



Thursday, June 10, 2021  
6:00 PM

Location: Borough Assembly Chambers  
City Hall

PZ meeting 6/10/21  
6:00 PM

**A. CALL TO ORDER / ROLL CALL**

**B. AMENDMENTS TO THE AGENDA**

**C. CONFLICTS OF INTEREST**

**D. APPROVAL OF MINUTES**

1. Minutes of April 14, 2021 (unavailable)
2. Minutes of May 13, 2021
3. Minutes of Special Meeting June 1, 2021 (unavailable)

**E. PERSONS TO BE HEARD**

**F. CORRESPONDENCE**

1. Public Notice of the Corps of Engineers Permit application for wetland fill for the Institute Property development
2. Stik Built Homes - Letter of Introduction dated June 1, 2021
3. Letter to Jeff Good dated May 18, 2021 regarding withdrawal of Variance application

**G. NEW BUSINESS**

1. Final Plat review of the Merritt Replat, a replat of Lot 5-A, of a replat with Lot 5, within Block 24 of Wrangell Townsite, according to Plat 78-1; and Lot 5-B1 of L&A Subdivision, according to Plat 2002-3, creating Lot A, Merritt Replat, zoned Multi-Family, requested by Brian Merritt
2. (PH) Conditional Use permit request for a 150' lattice pole (modified from a monopole) for use as a cell transmission tower and fenced lease area for support services, on Lot 14, Block 5, USS 2127, currently zoned Holding but recommended for zone change to Open Space/Public, owned by the City and Borough of Wrangell, requested by Vertical Bridge Development, LLC through their representative Lynx Consulting

**H. OLD BUSINESS**

**I. PUBLIC COMMENT**

**J. COMMISSIONERS' REPORTS AND ANNOUNCEMENTS**

**K. ADJOURNMENT**



City and Borough of Wrangell  
 Planning and Zoning Commission  
 AGENDA



Thursday, May 13, 2021  
 6:00 PM

Location: Borough Assembly Chambers  
 City Hall

Planning and Zoning Commission  
 May 13, 2021  
 6:00 PM  
 MINUTES

**A. CALL TO ORDER / ROLL CALL:** Present – Chair Terri Henson, Don McConachie, Jillian Privett, Apryl Hutchinson.

**B. AMENDMENTS TO THE AGENDA**

**C. CONFLICTS OF INTEREST**

**D. APPROVAL OF MINUTES**

1. Minutes of April 14, 2021 Regular Meeting (not included in packet)
2. Minutes of Special Meeting April 29, 2021 **Don McConachie moved to approve, Seconded by Jillian Privett. Approved unanimous.**

**E. PERSONS TO BE HEARD**

Joan Sargent- represents animal rescue. Sent an application for a conditional permit. Worked with Parks and Rec. advisory board. Attended the WCA May 4, 2021 board meeting as persons to be heard. They were not supportive. St Francis is seeking other options and asking for assistance from Planning and Zoning Commission.

Rosemary Ruoff- reference to the communication tower. Benefit to the community. One flaw is the safety to the residences around the tower. Danger of possible radiation to others around the tower. Possibility of 4 towers in the future. Worry about the health of others in close proximity to the tower. Property owner that is hesitant about selling property close to tower because of putting others at risk

**F. CORRESPONDENCE**

Three letters were received but will be read in to the record during the Public Hearings.

**G. NEW BUSINESS**

1. (DEFER) Conditional Use permit request for an animal shelter facility at the old ball field Lot 1, ATS 1209, zoned Open Space/Public, owned by the City and Borough of Wrangell, requested by St. Frances Animal Rescue.
2. (PH) Variance permit request for a variance to the height requirement on Lot BB, Good/Edgley Subdivision (Plat No. 2018-4), zoned Single Family Residential, owned and requested by Jeff and Christina Good.

Open Public Hearing:

Jeff Good: House will be built on the lower fill area. Goal is to have one story from road and drive down to garage and lower level. Working with a designer about previous plans. Variance is for 3 foot (28 feet) to be safe.

Letter read into record from Simoneks.

Letter read into record from Rooney

Close Public Hearing

**Jillian Privett moves to approve findings of fact and the Variance requests for a two (2) foot variance to the height requirement.**

**Don McConachie seconds.**

(Staff just started to record the meeting)

DM asks to delay any decision until commissioners can have a site visit.

Jackie Demontigny – called back in could not unmute for hearing. Live across street. Haven't looked into issue. Variance might affect my sun angle and view.

Ivan Simonek – Commission should go look. Line of site will be obscured.

Commission will meet Wednesday May 26, 2021 at 1:5pm.

Item is recessed until the onsite visit.

3. (PH) Conditional Use permit request for a 150' lattice pole (modified from a monopole) for use as a cell transmission tower and fenced lease area for support services on Lot 14, Block 5, USS 2127, currently zoned Holding but recommended for zone change to Open Space/Public, owned by the City and Borough of Wrangell, requested by Vertical Bridge Development, LLC through their representative Lynx Consulting

Open Public Hearing:

Read Cowan letter into record.

Rosemary Ruoff to wish to move the towers to a different lot.

Joel Aro - Did quite a bit of work looking for a location. This facility will provide Verizon 4g coverage. Utilize this service for fire/police/search and rescue for communication. Make sure the relocation of access goes into the lease document.

Close Public Hearing

**Jillian Privett Move to approve the findings of fact and the conditional use permit request for lattice pole G4 cell tower with the following conditions:**

- 1) Permit is subject to approval by the Borough Assembly of the proposed zone change of Lot 14, Block 5, USS 2127 to Open Space/Public and modification of conditionally allowed uses to the Open Space/Public district to allow communication infrastructure.**
- 2) Permit is subject to lease approval by the Borough Assembly.**

- 3) Security lighting should be no higher than 15 feet from grade and angled down and side blocked so as not impact adjacent residential houses.
- 4) Fencing should be site obscuring facing residential properties.
- 5) Intermodulation Study for interference with KSTK translator must be completed prior to installation and show a negative impact to KSTK translator.
- 6) Recommend to the Borough Assembly issues identified by KSTK be addressed within the lease document.
- 7) If access to the fenced lease area via the ROW between the transfer station and Lot 14 be developed in the future, access easement across Lots 12, 13 and 14 may be vacated for the alternative access.
- 8) The tower, antennas, structures and equipment associated with the telecommunication will be removed within six months of ceasing operations.
- 9) Generator will be for back up power supply only and muffled as much as possible.

### **Apryl Hutchinson Seconds**

TH: We may need more time to review health related concerns. What do some of the other municipalities use for distance requirements ?

Joel Aro: We can share health related guidelines. They are within FCC standards. A NIER report can be generated on the emissions around the facility.

**Don McConachie moves to amend the motion to include requirement of a NIER study; Apryl Hutchinson seconds.**

What other alternate sites were considered?

Aro – top of the hill but State and FAA would not allow. At transfer station, but the reorganization of the facility may not allow.

Carol: When do you do the modulation study

Aro: When we have a final design, we would work with KSTK's engineer for the study (prior issuance to a building permit)

JP – wants to wait for an impact study done.

Campos – Private company provides the NIER report and can be done by the next meeting.

**Postponed until next meeting.**

- 4. (PH) Preliminary Plat review of the Buhler Industrial Subdivision, a subdivision of the old 6 mile mill site of Lots 6B and 9B Mitchell-Buhler Replat; Lots 4-7 USS 3534; Lots 10,11,20 PSS USS 2589; USS 3000, zoned Waterfront Development, owned by Betty Buhler, requested by PDC Engineers on owner’s behalf.

Open Public Hearing

Brett Martin and Kevin Eischens are available for questions.

Close Public Hearing

**Jillian Privett moves to approve the Preliminary plat of the Buhler Industrial Subdivision subject to the following:**

- 1) Easements for storm drain, sewer and water all need to be identified on the plat, including sewer easements across Lot 10, 11 and 18, and will be included in the final plat**
- 2) Resolution of the request to cancel the tidelands lease needs to be approved by the Assembly prior to the final plat approval.**
- 3) Water system delivery - city extension or on site system needs determination prior to final.**
- 4) Alaska Department of Environmental Conservation will need to approve on-site septic systems, outfalls and onsite water system if developed, as well as storm water outfalls and need for oil/water separators.**
- 5) Plat note 13 should reference Lots 6 and 7 not Lots 5 and 6.**

Summary of the subdivision components provided by staff.

**Jillian Privett moves to amend the motion to add easements on Lot 13B and between Lots 11 and 10**

**Apryl Hutchinson seconds**

**Amendment passes unanimously.**

**Main Motion passes unanimously.**

Staff requests a Special Meeting per the Borough Manager request, due to the timeline of events for Institute Property development. Another preliminary plat must come back to Commission as there is only enough funds to do half the development. Special set for June 1 at 2:30pm

Meeting adjourned at 7:30pm



US Army Corps  
of Engineers  
Alaska District

Regulatory Division (1145)  
CEPOA-RD  
Post Office Box 6898  
JBER, Alaska 99506-0898

# Public Notice of Application for Permit

|                            |                       |
|----------------------------|-----------------------|
| <b>PUBLIC NOTICE DATE:</b> | <b>May 26, 2021</b>   |
| <b>EXPIRATION DATE:</b>    | <b>June 25, 2021</b>  |
| <b>REFERENCE NUMBER:</b>   | <b>POA-2021-00196</b> |
| <b>WATERWAY:</b>           | <b>Zimovia Strait</b> |

Interested parties are hereby notified that a Department of the Army (DA) permit application has been received for work in waters of the United States (U.S.) as described below and shown on the enclosed project drawings.

All comments regarding this Public Notice (PN) should be sent to the address noted above. If you desire to submit your comments by email, you should send it to the Project Manager's email as listed below or to: [regpagemaster@usace.army.mil](mailto:regpagemaster@usace.army.mil). All comments should include the PN reference number listed above.

All comments should reach this office no later than the expiration date of this PN to become part of the record and be considered in the decision. Please contact Roberta Budnik at (907) 753-2785, toll free from within Alaska at (800) 478-2712, by fax at (907) 753-5567, or by email at: [Roberta.K.Budnik@usace.army.mil](mailto:Roberta.K.Budnik@usace.army.mil) if further information is desired concerning this notice.

**APPLICANT:** City and Borough of Wrangell, 205 Brueger Street, Wrangell, AK 99929

**AGENT:** R&M Engineering-Ketchikan, Inc., POC: Mr. Trevor Sande, 7180 Revilla Road, Suite 300, Ketchikan, AK 99901

**LOCATION:** The project site is located at Latitude 56.4160° N., Longitude 132.3423° W.; at the Wrangell Institute site, in Wrangell, Alaska.

**PURPOSE:** The applicant's stated purpose is to develop land for single family residential lots. The City and Borough of Wrangell's (applicant) "Comprehensive Plan" identified that privately offered residential lots or homes were not keeping up with demand for residential housing, and the Borough identified municipal owned lots that were suitable for single or multi-family

residential lots. The proposed project area was identified and zoned for light residential use and the proposed development project would allow access to the 40 single family lots.

**PROPOSED WORK:** Discharge up to 11,400 cubic yards of shot rock material into 3.36 acres of wetlands in order to construct a 4,200-foot long, 44.7-foot wide toe-to-toe road which would allow access to the future single family residential lots. The road would include a 24-foot top width for driving, a 2-foot wide gutter between the driving area and sidewalk, a 5-foot wide sidewalk, and a 1.5:1 side slope embankment (approximately 5-foot wide embankment). The proposed project would also install water lines, fire hydrants, sewer lines, manholes and 20 wood power poles. These items would all be located within the footprint of the proposed road, except for 2,008 linear feet of one sewer line. This sewer line would be installed through multiple lots and in a 10-foot wide trench. After installation, the trench would be backfilled with excavated material. Culverts would be installed at several drainages and at one stream through the constructed road to allow for the hydrology of the area to be maintained. All work would be performed in accordance with the enclosed plan (sheets 1-16), dated April 12, 2021.

**APPLICANT PROPOSED MITIGATION:** The applicant proposes the following mitigation measures to avoid, minimize, and compensate for impacts to waters of the U.S. from activities involving discharges of dredged or fill material.

a. Avoidance: The applicant stated, "Avoidance for this project was not possible. There are few parcels of land in Wrangell that are available and suitable for residential development making alternative locations not feasible." Additionally, the applicant stated, "Of the land that is available, nearly all contain forested wetlands."

b. Minimization: Impacts to waters of the U.S. would be minimized by collocating most utilities within the footprint of the proposed roadbed. The applicant stated, "The width of the roadway is the minimum allowed to meet the International Fire Code for fire fighting apparatus which was governing the geometry of the design. The slopes of the roadway embankment and ditches are minimized to the extent possible and still retain structural integrity of the fill material."

c. Compensatory Mitigation: The applicant has offered to pay compensatory mitigation through the Natuhini Bay Mitigation Bank or whichever entity has available credits if none are available through Natuhini Bay Mitigation Bank.

**WATER QUALITY CERTIFICATION:** A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

**CULTURAL RESOURCES:** The latest published version of the Alaska Heritage Resources Survey (AHRs) has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. There are historic properties/cultural resources in the permit area or within the vicinity of the permit area (PET-00039). The permit area has been determined to be only the footprint of the proposed project in jurisdictional waters of the U.S., including wetlands. Consultation of the AHRs constitutes the extent of cultural resource investigations by the Corps of Engineers (Corps) at this time, and we are otherwise unaware of the presence of such resources. The

Corps has made a No Historic Properties Affected (No Effect) determination for the proposed project. This application is being coordinated with the State Historic Preservation Office (SHPO), and other consulting parties, including federally recognized tribes. Any comments those consulting parties may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work. The Corps is requesting the SHPO's concurrence with this determination.

**ENDANGERED SPECIES:** No threatened or endangered species are known to use the project area. We have determined the described activity would have no effect on any listed or proposed threatened or endangered species, and would have no effect on any designated or proposed critical habitat, under the Endangered Species Act of 1973 (87 Stat. 844). Therefore, no consultation with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service (NMFS) is required. However, any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

**ESSENTIAL FISH HABITAT:** The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). No EFH species are known to use the project area. We have determined the described activity would not adversely affect EFH in the project area. Therefore, no consultation with the National Marine Fisheries Service (NMFS) is required. However, any comments or recommendations they may have concerning EFH will be considered in our final assessment of the described work.

**TRIBAL CONSULTATION:** The Alaska District fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This PN serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal right or resource. Additionally, letters have been sent directly to tribal leaders concurrent with this PN. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

**PUBLIC HEARING:** Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

**EVALUATION:** The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the

conditions under which it will be allowed to occur. The decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

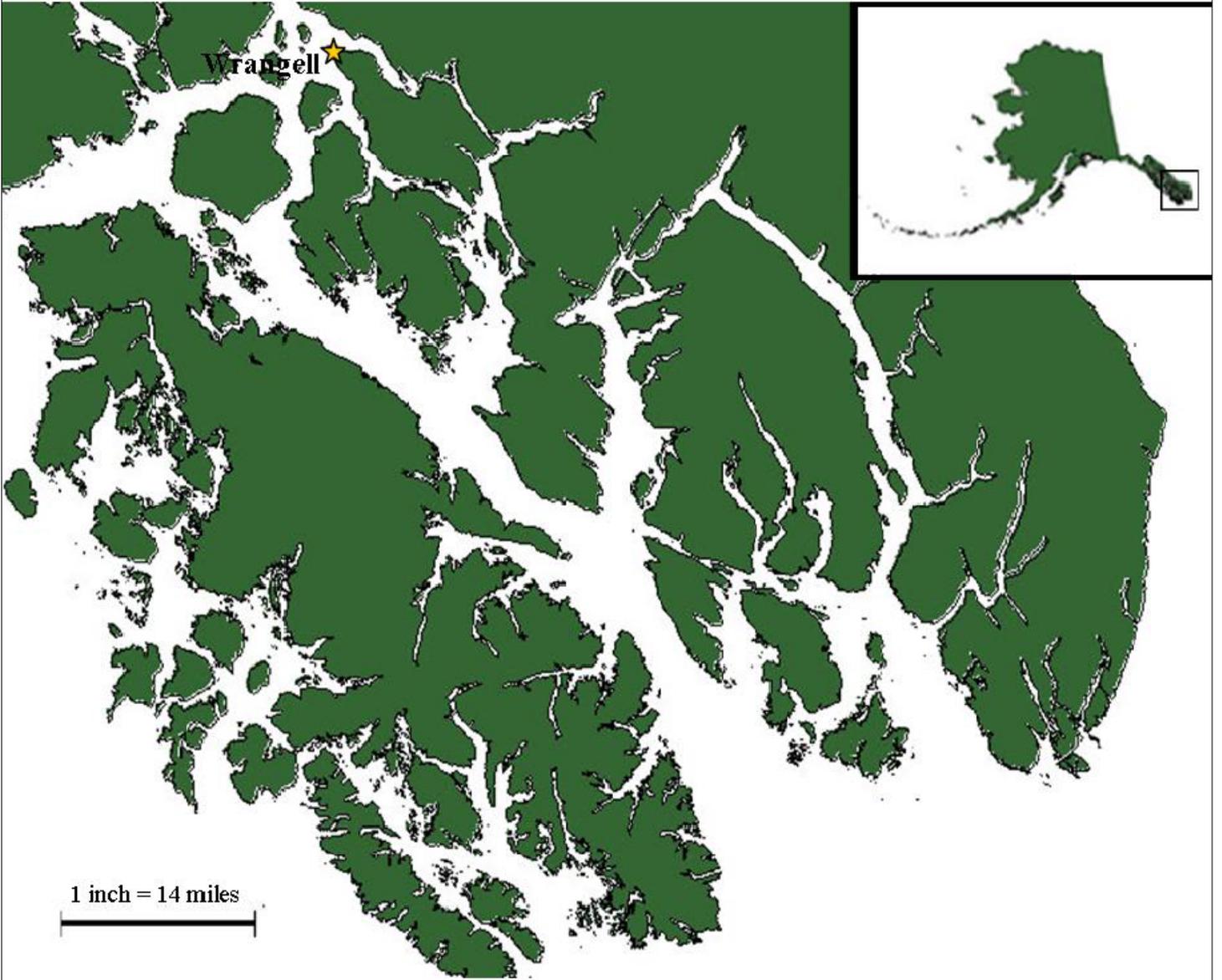
**AUTHORITY:** This permit will be issued or denied under the following authorities:

(X) Discharge dredged or fill material into waters of the U.S. – Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

Project drawings are enclosed with this Public Notice.

District Commander  
U.S. Army, Corps of Engineers

Enclosures



**VICINITY MAP**

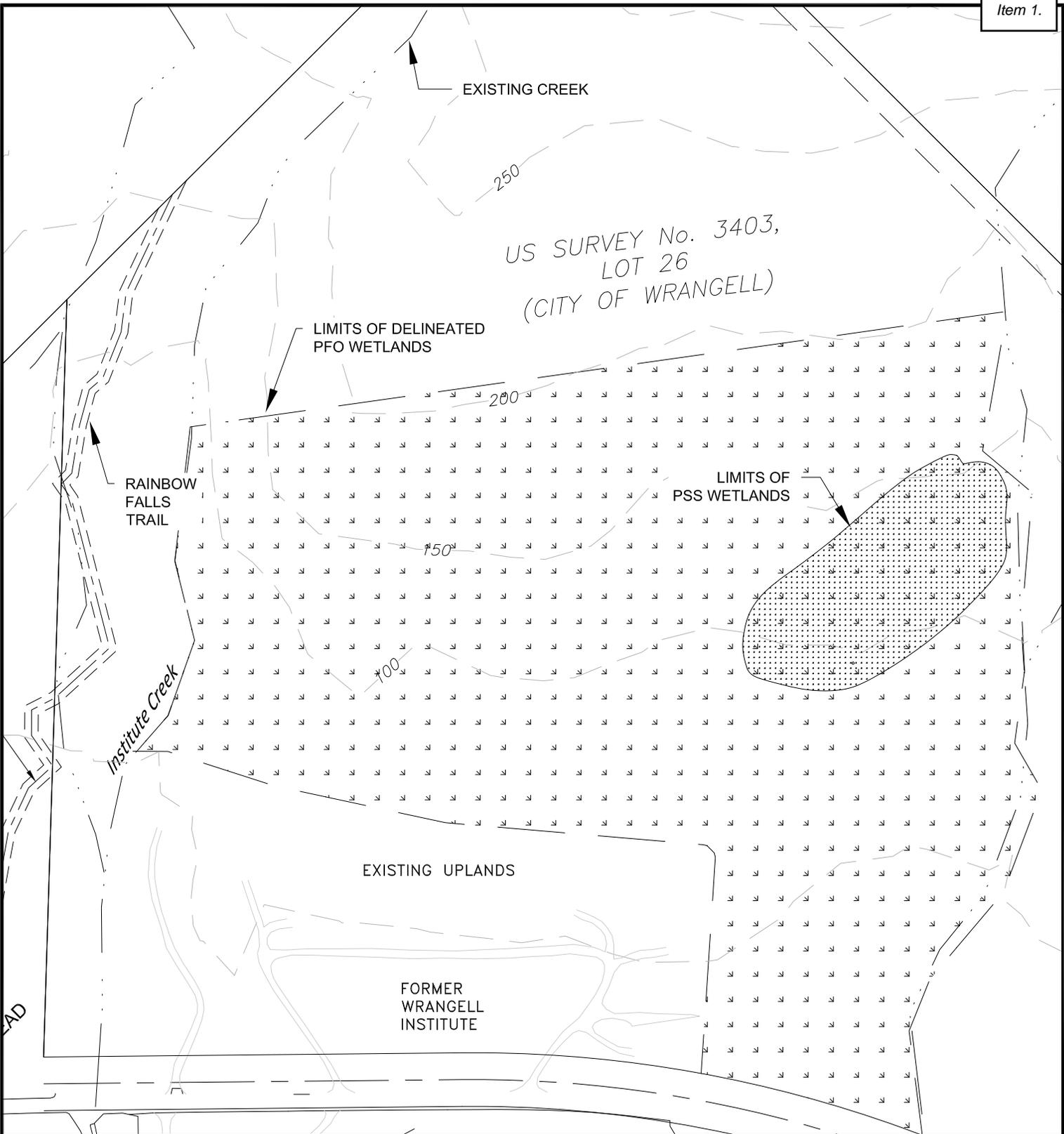
*APPLICATION BY: CITY AND  
BOROUGH OF WRANGELL;  
205 BRUEGER STREET  
WRANGELL, AK 99929*

WRANGELL INSTITUTE DEVELOP.

AT: LOT 26, USS 3403, WRANGELL  
LOCATED IN: T.63S., R.84E., SECTION 8&17  
Lat 56.416006N, Long. 132.342288W

DATE: 4-12-21

SHEET **1**



**EXISTING  
CONDITIONS**

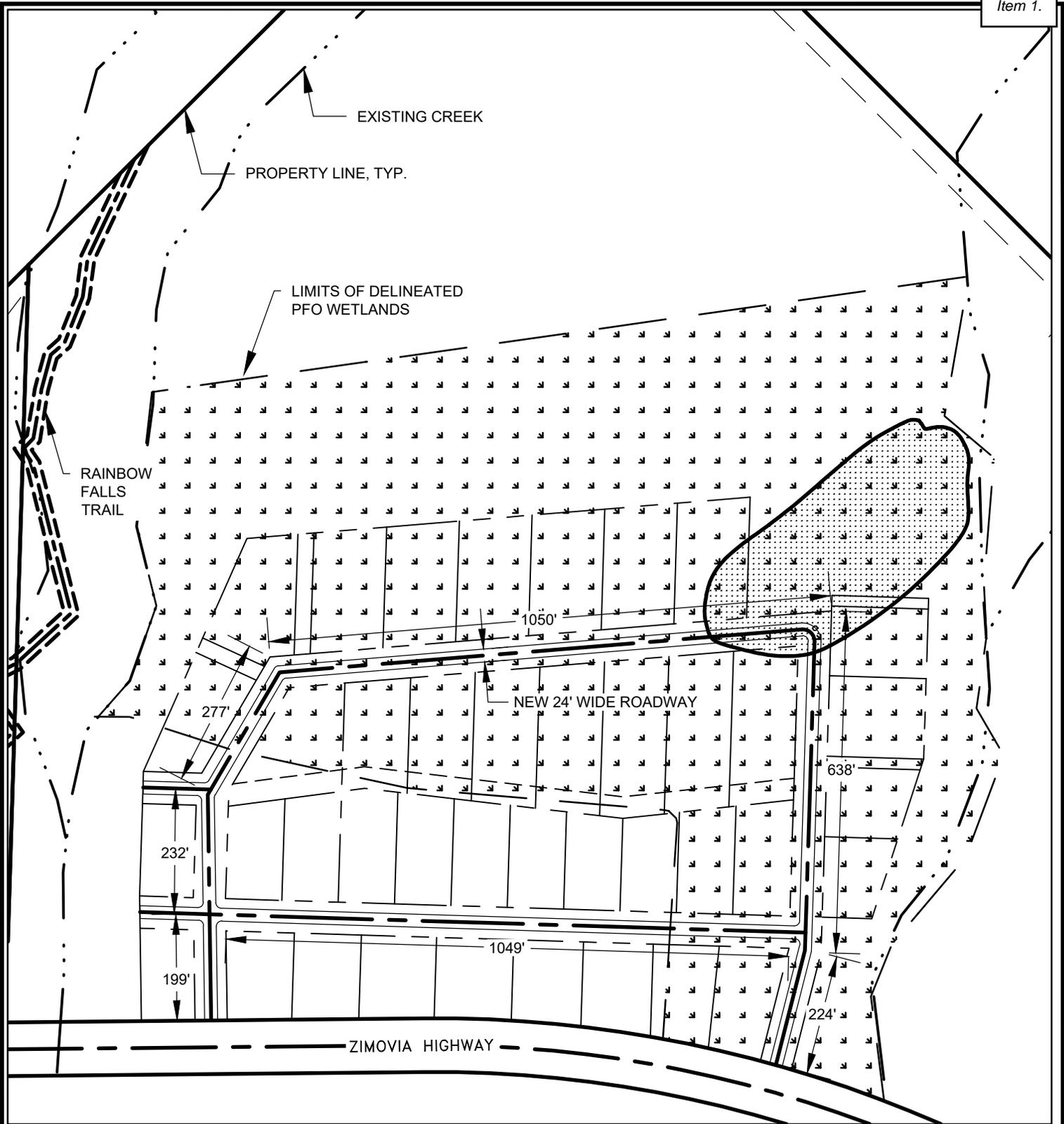
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DATE: 4-12-21

