facility is necessary to continue to fill a significant gap in wireless phone and data service in this area, and to support improved AT&T service for residential, business and emergency use.

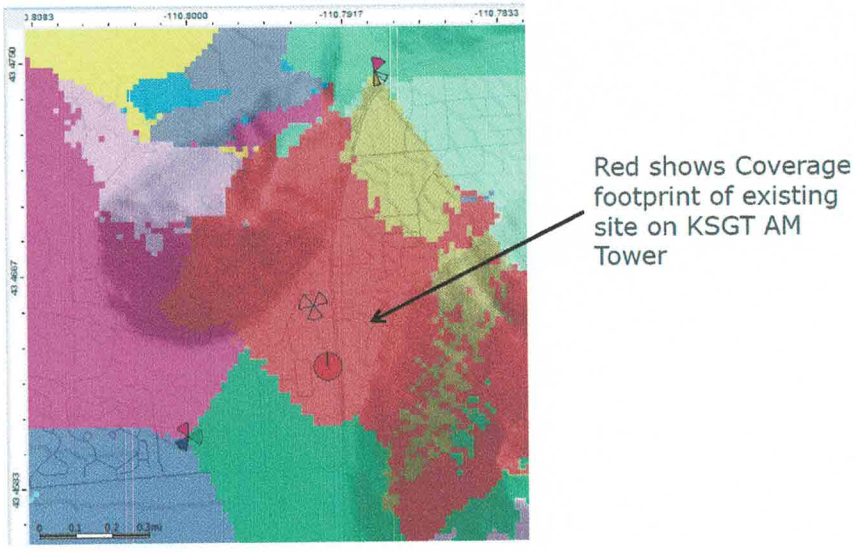


Figure 1: Coverage offered by current sites (Teton High School to the south, KSGT Radio Tower (current site), Storage Facility on County property to the north)

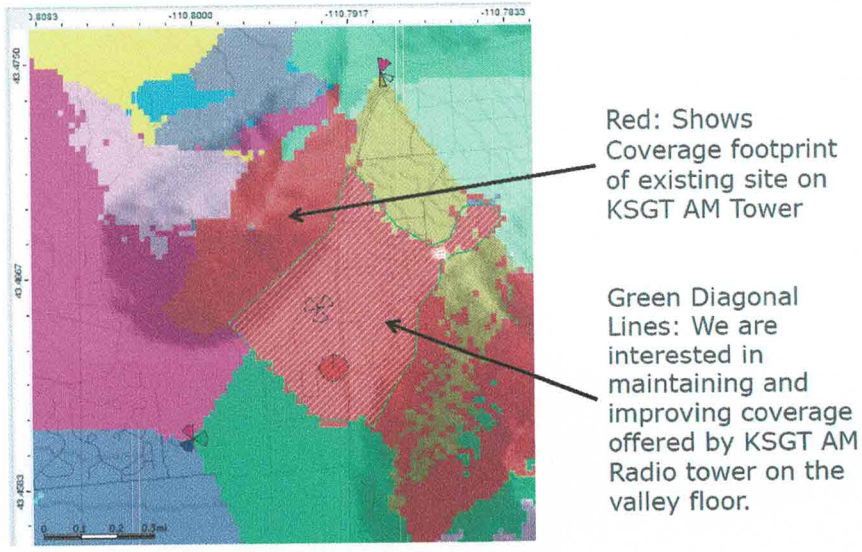
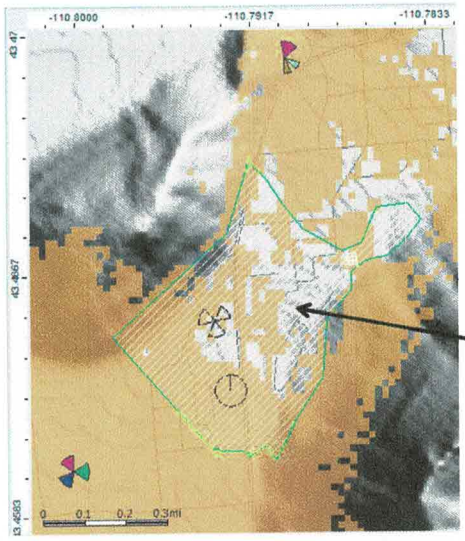


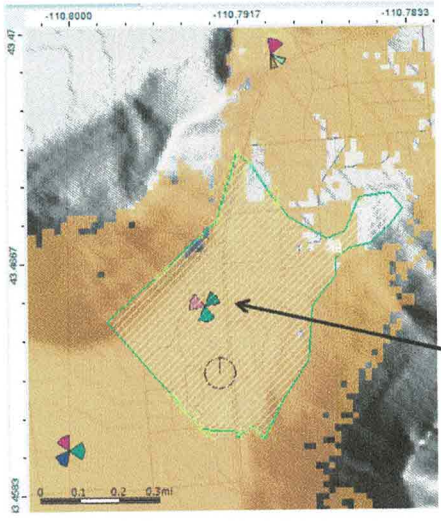
Figure 2: Coverage of valley floor in the area



Orange: Identifies where prediction models show we have acceptable indoor coverage.

Increased gaps in coverage without Site in the area of KSGT AM Tower

Figure 3: Coverage without KSGT



Orange: Identifies where prediction models show we have acceptable indoor coverage.

Replacement site offers matches and exceeds coverage offered by KSGT AM Radio Tower location

Figure 4: Replacement site at 1024 Gregory Lane

Alternate Sites Considered: The Business Park (BP) zone is separated from the highway by the (BP-R) zone where wireless sites are prohibited. There are few parcels in this section of the Business Park (BP) zone that are close enough to the highway, have enough building height, or have enough ground space available for equipment to allow AT&T to meet the coverage objectives described above. AT&T considered several properties surrounding the proposed property on 1024 Gregory Lane; however they were either deemed by the RF engineers to be too far from the coverage objective, there was not sufficient height or ground space, or property owners did not express interest in leasing to a wireless carrier.

Determination of Need: As noted above, AT&T must find an alternative location for the current site on the KSGT Radio tower at 1525 Martin Lane that will support FirstNet capabilities and meet the increased coverage and capacity demands within this section of the Town of Jackson. The proposed site at 1024 Gregory Lane is the best available location to serve this coverage area.

3. ANALYSIS OF LAWS APPLICABLE TO THIS APPLICATION

Federal, state, and local laws apply to this application.

While the federal Telecommunications Act acknowledges a local jurisdiction's zoning authority over wireless facilities, it limits the exercise of that authority in several important ways.

- A local regulation may not prohibit, or have the effect of prohibiting, the provision of wireless services. 47 U.S.C. §332(c)(7)(A) and (B)(i)(II).

- A jurisdiction is prohibited from considering the environmental effects of radio frequency emissions (including health effects) of the WCF site if the site will operate in compliance with federal regulations. 47 U.S.C. §332(c)(7)(B)(iv).

- A jurisdiction may not discriminate among providers of functionally equivalent services. A jurisdiction must be able to provide plausible reasons for disparate treatment of different providers' applications for similarly situated facilities. 47 U.S.C. §332(c)(7)(B)(i)(I).

- The Telecommunications Act requires local jurisdictions to act upon applications for wireless communications sites within a "reasonable" period of time. The shot clock applicable to this application is 150 days.[1]

The Facility will operate in accordance with the Federal Communications Commission's Radio Frequency emissions regulations. Therefore, issues regarding environmental effects are preempted under federal law.

This application is also subject to and complies with the Town of Jackson Land Development Regulations, including Article 6, Division 6.1.10.D Wireless Communication Facilities.

[1]The FCC rules clarify that the shot clock begins to run when the application is submitted and further state that "[a] determination of incompleteness tolls the clock only if the local government provides notice to the applicant within 30 days that the application is incomplete and while specifically delineating all missing information, and specifying the code provision, ordinance or application instruction or other publically-stated procedure requiring that the information be submitted. Following a resubmission the clock can be tolled again only if the local government notifies the applicant within 10 days that the supplemental submission did not provide the information identified in the original notice." *See FCC Report and Order, FCC 14-153. Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies. October 17, 2014.*

4. PROPOSED DEVELOPMENT PROGRAM

Existing Condition: The existing building is a mixed-use. The bottom floor has two areas rented for commercial storage spaces. The upper floor has two apartments for residential living. The front of the building has a covered stairwell for access to the apartments and patio roof. Figure 5 below shows the existing building.

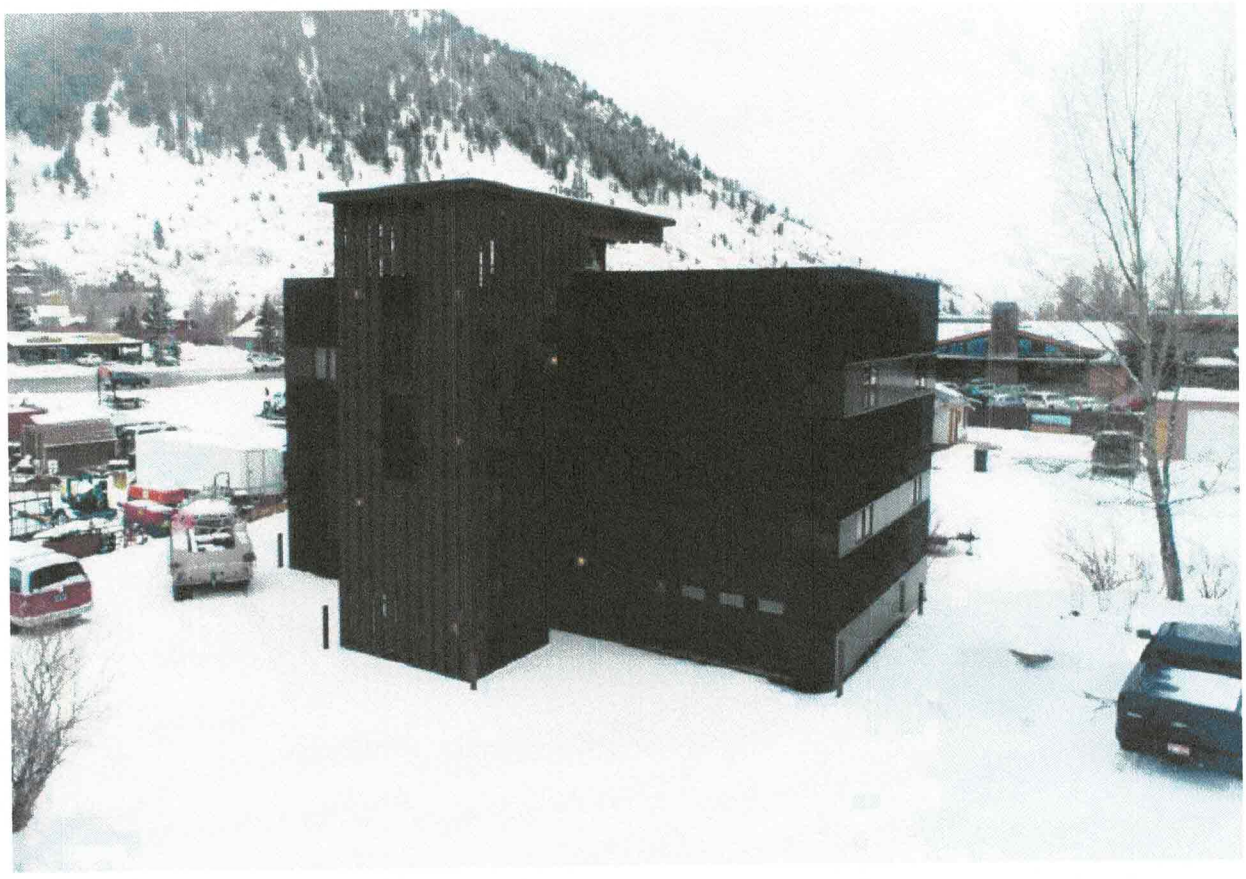


Figure 5: Existing Building

Proposed Use: The proposed wireless communication site will be built on the existing building and will include a 5' tall x 10' wide x 10' deep "stealth", roof-mounted facility built above the covered stairwell. This will be built to enclose two sectors of antennas. This is in compliance with Sec. 6.D.3.f.2.iii, which limits the height of any roof-mounted wireless facility to 5 ft. above the roof on which it is affixed. The "stealth" structure will be constructed of fiberglass, radio frequency-transparent material which will conceal the roof-top antennas while allowing the antenna signal to transmit. This addition will include a slat design and be painted to match the current exterior of the building (see photo simulations below).This will house two sectors of the antennas. The third sector of antennas will be wall-mounted antennas, mounted on the back of the building on the parapet. This sector will be enclosed in a "stealth" screen made of similar material to the roof-mounted structure and measuring 6' tall x 10' wide x 2' deep; however, the siding will be designed and painted to match the existing building siding (see photo simulation below).

The existing covered stairwell is 34.6 ft. tall; the proposed height of the "stealth" screen addition will be 5 ft. tall bringing the existing total height of the highest point on the building to 39.6 ft. This is the minimum space required to conceal and enclose 4 ft. tall wireless communication antennas. It should be noted that the optimal antenna size is 8 ft. but the LDR limits the height to 5 ft. above the existing roof. Using a 4 ft. antenna will necessitate additional equipment in order to provide the FirstNet coverage.

The electronic equipment will be located within a fenced ground area measuring 9.92'x 23'6" behind the building. This area will enclose the electronic equipment within outdoor cabinets and a 30kw natural gas generator to be used as back-up power in the event of emergency or power failure. A concrete pad will be added for the equipment and generator to sit on. The wood fencing will be 6 ft. tall and stained to match the wood finish on the building.

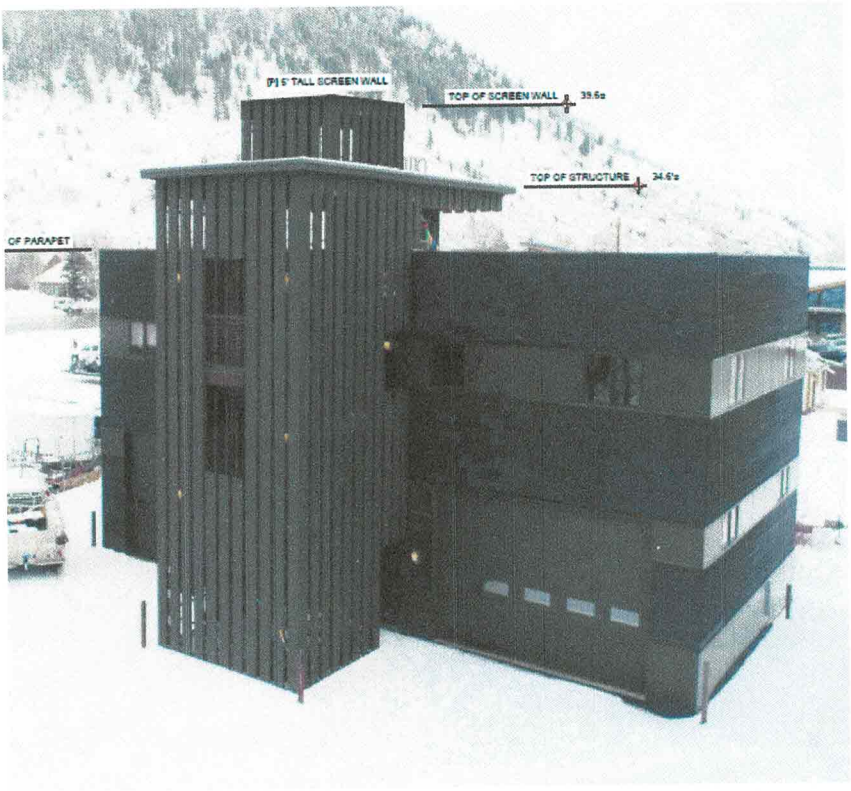


Figure 6: Proposed Stealth Screen Roof-mounted Structure for two sectors

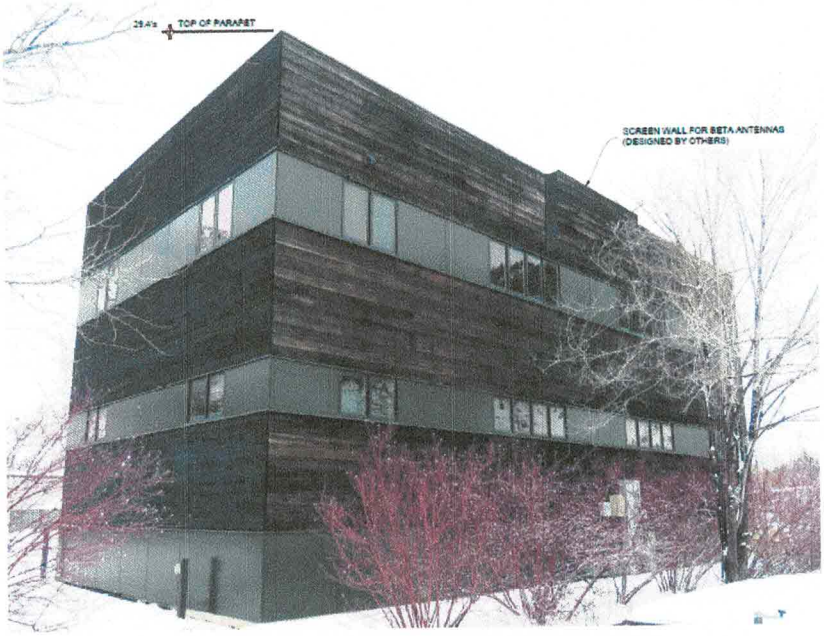


Figure 7: Proposed Stealth Screen Wall-mounted structure for third sector

Height and floor area: Described above

Setbacks: There are no setbacks applicable to the roof or wall mounted antennas as they are being proposed within the confines of the existing building. Under section 6.1.10.C.1.b, the equipment area behind the building for the enclosure of electronic equipment (a wireless facility) is listed in 1.b and the LDRs state that utilities listed above in 1.b do not require a use permit and the physical development associated with them is not required to meet structure or site development setbacks if the physical development is located within an easement or lot designated for the proposed utility (this lot in this area is zoned allowed for the proposed utility under this section, a wireless facility). The fence meets the setback guidelines for the zone at a maximum height of 6' in the side or rear of the yard and a setback of 0' from the side or rear lot line.

Utilities:

Utilities will be pulled from the transformer and fiber on Dusty Acres Lane to the South of the building. A cable chase will run from the equipment area up the back of the building to the wall mounted antennas and along the existing parapet wall to the roof-mounted antennas. The proposed cable chase will be 12"x8"with the flash and paint matching the existing building.

5. SITE AND FLOOR PLANS

The enclosed site plans meet the minimum standards established in the Administrative Manual. Sheet T-1 includes project data;

- SV-1 includes a professional land survey of the subject property;
- A-0 includes an overall site plan;
- A-1 includes a site plan for the proposed wireless facility;
- A-2 includes an equipment plan;

- A-3 and A-3.1 includes existing and proposed antenna elevations and A-3.2 and A-3.3 includes existing and proposed photo simulations;
- A-4 includes a detailed plan of the antenna facilities within the "stealth" structures;
- R-1 through R-5 includes equipment details;
- G-1 and G-2 includes grounding details;

No changes to the floor plan of the existing building. Layouts for the "stealth" structures and equipment area are included within the site plans.

5. POSTED NOTICE

When hearing dates are scheduled, Applicant will prepare required signs and post notice as required by Sec. 8.2.14.C.4.

6. REVIEW CRITERIA

Pursuant to the requirements outlined in the Pre-Application Conference Summary, the following items are addressed below.

GENERAL INFORMATION
Planning Permit Application has been provided.
Notarized Letter of Authorization has been provided.
Application Fees have been paid by enclosed Check No. 215 in the amount of $2,500.00.
Review Fees Applicant acknowledges responsibility for payment of review fees necessitated by the review of the application.
Mailed Notice Fee Applicant acknowledges responsibility for payment of mailed notices in excess of 25 notices.
Digital Format Applicant has submitted all application materials in digital format on the enclosed CD.
Response to Submittal Checklist Applicant has provided responses to the comments identified in the Pre-Application Conference Summary in the text of this narrative.
Title Report per the Pre-Application Meeting, this is not required.
Narrative description of the proposed development This has been provided herein (see "Project Description," above.
Proposed Development Program This has been provided herein (see "Proposed Development Program," above.
Site Plan The enclosed site plan set is based on revisions discussed at the Pre-Application Conference
Floor Plans There are no proposed changes to the floor plan of the existing building

SUBMITTAL CHECKLIST: Subsection B, Physical Development:
The following items are required to be addressed:

Structure Mass and Location and Maximum Scale of Development: The existing building is a mixed-use. The bottom floor has two areas rented for commercial storage spaces. The upper floor has two apartments for residential living. The front of the building has a covered stairwell for access to the apartments and patio roof. The existing building is 29.4 ft. high with the covered stairwell and highest point of the building being 34.6 ft. high. The proposed 5 ft. high addition of the "stealth" structure to enclose two sectors of antennas will bring the total height to 39.6 ft. high. This addition will be in proportion to the existing building. The dimensions of the "stealth" structure on the rooftop are 5' (H) x

10' (L) x 10' (W). The dimensions of the "stealth" box added to the parapet on the back wall of the building are 6' (H) x 10' (L) x 2' (W). The dimensions of the equipment area on the ground are 9.92'x 23'6". All setbacks are met as described above in the Proposed Development Program Section under "Setbacks".

Building Design: The existing building is a contemporary design with concrete and siding facade. The proposed "stealth" design is intended to appear to be a design extension of the covered stairwell. Applicant understands a meeting with the Design Review Committee is required.

Site Development: No new driveways or access points are proposed. The site will be accessed from Dusty Acres Lane. No new easements are proposed. It is possible that during construction a crane will be needed to transport building materials to the roof; however this will be determined at a pre-construction meeting with Town building officials. Construction of this site is estimated to take approximately 60 to 90 days. Staging for constructions materials will be coordinated with property owners and will not obstruct or impact neighboring lots or Dusty Acres Lane. There is no pedestrian access to the site as Dusty Acres Lane only leads to the existing building on which the wireless site is proposed and a residential home on the lot south.

Fencing: The electronic equipment and generator will be enclosed behind a 6 ft. wood fence in the rear of the building and will be painted to match the exterior of the building. This area will be secured with a lock. The fence meets the requirements for the BP zone district of a maximum of 6' in the side or rear of the building and a setback of 0' on side or rear lot line.

Wildlife Friendly Fencing: Not applicable, per Pre-Application Conference Summary

Environmental Standards: Not applicable, per Pre-Application Conference Summary

SUBMITTAL CHECKLIST: Subsection D, Development Options: Not applicable, per Pre-Application Conference Summary

SUBMITTAL CHECKLIST: Subsection E, Additional Zone-Specific Standards: Not applicable, per Pre-Application Conference Summary

SUBMITTAL CHECKLIST: Article 4, Special Purpose Zones: Not applicable, per Pre-Application Conference Summary

SUBMITTAL CHECKLIST: Article 5, Physical Development Standards Applicable in all Zones:
The following items are required to be addressed:

Division 5.1, General Environmental Standards: Not applicable, per Pre-Application Conference Summary

Division 5.2, Environmental Standards Applicable in Specific Areas: Not applicable, per Pre-Application Conference Summary

Division 5.3, Scenic Standards: This site will not include exterior lighting per Div. 5.3.1 and is not in a Scenic Resources Overlay per Div. 5.3.2.

Division 5.4, Natural Hazard Protection Standards: Not applicable, per Pre-Application Conference Summary

Division 5.5, Landscaping Standards: All antennas will be located behind "stealth" screens on the existing building. The electronic equipment will be concealed behind a 6' wooden fence located in the rear of the property. In the planned electronic equipment area, there are no trees only a couple shrubs on the lot line. Applicant will replace any existing landscaping required by code that is removed in order to facilitate the electronic equipment area (see Exhibit 8).

Exhibit 8: Existing vegetation in rear of property

Division 5.6, Sign Standards: Not applicable, per Pre-Application Conference Summary

Division 5.7, Grading, Erosion Control and Stormwater Management: Not applicable, per Pre-Application Conference Summary

Division 5.8, Design Guidelines: The design review in the (BP) zone district shall only apply to the selection of exterior materials per the Town of Jackson LDRs. The proposed materials are appropriate based on the context of the existing building. The material used for the screen wall additions will be durable, radio-frequency transparent fiberglass and will be maintainable over time. AT&T will be responsible for maintaining the painted surfaces of the screen wall addition and fencing to match the existing façade of the building. The proposed material is the only possible choice for the purpose of antenna concealment. In summary, the proposed site plans are in compliance with Design Guidelines set forth by the Town of Jackson.

SUBMITTAL CHECKLIST: Article 6, Use Standards Applicable in all Zones:
The following items are required to be addressed:

Division 6.1, Allowed Uses: The proposed site is located in the (BP) zone district and wireless communication sites are an allowed use.

Division 6.2, Parking and Loading Standards: The parking, loading and maintenance requirements of this section do not apply because the proposed site will be unmanned, unoccupied space. The site will be visited only occasionally by one technician in one vehicle for a short period of time for monitoring and maintenance of the electronic equipment.

Division 6.3, Employee Housing Requirements: Not applicable, per Pre-Application Conference Summary.

Division 6.4, Operational Standards: There will be no outside storage; all equipment and materials associated with the site will be kept in the designated equipment area shown on Sheet A-2 of the site plans. The unoccupied site will generate no refuse or recycling; it will be visited only occasionally by an AT&T technician to monitor and maintain equipment. The site will not generate any significant noise and no vibration. The generator at the site produces no significant noise and will be well within the 65 DBA guideline set forth in the Town of Jackson LDRs. All AT&T facilities are monitored remotely 24/7; therefore the likelihood of fire, explosive hazards or electrical disturbances is minimal. The site will include its own generator in the case of emergency or power outage.

SUBMITTAL CHECKLIST: Article 7, Development option and Subdivision Standards Applicable in all Zones:
The following items are required to be addressed:

Division 7.1, Development Option Standards: Not applicable, per Pre-Application Conference Summary

Division 7.2, Subdivision Standards: Not applicable, per Pre-Application Conference Summary

Division 7.3, Open Space Standards: Not applicable, per Pre-Application Conference Summary

Division 7.4, Affordable Housing Standards: Per the Pre-Application Conference Summary notes, "Applicant shall provide a Housing Mitigation Plan consistent with the Housing Department Guidelines. It is likely that no requirement exists, but the paperwork must be filled out and provided with the CUP application." Enclosed with application.

Division 7.5, Development Exaction Standards: Not applicable, per Pre-Application Conference Summary

Division 7.6, Transportation Facility Standards: Not applicable, per Pre-Application Conference Summary

Division 7.7, Required Utilities: The proposed site is an unmanned, unoccupied facility which requires only electric power and fiber optic connection for operation. No water, sewer, or irrigation will be required. AT&T will install a 30K natural gas generator in the electronic equipment area as a back-up to be run in the case of emergency or power outage.

GENERAL STANDARDS AND DESIGN REQUIREMENTS:
The following standards are required pursuant to Sec.6.1.10.D.3.f:

i) **Must be Stealth:** The application meets this requirement with all antennas and equipment concealed from public view. The proposed design minimizes visual impacts by matching the existing facade with radio frequency-transparent fiberglass screening. Antennas and equipment will not be visible from the street. The "stealth" addition will appear consistent with the architecture and design of the existing building. It will not be obvious that a wireless communication site is located there, i.e., the presence, purpose, or nature of the facility is not readily apparent to a reasonable observer.

ii) **Standards to be applied include the following:**

a. **Determination of Need** – Please see "Alternatives Sites Considered" and "Determination of Need" sections of this report.
b. **Concealment Element** – The proposed design is the most effective concealment that can be provided within the constraints of the 5 ft. limitation on height for a rooftop communication facility. There is no intent to frustrate the purpose of the conditions of approval. The concealment structures are intended to blend with the existing building.
c. **Height** – The highest point of the proposed facility is 5 ft. above the roof to which it is affixed, in compliance with this section. Although taller antennas would have been preferable, AT&T proposes 4 ft. tall antennas inside the 5 ft. tall screen wall concealment structure.
d. **Setbacks** – No setbacks are applicable as the proposed facility is within the confines of the existing building. The fencing of the equipment area meets the setbacks set forth for the zone in 2.3.10.6 as no more than 6 ft. tall in the side or rear of the yard and a 0' setback from the side or rear lot line.
e. **Other conditions** – The proposed facility is designed and will be maintained to be visually compatible with adjoining terrain and structures. The proposed site will not be used for the storage of excess equipment and there will be no outdoor storage. All equipment associated with the site will be contained in the designated equipment area in the rear of the building.
f. **Landscaping** – there is no landscaping in the area proposed for AT&T's electronic equipment. There are shrubs on the lot line and any of these that need to be removed in order to place the fence will be replaced if necessitated by code.
g. **Signage** – No commercial messages will be displayed at the proposed facility. Signage will be limited to that required by federal regulatory agencies.
h. **Lighting** – No lighting is proposed for this facility.
i. **Quantity limit** –There is a limit of one (1) tower per legally created parcel of property per Town of Jackson LDRs. There will be no towers on this parcel only a roof and wall mounted wireless communication facility.
j. **Emergency generator** - AT&T will install a 30K natural gas generator in the electronic equipment area as a back-up to be run in the case of emergency or power outage.
k. **Noise level** – The site will not generate any significant noise and no vibration. The generator at the site produces no significant noise and will be well within the 65 DBA guideline set forth in the Town of Jackson LDRs.
l. **Visibility** – Antennas will be completely concealed behind the proposed screen wall additions. As noted above, the screen wall additions are deigned to appear to be a logical extension of the existing building. This application includes elevation drawings and photo-simulations showing the existing and proposed designs. Due to the limited rooftop and ground space at this site, there is limited space for future collocation. First there is very limited useable space on the roof of the covered stairwell. The "stealth" walled structure is being constructed as large as possible to be structurally sound. With the 5 ft. height requirement in the Town of Jackson LDRs, additional equipment is needed by AT&T in order to accommodate FirstNet capabilities when using 4 ft. antennas. This leaves very limited space within the "stealth" walled structure for another carrier. In addition, there is limited ground space available in the rear of the property for placing electronic equipment.
m. **Notice** – The facility will be in compliance with all requirements for public hearings. When dates for the required public hearings are scheduled, Applicant will order notice signs to be posted at designated locations on the property.

n. **Access** - No part of the facility will obstruct access or cause the existing building to fail to comply with the American Disabilities Act.

o. **Security** – Opportunities for unauthorized access will be minimized with entrance to the electronic equipment area fenced and locked. In addition, AT&T facilities are monitored remotely 24/7, providing additional security for the site.

p. **Building Design** – The proposed "stealth" walled structure is in scale and architecturally integrated with the existing building design to be visually unobtrusive. The proposed screen wall additions will be painted to match the façade of the existing building. As noted above, it will not be obvious that a wireless communication site is located on the roof, i.e. the presence, purpose or nature of the facility is not readily apparent to a reasonable observer.

7. CONDITIONAL USE PERMIT REQUIREMENTS:

The following findings must be made prior to approval of a conditional use permit:

- **The application is compatible with the desired future character of the area:** As demonstrated in the project description and determination of need sections of this application, this wireless site is necessary to provide FirstNet and increased user demands for coverage and capability in this area. Everything possible has been done to integrate the design of the wireless facility into the existing building. Surrounding lot uses include apartment buildings and small industrial and commercial supply businesses.
- **The application complies with the use specific standards of Division 6.1:** Jackson Land Development Regulations allow wireless communication sites in the BP zone district.
- **The application minimizes adverse visual impacts:** As described throughout the application, this site is designed to be within Town of Jackson LDRs and to replicate the exterior finishes of the existing building as well as architecturally appear to be a logical extension of the building.
- **The application minimizes adverse environmental impacts:** There will be no adverse environmental impacts associates with this development. The proposed site will be unoccupied and requires only minimal electric utility service for operation. There will be no ground disturbance associated with the construction of this site other than to pour a concrete pad in the rear of the building to accommodate the electronic equipment on the ground.
- **The application minimizes adverse impacts from nuisances:** The proposed site will not generate any significant noise, no dust, odor or other impacts that could be considered a nuisance. As noted above, this generator is proposed to be used in the event of an emergency or power outage and any cycling or use will be within Town of Jackson noise regulation of 65 DBA.
- **The application minimizes adverse effects on public facilities:** There will be minimal impact on public facilities. This site requires only minimal electrical service. The site will be unoccupied and requires no water, sewer, trash collection or other public services. The site will generate no traffic; it will be visited only occasionally by a sole technician to monitor and maintain the equipment. AT&T facilities are monitored remotely 24/7 and standard operating procedures minimize security risks.
- **The application complies with all other relevant standards of these LDRs and all other Town Ordinances:** The proposed development will comply with all Land Development Regulations, building code requirements and other ordinances.
- **The application is in substantial conformance with all standards or conditions of any prior applicable permits or approvals:** Applicant believes the proposed plans meet or exceed all requirements of applicable permits and required approvals.

In summary, the application satisfies the criteria established for Conditional Use Permit findings.

"FCC SHOT CLOCK"

AT&T requests that the Town of Jackson issue a written decision granting AT&T's request within (90) days of the date this application is submitted pursuant to *Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7) to Ensure Timely Siting Review*, Declaratory Ruling, 24 FCC Rcd 13994, para. 46 (2009 Declaratory Ruling). If applicable, within fourteen (14) days of the date the application is submitted, AT&T requests the Town to inform AT&T in writing of the specific reasons why the application is incomplete and does not meet the submittal requirements; and in doing so, to please specifically identify the code provision, ordinance, instruction or public procedure that requires the information be submitted.

7. CONCLUSION

AT&T respectfully requests the Town of Jackson to grant conditional use permit approval for the above described project. The proposed site will be part of the FirstNet directive by the federal government as well as the more comprehensive AT&T wireless network and approval of this application will allow AT&T to meet its federally mandated obligations under the license granted by the Federal Communications Commission (FCC) pursuant to the Telecommunications Act of 1996.

The new at&t
Your world. Delivered.

AT&T Mobility
2890 South 25th East
Idaho Falls, ID 83404
www.att.com

September 7, 2018

Whom It May Concern at the Town of Jackson, WY, Planning Department,

AT&T's proposed wireless facility at 1024 Gregory Lane, Jackson, WY 83001 (AT&T site FA Code 14471313) will comply with all American National Standards Institute (ANSI) standards for electromagnetic radiation adopted by the Federal Communications Commission (FCC) for wireless telecommunications facilities.

The proposed AT&T wireless telecommunication facility will comply at all times with FCC regulations prohibiting localized interference with reception of television and radio broadcasts.

The proposed AT&T wireless telecommunication facility will not interfere with public safety frequencies servicing the town and its residents.

If I can be of further assistance in this matter, please do not hesitate to contact me by phone at (208)317-0011 or by email, jr129e@att.com.

Best regards,

J. Shad Rydalch

J. Shad Rydalch
AT&T Senior Specialist Radio Access Network Engineer
RF Safety for Rocky Mountain Region
2890 S 25th East, Idaho Falls, Idaho 83404
m 208.317.0011 | jr129e@att.com

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Idaho Falls, ID 83404
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September 7, 2018

Whom It May Concern at the Town of Jackson, WY, Planning Department,

AT&T's proposed wireless facility at 1024 Gregory Lane, Jackson, WY 83001 (AT&T site FA Code 14471313) will comply with all Federal Communications Commission ("FCC") Radio Frequency ("RF") exposure rules.

