



NATRONA COUNTY BOARD OF COUNTY COMMISSIONERS

AGENDA

Paul Bertoglio, Commissioner
Forrest Chadwick, Commissioner
Rob Hendry, Commissioner
Brook Kaufman, Commissioner
Jim Milne, Commissioner

Tuesday, July 21, 2020 5:30 p.m.
Natrona County Courthouse, 200 North Center, Casper, Wyoming
Large Courtroom, 2nd Floor
Teleconference: 235-9518

I. CALL MEETING TO ORDER

II. ROLL CALL

III. PLEDGE OF ALLEGIANCE

IV. APPROVAL OF CONSENT AGENDA

V. PUBLIC HEARING

A. CUP20-1 CUP to allow land reclamation and drainage improvements. The CUP is for Lot 2 of Douglass Subdivision, the address being 3799 Douglass Rd.

B. PS20-2-Request to subdivide a 5.04 acre parcel of land into 2 lots to be known as Zero Road Industrial Park, Lots 3A &3B. This parcel currently has 2 buildings addressed as 1014 & 1028 N. Robertson Road.

C. CUP20-3-A CUP by Union Wireless/Hemphill for and 84-foot self-supporting communication tower on an existing site located at 56252 W. US Highway 20-26. Applicant is requesting 100-feet to include all appurtenances. This location is approximately 4 miles west of Hiland.

D. CUP 20-4-A CUP by Union Wireless/Hemphill for and 84-foot self-supporting communication tower on an existing site located at 15303 Arminto Rd. Applicant is requesting 100-feet to include all appurtenances.

E. CUP20-5- Union Wireless/Hemphill for and 84-foot self-supporting communication tower on an existing site located at 21755 State Highway 220. Applicant is requesting 100-feet to include all appurtenances. The location is east of Highway 220 and north of Grey Reef Rd.

VI. PUBLIC COMMENTS

VII. COMMISSIONER COMMENTS

VIII. ADJOURNMENT

Agendas are subject to amendments



**NATRONA COUNTY
BOARD OF COUNTY COMMISSIONERS**

Paul Bertoglio, Commissioner
Forrest Chadwick, Commissioner
Rob Hendry, Commissioner
Brook Kaufman, Commissioner
Jim Milne, Commissioner

CONSENT AGENDA

Tuesday, July 21, 2020 5:30 p.m.
Natrona County Courthouse, 200 North Center Street, Casper, Wyoming
Large Courtroom, 2nd Floor
Teleconference: 235-9518

- I. APPROVAL OF JULY 8, 2020 MEETING MINUTES**
- II. APPROVAL OF BILLS \$2,358,812.19**
- III. CONTRACTS, AGREEMENTS, RESOLUTIONS:**
 - A. Resolution 26-20 Setting Tax Levies for Fiscal Year 2020-2021
 - B. Amendment to CenturyLink Loyal Advantage Agreement
 - C. Third Amendment to the Amoco Properties Reuse Joint Powers Agreement between NC, WY and the City of Casper, WY
 - D. Resolution 27-20 Coronavirus Relief Grant COVID-19 Application for the NCPL
 - E. Resolution 28-20 Coronavirus Relief Grant COVID-19 Application for the NCIA
- IV. STATEMENT OF EARNINGS:** Development \$33,093.61; County Clerk \$135,684.00; Lake \$5367.00; Parks \$6060.00
- V. LICENSES**
 - A. Marc Nogle-CR#319/Oregon Trail-Water line-Lic. #29-20-14
 - B. Colleen Morrison-CR#308/Bessener Bend-access to pasture-Lic. #29-20-15
 - C. Black Hills WY Gas-CR#202/Zero Rd-Gas Line-Lic.#29-20-16
 - D. Rettew Associates, Inc.-Barnard St., Smith St.-Monitored Well Installation-Lic. #29-20-17
- VI. TAXROLL CORRECTION 2019:** ARCHAEOLOGICAL ENERGY CONSULTANT \$-8.75; CATELLIAR, RONALD J \$-321.26; SUNBURST PROPERTIES LLC \$-588.27; ANNIS, HARVEY B \$-3540.26

Agendas are subject to amendments

**BOARD OF COUNTY COMMISSIONERS
MINUTES OF PROCEEDINGS**

July 7, 2020

The regular meeting of the Board of County Commissioners was brought to order at 5:30 p.m. by Chairman Hendry. Those in attendance were Commissioner Brook Kaufman, Commissioner Matt Keating, Commissioner Paul Bertoglio, Commissioner Chadwick, County Attorney Eric Nelson, County Clerk Tracy Good and Commissioners' Assistant Michelle Maines.

Consent Agenda:

Commissioner Chadwick moved for approval of the Consent Agenda. Commissioner Milne seconded the motion. Motion carried.

Public Hearings:

FY 2020-2021 Budget Approval Resolution 24-20

Clerk Good reported on the budget for FY 2020/21.

Chairman Hendry opened the public Hearing.

Hearing no comments in favor or in opposition, Chairman Hendry closed the public hearing. Commissioner Chadwick moved for approval of the Resolution 24-20. Commissioner Kaufman seconded the motion. Motion carried.

Public Comments:

Chairman Hendry opened the floor to Public Comments.

Hearing no further comments the floor was closed.

Commissioner Comments:

Chairman Hendry opened the floor to Commissioner Comments.

Hearing no further comments the floor was closed.

Adjournment:

There being no further business to come before the Board of Commissioners, Chairman Hendry adjourned the meeting at 5:41 p.m.