SHEET **2**



PROJECT QUANTITIES

4.0 AC PROJECT AREA  
3.0 AC WETLANDS IMPACTED

**SITE PLAN**

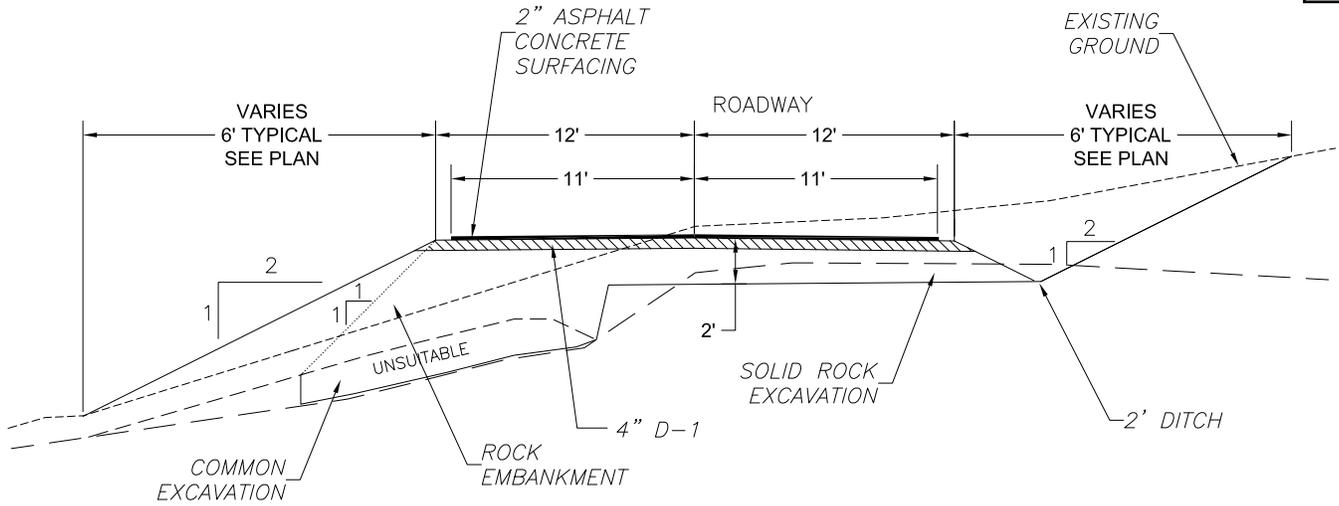
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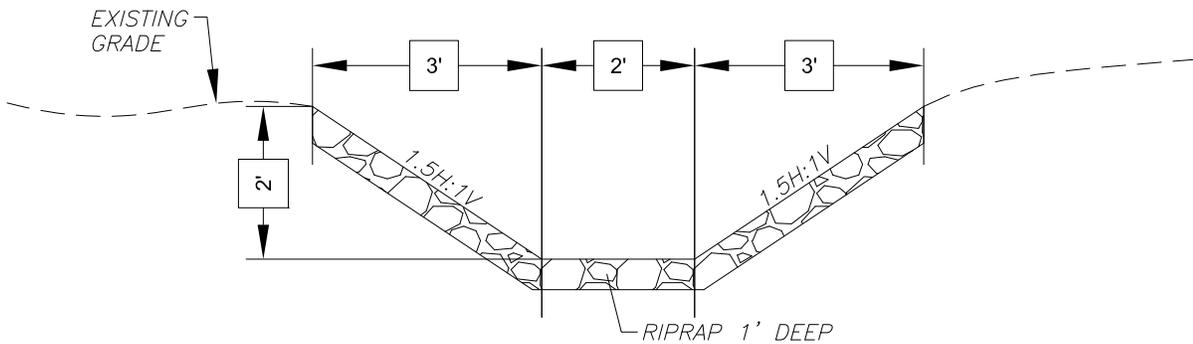
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SHEET 3

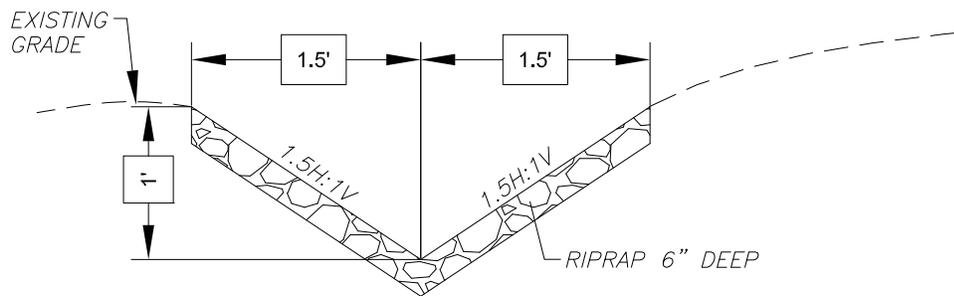


TYPICAL ROADWAY SECTION



TYPICAL INTERCEPTOR DITCH SECTION

NOT TO SCALE



TYPICAL VEE DITCH SECTION

NOT TO SCALE

**TYPICAL SECTIONS**

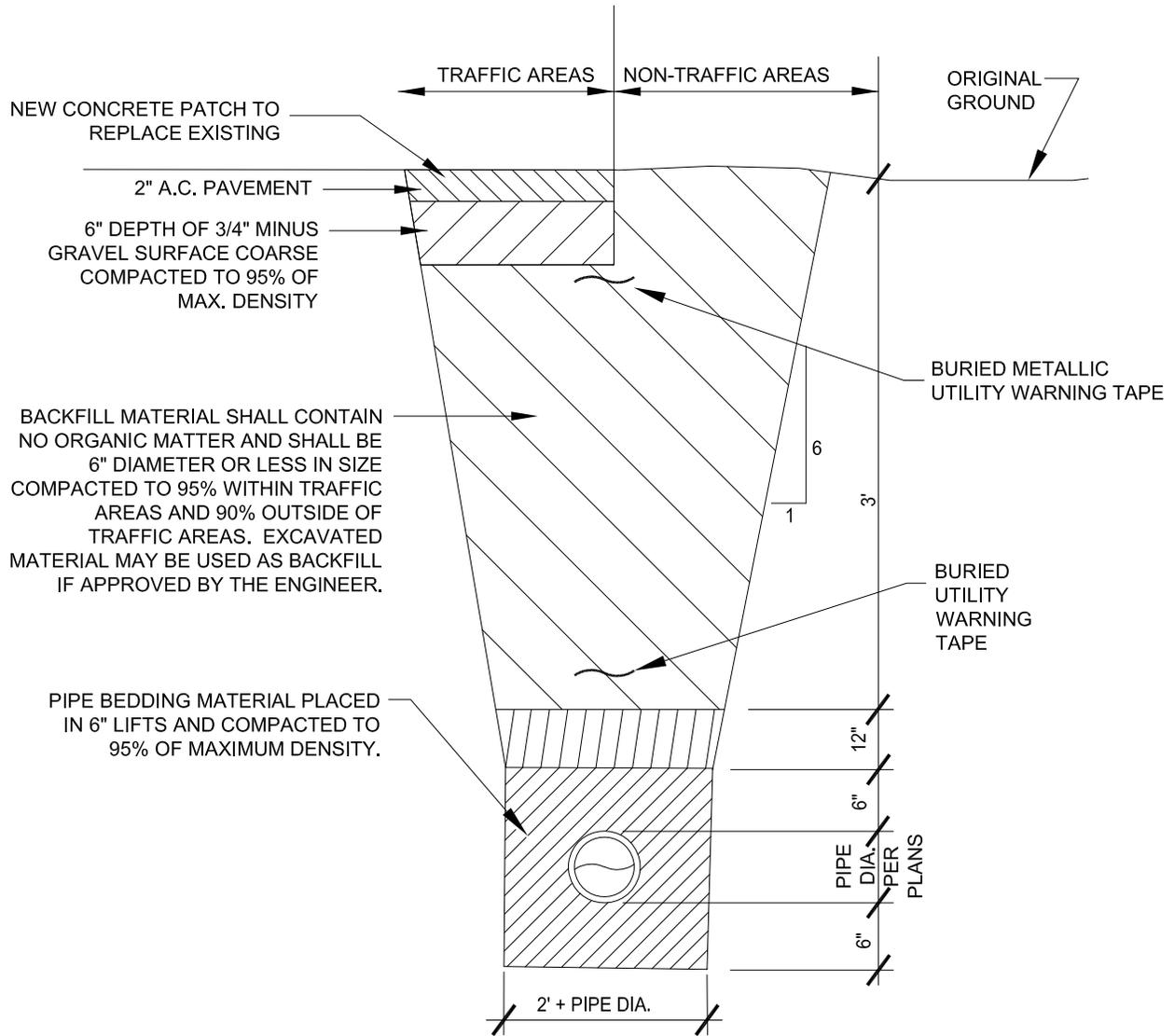
APPLICATION BY: CITY AND  
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Lat 56.416006N, Long. 132.342288W

DATE: 4-12-21

SHEET **4**



# TYPICAL TRENCH DETAIL

NOT TO SCALE

## TYPICAL UTILITY TRENCH

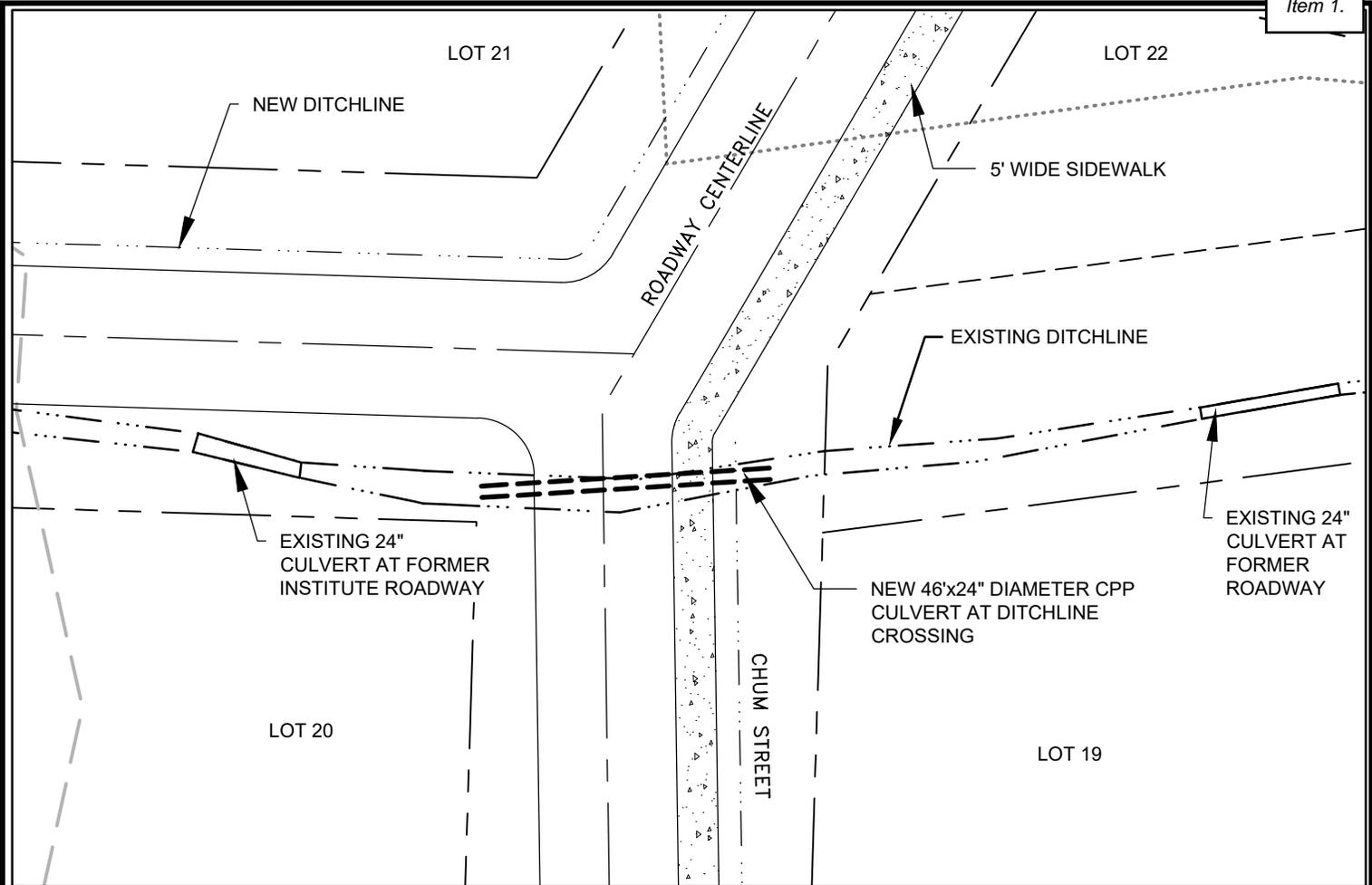
APPLICATION BY: CITY AND BOROUGH OF WRANGELL;  
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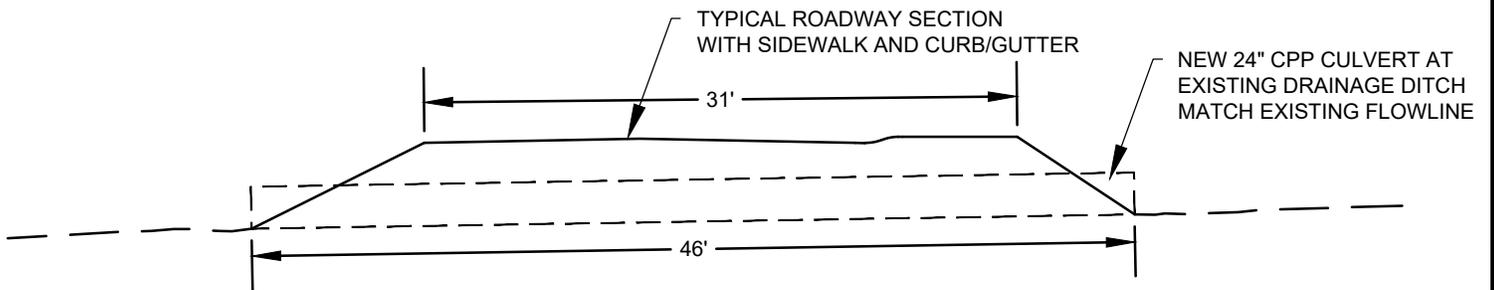
DATE: 4-12-21

SHEET **5**



### STREAM CROSSING PLAN VIEW

1"=30'



### STREAM CROSSING SECTION VIEW

NOT TO SCALE

## STREAM CULVERT

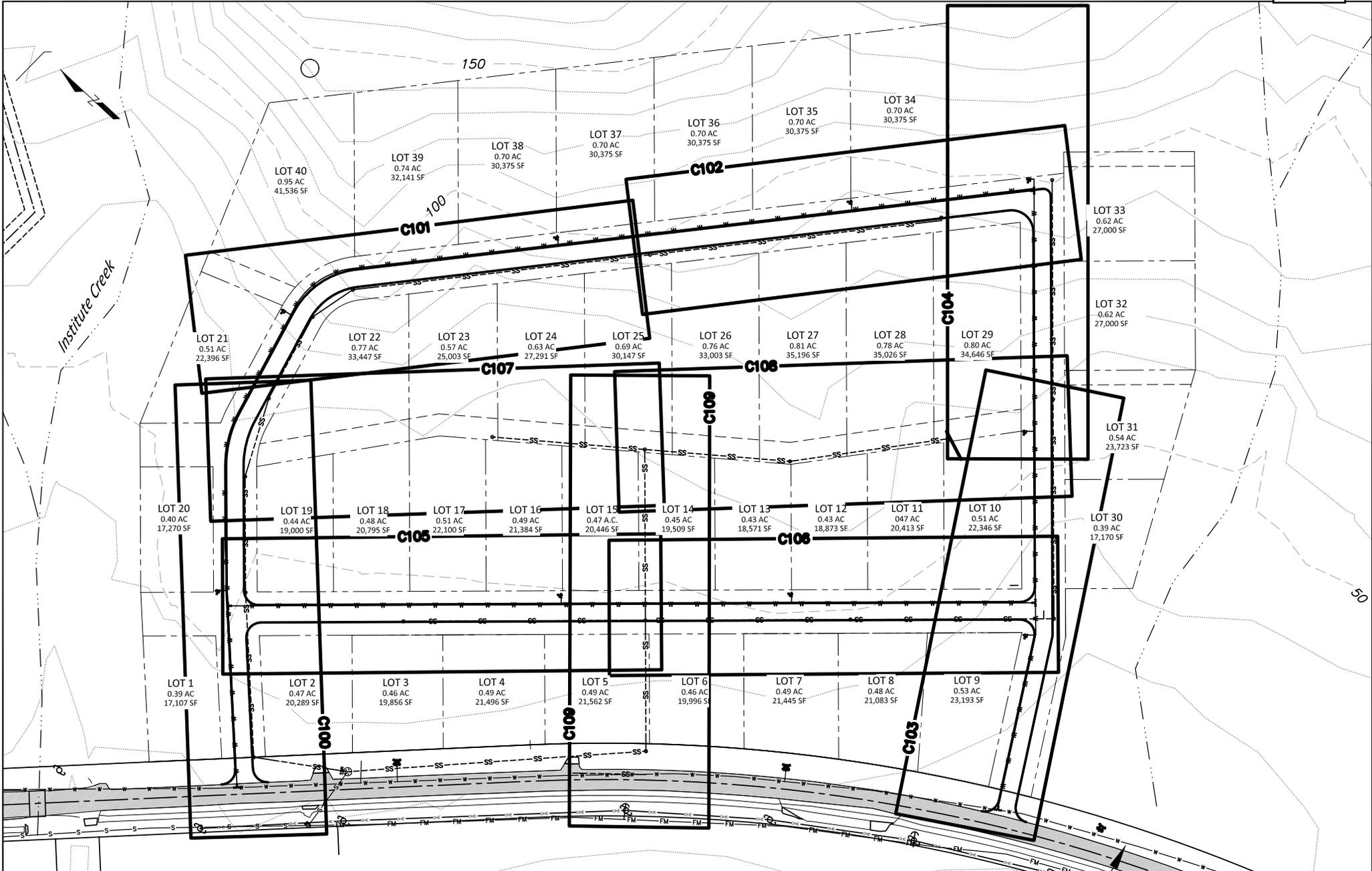
APPLICATION BY: CITY AND  
BOROUGH OF WRANGELL;  
205 BRUEGER STREET  
WRANGELL, AK 99929

WRANGELL INSTITUTE DEVELOP.

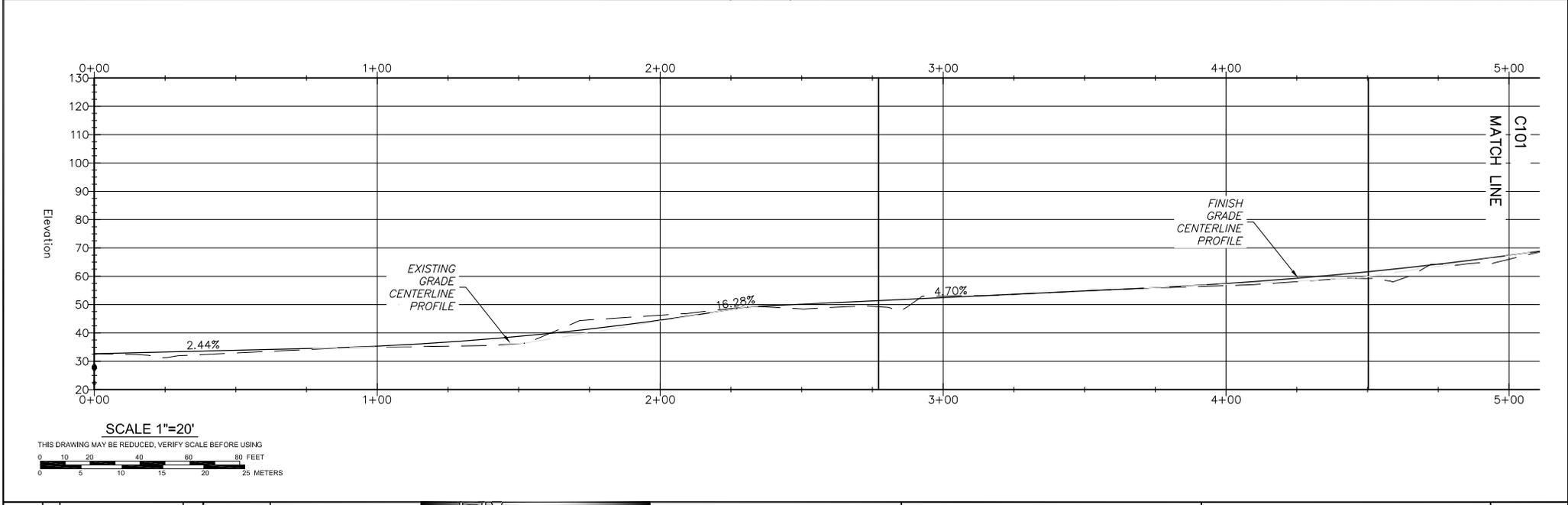
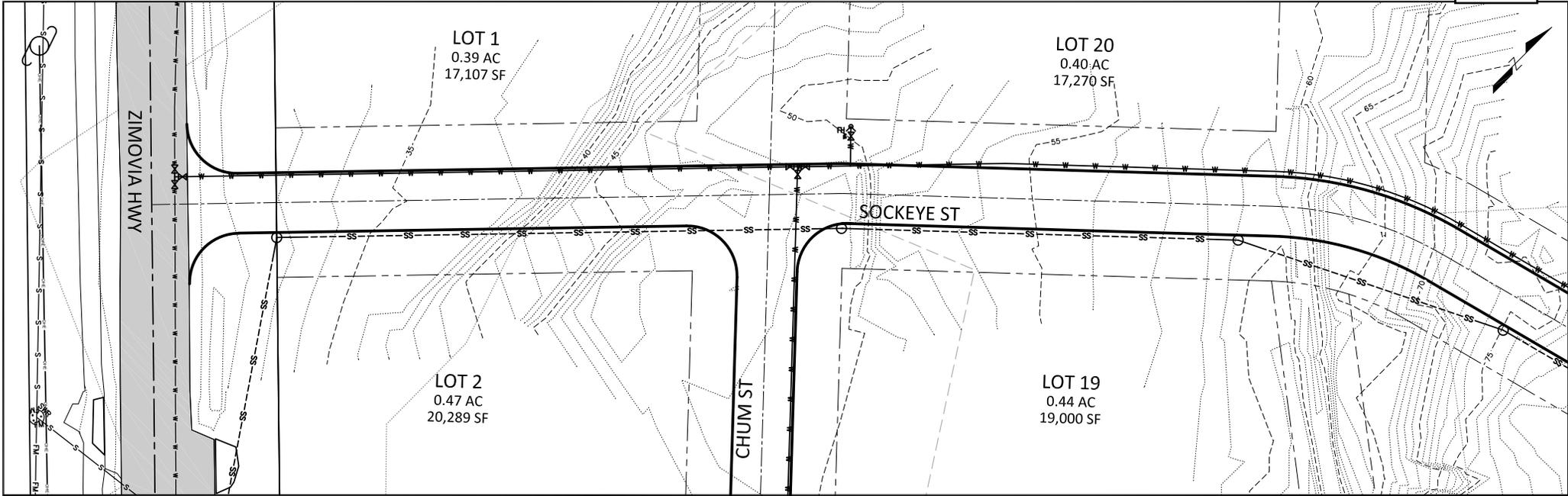
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LOCATED IN: T.63S., R.84E., SECTION 8&17  
Lat 56.416006N, Long. 132.342288W

DATE: 4-27-21

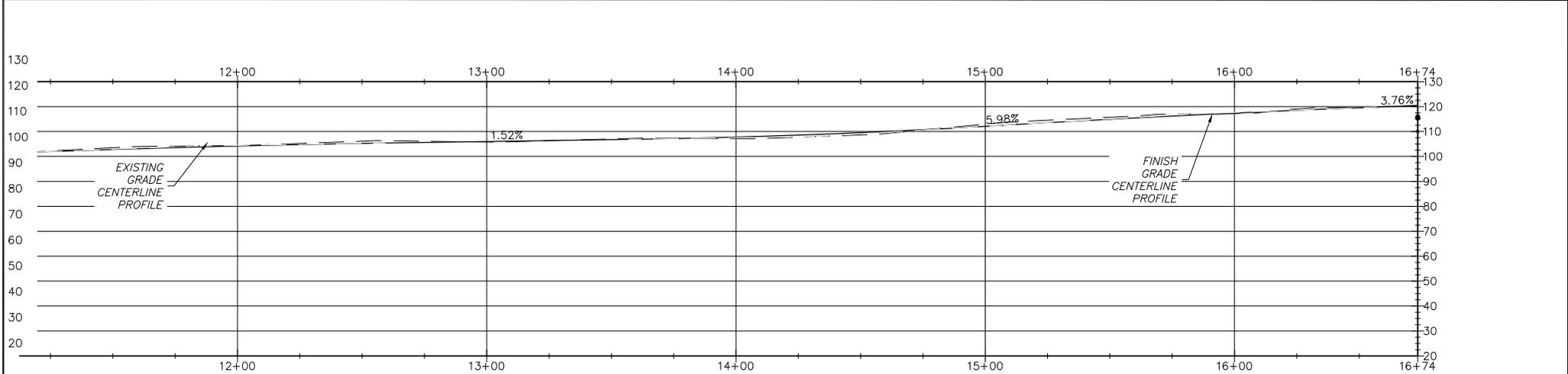
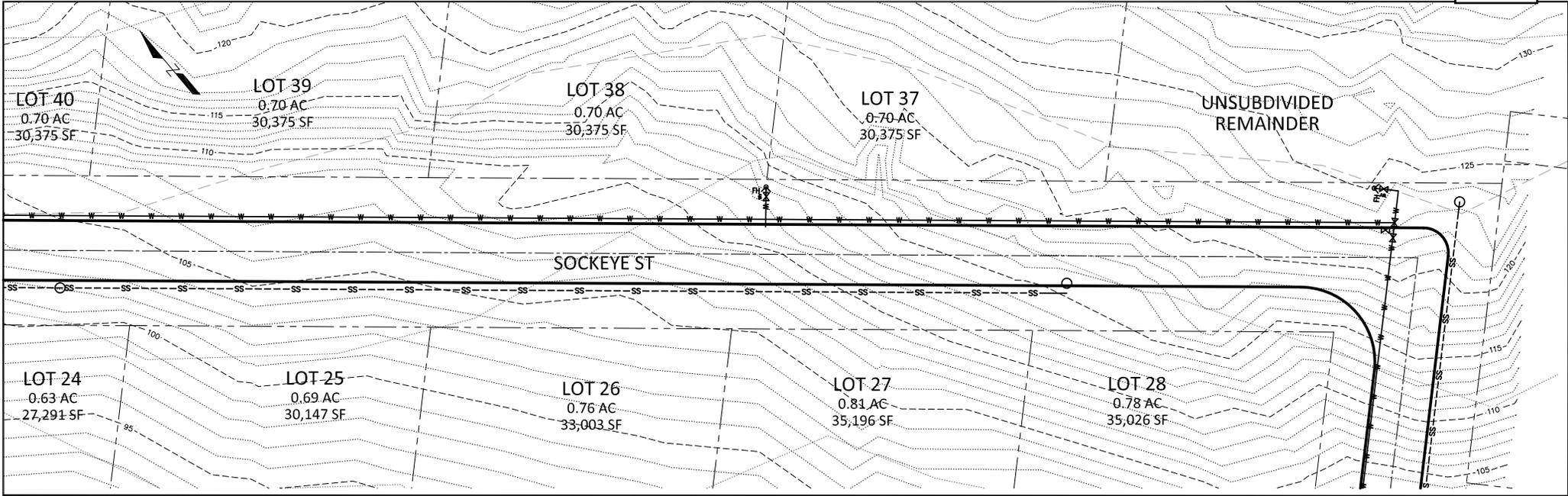
SHEET 6



|               |  |                      |  |  |                          |   |                                 |                |
|---------------|--|----------------------|--|--|--------------------------|---|---------------------------------|----------------|
| Designed: ARP |  | Approved:            |  | <br>RAM ENGINEERING-KETCHIKAN, INC.<br>7180 REVILLA ROAD, SUITE 300<br>KETCHIKAN, ALASKA 99901 | Client: CITY OF WRANGELL | Project: WRANGELL INSTITUTE SUBDIVISION | Sheet Description: SHEET LAYOUT | Sheet No. C003 |
| Drawn: ARP    |  | Date: FEBRUARY, 2020 |  |  |                          |   |                                 |                |
| Checked:      |  | PROJECT #: 202725    |  |  |                          |   |                                 |                |



|               |                      |  |                          |   |  |                |
|---------------|----------------------|--|--------------------------|---|--|----------------|
| Designed: ARP | Approved:            | <br>RAM ENGINEERING-KETCHIKAN, INC.<br>7180 REVILLA ROAD, SUITE 300<br>KETCHIKAN, ALASKA 99901 | Client: CITY OF WRANGELL | Project: WRANGELL INSTITUTE SUBDIVISION | Sheet Description: SOCKEYE STREET PLAN AND PROFILE | Sheet No. C100 |
| Drawn: ARP    | Date: FEBRUARY, 2020 |  |                          |   |  |                |
| Checked:      | PROJECT #: 202725    |  |                          |   |  |                |