The FCC rules set the maximum permissible exposure allowable from RF transmissions for the general population. The FCC has determined that a person may be exposed to RF emissions below those exposure limits with no harmful effects. The FCC's OET Bulletin 65 (Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields) provides guidance in determining RF exposure levels.

Additionally, the FCC has written OET Bulletin 56 (Questions and Answers about Biological Effects and Potential Hazards of Radiofrequency Electromagnetic Fields), an excellent document on RF safety which can be downloaded from http://www.fcc.gov/encyclopedia/radio-frequency-safety

If I can be of further assistance in this matter, please do not hesitate to contact me by phone at (208)317-0011 or by email, jr129e@att.com.

Best regards,

J. Shad Rydalch

J. Shad Rydalch
AT&T Senior Specialist Radio Access Network Engineer
RF Safety for Rocky Mountain Region
2890 S 25th East, Idaho Falls, Idaho 83404
m 208.317.0011 | jr129e@att.com

GENERAL DYNAMICS
Wireless Services

Contracted to AT&T Mobility

Town of Jackson Planning Department
150 E. Pearl Avenue
Jackson, WY 83001

September 10, 2018

RE: Compliance with Applicable Codes - AT&T project KSGT Relo IDL04405 FA 14471313

This letter is submitted in accordance with Sec. 6.1.10.D.3.d.vii of the Town of Jackson Land Development Regulations. AT&T affirms that the proposed Base Station known as "KSGT Relo IDL04405 FA 14471313", to be located on the rooftop and rear parapet wall of the existing building at 1024 Gregory Lane, will be constructed and maintained in compliance with all applicable non-discretionary structural, electrical, energy, building and safety codes.

Respectfully Submitted,

Tamara Shiveley
Real Estate Specialist
Shiveley and Associates, Inc.
Consultant to AT&T
801-230-4877
tamaras@shiveassoc.com

HOUSING MITIGATION PLAN

For CUP Application for Wireless Telecommunications Site at 1024 Gregory Lane in Jackson

AT&T is proposing to put an unmanned wireless communication site at 1024 Gregory Lane in Jackson. The antennas will be placed on the roof of an existing building and on the back parapet wall of the same existing building. There will be no square footage related to this project.

.000246 X 0 sq. ft. = 0

AT&T believes it does not qualify to provide housing given that there is no square footage and the site is unmanned.

IDL04405
KSGT RELOCATE
FA#: 14471313

34.6' ROOFTOP

PTN# 3770A0G669
NEW SITE BUILD

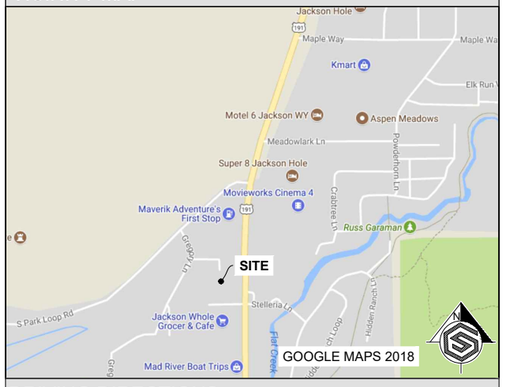
SITE INFORMATION

SITE ADDRESS:	1024 GREGORY LANE JACKSON, WY 83001
COUNTY:	TETON
COORDINATES:	43.4646350° / -110.7943900° (FOR NAVIGATION ONLY)
PROPERTY LANDLORD OR OWNER:	THE APARTMENTS AT DUSTY ACRES LLC BOB AND LEANNE MOORE
JURISDICTION:	TOWN OF JACKSON
OCCUPANCY GROUP	UNMANNED
CONSTRUCTION TYPE	II-B
POWER COMPANY:	LOWER VALLEY ENERGY
TELCO COMPANY:	CENTURY LINK
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION

CONTACT INFORMATION

APPLICANT:	AT&T 4393 RIVERBOAT ROAD, SUITE 400 TAYLORSVILLE, UTAH 84123 PHONE: 801.458.8888 CONTACT: BYRON BOSSHARDT
PROJECT MANAGER:	GENERAL DYNAMICS WIRELESS SERVICES, LLC. 1152 W. 2400 S., SUITE C SALT LAKE CITY, UT 84119 PHONE: 801.201.0566 CONTACT: ROCKY MATTISON
ARCHITECTURE & ENGINEERING:	GEOSTRUCTURAL, LLC. PO BOX 2621 BOISE, ID 83701 PHONE: 530.539.4787 CONTACT: DON GEORGE

VICINITY MAP



DRIVING DIRECTIONS

From Jackson Airport:
Turn right at the 1st cross street onto US-191 S/US-26 W/US-89 S (8.8 mi)
Turn right onto US-191 S/US-26 W/US-89 S/W Broadway (2 mi)
Turn right onto S Park Loop Road (0.1 mi)
Turn left onto Gregory Ln (0.1 mi)
Turn left onto access drive and to apartment building
Site is around back of building

APPROVALS

RF MANAGER	_____	_____
CONSTRUCTION MANAGER	_____	_____
SITE ACQ. MANAGER	_____	_____
PROPERTY OWNER	_____	_____
OPERATIONS MANAGER	_____	_____

SCOPE OF WORK

PROPOSED:
5' TALL SCREEN WALL & BACK WALL SCREEN
(TO MATCH EXISTING BUILDING)
(9) SBNHH-1D65A ANTENNAS
(3) NNHH-65A-R4 ANTENNAS

(3) ALU B25 RRH4x30-4R
(3) ALU RRH4x25-WCS-4R
(6) AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB
(3) AIRSCALE DUAL RRH 4T4R B12/14 320W AHLBA
(3) DC/FIBER DISTRIBUTION BOXS

OUTDOOR EQUIPMENT ON GROUND BEHIND BUILDING

OUTDOOR GENERATOR

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR THE SAME.

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF ALL GOVERNING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. WORK PERFORMED IN VIOLATION OF THESE CODES IS NOT ALLOWED.

FCC COMPLIANCE

RADIATION FROM THIS FACILITY WILL NOT INTERFERE WITH OPERATION OF OTHER COMMUNICATION DEVICES.

DIG LINE

THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES, AND/OR EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UTILITIES, PIPELINES AND OTHER STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS.

ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AND ENGINEER AT THE CONTRACTOR'S EXPENSE.

811 Know what's below. CALL before you dig.

SITE PHOTO

SHEET INDEX

SHEET	DESCRIPTION
T-1	TITLE SHEET
GN-1 - GN-6	GENERAL NOTES
SV-1	SITE SURVEY
A-0	OVERALL SITE PLAN
A-1	SITE PLAN
A-2	EQUIPMENT PLAN
A-3 - A-3.3	ANTENNA ELEVATIONS
A-4	ANTENNA PLANS
R-1 - R-5	EQUIPMENT DETAILS
G-1 - G-2	GROUNDING DETAILS

at&t

GENERAL DYNAMICS
Information Technology

GEOSTRUCTURAL
PO BOX 2621, BOISE, ID 83701
P: 530.539.4787
E: CONTACT@GEOSTRUCTURAL.COM
WWW.GEOSTRUCTURAL.COM

REVISIONS

REV	DATE	DESCRIPTION	INT
0	08/06/18	ISSUED FOR CONSTRUCTION	GGD

CHECKED BY: DWG

Professional Engineer (Structural)
DONALD W. GEORGE
12673
WYOMING

SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1

CONSTRUCTION NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS THE FOLLOWING DEFINITIONS SHALL APPLY:

   GENERAL CONTRACTOR: GENERAL DYNAMICS
   SUBCONTRACTOR: ASSIGNED CONTRACTOR

2. ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND AT&T PROJECT SPECIFICATIONS.

3. GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS. GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

4. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORK.

5. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.

6. UNLESS OTHER WISE, THE WORK SHALL INCLUDE FURNISHING, MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

7. PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO BE FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ARCHITECT/ENGINEERPRIOR TO PROCEEDING WITH WORK.

8. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

9. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE SPACE FOR APPROVAL BY THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING.

10. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS AND LOCAL JURISDICTION.

11. GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLES.

12. ERECTION SHALL BE DONE IN A WORK MANLIKE MANNER BY COMPETENT EXPERIENCED PRACTICE. ALL MEMBERS SHALL BE LAID PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.

13. SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH UL LISTED MATERIALS APPROVED BY LOCAL JURISDICTION. SUB CONTRACTOR SHALL KEEP AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DEBRIS.

14. WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES. SUB CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWING PRIOR TO THE BEGINNING CONSTRUCTION.

15. SUBCONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO THE COMMENCEMENT OF WORK.

16. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTORS EXPENSE TO THE SATISFACTION OF THE OWNER.

17. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.

18. GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND SUBCONTRACTORS TO THE SITE AND/OR BUILDING.

19. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.

20. THE GENERAL CONTRACTOR SHALL MAINTAIN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISION, ADDENDA, AND CHANGES ORDERS ON THE PREMISES AT ALL TIMES.

21. THE GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A OT 2-A:10-B:C AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.

22. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES. AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ARCHITECT/ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO, A)FALL PROTECTION, B)CONFINED SPACE, C)ELECTRICAL SAFETY, D)TRENCHING & EXCAVATION.

23. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ARCHITECT/ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.

24. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OF DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.

25. SUB CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION, EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.

26. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUNDING, FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACE IN ANY FILL OR EMBANKMENT.

27. THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH GRADE AND COMPACTED TO 95 PERCENT STANCE PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE, ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL, PRE-APPROVED BY THE LOCAL JURISDICTION.

28. ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.

29. ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER THE THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.

30. SUBCONTRACTOR SHALL SUBMIT A COMPLETE SET OS AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.

31. SUBCONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.

32. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE AND IS NOT FOR HUMAN HABITAT (NO HANDICAP ACCESS REQUIRED).

33. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY AT&T TECHNICIANS.

34. NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.

35. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION AT&T MOBILITY GROUNDING STANDARD "TECHNICAL SPECIFICATION FOR CONSTRUCTION OF GSM/GPGPRS WIRELESS SITES." INCASE OF A CONFLICT BETWEEN THE CONSTRUCTION SPECIFICATION AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.

36. SUBCONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF SUBCONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY.

37. SUBCONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.

38. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER,. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OF PROCEEDING WITH CONSTRICTION.

39. NO WHITE STROBIC LIGHTS ARE PERMITTED. LIGHTING IF REQUIRE, WILL MEET FAA STANDARDS AND REQUIREMENTS.

40. ALL COAXIAL CABLE INSTALLATIONS TO FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

41. NO NOISE, SMOKE, DUST, OR VIBRATION WILL RESULT FROM THIS FACILITY. (DISREGARD THIS NOTE IF THIS SITE HAS A GENERATOR)

42. NO ADDITIONAL PARKING TO BE PROPOSED. EXISTING ACCESS AND PARKING TO REMAIN, UNLESS NOTED OTHERWISE.

43. NO LANDSCAPING IS PROPOSED AT THIS SITE, UNLESS NOTED OTHERWISE.

SITE WORK & DRAINAGE:

PART 1 - GENERAL

CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUBGRADE PREPARATION AND FINISH GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS.

1.1 REFERENCES:
- A. DOT (STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION-CURRENT EDITION)
- B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)
- C. OSHA (OCCUPATION SAFETY AND HEALTH ADMINISTRATION)

1.2 INSPECTION AND TESTING:
- A. FIELD TESTING OF EARTHWORK COMPACTION AND CONCRETE CYLINDERS SHALL BE PERFORMED BY SUBCONTRACTORS INDEPENDENT TESTING LAB. THIS WORK TO BE COORDINATE BY THE SUBCONTRACTOR.
- B. ALL WORK SHALL BE INSPECTED AND RELEASED BY THE GENERAL CONTRACTOR WHO PROPER PERFORMANCE OF THE WORK AS SPECIFIED AND/OR CALLED FOR ON THE DRAWINGS. IT IS THE SUBCONTRACTOR RESPONSIBILITY TO REQUEST TIMELY INSPECTIONS PRIOR TO PROCEEDING WITH FURTHER WORK THAT WOULD MAKE PARTS WORK INACCESSIBLE OR DIFFICULT TO INSPECT.

1.3 SITE MAINTENANCE AND PROTECTION:
- A. PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OR WORK UNTIL COMPLETION OF THE SUBCONTRACT.
- B. AVOID DAMAGE TO THE SITE AND TO EXISTING FACILITIES, STRUCTURES, TREES, AND SCRUBS DESIGNATED TO REMAIN. TAKE PROTECTIVE MEASURES TO PREVENT EXISTING FACILITIES THAT ARE NOT DESIGNATED FOR REMOVAL FROM BEING DAMAGED BY THE WORK.
- C. KEEP SITE FREE OF ALL PONDING WATER.
- D. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT AND EPA REQUIREMENTS.
- E. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.
- F. EXISTING UTILITIES: DO NOT INTERRUPT EXISTING SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE ENGINEER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.
- G. PROVIDE A MINIMUM 48-HOUR NOTICE TO THE ENGINEER AND RECEIVE WRITTEN NOTICE TO PROCEED BEFORE INTERRUPTING ANY UTILITY SERVICE.

PART 2 - PRODUCTS

2.1 SUITABLE BACKFILL: ASTM D2321 (CLASS I, II, II OR IVA) FREE FROM FROZEN LUMPS, REFUSE, STONES, OR ROCKS LARGER THAT 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.

2.2 NON-POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS III, IVA ORIVB) COARSE AGGREGATE. FREE FROM FROZEN LIMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.

2.3 POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM 52321 (CLASS IA, IB OR II) COARSE AGGREGATE FREE FROM FROZEN LUMPS, REFUSE STONES OR ROCS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL

2.4 SELECT STRUCTURAL FILL: GRANULAR FILL MATERIAL MEETING THE REQUIREMENTS OF ASTM E850-95. FOR USE AROUND UNDER STRUCTURES WHERE STRUCTURAL FILL MATERIAL ARE REQUIRED.

2.5 GRANULAR BEDDING AND TRENCH BACKFILL: WELL-GRADED SAND MEETING THE GRADATION REQUIREMENTS OF ASTM D2467 (SE OR SW-SM)

2.6 COARSE AGGREGATE FOR ACCESS ROAD SUBBASE COURSE SHALL CONFORM ASTM D2940.

2.7 UNSUITABLE MATERIAL: HIGH AND MODERATELY PLASTIC SILTS AND CLAYS (LL>45) MATERIAL CONTAINING REFUSE, FROZEN LIMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION AND SOILS CLASSIFIED BY ASTM AS PT, MH, CH, OH, ML, AND DL.

2.8 GEOTEXTILE FABRIC: MIRAFI 500X OR APPROVED EQUAL.

2.9 PLASTIC MARKING TAPE: SHALL BE ACID AND ALKALI RESISTANT POLYETHYLENE FILM SPECIFICALLY MANUFACTURED FOR MARKING THE LOCATING UNDERGROUND UTILITIES 6 INCHES WIDE WITH A MINIMUM THICKNESS OF 0.004 INCHES, TAPE SHALL HAVE A MINIMUM STRENGTH OF 1500 PSI IN BOTH DIRECTIONS AND MANUFACTURED WITH INTEGRAL CONDUCTORS. FOIL BACKING OR OTHER MEANS TO PROTECT IT FROM CORROSION. TAPE COLOR SHALL BE RED FOR ELECTRIC UTILITIES AND ORANGE FOR TELECOMMUNICATION UTILITIES.

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GENERAL DYNAMICS
Information Technology

GEOSTRUCTURAL
PO BOX 2621, BOISE, ID 83701
P: 530.539.4787
E: CONTACT@GEOSTRUCTURAL.COM
WWW.GEOSTRUCTURAL.COM

REVISIONS

REV	DATE	DESCRIPTION	INT
0	08/06/18	ISSUED FOR CONSTRUCTION	GGD

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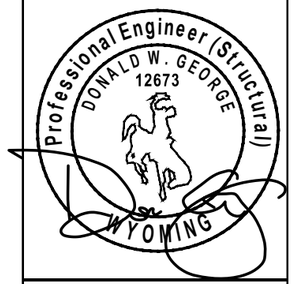

SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

GN-1

SITE WORK & DRAINAGE (CONT.)

PART 3 - EXECUTION

3.1 GENERAL:

A. BEFORE START GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL, MEASURES. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ANY TIME.

B. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING, ESTABLISH AND MAINTAIN ALL LINE, GRADES, ELEVATIONS AND BENCHMARKS NEED FOR EXECUTION OF THE WORK.

C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE. REMOVE TREES, BRUSH, STUMPS, RUBBISH AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA TO BE CLEARED.

1. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STUMPS, AND OTHER DEBRIS. BRUSH AND REFUSE EMBEDDED IN OR PROTRUDING THROUGH THE GROUND SURFACE, RAKE, DISK OR PLOW THE AREA TO A DEPTH OF NO LESS THAN 6 INCHES, AND REMOVE TO A DEPTH OR 12 INCHES ALL ROOTS AND OTHER DEBRIS THEREBY EXPOSED.

2. REMOVE TOPSOIL MATERIAL COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL. AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER UNDESIRABLE MATERIALS.

3. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED TILL DEPRESSIONS RESULTING FROM CLEARING, GRUBBING AND DEMOLITION WORK COMPLETELY WITH SUITABLE FILL.

D. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL ALL DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS BURNING WILL NOT BE PERMITTED.

E. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATIONS OF FEATURES ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER ITEM THAT MIGHT INTERFERE WITH THE PROPOSED CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.

F. SEPARATE AND STOCK PILE ALL EXCAVATED MATERIALS SUITABLE FOR BACKFILL, ALL EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.

3.2 BACKFILL:

A. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING EXPIRATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST-IN-PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.

1. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL BE REMOVED AND THE EXCAVATION CLEANED OF ALL TRASH, DEBRIS AND UNSUITABLE MATERIALS.

2. BACKFILL BY PLACING AND COMPACTING SUITABLE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAT 8-INCHES LOOSE THICKNESS AND COMPACTED. WHERE HAND OPERATED COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4 INCHES IN LOOSE DEPTH AND COMPACTED.

3. WHENEVER THE DENSITY TESTING INDICATES THAT THE CONTRACTOR HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE SPECIFICATION REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY, SUCH AS DISKING AND DRYING, ADDING WATER, OR INCREASING THE COMPACTIVE EFFORT TO MEET THE MINIMUM COMPACTION REQUIREMENTS.

B. THOROUGHLY COMPACT EACH LAYER OF BACKFILL TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

3.3 TRENCH EXCAVATION:

A. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE GENERAL CONTRACTOR. PROVIDE SHORING, SHEETING AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE TRENCH WALLS.

B. EXTEND THE TRENCH WIDTH A MINIMUM OF 7 INCHES BEYOND THE OUTSIDE EDGE OF THE OUTERMOST CONDUIT.

C. WHEN SOIL YIELDING, OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED. BACKFILL AT THE REQUIRED TRENCH TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE REQUIRED ELEVATION AND BACKFILL WITH GRANULAR BEDDING MATERIAL.

3.4 TRENCH BACKFILL:

A. PROVIDE GRANULAR BEDDING MATERIAL IN ACCORDANCE WITH THE DRAWING AND THE UTILITY REQUIREMENTS.

B. NOTIFY THE GENERAL CONTRACTOR 24 HOURS IN ADVANCE OF BACKFILLING.

C. CONDUCT UTILITY CHECK TESTS BEFORE BACKFILLING, BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.

D. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6-INCH UNCOMPACTED LIFTS UNTIL 12 INCHES OVER THE CONDUITS. SOLIDLY RAM AND TRAMP BACKFILL INTO SPACE AROUND CONDUITS.

E. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE OR UNBALANCED LOADING.

F. ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 8 INCH MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.

G. COMPACT FINAL TRENCH BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE EXISTING UNDISTURBED MATERIAL IMMEDIATELY ADJACENT TO THE TRENCH BUT NO LESS THAN A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

3.5 AGGREGATE ACCESS ROAD:

A. CLEAR GRUB, STRIP AND EXCAVATE FOR THE ACCESS ROAD TO THE LINES AND GRADES INDICATED ON THE DRAWINGS. SCARIFY TO A DEPTH OF 6INCHES AND PROOF-ROLL. ALL HOLES, RUTS , SOFT PLACES AND OTHER DEFECTS SHALL BE CORRECTED.

B. THE ENTIRE SUBGRADE SHALL BE COMPACTED TO NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 1557.

C. AFTER PREPARATION OF THE SUBGRADE IS COMPLETE THE GEOTEXTILE FABRIC (MIRAFI 500XI) SHALL BE INSTALLED TO THE LIMITS INDICATED ON THE DRAWINGS BY ROLLING THE FABRIC OUT LONGITUDINALLY ALONG THE ROADWAY THE FABRIC SHALL NOT BE DRAGGED ACROSS THE SUBGRADE. PLACE THE ENTIRE ROLL IN A SINGE OPERATION, ROLLING OUT AS SMOOTHLY AS POSSIBLE.

1. OVERLAPS PARALLEL TO THE ROADWAY WILL BE PERMITTED AT THE CENTERLINE AND AT LOCATIONS BEYOND THE ROADWAY SURFACE WIDTH (I.E. WITHIN THE SHOULDER WIDTH) ONLY. NO LONGITUDINAL OVERLAPS SHALL BE LOCATED BETWEEN THE CENTERLINE AND THE SHOULDER. PARALLEL OVERLAPS SHALL BE A MINIMUM OF 3 FEET WIDE.

2. TRANSVERSE (PERPENDICULAR TO THE ROADWAY) OVERLAPS AT THE END OF A ROLL, SHALL OVERLAPS IN THE DIRECTION OF THE AGGREGATE PLACEMENT (PREVIOUS ROLL ON TOP) AND SHALL HAVE A MINIMUM LENGTH OF 3 FEET.

3. ALL OVERLAPS SHALL BE PINNED WITH STAPLES OF NAILS A MINIMUM O 10 INCHES LONG TO INSURE POSITIONING DURING PLACEMENT OF AGGREGATE. PIN LONGITUDINAL SEAMS AT 25 FOOT CENTERS AND TRANSVERSE SEAMS EVERY 5 FEET.

D. THE AGGREGATE BASE AND SURFACE COURSES SHALL BE CONSTRUCTED IN LAYERS NOT GEOTEXTILE FABRIC SHALL BE END-DUMPED ON THE FABRIC FROM THE FREE END OF THE FABRIC OR OVER PREVIOUSLY PLACED AGGREGATE. THE FIRST LIFT SHALL BE BLADED DOWN TO A THICKNESS OF OF 8 INCHES PRIOR TO COMPACTION. AT NO TIME SHALL EQUIPMENT EITHER TRANSPORTING THE AGGREGATE OR GRADING THE AGGREGATE BE PERMITTED ON THE ROADWAY WITH LESS THAN 4 INCHES OF MATERIAL COVERING THE FABRIC.

E. THE AGGREGATE SHALL BE IMMEDIATELY COMPACTED TO NOT LESS THAT 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE PROCTOR TEST, ASTM D 1557 WITH A TAMPING ROLLER, OR WITH A PNEUMATIC-TIRED ROLLER, OR WITH A VIBRATORY MACHINE OR ANY COMBINATION OF THE ABOVE. THE TOP LAYER SHALL BE GIVEN A FINAL ROLLING WITH A THREE-WHELL OR TANDEM ROLLER.

3.6 FINISH GRADING:

A. PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION, GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.

B. UTILIZE SATISFACTORY FILL MATERIAL, RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF FILLS, EMBANKMENTS AND FOR REPLACEMENTS OF REMOVED UNSUITABLE MATERIALS.

C. ACHIEVE FINISHED GRADE BY PLACING A MINIMUM OF 4 INCHES OF 1/2"-3/4" CRUSHED STONE ON TOP SOIL STABILIZER FABRIC.

D. REPAIR ALL ACCESS ROADS AND SURROUND AREAS USED DURING THE COURSE OF THIS WORK TO THEIR ORIGINAL CONDITION.

3.7 ASPHALT PAVING ROAD:

A. DIVISION 600-KDOT FLEXIBLE PAVEMENT (UPDATE PER LOCAL DOT)

B. SECTION 403-MODOT ASPHALT CONCRETE PAVEMENT.

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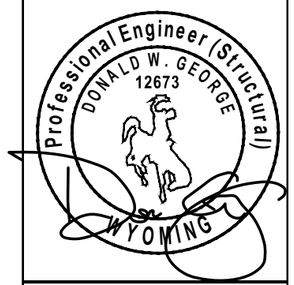
Information Technology

GEOSTRUCTURAL
PO BOX 2621, BOISE, ID 83701
P: 530.539.4787
E: CONTACT@GEOSTRUCTURAL.COM
WWW.GEOSTRUCTURAL.COM

REVISIONS

REV	DATE	DESCRIPTION	INT
0	08/06/18	ISSUED FOR CONSTRUCTION	GGD

CHECKED BY: DWG



SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

GN-2

ELECTRICAL NOTES:

PART 1 - GENERAL

1.1 CONTRACTOR RESPONSIBILITIES
- A. CONTRACTOR SHALL INSPECT THE EXISTING SITE CONDITIONS PRIOR TO SUBMITTING BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE SUBCONTRACTORS FUNCTIONS. THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.
- B. THE SUBCONTRACTOR SHALL OBTAIN PERMITS, LICENSES, MAKE ALL DEPOSITS, AND PAY ALL FEES REQUIRED FOR THE CONSTRUCTION PERFORMANCE FOR THE WORK UNDER THIS SECTION.
- C. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL SYSTEMS AND COMPONENTS COVERED UNDER THIS SECTION. THE SUBCONTRACTOR SHALL VERIFY ALL DIMENSIONS. DRAWINGS SHALL NOT BE SCALED TO DETERMINED DIMENSIONS.

1.2 LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES:
- A. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, AND ALL APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUES AND CODES. CONDUIT BENDS SHALL BE THE RADIUS BEND FOR THE TRADE SIZE OF CONDUIT IN COMPLIANCE WITH THE LATEST EDITIONS OF NEC.

1.3 REFERENCES:
- A. THE PUBLICATIONS LISTED BELOW ARE PART OF THIS SPECIFICATION. EACH PUBLICATION SHALL BE THE LATEST REVISION AND ADDENDUM IN EFFECT ON THE DATE. THIS SPECIFICATION IS ISSUED FOR THE CONSTRUCTION UNLESS OTHER WISE NOTED. EXCEPT AS MODIFIED BY THE REQUIREMENT SPECIFIED HEREIN OR THE DETAILS OF THE DRAWINGS. WORK INCLUDED IN THIS SPECIFICATION SHALL CONFORM TO THE APPLICABLE PROVISION OF THESE PUBLICATIONS.
  1. ANSI/IEEE (AMERICAN NATION STANDARDS INSTITUTE)
  2. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)
  3. ICE (INSULATED CABLE ENGINEERS ASSOCIATION)
  4. NEMA (NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION)
  5. NEPA (NATIONAL ENVIRONMENTAL PROTECTION ASSOCIATION)
  6. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
  7. OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION)
  8. UL (UNDERWRITERS LABORATORIES, INC.)
  9. AT&T MOBILITY GROUNDING STANDARD ND-00071
  10. IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS)

1.4 SCOPE OF WORK:
- A. WORK UNDER THIS SECTION SHALL CONSIST OF FURNISHING ALL LABOR, MATERIAL, AND ASSOCIATED SERVICES REQUIRED TO COMPLETE REQUIRED CONSTRUCTION AND BE OPERATIONAL.
- B. ALL ELECTRICAL EQUIPMENT UNDER THIS CONTRACT SHALL BE PROPERLY TESTED, ADJUSTED, AND ALIGNED BY THE SUBCONTRACTOR.
- C. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATING, DRAINING, TRENCHES, BACKFILLING, AND REMOVAL OF EXCESS DIRT.
- D. THE SUBCONTRACTOR SHALL FURNISH TO THE OWNER WITH CERTIFICATES OF FINAL INSPECTION AND APPROVAL FROM THE INSPECTION AUTHORITIES HAVING JURISDICTION.
- E. THE SUBCONTRACTOR SHALL PREPARE A COMPLETE SET OF AS-BUILT DRAWINGS, DOCUMENT ALL WIRING EQUIPMENT CONDITIONS, AND CHANCES WHILE COMPLETING THIS CONTRACT. THE AS-BUILT DRAWINGS SHALL BE SUBMITTED AT THE COMPLETION OF THE PROJECT.

PART 2 - PRODUCTS

2.1 GENERAL:
- A. ALL MATERIALS AND EQUIPMENT SHALL BE UL LISTED, NEW AND FREE FROM DEFECTS.
- B. All ITEMS OF MATERIALS AND EQUIPMENT SHALL BE ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION AS SUITABLE FOR THE USE INTENDED.
- C. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OR APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
- D. ALL OVER CURRENT DEVICES HAVE AN INTERRUPTING CURRENT RATING EQUAL TO OR GREATER THAT THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED. 10000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT.

2.2 MATERIALS AND EQUIPMENT:
- A. CONDUIT:
  1. RIGID METAL CONDUIT (RMC) SHALL BE HOTT-DIPPED GALVANIZED INSIDE AND OUTSIDE INCLUDING ENDS AND THREADS AND ENAMELED OR LACQUERED IN ADDITION TO GALVANIZING.
  2. LIQUID TIGHT FLEXIBLE METAL CONDUIT SHALL BE UL LISTED.
  3. CONDUIT CLAMPS, STRAPS AND SUPPORTS SHALL BE STEEL OR MALLEABLE IRON. ALL FITTINGS SHALL BE COMPRESSION AND CONCRETE TIGHT TYPE. GROUNDING BUSHINGS WITH INSULATED THROATS SHALL BE INSTALLED ON ALL CONDUIT TERMINATIONS.
  4. NONMETALLIC CONDUIT AND FITTINGS SHALL BE SCHEDULE 40 PVC. INSTALL USING SOLVENT-CEMENT-TYPE JOINTS AS RECOMMENDED BY THE MANUFACTURER.
- B. CONDUCTORS AND CABLE:
  1. CONDUCTORS AND CABLE SHALL BE FLAME-RETARDANT, MOISTURE AND HEAT RESISTANT THERMOPLASTIC, SINGLE CONDUCTOR, COPPER, TYPE THHN/THWN-2, 600 VOLT, SIZE AS INDICATED, 12 AWG SHALL BE THE MINIMUM SIZE CONDUCTOR USED.
  2. 10 AWG AND SMALLER CONDUCTOR SHALL BE SOLID OR STRANDED AND 6 AWG AND LARGER CONDUCTOR SHALL BE STRANDED.
  3. SOLDERLESS, COMPRESSION-TYPE CONNECTORS SHALL BE USED FOR TERMINATION OF ALL STRANDED CONDUCTORS.
  4. STRAIN-RELIEF SUPPORTS GRIPS SHALL BE HUBBELL KELLEMS OR APPROVED EQUAL. CABLES SHALL BE SUPPORTED IN ACCORDANCE WITH THE NEC AND CABLE MANUFACTURERS RECOMMENDATIONS.
  5. ALL CONDUCTORS SHALL BE TAGGED AT BOTH ENDS OF THE CONDUCTOR, AT ALL PULL BOXES, J-BOXES, EQUIPMENT AND CABINETS AND SHALL BE IDENTIFIED WITH APPROVED PLASTIC TAGS (ACTION CRAFT, BRADY, OR APPROVED EQUAL).
- C. DISCONNECT SWITCHES:
  1. DISCONNECT SWITCHES SHALL BE HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, QUICK-BREAK, EXTERNALLY OPERABLE, HANDLE LOCKABLE AND INTERLOCK WITH COVER IN CLOSED POSITION RATING AS INDICATED, UL LABELED FURNISHED IN NEMA 3R ENCLOSURE, SQUARE-D OR APPROVED EQUAL.
- D. CHEMICAL ELECTROLYTIC GROUNDING SYSTEM:
  1. INSTALL CHEMICAL GROUND AS REQUIRED. THE SYSTEM SHALL BE ELECTROLYTIC MAINTENANCE FREE ELECTRODE CONSISTING OF RODS WITH A MINIMUM OF 2 AWG CU EXOTHERMALLY WELDED PIGTAIL, PROTECTIVE BOXES, AND BACKFILL MATERIAL. MANUFACTURER SHALL BE LYNCOLE XIT GROUND ROD TYPES K2-(*) CS OR K2L-(*) CS (*) LENGTH AS REQUIRED.
  2. GROUND ACCESS BOX SHALL BE A POLY-PLASTIC BOX FOR NON-TRAFFIC APPLICATIONS. INCLUDING BOLT DOWN FLUSH COVER WITH "BREATHER" HOLES, XIT MODEL #XB-22. ALL DISCONNECT SWITCHES AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMICOID NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS ID NUMBERING, AND THE ELECTRICAL POWER SOURCE.
  3. BACKFILL MATERIAL SHALL BE LYNCONITE AND LYNCOLE GROUNDING GRAVEL.
- E. SYSTEM GROUNDING:
  1. ALL GROUNDING COMPONENTS SHALL BE TINNED AND GROUNDING CONDUCTOR SHALL BE 2 AWG BARE, SOLID, TINNED, COPPER, ABOVE GRADE GROUNDING CONDUCTORS SHALL BE INSULATED WHERE NOTED.
  2. GROUNDING BUSES SHALL BE BARE, TINNED, ANNEALED COPPER BARS OF RECTANGULAR CROSS SECTION. STANDARD BUS BARS MGB, SHALL BE FURNISHED AND INSTALLED BY THE SUBCONTRACTOR, THEY SHALL NOT BE FABRICATED OR MODIFIED IN THE FIELD. ALL GROUNDING BUSSES SHALL BE IDENTIFIED WITH MINIMUM 3/4" LETTERS BY WAY OF STENCILING OR DESIGNATION PLATE.
  3. CONNECTORS SHALL BE HIGH-CONDUCTIVITY, HEAVY DUTY, LISTED AND LABELED AS GROUNDED CONNECTORS FOR THE MATERIALS USED. USE TWO-HOLD COMPRESSION LUGS WITH HEAT SHRINK FOR MECHANICAL CONNECTIONS.
  4. EXOTHERMIC WELDED CONNECTIONS SHALL BE PROVIDED IN KIT FORM AND SELECTED FOR THE SPECIFIC TYPES, SIZES AND COMBINATIONS OF CONDUCTORS AND OTHER ITEMS TO BE CONNECTED.
  5. GROUND RODS SHALL BE COPPER-CLAD STEEL WITH HIGH-STRENGTH STEEL CORE AND ELECTROLYTIC-GRADE COPPER OUTER SHEATH, MOLTEN WELDED TO CORE, 5/8"X10'-0". ALL GROUNDING RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES.
  6. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS IN COMPLIANCE WITH THE SPECIFICATIONS AND NEC. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, DISCONNECT SWITCHES, STARTERS AND EQUIPMENT CABINETS.
- F. OTHER MATERIALS:
  1. THE SUBCONTRACTOR SHALL PROVIDE OTHER MATERIALS, THOUGH NOT SPECIFICALLY DESCRIBED, WHICH ARE REQUIRED FOR A COMPLETELY OPERATIONAL SYSTEM AND PROPER INSTALLATION OF THE WORK.
  2. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR REQUIRED BY NEC.
- G. PANELS AND LOAD CENTERS:
  1. ALL PANEL DIRECTORIES SHALL BE TYPEWRITTEN.