BOARD OF NATRONA COUNTY COMMISSIONERS

Robert L. Hendry, Chairman

ATTEST:
NATRONA COUNTY CLERK

Tracy Good

Newspaper listing for Bills 7/8/2020 through 7/14/2020

94 vendors listed

Total: \$ 2,358,812.19

ABC LEGAL SVCS \$595.00	HOOD'S EQUIPT \$920.40
ACTIVE DATA SYS \$3600.00	HP INC \$275.08
AGRICULTURE DEPARTMENT \$7416.66	INFORMATION TECHNOLOGY \$40422.44
ALCOHOL & DRUG TESTING \$16220.10	JOHNSON CONTROLS. \$1818.24
AMAZON CAPITAL SVCS \$123.62	KAUFMAN, JAHNA K \$300.00
AMBI MAIL & MARKETING \$12380.29	NATIONAL TEST SYS \$2193.50
ANIXTER \$17.72	NC TREASURER \$8988.88
ASSESSOR \$48096.68	OUTPATIENT RADIOLOGY \$326.76
ATLAS OFFICE PROD \$376.55	PARTSMaster NCH CORPORATION \$39.95
AXIS FORENSIC TOXICOLOGY \$1344.00	POST AND ASSOCIATES \$4766.97
B & B RUBBER STAMP SHOP \$49.90	PRONGHORN PROPANE \$1140.80
BENNETT, THOMAS L MD \$1800.00	RECONNECT \$410.52
BERTOGLIO, PAUL \$226.54	RICOH USA INC \$896.52
CAPITAL BUSINESS SYS \$1573.39	RMP \$3441.65
CASPER- NC HEALTH DEPARTMENT \$58688.17	ROAD & BRIDGE - LAKE \$18032.13
CASPER WINNELSON CO \$142.40	ROAD & BRIDGE/ADMINISTRATION \$67622.01
CENTRAL FAIR AND RODEO \$73224.93	ROAD & BRIDGE/PARKS DEPT \$15477.33
CENTURYLINK \$10702.55	ROAD & BRIDGE/VEHICLE SVC \$17656.33
CHILD SUPPORT ENFORCEMENT \$50900.70	ROCKY MOUNTAIN INFORMATION \$250.00
CLERK OF COURT/ADMINISTRATION \$44465.19	RT COMMUNICATIONS INC \$40.52
CLERK/ADMINISTRATION \$61687.11	SHAMROCK FOODS CO \$16767.89
COCA-COLA BOTTLING CO \$169.50	SHERIFF/ADMINISTRATION \$288031.48
COMMISSION/ADMINISTRATION \$10416.65	SHERIFF/COURTHOUSE SECURITY \$60739.01
COMMISSION/COUNTY ATTORNEY \$24232.43	SHERIFF/EMERGENCY MANAGEMENT \$12143.49
COMMISSION/COUNTY DEVELOPMENT \$36946.89	SHERIFF/NEW JAIL \$438003.13
COMMISSIONER/ HR \$7083.34	SINCLAIR FLEET TRACK \$850.43
COMMISSIONERS/MAINT. SALARIES \$26119.37	SMITH, JUSTIN \$455.00
CONCORDANCE HEALTHCARE SOLUTIONS \$478.90	SOURCE OFFICE & TECHNOLOGY \$124.61
CORNERSTONE PROGRAMS CORP \$146861.00	SPECTRUM \$331.12
CORONER \$18889.26	STAPLES \$132.95
COWBOY AUTO SPA \$9.75	STOTZ EQUIPT \$544.15
CROWLEY FLECK PLLP \$3134.00	SUTHERLANDS \$64.97
CST \$133.88	THOMSON REUTERS \$640.76
DECKER AUTO GLASS \$308.42	TLC CLEANING \$800.00
DEWITT WATER SYS \$499.10	TREASURER \$49991.34
DISTAD, ERIC A \$2550.00	TRI-STATE TRUCK & EQUIPT \$715.71
DRUG COURT \$16600.35	URGENT CARE OF CASPER \$75.00
ELECTION SYS & SOFTWARE \$8214.43	US FOODS \$3322.89
EMERGENCY MEDICAL PHYSICIANS \$919.00	VERIZON \$5376.25
EXPRESS PRINTING \$543.00	VITAL RECORDS CONTROL (VRC) \$78.02
FERGUSON ENT #109 \$101.25	W.A.R.M. PROPERTY INS POOL \$546470.11
FIRST INTERSTATE BANK \$6493.93	WORTHINGTON, LENHART & CARPENTER, \$80.00
FOXIT SOFTWARE \$303.00	WSFP WESTERN STATES FIRE PROT. DBA \$4676.00
GALLS \$59.80	WY STATE FORESTRY DIVISION \$32299.84
HENSLEY BATTERY \$44.40	WY STEEL RECYCLING IRON & \$32.40
HIGH PLAINS POWER INC \$1110.73	YOUTH CRISIS CENTER INC \$2500.00
HOMAX OIL SALES INC \$1841.73	ZERBE-ALME, KELLIE DBA ALL AREA PROCESS SVC \$850.00

RESOLUTION 26-20

A RESOLUTION SETTING TAX LEVIES FOR FISCAL YEAR 2020/2021

WHEREAS, Wyo. Stat. Ann. § 39-13-102(g) provides that the Board of County Commissioners shall by order of record levy the requisite taxes for the year; and

WHEREAS, the Board of County Commissioners, has presented a list of tax levies for Natrona County for fiscal year 2021.

NOW, THEREFORE, the Board of County Commissioners of Natrona County, Wyoming, hereby approves the tax levies submitted by: Casper Community College, Casper Mountain Fire District, City of Casper, Downtown Development Authority, Natrona County, Natrona County Fire Protection District, Natrona County School District #1, Natrona County Weed & Pest District, Pioneer Water & Sewer District, Town of Bar Nunn, Town of Edgerton, Town of Evansville, Town of Midwest, Wardwell Water and Sewer District and Town of Mills to be imposed on property located within Natrona County, Wyoming, pursuant to the list submitted to the County Assessor.

Casper Community College	7.39 mills
Casper Mountain Fire District	3 mills
City of Casper	8 mills
Downtown Development Authority	16 mills
Natrona County	12 mills
Natrona County Fire Protection District	3 mills
Natrona County School District #1	44.5 mills
Natrona County Weed & Pest District	1 mill
Pioneer Water & Sewer District	8 mills
Town of Bar Nunn	8 mills
Town of Edgerton	8 mills
Town of Evansville	8 mills
Town of Midwest	8 mills
Wardwell Water and Sewer District	8 mills
Town of Mills	8 mills

DATED this 21st day of July, 2020.