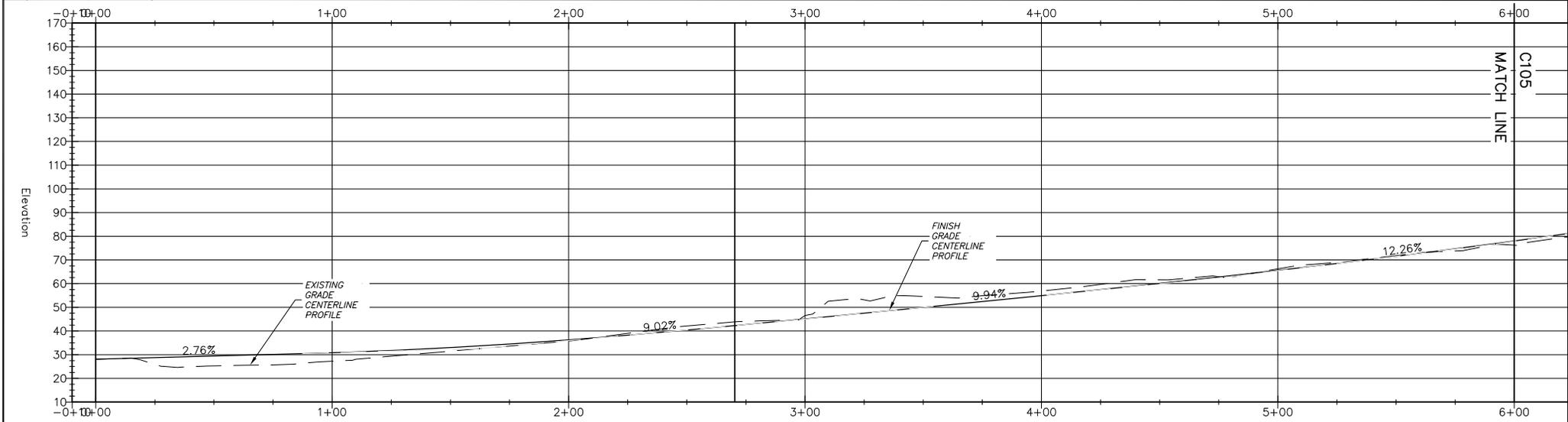
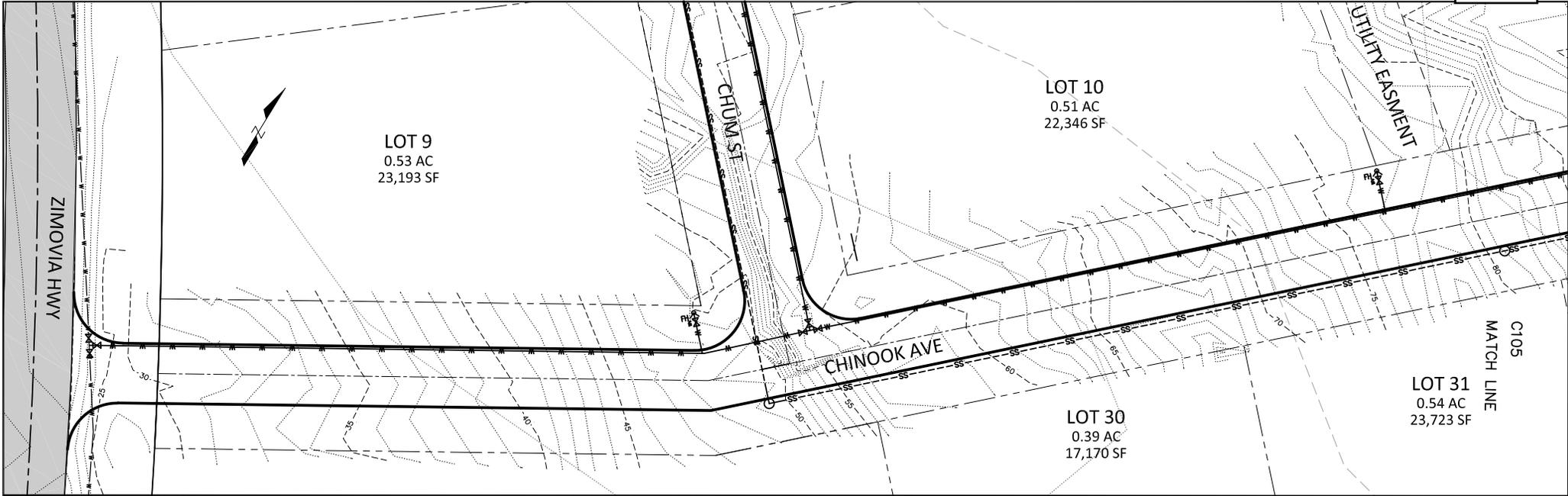


SCALE 1"=20'

THIS DRAWING MAY BE REDUCED. VERIFY SCALE BEFORE USING

0 10 20 40 60 80 FEET  
0 5 10 15 20 METERS

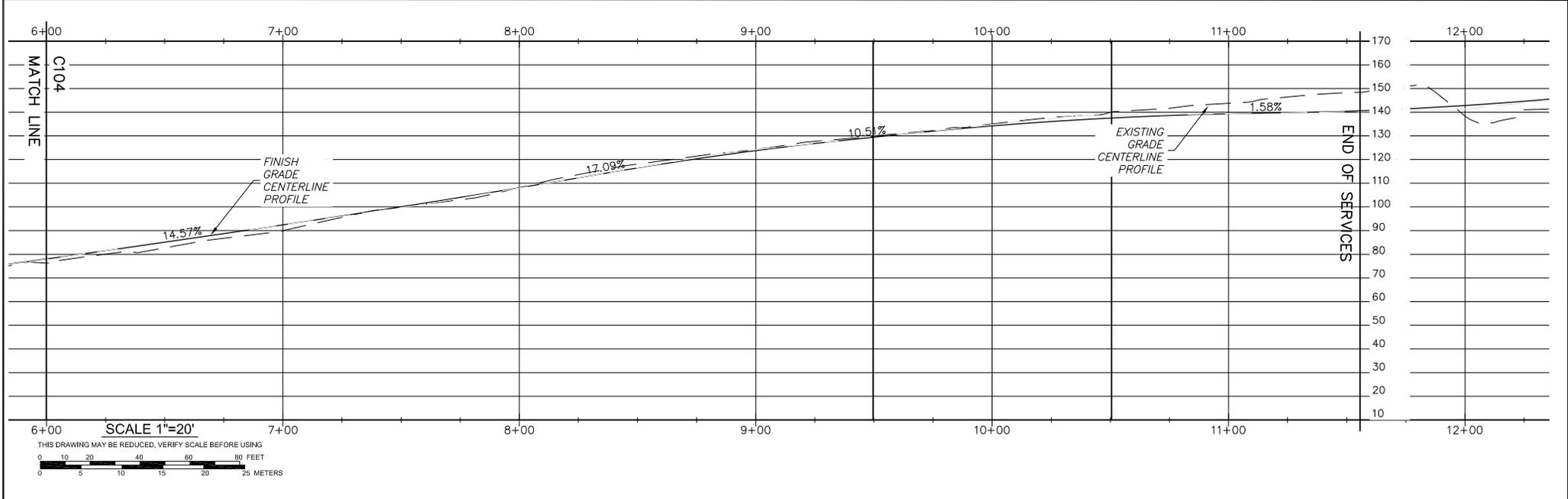
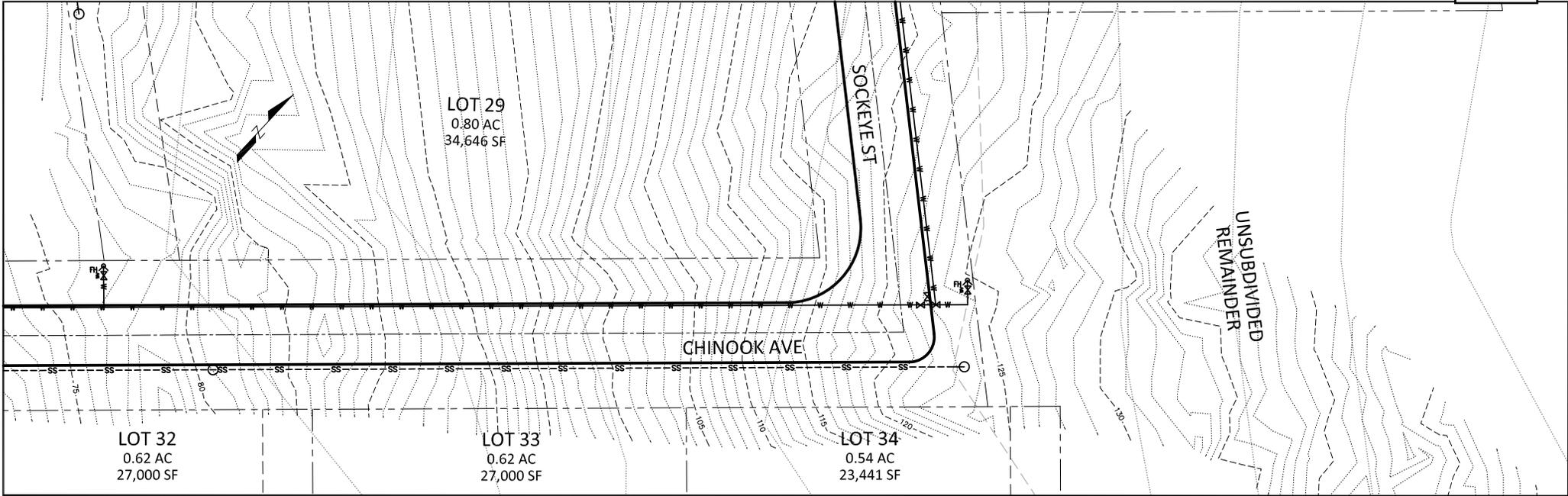
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|---------------|--|----------------------|--|---|--------------------------|---|--|----------------|
| Designed: ARP |  | Approved:            |  | <br>RSM ENGINEERING-KETCHIKAN, INC.<br>7180 REVILLA ROAD, SUITE 300<br>KETCHIKAN, ALASKA 99901 | Client: CITY OF WRANGELL | Project: WRANGELL INSTITUTE SUBDIVISION | Sheet Description: SOCKEYE STREET PLAN AND PROFILE | Sheet No. C102 |
| Drawn: ARP    |  | Date: FEBRUARY, 2020 |  |   |                          |   |  |                |
| Checked:      |  | PROJECT #: 202725    |  |   |                          |   |  |                |



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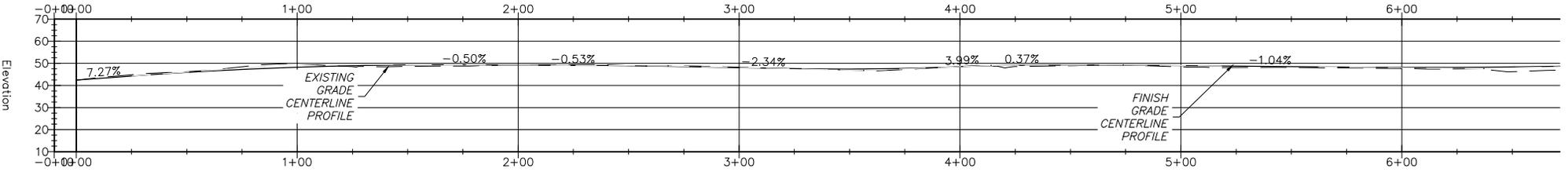
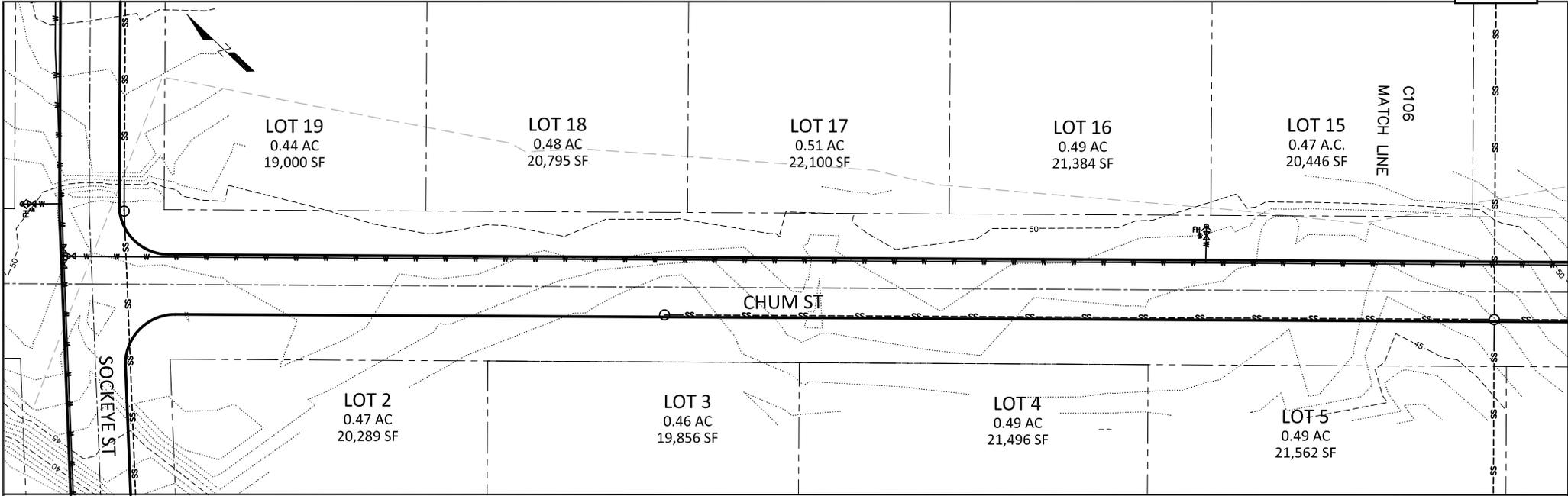
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| Designed: ARP |  | Approved:            |  | Client: CITY OF WRANGELL | Project: WRANGELL INSTITUTE SUBDIVISION | Sheet Description: CHINOOK AVE PLAN AND PROFILE | Sheet No. C103 |
| Drawn: ARP    |  | Date: FEBRUARY, 2020 |  |                          |   |   |                |
| Checked:      |  | PROJECT #: 202725    |  |                          |   |   |                |

**RAM**  
 RAM ENGINEERING-KETCHIKAN, INC.  
 7180 REVILLA ROAD, SUITE 300  
 KETCHIKAN, ALASKA 99901



|               |                      |  |                          |   |   |                |
|---------------|----------------------|--|--------------------------|---|---|----------------|
| Designed: ARP | Approved:            | <br>RSM ENGINEERING-KETCHIKAN, INC.<br>7180 REVILLA ROAD, SUITE 300<br>KETCHIKAN, ALASKA 99901 | Client: CITY OF WRANGELL | Project: WRANGELL INSTITUTE SUBDIVISION | Sheet Description: CHINOOK AVE PLAN AND PROFILE | Sheet No. C104 |
| Drawn: ARP    | Date: FEBRUARY, 2020 |  |                          |   |   |                |
| Checked:      | PROJECT #: 202725    |  |                          |   |   |                |

Item 1.



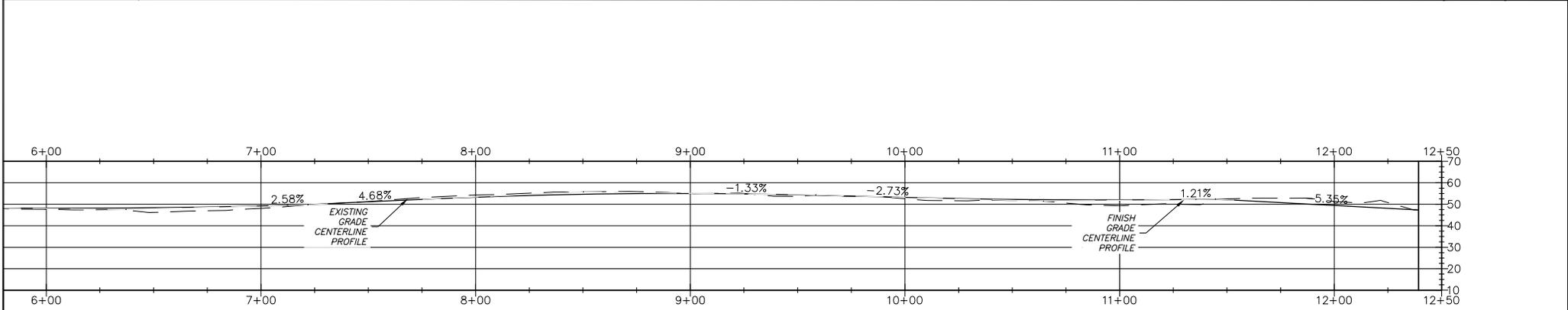
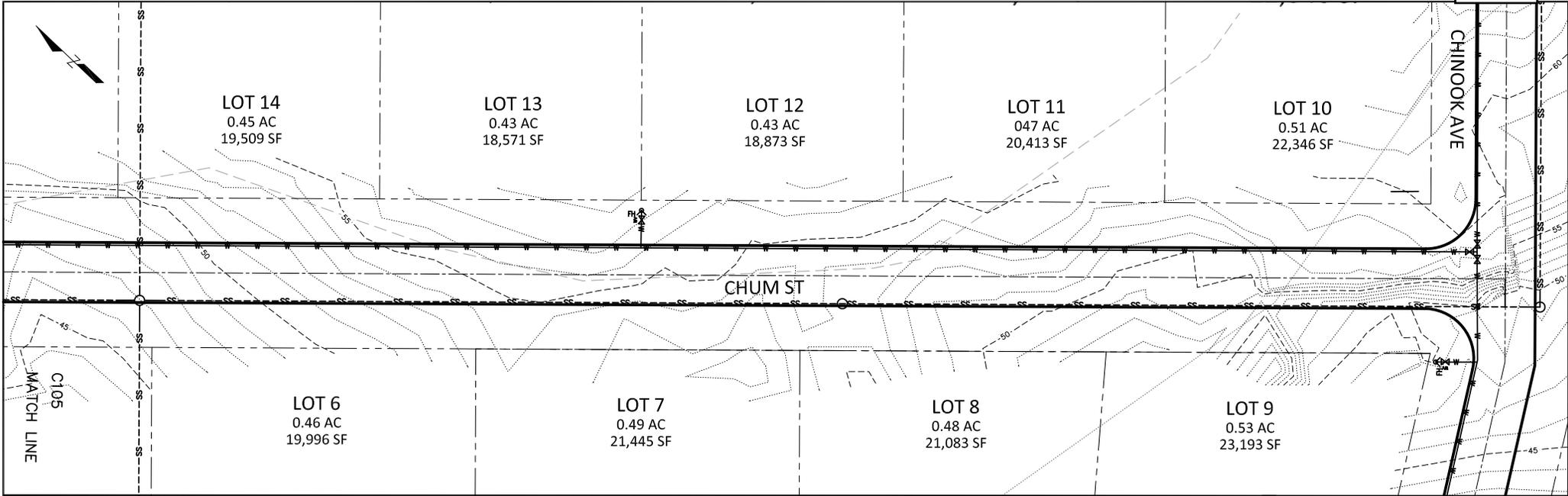
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| Designed: ARP |  | Approved:            |  | <br>RSM ENGINEERING-KETCHIKAN, INC.<br>7180 REVILLA ROAD, SUITE 300<br>KETCHIKAN, ALASKA 99901 | Client: CITY OF WRANGELL | Project: WRANGELL INSTITUTE SUBDIVISION | Sheet Description: CHUM STREET PLAN AND PROFILE | Sheet No. C105 |
| Drawn: ARP    |  | Date: FEBRUARY, 2020 |  |  |                          |   |   |                |
| Checked:      |  | PROJECT #: 202725    |  |  |                          |   |   |                |