PART 3 - EXECUTION

3.1 GENERAL:
- A. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- B. EQUIPMENT SHALL BE TIGHTLY COVERED AND PROTECTED AGAINST DIRT OR WATER, AND AGAINST CHEMICAL OR MECHANICAL INJURY DURING INSTALLATION AND CONSTRUCTION PERIODS.

3.2 LABOR AND WORKMANSHIP:
- A. ALL LABOR FOR THE INSTALLATION OF MATERIALS AND EQUIPMENT FURNISHED FOR THE ELECTRICAL SYSTEM SHALL BE INSTALLED BY EXPERIENCED WIREMEN, IN A NEAT AND WORKMAN-LIKE MANNER.
- B. ALL ELECTRICAL EQUIPMENT SHALL BE ADJUSTED, ALIGNED AND TESTED BY THE SUBCONTRACTOR AS REQUIRED TO PRODUCE THE INTENDED PERFORMANCE.
- C. UPON COMPLETION OF WORK, THE SUBCONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED EQUIPMENT, REMOVE ALL LABELS AND ANY DEBRIS, CRATING OR CARTONS AND LEAVE THE INSTALLATION FINISHED AND READY FOR OPERATION.

3.3 COORDINATION:
- A. THE SUBCONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRICAL ITEMS WITH THE OWNER-FURNISHED EQUIPMENT DELIVERY SCHEDULE TO PREVENT UNNECESSARY DELAYS IN THE TOTAL WORK.

3.4 INSTALLATION:
- A. CONDUIT:
  1. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT AS SPECIFIED. NO CONDUIT OR TUBING OF LESS THAN 3/4 INCH TRADE SIZE.
  2. PROVIDE RIGID PVC SCHEDULE 80 CONDUITS FOR ALL RISERS, RMC OTHERWISE NOTED. EMT MAY BE INSTALLED FOR EXTERIOR CONDUITS WHERE NOT SUBJECT TO PHYSICAL DAMAGE.
  3. THE INSTALLATION OF SCHEDULE 40 PVC AND RMC CONDUITS SHALL BE 24 INCHES MINIMUM DEPTH. ALL 90 DEGREE BENDS SHALL BE RMS. EXPANSION JOINTS ARE REQUIRED ON ALL CONDUIT RISERS.
  4. USE GALVANIZED FLEXIBLE STEEL CONDUIT WHERE DIRECT CONNECTION TO EQUIPMENT WITH MOVEMENT, VIBRATION, OR FOR ESE OF MAINTENANCE. USE LIQUID TIGHT, FLEXIBLE METAL CONDUIT FOR OUTDOOR APPLICATIONS. INSTALL GALVANIZED FLEXIBLE STEEL CONDUIT AT ALL POINTS OF CONNECTION TO EQUIPMENT MOUNTED ON SUPPORT TO ALLOW FOR EXPANSION AND CONTRACTION.
  5. A RUN OF CONDUIT BETWEEN BOXES OR EQUIPMENT SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF THREE QUARTER-BENDS. CONDUIT BEND SHALL BE MADE WITH THE UL LISTED BENDER OR FACTOR 90 DEGREE ELBOWS MAY BE USED.
  6. FIELD FABRICATED CONDUITS SHALL BE CUT SQUARE WITH A CONDUIT CUTTING TOOL AND REAMED TO PROVIDE A SMOOTH INSIDE SURFACE.
  7. PROVIDE INSULATED GROUNDING BUSHING FOR ALL CONDUITS.
  8. SUBCONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL CONDUITS DURING CONSTRUCTION. TEMPORARY OPENING IN THE CONDUIT SYSTEM SHALL BE PLUGGED OR CAPPED TO PREVENT ENTRANCE OF MOISTURE OR FOREIGN MATTER. SUBCONTRACTOR SHALL REPLACE ANY CONDUITS CONTAINING FOREIGN MATERIALS THAT CANNOT BE REMOVED.
  9. ALL CONDUITS SHALL BE SWABBED CLEAN BY PULLING AN APPROPRIATE SIZE MANDREL THROUGH THE CONDUIT BEFORE INSTALLATION OF CONDUCTORS AR CABLES. CONDUIT SHALL BE FREE OF DIRT AND DEBRIS.
  10. INSTALL PULL STRINGS IN ALL CLEAN EMPTY CONDUITS. IDENTIFY PULL STRINGS AT EACH END.
  11. INSTALL 2" HIGHLY VISIBLE AND DETECTABLE TAPE 12" ABOVE ALL UNDERGROUND CONDUITS AND CONDUCTORS.
  12. CONDUITS SHALL BE INSTALLED IN SUCH A MANNER AS TO INSURE AGAINST COLLECTION OF TRAPPED CONDENSATION.
  13. PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS TO ALLOW FOR RACEWAYS AND CABLES TO BE ROUTED THROUGH THE BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS. SLEEVES AND/OR PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE EFFECTIVELY SEALED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL OR STRUCTURE. FIRE STOPS AT FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE, FIRE, AND FUMES. ALL MATERIAL SHALL BE UL APPROVED FOR THIS PURPOSE.

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GEOSTRUCTURAL
PO BOX 2621, BOISE, ID 83701
P: 530.539.4787
E: CONTACT@GEOSTRUCTURAL.COM
WWW.GEOSTRUCTURAL.COM

REVISIONS

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Professional Engineer (Structural)
DONALD W. GEORGE
12673
WYOMING

SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

GN-3

ELECTRICAL NOTES (CONT.):

B. CONDUCTORS AND CABLE:

1. ALL POWER WIRING SHALL BE COLOR CODED AS FOLLOWS:

DESCRIPTION	208/240/120 VOLT SYSTEMS
PHASE A	BLACK
PHASE B	RED
PHASE C	BLUE
NEUTRAL	WHITE
GROUNDING	GREEN

2. SPLICES SHALL BE MADE ONLY AT OUTLETS, JUNCTION BOXES, OR ACCESSIBLE RACEWAY CONDULETS APPROVED FOR THIS PURPOSE.

3. PULLING LUBRICANTS SHALL BE UL APPROVED, SHALL USE NYLON OR HEMP ROPE FOR PULLING CONDUCTOR OR CABLES INTO THE CONDUIT.

4. CABLES SHALL BE NEATLY TRAINED, WITHOUT INTERLACING, AND BE OF SUFFICIENT LENGTH IN ALL BOXES & EQUIPMENT TO PERMIT MAKING A NEAT ARRANGEMENT. CABLES SHALL BE SECURED IN A MANNER TO AVOID TENSION ON CONDUCTORS OF TERMINALS. CONDUCTORS SHALL BE PROTECTED FROM MECHANICAL INJURY AND MOISTURE. SHARP BENDS OVER CONDUIT BUSHINGS ARE PROHIBITED. DAMAGED CABLES SHALL BE REMOVED AND REPLACED AT THE SUBCONTRACTORS EXPENSE.

C. DISCONNECT SWITCHES:

1. INSTALL DISCONNECT SWITCHES LEVEL AND PLUMB. CONNECT TO WIRING SYSTEM AND GROUNDING SYSTEM AS INDICATED.

D. GROUNDING:

1. ALL METALLIC PARTS OF ELECTRICAL EQUIPMENT WHICH DO NOT CARRY CURRENT SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING MANUFACTURER, AT&T MOBILITY GROUNDING STANDARD ND-0071, ND-00135, AND THE NATIONAL ELECTRICAL CODE.

2. PROVIDE ELECTRIC GROUNDING AND BONDING SYSTEM INDICATED WITH ASSEMBLY OF MATERIALS, INCLUDING GROUNDING ELECTRODES, BONDING JUMPERS AND ADDITIONAL ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.

3. ALL GROUNDING CONDUCTORS SHALL PROVIDE A STRAIGHT DOWNWARD PATH TO GROUND WITH GRADUAL BEND AS REQUIRED. GROUNDING CONDUCTORS SHALL NOT BE LOOPED OR SHARPLY BENT. ROUTE GROUNDING CONNECTIONS AND CONDUCTORS TO GROUND IN THE SHORTEST AND STRAIGHTEST PATHS POSSIBLE TO MINIMIZE TRANSIENT VOLTAGE RISES.

4. BUILDINGS AND/OR NEW TOWERS GREATER THAN 75 FEET IN HEIGHT AND WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE. THE SUBCONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM. THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 AWG COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM. THE BUILDING STEEL COLUMNS LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATERLINE (FERROUS OR NONFERROUS METAL PIPING ONLY.)

5. TIGHTEN GROUNDING AND BONDING CONNECTORS. INCLUDING SCREWS, BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES FOR CONNECTORS AND BOLTS, WHERE MANUFACTURER'S TORQUING REQUIREMENTS ARE NOT AVAILABLE, TIGHTEN CONNECTIONS TO COMPLY WITH TIGHTENING TORQUE VALUES SPECIFIED IN UL TO ASSURE PERMANENT AND EFFECTIVE GROUNDING.

6. SUBCONTRACTOR SHALL VERIFY THE LOCATIONS OF GROUNDING TIE-IN-POINTS TO THE EXISTING GROUNDING SYSTEM. ALL UNDERGROUND GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

7. ALL GROUNDING CONNECTIONS SHALL BE INSPECTED FOR TIGHTNESS, EXOTHERMIC WELDED CONNECTIONS SHALL BE APPROVED BY THE INSPECTOR HAVING JURISDICTION BEFORE BEING PERMANENTLY CONCEALED.

8. APPLY CORROSION-RESISTANCE FINISH TO FIELD CONNECTIONS AND PLACES WHERE FACTORY APPLIED PROTECTIVE COATINGS HAVE BEEN DESTROYED. USED KOPR-SHIELD ANIT-OXIDATION COMPOUND O ALL COMPRESSION GROUNDING CONNECTIONS.

9. A SEPARATE, CONTINUOUS, INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUITS.

10. BOND ALL INSULATED GROUNDING BUSHING WITH A BARE 6 AWG GROUNDING CONDUCTOR TO A GROUND BAR.

11. DIRECT BURIED GROUNDING CONDUCTORS SHALL BE INSTALLED AT A NOMINAL DEPTH OF 36" MINIMUM BELOW GRADE, OR 6" BELOW THE FROST LINE, USE GREATER OF THE TWO DISTANCES.

12. ALL GROUNDING CONDUCTORS EMBEDDED IN OR PENETRATING CONCRETE SHALL BE INSTALLED IN SCHEDULE 40 PVC CONDUIT.

13. THE INSTALLATION OF CHEMICAL ELECTROLYTIC GROUNDING SYSTEM IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REMOVE SEALING TAPE FROM LEACHING AND BREATHER HOLES. INSTALL PROTECTIVE BOX FLUSH WITH GRADE.

14. DRIVE GROUND RODS UNTIL TOPS ARE A MINIMUM DISTANCE OF 36" DEPTH OR 6" BELOW FROST LINE, USING THE GREATER OF THE TWO DISTANCES.

15. IF COAX ON THE ICE BRIDGE IS MORE THAN 6 FT. FROM THE GROUNDING BAR AT THE BASE OF THE TOWER, A SECOND GROUNDING BAR WILL BE NEEDED AT THE END OF THE ICE BRIDGE, TO GROUND THE COAX CABLE GROUNDING KITS AND IN-LIN ARRESTERS.

16. SUB CONTRACTORS SHALL REPAIR, AND/OR REPLACE EXISTING GROUNDING SYSTEM COMPONENTS DAMAGED DURING CONSTRUCTION AT THE SUBCONTRACTORS EXPENSE.

3.5 ACCEPTANCE TESTING:

A. CERTIFIED PERSONNEL USING CERTIFIED EQUIPMENT SHALL PERFORM REQUIRED TESTS AND SUBMIT WRITTEN TEST REPORTS UPON COMPLETION.

B. WHEN MATERIAL AND/OR WORKMANSHIP IS FOUND NOT TO COMPLY WITH THE SPECIFIED REQUIREMENTS, THE NON COMPLYING ITEMS SHALL BE REMOVED FROM THE PROJECT SITE AND REPLACED WITH ITEMS COMPLYING WITH THE SPECIFIED REQUIREMENTS PROMPTLY AFTER RECEIPT OF NOTICE FOR NON-COMPLIANCE.

C. TEST PROCEDURES:

1. ALL FEEDERS SHALL HAVE INSULATION TESTED AFTER INSTALLATION, BEFORE CONNECTION TO DEVICES. THE CONDUCTORS SHALL TEST FREE FROM SHORT CIRCUITS AND GROUNDS. TESTING SHALL BE FOR ONE MINUTE USING 1000V DC. PROVIDE WRITTEN DOCUMENTATION FOR ALL TEST LISTED TO SUBCONTRACTOR.

2. PRIOR TO ENERGIZING CIRCUITRY, TEST WIRING DEVICES FOR ELECTRICAL CONTINUITY AND PROPER POLARITY CONNECTIONS.

3. MEASURE AND RECORD VOLTAGES BETWEEN PHASES AND BETWEEN PHASE CONDUCTORS AND NEUTRALS. SUBMIT A REPORT OF MAXIMUM AND MINIMUM VOLTAGES.

4. PERFORM GROUNDING TEST TO MEASURE GROUNDING RESISTANCE OF GROUNDING SYSTEM USING THE IEEE STANDARD 3-POINT :FALL-OF-POTENTIAL" METHOD. PROVIDE PLOTTED TEST VALUES AND LOCATION SKETCH. NOTIFY THE ENGINEER IMMEDIATELY IF MEASURE VALUE IS OVER 5 OHMS.

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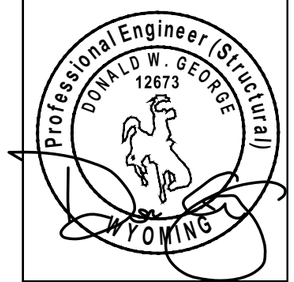

SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

GN-4

GENERAL NOTES:

1. THIS FACILITY IS EXEMPT FROM HANDICAP REQUIREMENTS PER 2010 CBC SECTION 1105B.3.4 EXCEPTION #1. THIS FACILITY IS NON-OCCUPIABLE SPACE AND ENTERED ONLY BY SERVICE PERSONNEL. THIS SPACE IS NOT FOR HUMAN OCCUPANCY.
2. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO SUBMITTING HIS BID. ANY DISCREPANCIES, CONFLICTS OR OMISSIONS SHALL BE REPORTED TO THE ENGINEER PRIOR TO SUBMITTING BIDS, AND PROCEEDING WITH ANY WORK.
3. THE CONTRACTOR SHALL NOTIFY ENGINEER OF ANY ERRORS, OMISSIONS, OR DISCREPANCIES AS THEY MAY BE DISCOVERED IN THE PLANS, SPECIFICATIONS, & NOTES PRIOR TO STARTING CONSTRUCTION. INCLUDING BUT NOT LIMITED BY DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY ERRORS, OMISSION, OR INCONSISTENCY AFTER THE START OF CONSTRUCTION WHICH HAS NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER AND SHALL INCUR ANY EXPENSES TO RECTIFY THE SITUATION. THE METHOD OF CORRECTION SHALL BE APPROVED BY THE ARCHITECT OR THE ENGINEER RESPONSIBLE OF THE PROJECT.
4. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR HAS THE RESPONSIBILITY TO LOCATE ALL EXISTING UTILITIES, WHETHER OR NOT SHOWN ON THE PLANS, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR OR SUBCONTRACTOR SHALL BEAR THE EXPENSE OF REPAIRING OR REPLACING ANY DAMAGE TO THE UTILITIES CAUSED DURING THE EXECUTION OF THE WORK. CONTACT USA DIG ALERT @ 800-227-2600.
5. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL PROTECT ALL AREAS FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW OR EXISTING SURFACES, STRUCTURES OR EQUIPMENT SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF THE PROPERTY OWNER. THE CONTRACTOR SHALL BEAR THE EXPENSE OF REPAIRING OR REPLACING ANY DAMAGED AREAS.
6. A COPY OF THE APPROVED PLANS SHALL BE KEPT IN PLACE SPECIFIED BY THE GOVERNING AGENCY, AND BY LAW SHALL BE AVAILABLE FOR INSPECTION AT ALL TIMES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL CONSTRUCTION SETS REFLECT THE SAME INFORMATION AS THE APPROVED PLANS. THE CONTRACTOR SHALL ALSO MAINTAIN ONE SET OF PLANS AT THE SITE FOR THE PURPOSE OF DOCUMENTING ALL AS-BUILT CHANGES, REVISIONS, ADDENDA, OR CHANGE ORDERS. THE CONTRACTOR SHALL FORWARD THE AS-BUILT/HIRED DRAWINGS TO THE ARCHITECT OR THE ENGINEER RESPONSIBLE OF THE PROJECT AT THE CONCLUSION OF THE PROJECT.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE SITE WHILE THE WORK IS IN PROGRESS UNTIL THE JOB IS COMPLETE.
8. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY POWER, WATER, AND TOILET FACILITIES AS REQUIRED BY THE PROPERTY OWNER OR GOVERNING AGENCY.
9. ALL CONSTRUCTION THROUGH THE PROJECT SHALL CONFORM TO THE LATEST C.B.C, AND ALL OTHER GOVERNING CODES, INCLUDING THE CALIFORNIA ADMINISTRATIVE CODES TITLE 8, 19, AND 24. THE MOST RESTRICTIVE CODE SHALL GOVERN.
10. THE CONTRACTOR AND SUB CONTRACTOR SHALL COMPLY WITH ALL LOCAL AND STATE REGULATIONS INCLUDING ALL OSHA REQUIREMENTS.
11. WHEN REQUIRED STORAGE OF MATERIALS OCCURS, THEY SHALL BE EVENLY DISTRIBUTED OVER THE FLOOR OR ROOF SO AS NOT TO EXCEED THE DESIGNED LIVE LOADS FOR THE STRUCTURE. TEMPORARY SHORTING OR BRACING SHALL BE PROVIDED WHERE THE STRUCTURE OR SOIL HAS NOT ATTAINED THE DESIGN STRENGTH FOR THE CONDITIONS PRESENT.
12. THE CONTRACTOR SHALL SUPERVISE AND COORDINATE ALL WORK, USING HIS PROFESSIONAL KNOWLEDGE AND SKILLS, HE IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES, AND SEQUENCING AND COORDINATING ALL PORTIONS OF THE WORK UNDER THE PROJECT.
13. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS WITH RESPECT TO THE WORK TO COMPLETE THE PROJECT, BUILDING PERMIT APPLICATIONS SHALL BE FILED BY THE OWNER OR AUTHORIZED AGENT. CONTRACTOR SHALL OBTAIN THE PERMIT AND MAKE FINAL PAYMENT OF SAID DOCUMENT.
14. ALL DIMENSIONS TAKE PRECEDENCE OVER SCALE. DRAWINGS ARE NOT TO BE SCALED UNDER ANY CIRCUMSTANCES.
15. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING, BRACING, FRAMING, HANGERS OR SUPPORTS FOR THE INSTALLATION OF ITEMS INDICATED ON THE DRAWINGS.
16. THE CONTRACTOR SHALL PROVIDE THE FIRE MARSHAL OR UL APPROVED MATERIALS TO FILL/SEAL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES.
17. NEW CONSTRUCTION ADDED TO EXISTING CONSTRUCTION SHALL BE MATCHED IN FORM, TEXTURE, MATERIAL, AND PAINT COLOR EXCEPT AS NOTED IN THE PLANS.
18. THE CONTRACTOR IS TO PROVIDE PORTABLE FIRE EXTINGUISHERS HAVING A MINIMUM 28: 10-B:C RATING WITHIN 75 FT. OF TRAVEL TO ALL PORTIONS OF THE CONSTRUCTION AREA. (2010 CC SECTION 906-1-1 &7 AND SECTION 906.3.1)
19. MATERIALS TESTING SHALL BE TO THE LATEST STANDARDS AVAILABLE AS REQUIRED BY THE LOCAL GOVERNING AGENCY RESPONSIBLE FOR APPROVING THE RESULTS.
20. ALL GENERAL NOTES AND STANDARD DETAILS ARE THE MINIMUM REQUIREMENTS TO BE USED IN CONDITIONS WHICH ARE NOT SPECIFICALLY SHOWN OTHERWISE.
21. ALL DEBRIS AND REFUSE IS TO BE REMOVED FROM THE PROJECT. PREMISES SHALL BE LEFT N A CLEAN BROOM FINISHED CONDITION AT ALL TIMES.
22. BUILDING INSPECTORS AND/OR OTHER BUILDING OFFICIALS ARE TO BE NOTIFIED PRIOR TO ANY GRADING AND CONSTRUCTION EFFORT AS MANDATED BY THE GOVERNING AGENCY.
23. ALL SYMBOLS AND ABBREVIATIONS ARE CONSIDERED CONSTRUCTION INDUSTRY STANDARDS, IF A CONTRACTOR HAS A QUESTION REGARDING THEIR EXACT MEANING THE ARCHITECT OR THE ENGINEER RESPONSIBLE OF THE PROJECT SHALL BE NOTIFIED FOR CLARIFICATIONS.

GENERAL FIRE NOTES:

1. BUILDINGS UNDERGOING CONSTRUCTION, ALTERATION OR DEMOLITION SHALL BE IN ACCORDANCE WITH 2010 CFC SECTION 1401 AND ALL GOVERNING CODES.
2. ADDRESS SHALL BE PROVIDED FOR ALL NEW AND EXISTING BUILDINGS IN A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY.(2010 CFC SECTION 505.1)
3. DECORATIVE MATERIALS SHALL BE MAINTAINED IN A FLAME-RETARDANT CONDITION.(2010 CFC SECTION 807-1.2)
4. PORTABLE FIRE EXTINGUISHERS: AT LEAST ONE FIRE EXTINGUISHER WITH A MINIMUM RATING OF 2-A-10B:C SHALL BE PROVIDED WITHIN 75 FEET MAXIMUM TRAVEL DISTANCE FOR EACH 6000 SQUARE FEET OR PORTION THEREOF ON EACH FLOOR.(2010 CFC SECTION 906.1.1 & 7 AND SECTION 906.3.1)

GENERAL NOTES **3**

ABBR.	DEFINITION
A.B.	ANCHOR BOLT
ABV.	ABOVE
ACCA	ANTENNA CABLE COVER ASSEMBLY
ADDL	ADDITIONAL
A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
ALUM.	ALUMINUM
ALT.	ALTERNATE
ANT.	ANTENNA
APRX.	APPROXIMATE(LY)
ARCH.	ARCHITECT(URAL)
AWG.	AMERICAN WIRE GAUGE
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLICKING
BM.	BEAM
B.N.	BOUNDARY NAILING
BRCW.	BARE TINNED COPPER WIRE
B.O.F.	BOTTOM OF FOOTING
B/U	BACK-UP CABINET
CAB.	CABINET
CANT.	CANTILEVER(ED)
C.I.P.	CAST IN PLACE
CLG.	CEILING
CLR.	CLEAR
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION(OR)
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
d	PENNY (NAILS)
DBL.	DOUBLE
DEPT.	DEPARTMENT
D.F.	DOUGLAS FIR
DIA.	DIAMETER
DIAG.	DIAGONAL
DIM.	DIMENSION
DWG.	DRAWING(S)
DWL.	DOWEL(S)
EA.	EACH
EL.	ELEVATION
ELEC.	ELECTRICAL
ELEV.	ELEVATOR
EMT.	ELECTRICAL METALLIC TUBING
E.N.	EDGE NAIL
ENG.	ENGINEER
EQ.	EQUAL
EXP.	EXPANSION
EXST.(E)EXISTING	
EXT.	EXTERIOR
FAB.	FABRICATION(OR)
F.F.	FINISH FLOOR
F.G.	FINISH GRADE
FIN.	FINISH(ED)
FLR.	FLOOR
FDN.	FOUNDATION
F.O.C.	FACE OF CONCRETE
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD
F.O.W.	FACE OF WALL
F.S.	FINISH SURFACE
FT.(')	FOOT (FEET)
FTG.	FOOTING
G.	GROWTH (CABINET)
GA.	GAUGE
GI.	GALVANIZED
G.F.I.	GROUND FAULT CIRCUIT INTERRUPTER
GLB.(GLU-LAM)	GLUE LAMINATED BEAM
GPS	GLOBAL POSITIONING SYSTEM
GRND.	GROUND
HDR.	HEADER
HGR.	HANGER
HT.	HEIGHT
ICGB.	ISOLATED COPPER GROUND BUS
IN.(")	INCH(ES)
INT.	INTERIOR
LB.(#)	POUND(S)
L.B.	LAG BOLTS
L.F.	LINEAR FEET (FOOT)
L.	LONG(ITUDINAL)
MAS.	MASONRY
MAX.	MAXIMUM
M.B.	MACHINE BOLT
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MTL.	METAL
(N)	NEW
NO.(#)	NUMBER
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OPNG.	OPENING
P/C.	PRECAST CONCRETE
PCS	PERSONAL COMM SERVICES
PLY.	PLYWOOD
PPC	POWER PROTECTION CABINET
PRC	PRIMARY RADIO CABINET
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
P.T.	PRESSURE TREATED
PWR.	POWER (CABINET)
QTY.	QUANTITY
RAD.(R)	RADIUS
REF.	REFERENCE
REINF.	REINFORCEMENT(ING)
REQD.	REQUIRED
RGS.	RIGID GALVANIZED STELL
RRH.	REMOTE RADIO HEAD
SCH.	SCHEDULE
SHT.	SHEET
SIM.	SIMILAR
SPEC.	SPECIFICATION(S)
SQ.	SQUARE
S.S.	STAINLESS STEEL
STD.	STANDARD
STL.	STEEL
STRUC.	STRUCTURAL
TEMP.	TEMPORARY
THK.	THICK(NESS)
TMA	TOWER MOUNTED AMPLIFIER
T.N.	TOE NAIL
T.O.A.	TOP OF ANTENNA
T.O.C.	TOP OF CURB
T.O.F.	TOP OF FOUNDATION
T.O.P.	TOP OF PLATE (PARAPET)
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U.G.	UNDERGROUND
U.L.	UNDERWRITERS LABORATORY
U.N.O.	UNLESS NOTED OTHERWISE
V.I.F.	VERIFY IN FIELD
W	WIDE (WIDTH)
W/	WITH
W.P.	WEATHERPROOF
WT.	WEIGHT
℄	CENTERLINE
PL	PLATE

ABBREVIATIONS **2**

NEW ANTENNA
EXISTING ANTENNA
GROUND ROD
GROUND BUS BAR
MECHANICAL GRND. CONN.
CAD WELD
GROUND ACCESS WELL
ELECTRIC BOX
TELEPHONE BOX
LIGHT POLE
FND. MONUMENT
SPOT ELEVATION
SET POINT
REVISION

CENTERLINE
PROPERTY/LEASE LINE
MATCH LINE
WORK POINT
GROUND CONDUCTOR
TELEPHONE CONDUIT
ELECTRICAL CONDUIT (POWER)
COAXIAL CABLE
OVERHEAD SERVICE CONDUCTORS
CHAIN LINK FENCING
GRID REFERENCE
DETAIL REFERENCE
ELEVATION REFERENCE
SECTION REFERENCE

GROUT OR PLASTER
(E) BRICK
(E) WOOD FRAME
CONCRETE
EARTH
GRAVEL
PLYWOOD
SAND
WOOD CONT.
WOOD BLOCKING
STEEL

LEGEND **1**

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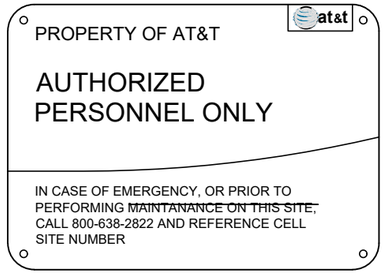
GN-5

ALERTING SIGNS

ALERTING SIGNS

ALERTING SIGNS



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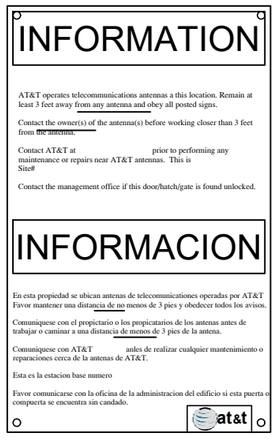

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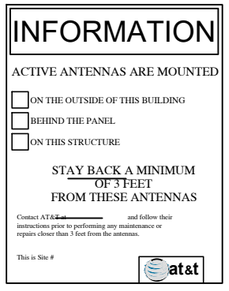

INFO SIGN #2

GENERAL SIGNAGE GUIDELINES

STRUCTURE TYPE	INFO SIGN #1	INFO SIGN #2	INFO SIGN #3	INFO SIGN #4	INFO SIGN #5	STRIPING	NOTICE SIGN	CAUTION SIGN
TOWERS								
MONOPOLE/MONOPINE/MONOPALM	ENTRANCE GATE SHELTER DOORS OR ON THE OUTDOOR CABINETS	CLIMBING SIDE OF THE TOWER	ON BACKSIDE OF ANTENNAS	ON BACKSIDE OF ANTENNAS	ON THE SHELTER DOOR OR ON ONE OUTDOOR EQUIPMENT CABINET			AT THE HEIGHT OF THE FIRST CLIMBING STEP, MIN. 9FT ABOVE GROUND
SCE TOWERS/TOWERS WITH HIGH VOLTAGE	ENTRANCE GATE SHELTER DOORS OR ON THE OUTDOOR CABINETS	CLIMBING SIDE OF THE TOWER	ON BACKSIDE OF ANTENNAS	ON BACKSIDE OF ANTENNAS	ON THE SHELTER DOOR OR ON ONE OUTDOOR EQUIPMENT CABINET			AT THE HEIGHT OF THE FIRST CLIMBING STEP, MIN. 9FT ABOVE GROUND
LIGHT POLES/FLAG POLES	ENTRANCE GATE SHELTER DOORS OR ON THE OUTDOOR CABINETS	ON THE POLE, NO LESS THAN 3FT BELOW THE ANTENNA	ON BACKSIDE OF ANTENNAS	ON BACKSIDE OF ANTENNAS	ON THE SHELTER DOOR OR ON ONE OUTDOOR EQUIPMENT CABINET			
UTILITY WOOD POLES (JPA)	ENTRANCE GATE SHELTER DOORS OR ON THE OUTDOOR CABINETS	ON THE POLE, NO LESS THAN 3FT BELOW THE ANTENNA	ON BACKSIDE OF ANTENNAS	ON BACKSIDE OF ANTENNAS	ON THE SHELTER DOOR OR ON ONE OUTDOOR EQUIPMENT CABINET		IF GP MAX VALUE OF MPE AT ANTENNA LEVEL IS: 0-99%: NOTICE SIGN; OVER 99%: CAUTION SIGN AT NO LESS THAN 3FT BELOW ANTENNA AND 9FT ABOVE GROUND	
MICROCELLS MOUNTED ON NON-JPA POLES	ENTRANCE GATE SHELTER DOORS OR ON THE OUTDOOR CABINETS	ON THE POLE, NO LESS THAN 3FT BELOW THE ANTENNA	ON BACKSIDE OF ANTENNAS	ON BACKSIDE OF ANTENNAS	ON THE SHELTER DOOR OR ON ONE OUTDOOR EQUIPMENT CABINET		NOTICE OR CAUTION SIGN AT NO LESS THAN 9FT ABOVE GROUND: ONLY IF THE EXPOSURE EXCEEDS 90% OF THE GENERAL PUBLIC EXPOSURE AT 6FT ABOVE GROUND	
ROOF TOPS								
AT ALL ACCESS POINTS TO THE ROOF	X							
ON ANTENNAS	X		X	X				
CONCEALED ANTENNAS	X	X						
ANTENNA MOUNTED FACING OUTSIDE BUILDING	X	X						
ANTENNAS ON SUPPORT STRUCTURE	X	X						
ROOFTOP GRAPH:								
RADIATION AREA IS WITHIN 3FT FROM ANTENNA	X	ADJACENT TO EACH ANTENNA					EITHER NOTICE OR CAUTION SIGN (BASED ON ROOFVIEW RESULTS) AT ANTENNAS/BARRIER	
RADIATION IS BEYOND 3FT FROM ANTENNA	X	ADJACENT TO EACH ANTENNA				DIAGONAL, YELLOW STRIPING AS TO ROOF VIEW GRAPH		
CHURCH STEEPLES	ACESS TO STEEPLE	ADJACENT TO EACH ANTENNAS IF ANTENNAS ARE CONCEALED	ON BACKSIDE OF ANTENNAS	ON BACKSIDE OF ANTENNAS	ON THE SHELTER DOOR OR ON ONE OUTDOOR EQUIPMENT CABINET			CAUTION SIGN AT THE ANTENNAS
WATER STATIONS	ACESS TO STEEPLE	ADJACENT TO EACH ANTENNAS IF ANTENNAS ARE CONCEALED	ON BACKSIDE OF ANTENNAS	ON BACKSIDE OF ANTENNAS	ON THE SHELTER DOOR OR ON ONE OUTDOOR EQUIPMENT CABINET			CAUTION SIGN AT THE ANTENNAS

NOTES FOR ROOFTOP SITES:

1. EITHER NOTICE OR CAUTION SIGNS NEED TO BE POSTED AT EACH SECTOR AS CLOSE AS POSSIBLE TO: THE OUTER EDGE OF THE STRIPED OFF AREA OR THE OUTER ANTENNAS OF THE SECTOR.
2. IF ROOF VIEW SHOWS: ONLY BLUE = NOTICE SIGN, BLUE AND YELLOW = CAUTION SIGN, ONLY YELLOW = CAUTION SIGN TO BE INSTALLED.
3. SHOULD THE REQUIRED STRIPING AREA INTERFERE WITH ANY STRUCTURES OR EQUIPMENT (A/C VENTS, ROOF HATCH, DOORS, OTHER ANTENNAS, DISHES, ETC.)
4. PLEASE NOTIFY AT&T TO MODIFY THE STRIPING AREA, PRIOR TO STARTING THE WORK.