THE BOARD OF COUNTY COMMISSIONERS
NATRONA COUNTY, WYOMING

Robert L. Hendry, Chairman

ATTEST:

Tracy Good, County Clerk

Approved as to form:

Natrona County Attorney

Casper College

Administrative Services

June 1, 2020

Mr. Rob Hendry, Chairman
Natrona County Commissioners
200 North Center, Suite 115
Casper, WY 82601

Dear Chairman Hendry and Commissioners:

The Casper Community College District Preliminary Budget was provided to the Casper College Board of Trustees as per Wyoming Statute.

The mill levies anticipated in support of the FY 2021 Budget and to be recommended for approval at the July 21, 2020 Budget hearing, are as follows:

- 4 mill levy - General Operating levy
- 1 mill levy - Optional one mill levy
- 1.89 mill levy - General Obligation Bonds
- .5 mill levy – Central Wyoming Board of Cooperative Services (BOCES).

The total levy, on behalf of the Casper Community College District, is 7.39 mills.

The Natrona County Commission will receive a copy of the Casper Community College District Budget including appropriate resolutions following approval at the July Budget Hearing.

If you have any questions regarding the Budget and the required levies, please do not hesitate to call me at 268-2232.

Sincerely,



Lynnde Colling

CC: County Assessor
County Treasurer

2



CASPER MOUNTAIN FIRE DISTRICT

1000 Lemmers Road • Casper, Wyoming 82601-9709 • (307) 259-0329

March 4, 2020

OFFICERS

President

Bill Chambers
307 237 7093

Treasurer

David Mowry

Secretary

Pat Harshman

Board Members

Margo Spurrier
Jim Barton
Pat Harshman
David Mowry
Bill Chambers

Matt Keating Natrona County Assessor
200 North Center
Casper, WY 82601

RE: Mill Levy 2018-2019

Dear Matt,

Please continue to collect the 3 Mill Levy for the Casper Mountain Fire Protection District for this fiscal year.

Any questions or concerns please let me know.

We greatly appreciate your assistance.

Sincerely,

David Mowry
Treasurer
Casper Mountain Fire Protection District
mowryd@cmfd14.com
(307) 262-2760

Cc: Natrona County Commissioners

RECEIVED
MAR - 4 2020
BY: mm-Boce

15



RESOLUTION NO. 20-132

A RESOLUTION AUTHORIZING THE LEVYING OF 8 MILLS PROPERTY TAX BY THE NATRONA COUNTY ASSESSOR ON BEHALF OF THE CITY OF CASPER.

WHEREAS, Article 15, Section 6 of the Wyoming State Constitution, and 15-1-103 and 15-1-902 of Wyoming State Statutes provide for the City of Casper to levy and assess upon taxable value of property within the limits of the City of Casper up to 8 mills, inclusive of a quarter of one mill dedicated to the Casper Municipal Band; and,

WHEREAS, the City of Casper has historically levied the full 8 mills and desires to continue levying and assessing the same upon taxable value of property within the limits of the City of Casper as done so by the Natrona County Assessor with the proceeds remitted to the City.

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY OF CASPER, WYOMING: That the Mayor is hereby authorized and directed to request that the Natrona County Assessor levy and assess 8 mills upon taxable value of property within the limits of the City of Casper for FY 2021.

PASSED, APPROVED, AND ADOPTED on this 16th day of June, 2020.

APPROVED AS TO FORM:

[Handwritten signature]

ATTEST:

CITY OF CASPER, WYOMING
A Municipal Corporation

[Handwritten signature]
Fleur D. Tremel
City Clerk



[Handwritten signature]
Steven K. Freel
Mayor



I hereby certify that this document is a true and correct copy of the original.

[Handwritten signature]
City Clerk or Deputy Clerk



**DOWNTOWN DEVELOPMENT
AUTHORITY**

www.downtowncasper.com

5

Downtown Development Authority
341 W. Yellowstone Hwy.
Casper, WY 82601

June 12, 2020

Mr. Matt Keating
Natrona County Assessor
200 N. Center Street
Casper, WY 82601

Dear Mr. Keating:

On November 7, 2017, property owners within the Casper Downtown Development Authority (DDA) District passed a four-year, 16 mill-levy on the assessed valuation of real property within the DDA District, excluding real property used exclusively for residential purposes. This four-year assessment began with the tax year 2018 and continues through 2021.

For the 2020 tax year, the Casper DDA requests Natrona County assess Casper DDA District property for the full 16-mills.

Please contact me if you require additional information.

Thank you for your assistance and support

Sincerely,

Kevin Hawley
Executive Director

RECEIVED
JUN 15 2020
BY: mm/Boc



NATRONA COUNTY FIRE PROTECTION DISTRICT

555 N Robertson Rd • Casper, WY 82604

PO Box 820 • Mills WY 82644

307-234-8826



May 4, 2020

Natrona County Assessor
Attn: Matt Keating, Assessor
200 North Center Street
Room 140
Casper, Wyoming 82601

Dear Matt:

The Board of Directors of the Natrona County Fire Protection District have authorized me to again request that you continue the annual assessment for the District. This request is for the renewal of the assessment of three (3) mills for all unincorporated portions of Natrona County with exception of those areas within the Casper Mountain Fire District. A copy of this request is also being mailed this day to the Board of Natrona County Commissioners.

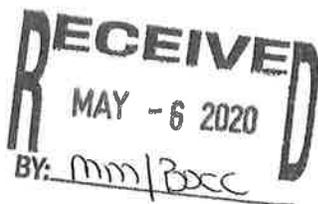
If anything further is required in this regard by either your office or the Board of Natrona County Commissioners, please notify me.

Sincerely,

Brian Oliver
District Chief

XC Rob Hendry, Chairman
Board of Natrona County Commissioners

File: Board of Directors N.C. Fire Protection District





Budget Appropriation and Levy Resolution for 2020-21

Whereas, a summary of the budget was entered into the Board minutes, and notice of a public hearing on such budget, together with said summary was published in the Casper Star-Tribune, as a newspaper having general circulation in the county in which the District is located, on June 28, 2020; and

Whereas, a public hearing was held concerning such budget on July 8, 2020 at 7:30 pm, at which time all interested parties were given an opportunity to be heard.