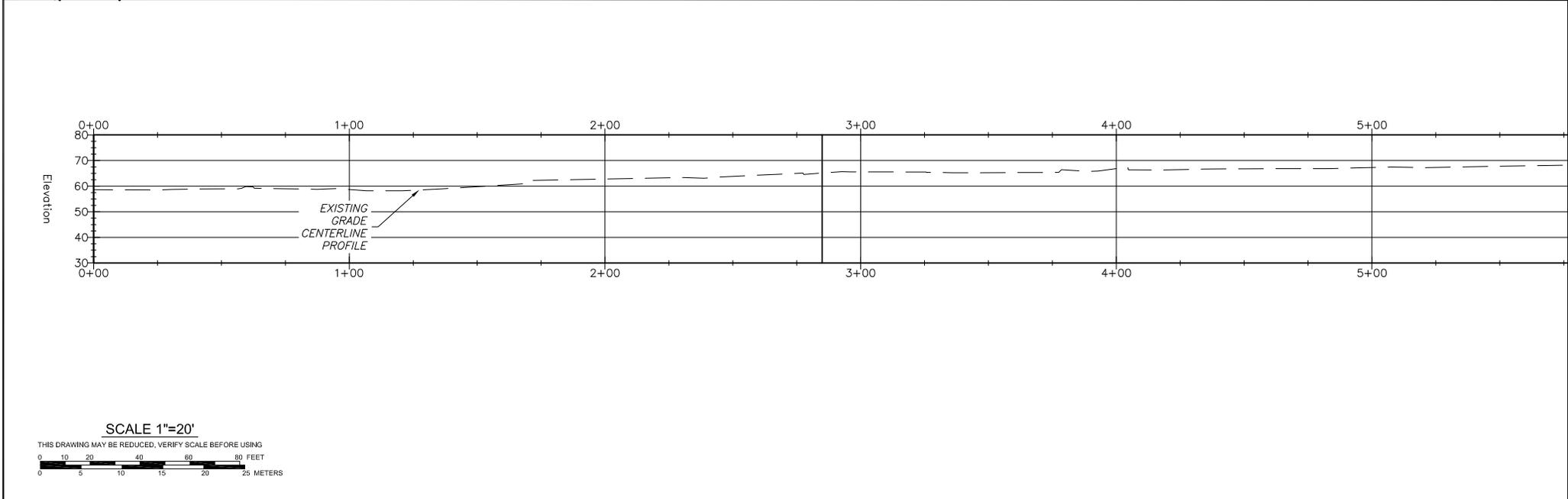
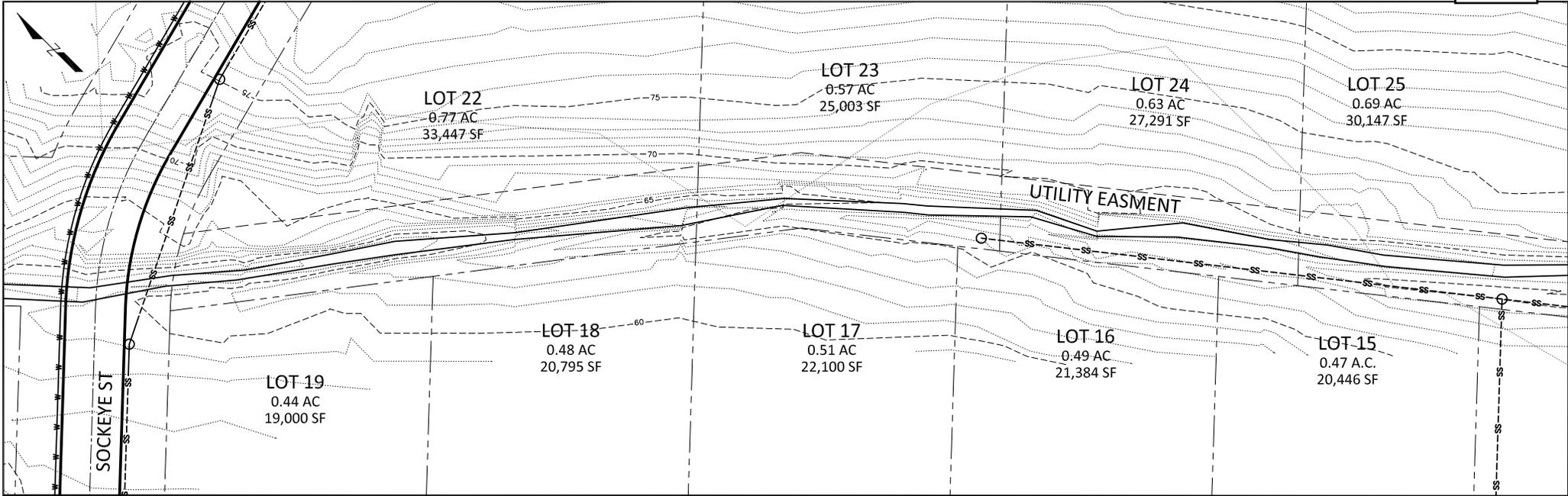
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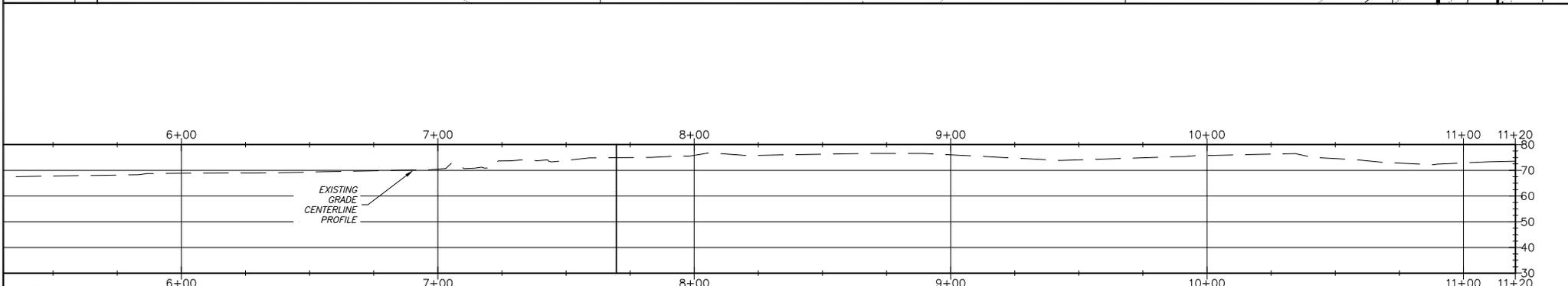
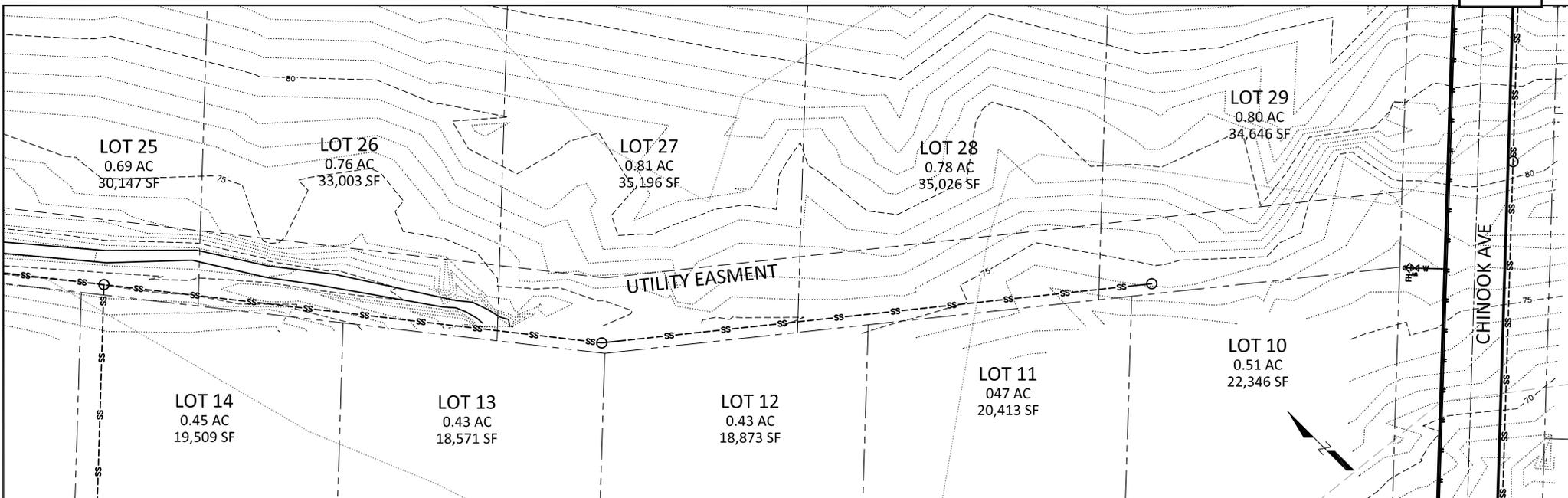
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| Designed: ARP | Approved:            | <br>RSM ENGINEERING-KETCHIKAN, INC.<br>7180 REVILLA ROAD, SUITE 300<br>KETCHIKAN, ALASKA 99901 | Client: CITY OF WRANGELL | Project: WRANGELL INSTITUTE SUBDIVISION | Sheet Description: CHUM STREET PLAN AND PROFILE | Sheet No. C106 |
| Drawn: ARP    | Date: FEBRUARY, 2020 |  |                          |   |   |                |
| Checked:      | PROJECT #: 202725    |  |                          |   |   |                |



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| Designed: ARP |  | Approved:            |  | <br>RSM ENGINEERING-KETCHIKAN, INC.<br>7180 REVILLA ROAD, SUITE 300<br>KETCHIKAN, ALASKA 99901 | Client: CITY OF WRANGELL | Project: WRANGELL INSTITUTE SUBDIVISION | Sheet Description: CHUM STREET PLAN AND PROFILE | Sheet No. C107 |
| Drawn: ARP    |  | Date: FEBRUARY, 2020 |  |  |                          |   |   |                |
| Checked:      |  | PROJECT #: 202725    |  |  |                          |   |   |                |



C108  
MATCH LINE

6+00 7+00 8+00 9+00 10+00 11+00 11+20

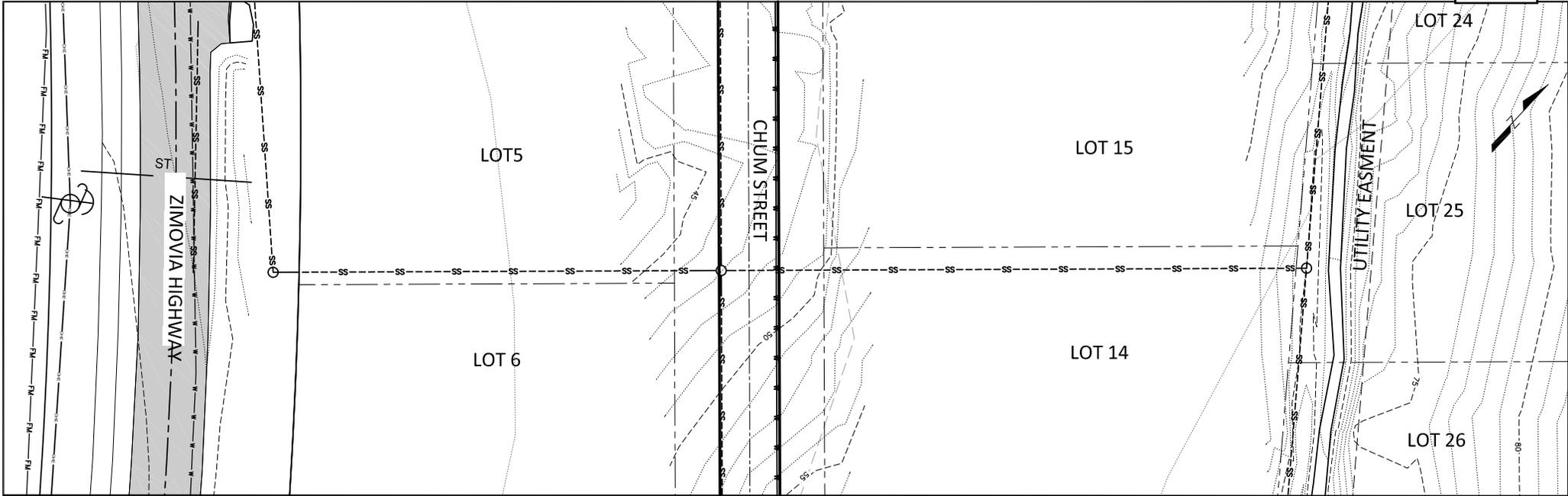
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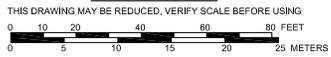
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| Designed: ARP | Approved:            | <br>RAM ENGINEERING-KETCHIKAN, INC.<br>7180 REVILLA ROAD, SUITE 300<br>KETCHIKAN, ALASKA 99901 | Client: CITY OF WRANGELL | Project: WRANGELL INSTITUTE SUBDIVISION | Sheet Description: CHUM STREET PLAN AND PROFILE | Sheet No. C108 |
| Drawn: ARP    | Date: FEBRUARY, 2020 |  |                          |   |   |                |
| Checked:      | PROJECT #: 202725    |  |                          |   |   |                |

Item 1.



SCALE 1"=20'



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|      |     | Designed: ARP | Approved: | <br>R&M ENGINEERING-KETCHIKAN, INC.<br>7180 REVILLA ROAD, SUITE 300<br>KETCHIKAN, ALASKA 99901 | Client: CITY OF WRANGELL | Project: WRANGELL INSTITUTE SUBDIVISION | Sheet Description: XXX PLAN AND PROFILE | Sheet No. C109 |
| Date | No. | Description   | By        |  |                          |   |   |                |

June 1, 2021

Ms. Terri Henson, Chair  
**Wrangell Planning and Zoning Commission**  
PO Box 531  
Wrangell, AK 99929

**RE: Introduction to Stik Built Homes LLC**

Dear Ms. Henson and Commissioners:

We are writing to introduce you to our new business venture: Stik Built Homes LLC. Founded in June of 2020 by sisters Chris Bunes and Stephanie Hatton, Stik Built Homes LLC (SBH) was borne from a strong desire to fulfill a community need for healthy, economical housing – not a common thing in Wrangell.

Over the last several years we have considered various business ideas but settled on the belief that creating thoughtfully designed, efficient, lasting homes allows us to contribute positively to this community. We each bring diverse strengths yet are united in the desire to role model how a viable enterprise can be a force for social good; one that prioritizes minimizing our environmental impact while maximizing social benefit. As the owners of SBH, we are reliable, trustworthy and committed to running our business with integrity and transparency.

Creating lasting homes that are soundly built and well designed is foundational to our mission. This translates into several things: thorough research of appropriate materials – both traditional and modern, an openness to explore what constitutes a “home”, and employment of sound design principles. We are considering all options – new dwelling construction, rehabilitation, and repurposing. Since our founding we have acquired a vacant lot with great potential, developed working plans for a float house, and have recently purchased a house for renovation.

As we continue to expand and grow we recognize that we will need the support of the community and the City and it was in this spirit that we wanted to share our new business with the Commission.

We believe that everyone deserves to have healthy place to live.

Most sincerely,  
**STIK BUILT HOMES LLC**



Chris Bunes and Stephanie Hatton  
Owner Members



## CITY AND BOROUGH OF WRANGELL

INCORPORATED MAY 30, 2008

Item 3.

P.O. BOX 531 (907)-874-2381  
Wrangell, AK 99929 FAX (907)-874-3952  
www.wrangell.com

June 7, 2021

Jeff and Christina Good  
Wrangell, AK 99929

Re: Variance permit request for a variance to the height requirement on Lot BB, Good/Edgley Subdivision (Plat No. 2018-4), zoned Single Family Residential, owned and requested by Jeff and Christina Good

Dear Jeff:

The Planning and Zoning Commission, at their regular meeting of May 13, 2021 held a public hearing on the above described variance permit application. At that meeting, the Commission recessed this item until May 26, 2021 at 1:15pm for an onsite visit.

Since then, staff met with you regarding modifications to the fill and to the house design. Staff, including the building official, met on site on Monday May 17, 2021 to go over the changes. At that time, the building official determined, due to the proposed modifications, the structure's height is just under 25'. The variance permit will not be needed and the application has been withdrawn. There will be no site visit by the Commission on May 26, 2021.

Please do not hesitate to call if you have any additional questions.

Sincerely,

Carol Rushmore  
Economic Development Director

Cc: Jeff Good  
Rob and Sharri Rooney  
Jackie DeMontigny  
Planning and Zoning Commission

# *City and Borough of Wrangell, Alaska*

## Agenda Item G1

Date: June 6, 2021

To: Planning and Zoning Commission

From: Carol Rushmore, Economic Development Director

Re: Final Plat review of the Merritt Replat, a replat of Lot 5-A, of a replat with Lot 5, within Block 24 of Wrangell Townsite, according to Plat 78-1; and Lot 5-B1 of L&A Subdivision, according to Plat 2002-3, creating Lot A, Merritt Replat, zoned Multi-Family, requested by Brian Merritt.

---

### **Recommendation:**

Staff recommends approving the final plat.

### **Recommended Motion:**

**Move to approve the Final plat of the Merritt Replat.**

### **Findings:**

The Merritt's have inherited the lot owned by Mr. Bob Grant with a residential dwelling which is adjacent to their vacant lot. They are combining the two lots into a single lot. Both lots are zoned Multi-Family. Mr. Merritt proposes to build a shop on the vacant lot, but could not do so as a stand alone shop without a primary use – the residence. There have been no changes to the outside boundary lines, only elimination of the internal shared line, thus there was no requirement to have a preliminary plat (WMC19.04.020)



# CITY AND BOROUGH OF WRANGELL, ALASKA

Item 1.



1 inch = 75 feet  
Date: 6/7/2021  
31

Public Map



**DISCLAIMER: THESE MAPS ARE FOR PLANNING PURPOSES ONLY. PROPERTY LINES ARE APPROXIMATE. AERIAL 2002.**



# Alaska Escrow and Title Insurance Agency, Inc.

2030 Sea Level Drive Suite 201  
Ketchikan, Alaska 99901  
Tel:(907)225-9077 Fax:(907)225-9076

8800 Glacier Hwy Suite 102  
Juneau, Alaska 99801  
Tel:(907)789-1161 Fax:(907)789-1159

315 Seward Street, Ste. B  
Sitka, AK 99835  
Tel:(907)623-1140 Fax(907)623-0774

61812

June 01, 2021

## CERTIFICATE TO PLAT

Amendment No. 1

Reference No.:  
File No.: 61812  
Premium: \$250.00  
Tax: \$16.25

**Total: \$266.25**

This report is restricted to the use of the addressee and is not to be used as a basis for closing any transaction affecting title to said property. Liability of the Agency is limited to the compensation received therefore. Two years from the certificate date, this Certificate to Plat expires and this company's obligation for updates or use ends.

This is a certificate as of May 27, 2021 at 8:00 a.m for a plat out of the following property:

Parcel I:

Lot 5-B1, L & A Subdivision, Plat No. 2002-3, Wrangell Recording District, First Judicial District, State of Alaska.

Parcel II:

Lot 5-A Block 24 Wrangell Townsite, according to Plat No. 78-1, records of the Wrangell Recording District, First Judicial District, State of Alaska.

The Company certifies that record title is vested in:

Brian Allen Merritt and Sarah Whittlesey-Merritt, husband and wife, as tenants by the entirety an estate in Fee Simple

SUBJECT TO:

1. Any facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
2. Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.
3. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
4. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof (c) water rights; claims or title to water.

5. Rights of the state or federal government and/or public in and to any portion of the land for right of way as established by federal statute RS 2477 (whether or not such rights are shown by recordings of easements and/or maps in the public records by the State of Alaska showing the general location of these rights of way).
6. Any lien or right to lien, for services, labor or material heretofore or hereafter furnished imposed by law and not shown by the public records.
7. Any right, title, interest, estate or easement in land beyond the lines of the area specifically described or referred to in this report, or in abutting streets, roads, avenues, alleys, lanes, ways or waterways, but nothing in this paragraph shall modify or limit the extent to which the ordinary right of an abutting owner for access to a physically open street or highway is insured by this policy.
8. Any law ordinance or governmental regulation (including but not limited to building and zoning ordinances) restricting or regulating or prohibiting the occupancy, use or enjoyment of the land, or regulating the character, dimensions or location of any improvement now or hereafter erected on the land, or prohibiting a separation in ownership or a reduction in the dimensions or area of the land, or the effect of any violation of any such law, ordinance or governmental regulation.
9. Rights of eminent domain or governmental rights of police power unless notice of the exercise of such rights appears in the public records.
10. Defects, liens, encumbrances, adverse claims, or other matters, (a) created, suffered, assumed or agreed to by the insured claimant; (b) not shown by the public records and not otherwise excluded from coverage but known to the insured claimant either at Date of Policy or at the date such claimant acquired an estate or interest insured by this policy or acquired the insured mortgage and not disclosed in writing by the insured claimant to the Company prior to the date such insured claimant became an insured hereunder; (c) resulting in no loss or damage to the insured claimant; (d) attaching or created subsequent to Date of Policy; or (e) resulting in loss or damage which would not have been sustained if the insured claimant had been a purchaser or encumbrance for value without knowledge.
11. Minerals of whatsoever kind, subsurface and surface substances, including but not limited to coal, lignite, oil, gas, uranium, clay, rock, sand and gravel in, on, under and that may be produced from the Land, together with all rights, privileges, and immunities relating thereto, whether or not appearing in the Public Records or listed in Schedule B. The Company makes no representation as to the present ownership of any such interests. There may be leases, grants, exceptions or reservations of interest that are not listed.
12. Taxes and/or assessments, if any, due the City of Wrangell, a report of which will follow.
13. Reservations and exceptions as contained in the U.S. Patent and acts relating thereto.
14. Easements and notes as shown on Plat No. 78-1.
15. Easements and notes as shown on Plat No. 2002-3.  
(Affects Parcel I)
16. Easement and the terms and conditions thereof:

GRANTEE: Town of Wrangell  
PURPOSE: Water Supply System  
DATE: January 21, 1952  
RECORDED: January 28, 1952 in Book 10 at Page 277  
THE DESCRIPTION CONTAINED THEREIN IS NOT SUFFICIENT TO DETERMINE ITS EXACT LOCATION WITH THE PROPERTY HEREIN DESCRIBED.

17. Deed of Trust, including the terms and provisions thereof:

TRUSTOR: Robert H. Grant, a single person  
TRUSTEE: Stewart Title Guaranty Co.  
BENEFICIARY: Wells Fargo Bank, N.A.  
AMOUNT: \$45,000.00  
DATED: January 4, 2006  
RECORDED: January 13, 2006  
DOCUMENT NO.: 2006-000016-0

Assignment of Deed of Trust:

ASSIGNEE: Alaska Housing Finance Corporation  
DATED: January 4, 2006  
RECORDED: January 13, 2006  
DOCUMENT NO.: 2006-000017-0  
(Affects Parcel II)

**Alaska Escrow and Title Insurance Agency, Inc.**

  
Authorized Countersignature

# *City and Borough of Wrangell, Alaska*

## AGENDA G2

Date: June 4, 2021

To: Planning and Zoning Commission

From: Carol Rushmore, Economic Development Director

Re: Conditional Use permit request for a 150' lattice pole for use as a cell transmission tower and fenced lease area for support services on Lot 14, Block 5, USS 2127, currently zoned Holding but recommended for zone change to Open Space/Public, owned by the City and Borough of Wrangell, requested by Vertical Bridge Development, LLC through their representative Lynx Consulting

---

### **Background:**

Vertical Bridge is seeking to install a lattice cell tower (modified from a monopole tower per the public notice) for G4 service on the north end of the island.

The Planning and Zoning Commission held the public hearing on this item on May 13, 2021. The following individuals provided written testimony or in person testimony; Sherri and Royce Cowan, Rosemary Ruoff, and Joel Aro. The following motion was made for discussion purposes:

**Move to approve the findings of fact and the conditional use permit request for a lattice pole G4 cell tower with the following conditions:**

- 1) Permit is subject to approval by the Borough Assembly of the proposed zone change of Lot 14, Block 5, USS 2127 to Open Space/Public and modification of conditionally allowed uses to the Open Space/Public district to allow communication infrastructure.**
- 2) Permit is subject to lease approval by the Borough Assembly.**
- 3) Security lighting should be no higher than 15 feet from grade and angled down and side blocked so as not impact adjacent residential houses.**
- 4) Fencing should be site obscuring facing residential properties.**
- 5) Intermodulation Study for interference with KSTK translator must be completed prior to installation and show a negative impact to KSTK translator.**
- 6) Recommend to the Borough Assembly issues identified by KSTK be addressed within the lease document.**

- 7) If access to the fenced lease area via the ROW between the transfer station and Lot 14 be developed in the future, access easement across Lots 12, 13 and 14 may be vacated for the alternative access.
- 8) The tower, antennas, structures and equipment associated with the telecommunication will be removed within six months of ceasing operations.
- 9) Generator will be for back up power supply only and muffled as much as possible.

**Recommendation:** Staff recommends approval of the proposed cell tower subject to conditions.

**Review Criteria:**

Chapter 20.32: Open Space/Public District  
 Chapter 20.52: Lot Standards:  
 Chapter 20.68: Conditional Use Permits

**Findings of Fact:**

Lynx Consulting began discussions with the Borough for placement of a new cell tower at the north end of the island in 2020. After considering alternative sites, the preferred site was somewhere near the solid waste transfer station. There was considerable discussion with the Borough staff regarding location and access prior to their surveyors coming in to survey and make a formal proposal for their preferred site.

Upon reviewing the land use and zoning for the area, the existing zoning for the proposed cell tower lot was Holding which did not allow for review of cell towers or other activities. Only recreation and gravel extraction is permitted. Staff proposed changing the zone of all the lots bordering the Solid Waste Transfer Facility to Open Space/ Public (OS/P) to allow new or continued municipal uses. In addition, two new uses were proposed for the OS/P District, including Municipal Facilities and Communication Infrastructure. The adding latter conditionally approved use would allow review The Commission reviewed the zone change and use modification in April and recommended approval to the Assembly. The first reading of each ordinance was on May 11, 2021 and the public hearing and approval was held on each item on May 25, 2021.

Originally the proposed tower was to be a monopole, but, per the recent communication from Lynx Consulting, concern about crane access has required them to modify the proposal to a lattice tower. The tower will be a 4G not a 5G tower.

Some adjacent residents have commented regarding potential health concerns from cell tower radiation emissions being so close to residential homes. Basic research on health and safety issues related to cell towers is diverse, international, and with varying opinions. There is a vacant lot 50' wide between the tower lot and the next privately owned residential lot in the same block. Staff has found that some municipalities require a minimum of 150' distance from residential properties down to 50' or a minimum of 4 acres for example. The setbacks of a tower vary substantially between jurisdictions. The Commission needs to determine the impact of such a tower on the adjacent residential neighborhood.

Vertical Bridge indicated that a NIER Report could be conducted prior to the June, 8, 2021 Planning and Zoning Commission. The report is conducted by a third party and assesses levels of radiofrequency radiation energy emitted from the tower. The report (attached) indicates analysis shows that the cumulative emissions will comply with FCC limits to human exposure and at ground level will be less than 1% of the FCC exposure limits. Mr. Thatcher who prepared the report will be available at the meeting to answer the Commission's questions.

The Findings of Fact and Conditions of Approval (part of the Findings of Fact) have been modified since the last meeting and the Commission needs to reaffirm the Findings at the June meeting. Also of note, the Assembly did approve the zone change on May 25, 2021 as mentioned in Condition #1.

Conditions of Approval for conditional use applications include:

1) *Minimal impacts on adjacent neighbors from noise, traffic, appearance, yards etc.*

There should be minimal impacts from a cell tower at this location due to noise, traffic, or the fenced site. Once construction is completed, there will be minimal activity at the site itself. The tower is tucked up closer to the solid waste transfer station so should not directly block views, but it will be visible and in view sheds of the surrounding neighborhood. There is a vacant lot 50' wide between the tower lot and next adjacent privately owned residential lot in the same block to the east. There is also 50' of the proposed lot and an alleyway between the residential lot to the south. Lighting will be permitted at the site for security but is conditioned to be blocked to adjacent residents and angled downwards. The primary initial impact of concern is the emissions from the tower on the surrounding residential area. According to the NIER Report, analysis shows that the cumulative emissions will comply with FCC limits to human exposure and at ground level will be less than 1% of the FCC exposure limits.

2) *Provisions of sewer and water:* There are no plans for installing sewer or water.

3) *Entrances and off-street parking available without safety issues:* Access to the facility will be off a non-exclusive easement from Third Street. Third Street leads to the Transfer Station. The easement access will be constructed by Lynx Consulting/Vertical Bridge. Should the ROW on the northern edge of the property be developed, access to the tower site should be switched to the ROW, and the easements vacated to allow full use of the lots. There is adequate parking and turn around on Lot 14 to access the infrastructure.

CITY AND BOROUGH OF WRANGELL, ALASKA  
CONDITIONAL USE APPLICATION

PLANNING AND ZONING COMMISSION

P.O. BOX 531  
WRANGELL, ALASKA 99929

Application Fee: \$50

I. Applicant's Name and Address: Vertical Bridge Development, LLC represented by Lynx Consulting  
750 Park of Commerce Drive, Suite 200  
Boca Raton, FL 33487

Applicant's Phone Number: (206) 661-5010 Joel Aro, Lynx Consulting

II. Land Owner's Name and Address: City of Wrangell  
PO BOX 531  
Wrangell, AK 99929

Land Owner's Phone Number: (907) 874-2381

III. Legal Description: Lot 12, 13, 14 , Block 5 , U.S. Survey 2127  
Parcel No. 01-005-327 (Tower), and 01-005-323 & 01-005-325 (Easement)

IV. Zoning Classification: HOLDING

V. Specific Request: The request is for a 150' monopole with a 4' lightning rod and within a 50' x 50' fenced lease area. The proposal would allow for Verizon Wireless coverage on the north end of Wrangell and the Wrangell Airport.

VI. Site Plan shall be submitted with the application. The plan shall show existing and proposed structures, driveways, roadways, existing and proposed grading. Additional information shall be furnished upon request of the Zoning Administrator.

VII. Construction Schedule: BEGIN: 6/01/2022 END: 7/31/2022

SIGNATURE OF OWNER: Wen M VanBerg DATE: 4/13/2021

SIGNATURE OF APPLICANT: Joel Aro DATE: 4/13/2021

If more than one owner or if more than one parcel is involved, attach all signatures on a separate piece of paper identifying which parcels are owned by which persons.

Written authorization of the property owner must be submitted with this application if the applicant is other than the owner.



25 February 2021

Carol Rushmore  
Economic Development Director  
City and Borough of Wrangell  
P.O. Box 531  
Wrangell, AK 99929

Re: Vertical Bridge Project US-AK-5261 Stikeen Wireless Communication Site project narrative.

Ms. Rushmore,

The following is a brief description of the proposed project based on final zoning drawings (FZD's) dated 1/19/21 and included as part of this narrative:

Vertical Bridge proposes to install a 150' monopole communication tower on 50' x 50' fenced, leased portion Lot 14 (aka Parcel number 01-005-327) owned by the City of Wrangell.