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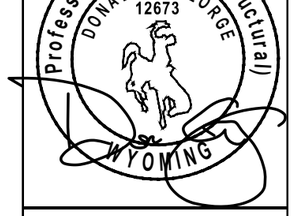
REVISIONS

REV	DATE	DESCRIPTION	INT
0	08/06/18	ISSUED FOR CONSTRUCTION	GGD

CHECKED BY: DWG



SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

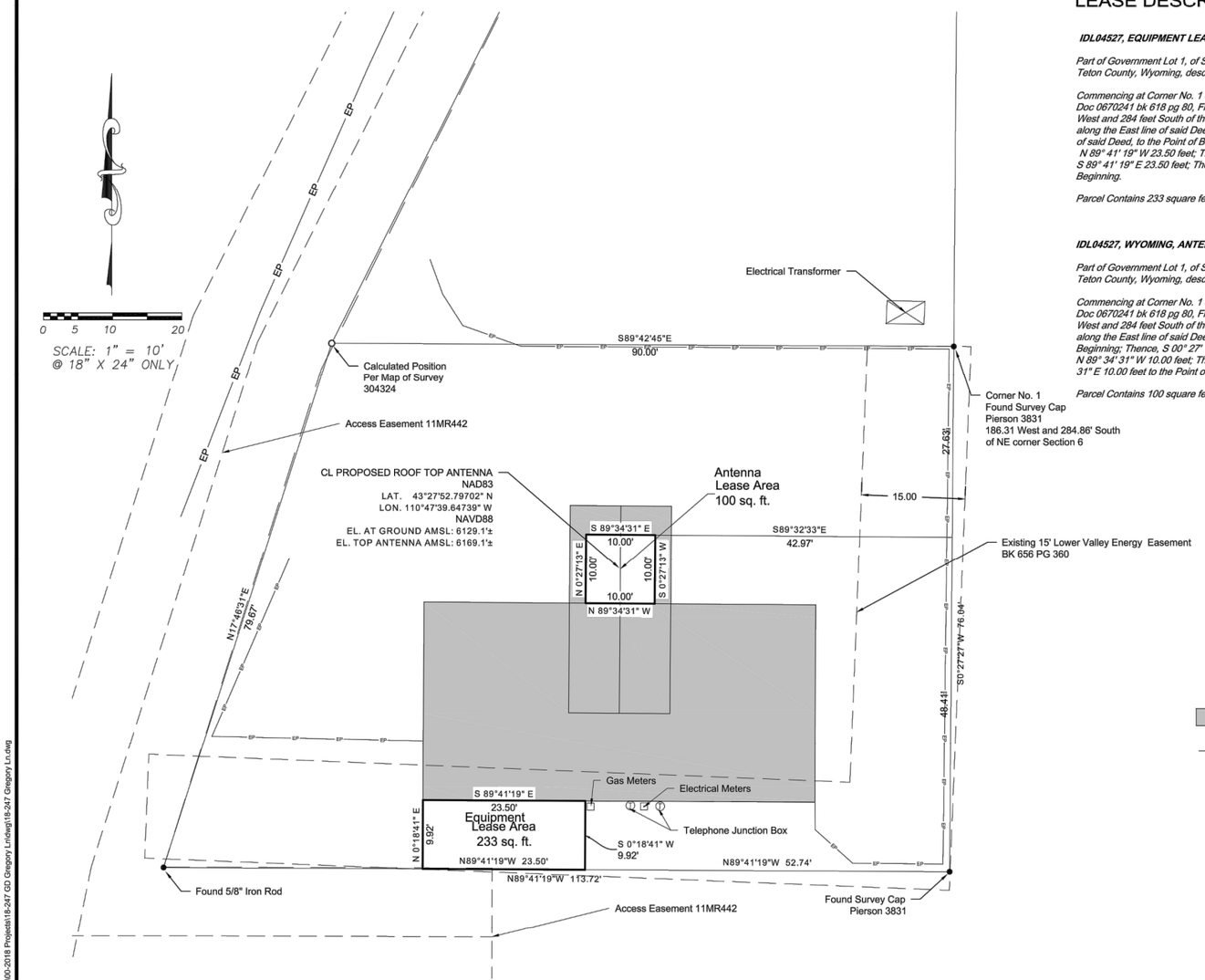
GENERAL NOTES

SHEET NUMBER:

GN-6

KSGT Relocate IDL04527
PART OF THE NE 1/4 OF
SECTION 6, T. 40 N., R. 116 W. 6TH P.M.
TETON COUNTY, WYOMING

RECORDER'S CERTIFICATE



LEASE DESCRIPTIONS:

IDL04527, EQUIPMENT LEASE AREA:

Part of Government Lot 1, of Section 6, Township 40 N., Range. 116 W. 6th P.M. Teton County, Wyoming, described as:

Commencing at Corner No. 1 of Warranty Deed, Recorded as Doc 0670241 bk 618 pg 80, Filed in Teton County Clerks office, said point being 185.9 feet West and 284 feet South of the NE corner of Section 6 Thence S 0°27'27" W 76.04 feet along the East line of said Deed; Thence N 89°41'19" W 52.74 feet along the South line of said Deed, to the Point of Beginning; Thence continuing along said South line, N 89° 41' 19" W 23.50 feet; Thence, N 00° 18' 41" E 9.92 feet; Thence, S 89° 41' 19" E 23.50 feet; Thence S 00° 18' 41" W 9.92 feet to the Point of Beginning.

Parcel Contains 233 square feet, more or less.

IDL04527, WYOMING, ANTENNA LEASE AREA:

Part of Government Lot 1, of Section 6, Township 40 N., Range. 116 W. 6th P.M. Teton County, Wyoming, described as:

Commencing at Corner No. 1 of Warranty Deed, Recorded as Doc 0670241 bk 618 pg 80, Filed in Teton County Clerks office, said point being 185.9 feet West and 284 feet South of the NE corner of Section 6; Thence S 0°27'27" W 27.63 feet along the East line of said Deed; Thence S 89°32'33" E 42.97 feet, to the Point of Beginning; Thence, S 00° 27' 13" W 10.00 feet; Thence, N 89° 34' 31" W 10.00 feet; Thence, N 00° 27' 13" E 10.00 feet; Thence S 89° 34' 31" E 10.00 feet to the Point of Beginning.

Parcel Contains 100 square feet, more or less.

LEGEND

- Section Corner Control
- Placed 1/2" X 24" Iron rod with cap marked P.L.S. 12224
- Found 1/2" Iron Rod
- Existing Apartment Building
- EP — Edge of Pavement

Professional Land Surveyor
CHRIS G. STREET
11848
LICENSED
Date 7/19/2018
WYOMING

CIVIL & STRUCTURAL ENGINEERING
MATERIALS TESTING & LAND SURVEYING
101 S. Park Avenue, Idaho Falls, ID 83402, (208)524-0212
600 W. Judicial Street, Blackfoot, ID 83221, (208)785-2977
460 Lincoln Street, American Falls, ID 83211, (208)226-5764
hleinc.com

DRAWN BY	DESIGN BY	CHECK BY
SJ	HLE	CGS

JOB NO: 18-247

DATE: August 1, 2018

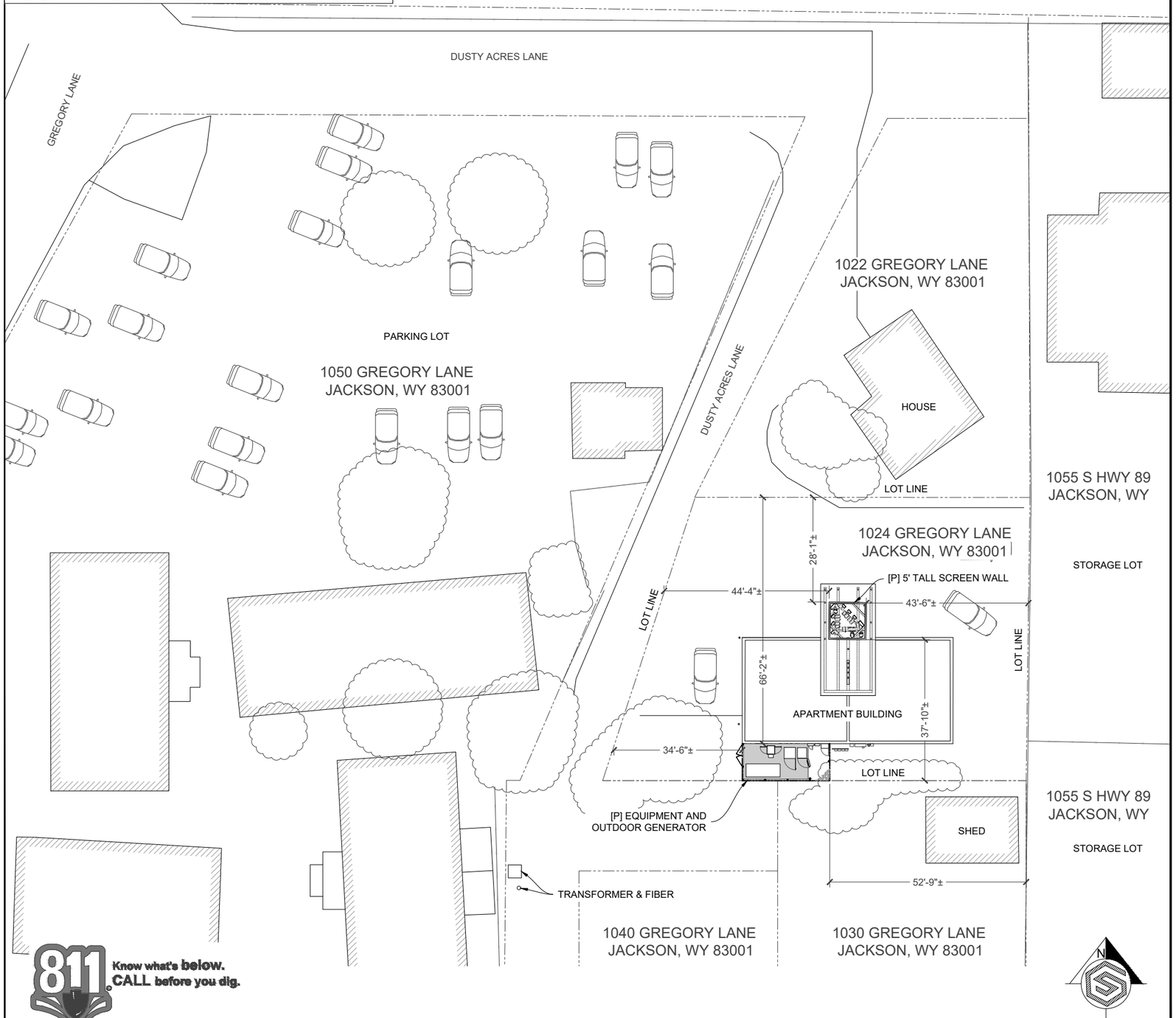
REVISIONS	DATE
Revised Easements	8/1/18

RECORD OF SURVEY
IDL04527
SEC. 6, T. 40 N., R. 116 W. 6TH P.M.
TETON COUNTY, WYOMING

SHEET NO. 1 OF 1 SHEETS

Z:\Projects\00-2018 Projects\18-247 GD Gregory Ln\dwg\18-247 Gregory Ln.dwg

UTILITY NOTE	EXISTING CONDITIONS	KEY		NOTE
THE UTILITIES AS SHOWN ON THIS SET OF DRAWINGS WERE DEVELOPED FROM THE INFORMATION AVAILABLE. THE INFORMATION PROVIDED IS NOT IMPLIED NOR INTENDED TO BE A COMPLETE INVENTORY OF THE UTILITIES IN THIS AREA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES (WHETHER SHOWN OR NOT) AND PROTECT SAID UTILITIES FROM ANY DAMAGE CAUSED BY CONTRACTOR'S ACTIVITIES.	THESE DRAWINGS WERE PRODUCED WITH INFORMATION PROVIDED BY THE CLIENT. LINES, EASEMENTS, AND SETBACKS SHALL BE VERIFIED PRIOR TO START OF CONSTRUCTION, GEOSTRUCTURAL DOES NOT GUARANTEE THE ACCURACY OF SAID PROPERTY LINE, EASEMENTS AND SETBACKS.	[E]	EXISTING	EVERYTHING SHOWN IS EXISTING UNLESS MARKED PROPOSED
		[P]	PROPOSED	



811 Know what's below. CALL before you dig.

OVERALL SITE PLAN | 32 | SCALE: 1" = 15'-0" (24x36) / SCALE: 1" = 30'-0" (11x17) | 2

PHOTOS | N.T.S. | 1

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WWW.GEOSTRUCTURAL.COM

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REV	DATE	DESCRIPTION	INT
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CHECKED BY: DWG

Professional Engineer (Structural)
DONALD W. GEORGE
12673
WYOMING

SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

OVERALL
SITE PLAN

SHEET NUMBER:

A-0

UTILITY NOTE	EXISTING CONDITIONS	KEY		NOTE
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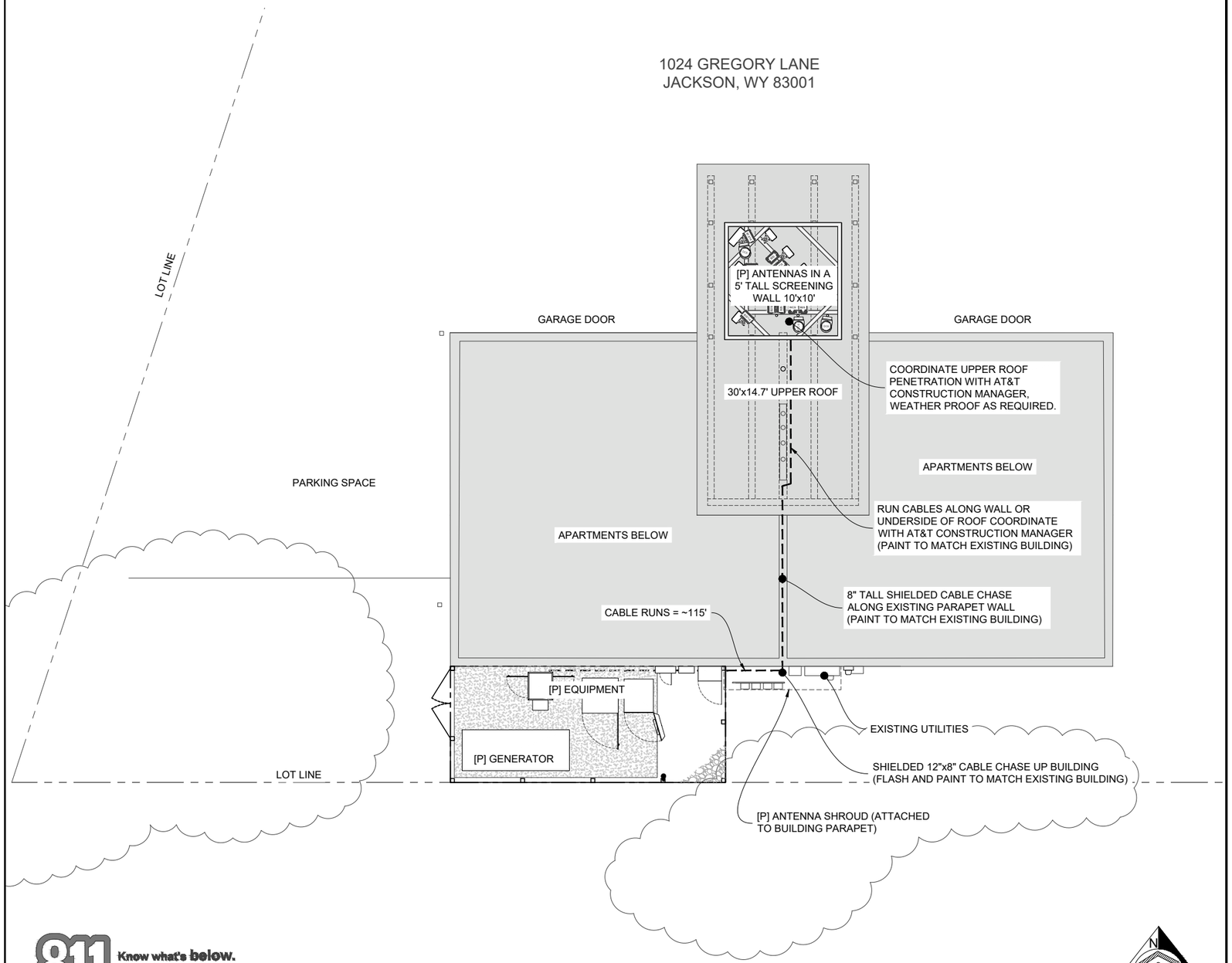
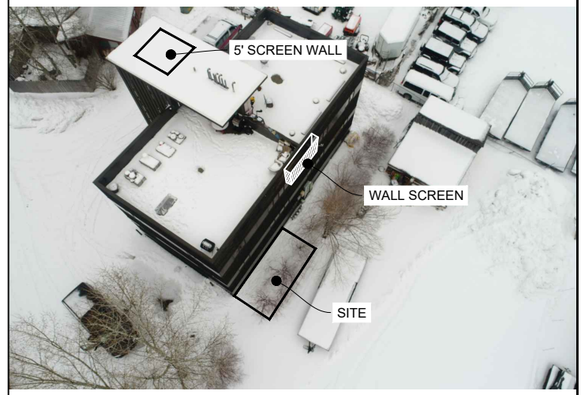
		[P]	PROPOSED	

1024 GREGORY LANE
JACKSON, WY 83001



811 Know what's below. CALL before you dig.



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CHECKED BY: DWG

Professional Engineer (Structural)
DONALD W. GEORGE
12673
WYOMING

SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

SITE PLAN

SHEET NUMBER:

A-1

UTILITY NOTE

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EXISTING CONDITIONS

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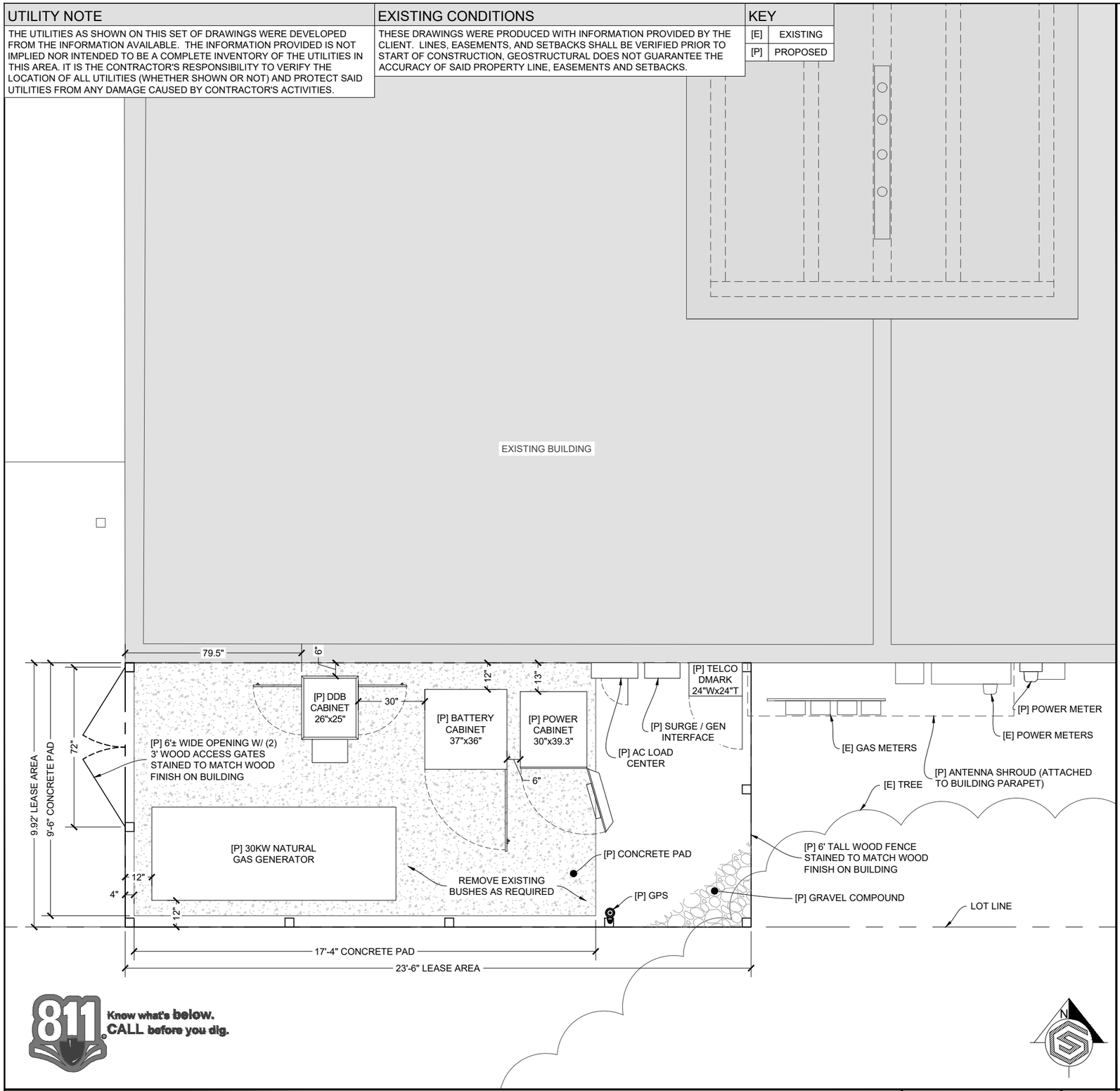
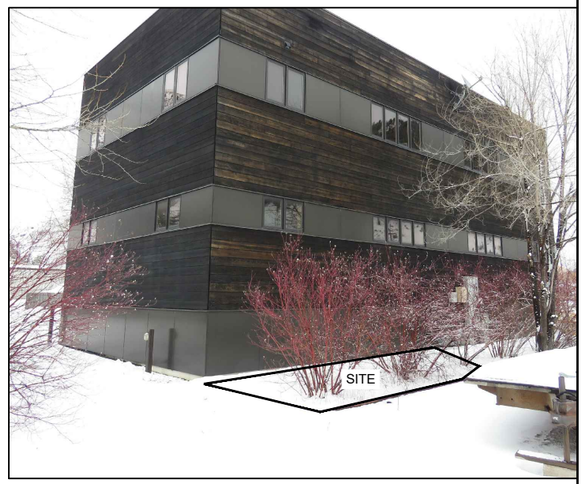
KEY

[E]	EXISTING
[P]	PROPOSED



811 Know what's below. CALL before you dig.

PROPOSED EQUIPMENT PLAN | 34 | SCALE: 1/2" = 1'-0" (24x36) SCALE: 1/4" = 1'-0" (11x17) | 2



PHOTOS | N.T.S. | 1

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CHECKED BY: DWG

Professional Engineer (Structural) DONALD W. GEORGE 12673 WYOMING

SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:
EQUIPMENT PLAN

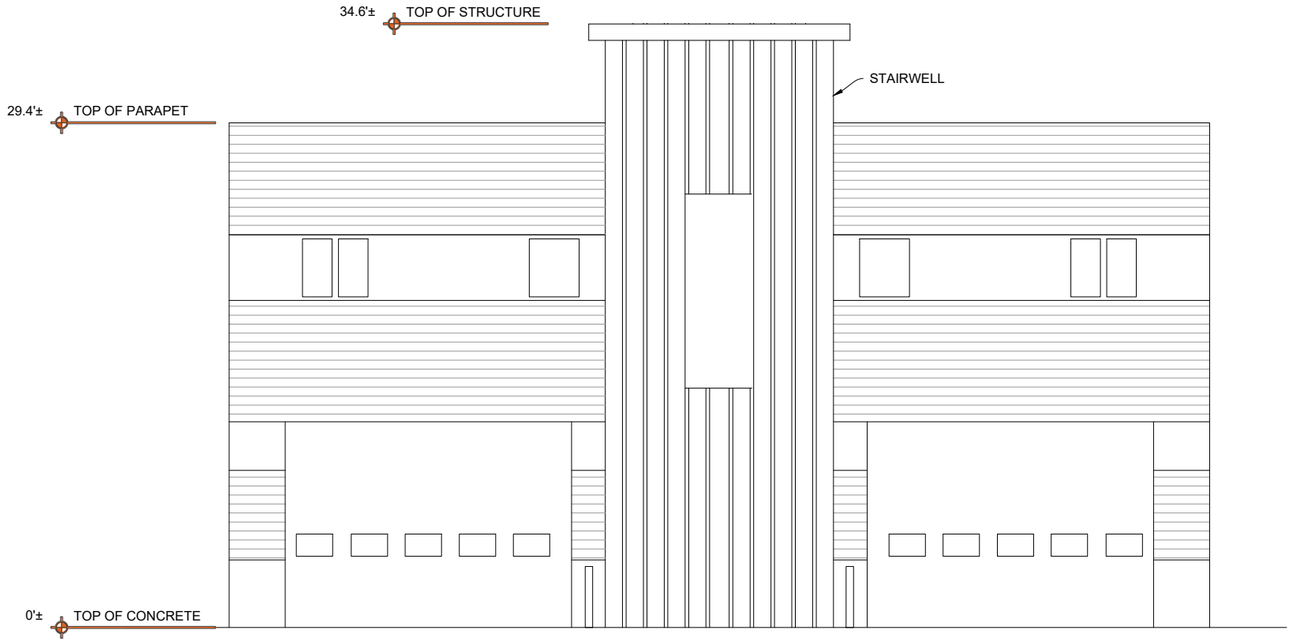
SHEET NUMBER:
A-2

STRUCTURE NOTES

CONTRACTOR TO COMPLY WITH ALL FCC AND FAA REGULATIONS ON THIS PROJECT.

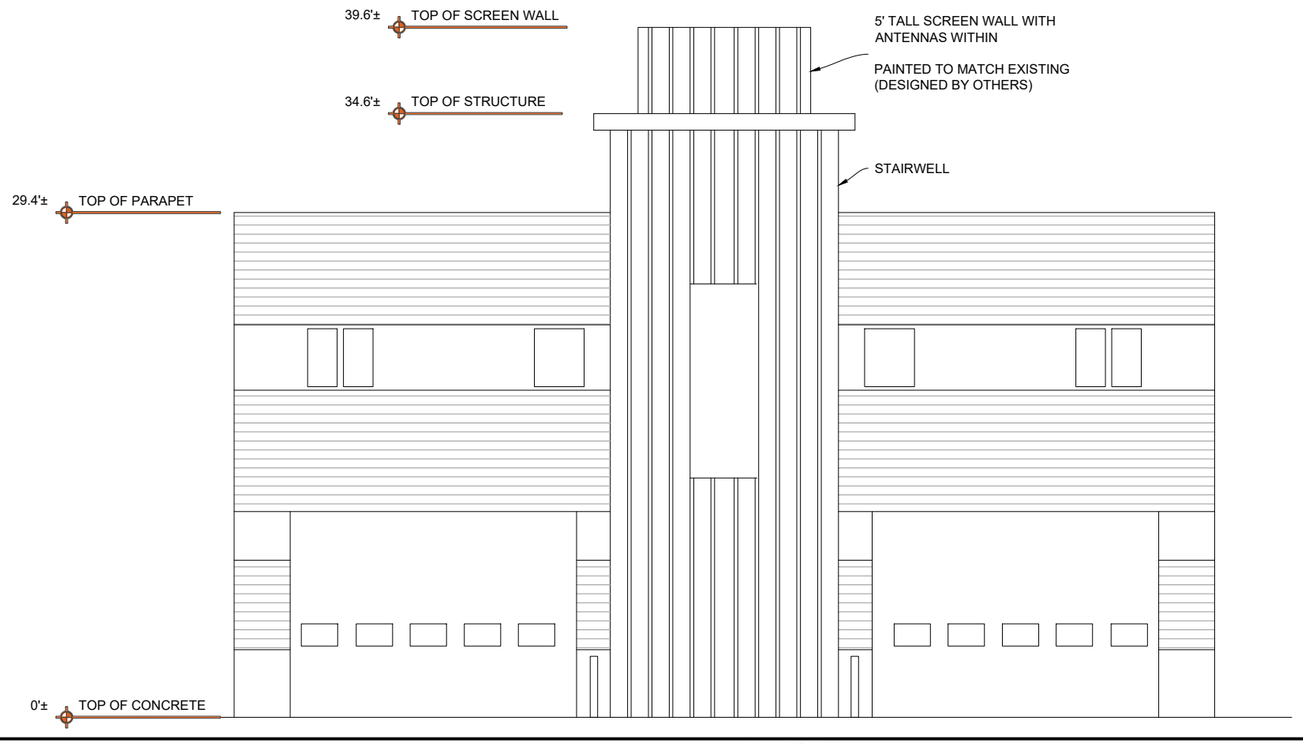
REFER TO BUILDING MAPPING FOR ALL EXISTING COMPONENTS AND APPURTENANCES.

PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY THAT A BUILDING STRUCTURAL ANALYSIS AND A MOUNT ANALYSIS HAS BEEN PERFORMED AND SHOWS A "PASS" OR AN "ACCEPTABLE" RATING. UNDER NO CIRCUMSTANCE WHATSOEVER SHALL THE PROPOSED EQUIPMENT BE INSTALLED WITHOUT SAID STRUCTURAL ANALYSIS. IF SAID STRUCTURAL ANALYSIS REQUIRES THAT THE STRUCTURE AND/OR MOUNT BE MODIFIED, SUCH MODIFICATIONS SHALL BE COMPLETED PRIOR TO INSTALLATION OF THE PROPOSED EQUIPMENT.



EXISTING ELEVATION

SCALE N.T.S. **2**



PROPOSED ELEVATION

SCALE N.T.S. **1**

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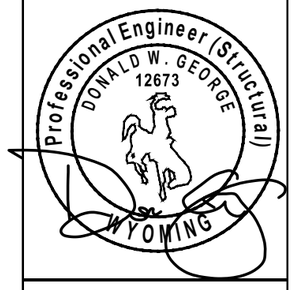

SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

ANTENNA ELEVATIONS

SHEET NUMBER:

A-3

STRUCTURE NOTES

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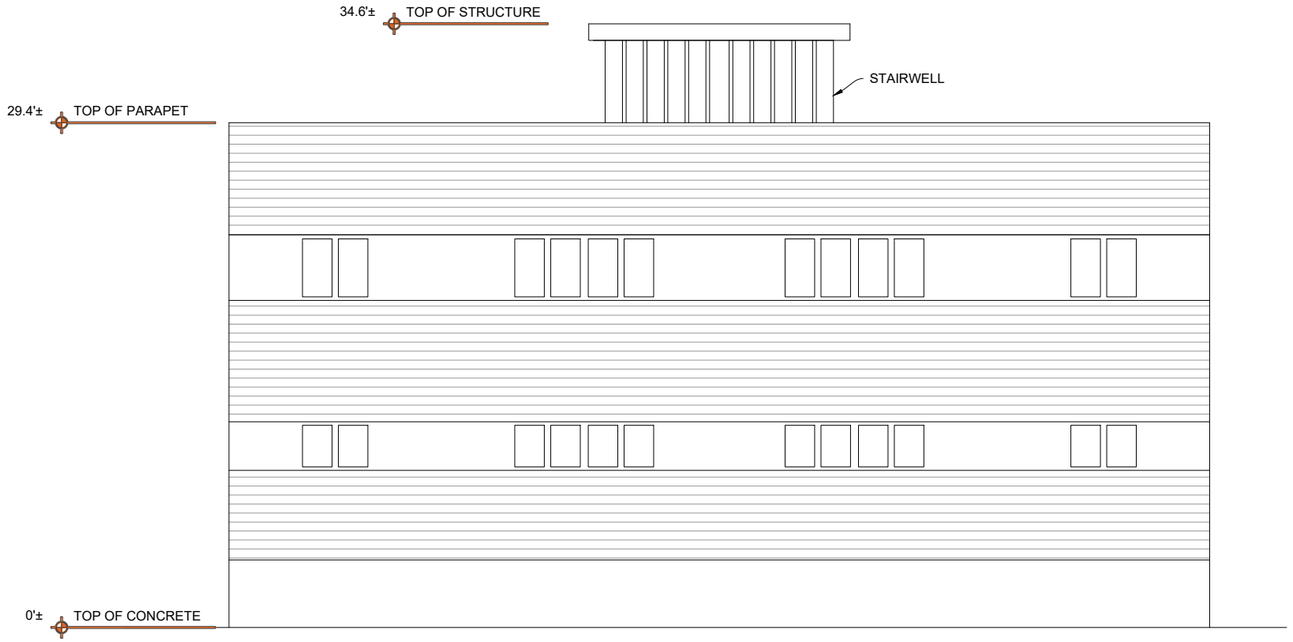
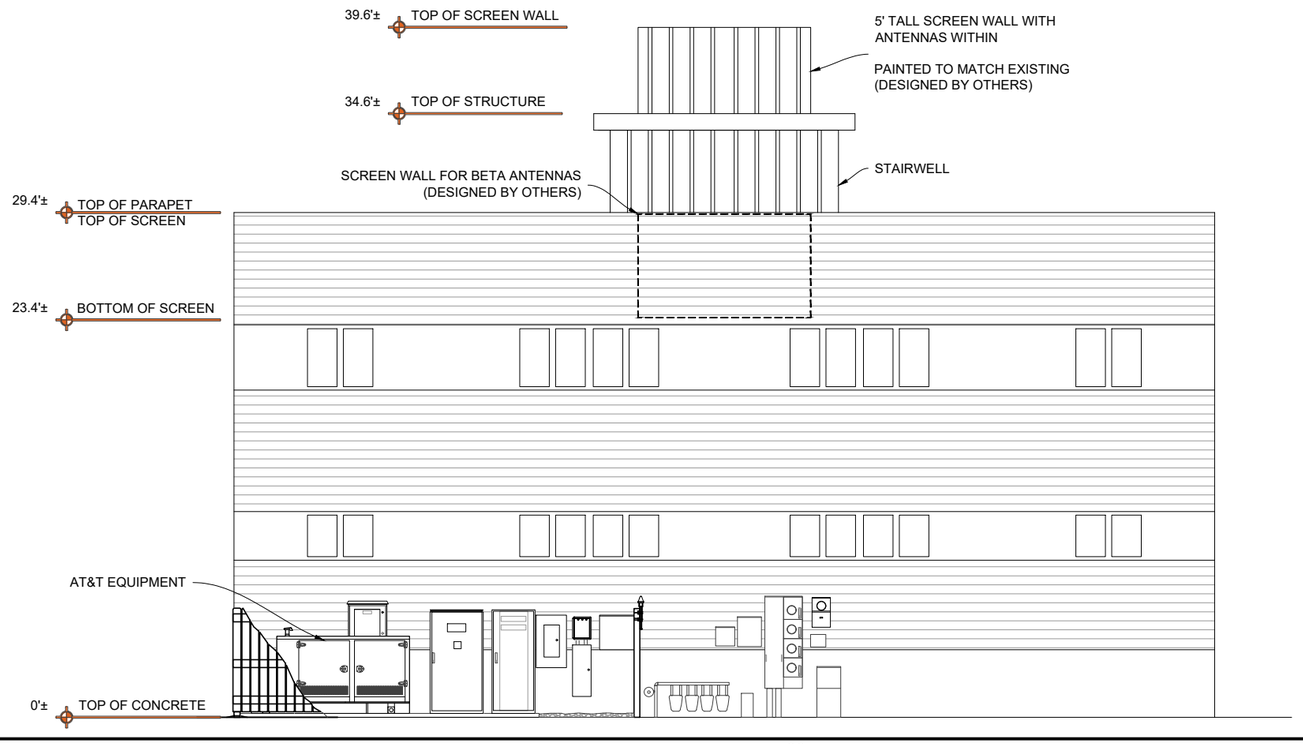


EXISTING ELEVATION

SCALE N.T.S. **2**



PROPOSED ELEVATION

SCALE N.T.S. **1**

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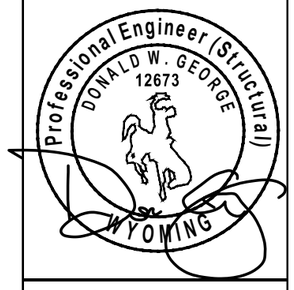

SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

ANTENNA ELEVATIONS

SHEET NUMBER:

A-3.1

STRUCTURE NOTES

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PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY THAT A BUILDING STRUCTURAL ANALYSIS AND A MOUNT ANALYSIS HAS BEEN PERFORMED AND SHOWS A "PASS" OR AN "ACCEPTABLE" RATING. UNDER NO CIRCUMSTANCE WHATSOEVER SHALL THE PROPOSED EQUIPMENT BE INSTALLED WITHOUT SAID STRUCTURAL ANALYSIS. IF SAID STRUCTURAL ANALYSIS REQUIRES THAT THE STRUCTURE AND/OR MOUNT BE MODIFIED, SUCH MODIFICATIONS SHALL BE COMPLETED PRIOR TO INSTALLATION OF THE PROPOSED EQUIPMENT.