NOW, THEREFORE, BE IT RESOLVED by the Board of Trustees of Natrona County School District No. 1 that such budget, as revised, if applicable, is hereby adopted and, subject to future amendment and transfer, is in effect for the fiscal year ending June 30, 2021.

BE IT FURTHER RESOLVED that the following appropriations are made, as of and for the fiscal year ending June 30, 2021, and that those respective expenditures applicable to each fund shall be limited to the amounts hereby appropriated, subject to future amendment and transfer.

Appropriations:

General Fund	\$	225,843,210
Special Revenue Fund	\$	45,289,520
Capital Projects Fund	\$	36,183,417
Food Service Fund	\$	6,189,486
Extra-Curricular Fund	\$	4,164,969
Total Appropriations	\$	317,670,602

BE IT FURTHER RESOLVED that after deducting all available cash and estimated revenues, the following amounts must be raised through general taxation, and that such levies as are required to provide such amounts are hereby authorized as of and for the fiscal year ending June 30, 2021.

Amounts to be raised for the District:

General Fund	\$	37,737,799	31.0 Mills
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BE IT FURTHER RESOLVED that the District will levy 12 additional mills for the Wyoming School Foundation Fund, .5 mill for the Natrona County BOCES, and 1.0 mill for the Natrona County Recreation Joint Powers Board. The taxes from these levies go directly to the State of Wyoming, the Natrona County BOCES and the Natrona County Recreation Joint Powers Board, respectively.

Wyoming School Foundation	\$	14,608,180	12.0 Mills
Natrona County BOCES	\$	608,674	.5 Mill
Natrona County Recreation Joint Powers Board	\$	1,217,348	1 Mill

Proposed Budget

NATRONA COUNTY WEED and PEST DISTRICT	
Budget Hearing Information	
PO BOX 1385	Location: NATRONA COUNTY WEED AND PEST DISTRICT
MILLS, WY 82644	Date: 7/15/2020
307-472-5559	Time: 1:00 PM
Natrona County	Budget Prepared by: BRIAN CONNELLY, SUPERVISOR

S-A BUDGET MESSAGE W.S. 16-4-104(d)

FY20-21 will likely be another grasshopper outbreak year. The funding available for aerial grasshopper treatments will likely be reduced on a Federal, State and local level. We will mitigate funding deficiencies with aggressive early season ground treatments, training and resources for landowners to conduct their own treatments and targeted hotspot aerial treatments with available funding. We will also modify our seasonal crew to accommodate COVID-19 pandemic realities by NOT camping out on project locations. This will be the first year not camping in 34 years that I know of. We will instead, commute to project areas, every day, by vehicle. This will lower our efficiency, raise our operations costs and probably raise overtime for crews. Despite this reality we will continue to "control noxious weeds" in the County. We will continue to improve our data collection and sharing capabilities through ArcGIS and MS Access be able to record, catalog, archive, retrieve and analyze weed treatment data. This year, we will try to build our Emergency Reserves which were depleted during the grasshopper outbreak last year. We will be frugal with this year's allocation in anticipation of leaner years in the future. To fund this year's operation we request one mill tax levy in accordance with State Statute. Thank You.

S-B RESERVE DESCRIPTION

We are reserving \$25,000 Depreciation monies to fund an eventual overhaul of an aging septic field.

S-C

Names of Board Members	Date of End of Term	
JASON GUTIERREZ	12/31/20	
CRAIG COLLINS	12/31/22	
DONNIE WILLIAMS	12/31/20	
WESLEY WATERS	12/31/20	
MIKE GILMORE	12/31/22	
SHANE SMITHEY	12/31/22	

Does the district have regular office hours exceeding 20 hours per week? Yes

If Yes, enter

Address of office: 6819 WEST YELLOWSTONE HIGHWAY

City, State, Zip: CASPER, WY 82604

Phone Number: 307-472-5559

Hours Open: 7:30AM-4:00PM, M-F

Where are the minutes of your board meeting available for public review?

How and where are the notices of meeting posted for the public?

Where are the public meetings held?

PIONEER WATER & SEWER DISTRICT
8917 Poison Spider Road
Casper WY 82604
307-472-7300

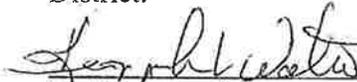
RESOLUTION 2020-1

WHEREAS, the board of directors of the Pioneer Water and Sewer District convened a Regular Meeting on June 8, 2020; and

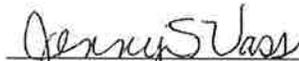
WHEREAS, the board determined that an eight mill levy would be required by taxation and then that said levy together with other revenues will raise the amount required by the District for the ensuing fiscal year to supply funds for paying expenses and the costs of acquiring, operating and maintaining the works, equipment and water of and for the District and for the paying in full of all interests on and principal of obligations of the District;

NOW THEREFORE BE IT RESOLVED that the District requests the Natrona County Assessor in and for Natrona County, Wyoming to levy eight mills upon every dollar of assessed valuation of taxable property within the district and to cause that money to be delivered to the District for the purpose of paying expenses and the costs of acquiring, operating and maintaining the works and equipment of the District and for the payment of obligations of the District.

BE IT FURTHER RESOLVED that a copy of this resolution be delivered to the County Commissioners of Natrona County and to the Natrona County Clerk so that at the time and in the manner required by law for levying taxes for county purposes, such board of County Commissioners shall levy such tax upon the assessed valuation of all taxable property within the District.



Ken Waters, Board Chairman

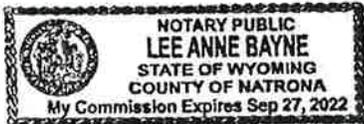


Jenny S Vass, Board Secretary - JENNY S VASS TREASURER

The foregoing instrument was acknowledged by me this 13th day of July, 2020 in the County of Natrona, State of Wyoming.

Witness my hand and official seal. 

Notary Public



My commission expires Sept 27, 2022.

RESOLUTION NO. 2020-02

**A RESOLUTION OF THE TOWN OF BAR NUNN, WYOMING,
SETTING THE MILL LEVY FOR THE CALENDAR YEAR 2020**

WHEREAS, the Town of Bar Nunn Governing Body deems it necessary to set the mill levy at 8.00 MILLS for the calendar year of 2020.