Access to that site will be via a new, non-exclusive 20' wide access and utility easement across the southern portions of Lots 12 and 13 (aka parcels 01-005-323 and 01-005-325). While there is an alley identified to the south of these latter two parcels, topography (i.e., steepness of that area) render this route unusable as an access point to the proposed Vertical Bridge lease area.

The communication tower and lease area are designed to accommodate three additional wireless carriers. In addition, there will be site ownership identification placards with emergency contact information clearly visible together with all applicable warning signs and the tower will be equipped with anti-climbing devices.

The initial tenant for this site will be Verizon Wireless whose 4G antennas will be positioned at a height of approximately 147' above ground level and which will occupy a portion of the lease area as shown on the FZD's. Included as part of this installation will be a back-up generator.

17311 135<sup>th</sup> Avenue NE, Suite A-100, Woodinville, WA 98072



The coverage objective for the Verizon wireless communication facility will be the north end of Wrangell Island including the residential areas, the airport, and the islands to the North.

Granting the permit to proceed with this project will greatly enhance wireless coverage in the are and will provide an opportunity for other wireless carriers to provide coverage to the north end of Wrangell Island.

Should you have any questions regarding this proposal please feel free to contact me by either email [jaro@lynxconsulting.org](mailto:jaro@lynxconsulting.org) or by telephone at 206-661-5010.

Sincerely yours,

Joel Aro

Attachments:

Final Zoning Drawings

## **Evaluation of Compliance with FCC Guidelines for Human Exposure to Radiofrequency Radiation**

**Site Address:  
3 Evergreen Ave  
Wrangell, AK 99929**

**Site Name:  
AK3 STICKEEN**

**Prepared for:  
Lynx Consulting**

**on behalf of**



**May 26<sup>st</sup>, 2021**

**Prepared By:  
Andrew H. Thatcher, MSHP, CHP**

## Introduction

This report assesses levels of exposure to radiofrequency (RF) energy from a new Verizon Wireless base station with antennas located on a self-support tower located on the property of Wrangell Landfill at 3 Evergreen Ave, Wrangel, AK 99929. The tower will have 6 new antennas operating at 750 MHz LTE and 2100 AWS LTE bands of service. The new antennas will be mounted at the elevations of 146' above grade. This report analyzes the cumulative RF exposures from the facility at ground level.

## Executive Summary

Analysis shows that the cumulative emissions from the proposed Verizon Wireless transmitters will comply with FCC limits for human exposure to RF energy at any place of public access. Maximum RF exposure levels at all ground level locations will be less than 1% of the FCC exposure limits for the general public.

## Site Description

The project will add 6 new antennas to serve 750 MHz LTE and 2100 AWS LTE bands of service. The following analysis is based on technical data provided by Verizon Wireless, which indicates that four transmitters will be used for 750 MHz and 2100 AWS3 LTE frequency bands.

Based on a search conducted on [www.antennasearch.com](http://www.antennasearch.com), no other significant (i.e. capable of affecting compliance determinations for the present installation) RF emitting source exists within 2,000 feet of this location.

## Exposure At Ground Level Outside the Building

Equation 6 of OET Bulletin 65<sup>1</sup> is used as the basis for ground level calculations as it considers a truly worst-case prediction of power density in an outdoor environment in which 100% of incoming radiation is assumed to reflect off a ground surface, resulting in a doubling of the predicted field strength and a four-fold increase in power density. Due to the considerable attenuation by building materials, exposure levels within buildings will be lower than those calculated outside buildings, typically by a factor of 10. The formula is as follows:

$$S = [EIRP] / [\pi \cdot D^2]$$

*WHERE:*

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<sup>1</sup> Federal Communications Commission Office of Engineering and Technology. Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields. OET Bulletin 65. 1997.

S = Power density (mW/cm<sup>2</sup>)

EIRP = Effective isotropic radiated power (mW) (varies with angle as per manufacturer's specifications)

D = Hypotenuse distance (cm)

**Ground Level Exposures**

Table 1 shows the calculated maximum cumulative RF exposure at 6' above ground for the all sectors (0°-360°) assuming all antennas operating at 100% power and complete ground reflection. To determine the maximum cumulative exposure the total RF signal levels from each Verizon Wireless antenna were summed at each location as a percent of the FCC exposure limit (which varies somewhat with frequency). The maximum cumulative exposure at any location was determined to be 0.002 mW/cm<sup>2</sup> or 0.28% of the FCC general public exposure limit. This cumulative exposure was created by using the information provided by Verizon Wireless. Table 1 also provides the maximum effective radiated power in each frequency band.

| Table 1: Calculated Ground Level Exposures |                             |                       |                     |   |               |   |
|--|-----------------------------|-----------------------|---------------------|---|---------------|---|
| Site Name:                                 | AK3 STICKEEN                |                       |                     |   |               |   |
|  | All Sectors (0-360 degrees) |                       |                     |   |               |   |
| Carrier Type                               | Upper Bound ERP (watts)     | Upper Bound ERP (dBm) | Antenna Height (ft) | Maximum outdoor exposure (with ground reflection) (mW/cm <sup>2</sup> ) | % of Standard | General Population Exposure Limit (mW/cm <sup>2</sup> ) |
| Ver 750 LTE                                | 3950                        | 65.97                 | 146                 | 7.8E-04   | 0.16%         | 0.500   |
| Ver 2100 AWS                               | 10830                       | 70.35                 | 146                 | 1.2E-03   | 0.12%         | 1.000   |
|  |                             |                       |                     | <b>2.0E-03</b>  | <b>0.28%</b>  |   |

**Note: “maximum outdoor exposure” is calculated at the point at ground level where the cumulative exposure from all sources is at a maximum.**

**Discussion**

The biological effects of RF energy have been extensively studied, and there are several thousand reports in the scientific literature on this subject. These reports have been critically reviewed by numerous independent panels, most recently the IEEE (formerly Institute of Electrical and Electronics Engineers) and the International Commission on Nonionizing Radiation Protection. These groups have affirmed existing health standards, or have developed and proposed standards for exposure to RF energy that are broadly similar to the FCC limits.

## Conclusions/Recommendations

The cumulative emissions from the proposed Verizon Wireless transmitters will comply with FCC exposure limits for the general public at all locations outside the building. Present analysis shows that RF exposures are less than 1% of the FCC general public exposure limit.

It should be noted that wireless technology is changing rapidly, and companies including Verizon Wireless are frequently upgrading and introducing new services and updating existing services to new technologies. Consequently, the calculated exposure levels in Table 1 are based on current design data which may change in the future. Compliance after major changes to the site should be established based on current design information.

## Certification

I hereby certify the following:

1. I have read and fully understand the FCC regulations concerning RF safety and the control of human exposure to RF fields.
2. To the best of my knowledge, the statements and information disclosed in this report are true, complete and accurate, based on engineering design data for the site supplied to me by Verizon Wireless.
3. The results of the analysis indicate that the site is in full compliance with the FCC regulations concerning RF exposure at all areas of public access.
4. Transmission equipment for the Verizon Wireless facility is certified by the FCC under the equipment authorization procedures set forth in the FCC rules. This assures that the wireless facility will transmit within assigned frequency bands, and at authorized power levels. The Verizon wireless facility will operate in accordance with all FCC rules regarding power, signal bandwidth, interference mitigation, and good RF engineering practices. The Verizon Wireless facility will comply with all FCC standards for radio frequency emissions.

Regards,



Andrew H. Thatcher, MSHP, CHP

# CITY AND BOROUGH OF WRANGELL, ALASKA

Item 2.



1 inch = 83.333333 feet  
 Date: 4/14/2021  
 46

Public Map



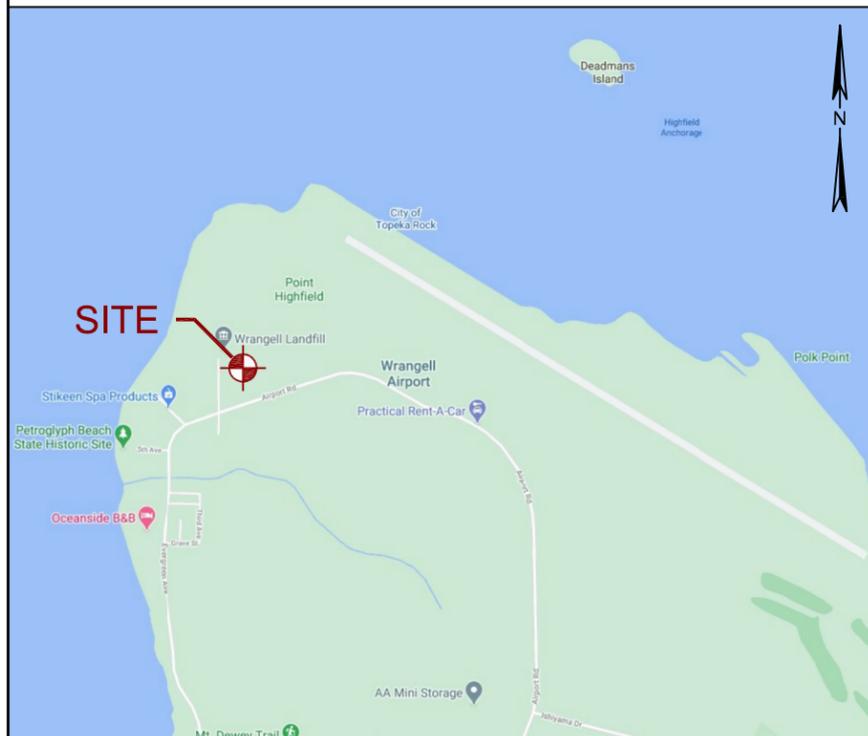
**DISCLAIMER: THESE MAPS ARE FOR PLANNING PURPOSES ONLY. PROPERTY LINES ARE APPROXIMATE. AERIAL 2002.**



**VB PROJECT NAME: US-AK-5261**  
**VZW PROJECT NAME: AK3 STICKEEN**  
**PROJECT LOCATION: 3 EVERGREEN AVE WRANGELL, AK 99929**

CO-APPLICANT: **Item 2.**  
**verizon**  
 CO-APPLICANT:  
**verticalbridge**  
 IMPLEMENTATION TEAM/CLIENT:  
**LYNX**  
 DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DRAWINGS AND ADVISE CONSULTANTS OF ANY ERRORS OR OMISSIONS. NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE IMPLEMENTED WITHOUT PRIOR WRITTEN APPROVAL. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. ALL DRAWINGS AND SPECIFICATIONS REMAIN THE PROPERTY OF LYNX CONSULTING, INC. NEITHER LYNX CONSULTING, INC. NOR THE ARCHITECT WILL BE PROVIDING CONSTRUCTION REVIEW OF THIS PROJECT.

VICINITY MAP



PROJECT INFORMATION

JURISDICTION: CITY AND BOROUGH OF WRANGELL  
 ZONING CLASS: HOLDING  
 PARCEL #1 ID: 01-005-323  
 PARCEL #2 ID: 01-005-325  
 PARCEL #3 ID: 01-005-327  
 TRS: SEC 24, TWN 62S, RNG 83E  
 PARCEL #1 SIZE: 5,000 SF (0.11 ACRES)  
 PARCEL #2 SIZE: 5,000 SF (0.11 ACRES)  
 PARCEL #3 SIZE: 5,000 SF (0.11 ACRES)

LATITUDE : 56°29'6.64"N  
 (APPROXIMATE) 56.485178'  
 LONGITUDE : 132°23'17.47"W  
 (APPROXIMATE) -132.388186'  
 GROUND ELEVATION: 117.0' AMSL  
 STRUCTURE HEIGHT: 150'-0" (TOP OF TOWER)  
 HIGHEST APPURTENANCE: 154'-0" (TOP OF LIGHTNING ROD)

LIST OF DRAWINGS

| SHEET | DESCRIPTION                    |
|-------|--------------------------------|
| T-1   | COVER SHEET                    |
| N-1   | GENERAL NOTES                  |
| SV-1  | EXISTING CONDITIONS SURVEY     |
| C-1   | PROPOSED SITE PLAN             |
| A-1   | EXISTING COMPOUND PLAN         |
| A-2   | PROPOSED COMPOUND PLAN         |
| A-3   | PROPOSED LEASE AREA PLAN       |
| A-4   | PROPOSED ELEVATION             |
| RF-1  | PROPOSED ANTENNA CONFIGURATION |
| RF-2  | PROPOSED IT DIAGRAM            |

SCOPE OF WORK

VERTICAL BRIDGE DEVELOPMENT, LLC AND VERIZON WIRELESS PROPOSE TO INSTALL A WIRELESS FACILITY WITH THE FOLLOWING SCOPE OF WORK:

- ADD (1) 6'-0" CHAIN LINK FENCE WITH BARBED WIRE (50'-0"x50'-0" LEASE AREA)
- ADD (1) 150'-0" SELF-SUPPORT TOWER
- ADD (1) 4'-0" LIGHTNING ROD TO PROPOSED TOWER
- ADD (1) 8'-0" UTILITY H-FRAME
- ADD (1) 4-POSITION POWER METER BANK TO PROPOSED H-FRAME
- ADD (1) 12"x36"x36" HOFFMAN BOX TO PROPOSED H-FRAME
- ADD (1) GRADE BEAM FOUNDATION
- ADD (1) 7'-0"x10'-0" STEEL EQUIPMENT PLATFORM (WITHIN AN 80 SF LEASE AREA)
- ADD (1) EQUIPMENT CABINET TO PROPOSED EQUIPMENT PLATFORM
- ADD (1) RACK MOUNTED 12-PORT OVP TO PROPOSED CABINET
- ADD (1) 30KW DIESEL GENERATOR TO PROPOSED EQUIPMENT PLATFORM
- ADD (1) 200A 30-POSITION OUTDOOR RATED ILC TO PROPOSED EQUIPMENT PLATFORM H-FRAME
- ADD (1) 200A 120/240V-1P POWER METER TO PROPOSED METER BANK
- ADD (1) 12" ICE-BRIDGE
- ADD (1) GPS ANTENNA TO PROPOSED H-FRAME LEG
- ADD (1) 12x24 HYBRID CABLE TO PROPOSED ICE-BRIDGE
- ADD (3) HEAVY-DUTY SECTOR FRAMES TO PROPOSED TOWER
- ADD (6) PANEL ANTENNAS TO PROPOSED ANTENNA MOUNT
- ADD (3) 700 RRU'S (RRUS4449 B13) TO PROPOSED ANTENNA MOUNT
- ADD (3) AWS RRU'S (RRUS8843 B66) TO PROPOSED ANTENNA MOUNT
- ADD (1) 12-PORT OVP TO PROPOSED ANTENNA MOUNT

CONTACTS

**PROPERTY OWNER:**  
CITY AND BOROUGH OF WRANGELL  
3 EVERGREEN AVE WRANGELL, AK 99929

**CO-APPLICANT:**  
AMY KARN  
VERIZON WIRELESS  
635 EAST 40TH AVE ANCHORAGE, AK 99503  
PHONE: (907) 786-9943

**CO-APPLICANT:**  
STEVE HEDGES  
VERTICAL BRIDGE DEVELOPMENT, LLC  
750 PARK OF COMMERCE DR BOCA RATON, FLORIDA 33487  
PHONE: (773) 988-1715  
shedges@verticalbridge.com

**TOWER OWNER:**  
STEVE HEDGES  
VERTICAL BRIDGE DEVELOPMENT, LLC  
750 PARK OF COMMERCE DR BOCA RATON, FLORIDA 33487  
PHONE: (773) 988-1715  
shedges@verticalbridge.com

**PROFESSIONAL OF RECORD:**  
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LYNX CONSULTING, INC  
17311 135TH AVE NE, SUITE A-100 WOODINVILLE, WA 98072  
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**APPLICANT AGENT:**  
JULEI CAMPOS  
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17311 135TH AVE NE, SUITE A-100 WOODINVILLE, WA 98072  
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jcampos@lynxconsulting.org

**PERMITTING CONTACT:**  
PATRICK EVANS  
LYNX CONSULTING, INC  
17311 135TH AVE NE, SUITE A-100 WOODINVILLE, WA 98072  
PHONE: (503) 914-8977  
pevans@lynxconsulting.org

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT CONDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

**ALASKA STATE AND LOCAL BUILDING CODES WITH THE FOLLOWING REFERENCE CODE:**

2012 INTERNATIONAL BUILDING CODE (IBC)  
 2012 INTERNATIONAL MECHANICAL CODE (IMC)  
 2012 INTERNATIONAL FIRE CODE (IFC)  
 2011 NATIONAL ELECTRIC CODE (NFPA 70)  
 ANSI/TIA-222-H (REVISION H)

LEGAL DESCRIPTION

INFORMATION PER TITLE REPORT NO. 60172, DATED OCTOBER 23, 2020, ISSUED BY STEWART TITLE COMPANY.  
 TITLE IS VESTED IN: CITY OF WRANGELL  
 LOT 12, 13 AND 14, BLOCK 5, ACCORDING TO THE OFFICIAL PLAT OF U.S. SURVEY 2127 FOR THE EASTERN ADDITION TO WRANGELL TOWN SITE, WRANGELL RECORDING DISTRICT, FIRST JUDICIAL DISTRICT, STATE OF ALASKA.

DRIVING DIRECTIONS

- (FROM WRANGELL AIRPORT)
- HEAD NORTHWEST ON AIRPORT RD TOWARD EVERGREEN AVE.
  - TURN RIGHT AT THE FIRST CROSS STREET ONTO 3RD AVE.
  - TURN RIGHT ONTO GRAVEL DRIVEWAY.
  - SITE WILL BE LOCATED DIRECTLY AHEAD.



| REV | DATE    | DESCRIPTION                               |
|-----|---------|---|
| 5   | 5/05/21 | REVISED DESIGN TO A SELF-SUPPORT TOWER    |
| 4   | 4/12/21 | EQUIPMENT LOCATION REVISED PER VB COMMENT |
| 3   | 3/29/21 | FZD'S REVISED PER LANDLORD COMMENTS       |
| 2   | 1/19/21 | FZD'S ISSUED FOR SUBMITTAL                |

PROJECT:  
**AK3 STICKEEN**  
 3 EVERGREEN AVE WRANGELL, AK 99929

SHEET TITLE:  
**COVER SHEET**

APPROVALS

| TITLE          | SIGNATURE | DATE |
|----------------|-----------|------|
| REPRESENTATIVE |           |      |
| RF ENGINEER    |           |      |
| PROPERTY OWNER |           |      |

|                          |                                |
|--------------------------|--------------------------------|
| FUZE NUMBER:<br>15906627 | DATE:<br>12/30/20              |
| DRAFTER:<br>BEW          | PROFESSIONAL OF RECORD:<br>BEW |
| REVISION NO:<br><b>5</b> | SHEET NO:<br><b>T-1</b>        |

## GENERAL NOTES

1. THESE DOCUMENTS ARE FOR THE DESIGN OF AN UNMANNED TELECOMMUNICATIONS FACILITY. THE FACILITY SHALL BE USED FOR THE TRANSMISSION OF RADIO SIGNALS FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE. THE FACILITY WILL NOT BE OPEN TO THE PUBLIC AND SHALL HAVE RESTRICTED ACCESS TO THE WIRELESS CARRIER'S PERSONNEL AND SERVICE EQUIPMENT.
2. THE WIRELESS CARRIER CERTIFIES THAT THIS TELECOMMUNICATIONS FACILITY WILL BE SERVICED ONLY BY THE CARRIER'S EMPLOYEES AND THEIR SUB-CONTRACTORS, FOR INSPECTION AND REPAIR PURPOSES ONLY.
3. ON AVERAGE THE WIRELESS CARRIER'S EMPLOYEES OR SUB-CONTRACTORS (TYPICALLY ONE PERSON) WILL VISIT THE WIRELESS FACILITY TWO TIMES PER MONTH FOR A DURATION OF APPROXIMATELY ONE HOUR.
4. THIS FACILITY IS UNMANNED AND IS NOT FOR HUMAN HABITATION (NO ADA ACCESS IS REQUIRED).
5. THIS FACILITY WILL CONSUME NO UNRECOVERABLE ENERGY.
6. NO POTABLE WATER SUPPLY IS TO BE PROVIDED TO THIS FACILITY.
7. NO WASTE WATER WILL BE GENERATED FROM THIS FACILITY.
8. NO SOLID WASTE WILL BE GENERATED FROM THIS FACILITY.
9. WORK SHALL COMPLY WITH ALL APPLICABLE STATE AND FEDERAL CODES, ORDINANCES AND REGULATIONS. ALL NECESSARY LICENSES, CERTIFICATES, ETC., REQUIRED BY AUTHORITY HAVING JURISDICTION SHALL BE PROCURED AND PAID FOR BY THE CONTRACTOR.
10. WORK SHALL COMPLY WITH ALL MANUFACTURER'S RECOMMENDED SPECIFICATIONS. THE CONTRACTOR SHALL FOLLOW SPECIFICATIONS SHOWN IN THESE DOCUMENTS, ONLY WHEN THOSE SPECIFICATIONS ARE MORE STRINGENT THAN THE MANUFACTURER'S.
11. WHERE ONE DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, EVEN THOUGH NOT SPECIFICALLY MARKED ON THE DRAWINGS OR REFERRED TO IN THE SPECIFICATIONS, UNLESS OTHERWISE NOTED.
12. IN EVERY EVENT, THESE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS SHALL BE INTERPRETED AS A MINIMUM ACCEPTABLE MEANS OF CONSTRUCTION. HOWEVER, THIS SHALL NOT RELIEVE THE CONTRACTOR, SUB-CONTRACTOR, AND/OR SUPPLIER/MANUFACTURER FROM PROVIDING A COMPLETE AND CORRECT JOB WHEN ADDITIONAL ITEMS ARE REQUIRED TO THE MINIMUM SPECIFICATION. IF ANY ITEMS NEED TO EXCEED THESE MINIMUM SPECIFICATIONS TO PROVIDE A COMPLETE, ADEQUATE AND SAFE WORKING CONDITION, THEN IT SHALL BE DEEMED AND UNDERSTOOD TO BE INCLUDED IN THE DRAWINGS. FOR EXAMPLE, IF AN ITEM AND/OR PIECE OF EQUIPMENT REQUIRES A LARGER WIRE SIZE (I.E. ELECTRICAL WIRE), STRONGER OR LARGER PIPING, INCREASED QUANTITY (I.E. STRUCTURAL ELEMENTS), REDUCED SPACING, AND/OR INCREASED LENGTH (I.E. BOLT/ BAR LENGTHS), THEN IT SHALL BE DEEMED AND UNDERSTOOD TO BE INCLUDED IN THE BID/PROPOSAL. THESE DOCUMENTS ARE MEANT TO SERVE AS A GUIDE AND ALL ITEMS REASONABLY INFERRED SHALL BE DEEMED TO BE INCLUDED.
13. SEE THE STRUCTURAL ANALYSIS BY OTHERS UNDER SEPARATE COVER FOR APPLICABLE CODE REFERENCES AND PROPOSED DESIGN LOADS.
14. NO WORK SHALL COMMENCE WITHOUT THE APPROVED STRUCTURAL ANALYSIS REPORT (STAMPED AND SIGNED) PROVIDED BY OTHERS UNDER SEPARATE COVER.
15. THE CONTRACTOR, PRIOR TO INSTALLATION OF ANTENNAS, EQUIPMENT, AND/OR COAX CABLES, SHALL REVIEW THE APPROVED STRUCTURAL ANALYSIS AND MODIFY, IF REQUIRED, ALL APPLICABLE MEMBERS AS INDICATED IN THE CERTIFIED STRUCTURAL ANALYSIS.
16. THESE DESIGN DOCUMENTS AND SPECIFICATIONS SHALL NOT BE CONSTRUED TO CREATE A CONTRACTUAL RELATIONSHIP OF ANY KIND BETWEEN THE ENGINEER AND THE CONTRACTOR.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY CLEANUP OF ALL TRADES AND REMOVE ALL DEBRIS FROM THE CONSTRUCTION SITE. AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL THOROUGHLY CLEAN THE BUILDING, SITE AND ANY SURROUNDING AREA TO BETTER THAN EXISTING CONDITION.
18. THE CONTRACTOR SHALL ADEQUATELY BRACE AND PROTECT ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, ETC., ACCORDING TO APPLICABLE CODES, STANDARDS AND BEST CONSTRUCTION PRACTICES.
19. THE CONTRACTOR SHALL MEET ALL OSHA REQUIREMENTS FOR ALL SITE CONDITIONS AND INSTALLATIONS.
20. WHERE NEW PAVING, CONCRETE SIDEWALKS, OR PATHS MEET EXISTING CONSTRUCTION, THE CONTRACTOR SHALL MATCH THE EXISTING SLOPE AND ELEVATION AS TO MAINTAIN A SMOOTH TRANSITION.