BEFORE

AFTER

PROPOSED ELEVATION (PHOTO SIM)

SCALE N.T.S. | 1

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CHECKED BY: DWG

Professional Engineer (Structural)
DONALD W. GEORGE
12673
WYOMING

SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

ANTENNA ELEVATIONS

SHEET NUMBER:

A-3.2

STRUCTURE NOTES

CONTRACTOR TO COMPLY WITH ALL FCC AND FAA REGULATIONS ON THIS PROJECT.

REFER TO BUILDING MAPPING FOR ALL EXISTING COMPONENTS AND APPURTENANCES.

PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY THAT A BUILDING STRUCTURAL ANALYSIS AND A MOUNT ANALYSIS HAS BEEN PERFORMED AND SHOWS A "PASS" OR AN "ACCEPTABLE" RATING. UNDER NO CIRCUMSTANCE WHATSOEVER SHALL THE PROPOSED EQUIPMENT BE INSTALLED WITHOUT SAID STRUCTURAL ANALYSIS. IF SAID STRUCTURAL ANALYSIS REQUIRES THAT THE STRUCTURE AND/OR MOUNT BE MODIFIED, SUCH MODIFICATIONS SHALL BE COMPLETED PRIOR TO INSTALLATION OF THE PROPOSED EQUIPMENT.

BEFORE

AFTER

PROPOSED ELEVATION (PHOTO SIM)

SCALE N.T.S. 1

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REVISIONS

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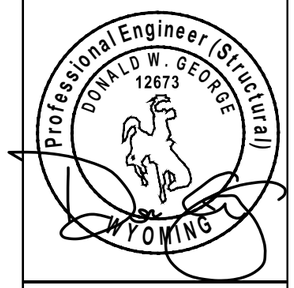
CHECKED BY: DWG



SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

ANTENNA ELEVATIONS

SHEET NUMBER:

A-3.3

NEW SCREEN WALL

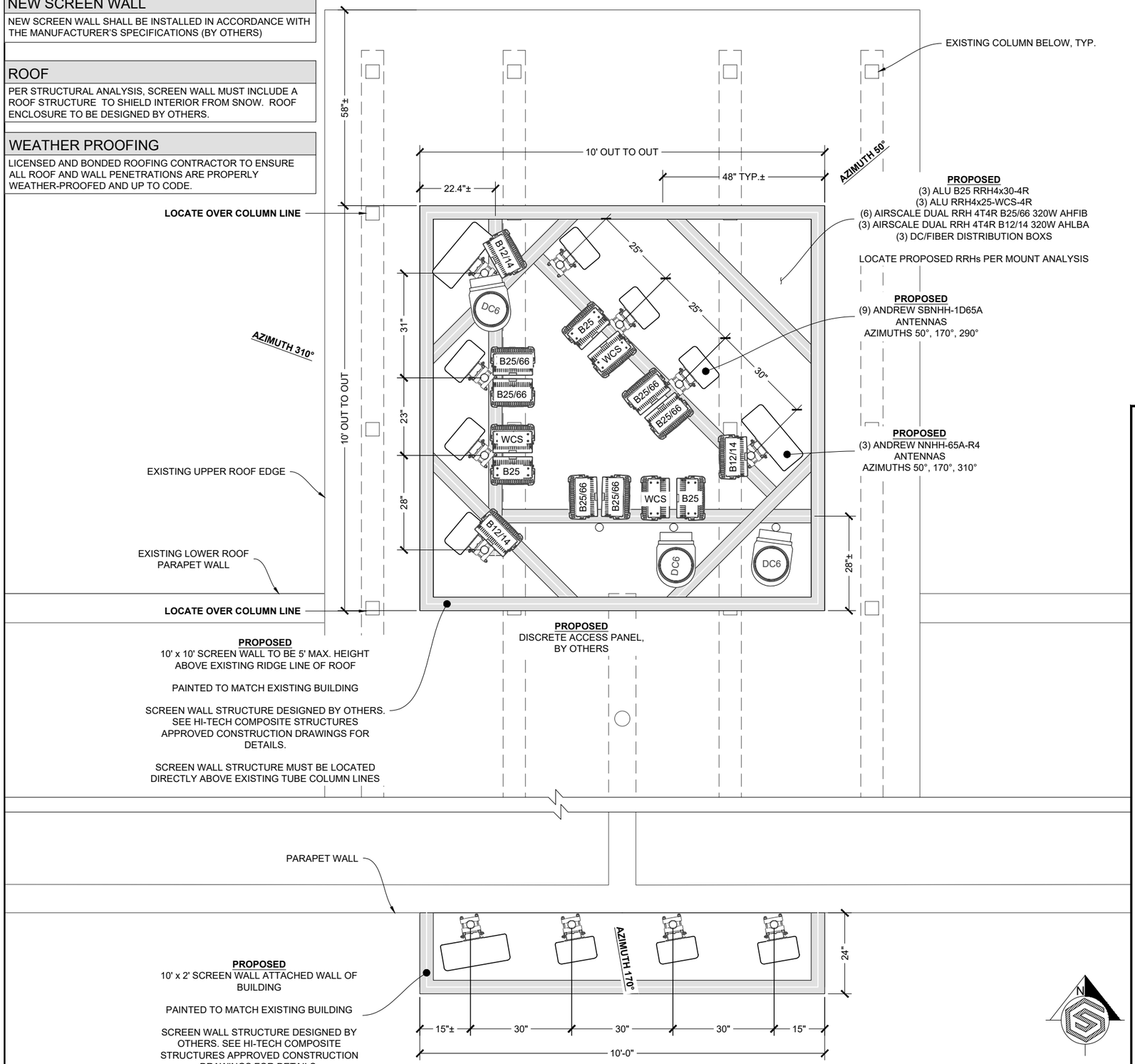
NEW SCREEN WALL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS (BY OTHERS)

ROOF

PER STRUCTURAL ANALYSIS, SCREEN WALL MUST INCLUDE A ROOF STRUCTURE TO SHIELD INTERIOR FROM SNOW. ROOF ENCLOSURE TO BE DESIGNED BY OTHERS.

WEATHER PROOFING

LICENSED AND BONDED ROOFING CONTRACTOR TO ENSURE ALL ROOF AND WALL PENETRATIONS ARE PROPERLY WEATHER-PROOFED AND UP TO CODE.



PROPOSED ANTENNA PLAN 39 N.T.S. 2

INSTALLATION NOTES

1.	ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED PER MOUNT ANALYSIS (BY OTHERS).
2.	CONTRACTOR TO VERIFY FINAL ANTENNA CONFIGURATION FROM LATEST APPROVED RFDS.
3.	CONTRACTOR SHALL OBTAIN A MINIMUM 4' SEPARATION BETWEEN ALL ANTENNAS UNLESS APPROVED BY RF.
4.	STRUCTURAL ANALYSIS MUST BE PERFORMED PRIOR TO THE INSTALLATION OF ANY NEW EQUIPMENT.

EXISTING CONDITIONS

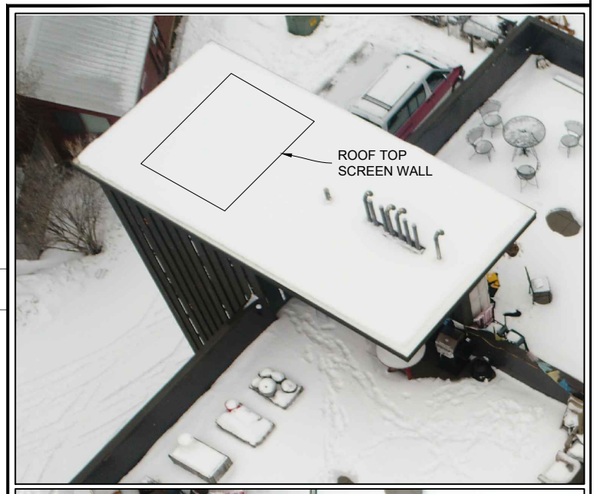
THESE DRAWINGS WERE PRODUCED WITH INFORMATION PROVIDED BY THE CLIENT. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO INSTALLATION.

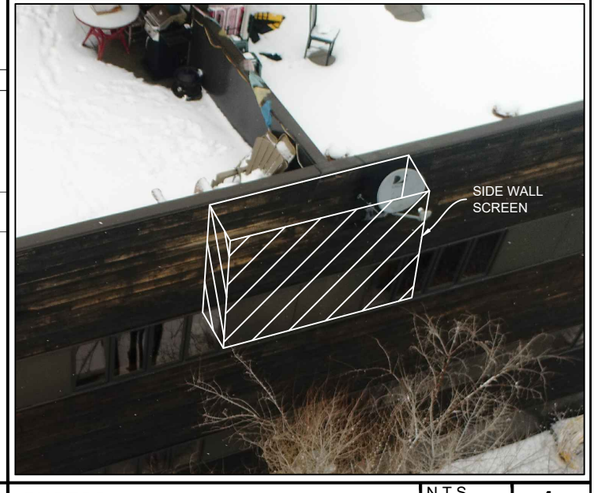
ANTENNAS

ANTENNA AND EQUIPMENT CALLOUTS SHOWN ARE TYPICAL OF ALL SECTORS UNLESS SPECIFICALLY NOTED OTHERWISE.

ANTENNA FIT-UP VARIATIONS

COORDINATE ANY VARIATIONS TO THE ANTENNA / EQUIPMENT FIT-UP SHOWN WITH THE CONSTRUCTION MANAGER AND PROVIDE AS-BUILTS AND PHOTOS OF THE FINAL CONFIGURATION. SCREEN MANUFACTURER TO PROVIDE MOUNTING MATERIAL, SEE SCREEN WALL CONSTRUCTION DRAWINGS (BY OTHERS).





PHOTOS N.T.S. 1

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PO BOX 2621, BOISE, ID 83701
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REVISIONS

REV	DATE	DESCRIPTION	INT
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CHECKED BY: DWG

SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

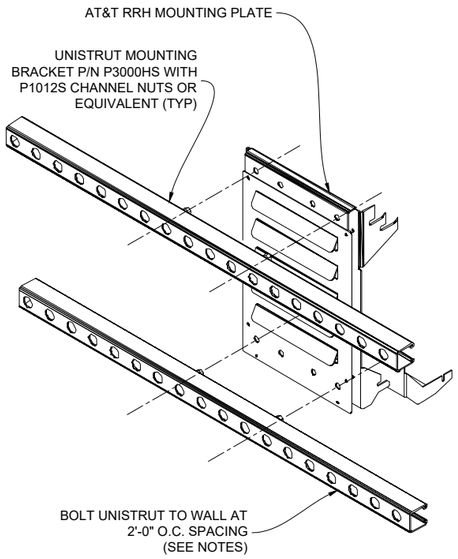
SHEET TITLE:

ANTENNA PLANS

SHEET NUMBER:

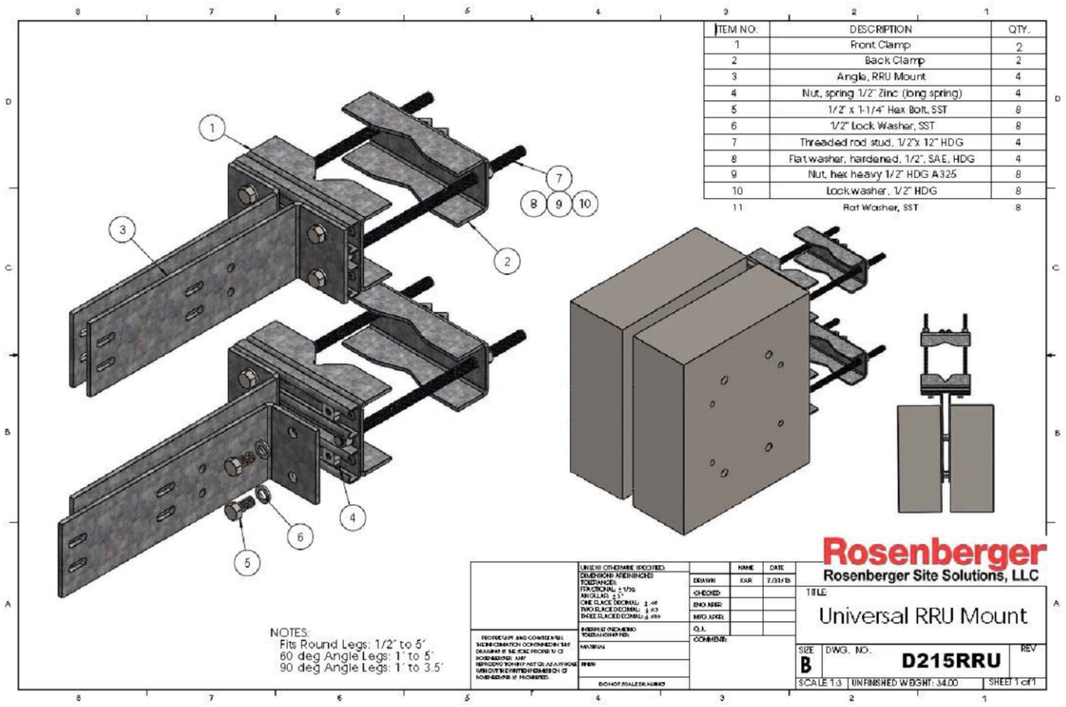
A-4

V1



NOTES:

1. CONCRETE
   ANCHOR: HILTI HIT HY 150 ADHESIVE ANCHOR
   SIZE: Ø = 3/8"
   EMBEDMENT: 1 3/4"
   SPACING: S = 24" (MAX)
   * IF THE WALL THICKNESS IS LESS THAN 2", THE 1/2"Ø A325 BOLT SHALL BE USED TO GO THROUGH THE WALL WITH A 3/8" BACK PLATE INSIDE OF THE WALL.
2. FULLY-GROUTED CMU WALL
   ANCHOR: HILTI HIT HY 150 ADHESIVE ANCHOR
   SIZE: Ø = 3/8"
   EMBEDMENT: 1 3/4"
   SPACING: ONE (1) ANCHOR PER CELL (MAX) AND 8" (MIN)
3. SOLID BRICK WALL
   ANCHOR: HILTI HIT HY 20 ADHESIVE ANCHOR
   SIZE: Ø = 3/8"
   EMBEDMENT: 2"
   SPACING: S = 24" (MAX)
4. HOLLOW, UNGROUTED CMU WALL & BRICK WALL WITH HOLES
   ANCHOR: HILTI HIT HY 20 ADHESIVE ANCHOR
   SIZE: Ø = 3/8"
   EMBEDMENT: THROUGH FACE OF HOLLOW BASE > 6" (MIN)
   SPACING: S = (2) COMPLETE BRICKS IN ANY DIRECTION
   (1) ANCHOR PER BLOCK CELL (CMU)
5. STEEL
   BOLT: A325
   BOLT SIZE: Ø = 1/2"
   BOLT HOLE SIZE: Ø = 9/16"
6. IF THE WALL MATERIAL IS DIFFERENT FROM ABOVE, CONTRACTOR SHALL INFORM DESIGN ENGINEER IMMEDIATELY.
7. ALL HARDWARE AND PARTS SHALL BE HOT-DIPPED GALVANIZED WITH LOCK WASHERS AND HEAVY HEX NUTS.
8. ALL BOLT HOLES SHALL BE 7/16"Ø UNLESS NOTED OTHERWISE.
9. THE MAX LOAD BETWEEN ANCHORS SHALL BE LESS THAN 400 POUNDS.



ITEM NO.	DESCRIPTION	QTY.
1	Front Clamp	2
2	Back Clamp	2
3	Angle, RRU Mount	4
4	Nut, spring 1/2" Zinc (long spring)	4
5	1/2" x 1-1/4" Hex Bolt, SST	8
6	1/2" Lock Washer, SST	8
7	Threaded rod stud, 1/2"x 12" HDG	4
8	Flat washer, hardened, 1/2", SAE, HDG	4
9	Nut, hex heavy 1/2" HDG A325	8
10	Lock washer, 1/2" HDG	8
11	Flat Washer, SST	8

NOTES:
Fits Round Legs: 1/2" to 5"
60 deg Angle Legs: 1" to 5"
90 deg Angle Legs: 1" to 3.5"

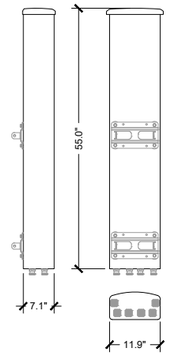
Rosenberger
Rosenberger Site Solutions, LLC

TITLE: Universal RRU Mount

SIZE B | DWG. NO. D215RRU | REV
SCALE 1:3 | WEIGHT: 34.00 | SHEET 1 of 1

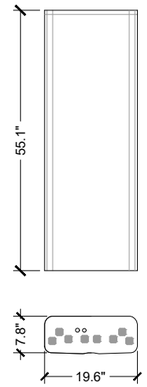
ANDREW SBNHH-1D65A

DIMENSION (H x W x D) 55" x 11.9" x 7.1"
WEIGHT 40.9 lbs



COMMSCOPE NNHH-65A-R4

DIMENSION (H x W x D) 55.1" x 19.6" x 7.8"
WEIGHT 68.3 lbs



ALCATEL-LUCENT B25 RRH4X30 (4-WAY RECEIVE)

DIMENSION (H x W x D) 21.2" x 12.0" x 7.2"
WEIGHT 53 lbs

NOKIA

AHFIB Dimensions

Product name	AirScale Dual RRH 4T4R B25/66 320W AHFIB - 474216A
Supported frequency bands	3GPP Band 25 and Band 66
Frequencies	Band 25: DL 1930–1995MHz, UL 1850–1915MHz Band 66: DL 2110–2200MHz, UL 1710–1780MHz
Number of TX/RX ports	4
Instantaneous Bandwidth IBW	Band 25: 65MHz, Band 66: 70MHz UL/90MHz DL
Occupied Bandwidth OBW	Band 25: 65MHz, Band 66: 80MHz
Output power	Band 25: 4x40W, Band 66: 4x40W
Dimensions (mm) height x width x depth	730x390x240 (overall not-to-exceed with cover and bracket)
Weight (kg)	<40 (overall not-to-exceed with cover and bracket)
Supply Voltage / Voltage Range	DC-48V / -36V to -60V
Typical Power Consumption	525W (ETSI 24h Avg – 4x20W per band, 40W per TX port)
Antenna ports	4TX/RX, 4.3-10+
Optical ports	2 x CPRI 9.8 Gbps
ALD control interfaces	AISG3.0 from ANT1, 2, 3, 4 and RET (Power supply ANT1 and ANT3)
Other interfaces	External alarm MDR-26 serial connector (4 inputs) DC circular power connector
Operational temperature range	-40°C to 55°C (with no solar load)
Ingress protection class	IP65
Installation options	Pole or wall, vertical or horizontal book mount
Surge protection	Class II 5kA

ALCATEL-LUCENT RRH4x25-WCS-4R (4-WAY RECEIVE)

DIMENSION (H x W x D) 31.5" x 11.8" x 8.7"
WEIGHT 70 lbs

NOKIA

AHLBA Dimensions

Product name	AirScale Dual RRH 4T4R B12/14 320W AHLBA - 474240A
Supported frequency bands	3GPP Band 12 and Band 14
Frequencies	Band 12: DL 729–746MHz, UL 699–715MHz Band 14: DL 759–768MHz, UL 788–798MHz
Number of TX/RX ports	4
Instantaneous Bandwidth IBW	Band 12: 16MHz, Band 14: 10MHz
Occupied Bandwidth OBW	Band 12: 15MHz, Band 14: 10MHz
Output power	80W per TX port shared between bands (e.g. 4x40W per band)
Dimensions (mm) height x width x depth	730x390x240 (overall not-to-exceed with cover and bracket)
Weight (kg)	<46 (overall not-to-exceed with cover and bracket)
Supply Voltage / Voltage Range	DC-48V / -36V to -60V
Typical Power Consumption	525W (ETSI 24h Avg – 4x20W per band, 40W per TX port)
Antenna ports	4TX/RX, 4.3-10+
Optical ports	2 x CPRI 9.8 Gbps
ALD control interfaces	AISG3.0 from ANT1, 2, 3, 4 and RET (Power supply ANT1 and ANT3)
Other interfaces	External alarm MDR-26 serial connector (4 inputs) DC circular power connector
Operational temperature range	-40°C to 55°C (with no solar load)
Ingress protection class	IP65
Installation options	Pole or wall, vertical or horizontal book mount
Surge protection	Class II 5kA

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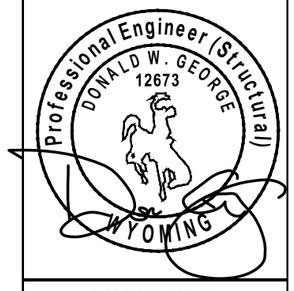


SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

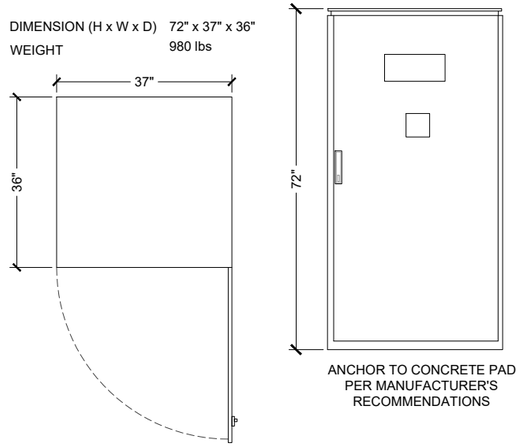
EQUIPMENT DETAILS

SHEET NUMBER:

R-1

BATTERY CABINET

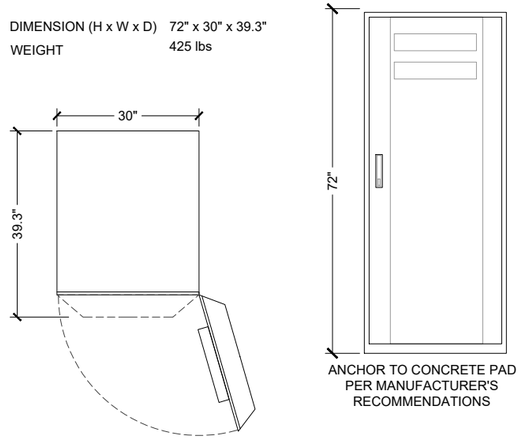
DIMENSION (H x W x D) 72" x 37" x 36"
WEIGHT 980 lbs



ANCHOR TO CONCRETE PAD PER MANUFACTURER'S RECOMMENDATIONS

POWER CABINET

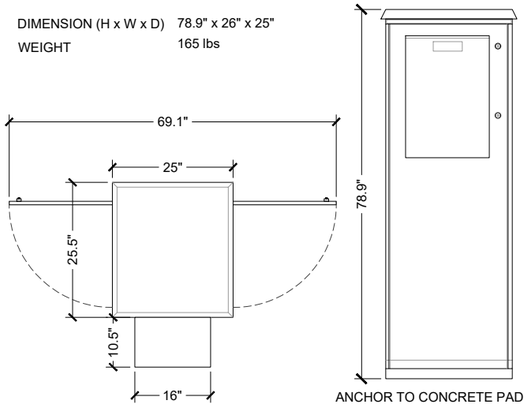
DIMENSION (H x W x D) 72" x 30" x 39.3"
WEIGHT 425 lbs



ANCHOR TO CONCRETE PAD PER MANUFACTURER'S RECOMMENDATIONS

DDB CABINET

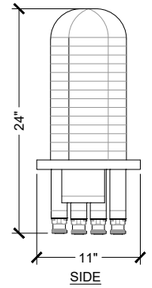
DIMENSION (H x W x D) 78.9" x 26" x 25"
WEIGHT 165 lbs



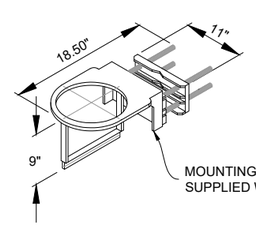
ANCHOR TO CONCRETE PAD PER MANUFACTURER'S RECOMMENDATIONS

RAYCAP DC6 DC/FIBER DISTRIBUTION BOX

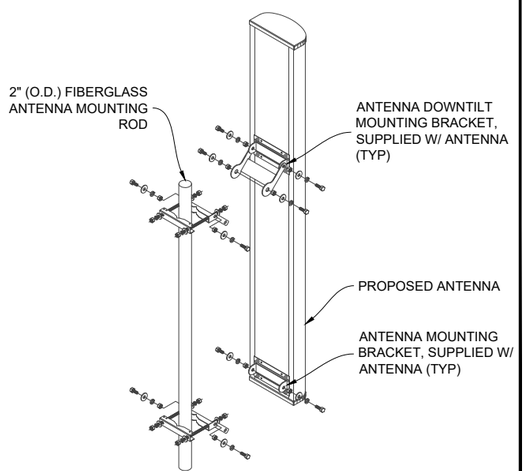
DIMENSION (H x W x D) 24" x 11" x 11"
WEIGHT 32.8 lbs

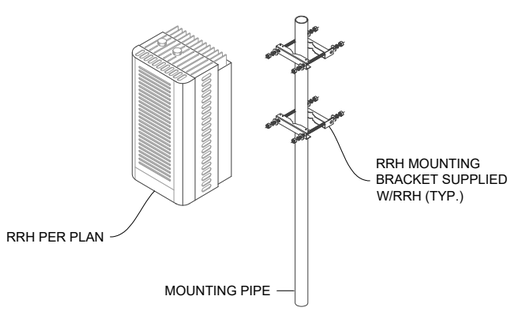


SIDE



MOUNTING BRACKET SUPPLIED W/UNIT





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Professional Engineer (Structural)
DONALD W. GEORGE
12673
WYOMING

SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

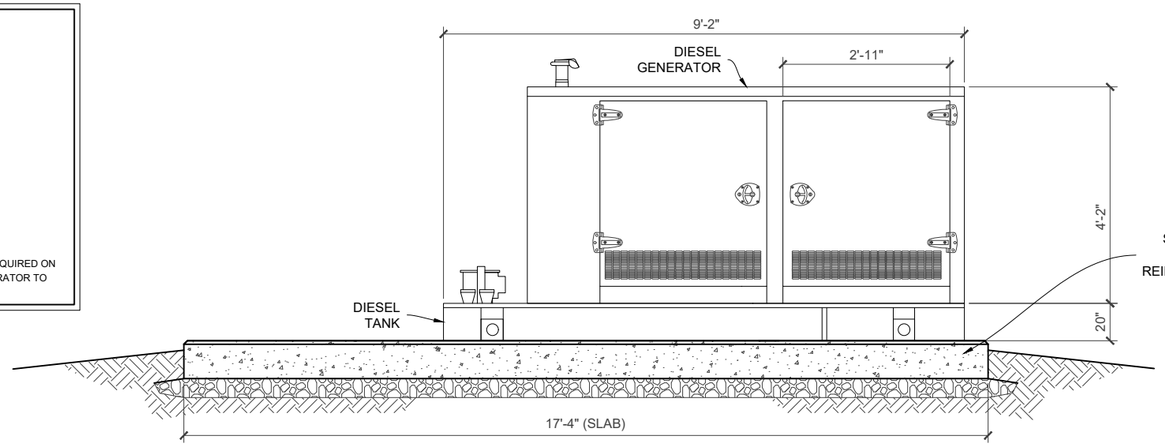
EQUIPMENT DETAILS

SHEET NUMBER:

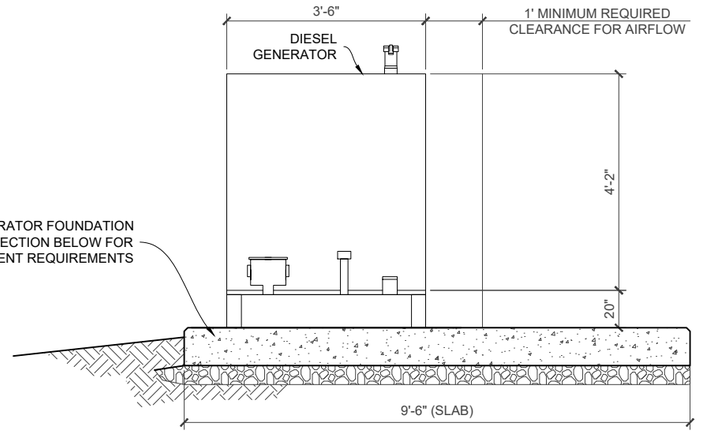
R-2

MANUFACTURER: KOHLER CO.
MODEL: 50REOZJD
P/N: ADV-8017
LENGTH: 91.34"
WIDTH: 42.12"
HEIGHT: 49.85"
TANK P/N: GM79144-MA2
LENGTH: 109.00"
WIDTH: 40.94"
HEIGHT: 20.00"
CAPACITY: 173 GALLONS
ASSEMBLED
LENGTH: 110.29"
WIDTH: 42.12"
HEIGHT: 69.86"
WEIGHT: 3263 LBS

MINIMUM CLEARENCE OF 1'-0" REQUIRED ON NON-SERVICING SIDES OF GENERATOR TO MEET AIRFLOW REQUIREMENTS.

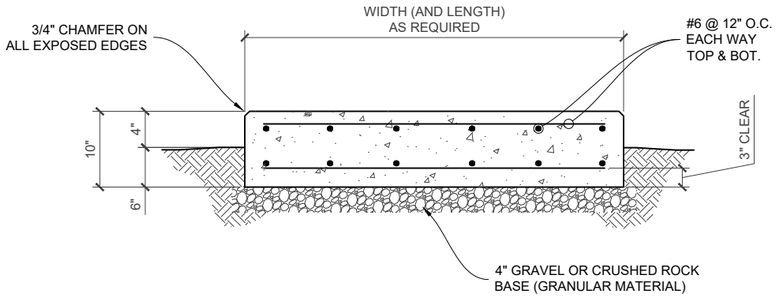


FRONT



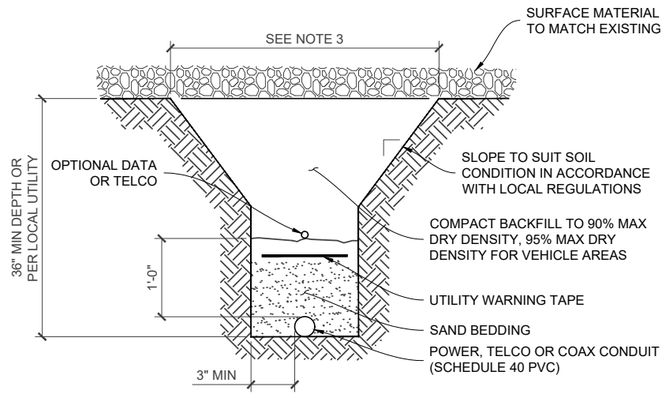
SIDE

SCALE : NTS — GENERATOR DETAIL | 5



SCALE : NTS — FOUNDATION SECTION | 4

NOTE:
1. "ONE CALL" SERVICE SHALL BE CALLED PRIOR TO EXCAVATION
2. DETAIL SHOWN IS FOR ONE CONDUIT. MULTIPLE CONDUITS CAN BE PLACED IN THE SAME TRENCH AS LONG AS A MINIMUM SEPARATION PER THE LOCAL UTILITY COMPANIES IS MAINTAINED. IN ALL CASES THE MINIMUM CENTER TO CENTER SPACING BETWEEN CONDUITS IS 1'-0" (NOT REQUIRED FOR COAX).
3. CONTRACTOR SHALL RESTORE THE TRENCH TO ITS ORIGINAL CONDITIONS BY EITHER SEEDING OR SODDING GRASS AREAS, OR REPLACING ASPHALT OR CONCRETE AREAS TO ITS ORIGINAL CROSS SECTION.
4. CONTRACTOR TO SHORE VERTICAL EXCAVATIONS ANYTIME CONDITIONS WARRANT TO PROTECT PERSONNEL AND MATERIALS OR AS REQUIRED BY OSHA AND LOCAL REQUIREMENTS.