NOW, THEREFORE BE IT RESOLVED, by the Town of Bar Nunn Governing Body that this resolution be passed and adopted.

APPROVED, PASSED, AND ADOPTED this 7th day of January 2020.



(ATTEST)


Patrick R. Ford, Mayor


Carisa M Hensley, Clerk Treasurer

**ORDINANCE #2020-01
ANNUAL APPROPRIATION ORDINANCE FOR THE
FISCAL YEAR ENDING JUNE 30,2021**

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF EDGERTON, NATRONA COUNTY, WYOMING:

Section 1. The following sums of money are anticipated as revenue for the General Fund of the Town of Edgerton for the fiscal year beginning July 1, 2020 and ending June 30,2021, to wit:

REVENUE: GENERAL FUND

Mineral Royalties	19,252.00
Severance Tax	7,234.00
Gasoline Tax	1,500.00
Special Fuels Tax	1,500.00
Sales Tax	55,000.00
Optional 1% Sales Tax	45,000.00
Property Tax	7,000.00
County Motor License Fees	7,000.00
Well Leases & WCG Comm. Distribution	6,000.00
Franchise	5,700.00
Liquor License	1,500.00
Water Revenue	67,000.00
Sewer	7,300.00
Sanitation	39,000.00
Miscellaneous Income	2,500.00
Lottery Proceeds	1,000.00
Dog Tags	350.00
Interest Income	8,000.00
Supplemental Funding	53,856.00
Meter Pit Upgrades (Carryover)	919.00
Community Improvement (Carryover)	<u>44,224.00</u>
TOTAL REVENUES	380,835.00

Section 2. The following sums of money are hereby appropriated to defray the expenses of the Town of Edgerton, Wyoming, for the fiscal year beginning July 1,2020, and ending June 30, 2021 to wit:

EXPENDITURES:

Clinic	6,000.00
Streets	10,000.00
Heat and Lights	9,000.00
Salaries	61,000.00
Employee Required Benefits	46,000.00
Legal Fees	1,000.00
Park & Recreation	2,750.00
Town Hall	4,000.00
Telephone	2,900.00
Salt Creek Community Rec	3,500.00
Office Expense	3,000.00
Insurance/Bonds	5,500.00
Travel/Education	3,000.00
Auto Maintenance & Repair	4,500.00
General Maintenance	6,000.00
Contingency Fund (Misc.)	3,947.00
Expense on Water (SCJP)	22,500.00
Expense on O&M Water	19,000.00
Town Water Expenses	25,500.00
Expense on Sewer	7,300.00
Salt Creek Joint Powers Bd.	44,250.00
SCJPB(Sanitation)	41,000.00
Energy Lease Payment	4,045.00
Meter Pit Upgrades	919.00
Community Improvement	<u>44,224.00</u>
TOTAL EXPENDITURES	380,835.00

Section 3. That it is anticipated that an Eight (8) Mill Levy for property taxes will be required for operation of the General Fund of the Town of Edgerton, Wyoming, and a copy of this Ordinance shall be forwarded to the Board of County Commissioners of Natrona County, Wyoming by the Town Clerk, requesting that Eight (8) Mills be levied upon property in the Town for town purposes.

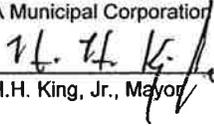
Section 4. This ordinance shall be in full force and effect from and after its approval, passage, and adoption.

APPROVED AND PASSED THIS 4th DAY OF MAY, 2020 ON FIRST READING.

APPROVED AND PASSED THIS 1st DAY OF JUNE, 2020 ON SECOND READING.

APPROVED AND PASSED THIS 8th DAY OF JUNE, 2020 ON THIRD READING

The Town of Edgerton, Wyoming
A Municipal Corporation



H.H. King, Jr., Mayor

ATTEST:



Cynthia R. Aars, Clerk/Treasurer

SEAL:



THE TOWN OF EVANSVILLE

April 7, 2020

Natrona County Clerk
Natrona County Assessor
200 N. Center Street
Casper, Wyoming 82602

RE: Mill Levy for 2020

Dear Ms. Good and Mr. Keating:

The Town Council of the Town of Evansville hereby requests and authorize the County Clerk, the Board of County Commissioners, and the Assessor of Natrona County, Wyoming to levy an assessment of the eight (8) mill levy, known as the General Tax, to meet the current expenses of the Town of Evansville pursuant to Ordinance #2-2020 and to collect the same as by law provided on all the property subject to tax in the Town of Evansville, Wyoming.

CERTIFICATE

To the County Clerk, Board of County Commissioners, and the County Assessor of Natrona County, Wyoming.

This certifies that there is to be raised, according to Ordinance #2-2020 of the Town of Evansville, Wyoming, on all property therein subject to tax, for the municipal purpose of said Town, for the calendar year 2020. The maximum amount for which levy is requested as provided in the Ordinance of which the foregoing is a copy and by law.

Dated April 7, 2020

Janelle Underwood
Town Clerk
Town of Evansville

ORDINANCE #2-2020

AN ORDINANCE FIXING THE TAX LEVY FOR 2020 AND PROVIDING AN EFFECTIVE DATE THEREFORE

BE IT ORDAINED BY THE GOVERNING BODY OF THE TOWN OF EVANSVILLE, WYOMING, as follows:

Section 1: There is hereby assessed upon the real property located within the Town of Evansville, Wyoming, an 8 mill levy, known as general tax to meet the current expenses of the Town.

Section 2: Said taxes shall be collected in accordance with the laws of the State of Wyoming, by the County Treasurer of Natrona County, Wyoming.

Section 3: The Town Clerk of the Town of Evansville, Wyoming is hereby directed to make due certification over her signature as provided by law, of foregoing tax levies for amounts of money to be raised for the aforementioned municipal purposes, and to file the same with the Assessor of Natrona County, Wyoming and the County Clerk of Natrona County, Wyoming on or before the forth Monday in May 2020, as provided by law.

Section 4: If any provision of this ordinance or any section thereof in any circumstances is held to be invalid the validity of the remainder of the ordinance and of the application of any of the other provisions or sections thereof shall not be affected thereby.