21. ALL ITEMS NOT LISTED AS "EXISTING" OR "PROVIDED BY OTHERS" ARE TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.
22. ALL MATERIALS FURNISHED UNDER THIS CONTRACT SHALL BE NEW, UNLESS OTHERWISE NOTED.
23. WHERE EXISTING MATERIALS ARE RE-USED, THE CONTRACTOR SHALL ENSURE THAT ALL OF THE EXISTING MATERIALS ARE FREE FROM DEFECTS OR HAVE BEEN REPAIRED TO LIKE NEW CONDITION.
24. ALL WORK SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP. THE CONTRACTOR SHALL REPAIR OR REPLACE AT THEIR EXPENSE ALL WORK THAT MAY DEVELOP DEFECTS IN MATERIALS OR WORKMANSHIP WITHIN ONE YEAR AFTER FINAL ACCEPTANCE OF THE ENTIRE PROJECT OR A PREDETERMINED PERIOD OF TIME (AS NEGOTIATED WITH THE PROPERTY OWNER AND WIRELESS CARRIER), WHICHEVER IS GREATER.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE EXISTING CONSTRUCTION AND REPAIR ALL DAMAGES TO BETTER THAN NEW CONDITION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DAMAGE TO THE BUILDING SITE OR ANY ADJACENT STRUCTURES. THE PROPERTY OWNER SHALL BE SOLE AND FINAL JUDGE AS TO THE QUALITY OF THE REPAIRED CONSTRUCTION. ANY REPAIRS OR MODIFICATIONS WHICH MUST BE MADE SHALL BE MADE AT THE EXPENSE OF THE CONTRACTOR.
26. THE EXISTING CONDITIONS REPRESENTED HEREIN ARE BASED ON VISUAL OBSERVATIONS AND INFORMATION PROVIDED BY OTHERS. LYNX CONSULTING INC. CANNOT GUARANTEE THE CORRECTNESS NOR COMPLETENESS OF THE EXISTING CONDITIONS AS SHOWN AND ASSUMES NO RESPONSIBILITY THEREOF. THE CONTRACTOR AND SUB-CONTRACTORS SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AS REQUIRED FOR PROPER EXECUTION OF THE PROJECT. THE CONTRACTOR AND SUB-CONTRACTORS SHALL REPORT ANY CONFLICTS OR DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
27. THE CONTRACTOR SHALL CALL FOR UTILITY LOCATES, VERIFY LOCATIONS AND MARK ALL BURIED UTILITIES PRIOR TO PERFORMING ANY EXCAVATIONS OR GRADING ACTIVITIES.
28. DO NOT SCALE THESE DRAWINGS. DIMENSIONS ARE EITHER TO THE FACE OF FINISHED ELEMENTS OR TO THE CENTERLINE OF ELEMENTS, UNLESS OTHERWISE NOTED. CRITICAL DIMENSIONS SHALL BE VERIFIED AND THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.
29. LYNX CONSULTING INC. HAS NOT CONDUCTED, NOR DOES IT INTEND TO CONDUCT ANY INVESTIGATION AS TO THE PRESENCE OF HAZARDOUS MATERIALS, INCLUDING, BUT NOT LIMITED TO, ASBESTOS WITHIN THE CONFINES OF THIS PROJECT. LYNX CONSULTING INC. DOES NOT ACCEPT RESPONSIBILITY FOR THE INDEMNIFICATION, REMOVAL, OR ANY EFFECTS FROM THE PRESENCE OF THESE MATERIALS. IF EVIDENCE OF HAZARDOUS MATERIALS IS FOUND, WORK IS TO BE SUSPENDED AND THE PROPERTY OWNER NOTIFIED. THE CONTRACTOR IS NOT TO PROCEED WITH FURTHER WORK UNTIL INSTRUCTED BY THE PROPERTY OWNER IN WRITING.
30. THE GENERAL CONTRACTOR AND EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS, DIMENSIONS, AND UTILITIES ON SITE PRIOR TO THE COMMENCEMENT OF WORK. ALL DISCREPANCIES BETWEEN THESE DOCUMENTS AND THE EXISTING ONSITE CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ENGINEER'S ATTENTION. NO CLAIM FOR ADDITIONAL COMPENSATION FOR WORK WHICH COULD HAVE BEEN FORESEEN BY AN INSPECTION, WHETHER SHOWN ON THE CONTRACT DOCUMENTS OR NOT, WILL BE ACCEPTED OR PAID.
31. THE CONTRACTOR SHALL VERIFY AND COORDINATE SIZE AND LOCATION OF ALL OPENINGS FOR STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING, CIVIL, OR ARCHITECTURAL WORK.
32. THE CONTRACTOR SHALL VERIFY THAT NO CONFLICTS EXIST BETWEEN THE LOCATIONS OF ANY AND ALL MECHANICAL, ELECTRICAL, PLUMBING, OR STRUCTURAL ELEMENTS AND THAT ALL REQUIRED CLEARANCES FOR THE INSTALLATION AND MAINTENANCE ARE MET. IN THE CASE OF ANY CONFLICTS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY. THE ENGINEER HAS THE RIGHT TO MAKE MINOR MODIFICATIONS IN THE DESIGN OF THE FACILITY WITHOUT THE CONTRACTOR GETTING ADDITIONAL COMPENSATION.
33. IF THE CONTRACTOR OR SUB-CONTRACTORS FIND IT NECESSARY TO DEVIATE FROM THE ORIGINAL APPROVED PLANS, THEN IT IS THE CONTRACTOR'S AND THE SUB-CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE ENGINEER WITH COPIES OF THE PROPOSED CHANGES FOR THEIR APPROVAL BEFORE PROCEEDING WITH THE WORK. IN ADDITION, THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROCURING ALL NECESSARY APPROVALS FROM THE BUILDING AUTHORITIES FOR THE PROPOSED CHANGES BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROCURING ALL NECESSARY INSPECTIONS AND APPROVALS FROM BUILDING AUTHORITIES DURING EXECUTION OF THE WORK.

## CONCRETE NOTES

1. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI-318.
2. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH CHAPTER 19 OF THE IBC 2012. STRENGTHS AT 28 DAYS AND MIX CRITERIA SHALL BE AS FOLLOWS.

| TYPE OF CONSTRUCTION                             | 28 DAY STRENGTH (f <sub>c</sub> ) | W/C RATIO | MINIMUM CEMENT CONTENT PER CUBIC YARD |
|--|-----------------------------------|-----------|---------------------------------------|
| SLAB ON GRADE<br>TOPPING SLABS<br>CONCRETE PIERS | 3,000 PSI                         | ≤ 0.45    | 5 1/2 SACKS                           |
| ALL STRUCTURAL CONCRETE                          | 4,000 PSI                         | ≤ 0.45    | 6 1/2 SACKS                           |
| CONCRETE WALLS                                   | 4,000 PSI                         | ≤ 0.45    | 6 1/2 SACKS                           |

CEMENT SHALL BE ASTM C150, PORTLAND CEMENT TYPE II U.N.O.
3. THE GENERAL CONTRACTOR SHALL SUPERVISE AND BE RESPONSIBLE FOR THE METHODS AND PROCEDURES OF CONCRETE PLACEMENT.
4. ALL CONCRETE WITH SURFACES EXPOSED TO STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINMENT AGENT CONFORMING TO ASTM C260, C494, C989, AND C1017. TOTAL AIR CONTENT SHALL BE IN ACCORDANCE WITH TABLE 1904.2.1 OF THE IBC 2012.
5. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENTS S1), GRADE 60, f<sub>y</sub>=60,000 PSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, f<sub>y</sub>=40,000 PSI. GRADE 60 REINFORCING BARS INDICATED ON DRAWINGS TO BE WELDED SHALL CONFORM TO ASTM A706. REINFORCING COMPLYING WITH ASTM A615(S1) MAY BE WELDED ONLY IF MATERIAL PROPERTY REPORTS INDICATING CONFORMANCE WITH WELDING PROCEDURES SPECIFIED IN A.W.S. D14 ARE SUBMITTED.
6. REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315 AND 318. LAP ALL CONTINUOUS REINFORCEMENT AT LEAST 30 BAR DIAMETERS OR A MINIMUM OF 2'-0". PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS AT LEAST 30 BAR DIAMETERS OR A MINIMUM OF 2'-0". LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.
7. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-165.
8. SPIRAL REINFORCEMENT SHALL BE PLAIN WIRE CONFORMING TO ASTM A615, GRADE 60, f<sub>y</sub>=60,000 PSI.
9. NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY DO DETAILED OR APPROVED BY THE ENGINEER.
10. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

|  |   |
|--|---|
| FOOTINGS AND OTHER UNFORMED SURFACES, EARTH FACE | 3"  |
| FORMED SURFACES EXPOSED TO EARTH OR WEATHER      | 2"<br>(#6 BARS OR LARGER)<br>1-1/2"<br>(#5 BARS OR SMALLER) |
| SLABS AND WALLS (INTERIOR FACE)                  | 3/4"  |
11. BARS SHALL BE SUPPORTED ON CHAIRS OR DOBIE BRICKS.
12. ANCHOR BOLTS TO CONFORM TO ASTM A307.
13. NON-SHRINKING GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (3,000 PSI MINIMUM).
14. ALL EXPANSION ANCHORS TO BE HILTI BRAND. ADHESIVE ANCHORS REQUIRE TESTING TO CONFIRM CAPACITY UNLESS WAIVED BY ENGINEER.

CO-APPLICANT:

Item 2.

CO-APPLICANT:

IMPLEMENTATION TEAM/CLIENT:

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DRAWINGS AND ADVISE CONSULTANTS OF ANY ERRORS OR OMISSIONS. NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE IMPLEMENTED WITHOUT PRIOR WRITTEN APPROVAL. ALL PREVIOUS ISSUES OF THIS DRAWINGS ARE SUPERSEDED BY THE LATEST REVISION. ALL DRAWINGS AND SPECIFICATIONS REMAIN THE PROPERTY OF LYNX CONSULTING, INC. NEITHER LYNX CONSULTING, INC. NOR THE ARCHITECT WILL BE PROVIDING CONSTRUCTION REVIEW OF THIS PROJECT.



May 05, 2021

| REV | DATE    | DESCRIPTION                               |
|-----|---------|---|
| 5   | 5/05/21 | REVISED DESIGN TO A SELF-SUPPORT TOWER    |
| 4   | 4/12/21 | EQUIPMENT LOCATION REVISED PER VB COMMENT |
| 3   | 3/29/21 | FZD'S REVISED PER LANDLORD COMMENTS       |
| 2   | 1/19/21 | FZD'S ISSUED FOR SUBMITTAL                |

PROJECT:

**AK3  
STICKEEN**  
3 EVERGREEN AVE  
WRANGELL, AK 99929

SHEET TITLE:

# GENERAL NOTES

|  |   |
|--|---|
| FUZE NUMBER:<br>15906627                                   | DATE:<br>12/30/20   |
| DRAFTER:<br>BEW  | PROFESSIONAL OF RECORD<br>BEW                             |
| REVISION NO:<br><br><span style="font-size: 2em;">5</span> | SHEET NO:<br><br><span style="font-size: 2em;">N-1</span> |

## SPECIAL INSPECTIONS

RECOMMENDED TESTING AGENCY: \_\_\_\_\_ PHONE: (\_\_\_\_) \_\_\_\_-\_\_\_\_

THE OWNER, OR THE OWNER'S AGENT, IS REQUIRED TO HIRE AN INDEPENDENT TESTING/INSPECTION AGENCY TO PERFORM REQUIRED SPECIAL INSPECTIONS.

SPECIAL INSPECTOR MUST BE CONTACTED IN ADVANCE OF ANY WORK NOTED BELOW. IT IS THE RESPONSIBILITY OF THE OWNER OR OWNER'S DESIGNEE TO NOTIFY THE SPECIAL INSPECTION AGENCY AND SCHEDULE A BUILDING INSPECTION IN A TIMELY MANNER. COPIES OF ALL INSPECTION REPORTS MUST BE POSTED ON SITE AND SUMMARY LETTERS SUBMITTED TO THE BUILDING INSPECTION SUPERVISOR. UNRESOLVED NON-CONFORMANCIES MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE MUNICIPALITY'S INSPECTOR.

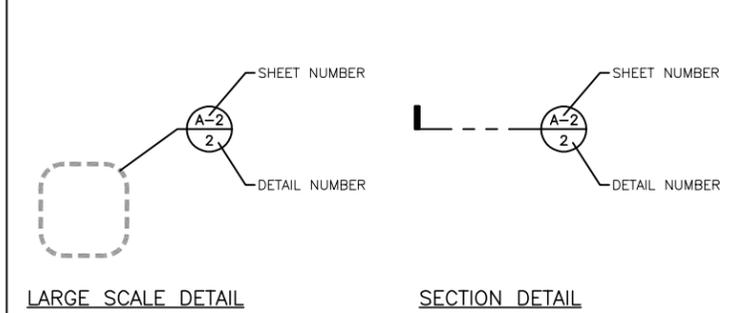
- REQUIRED SPECIAL INSPECTIONS  
2012 INTERNATIONAL BUILDING CODE; SECTIONS 1701, 1704, & 1705
- |  |   |
|--|---|
| <input type="checkbox"/> STRUCTURAL STEEL (1705.2; AISC 360)             | <input type="checkbox"/> SPRAYED FIRE-REST MATERIALS (1705.3)             |
| <input type="checkbox"/> STEEL - OTHER THAN STRUCTURAL STEEL (1705.2.2)  | <input type="checkbox"/> INTUMESCENT FIRE-RESIST CTGS (1705.14)           |
| <input type="checkbox"/> STRUCTURAL CONCRETE (1705.3)                    | <input type="checkbox"/> EIFS (1705.15)                                   |
| <input type="checkbox"/> REINF. STEEL/PRESTRESSING TENDONS (1705.3)      | <input type="checkbox"/> POST-INSTALLED ANCHORS (1705.3; AISC 315: D.9.2) |
| <input type="checkbox"/> SHOTCRETE (1705.3; 1910)                        | <input type="checkbox"/> SMOKE CONTROL (1705.17)                          |
| <input type="checkbox"/> STRUCTURAL MASONRY (1075.4)                     | <input type="checkbox"/> STRUCTURAL STEEL (SFRS 1705.11.1; AISC 314)      |
| TMS 402/ACI 530/ASCE 5;  | <input type="checkbox"/> STRUCTURAL WOOD (SFRS 1705.11.2)                 |
| TMS 602/ACI 530.1/ASCE 6   | <input type="checkbox"/> COLD FORMED STEEL FRAMING (SFRS 1705.11.2)       |
| <input type="checkbox"/> HIGH LOAD DIAPHRAGMS (WOOD 1705.5.1)            | <input type="checkbox"/> ACCESS FLOORS (SFRS 1705.11.5.1)                 |
| <input type="checkbox"/> GRADING, EXCAVATION, AND FILLING (SOILS 1705.6) | <input type="checkbox"/> STORAGE RACKS (SFRS 1705.11.7)                   |
| <input type="checkbox"/> DRIVEN DEEP FOUNDATIONS (1705.7)                | <input type="checkbox"/> ARCHITECTURAL COMPONENTS (SFRS 1705.11.5)        |
| <input type="checkbox"/> CAST-IN-PLACE DEEP FOUNDATIONS (1705.8)         | <input type="checkbox"/> MECH. AND ELEC. COMPONENTS (SFRS 1705.11.6)      |
| <input type="checkbox"/> INSTALLATION OF PRECAST ELEMENTS (1705.3)       | <input type="checkbox"/> SEISMIC ISOLATION SYSTEMS (SFRS 1705.11.8)       |
| <input type="checkbox"/> OTHER _____                                     |   |

## STRUCTURAL STEEL NOTES

1. SHOP DRAWINGS FOR STRUCTURAL STEEL SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW PRIOR TO FABRICATION.
2. STRUCTURAL STEEL DESIGN, FABRICATION AND ERECTION (INCLUDING FIELD WELDING, HIGH STRENGTH FIELD BOLTING, EXPANSION BOLTS, AND THREADED EXPANSION ANCHORS) SHALL BE BASED ON A.I.S.I. "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" LATEST EDITION. SUPERVISION SHALL BE IN ACCORDANCE WITH IBC 2012 CHAPTER 22, BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE ENGINEER. THE ENGINEER SHALL BE FURNISHED WITH A COPY OF ALL INSPECTION REPORTS AND TEST RESULTS.
3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

| TYPE OF MEMBER                |                                  |
|-------------------------------|----------------------------------|
| WIDE FLANGE SHAPE S           | ASTM A992, f <sub>y</sub> 50 KSI |
| OTHER SHAPES, PLATES AND RODS | ASTM A36, f <sub>y</sub> 36 KSI  |
| PIPE COLUMNS                  | ASTM A53, f <sub>y</sub> 35 KSI  |
| STRUCTURAL TUBING             | ASTM A500, f <sub>y</sub> 46 KSI |
| ANCHOR BOLTS                  | ASTM A307                        |
| CONNECTION BOLTS              | ASTM A325                        |
4. ALL MATERIAL TO BE HOT DIPPED GALVANIZED AFTER FABRICATION PER A123/A123M-00.
5. ALL WELDING SHALL BE IN CONFORMANCE WITH A.I.S.I. AND AWS STANDARDS AND SHALL BE PERFORMED BY CERTIFIED WELDERS USING E70 XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. WELDING OF GRADE 60 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING LOW HYDROGEN ELECTRODES. WELDING OF GRADE 40 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING E70 XX ELECTRODES. WELDING WITHIN 4" OF COLD BENDS IN REINFORCING STEEL IS NOT PERMITTED. SEE REINFORCING NOTE FOR MATERIAL REQUIREMENTS OF WELDED BARS.
6. COLD-FORMED STEEL FRAMING MEMBERS SHALL BE OF THE SHAPE, SIZE AND GAGE SHOWN ON THE PLANS. PROVIDE MINIMUM SECTION PROPERTIES INDICATED. ALL COLD-FORMED STEEL FRAMING SHALL CONFORM TO THE A.I.S.I. "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
7. BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (3/4" DIAMETER) AND SHALL HAVE A MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
8. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIAMETER ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
9. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE DESIGN AND CONSTRUCTION SPECIFICATION AND IN ACCORDANCE WITH ASTM A36 UNLESS NOTED OTHERWISE.
10. ALL WELDS TO BE 1/4" FILLET UNLESS NOTED OTHERWISE.
11. TOUCH UP ALL FIELD DRILLING AND WELDING WITH 2 COATS OF GALVACON (ZINC RICH PAINT) OR APPROVED EQUAL.

## LEGEND



Call Before You Dig

**TITLE EXCEPTION STATEMENTS**

- A. THE EXCEPTION IS A STANDARD EXCEPTION AND NOT THE TYPE TO BE DEPICTED HEREON
- B. THE EXCEPTION IS NOT LOCATED WITHIN THE PARENT PARCEL
- C. THE EXCEPTION IS LOCATED WITHIN THE PARENT PARCEL, BUT IS NOT LOCATED WITHIN THE LEASE AREA OR ANY VB EASEMENTS
- D. THE EXCEPTION IS LOCATED WITHIN THE PARENT PARCEL AND THE VB EASEMENTS, BUT IT IS NOT LOCATED WITHIN THE LEASE AREA
- E. THE EXCEPTION IS LOCATED WITHIN THE PARENT PARCEL AND THE LEASE AREA, BUT IS NOT LOCATED WITHIN THE VB EASEMENTS
- F. THE EXCEPTION IS BLANKET IN NATURE AND IS NOT PLOTTABLE
- G. THE EXCEPTION DOES NOT HAVE THE SUFFICIENT DATA TO DETERMINE ITS LOCATION

**TITLE REVIEW SUMMARY**

RECORD INFORMATION BELOW PER TITLE REPORT FILE NUMBER 19136, DATED SEPTEMBER 06, 2020, AS ISSUED BY STEWART TITLE GUARANTY COMPANY.  
 NOTE: ITEMS LISTED CORRESPOND WITH A LETTER THAT REFERS TO THE TITLE EXEMPTION STATEMENTS LISTED BELOW, EG "ITEM 1, A" REFERS TO "THE EXEMPTION IS A STANDARD..."

- ITEM 1, A: ANY DEFECT, LIEN, ENCUMBRANCE, ADVERSE CLAIM, OR OTHER MATTER THAT APPEARS FOR THE FIRST TIME IN THE PUBLIC RECORDS OR IS CREATED, ATTACHES, OR IS DISCLOSED THROUGH THE COMMITMENT DATE AND THE DATE ON WHICH ALL OF THE SCHEDULE B, PART I - REQUIREMENTS ARE MET.
- ITEM 2, A: RIGHTS OR CLAIMS OF PARTIES IN POSSESSION NOT SHOWN BY THE PUBLIC RECORDS.
- ITEM 3, A: EASEMENTS, OR CLAIMS, OF EASEMENT, NOT SHOWN BY THE PUBLIC RECORDS.
- ITEM 4, A: ENCROACHMENTS, OVERLAPS, BOUNDARY LINE DISPUTES, OR OTHER MATTERS WHICH WOULD BE DISCLOSED BY AN ACCURATE SURVEY OR INSPECTION OF THE LAND.
- ITEM 5, A: ANY LIEN, OR RIGHT TO A LIEN, FOR SERVICES, LABOR, OR MATERIAL HERETOFORE OR HEREAFTER FURNISHED, IMPOSED BY LAW AND NOT SHOWN BY THE PUBLIC RECORDS.
- ITEM 6, A: TAXES OR SPECIAL ASSESSMENTS WHICH ARE NOT SHOWN AS EXISTING LIENS BY THE PUBLIC RECORDS.
- ITEM 7, A: (A) UNPATENTED MINING CLAIMS;  
(B) RESERVATIONS OR EXCEPTIONS IN PATENTS OR IN ACTS AUTHORIZING THE ISSUANCE THEREOF;  
(C) WATER RIGHTS, CLAIMS OR TITLE TO WATER, WHETHER OR NOT THE MATTERS EXCEPTED UNDER (A), (B) OR (C) ARE SHOWN BY THE PUBLIC RECORDS
- ITEM 8, A: RIGHTS OF THE STATE OR FEDERAL GOVERNMENT AND/OR PUBLIC IN AND TO ANY PORTION OF THE LAND FOR RIGHT OF WAY AS ESTABLISHED BY FEDERAL STATUTE RS 2477 (WHETHER OR NOT SUCH RIGHTS ARE SHOWN BY RECORDINGS OF EASEMENTS AND/OR MAPS IN THE PUBLIC RECORDS BY THE STATE OF ALASKA SHOWING THE GENERAL LOCATION OF THESE RIGHTS OF WAY).
- ITEM 9, A: MINERALS OF WHATSOEVER KIND, SUBSURFACE AND SURFACE SUBSTANCES, INCLUDING BUT NOT LIMITED TO COAL, LIGNITE, OIL, GAS, URANIUM, CLAY, ROCK, SAND AND GRAVEL IN, ON, UNDER AND THAT MAY BE PRODUCED FROM THE LAND, TOGETHER WITH ALL RIGHTS, PRIVILEGES, AND IMMUNITIES RELATING THERETO, WHETHER OR NOT APPEARING IN THE PUBLIC RECORDS OR LISTED IN SCHEDULE B. THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, GRANTS, EXCEPTIONS OR RESERVATIONS OF INTEREST THAT ARE NOT LISTED.
- ITEM 10, A: TAXES AND/OR ASSESSMENTS, IF ANY, DUE THE CITY OF WRANGELL, A REPORT OF WHICH WILL FOLLOW.
- ITEM 11, A: RESERVATIONS AND EXCEPTIONS AS CONTAINED IN THE U.S. PATENT AND ACTS RELATING THERETO.
- ITEM 12, A: TERMS AND CONDITIONS OF THE OPERATING AGREEMENT FOR VERTICAL BRIDGE DEVELOPMENT, LLC.
- ITEM 13, A: THIS OFFICE MUST BE FURNISHED WITH A COPY OF THE OPERATING AGREEMENT ALONG WITH ANY AND ALL AMENDMENTS THERETO FOR VERTICAL BRIDGE DEVELOPMENT, LLC.
- ITEM 14, A: TERMS AND CONDITIONS OF THE OPERATING AGREEMENT FOR VERTICAL BRIDGE HOLDCO, LLC.
- ITEM 15, A: THIS OFFICE MUST BE FURNISHED WITH A COPY OF THE OPERATING AGREEMENT ALONG WITH ANY AND ALL AMENDMENTS THERETO FOR VERTICAL BRIDGE HOLDCO, LLC.
- ITEM 16, A: IF WE ARE TO ISSUE AN EXTENDED COVERAGE LOAN POLICY, THE FOLLOWING WILL APPLY:  
QUESTIONS OF RIGHTS OF PARTIES IN POSSESSION AND MATERIAL AND LABOR LIENS, DISPOSITION OF WHICH WILL BE DETERMINED BY SUBMISSION OF THE ENCLOSED ALTA LIEN AFFIDAVIT PROPERLY COMPLETED AND SIGNED BY THE OWNER AND, WHEN APPLICABLE, THE GENERAL CONTRACTOR. THE COMPANY MAY REQUIRE SUBMISSION OF AN AS-BUILT SURVEY IN ORDER TO ISSUE AN EXTENDED COVERAGE LOAN POLICY.  
IN ADDITION, INVESTIGATION SHOULD BE MADE IF ANY OTHER AGENCY INVOLVED IN THIS TRANSACTION MIGHT REQUIRE SUCH A SURVEY IN THE EVENT THAT A SURVEY IS OBTAINED, WE WOULD LIKE TO RECEIVE A COPY FOR OUR RECORDS.
- ITEM 17, A: NOTE: THERE HAVE BEEN NO DEEDS RECORDED WITHIN THE LAST 36 MONTHS AFFECTING THE HEREIN DESCRIBED LAND.

**NOTES**

1. THIS DRAWING IS BASED ON A FIELD SURVEY PERFORMED BY EDGE SURVEY AND DESIGN, LLC ON 11/16/2020.
2. ELEVATIONS SHOWN HEREON ARE NAVD88 ORTHOMETRIC HEIGHTS, AS DETERMINED BY A NGS OPUS SOLUTION HOLDING GEOID 12B.
3. COORDINATES SHOWN HEREON ARE ALASKA STATE PLANE ZONE 1, NAD83 (2011), EPOCH 2010.0000 US. SURVEY FEET.
4. THE BASIS OF BEARINGS FOR THIS DRAWING IS ALASKA STATE PLANE COORDINATE SYSTEM, ZONE 1.  
SITE NUMBER: XXXXXXXX  
SITE NAME: XXXXXXXX
5. AT THE TIME OF THE SURVEY, THE FOLLOWING ENCROACHMENTS WERE EVIDENT ONTO OR BEYOND THE LEASE AREA: OVERHEAD UTILITY LINES AND DISCARDED TIRES ENCROACHING A MAXIMUM OF 37.0' ONTO LOT 13.
6. ALL ACCESS AND UTILITY EASEMENTS GO TO A CONFIRMED RIGHT-OF-WAY.
7. ALL LEASE AREA AND EASEMENTS ARE WITHIN THE PARENT PARCEL.
8. IN AREAS OF DENSE TIMBER, ONLY DOMINANT TREE ELEVATIONS SHOWN.