SCALE : NTS — UTILITY TRENCH DETAIL | 3

NOT USED | 2

NOT USED | 1

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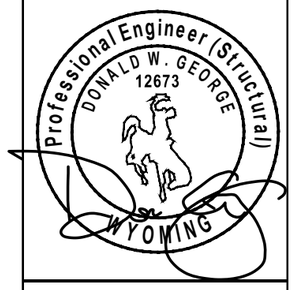

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1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

EQUIPMENT DETAILS

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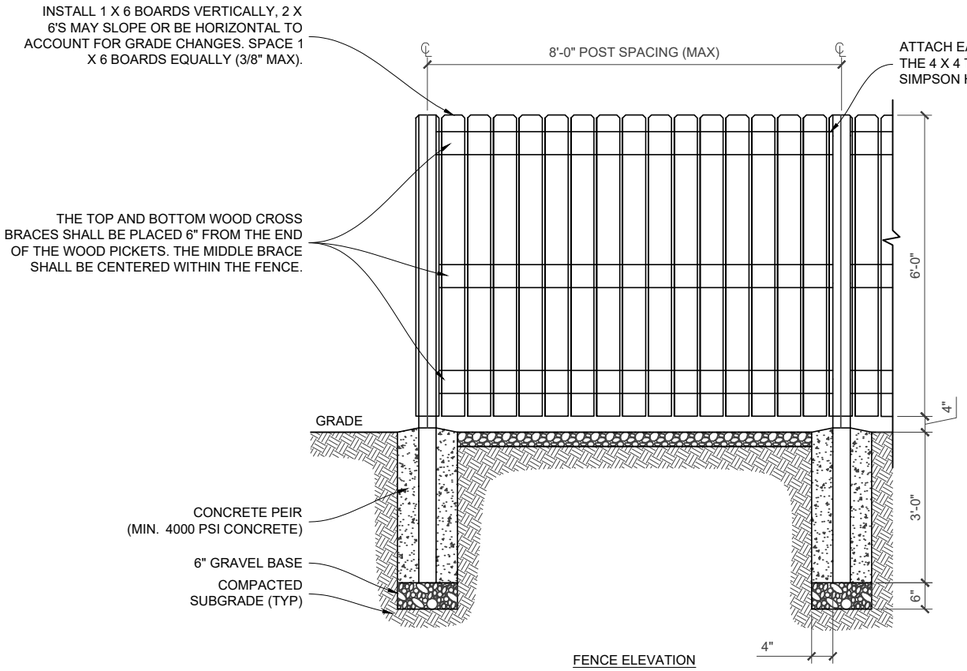
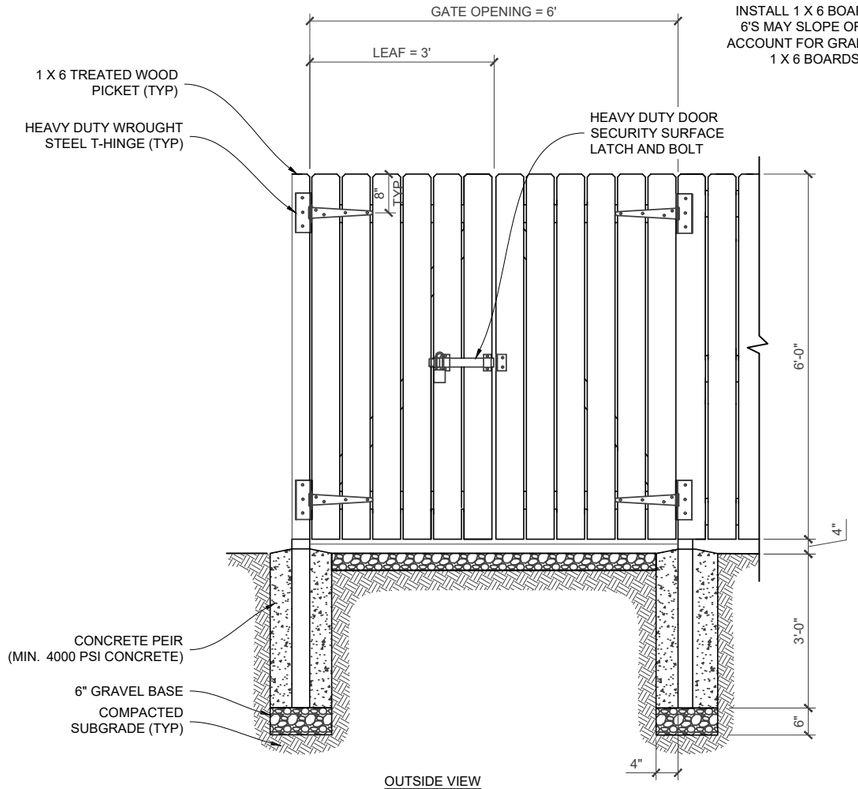
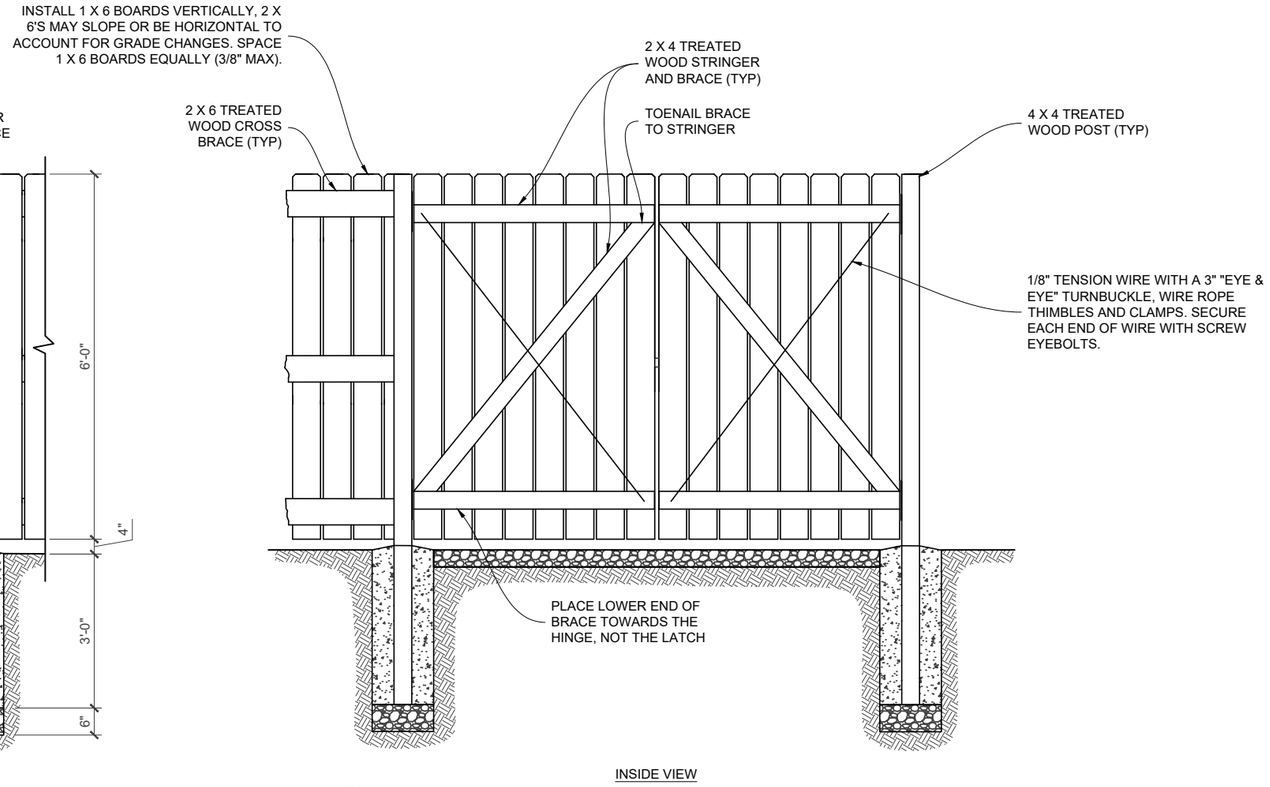
R-3



FENCE ELEVATION



OUTSIDE VIEW



INSIDE VIEW

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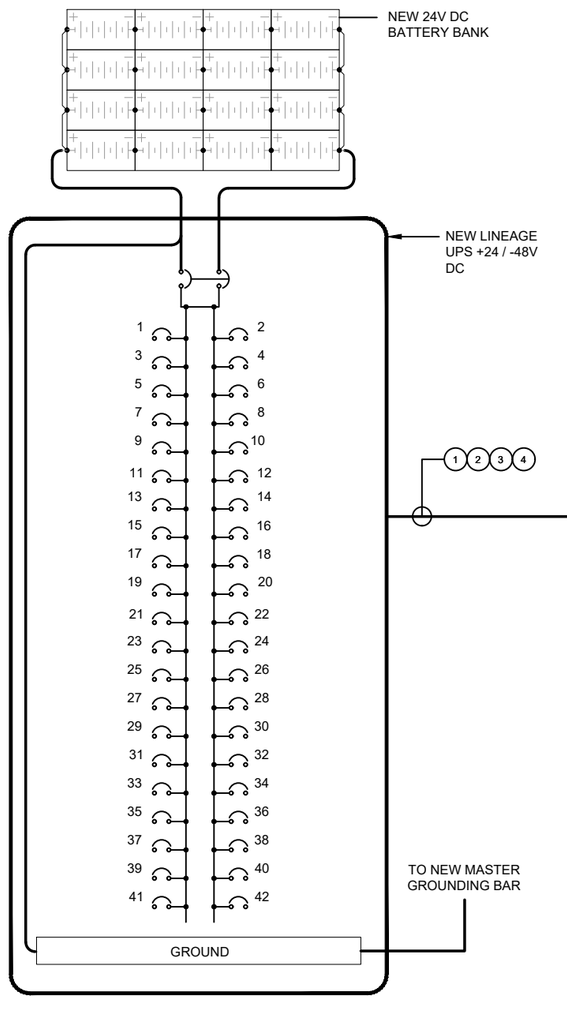
EQUIPMENT DETAILS

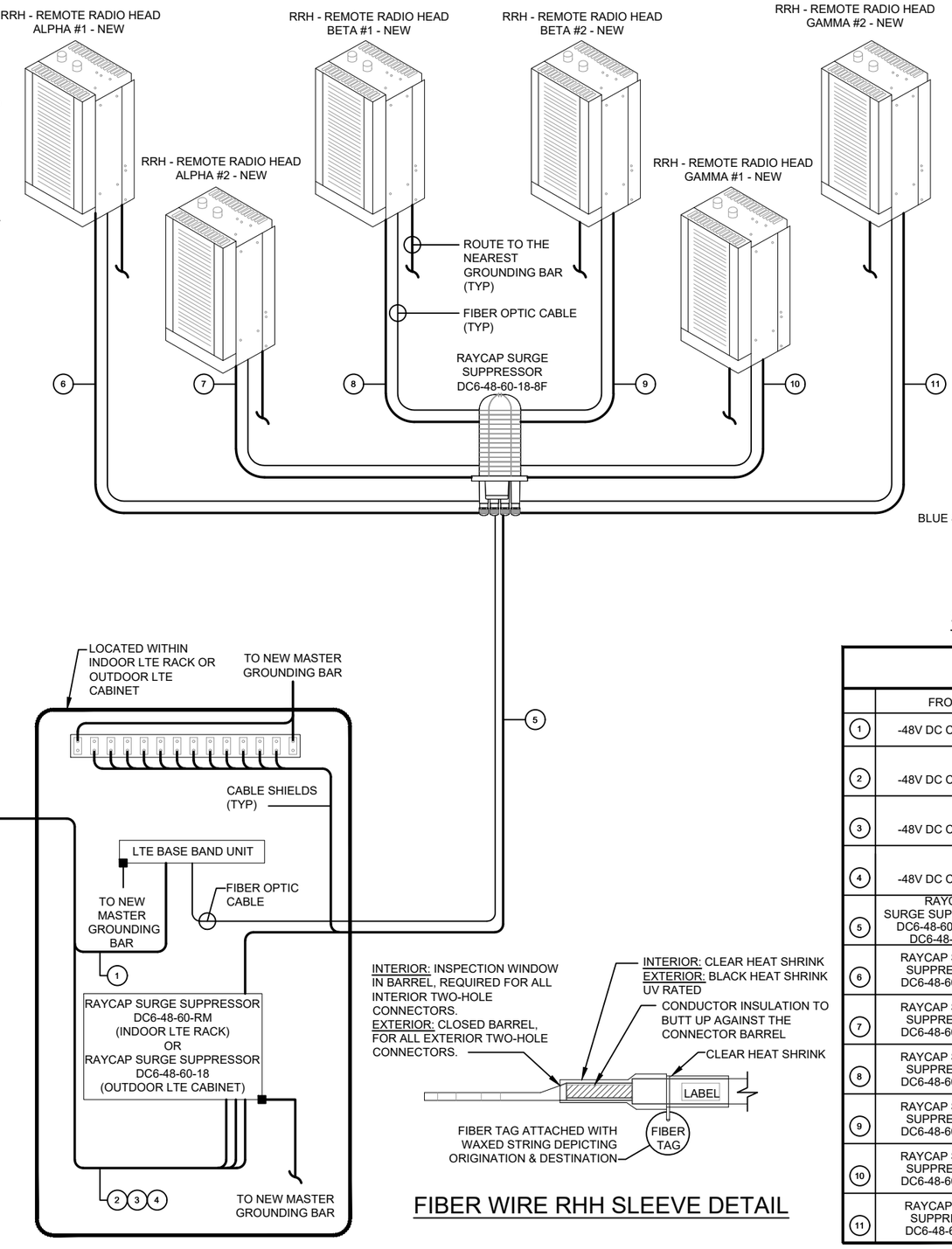
SHEET NUMBER:

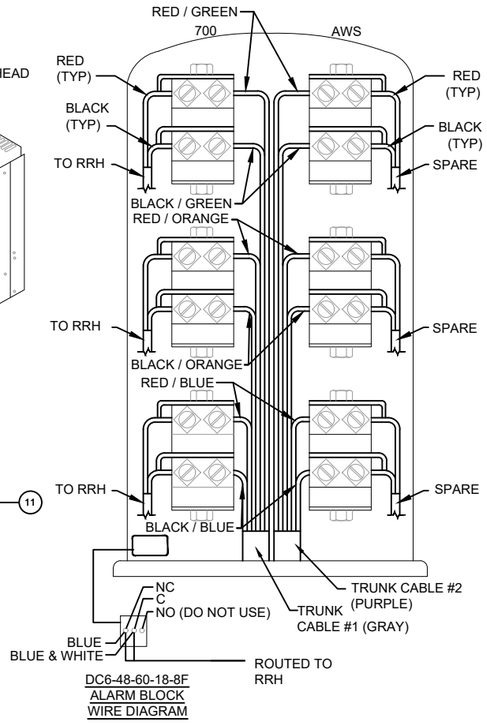
R-4

NOTES

1. INSTALL ADDITIONAL CIRCUITS TO RECTIFIERS AS REQUIRED, TO PROVIDE ADDITIONAL -48V DC POWER FOR LTE SYSTEM.
2. THE SCOPE OF WORK SHALL DICTATE THE EQUIPMENT TO BE INSTALLED. EQUIPMENT SHALL BE EQUAL TO OR BETTER THAN REFERRED VENDORS.
3. THE CONTRACTOR SHALL VERIFY THE LOAD CENTER SCHEDULE IS ACCURATE AND TRUE. IF THE LOAD CENTER SCHEDULE IS NOT TRUE THE CONTRACTOR SHALL NOTIFY THE ENGINEERING STAFF THE CORRECTIONS AS SOON AS PRACTICABLE.
4. CONTRACTOR SHALL PROVIDE ALL CONDUITS, CIRCUITS REQUIRED OF A COMPLETED SYSTEM AND SHALL BE IN COMPLIANCE WITH THE MANUFACTURER'S.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR AS-BUILT LOAD CENTER SCHEDULE AND SITE DRAWINGS.
6. THIS CIRCUIT SCHEDULE IS PULLED FROM LTE TEMPLATE FILE SUPPLIED BY GENERAL DYNAMICS. INDIVIDUAL CIRCUITS WERE NOT FIELD VERIFIED BY A&E VENDOR. CONTRACTOR IS TO VERIFY LOAD SCHEDULE.
7. ALL DC WIRE SHOULD BE RHH (OR OEM SUPPLIED) "LIST 3 CLASS B" OR "LIST 4 CLASS I" LIMITED SMOKE. ALL DC WIRE SHALL BE GRAY IN COLOR. COLOR CODE TAPE SHOULD BE USED TO IDENTIFY POLARITY AND CLEAR HEAT SHRINK SHALL COVER LUG CRIMP AND EXTEND OVER COLOR CODE. ENDS OF CABLES SHALL BE LABELED WITH FIBER TAGS ATTACHED WITH WAX STRING DEPICTING ORIGINATION TO DESTINATION.
8. CONTRACTOR SHALL VERIFY ADEQUATE CAPACITY EXISTS AT THE EXISTING DC POWER PLANT TO SUPPLY DC POWER TO THE NEW EQUIPMENT IN THE NEW FIF RACK OR CABINET. IF SUFFICIENT RECTIFIERS ARE NOT AVAILABLE IN THE EXISTING DC POWER PLANT, THE CONTRACTOR SHALL COORDINATE WITH THE DESIGN ENGINEER (TAEC) TO PROVIDE A DESIGN FOR NEW CIRCUITS TO THE EXISTING DC POWER PLANT FOR ADDITIONAL RECTIFIERS. CONTRACTOR SHALL ROUTE NEW DC POWER FROM THE EXISTING DC POWER PLANT TO THE NEW FIF RACK OR CABINET.







DC6-48-60-18-8F ALARM BLOCK WIRE DIAGRAM

DC6-48-60-18-8F DC SURGE SUPPRESSION WIRE DIAGRAM

FIBER WIRE RHH SLEEVE DETAIL

DC CIRCUIT SCHEDULE

	FROM	TO	CONFIGURATION
1	-48V DC CIRCUIT	LTE BASE BAND UNIT	(1) 2-#10 RHH TC-RE DC CABLE
2	-48V DC CIRCUIT	RAYCAP SURGE SUPPRESSOR DC6-48-60-RM OR DC6-48-60-18	(1) 2-#10 RHH TC-RE DC CABLE
3	-48V DC CIRCUIT	RAYCAP SURGE SUPPRESSOR DC6-48-60-RM OR DC6-48-60-18	(1) 2-#10 RHH TC-RE DC CABLE
4	-48V DC CIRCUIT	RAYCAP SURGE SUPPRESSOR DC6-48-60-RM OR DC6-48-60-18	(1) 2-#10 RHH TC-RE DC CABLE
5	RAYCAP SURGE SUPPRESSOR DC6-48-60-RM OR DC6-48-60-18	RAYCAP SURGE SUPPRESSOR DC6-48-60-18-8F	(2) 6-#8 RHH TC-RE DC CABLE
6	RAYCAP SURGE SUPPRESSOR DC6-48-60-18-8F	RRH REMOTE RADIO HEAD ALPHA #1	(1) 6-#12 RHH TC-RE-DC CABLE
7	RAYCAP SURGE SUPPRESSOR DC6-48-60-18-8F	RRH REMOTE RADIO HEAD ALPHA #2	(1) 6-#12 RHH TC-RE-DC CABLE
8	RAYCAP SURGE SUPPRESSOR DC6-48-60-18-8F	RRH REMOTE RADIO HEAD BETA #1	(1) 6-#12 RHH TC-RE-DC CABLE
9	RAYCAP SURGE SUPPRESSOR DC6-48-60-18-8F	RRH REMOTE RADIO HEAD BETA #2	(1) 6-#12 RHH TC-RE-DC CABLE
10	RAYCAP SURGE SUPPRESSOR DC6-48-60-18-8F	RRH REMOTE RADIO HEAD GAMMA #1	(1) 6-#12 RHH TC-RE-DC CABLE
11	RAYCAP SURGE SUPPRESSOR DC6-48-60-18-8F	RRH REMOTE RADIO HEAD GAMMA #2	(1) 6-#12 RHH TC-RE-DC CABLE

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REVISIONS

REV	DATE	DESCRIPTION	INT
0	08/06/18	ISSUED FOR CONSTRUCTION	GGD

CHECKED BY: DWG

SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

EQUIPMENT DETAILS

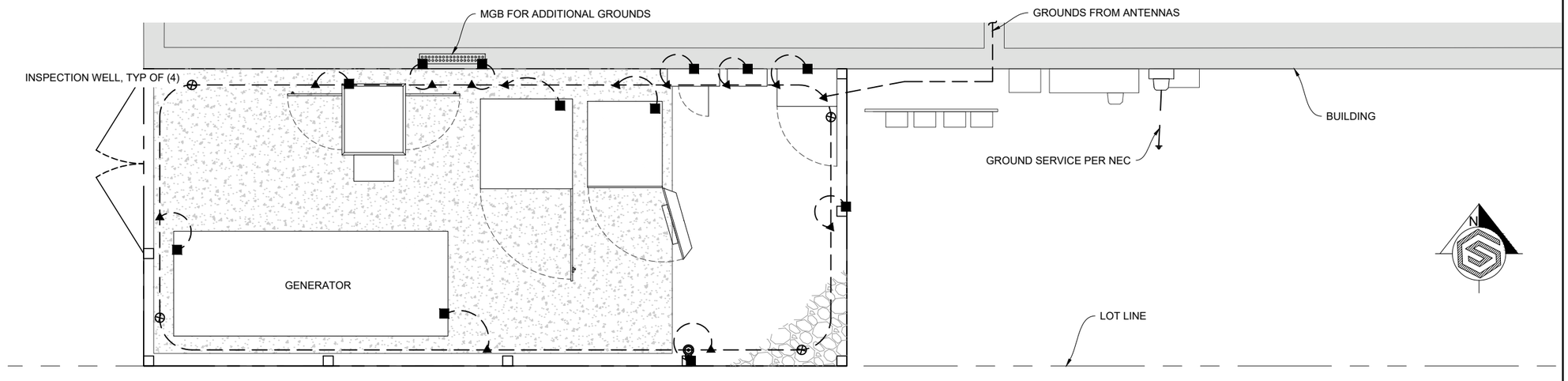
SHEET NUMBER:

R-5

GROUNDING SPECIFICATIONS

1. GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE CURRENTLY IN EFFECT FOR THE AUTHORITY HAVING JURISDICTION.
2. ALL GROUNDING DEVICE SHALL BE U.L. LISTED FOR THEIR INTENDED USE.
3. GROUND WIRES SHALL BE TINNED #2 AWG BARE SOLID COPPER UNLESS OTHERWISE NOTED.
4. CONNECTIONS OF ALL GROUND WIRES TO THE GROUND RING SHALL BE EXOTHERMIC (CAD-WELDED), UNLESS OTHERWISE NOTED. AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AT&T WIRELESS BROADBAND STANDARDS.
5. GROUNDING CONDUCTORS SHALL BE ROUTED ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. WHEN REQUIRED, GROUND LEADS SHALL BE BENT TO A MINIMUM OF 8" RADIUS.
6. WHERE GROUND WIRES ARE ROUTED FROM ANY CONNECTION ABOVE GRADE TO THE GROUND RING. INSTALL WIRE IN 3/4" HEAVY WALL LIQUID TIGHT FLEXIBLE CONDUIT FROM CONNECTION POINT TO 5" BELOW GRADE AND SEAL THE TOP WITH SILICONE SEALANT.
7. ALL GROUND BARS SHALL BE TINNED, 1/4" COPPER, SECTOR BARS 2", COLLECTOR AND MGB BARS 4", OF SUFFICIENT LENGTH TO ACCOMMODATE ALL REQUIRED CONNECTIONS WITHOUT DOUBLING LIGS, AND EACH INSTALLED WITH ISOLATORS. WHEN CONNECTING GROUND BARS (WITHIN 10 FEET OF GRADE) DIRECTLY TO THE GROUND RING, 2 EA. #2 SOLID DOWNLEADS SHALL BE CAD-WELDED TO THE GROUND BAR, 1 AT EACH OPPOSITE BOTTOM CORNER, AND EACH SHALL RUN IN 3/4" HEAVY WALL LIQUID TIGHT FLEXIBLE CONDUIT FROM GROUND BAR DOWN TO THE GROUND RING. WHEN CONNECTING SECTOR GROUND BARS, DAISY-CHAIN THE GROUND BARS AND RUN 1 EA. #2 AWG STRANDED COPPER WIRE WITH THWN INSULATION FROM THE MIDDLE GROUND BAR TO THE GROUND RING AND CAD-WELD TO THE RING.
8. WHEN ATTACHING STRANDED GROUND LEADS TO THE GROUND BARS, 2 HOLE COMPRESSION LUGS SHALL BE USED, PROTECT WITH WEATHERPROOF HEAT SHRINK, AND WITH A THIN COAT OF "KOP'R SHIELD" OR EQUIVALENT PROPERLY APPLIED AND ATTACHED ONLY WITH STAINLESS STEEL HARDWARE.
9. WHEN GROUNDING EQUIPMENT ENCLOSURES, PANELS, FRAMES, AND OTHER METAL APPARATUS, A #6 AWG STRANDED COPPER WIRE WITH THWN INSULATION SHALL BE ATTACHED UTILIZING A 2 HOLE COMPRESSION TYPE LUG, PROTECTED WITH WEATHERPROOF HEAT A CLEAN AND CORROSION FREE METALLIC SURFACE UTILIZING STAINLESS STEEL SELF-TAPPING SCREWS AS NOTED IN NOTE 10 BELOW.
10. PREPARE ALL BONDING SURFACES FOR GROUND CONNECTIONS BY REMOVING ANY AND ALL PAINT AND CORROSION TO SHINY METAL. FOLLING CAD-WELDED CONNECTIONS TO NON-COPPER SURFACES, APPLY ONE COAT OF ANY ANTI-OXIDIZING PAINT, "COLD GALV" OR EQUIVALENT.
11. GROUND RODS SHALL BE COPPER-CLAD STEEL 5/8"x10', SPACED NO LESS THAN 10' ON CENTER.
12. ALL GROUND SYSTEM CONDUCTORS AND CONDUITS SHALL BE SECURED UTILIZING ONLY NONMETALLIC, NON-CONDUCTIVE, UV RATED CLAMPS, BRACKET, AND OR SUPPORTS.
13. WHEN REQUIRED, THE CONTRACTOR SHALL ENGAGE THE SERVICES OF AN INDEPENDENT TESTING FIRM TO VERIFY, UTILIZING A MEGGER TEST, THAT THE RESISTANCE TO EARTH OF THE NEW GROUND SYSTEM IS EQUAL TO OR LESS THAN 5 (OHMS). A COPY OF THE COMPLETE TESTING REPORT SHALL BE PROVIDED TO THE AT&T REPRESENTATIVE.
14. ALL MATERIALS AND HARDWARE SHALL BR INSTALLED IN A WORKMAN-LIKE MANNER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, AND DEFINED IN NFPA-70 AND APPROVED BY A,H,J,
15. THE FENCE SHALL BE BONDED TO THE GROUND RING AT EACH CORNER POST AND AT EACH GATE POST WITH NO. 2 AWG BTCW. THE CONNECTION TO EACH POST AND THE GROUND RING SHALL BE BY EXOTHERMIC WELD. BOND EACH GATE TO THE GATE POST AT THE HINGED END WITH A GATE JUMPER. DO NOT LOCATE GATE JUMPER AT THE BOTTOM TO PREVENT IT FROM DRAGGING OR BEING DAMAGED BY MOVING EQUIPMENT.

LEGEND	
▲	CADWELD CONNECTION (EXOTHERMIC WELD)
■	MECHANICAL CONNECTION
⊗	5/8"Øx10' COPPER CLAD STEEL GROUND ROD
— — —	#2 SOLID, TINNED BARE COPPER
———	#6 GREEN STRANDED INSULATED COPPER



PROPOSED EQUIPMENT GROUNDING

SCALE: 1/2" = 1'-0" (24x36)
SCALE: 1/4" = 1'-0" (11x17)

1

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REVISIONS

REV	DATE	DESCRIPTION	INT
0	08/06/18	ISSUED FOR CONSTRUCTION	GGD

CHECKED BY: DWG

Professional Engineer (Structural)
DONALD W. GEORGE
12673
WYOMING

SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

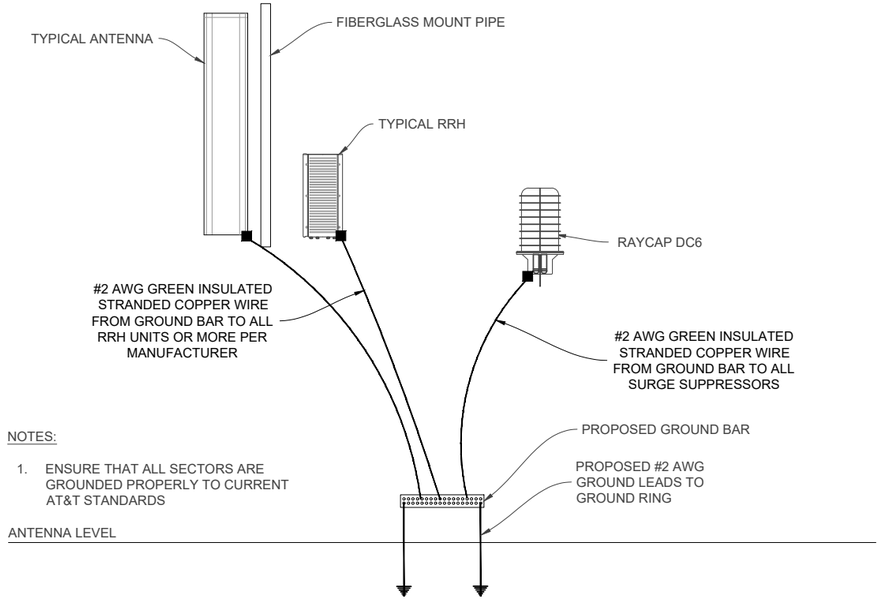
SHEET TITLE:

GROUNDING DETAILS

SHEET NUMBER:

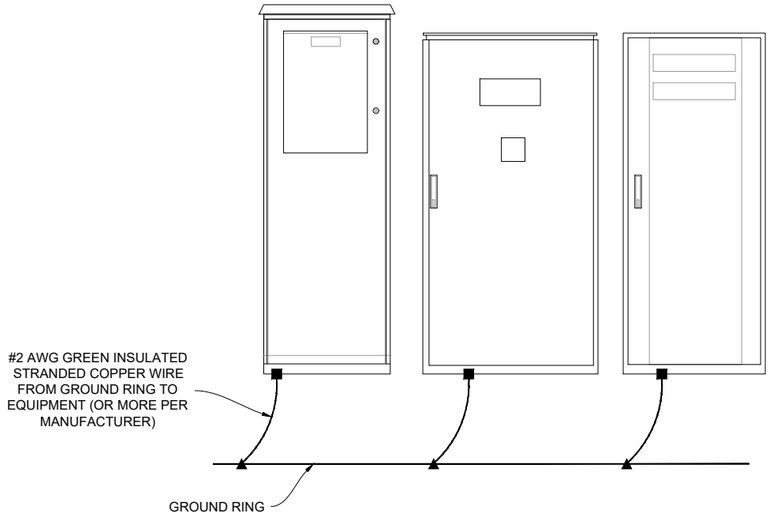
G-1

V1



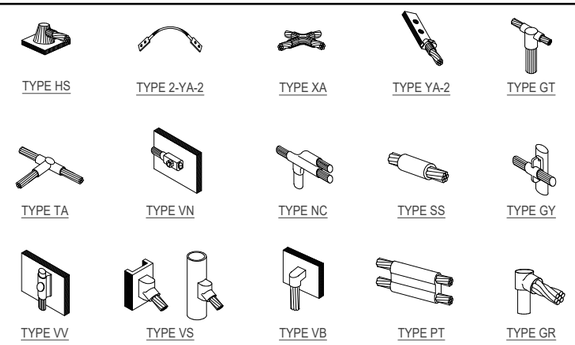
NOTES:

1. ENSURE THAT ALL SECTORS ARE GROUNDED PROPERLY TO CURRENT AT&T STANDARDS



TYPICAL GROUNDING SCHEMATIC

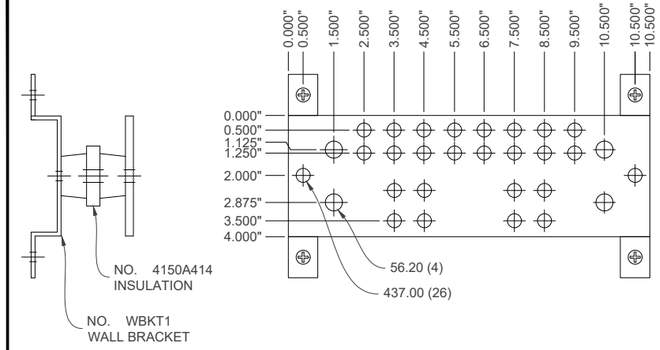
SCALE N.T.S. | 7



NOTE:
ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.

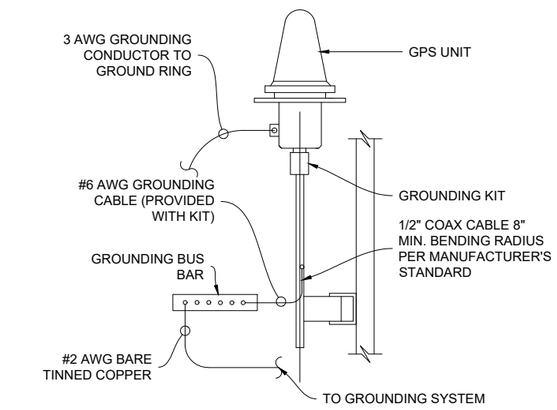
EXOTHERMIC WELDING

SCALE N.T.S. | 4



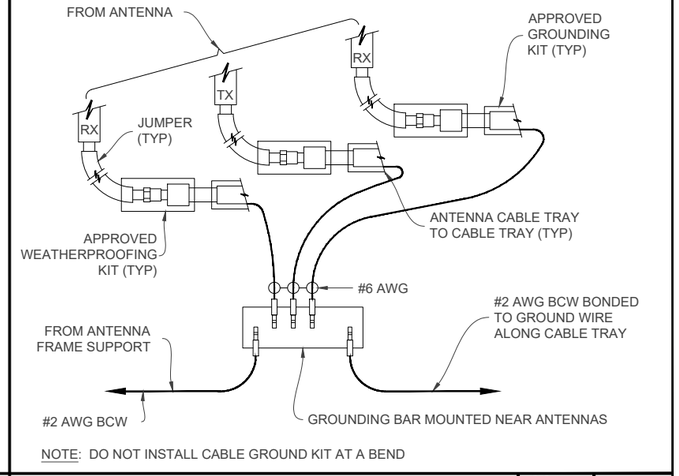
12" & 18" GROUND BARS

SCALE N.T.S. | 1



GPS GROUNDING DETAIL

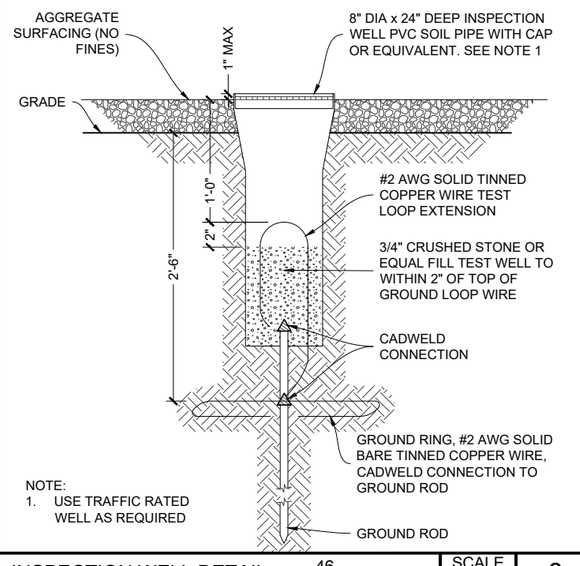
SCALE N.T.S. | 5



NOTE: DO NOT INSTALL CABLE GROUND KIT AT A BEND

COAX GROUNDING DETAIL

SCALE N.T.S. | 2



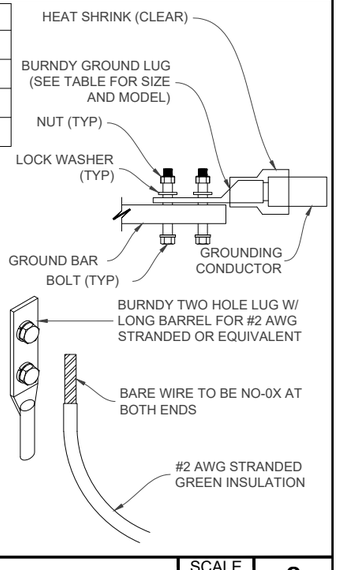
NOTE:
1. USE TRAFFIC RATED WELL AS REQUIRED

INSPECTION WELL DETAIL

SCALE N.T.S. | 6

WIRE SIZE	BURNDY LUG	BOLT SIZE
#2 AWG SOLID TINNED	YA3C-2TC38	3/8"-16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8"-16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8"-16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	3/8"-16 NC S 2 BOLT

NOTES:
1. ALL HARDWARE BOLT, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.
2. COPPER SHIELD, ANTIOX, CR NO-OX OR EQUIVALENT SHALL BE PLACED WHERE ALL DISSIMILAR METALS CONNECT.
3. ALL LUGS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
4. ALL RRH GROUND WIRES SHALL BE #2 GREEN STRANDED.
5. ALL GROUND LUGS SHALL BE 2-HOLE, LONG BARREL.
6. OUTDOOR GROUND LUGS SHALL BE BLACK HEAT SHRINK W/O INSPECTION HOLES.
7. INDOOR GROUND LUGS SHALL BE CLEAR HEAT SHRINK W/ INSPECTION HOLES.