PASSED on first reading the 27th day of January, 2020.

PASSED on second reading the 10th day of February, 2020.

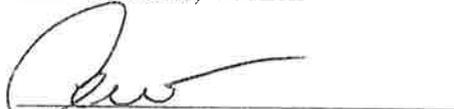
PASSED, APPROVED AND ADOPTED on third and final reading the 21st day of February, 2020.

The Town of Evansville by:


Jennifer Sorenson, Mayor


Chad Edwards, Council

absent
Joseph Knop, Council


Aaron Vigneault, Council


Sheena Hixson, Council

ATTESTED BY:


Janelle Underwood, Town Clerk

Ordinance 2020-5

ANNUAL APPROPRIATION ORDINANCE FOR THE TOWN OF MIDWEST
FISCAL YEAR ENDING JUNE 30, 2021.

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF
MIDWEST, NATRONA COUNTY, WYOMING

Section 1. That the following sums of money are anticipated as revenue for the General Operating Fund
of the Town of Midwest for the fiscal year beginning July 1, 2020 and ending June 30, 2021 to wit:

BEGINNING CASH BALANCE	\$	2,000.00	
Sub Total			
TAXES:			
Property Tax	\$	15,000.00	
Franchises	\$	14,000.00	
Motor Vehicle Fees	\$	17,000.00	
Gasoline Tax	\$	19,000.00	
Special Fuels Tax	\$	4,600.00	
Cigarette Tax	\$	3,000.00	
Sub Total			\$ 72,600.00
LICENSES & PERMITS:			
Building Permits	\$	175.00	
Dog Licenses	\$	500.00	
Liquor License	\$	700.00	
Sub Total			\$ 1,375.00
INTERGOVERNMENTAL REVENUES:			
Sales Tax - 1%	\$	135,972.00	
Sales Tax - 4%	\$	149,272.00	
Mineral Royalty	\$	26,300.00	
Severance Tax	\$	11,300.00	
Direct Funding	\$	47,566.00	
Lottery Distributions	\$	3,000.00	
Sub Total			\$ 373,410.00
FINES & FORFEITURES:			
Court Fines	\$	4,537.00	
Sub Total			\$ 4,537.00
CHARGES FOR SERVICES:			
Sanitation Revenue	\$	70,000.00	
Sub Total			\$ 70,000.00
MISCELLANEOUS REVENUE:			
Interest Income	\$	3,000.00	
Leased Property	\$	12,300.00	
Other Misc.	\$	2,000.00	
County Commissioners	\$	71,825.00	
Sales Tax Revenue	\$	20.00	
Misc. Income-Plates & Mugs	\$	200.00	
Property Sales	\$	2,500.00	
Cooling Pond Revenue	\$	2,500.00	
Wyo. Community Gas	\$	3,049.00	
Sub Total			\$ 97,394.00
GENERAL FUND OPERATING REVENUES:			\$ 621,316.00

Section 2. That the following sums of money are hereby appropriated from the General Operating Fund to defray the operating expenses of the Town of Midwest, Wyoming, for the fiscal year beginning July 1, 2020 and ending June 30, 2021, to wit

GENERAL FUND OPERATING EXPENSES:

Salaries	\$	91,217.00	
Payroll Taxes	\$	30,641.00	
Insurance, Personnel	\$	43,481.00	
Advertising	\$	1,500.00	
Dues and Registration	\$	2,000.00	
Town Insurance	\$	6,926.00	
Professional Fees	\$	3,000.00	
Contingency Fund	\$	1,200.00	
Office Supplies	\$	10,000.00	
Personnel Expenses	\$	3,755.00	
Repairs, Replacements, etc.	\$	15,000.00	
Telephone	\$	2,000.00	
Animal Control	\$	500.00	
Utilities	\$	13,000.00	
City Parks	\$	17,000.00	
Community Improvement/Building repair	\$	14,000.00	
Museum	\$	2,500.00	
Street Maintenance	\$	31,231.00	
Capital Improvements	\$	2,500.00	
Cooling Pond Expenses	\$	500.00	
Safety Equipment	\$	2,000.00	
Maintenance Uniforms	\$	300.00	
Maintenance Cellphone	\$	1,100.00	
Maintenance Auto	\$	5,000.00	
Maintenance Miscellaneous	\$	2,000.00	
County Commissioners	\$	71,825.00	
Clinic Expenses	\$	2,000.00	
Sub Total			\$ 376,176.00
Salt Creek Joint Powers Board	\$	36,050.00	
Expenditures-911 System	\$	3,131.00	
Sub Total			\$ 39,181.00
SANITATION DEPARTMENT:			
Contract Services	\$	70,000.00	
Sub Total			\$ 70,000.00
POLICE DEPARTMENT:			
Salaries	\$	49,990.00	
Payroll Taxes	\$	17,566.00	
Insurance-Personnel	\$	39,325.00	
Auto Expenses	\$	6,000.00	
Dues	\$	300.00	
Jail	\$	500.00	
Office & Operating Expenses	\$	1,500.00	
Personnel Expenses	\$	600.00	
Training Expenses	\$	500.00	
Uniforms	\$	500.00	
Telephone	\$	700.00	
Equipment	\$	5,000.00	
Cellular Phone	\$	1,000.00	
Sub Total			\$ 123,481.00
JUSTICE DEPARTMENT:			
Salaries	\$	5,455.00	
Payroll Taxes	\$	423.00	
Dues	\$	200.00	
Sub Total			\$ 6,078.00
SALT CREEK COMMUNITY RECREATION			
Community Recreation	\$	6,400.00	\$ 6,400.00
TOTAL GENERAL FUND OPERATING EXPENSES:			\$ 621,316.00

Section 3. That the following sums of money are anticipated as revenue for Water & Sewer Operating Fund of the Town of Midwest, Wyoming for the fiscal year beginning July 1, 2020 and ending June 30, 2021, to wit:

WATER & SEWER FUND REVENUES:

WATER CHARGES	\$	156,717.00	
WATER MISC. INCOME	\$	300.00	
SEWER CHARGES	\$	34,742.00	
Sub Total			\$ 191,759.00
SEWER INCREASE REVENUE:			\$ 10,900.00
BOND PAYMENT REVENUE:			\$ 22,600.00
TOTAL WATER & SEWER FUND REVENUE:			\$ 225,259.00