**DESCRIPTION OF SUBJECT PROPERTY: (PER TITLE REPORT)**

INFORMATION PER TITLE REPORT NO. 60172, DATED OCTOBER 23, 2020, ISSUED BY STEWART TITLE GUARANTEE COMPANY.  
 TITLE IS VESTED IN:  
 CITY OF WRANGELL  
 LOTS 12, 13 AND 14, BLOCK 5, ACCORDING TO THE OFFICIAL PLAT OF U.S. SURVEY 2127 FOR THE EASTERN ADDITION TO WRANGELL TOWNSITE, WRANGELL RECORDING DISTRICT, FIRST JUDICIAL DISTRICT, STATE OF ALASKA

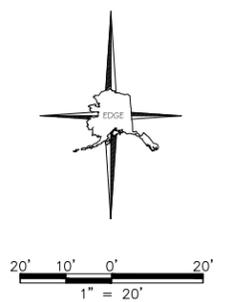
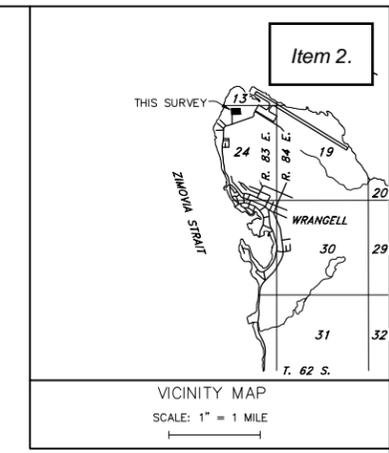
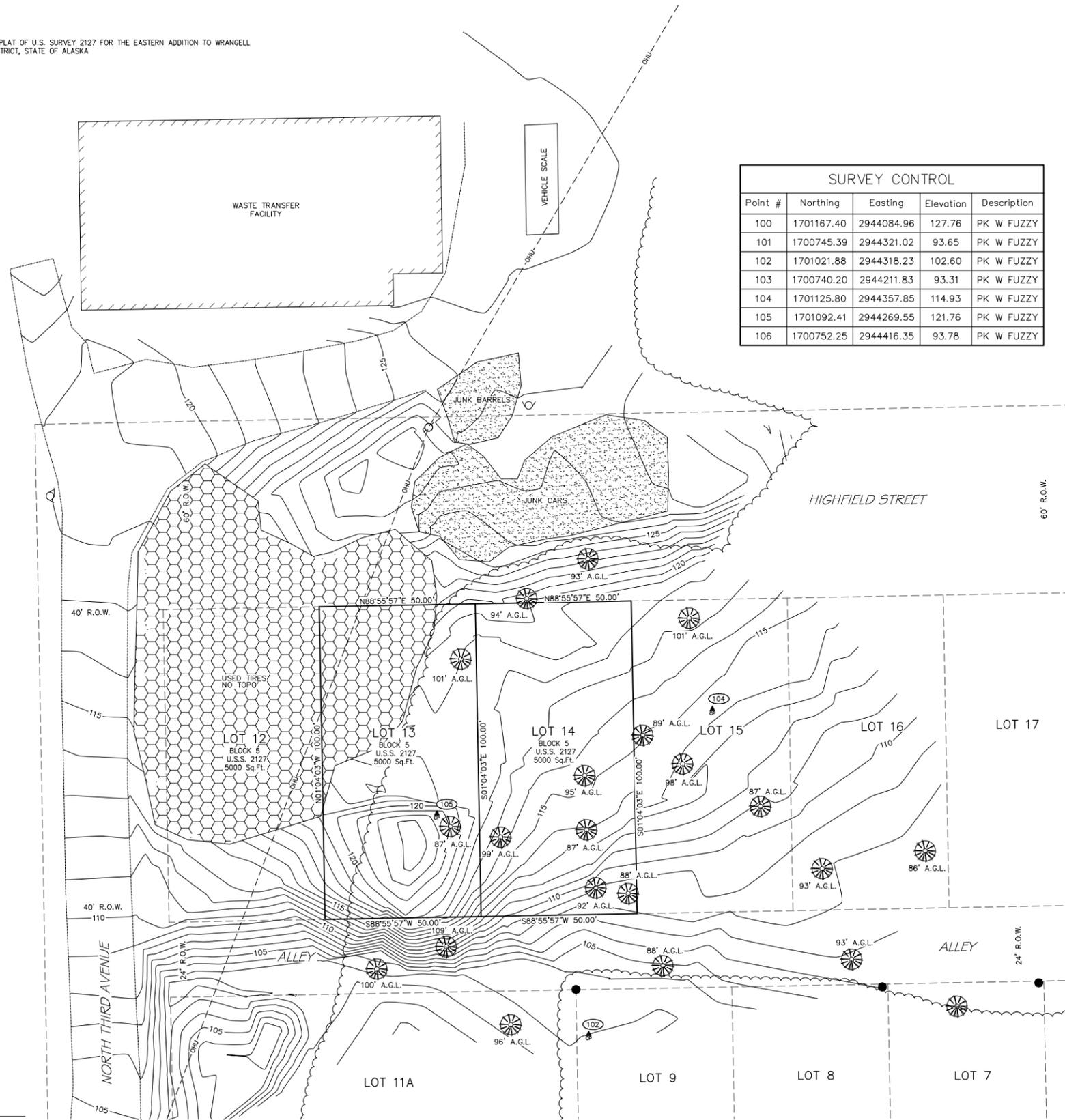
U.S. SURVEY NO. 2096

**FAA 1A CERTIFICATE INFORMATION**

THE COORDINATES BELOW ARE ACCURATE TO WITHIN 20± FEET HORIZONTALLY AND THAT THE GROUND ELEVATION IS ACCURATE TO WITHIN 3± FEET VERTICALLY.

PROPOSED TOWER LATITUDE: NORTH XXXXXXX  
 PROPOSED TOWER LONGITUDE: WEST XXXXXXX  
 EXISTING GROUND ELEVATION: XXXXXXX

| SURVEY CONTROL |            |            |           |             |
|----------------|------------|------------|-----------|-------------|
| Point #        | Northing   | Easting    | Elevation | Description |
| 100            | 1701167.40 | 2944084.96 | 127.76    | PK W FUZZY  |
| 101            | 1700745.39 | 2944321.02 | 93.65     | PK W FUZZY  |
| 102            | 1701021.88 | 2944318.23 | 102.60    | PK W FUZZY  |
| 103            | 1700740.20 | 2944211.83 | 93.31     | PK W FUZZY  |
| 104            | 1701125.80 | 2944357.85 | 114.93    | PK W FUZZY  |
| 105            | 1701092.41 | 2944269.55 | 121.76    | PK W FUZZY  |
| 106            | 1700752.25 | 2944416.35 | 93.78     | PK W FUZZY  |



**LEGEND**

- A.G.L. ABOVE GROUND LEVEL
- 104 CONTROL POINT
- CONIFEROUS TREE
- UTILITY POLE
- FOUND CORNER
- PROPERTY LINE
- ADJACENT PROP LINE
- LEASE AREA
- GRAVEL EDGE
- METAL GATE
- TREELINE
- OHU OVERHEAD UTILITY WIRE

**SURVEYOR'S CERTIFICATE:**

I HEREBY CERTIFY TO: VERTICAL BRIDGE REIT, LLC, A DELAWARE LIMITED LIABILITY COMPANY; ITS SUBSIDIARIES, AND THEIR RESPECTIVE SUCCESSORS AND/OR ASSIGNS; TORONTO DOMINION (TEXAS) LLC, AS ADMINISTRATIVE AGENT, FOR ITSELF AND ON BEHALF OF THE LENDERS PARTIES FROM TIME TO TIME TO THAT CERTAIN SECOND AMENDED AND RESTATED LOAN AGREEMENT DATED JUNE 17, 2016 WITH VERTICAL BRIDGE HOLDCO, LLC, AS BORROWER, AND VERTICAL BRIDGE HOLDCO PARENT, LLC, AS PARENT, AS MAY BE AMENDED, RESTATED, MODIFIED OR RENEWED, THEIR SUCCESSORS AND ASSIGNS AS THEIR INTERESTS MAY APPEAR; AND STEWART TITLE GUARANTEE COMPANY.

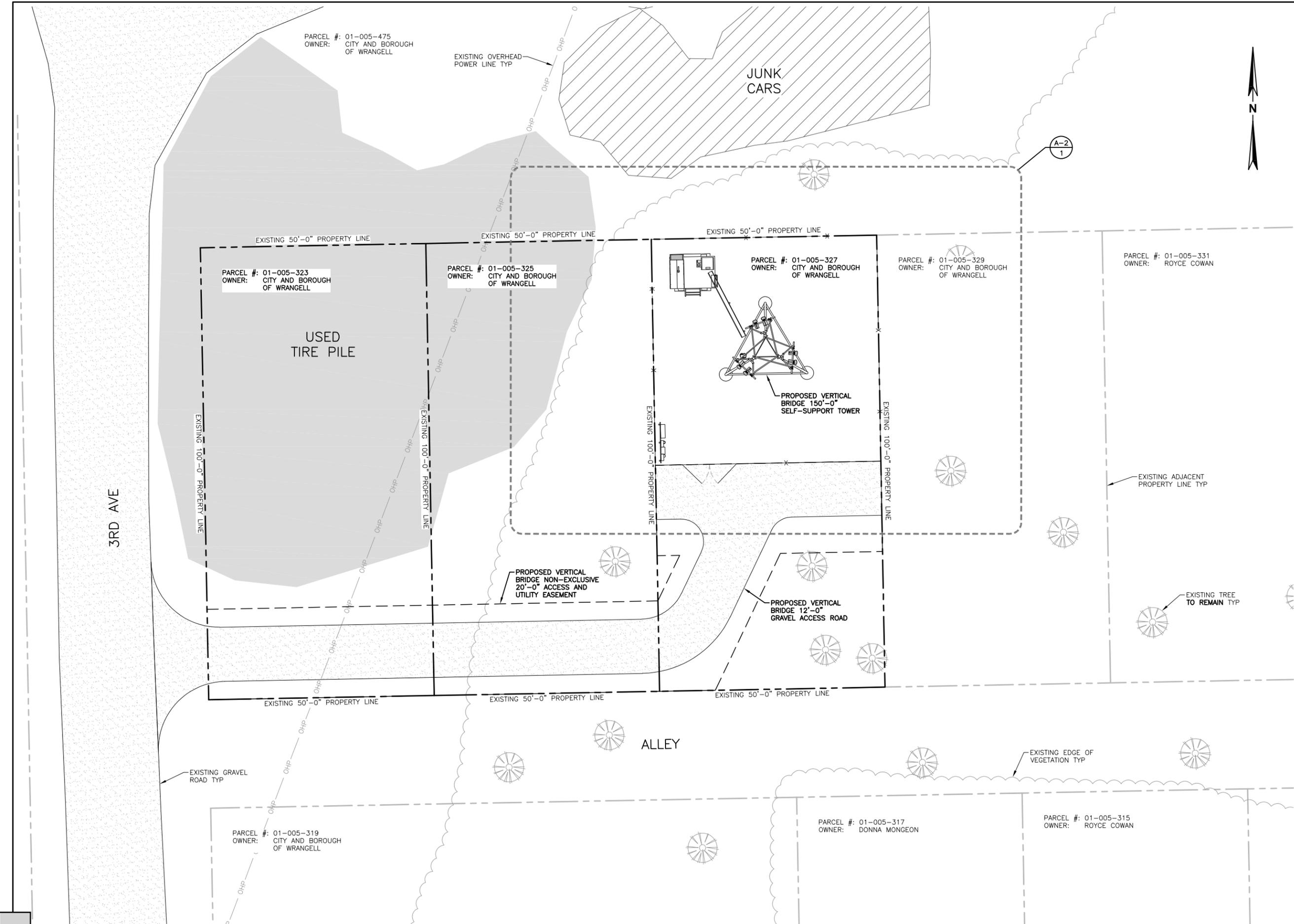
**PRELIMINARY**  
 MARK A. AMONETTI DATE  
 AKPLS 13055



12501 OLD SEWARD, D ANCHORAGE, AK 99515  
 Phone (907) 344-5990 Fax (907) 344-7794

**STIKINE EXISTING CONDITIONS SURVEY**

|                |                 |                    |
|----------------|-----------------|--------------------|
| DRAWN BY: MB   | DATE: 12/2/2020 | PROJECT NO: 20-194 |
| CHECKED BY: MA | SCALE: 1" = 20' | SHEET: 1 OF 1      |



CO-APPLICANT:

Item 2.

CO-APPLICANT:

IMPLEMENTATION TEAM/CLIENT:

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DRAWINGS AND ADVISE CONSULTANTS OF ANY ERRORS OR OMISSIONS. NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE IMPLEMENTED WITHOUT PRIOR WRITTEN APPROVAL. ALL PREVIOUS ISSUES OF THIS DRAWINGS ARE SUPERSEDED BY THE LATEST REVISION. ALL DRAWINGS AND SPECIFICATIONS REMAIN THE PROPERTY OF LYNX CONSULTING, INC. NEITHER LYNX CONSULTING, INC. NOR THE ARCHITECT WILL BE PROVIDING CONSTRUCTION REVIEW OF THIS PROJECT.

May 05, 2021

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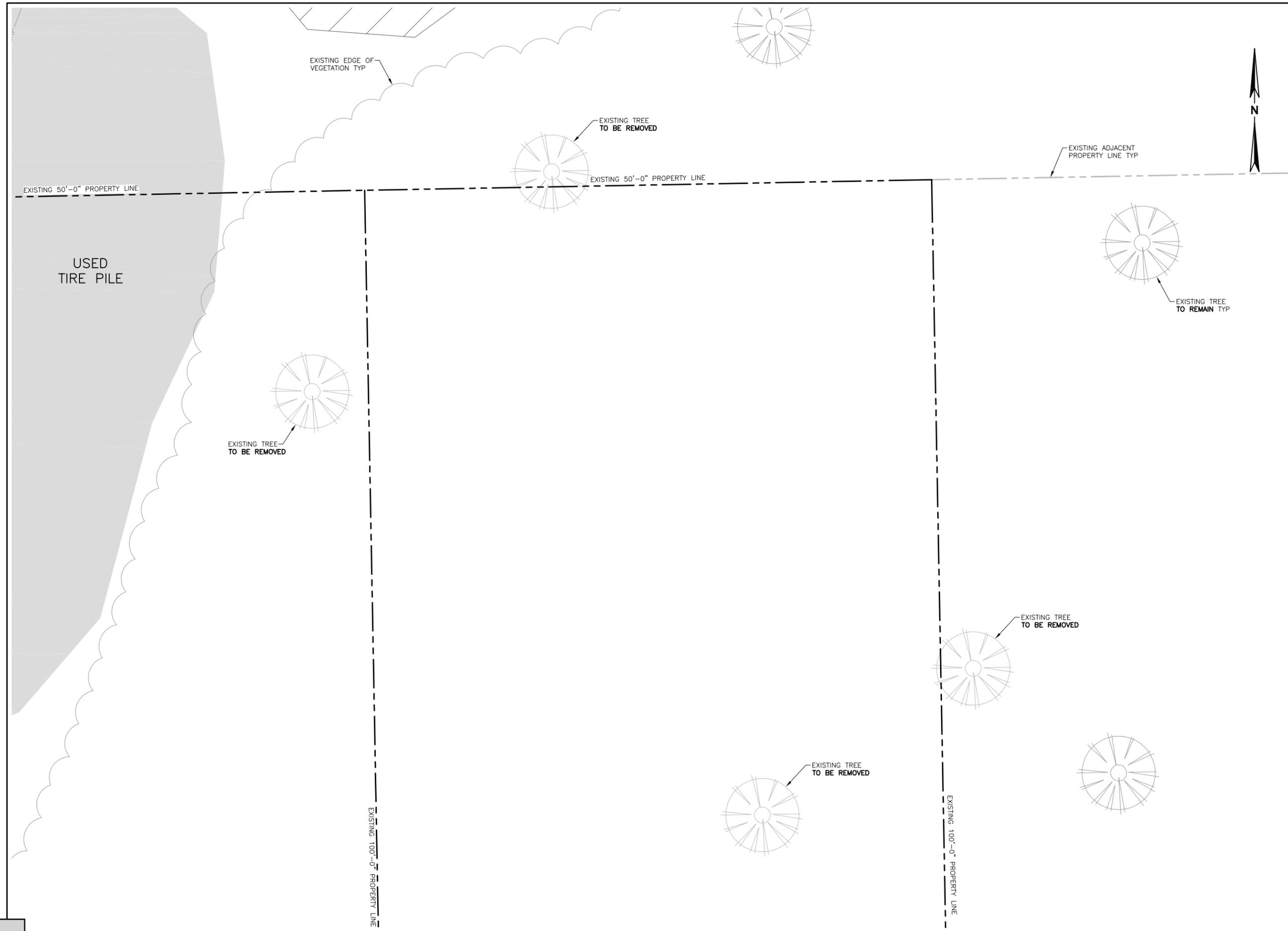
PROJECT:

**AK3 STICKEEN**  
 3 EVERGREEN AVE  
 WRANGELL, AK 99929

SHEET TITLE:

**PROPOSED SITE PLAN**

|                          |                               |
|--------------------------|-------------------------------|
| FUZE NUMBER:<br>15906627 | DATE:<br>12/30/20             |
| DRAFTER:<br>BEW          | PROFESSIONAL OF RECORD<br>BEW |
| REVISION NO:<br><b>5</b> | SHEET NO:<br><b>C-1</b>       |



CO-APPLICANT:

Item 2.



CO-APPLICANT:



IMPLEMENTATION TEAM/CLIENT:



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May 05, 2021

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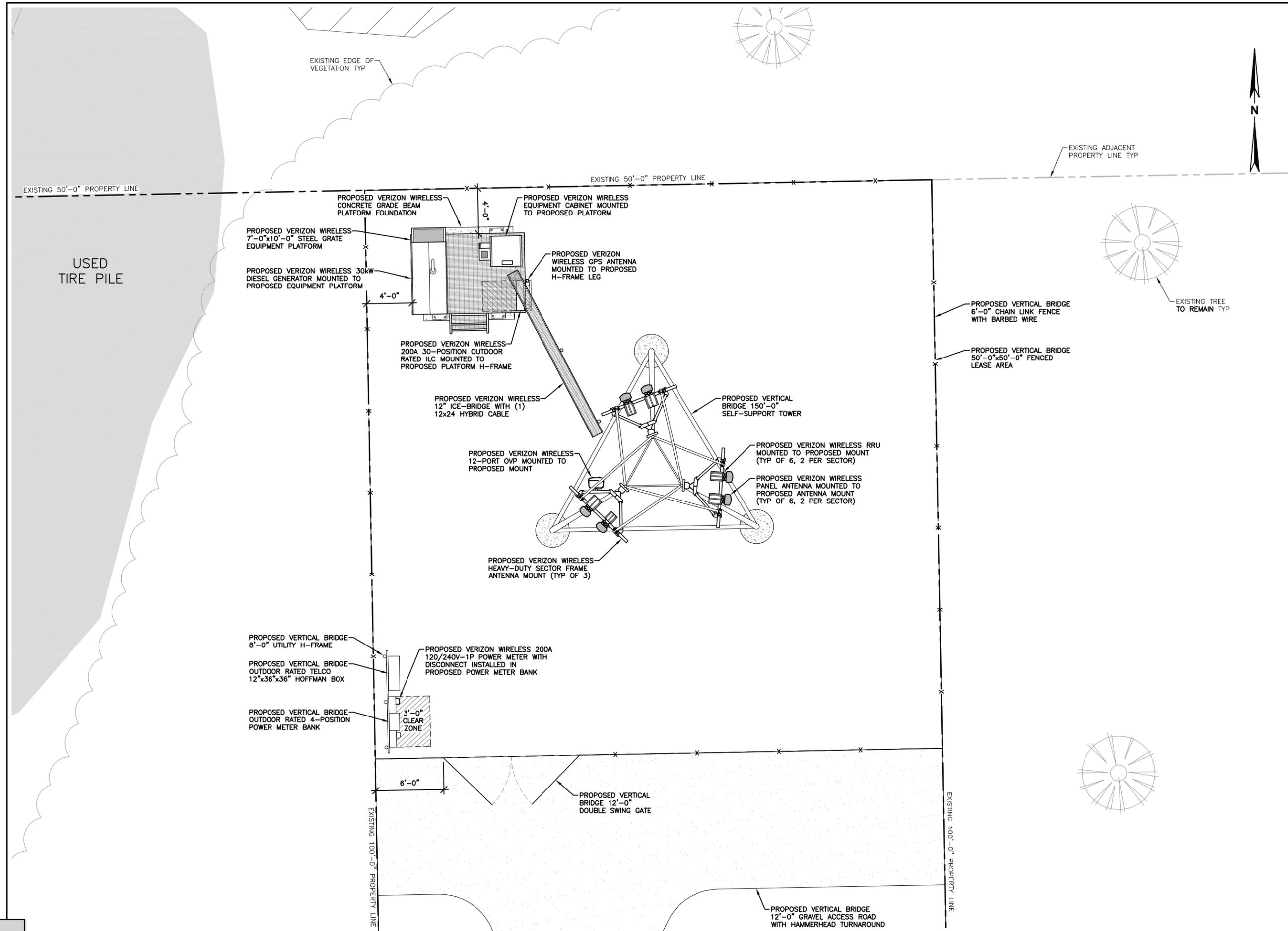
PROJECT:  
**AK3 STICKEEN**  
3 EVERGREEN AVE  
WRANGELL, AK 99929

SHEET TITLE:  
**EXISTING COMPOUND PLAN**

|                          |                               |
|--------------------------|-------------------------------|
| FUZE NUMBER:<br>15906627 | DATE:<br>12/30/20             |
| DRAFTER:<br>BEW          | PROFESSIONAL OF RECORD<br>BEW |
| REVISION NO:<br><b>5</b> | SHEET NO:<br><b>A-1</b>       |

51  
34" SCALE: 1/4" = 1'-0"  
11 x 17" SCALE: 1/8" = 1'-0"

EXISTING COMPOUND PLAN | 1



DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DRAWINGS AND ADVISE CONSULTANTS OF ANY ERRORS OR OMISSIONS. NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE IMPLEMENTED WITHOUT PRIOR WRITTEN APPROVAL. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. ALL DRAWINGS AND SPECIFICATIONS REMAIN THE PROPERTY OF LYNX CONSULTING, INC. NEITHER LYNX CONSULTING, INC. NOR THE ARCHITECT WILL BE PROVIDING CONSTRUCTION REVIEW OF THIS PROJECT.

REGISTERED PROFESSIONAL ENGINEER

May 05, 2021

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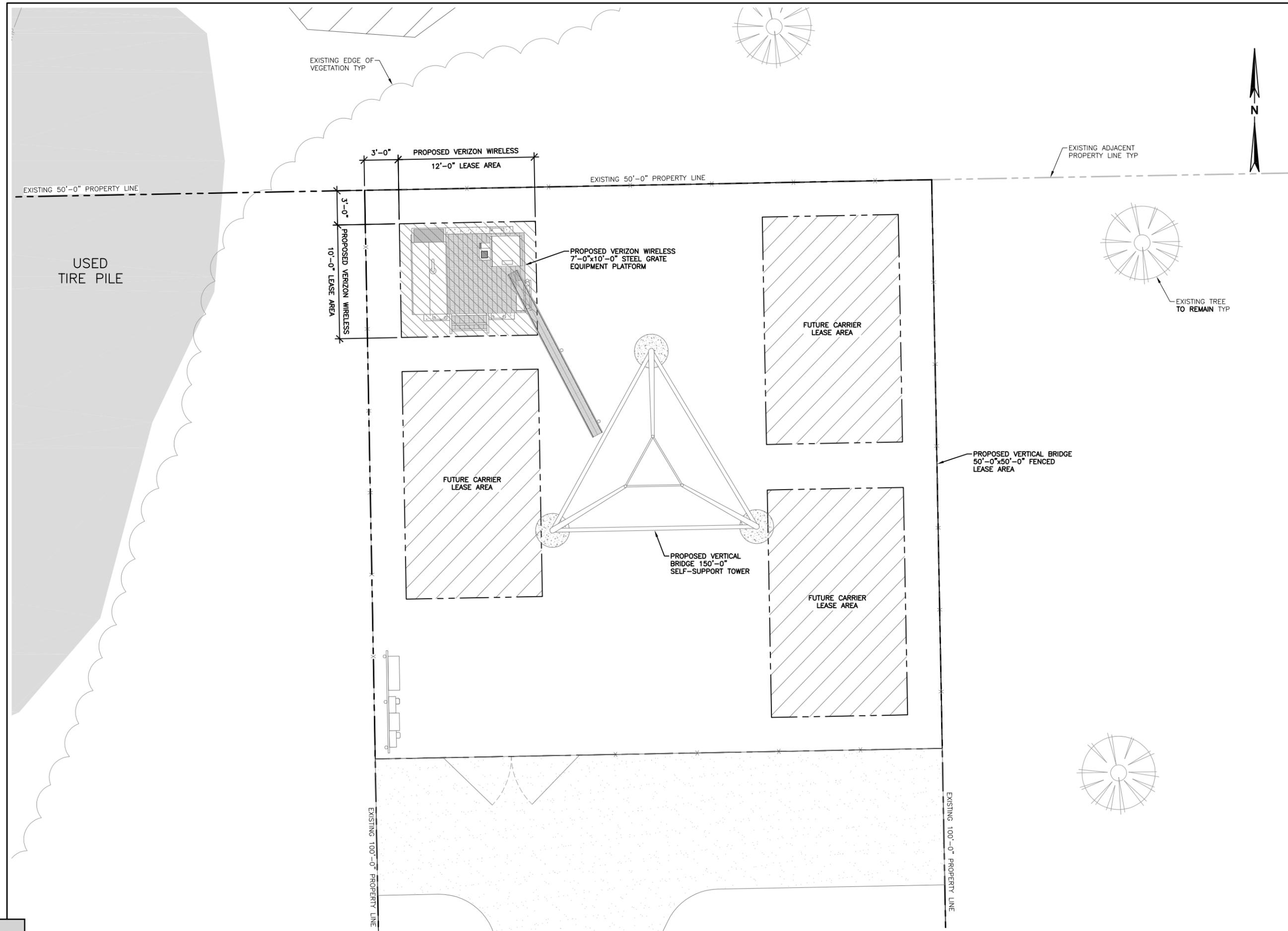
PROJECT:

**AK3 STICKEEN**  
 3 EVERGREEN AVE  
 WRANGELL, AK 99929

SHEET TITLE:

**PROPOSED COMPOUND PLAN**

|                          |                               |
|--------------------------|-------------------------------|
| FUZE NUMBER:<br>15906627 | DATE:<br>12/30/20             |
| DRAFTER:<br>BEW          | PROFESSIONAL OF RECORD<br>BEW |
| REVISION NO:<br><b>5</b> | SHEET NO:<br><b>A-2</b>       |



CO-APPLICANT:

**verizon** Item 2.

CO-APPLICANT:

**verticalbridge**

IMPLEMENTATION TEAM/CLIENT:

**LYNX**

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DRAWINGS AND ADVISE CONSULTANTS OF ANY ERRORS OR OMISSIONS. NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE IMPLEMENTED WITHOUT PRIOR WRITTEN APPROVAL. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. ALL DRAWINGS AND SPECIFICATIONS REMAIN THE PROPERTY OF LYNX CONSULTING, INC. NEITHER LYNX CONSULTING, INC. NOR THE ARCHITECT WILL BE PROVIDING CONSTRUCTION REVIEW OF THIS PROJECT.