MECHANICAL LUG CONNECTION

SCALE N.T.S. | 3

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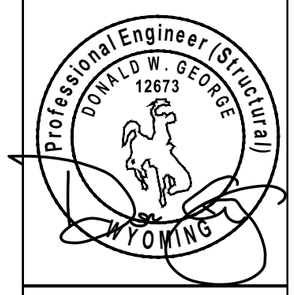
REVISIONS

REV	DATE	DESCRIPTION	INT
0	08/06/18	ISSUED FOR CONSTRUCTION	GGD

CHECKED BY: DWG



SITE INFORMATION:

KSGT RELOCATE
IDL04405

NEW SITE BUILD

1024 GREGORY LANE
JACKSON, WY 83001

SHEET TITLE:

GROUNDING DETAILS

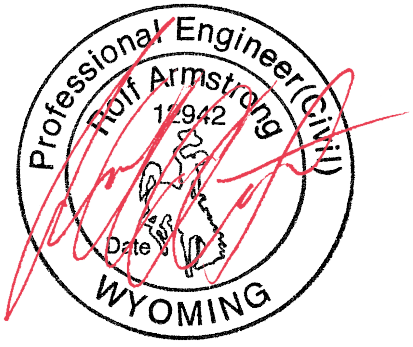
SHEET NUMBER:

G-2

Structural Calculations

FRP Antenna Enclosure

AT&T Site: IDL04405 KSGT Relocate
1024 Gregory Lane
Jackson, Wyoming 83001



Eclipse Engineering, Inc. has reviewed only the adequacy of the FRP shroud to support the vertical and lateral loads of the above noted area. We do not take responsibility for the existing supporting structure or the integrity of the structure as a whole.

Prepared For:
Hi-Tech Composite Structures, Inc
1266 SE Lake Road
Redmond, OR 97756

18-699 KSGT Relocate
1024 Gregory Lane
Jackson, Wyoming 83001

Approximate Site Coordinates:
Latitude = *43.464568*
Longitude = *-110.794022*

USGS Design Maps Summary Report

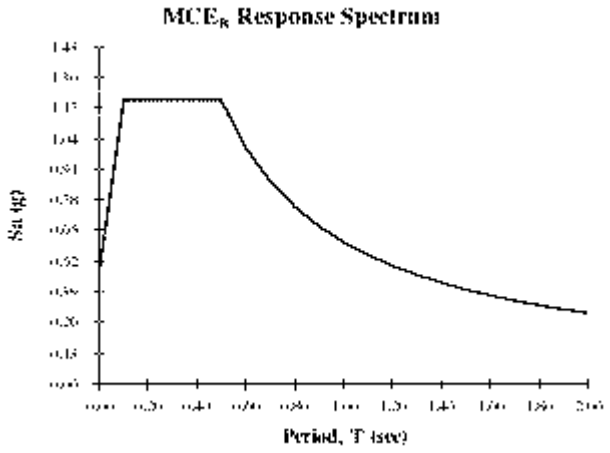
User–Specified Input

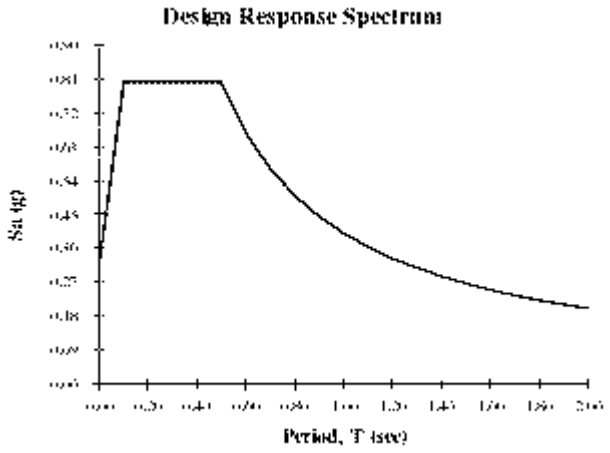
Building Code Reference Document	2012/2015 International Building Code (which utilizes USGS hazard data available in 2008)
Site Coordinates	43.46457°N, 110.79402°W
Site Soil Classification	Site Class D – "Stiff Soil"
Risk Category	I/II/III

USGS–Provided Output

S_S =	1.163 g	S_{MS} =	1.203 g	S_{DS} =	0.802 g
S_1 =	0.355 g	S_{M1} =	0.600 g	S_{D1} =	0.400 g

For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.



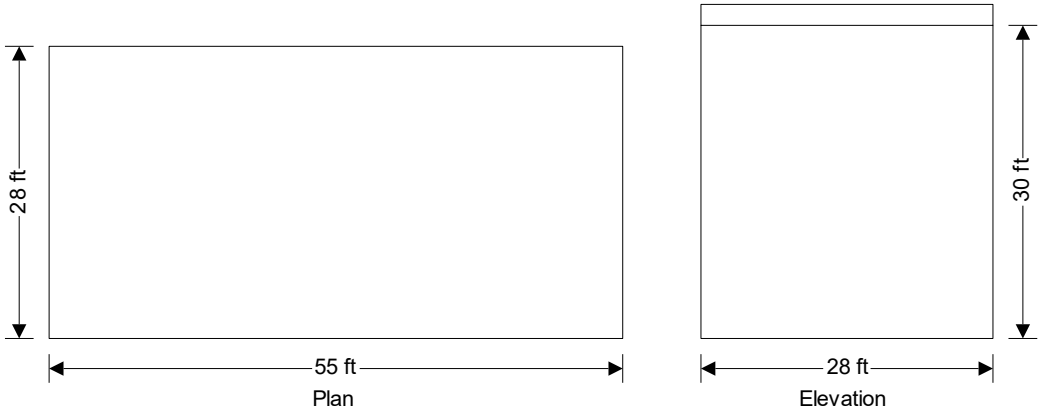


WIND LOADING (ASCE7-10)

In accordance with ASCE7-10 incorporating Errata No. 1 and Errata No. 2

Using the components and cladding design method

Tedds calculation version 2.0.20



Building data

Type of roof	Flat
Length of building	b = **55.00** ft
Width of building	d = **28.00** ft
Height to eaves	H = **30.00** ft
Height of parapet	h_p = **2.00** ft
Mean height	h = **30.00** ft

General wind load requirements

Basic wind speed	V = **115.0** mph
Risk category	II
Velocity pressure exponent coeff (Table 26.6-1)	K_d = **0.85**
Exposure category (cl.26.7.3)	C
Enclosure classification (cl.26.10)	Enclosed buildings
Internal pressure coef +ve (Table 26.11-1)	GC_{pi_p} = **0.18**
Internal pressure coef –ve (Table 26.11-1)	GC_{pi_n} = **-0.18**
Parapet internal pressure coef +ve (Table 26.11-1)	GC_{pi_pp} = **0.18**
Parapet internal pressure coef –ve (Table 26.11-1)	GC_{pi_np} = **-0.18**
Gust effect factor	G_f = **0.85**

Topography

Topography factor not significant	K_{zt} = 1.0

Velocity pressure

Velocity pressure coefficient (T.30.3-1)	K_z = **0.98**
Velocity pressure	$q_h = 0.00256 \times K_z \times K_{zt} \times K_d \times V^2 \times 1psf/mph^2$ = **28.2** psf

Velocity pressure at parapet

Velocity pressure coefficient (T.30.3-1)	K_z = **0.99**
Velocity pressure	$q_p = 0.00256 \times K_z \times K_{zt} \times K_d \times V^2 \times 1psf/mph^2$ = **28.5** psf

Peak velocity pressure for internal pressure

Peak velocity pressure – internal (as roof press.) q_i = **28.20** psf

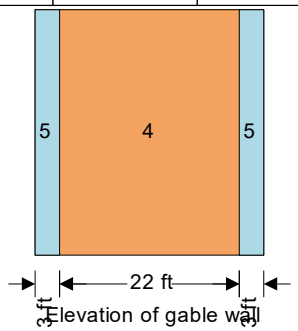
Equations used in tables

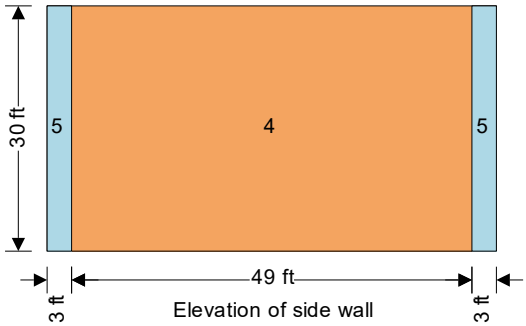
Net pressure $p = q_h \times [GC_p - GC_{pi}]$

Parapet net pressure $p = q_p \times [GC_p - GC_{pi\_p}]$

Components and cladding pressures - Wall (Figure 30.4-1 and Figure 30.4-2A)

Component	Zone	Length (ft)	Width (ft)	Eff. area (ft^2)	+GC_p	-GC_p	Pres (+ve) (psf)	Pres (-ve) (psf)
<10sf	4	-	-	10.0	0.90	-0.99	30.5	-33.0
50sf	4	-	-	50.0	0.79	-0.88	27.3	-29.9
200sf	4	-	-	200.0	0.69	-0.78	24.6	-27.2
>500sf	4	-	-	500.0	0.63	-0.72	22.8	-25.4
<10sf	5	-	-	10.0	0.90	-1.26	30.5	-40.6
50sf	5	-	-	50.0	0.79	-1.04	27.3	-34.3
200sf	5	-	-	200.0	0.69	-0.85	24.6	-28.9
>500sf	5	-	-	500.0	0.63	-0.72	22.8	-25.4



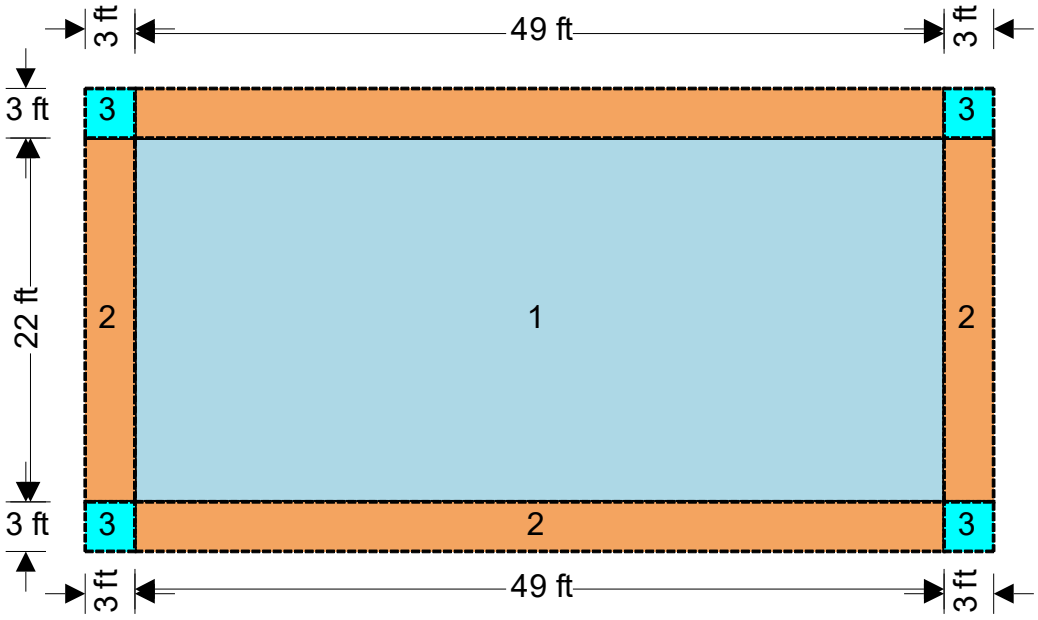


Components and cladding pressures - Roof (Figure 30.4-2A)

Component	Zone	Length (ft)	Width (ft)	Eff. area (ft^2)	+GC_p	-GC_p	Pres (+ve) (psf)	Pres (-ve) (psf)
<10sf	1	-	-	10.0	0.30	-1.00	13.5 #	-33.3
25sf	1	-	-	25.0	0.26	-0.96	12.4 #	-32.2
50sf	1	-	-	50.0	0.23	-0.93	11.6 #	-31.3

Component	Zone	Length (ft)	Width (ft)	Eff. area (ft^2)	$+GC_p$	$-GC_p$	Pres (+ve) (psf)	Pres (-ve) (psf)
>100sf	1	-	-	100.0	0.20	-0.90	10.7 #	-30.5
<10sf	2	-	-	10.0	0.30	-1.80	13.5 #	-55.8
25sf	2	-	-	25.0	0.26	-1.52	12.4 #	-48.0
50sf	2	-	-	50.0	0.23	-1.31	11.6 #	-42.0
>100sf	2	-	-	100.0	0.20	-1.10	10.7 #	-36.1
<10sf	3	-	-	10.0	0.30	-2.80	13.5 #	-84.0
25sf	3	-	-	25.0	0.26	-2.12	12.4 #	-65.0
50sf	3	-	-	50.0	0.23	-1.61	11.6 #	-50.5
>100sf	3	-	-	100.0	0.20	-1.10	10.7 #	-36.1

The final net design wind pressure, including all permitted reductions, used in the design shall not be less than 16psf acting in either direction



Plan on roof

Fiberglass Reinforced Antenna Structure

$k := 1000.lb$ $psi := lb \cdot in^{-2}$ $psf := lb \cdot ft^{-2}$ $ksi := 1000 \cdot lb \cdot in^{-2}$ $plf := lb \cdot ft^{-1}$

Design criteria: As Published in LARR #25520

FRP: $SF_v := 5.0$ $SF_b := 5.0$ $SF_a := 3$

Steel:

Modulus of Elasticity -	$E_f := 2800000 \cdot psi$	Modulus of Elasticity -	$E_s := 29000000 \cdot psi$
Tensile Strength -	$F_t := 6600 \cdot psi$	Yield Strength -	$F_y := 36000 \cdot psi$
Flexural Strength -	$F_{bu} := 6600 \cdot psi$	Shear Strength -	$F_{vu} := 21600 \cdot psi$
Ultimate Shear Stress -	$F_{vu} := 500 \cdot psi$		
Ultimate Brg Stress -	$F_{brg} := 30 \cdot ksi$		
1/2" Bolt Bearing -	$F_{b500b} := 6000 \cdot psi$	3/8" Bolt Bearing -	$F_{b375b} := 6000 \cdot psi$
1/2" Bolt Tension -	$F_{b500t} := 300 \cdot lb$	3/8" Bolt Tension -	$F_{b375t} := 170 \cdot lb$
1/2" Bolt Shear -	$F_{b500v} := 780 \cdot lb$	3/8" Bolt Shear -	$F_{b375v} := 440 \cdot lb$

Note: All values taken as lengthwise allowable strengths. Since a safety factor of 5 has been used, it is acceptable to use a 1/3 wind increase on bending stress.

Wind Loading - 2015 IBC & ASCE 7-10, Chapter 27.0

Section 6.5.13 - Wind Loads on Other Structures

3 - Second Wind Gust Speed -	$V := 115 mph$	
Fastest Mile Wind Speed -	$V_{fm} := (V - 10.5) \cdot 1.05^{-1} = 99.5 mph$	
Importance Factor -	$I_w := 1.00$	
Wind Directionality Factor Table 26.6-1 -	$K_d := 0.9$	Square profile rooftop structure
Velocity Pressure Exp. Coeff. Section 29.3.1 -	$K_z := 0.98$	30 ft > grade, Exposure C
Topographic Factor - 26.8.2 -	$K_{zt} := 1.00$	
Velocity Pressure - 29.3.2 -	$q_z := 0.00256 \cdot K_z \cdot K_{zt} \cdot K_d \cdot V^2 \cdot I_w \cdot psf = 29.9 \cdot psf$	
Gust Factor - 29.5.1 -	$GC_r := 1.9$	
Omega for conversion to ASD -	$\Omega := 0.6$	
Wind Force -	$P_w := q_z \cdot GC_r \cdot \Omega = 34 \cdot psf$	

Find the Seismic Load using Full Design Live Load :

ASCE 7-10 Design Procedure:

Importance Factor - $I_E := 1.0$ Normal Category

Mapped Seismic Accelerations - $S_s := 1.163$

$S_1 := 0.355$

$S_{DS} := 0.802$

$S_{D1} := 0.400$

Determine the Site Class - Class D

Determine F_a and F_v $F_a := 1.034$ $F_v := 1.690$

Component Response Modification Factor - $R := 3$ For Telecommunication Towers, Table 15.4-2

Component Amplification Factor - $a_p := 2.5$ For Flexible components, Table 13.6-1

Average Roof Height of Structure - $h := 30.0ft$

Height of FRP Attachment - $z := 26.5ft$

Determine Weight of FRP -

Unit Weight of 1/4 FRP Skin - $w_s := 0.070lb \cdot in^{-3}$ From Pultex Manual

Volume of 1/4" Skin - $V_s := 8520in^3$

Unit Weight of L4x4x3/8 - $w_3 := 2.32plf$ From Pultex Manual

Length of L4x4x3/8 - $L_3 := 86ft$

Unit Wt. of Antennna - $w_{aa} := 75lb$ Refer to Attached Cut Sheets

Number of Antennas - $N_{aa} := 4$

Total Weight of Structure - $W_p := w_s \cdot V_s + w_{aa} \cdot N_{aa} + w_3 \cdot L_3 = 1095.9\,lb$

Determine Shear Force Boundaries - $F_{pmax} := 1.6 \cdot S_{DS} \cdot I_E \cdot W_p = 1406.3\,lb$

$F_{pmin} := 0.3 \cdot S_{DS} \cdot I_E \cdot W_p = 263.7\,lb$

Seismic Lateral Force - $$V_s := \frac{0.4 \cdot a_p \cdot S_{DS} \cdot W_p}{\left(\frac{R}{I_E}\right)} \cdot \left(1 + 2 \cdot \frac{z}{h}\right) = 810.6\,lb$$

Determine if Wind or Seismic Governs:

Length of Largest Panel Face- $L_{max} := 10.0ft$ Conservative

Height of Largest Panel Face - $H_{max} := 6.0ft$ Conservative

Wind Lateral Force $V_w := P_w \cdot L_{max} \cdot H_{max} = 2042.5\,lb$

Wind Lateral Force > Seismic Lateral Force; therefore, wind governs design

Check 1/4" FRP Skin for Out-of-Plane Load:

Distance Between Stiffeners: $L_p := 1.75 \cdot ft$ (Maximum)

Width of Panel Section: $w_p := 12 \cdot in$

Thickness of Panel Section: $t_p := 0.25 \cdot in$ $A_p := w_p \cdot t_p = 3 \cdot in^2$

Section Properties of Flat Panel : $S_p := \frac{w_p \cdot t_p^2}{6}$ $S_p = 0.125 \cdot in^3$ $I_p := \frac{w_p \cdot t_p^3}{12}$ $I_p = 0.016 \cdot in^4$

Moment on Panel: $M_p := \frac{(P_w \cdot w_p) \cdot L_p^2}{8}$ $M_p = 13\ ft \cdot lb$

Bending Stress in Panel: $f_{bp} := \frac{M_p}{S_p}$ $f_{bp} = 1251 \cdot psi$ **OK!**

Deflection in Panel: $\Delta_p := \frac{5 \cdot (P_w \cdot w_p) \cdot L_p^4}{384 \cdot E_f \cdot I_p} = 0.164 \cdot in$ $\frac{L_p}{\Delta_p} = 127.9$ **OK!**

USE: 1/4" PANEL SKIN IS ADEQUATE TO SUPPORT THE LOADS

L4x4x3/8 Wind Girts: (Horiz. Simple Span)

Length of Girt: $L_p := 5.00 \cdot ft$ (Maximum)

Spacing of Girts: $w_p := 24 \cdot in$

Area of L4x4x3/8: $A_p := 2.84 in^2$ From Pultex Manual

Section Modulus: $S_p := 1.499 in^3$ From Pultex Manual

Moment of Inertia: $I_p := 4.290 in^4$ From Pultex Manual

Moment on Angle: $M_p := \frac{(P_w \cdot w_p) \cdot L_p^2}{8} = 212.8 \, ft \cdot lb$

Bending Stress in Angle: $f_{bp} := \frac{M_p}{S_p} = 1703.2 \cdot psi$

$$\frac{f_{bp}}{F_{bu}} = 0.3$$

$$if\left(\frac{f_{bp}}{F_{bu}} < 1.0, \text{"Member OK"}, \text{"Member NG"}\right) = \text{"Member OK"}$$

Deflection in Angle: $\Delta_p := \frac{5 \cdot (P_w \cdot w_p) \cdot L_p^4}{384 \cdot E_f \cdot I_p} = 0.08 \cdot in$ $\frac{L_p}{\Delta_p} = 752.8$ OK

USE: L4x4x3/8 HORIZONTAL WIND GIRTS SPACED AT MAX. 24" O.C. TO TRANSFER LOAD FROM FRP SKIN TO VERTICAL ELEMENTS

L4x4x3/8 Posts: (Vert. Simple Span)

Length of Post: $L_p := 6.00 \cdot ft$ (Maximum)

Spacing of Posts: $w_p := 60 \cdot in$

Area of L4x4x3/8: $A_p := 2.84 in^2$ From Pultex Manual

Section Modulus: $S_p := 1.499 in^3$ From Pultex Manual

Moment of Inertia: $I_p := 4.290 in^4$ From Pultex Manual

Moment on Angle: $M_p := \frac{(P_w \cdot w_p) \cdot L_p^2}{8}$ $M_p = 765.9\ ft \cdot lb$

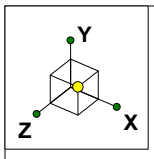
Bending Stress in Angle: $f_{bp} := \frac{M_p}{S_p} = 6131.6 \cdot psi$

$$\frac{f_{bp}}{F_{bu}} = 0.9$$

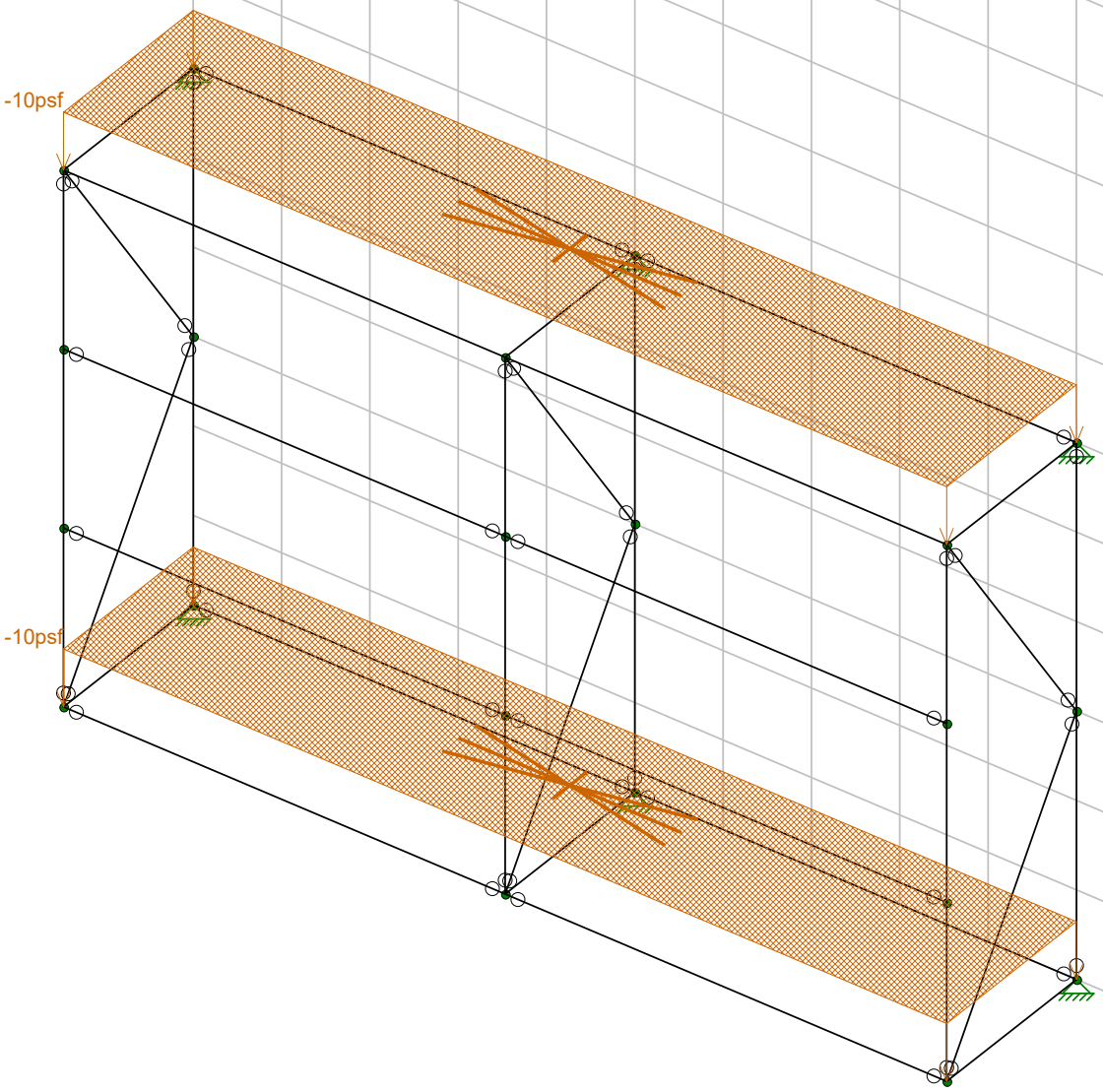
$$if\left(\frac{f_{bp}}{F_{bu}} < 1.0, \text{"Member OK"}, \text{"Member NG"}\right) = \text{"Member OK"}$$

Deflection in Angle: $\Delta_p := \frac{5 \cdot (P_w \cdot w_p) \cdot L_p^4}{384 \cdot E_f \cdot I_p} = 0.413 \cdot in$ $\frac{L_p}{\Delta_p} = 174.3$ OK

USE: L4x4x3/8 VERTICAL POSTS AT LOCATIONS SHOWN ON PLANS TO TRANSFER LOAD FROM FRP SKIN TO EXISTING STRUCTURE



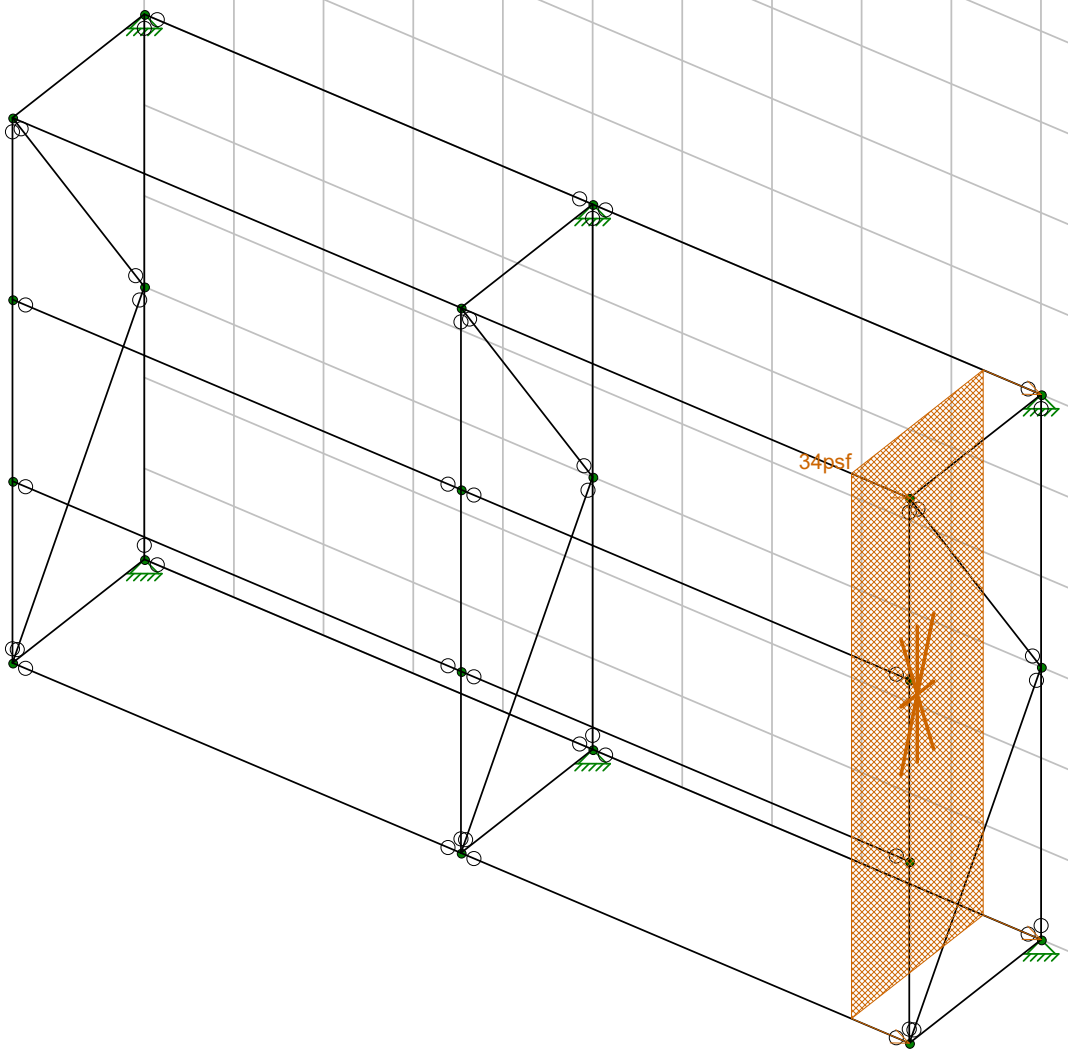
18-699 KGST Relocate
Jackson, WY
Model Dead Load
MLG 8/23/2018



Loads: BLC 1, DL
Envelope Only Solution

Eclipse Engineering, Inc.		
MLG	18-699 KSGT Relocate	Aug 21, 2018 at 1:11 PM
18-08-239	Dead Load	18-699.r3d

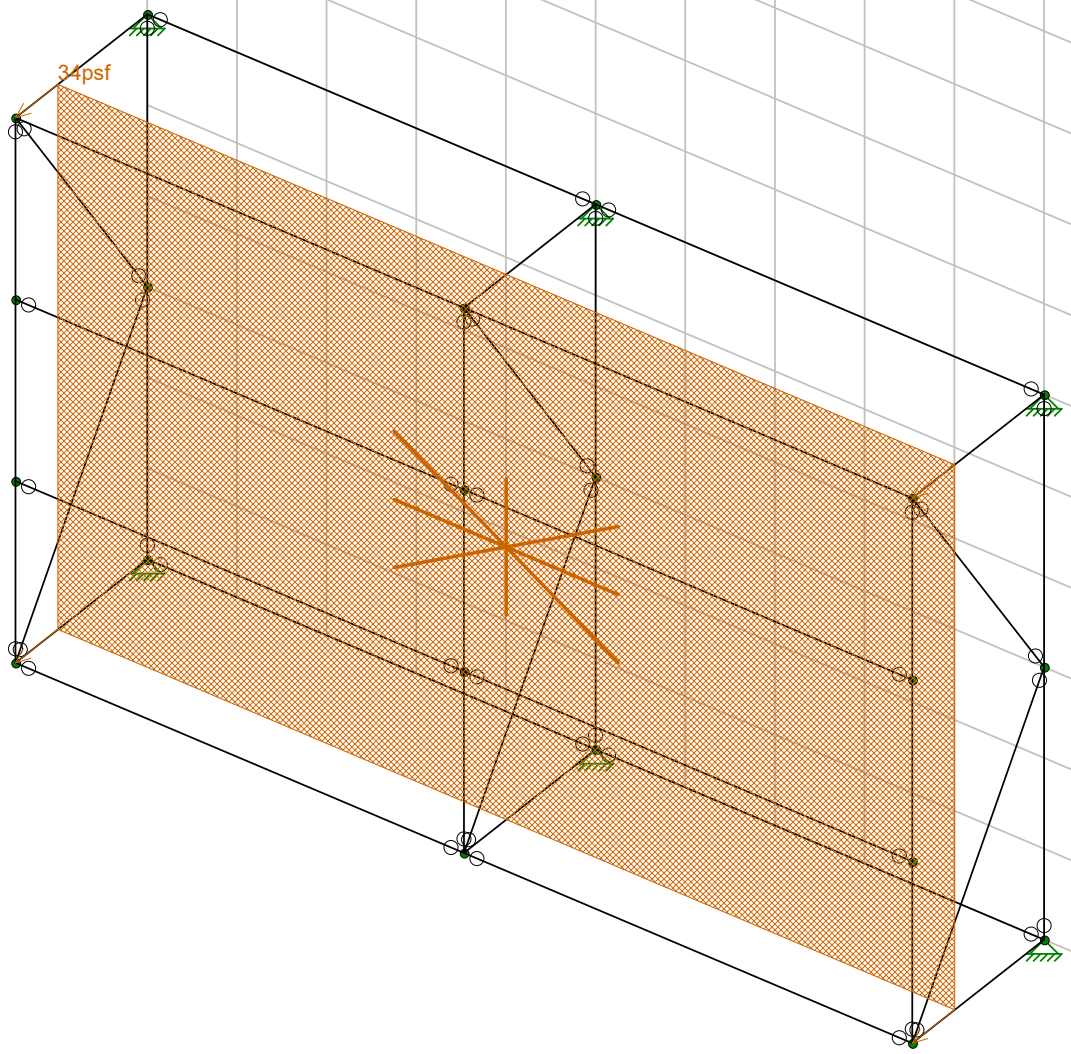
18-699 KGST Relocate
Jackson, WY
Model WL(x) Forces
MLG 8/23/2018



Loads: BLC 2, WL(x)
Envelope Only Solution

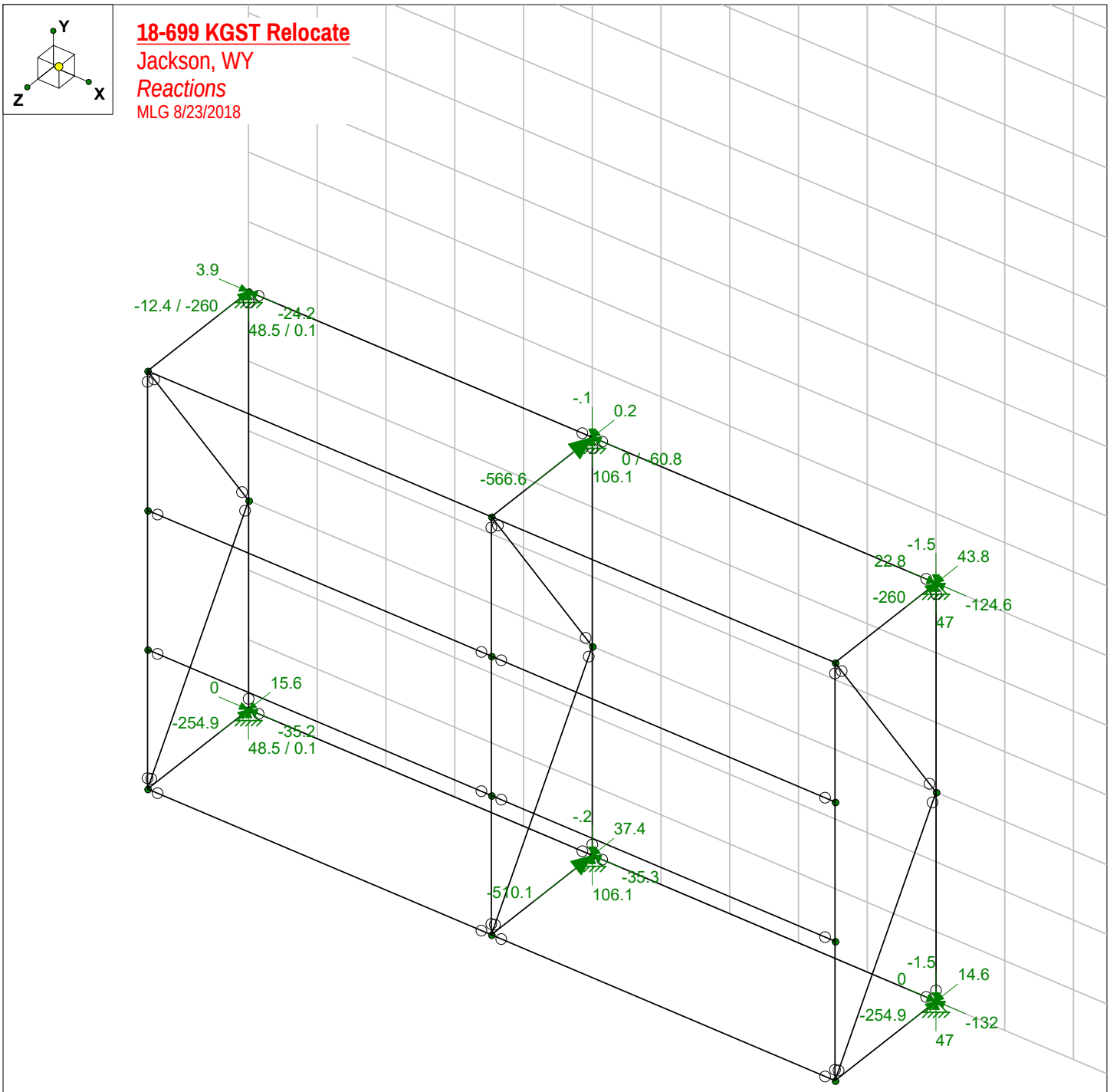
Eclipse Engineering, Inc.		
MLG	18-699 KSGT Relocate	Aug 21, 2018 at 1:12 PM
18-08-239	WL(x) Forces	18-699.r3d

18-699 KGST Relocate
Jackson, WY
Model WL(z) Forces
MLG 8/23/2018



Loads: BLC 3, WL(z)
Envelope Only Solution

Eclipse Engineering, Inc.		
MLG	18-699 KSGT Relocate	Aug 21, 2018 at 1:12 PM
18-08-239	WL(z) Forces	18-699.r3d



Envelope Only Solution
Reaction and Moment Units are lb and k-ft (Enveloped)

Eclipse Engineering, Inc.		
MLG	18-699 KSGT Relocate	Aug 21, 2018 at 1:16 PM
18-08-239	Reactions	18-699.r3d

SBNHH-1D65A

6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 65° HPBW, 2x RET. Both high bands share the same electrical tilt.