Section 4. That the following sums of money are hereby appropriated from the Water & Sewer Operating Fund to defray the expenses of the Town of Midwest, Wyoming for the fiscal year beginning July 1, 2020 and ending June 30, 2021 to wit:

WATER & SEWER EXPENDITURES:

WATER EXPENDITURES

Salary	\$	29,596.00	
Payroll taxes	\$	10,400.00	
Auto Expenses	\$	2,500.00	
Repairs, Replacement, etc.	\$	17,861.00	
Supplies	\$	1,000.00	
Testing	\$	1,000.00	
Utilities	\$	1,000.00	
Bond Payment	\$	22,600.00	
JP Water Disbursement	\$	60,000.00	
JP O & M Disbursement	\$	33,660.00	
Sub Total			\$ 179,617.00

SEWER EXPENDITURES

Salary	\$	14,798.00	
Payroll taxes	\$	5,200.00	
Repairs, Replacement, etc.	\$	16,154.00	
Supplies	\$	1,800.00	
Utilities	\$	550.00	
State Land & Investment	\$	7,140.00	
Sub Total			\$ 45,642.00

TOTAL WATER & SEWER FUND OPERATING EXPENDITURES: \$ 225,259.00

Section 5. That it is anticipated that an eight (8) mill levy for the property taxes will be required for the operation of the General Fund of the Town of Midwest, Natrona County, Wyoming and a copy of the Ordinance should be forwarded to the Board of County Commissioners of Natrona County, Wyoming by the Town Clerk requesting that an eight (8) mill tax be levied upon the property in the Town for Town purposes.

Section 6. This Ordinance shall be in full force and effect from and after its approval, passage and adoption

APPROVED AND PASSED THE 8 day of April, 2020 on the first reading.

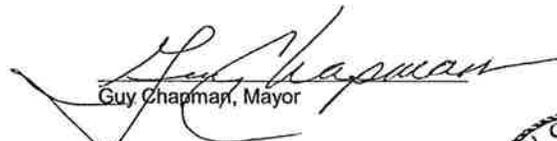
APPROVED AND PASSED THE 13 day of May, 2020 on the second reading.

APPROVED AND PASSED THE 24 day of June, 2020 on the third and final reading.

ADOPTED June 24, 2020.

ATTEST:


Bert Smith, Clerk


Guy Chapman, Mayor



(16)

WARDWELL WATER & SEWER DISTRICT
P.O. Box 728
MILLS, WYOMING 82644

OFFICE: 4150 NORTH SALT CREEK HWY.

PHONE: (307) 265-7034
FAX: (307) 265-3475

RESOLUTION
2020-1

WHEREAS, the Board of Directors of the Wardwell Water and Sewer District Met at a Special Meeting scheduled and held at the District's Office within the District Boundaries on the 11th, day February, 2020 and

WHEREAS, the Board determined that an eight- mill levy would be required by Taxation and then that said levy together with other revenues will raise the amount required by the District for the ensuing year to supply funds for paying expenses and the costs of acquiring, operating and maintaining the works and equipment of the District and for paying in full of all interests on principal of the obligations of the District.

NOW THEREFORE BE IT RESOLVED that the District requests the Natrona County Assessor in and for Natrona County, Wyoming to levy eight mills upon every dollar of assessed valuation of taxable property within the District for the purpose of paying expenses and the costs of acquiring, operating and maintaining the works and equipment of the District and for the payment of obligations of the District.

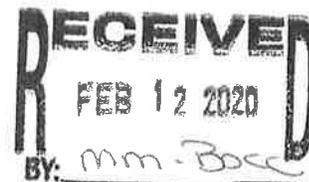
BE IT FURTHER RESOLVED that a copy of this Resolution be delivered to the County Commissioners of Natrona County and the Natrona County Clerk so that at the time and in the manner required by law for levying taxes for the county purposes, such Board of County Commissioners shall levy tax upon the assessed valuation of all taxable property within the District.

LA
Larry Keffer, President

Mark Pepper
Mark Pepper, Sec. Treas.

Mark Pepper^{Forberg}, the Secretary of the Wardwell Water and Sewer District, hereby certify that I am the Secretary of the Wardwell Water and Sewer District Board and that the above Resolution was adopted and passed by unanimous vote at a duly called Special Meeting held at the District's Office within the District boundaries on the 11th day of February 2020.

DATED THIS 11 DAY OF February, 2020
Mark Pepper
Mark Pepper, Sec/Treasurer



TOWN OF MILLS
RESOLUTION 2020-19

**A RESOLUTION FIXING THE TAX LEVEY FOR THE TOWN OF MILLS FOR THE FISCAL
YEAR ENDING JUNE 30, 2021.**

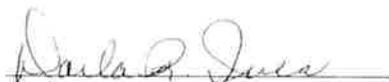
WHEREAS, the governing body of the Town of Mills, Wyoming must set the tax
levy for the fiscal year ending June 30th, 2021.

SECTION 1. That the amount of taxes to meet the expenditures of the Town of
Mills, Wyoming, for the fiscal year beginning July 1st, 2020 and ending June 30th,
2021. Shall be 8 (eight) mills, known as the general tax.

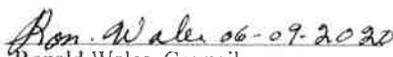
PASSED, ADOPTED AND APPROVED ON THE 9th **OF** June **2020.**


Seth Coleman, Mayor


Sara McCarthy, Council


Darla R. Ives, Council


James Hollander, Council


Ronald Wales, Council

ATTESTED:


Christine Trumbull, Town Clerk



6/10/2020 12:04:43 PM NATRONA COUNTY CLERK

Pages: 1

1082649

Tracy Good
Recorded: SA
Fee: \$12.00
TOWN OF MILLS

**AMENDMENT TO
CENTURYLINK® LOYAL ADVANTAGE® AGREEMENT**

THIS AMENDMENT NO. TWO (this "Amendment") is between **CenturyLink Sales Solutions, Inc.** as contracting agent on behalf of the applicable CenturyLink Affiliate providing the Services under the Agreement ("CenturyLink") and **NATRONA COUNTY GOVERNMENT** ("Customer"). It amends the applicable CenturyLink Loyal Advantage Agreement, as determined by CenturyLink records and as may have been previously amended (the "Agreement"). The name of the CenturyLink Affiliate providing Services to Customer is listed in a Service Attachment, each providing Affiliate separately and individually responsible for all of its own obligations. Capitalized terms not defined herein are defined in the Agreement or a Service Attachment. CenturyLink may withdraw this offer if Customer does not execute and deliver the Amendment to CenturyLink on or before August 30, 2020 ("Cutoff Date"). Further, any individual Service or Service Attachment may have its own expiration or cutoff date. Using CenturyLink's electronic signature process for the Amendment is acceptable.