  
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PROJECT:

**AK3 STICKEEN**  
3 EVERGREEN AVE  
WRANGELL, AK 99929

SHEET TITLE:

**PROPOSED LEASE AREA PLAN**

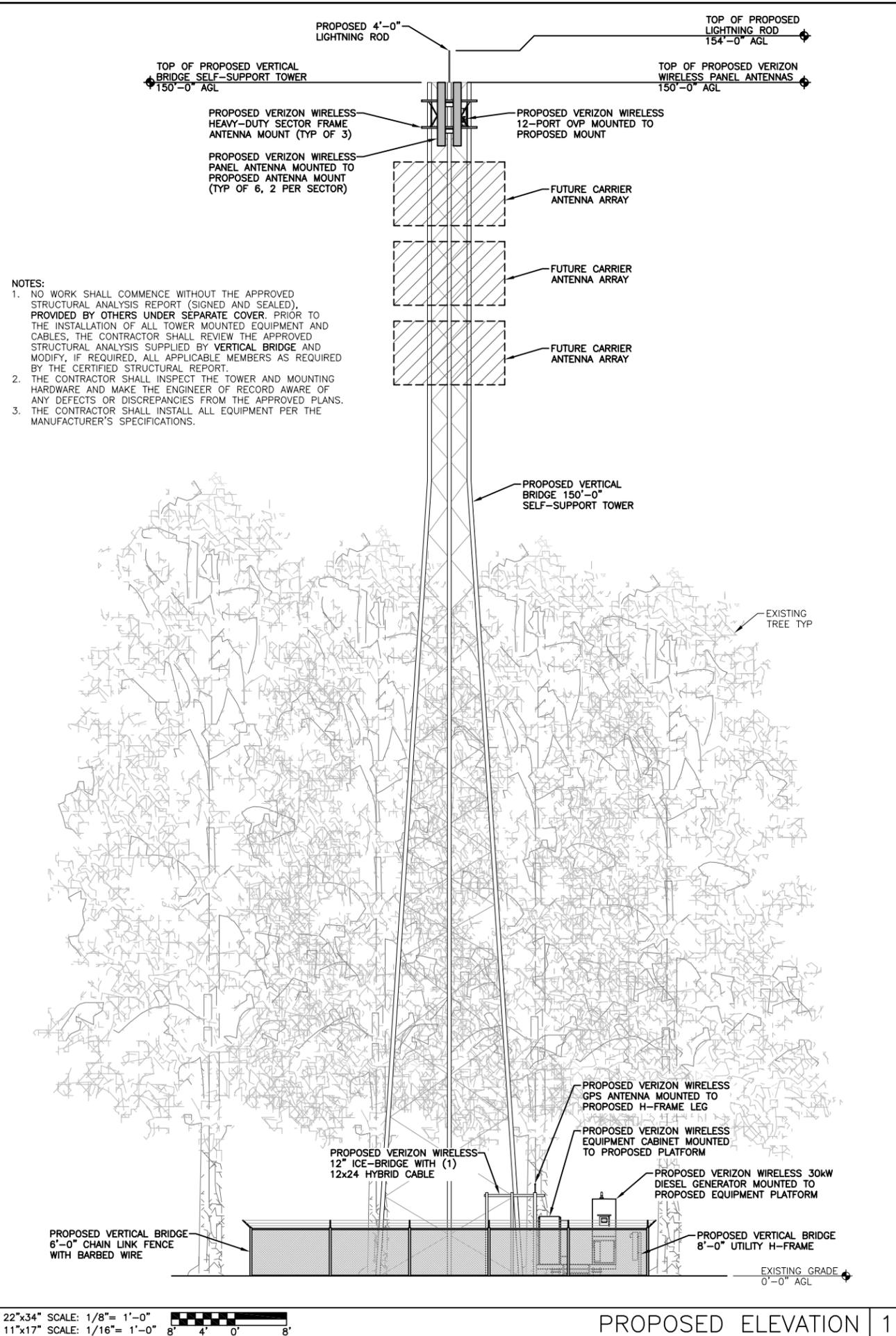
|                          |                               |
|--------------------------|-------------------------------|
| FUZE NUMBER:<br>15906627 | DATE:<br>12/30/20             |
| DRAFTER:<br>BEW          | PROFESSIONAL OF RECORD<br>BEW |
| REVISION NO:<br><b>5</b> | SHEET NO:<br><b>A-3</b>       |

22"x34" SCALE: NOT TO SCALE  
11"x17" SCALE: NOT TO SCALE

NOT USED 3

22"x34" SCALE: NOT TO SCALE  
11"x17" SCALE: NOT TO SCALE

NOT USED 2



- NOTES:**
- NO WORK SHALL COMMENCE WITHOUT THE APPROVED STRUCTURAL ANALYSIS REPORT (SIGNED AND SEALED), PROVIDED BY OTHERS UNDER SEPARATE COVER. PRIOR TO THE INSTALLATION OF ALL TOWER MOUNTED EQUIPMENT AND CABLES, THE CONTRACTOR SHALL REVIEW THE APPROVED STRUCTURAL ANALYSIS SUPPLIED BY VERTICAL BRIDGE AND MODIFY, IF REQUIRED, ALL APPLICABLE MEMBERS AS REQUIRED BY THE CERTIFIED STRUCTURAL REPORT.
  - THE CONTRACTOR SHALL INSPECT THE TOWER AND MOUNTING HARDWARE AND MAKE THE ENGINEER OF RECORD AWARE OF ANY DEFECTS OR DISCREPANCIES FROM THE APPROVED PLANS.
  - THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT PER THE MANUFACTURER'S SPECIFICATIONS.

22"x34" SCALE: 1/8" = 1'-0"  
11"x17" SCALE: 1/16" = 1'-0"



PROPOSED ELEVATION 1

CO-APPLICANT:

Item 2.

CO-APPLICANT:

IMPLEMENTATION TEAM/CLIENT:

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DRAWINGS AND ADVISE CONSULTANTS OF ANY ERRORS OR OMISSIONS. NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE IMPLEMENTED WITHOUT PRIOR WRITTEN APPROVAL. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. ALL DRAWINGS AND SPECIFICATIONS REMAIN THE PROPERTY OF LYNX CONSULTING, INC. NEITHER LYNX CONSULTING, INC. NOR THE ARCHITECT WILL BE PROVIDING CONSTRUCTION REVIEW OF THIS PROJECT.

May 05, 2021

| REV | DATE    | DESCRIPTION                               |
|-----|---------|---|
| 5   | 5/05/21 | REVISED DESIGN TO A SELF-SUPPORT TOWER    |
| 4   | 4/12/21 | EQUIPMENT LOCATION REVISED PER VB COMMENT |
| 3   | 3/29/21 | FZD'S REVISED PER LANDLORD COMMENTS       |
| 2   | 1/19/21 | FZD'S ISSUED FOR SUBMITTAL                |

PROJECT:

**AK3 STICKEEN**  
3 EVERGREEN AVE  
WRANGELL, AK 99929

SHEET TITLE:

**PROPOSED ELEVATION**

|                          |                               |
|--------------------------|-------------------------------|
| FUZE NUMBER:<br>15906627 | DATE:<br>12/30/20             |
| DRAFTER:<br>BEW          | PROFESSIONAL OF RECORD<br>BEW |
| REVISION NO:<br><b>5</b> | SHEET NO:<br><b>A-4</b>       |

PROPOSED ANTENNA SCHEDULE

| ALPHA SECTOR | AZIMUTH | TIP HEIGHT | QTY | VENDOR    | MODEL       | LENGTH | WIDTH | DEPTH | MECH TILT | ELEC TILT | CABLE QTY | FEEDER TYPE                   | FEEDER LENGTH | ADDITIONAL EQUIPMENT |
|--------------|---------|------------|-----|-----------|-------------|--------|-------|-------|-----------|-----------|-----------|-------------------------------|---------------|----------------------|
| 700          | 95°     | 150'-0"    | 1   | COMMSCOPE | NHH-65C-R2B | 96.0"  | 11.9" | 7.1"  | 0°        | 3°        | 1         | 12-PORT OVP WITH 12x24 HYBRID | 210'-0"       | RRUS4449 B13         |
| 700<br>AWS   | 95°     | 150'-0"    | 1   | COMMSCOPE | NHH-65C-R2B | 96.0"  | 11.9" | 7.1"  | 0°        | 3°        |           |                               |               | RRUS8843 B66         |
| BETA SECTOR  | AZIMUTH | TIP HEIGHT | QTY | VENDOR    | MODEL       | LENGTH | WIDTH | DEPTH | MECH TILT | ELEC TILT | CABLE QTY | FEEDER TYPE                   | FEEDER LENGTH | ADDITIONAL EQUIPMENT |
| 700          | 225°    | 150'-0"    | 1   | COMMSCOPE | NHH-65C-R2B | 96.0"  | 11.9" | 7.1"  | 0°        | 3°        | 0         | NA                            | NA            | RRUS4449 B13         |
| 700<br>AWS   | 225°    | 150'-0"    | 1   | COMMSCOPE | NHH-65C-R2B | 96.0"  | 11.9" | 7.1"  | 0°        | 3°        |           |                               |               | RRUS8843 B66         |
| GAMMA SECTOR | AZIMUTH | TIP HEIGHT | QTY | VENDOR    | MODEL       | LENGTH | WIDTH | DEPTH | MECH TILT | ELEC TILT | CABLE QTY | FEEDER TYPE                   | FEEDER LENGTH | ADDITIONAL EQUIPMENT |
| 700          | 340°    | 150'-0"    | 1   | COMMSCOPE | NHH-65C-R2B | 96.0"  | 11.9" | 7.1"  | 0°        | 3°        | 0         | NA                            | NA            | RRUS4449 B13         |
| 700<br>AWS   | 340°    | 150'-0"    | 1   | COMMSCOPE | NHH-65C-R2B | 96.0"  | 11.9" | 7.1"  | 0°        | 3°        |           |                               |               | RRUS8843 B66         |

CO-APPLICANT:

Item 2.



CO-APPLICANT:



IMPLEMENTATION TEAM/CLIENT:



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May 05, 2021

| REV | DATE    | DESCRIPTION                               |
|-----|---------|---|
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PROJECT:

**AK3  
STICKEEN**  
3 EVERGREEN AVE  
WRANGELL, AK 99929

SHEET TITLE:

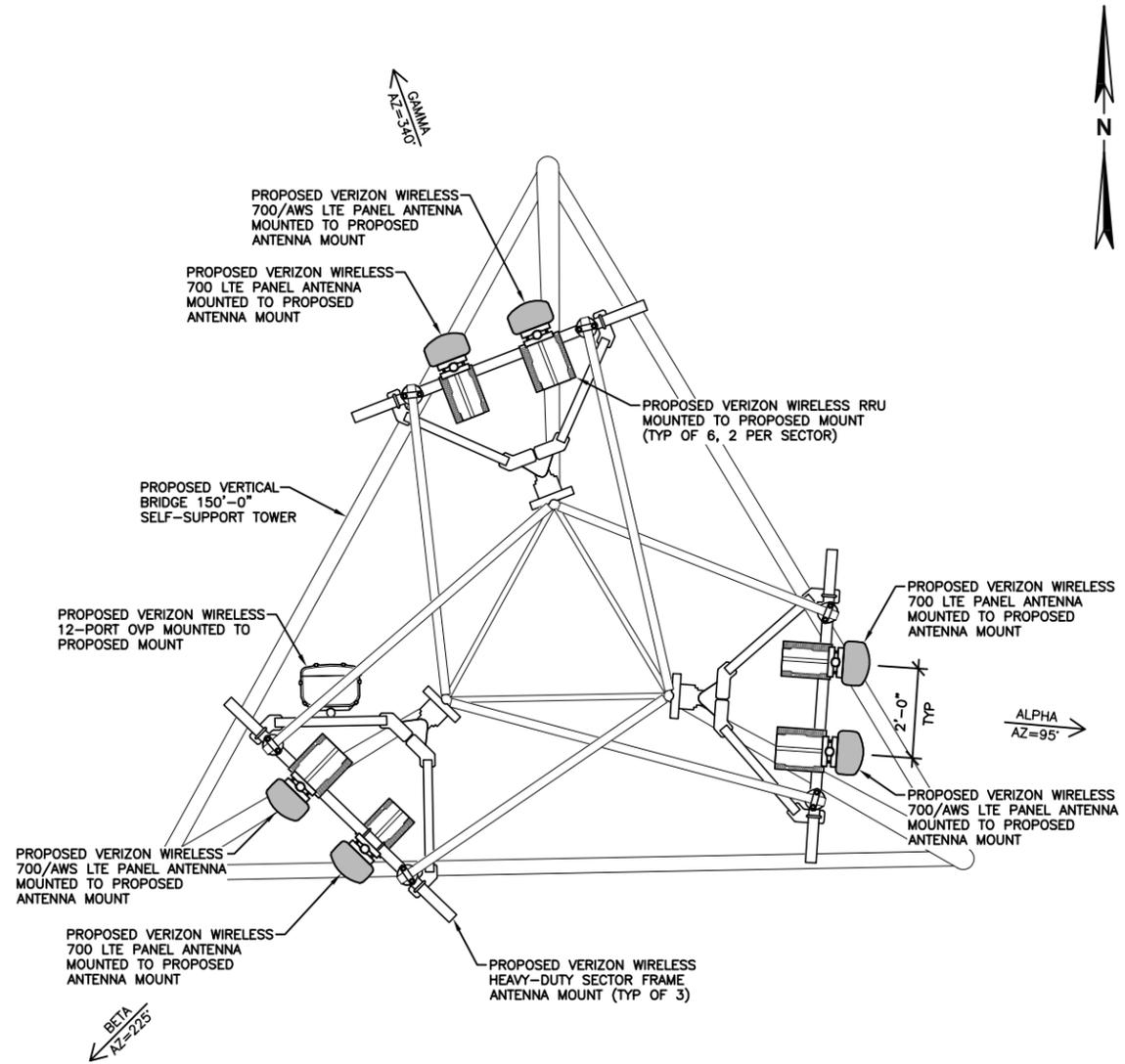
PROPOSED ANTENNA CONFIGURATION

|                          |                               |
|--------------------------|-------------------------------|
| FUZE NUMBER:<br>15906627 | DATE:<br>12/30/20             |
| DRAFTER:<br>BEW          | PROFESSIONAL OF RECORD<br>BEW |
| REVISION NO:             | SHEET NO:                     |

5 RF-1

22"x34" SCALE: NOT TO SCALE  
11"x17" SCALE: NOT TO SCALE

NOT USED 3



22"x34" SCALE: NOT TO SCALE  
11"x17" SCALE: NOT TO SCALE

NOT USED 2

22"x34" SCALE: 1/2" = 1'-0"  
11"x17" SCALE: 1/4" = 1'-0"

PROPOSED ANTENNA CONFIGURATION 1

# AK3 – STICKEEN [3 Sector – (4x4 700/AWS)]

CO-APPLICANT:

Item 2.



CO-APPLICANT:



IMPLEMENTATION TEAM/CLIENT:



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May 05, 2021

| REV | DATE    | DESCRIPTION                               |
|-----|---------|---|
| 5   | 5/05/21 | REVISED DESIGN TO A SELF-SUPPORT TOWER    |
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| 2   | 1/19/21 | FZD'S ISSUED FOR SUBMITTAL                |

PROJECT:  
**AK3 STICKEEN**  
3 EVERGREEN AVE  
WRANGELL, AK 99929

SHEET TITLE:  
**PROPOSED IT DIAGRAM**

|                          |                               |
|--------------------------|-------------------------------|
| FUZE NUMBER:<br>15906627 | DATE:<br>12/30/20             |
| DRAFTER:<br>BEW          | PROFESSIONAL OF RECORD<br>BEW |
| REVISION NO:             | SHEET NO:                     |

5

RF-2

SECTOR 1

95°

700 LTE  
AWS LTE  
700 LTE

SECTOR 2

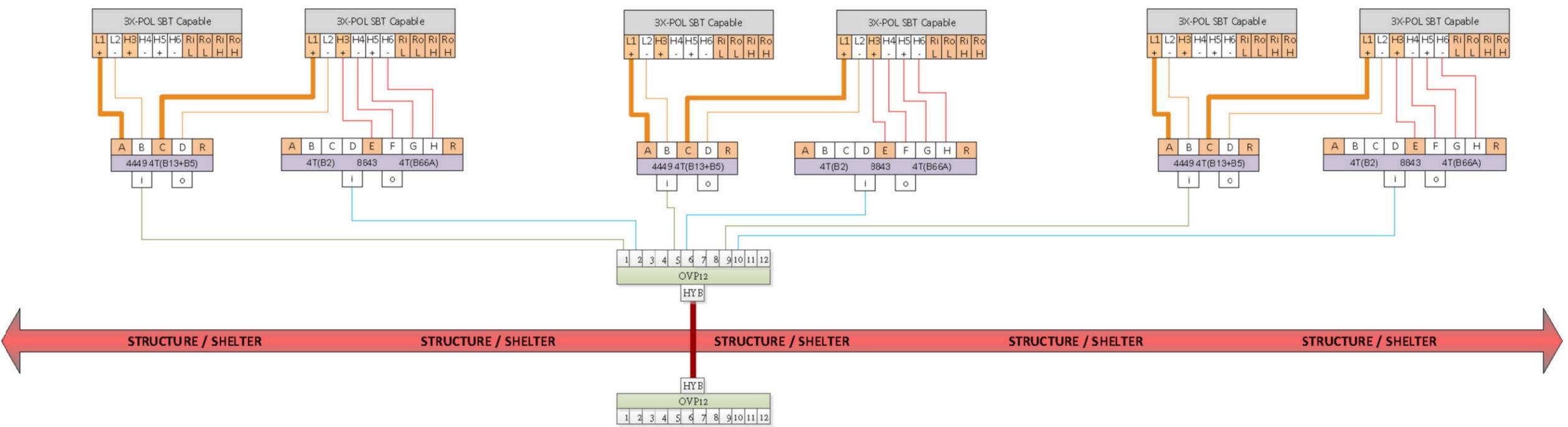
225°

700 LTE  
AWS LTE  
700 LTE

SECTOR 3

340°

700 LTE  
AWS LTE  
700 LTE



6630-2-3-1

|                 |     |          |  |  |  |
|-----------------|-----|----------|--|--|--|
| 6630-2-3-1      | B13 | B4       |  |  |  |
|                 |     | up to 20 |  |  |  |
| Bandwidth (MHz) | 10  | 20       |  |  |  |
| Tx or Rx        | 4   | 4        |  |  |  |

|           | BB1        | ABW | Branches |       | Cells |       |
|-----------|------------|-----|----------|-------|-------|-------|
|           |            |     | cont     | split | cont  | split |
| port A    | 700 alpha  | 40  | 4        | 4     | 1     | 1     |
| port B    | AWS1 alpha | 80  | 4        | 8     | 1     | 2     |
| port C    |            |     |          |       |       |       |
| port D    |            |     |          |       |       |       |
| port E    |            |     |          |       |       |       |
| port F    | 700 beta   | 40  | 4        | 4     | 1     | 1     |
| port G    | AWS1 beta  | 80  | 4        | 8     | 1     | 2     |
| port H    |            |     |          |       |       |       |
| port J    |            |     |          |       |       |       |
| port K    |            |     |          |       |       |       |
| port L    | 700 gamma  | 40  | 4        | 4     | 1     | 1     |
| port M    | AWS1 gamma | 80  | 4        | 8     | 1     | 2     |
| port N    |            |     |          |       |       |       |
| port P    |            |     |          |       |       |       |
| port Q    |            |     |          |       |       |       |
| Total ABW |            | 360 | 24       | 36    | 6     | 9     |

**RET Control Path Note:**  
All Smart BiasT's (SBT)/Internal BiasT's, or External AISG RET Controllers are driven by the **BOLD** coax/jumper pathways.  
Example: Antenna port '1' driven by RRH port 'A'

**RRU Bands:**

|         |          |
|---------|----------|
| 700     | Band 13  |
| AWS     | Band 4   |
| PCS     | Band 2   |
| 850     | Band 5   |
| AWS-1/3 | Band 66A |
| CBRS    | Band 48  |
| LAA     | Band 46  |

**From:** [Joel Aro](#)  
**To:** [Carol Rushmore](#)  
**Cc:** [Julei Campos](#)  
**Subject:** RE: AK3 STICKEEN (VERTICAL BRIDGE/VERIZON) - Lattice vs Monopole  
**Date:** Thursday, May 6, 2021 9:02:50 AM

---

Carol:

- Monopole can't be stacked without a crane. Concerned about crane access and cost to mobilize crane
- SST tend to have a higher load capacity and more mounting locations/options, making it easier to collocate on
- Foundation concerns as the SST spreads the weight better

Let me know if you have any questions or concerns.

Thanks

**Joel Aro | Lynx Consulting, Inc.**

17311 135th Ave NE, Suite A-100, Woodinville, WA 98072 | 47.752944°, -122.159842°

**Cell (206) 661-5010 | Office (425) 877-1871 ext. 9 | Fax (425) 354-3277**

[jaro@lynxconsulting.org](mailto:jaro@lynxconsulting.org) | [www.lynxconsulting.org](http://www.lynxconsulting.org)

---

**From:** Carol Rushmore <ecodev@wrangell.com>  
**Sent:** Wednesday, May 5, 2021 3:54 PM  
**To:** Joel Aro <jaro@lynxconsulting.org>  
**Subject:** RE: AK3 STICKEEN (VERTICAL BRIDGE/VERIZON) - Lattice vs Monopole

Okay, can you provide an explanation as to why?

Carol Rushmore

Economic Development Director  
City and Borough of Wrangell  
P.O. Box 531  
Wrangell, AK 99929  
907-874-2381

---

**From:** Joel Aro <[jaro@lynxconsulting.org](mailto:jaro@lynxconsulting.org)>  
**Sent:** Wednesday, May 5, 2021 1:14 PM  
**To:** Carol Rushmore <[ecodev@wrangell.com](mailto:ecodev@wrangell.com)>  
**Cc:** Julei Campos <[jcampos@lynxconsulting.org](mailto:jcampos@lynxconsulting.org)>  
**Subject:** AK3 STICKEEN (VERTICAL BRIDGE/VERIZON) - Lattice vs Monopole

Carol:

We had to revise the design of the facility from a monopole to a lattice tower. There are several factors that facilitated the change. Please let me know if you have any questions or concerns. Everything else on the plans remains the same.

I have attached revised plans for your review.

Sincerely,

**Joel Aro | Lynx Consulting, Inc.**

17311 135th Ave NE, Suite A-100, Woodinville, WA 98072 | 47.752944°, -122.159842°

**Cell (206) 661-5010 | Office (425) 877-1871 ext. 9 | Fax (425) 354-3277**

[jaro@lynxconsulting.org](mailto:jaro@lynxconsulting.org) | [www.lynxconsulting.org](http://www.lynxconsulting.org)



April 24, 2021

Wrangell Planning & Zoning Commission  
P.O. Box 531  
Wrangell, AK 99929

Dear Wrangell Planning and Zoning,

KSTK has two concerns regarding the City of Wrangell's potential agreement with Vertical Bridge to construct a Verizon cell tower near the Wrangell Transfer Station, AKA The Dump. KSTK owns translator K296FN - North Wrangell Island. The translator antenna is attached to the top of Transfer Station building. This translator sends KSTK's signal to the lower Stikine area and the Back Channel. Both of our concerns relate to the potential for signal interference between the cell tower signal and the KSTK translator signal. One concern is that KSTK's signal could be disrupted and not able to reach users in our service area. Perhaps a bigger concern is that KSTK needs to be held harmless if there is signal interference. In other words, KSTK does not want to be sued by Verizon if the existing KSTK signal and the new Verizon signal are interfering with each other.

Any potential signal interference can be avoided if the new service provider, Vertical Bridge / Lynx Consulting / Verizon is held responsible to engineer their system to not interfere with the existing KSTK signal.

KSTK requests that language be included in the lease agreement that:

- 1) Protects any existing telecommunications services from interference.
- 2) Hold harmless any existing telecommunications services from requirements or costs related to mitigating any interference to the cellular (or other) tenants.
- 3) The City's lease with Vertical Bridge / Verizon allow pre-existing tenants located on the premises the rights of a third party beneficiary to bring any claims against the new tenant for violating the terms of the lease if Vertical Bridge / Verizon causes interference.

The City and Borough of Wrangell and members of the community are all stakeholders in KSTK and we believe it is in everyone's interest to be pro-active and stipulate expectations of a new telecommunications entity so that Wrangell can benefit from both our local KSTK radio signal and new Verizon cell service.

Thank you for your consideration.

Sincerely,

Cindy Sweat – KSTK General Manager  
PO Box 1141 – Wrangell, AK 99929  
[cindy@kstk.org](mailto:cindy@kstk.org)  
874-2345

May 12, 2021

To all Planning and Zoning Members,

I am writing this letter in regards to the tower that has been proposed in our residential area, right next to our properties.

I have done quite a bit of research and am opposed to this tower being located in a residential area near kids and families. I believe there are other options for this tower to be located in the City of Wrangell.

I have indicated the harmful effects that I believe (my opinion) this tower will impose from my research.

- Mobile phone towers make air toxic. There are indicative studies to prove that the electromagnetic radiation is harmful to the people living in the 300-meter (approximately 984 ft) radius of the towers.
- According to the norms, the radiation level of 600 milli watts per meter square (mw/m. sq.) is considered safe. But mobile phone towers emit electromagnetic rays above the safe limit.
- The telecommunication companies and service providers pay rents up to Rs. 30,000 or sometimes more when competition is high among them. This is a good source of income for property owners and institutions, but the norms for safety are ignored keeping the lives of people at danger.
- In my opinion and what I have read the electromagnetic radiation poses grave health risks including memory loss, lack of concentration, digestive issues, headaches, fatigue, joint pains, vision distortion, miscarriage, heart problem and other health problems that they have just begun to discover. Not only the people living near the towers are affected but also the people who are at a distance of the towers.
- Children, adolescent and pregnant women are at maximum risk. The younger the child, the deeper is the penetration of the radiation due to the fact that children's skulls are thinner. Same in the case with pregnant women who carries an underdeveloped child.
- The radiations not only affect humans but also the birds, butterflies, insects and sparrows. The great decline in numbers of these creatures have been observed, especially urban areas. While urbanization is major factor involved, the radiation is adding fuel to it. The radiation, shells of the eggs of the birds and insects are getting thinner and the waves also interfere with the senses of the birds to navigate.
- Also, values of property tend to be 20% less in value when you go to sell if you are near a tower.

Links:

<https://www.recorder.com/my-turn-Carpenter-Ashfield-MUST-TUESDAY-39137782>

<https://mdsafetech.org/cell-tower-health-effects/>

<https://www.safespaceprotection.com/emf-health-risks/emf-health-effects/cell-towers/>

[https://www.researchgate.net/publication/241473738\\_The\\_Influence\\_of\\_Being\\_Physically\\_Near\\_to\\_a\\_Cell\\_Phase\\_One\\_Transmission\\_Mast\\_on\\_the\\_Incidence\\_of\\_Cancer](https://www.researchgate.net/publication/241473738_The_Influence_of_Being_Physically_Near_to_a_Cell_Phase_One_Transmission_Mast_on_the_Incidence_of_Cancer)

<https://www.radiationhealthrisks.com/5g-health-risks-debunked/>

I believe that if not kept in check and in limits, we need to protect our children, wildlife and people in our residential areas. We need to ensure that everyone is protected and in good health.

Thank you for your time.

Sherri Cowan  
831 Evergreen Ave- (property owner)  
Wrangell, AK 99929