- Interleaved dipole technology providing for attractive, low wind load mechanical package

Electrical Specifications

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	13.4	13.5	16.5	16.7	17.2	17.5
Beamwidth, Horizontal, degrees	66	61	70	65	62	61
Beamwidth, Vertical, degrees	17.6	15.9	7.1	6.6	6.2	5.5
Beam Tilt, degrees	0–18	0–18	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	16	13	13	13	12	12
Front-to-Back Ratio at 180°, dB	25	27	28	28	27	29
Isolation, dB	25	25	25	25	25	25
Isolation, Intersystem, dB	30	30	30	30	30	30
VSWR | Return Loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	200
Polarization	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

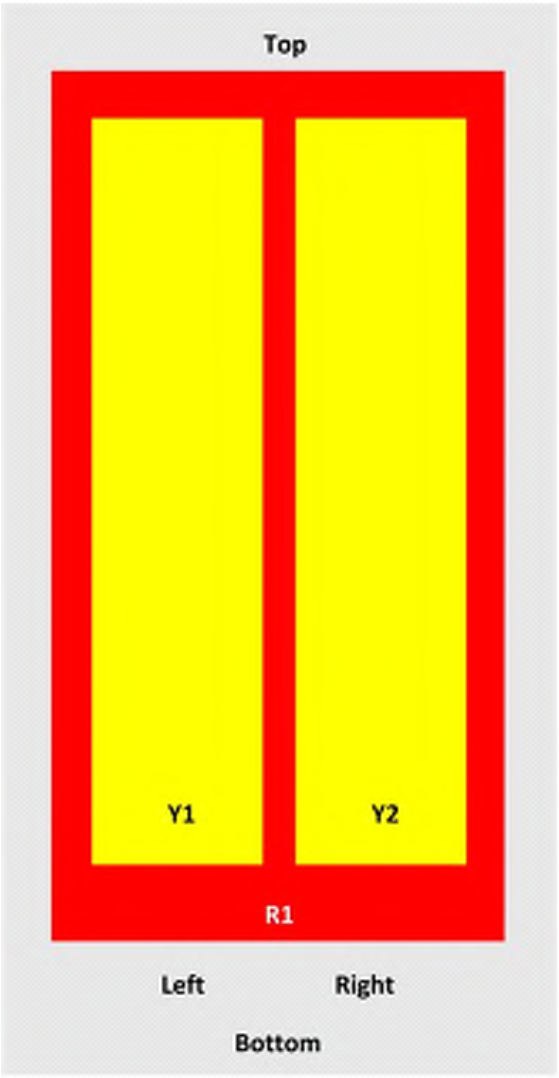
Electrical Specifications, BASTA*

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain by all Beam Tilts, average, dBi	13.1	13.1	16.1	16.5	16.7	17.2
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.5	±0.5	±0.3	±0.5	±0.4
Gain by Beam Tilt, average, dBi	0 ° | 13.4 9 ° | 13.1 18 ° | 12.7	0 ° | 13.4 9 ° | 13.1 18 ° | 12.7	0 ° | 16.0 5 ° | 16.2 10 ° | 16.1	0 ° | 16.3 5 ° | 16.5 10 ° | 16.5	0 ° | 16.5 5 ° | 16.8 10 ° | 16.6	0 ° | 17.0 5 ° | 17.3 10 ° | 16.9
Beamwidth, Horizontal Tolerance, degrees	±3.1	±5.4	±2.8	±4	±6.6	±4.6
Beamwidth, Vertical Tolerance, degrees	±1.8	±1.4	±0.3	±0.4	±0.5	±0.3
USLS, beampeak to 20° above beampeak, dB	15	14	15	15	15	14
Front-to-Back Total Power at 180° ± 30°, dB	22	21	26	26	24	25
CPR at Boresight, dB	22	16	22	25	21	22
CPR at Sector, dB	10	6	12	8	5	4

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, download the whitepaper Time to Raise the Bar on BSAs.

Array Layout

SBNHH 65



Array	Freq (MHz)	Conns	RET (MRET)	AISG RET UID
R1	698-896	1-2	1	ANxxxxxxxxxxxxxxx.1
Y1	1695-2360	3-4	2	ANxxxxxxxxxxxxxxx.2
Y2	1695-2360	5-6		

View from the front of the antenna

(Sizes of colored boxes are not true depictions of array sizes)

General Specifications

Operating Frequency Band	1695 – 2360 MHz | 698 – 896 MHz
Antenna Type	Sector

Band	Multiband
Performance Note	Outdoor usage

Mechanical Specifications

RF Connector Quantity, total	6
RF Connector Quantity, low band	2
RF Connector Quantity, high band	4
RF Connector Interface	7-16 DIN Female
Color	Light gray
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Aluminum | Low loss circuit board
Radome Material	Fiberglass, UV resistant
RF Connector Location	Bottom
Wind Loading, frontal	206.0 N @ 150 km/h 46.3 lbf @ 150 km/h
Wind Loading, lateral	169.0 N @ 150 km/h 38.0 lbf @ 150 km/h
Wind Loading, maximum	396.0 N @ 150 km/h 89.0 lbf @ 150 km/h
Wind Speed, maximum	241 km/h | 150 mph

Dimensions

Length	1413.0 mm | 55.6 in
Width	301.0 mm | 11.9 in
Depth	180.0 mm | 7.1 in
Net Weight, without mounting kit	15.2 kg | 33.5 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal RET	High band (1) | Low band (1)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Multi-RET)
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male

Packed Dimensions

Length	1589.0 mm | 62.6 in
Width	390.0 mm | 15.4 in

SBNHH-1D65A

Depth	296.0 mm | 11.7 in
Shipping Weight	26.1 kg | 57.5 lb

Regulatory Compliance/Certifications

Agency	**Classification**
RoHS 2011/65/EU	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

Included Products

BSAMNT-1 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

NNHH-65A-R4

8-port sector antenna, 4x 698–896 and 4x 1695–2360 MHz, 65° HPBW, 4x RETs

Electrical Specifications

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2180	2300–2360
Gain, dBi	13.4	13.9	17.2	17.7	17.8	18.3
Beamwidth, Horizontal, degrees	71	63	59	60	62	60
Beamwidth, Vertical, degrees	16.6	14.7	7.3	6.9	6.5	5.9
Beam Tilt, degrees	2–16	2–16	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	18	19	16	17	18	20
Front-to-Back Ratio at 180°, dB	27	29	35	36	37	37
Isolation, dB	25	25	25	25	25	25
Isolation, Intersystem, dB	25	25	25	25	25	25
VSWR | Return Loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	200
Polarization	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2180	2300–2360
Gain by all Beam Tilts, average, dBi	13.1	13.6	16.8	17.5	17.6	18.0
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.5	±0.7	±0.4	±0.3	±0.5
Gain by Beam Tilt, average, dBi	2 ° | 13.2 9 ° | 13.1 16 ° | 13.0	2 ° | 13.7 9 ° | 13.7 16 ° | 13.3	2 ° | 16.8 7 ° | 16.9 12 ° | 16.6	2 ° | 17.7 7 ° | 17.6 12 ° | 17.3	2 ° | 17.5 7 ° | 17.8 12 ° | 17.4	2 ° | 17.9 7 ° | 18.2 12 ° | 17.5
Beamwidth, Horizontal Tolerance, degrees	±4.7	±4.4	±3.6	±1.7	±3.4	±4.8
Beamwidth, Vertical Tolerance, degrees	±1.3	±0.9	±0.5	±0.4	±0.4	±0.3
USLS, beampeak to 20° above beampeak, dB	20	19	14	14	16	14
Front-to-Back Total Power at 180° ± 30°, dB	22	20	29	31	29	29
CPR at Boresight, dB	21	23	17	20	20	17
CPR at Sector, dB	10	4	9	10	8	9

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, download the whitepaper Time to Raise the Bar on BSAs.

Array Layout

Array	Freq (MHz)	Conns	RET (MRET)	AISG RET UID
R1	698-896	1-2	1	CPxxxxxxxxxxxxxxxMM.1
R2	698-896	3-4	2	CPxxxxxxxxxxxxxxxMM.2
Y1	1695-2360	5-6	3	CPxxxxxxxxxxxxxxxMM.3
Y2	1695-2360	7-8	4	CPxxxxxxxxxxxxxxxMM.4

(Sizes of colored boxes are not true depictions of array sizes)

Port Configuration

General Specifications

Operating Frequency Band 1695 – 2360 MHz | 698 – 896 MHz

Antenna Type	Sector
Band	Multiband
Performance Note	Outdoor usage
Total Input Power, maximum	900 W @ 50 °C

Mechanical Specifications

RF Connector Quantity, total	8
RF Connector Quantity, low band	4
RF Connector Quantity, high band	4
RF Connector Interface	4.3-10 Female
Color	Light gray
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Aluminum | Low loss circuit board
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	509.0 N @ 150 km/h 114.4 lbf @ 150 km/h
Wind Loading, lateral	169.0 N @ 150 km/h 38.0 lbf @ 150 km/h
Wind Loading, maximum	660.0 N @ 150 km/h 148.4 lbf @ 150 km/h
Wind Speed, maximum	241 km/h | 150 mph

Dimensions

Length	1400.0 mm | 55.1 in
Width	498.0 mm | 19.6 in
Depth	197.0 mm | 7.8 in
Net Weight, without mounting kit	30.5 kg | 67.2 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal RET	High band (2) | Low band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Multi-RET)
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male

Packed Dimensions

Length	1582.0 mm | 62.3 in
Width	608.0 mm | 23.9 in
Depth	352.0 mm | 13.9 in
Shipping Weight	43.7 kg | 96.3 lb

Regulatory Compliance/Certifications

Agency	**Classification**
RoHS 2011/65/EU	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

Included Products

BSAMNT-3 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

1) HTCS' STANDARD FABRICATION AND MANUFACTURING TOLERANCES & TECHNIQUES WILL APPLY.

2) ANCHOR BOLTS AND/OR ATTACHMENT HARDWARE BY OTHERS UNLESS NOTED.

3) EXISTING STRUCTURE AND CONNECTION SHALL BE VERIFIED BY OTHERS TO SUPPORT THE NEW VERTICAL AND LATERAL LOADS OF THE FRP ENCLOSURE.

4) THE TERM "INTEGRATED" REFERS TO A PROCEDURE USED IN FIBERGLASS APPLICATIONS WHERE TWO MEMBERS ARE BONDED TO EACH OTHER WITH THE USE OF FIBER LAMINATES AND FIBER-GLASS RESIN AS THE BONDING AGENT.

5) STRUCTURE IS NOT INTENDED TO BE A FULLY WEATHERPROOF STRUCTURE, ANY WEATHER-PROOFING IF REQUIRED BY OTHERS.

6) HINGED PANELS SHOULD NOT BE OPENED IN GUSTY OR CONSTANT WIND EXCEEDING 10 MPH. HINGED PANELS NEED TO BE SECURED WHEN IN OPEN POSITION.

7) ALL FABRICATION IS GOVERNED BY HI-TECH COMPOSITE STRUCTURES (LARR #25520).

8) FIBERGLASS SKIN IS HI-TECH COMPOSITES $\frac{1}{4}$" NOMINAL.

9) FIBERGLASS SKIN FLEXURAL CAPACITY = 800 LB-IN / FT MIN.

10) ALL FIELD CUT OR DRILLED EDGES OF FRP STRUCTURAL MEMBERS TO BE COATED BY OTHERS WITH RESIN OR ACRYLIC SEALER.

11) IF PREFABRICATED MEMBERS ARE NOT ASSEMBLED PER PLAN, CONTACT HI-TECH COMPOSITES BEFORE CUTTING OR ALTERING FABRICATED MEMBERS.

12) STRUCTURAL FRP MEMBERS SHALL BE FABRICATED AND ASSEMBLED AS INDICATED ON THE DRAWINGS.

13) THE CONTRACTOR SHALL PROTECT THE FRP STRUCTURAL MEMBERS FROM ABUSE TO PREVENT BREAKAGE, NICKS, GOUGES, ETC. DURING FABRICATION, HANDLING, AND INSTALLATION.

14) ANTENNAS & ANTENNA BRACKETS SUPPLIED AND INSTALLED BY OTHERS UNLESS OTHERWISE NOTED.

15) STANDARD FINISH IS FACTORY PRIMER. FINAL PAINTING BY OTHERS UNLESS OTHERWISE NOTED.

16) TEXTURE: THE DAMAGE AND/OR COMPROMISE OF ANY EXTERIOR MATERIALS (EIFS OR OTHERWISE) ARE NOT THE RESPONSIBILITY OF HI-TECH COMPOSITES DUE TO PRODUCT STORAGE AFTER SHIPPING TO A LOCATION. IT IS THE SOLE RESPONSIBILITY OF THE PARTY RECEIVING THE PRODUCT TO STORE MATERIALS IN A MANNER AS TO ENSURE APPLIED TEXTURE IS NOT COMPROMISED PRIOR TO OR AT TIME OF INSTALLATION OR HANDLING DURING OFFLOADING/DELIVERY. PROPER STORAGE/HANDLING PROCEDURES CAN BE FURNISHED UPON REQUEST

17) HI-TECH COMPOSITES WILL NOT BE REASONABLE FOR ANY ADDED MATERIAL TO STRUCTURES AND OR UNIT.

DISCLAIMER:
ALL STRUCTURAL COMPONENTS TO BE CONNECTED TOGETHER SHALL BE COMPLETELY FIT UP ON THE GROUND OR OTHERWISE VERIFIED FOR COMPATIBILITY PRIOR TO LIFTING ANY COMPONENTS INTO PLACE. REPAIRS REQUIRED DUE TO FIT-UP OR CONNECTION COMPATIBILITY PROBLEMS AFTER PARTIAL ERECTION ARE THE FINANCIAL RESPONSIBILITY OF THE CONTRACTOR.

DESIGN CRITERAI:

DESIGN CODE = 2015 INTERNATIONAL BUILDING CODE (2015)

WIND:
- -WIND SPEED = 115 MPH (3-SEC GUST) PER ASCE 7-10
- -RISK CATEGORY / STRUCTURE CLASS II
- -EXPOSURE CATEGORY: C

SEISMIC:
- -IMPORTANCE FACTOR: 1.00
- -RISK CATEGORY: II
- -MAPPED SPECTRAL Response Accelerations:
  Ss = 1.163 S1 = 0.335g
- -ASSUMED SITE CLASS: D
- -SPECTRAL RESPONSE COEFFICIENTS:
  SDS = 0.802g SD1 = 0.4g
- -SEISMIC DESIGN CATEGORY: D

GENERAL NOTES

STRUCTURAL ONLY

Professional Engineer (Civil) Rolf Armstrong 12942 Date WYOMING

ECLIPSE ENGINEERING
376 SW BLUFF DRIVE, STE 8
BEND, OR 97702
PH: (541) 389-9659

CARRIER
AT&T

CUSTOMER
GENERAL DYNAMICS
77 "A" STREET
NEEDHAM HEIGHTS, MA 02194

PROJECT
AT&T SITE: IDL04405
KSGT RELOCATE
1024 GREGORY LANE
JACKSON, WY 83001

REV	DESCRIPTION	DATE	NAME

SCALE:	DATE:	DRN:	CHKD:	DWG #	SHEET #
NTS	8-20-18	TDJ		17-617	T-1

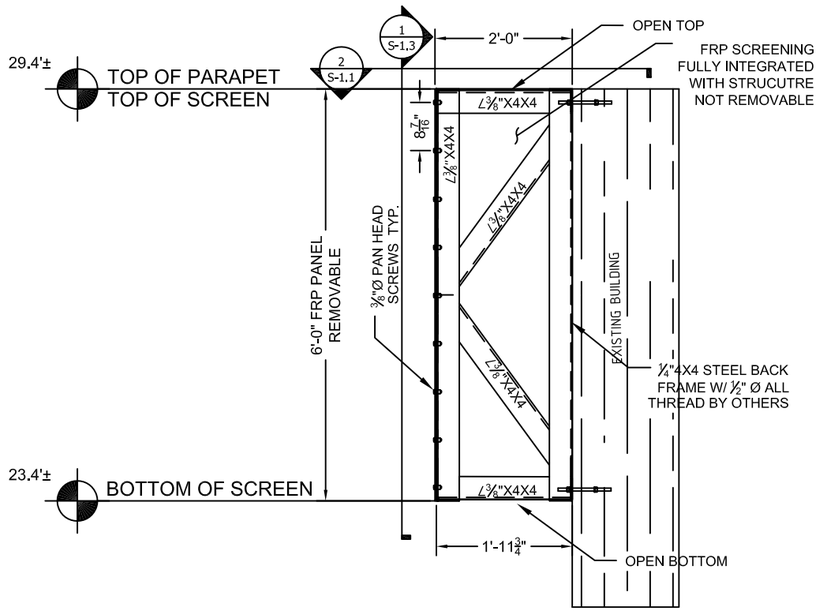
HTCS HI-TECH COMPOSITE STRUCTURES, INC.
Design, Engineering, Fabrication, Installation
PHONE - (541) 548-0812
FAX - (541) 548-0816
1266 SOUTH LAKE ROAD, REDMOND, OREGON 97756

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
BREAK ALL SHARP EDGES SURFACE ROUGHNESS
TOLERANCES UNLESS SPECIFIED

DECIMALS .X=±.1 .XX=±.03 .XXX=±.010
ANGLES ±1°
FRACTIONS ±1/16

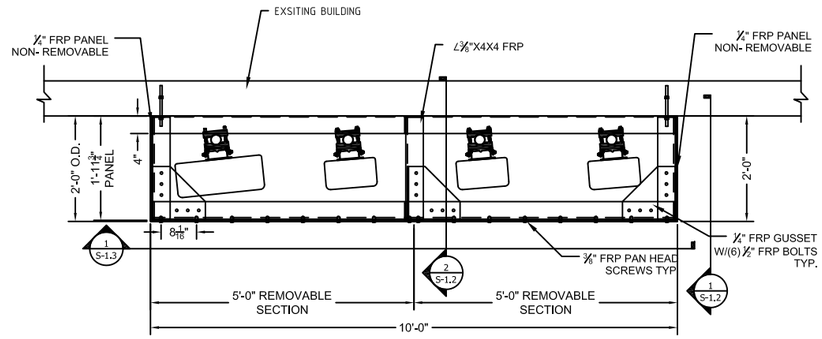
VIEW ORIENTATION

SHEET # T-1.1



1 SCREENING BOX (ADD)

Scale: 3/8" = 1'-0"

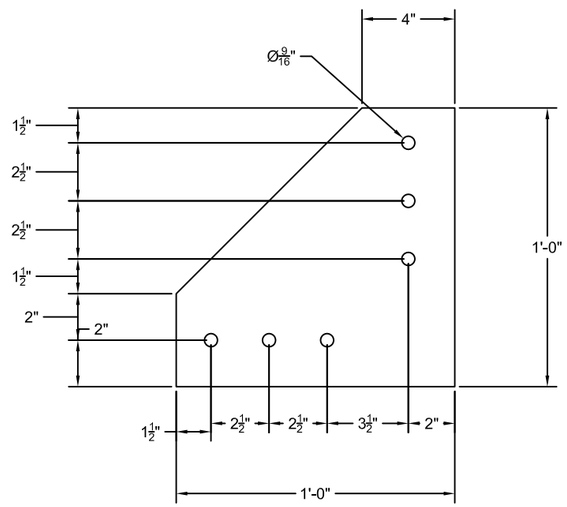


2 PLAN VIEW SCREENING BOX

Scale: 3/8" = 1'-0"

NOTE:
CONNECTION OF FRP ENCLOSURE TO EXISTING BUILDING ASSUMED TO BE AT (6) DISCREET LOCATIONS AT TOP AND BOTTOM OF EACH OF (3) STEEL UPRIGHTS. THE CONNECTION AND EXISTING BUILDING SHALL BE VERIFIED TO HAVE ADEQUATE CAPACITY TO SUPPORT THE FOLLOWING ASD REACTIONS FROM THE FRP ENCLOSURE AT EACH CONNECTION POINT:
+ TENSION/COMPRESSION = 600lb
+ SHEAR = 150lb

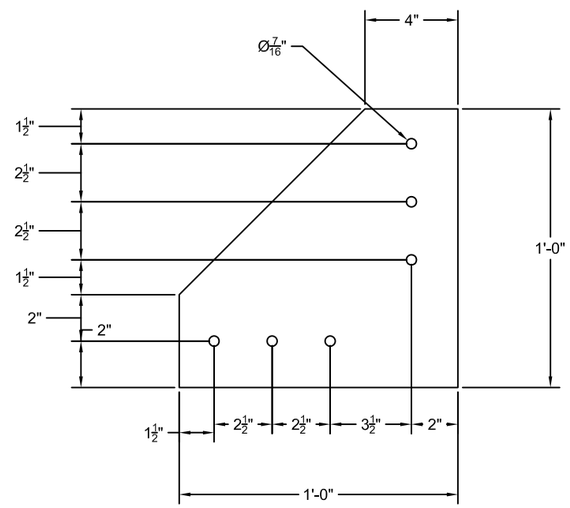
1/4" FRP CORNER GUSSET W/(6) 1/2" Ø FRP BOLTS TYP



3 DETAIL

Scale: 3/8" = 1'-0"

1/4" FRP CORNER GUSSET W/(6) 3/8" Ø COUNTER SUNK FRP SCREWS



4 DETAIL

Scale: 3/8" = 1'-0"

STRUCTURAL ONLY

Professional Engineer (Civil) Rolf Armstrong 12942 Date 10/18 WYOMING

ECLIPSE ENGINEERING
376 SW BLUFF DRIVE, STE 8
BEND, OR 97702
PH: (541) 389-9659

CARRIER
AT&T

CUSTOMER
GENERAL DYNAMICS
77 "A" STREET
NEEDHAM HEIGHTS, MA 02194

PROJECT
AT&T SITE: IDL04405
KSGT RELOCATE
1024 GREGORY LANE
JACKSON, WY 83001

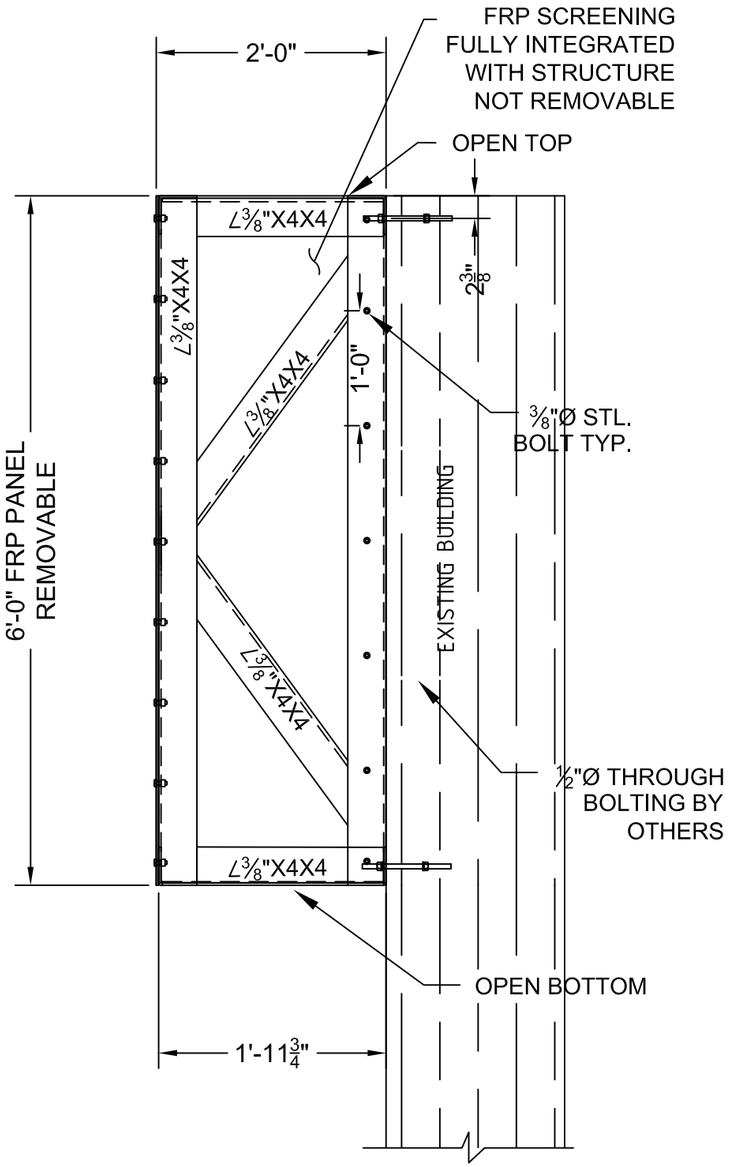
REV	DESCRIPTION	DATE	NAME

SCALE:	DATE:	DRN:	CHKD:	DWG #	SHEET #
NTS	8-20-18	TDJ		18-699	S-1.1

HTCS HI-TECH COMPOSITE STRUCTURES, INC.
Design, Engineering, Fabrication, Installation
PHONE - (541) 548-0812
FAX - (541) 548-0816
1266 SOUTH LAKE ROAD, REDMOND, OREGON 97756

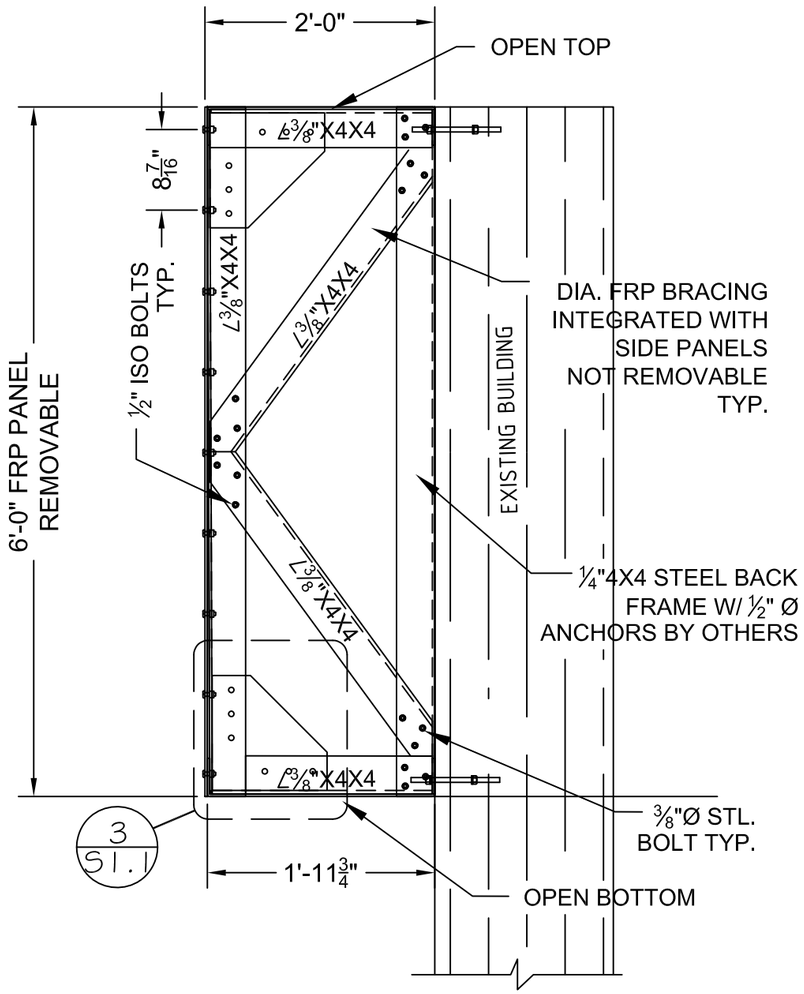
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
BREAK ALL SHARP EDGES SURFACE ROUGHNESS √
TOLERANCES UNLESS SPECIFIED
DECIMALS .X=±.1 .XX=±.03 .XXX=±.010
ANGLES ±1°
FRACTIONS ±1/16
VIEW ORIENTATION

SHEET # S-1.1



1 SCREENING END (BOX)

Scale: 3/8" = 1'-0"



2 SCREENING MID (BOX)

Scale: 3/8" = 1'-0"

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Professional Engineer (Civil)
Rolf Armstrong
12942
Date
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REV	DESCRIPTION	DATE	NAME

SCALE:	DATE:	DRN:	CHKD:	DWG #	SHEET #
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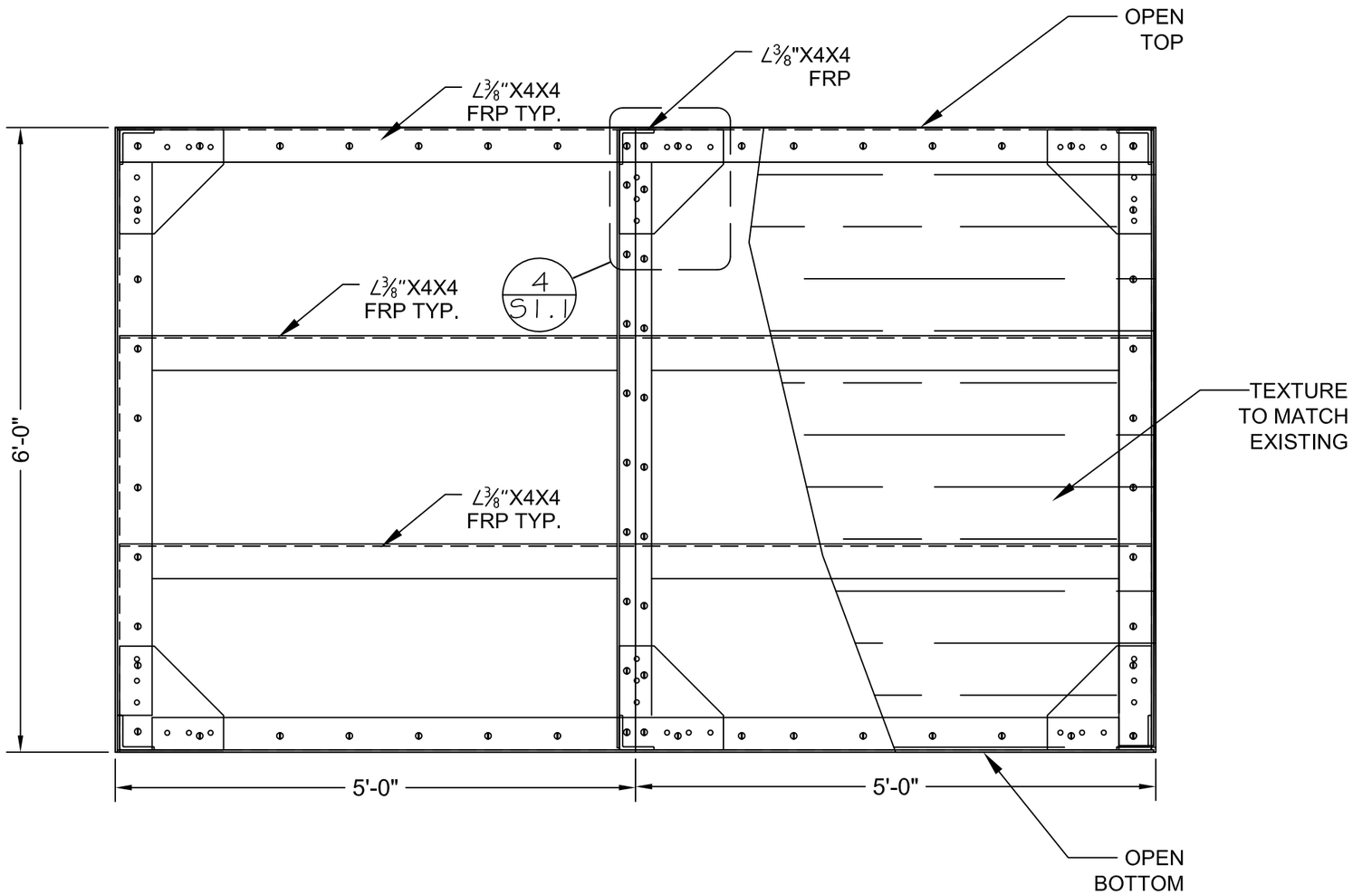
ANGLES ±1°
FRACTIONS ±1/16
VIEW ORIENTATION

SHEET # S-1.2



1 FRP SCREENING (BOX)

Scale: 3/8" = 1'-0"

STRUCTURAL ONLY

Professional Engineer (Civil) Rolf Armstrong 12942 Date 8/20/18 WYOMING

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REV	DESCRIPTION	DATE	NAME

SCALE:	DATE:	DRN:	CHKD:	DWG #	SHEET #
NTS	8-20-18	TDJ		18-699	S-1.3

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FRACTIONS ±1/16

VIEW ORIENTATION

SHEET # S-1.3