CenturyLink will provide the services, bundles, offers, or packages identified in this Amendment (for purposes of this Amendment only, the "Services") under the Agreement and under the Service-specific terms and conditions identified in the Agreement or a previous amendment.

CENTURYLINK SALES SOLUTIONS, INC.

NATRONA COUNTY GOVERNMENT

Authorized Signature

Name Typed or Printed

Title

Date

Authorized Signature

Name Typed or Printed

Title

Date

Signatures
PS 1.7.14

FOR INTERNAL CENTURYLINK REFERENCE
Contract ID(s) of Agreement being amended: 838744, 851561

1. **Addition of Service Exhibit(s) or Offer Attachment(s).** Section 1 of the CenturyLink Loyal Advantage Agreement is revised to add the following Service Exhibits to the Agreement:

- **DOMESTIC CENTURYLINK IQ® NETWORKING SERVICE EXHIBIT**
- **CENTURYLINK® LOCAL ACCESS SERVICE EXHIBIT**

2. **Modifications to Pricing.**

2.1 The rates for the Domestic CenturyLink IQ Networking set forth in Section 1.3 of the Domestic CenturyLink IQ Networking Pricing Attachment are amended to:

(a) Add the new rates and/or locations set forth below. All existing rates and/or locations remain unchanged.

Tiered Gigabit Ethernet (1000 Mbps) Internet Port Other Access	Net Rate MRC	Install NRC
300 Mbps	\$654.00	\$4,000.00

(b) **NRC Waiver.** So long as Customer is not in default of any obligations under the Agreement, CenturyLink will waive the Install NRCs for Internet Ports and Private Ports. The Internet Ports and Private Ports must remain installed for at least 12 months.

2.3 **Billing Change Date.** Any changes to pricing of Customer's existing Services will be effective on the second full billing cycle following the Amendment Effective Date ("Billing Change Date.")

3. **Miscellaneous.** This Amendment will be effective on the date the last party signs (the "Amendment Effective Date") and will become part of the Agreement. All other terms and conditions in the Agreement will remain in full force and effect and be binding upon the parties. This Amendment and the Agreement set forth the entire understanding between the parties as to the subject matter, and in the event, there are any inconsistencies between the two documents, the terms of this Amendment will control.

**CENTURYLINK® LOYAL ADVANTAGE® SERVICE AGREEMENT
DOMESTIC CENTURYLINK IQ® NETWORKING SERVICE EXHIBIT**

CenturyLink IQ Networking is subject to the Local Access Service Exhibit, and the CenturyLink® Total Advantage®, Loyal Advantage®, or Master Service Agreement between Customer and CenturyLink QCC. Port types that require Rental CPE are also subject to the Rental CPE Service Exhibit. All capitalized terms that are used but not defined in this Attachment are defined in the Agreement or Service Exhibit.

1. General. Domestic CenturyLink IQ® Networking Service ("Service") is provided by CenturyLink QCC under the terms of the Agreement, this Service Exhibit, and any signed quotes or Order Forms between CenturyLink QCC and Customer.

2. Service.

2.1 Description. Service is a data, IP, and a network management solution that is designed for connectivity between Customer's sites or public Internet connectivity.

2.2 Ports. CenturyLink offers Service in the following port ("Port") types:

(a) Internet Port. Internet Ports provide public Internet connectivity.

(b) Private Port. Private Ports provide WAN connectivity between Customer sites. Customer may allocate Private Port traffic up to 10 different closed user groups. Customer may request more than 10 point-to-point closed user groups for an additional charge. Quality of service ("QoS") traffic prioritization can be used with Private Ports. Ethernet Private Ports with real-time traffic that require QoS are subject to local access limitations.

(c) CenturyLink IQ®+ Port. A CenturyLink IQ+ Port is a bundled solution that includes the following: (i) the functionality of a Private Port, (ii) Local Access, (iii) Monitor and Notification for a CenturyLink provided or approved router, (iv) End-to-End Performance Reporting, and (v) optional CenturyLink provided router as Rental CPE and Priority Queuing. The Local Access and CenturyLink provided router for domestic Service are subject to the Local Access Service Exhibit and CenturyLink Rental CPE Service Exhibit (including the applicable Detailed Description), respectively. Customer may provide a router approved by CenturyLink. Domestic Service with a CenturyLink provided router includes 8x5 NBD maintenance using ProMET® Remote Standard Service or 24x7 on-site maintenance using ProMET® On-Site Premium Service at Customer qualified sites. CenturyLink may use repackaged Rental CPE or substitute the Rental CPE with other CPE. Customer is responsible for any trouble shooting and repair of equipment on Customer's side of the router. Domestically, a CenturyLink IQ + Port is only available in a CenturyLink determined data center.

(d) CenturyLink IQ®+ Cloud Port. A CenturyLink IQ+ Cloud Port is a bundled solution that provides: (i) private connectivity between Customer's Private Port sites and Customer resources in CenturyLink-determined data centers and/or cloud service provider environments, (ii) Local Access (Data Center Access), (iii) Monitor and Notification and (iv) End-to-End Performance Reporting. CenturyLink-determined data centers may include data centers operated by CenturyLink or one of its affiliates, or data centers operated by a third-party cloud service provider. Customer can use all Private Port features defined in the Private Port section above. Access within data centers and cloud service provider environments may include shared or virtualized services where available. Customer understands that cloud-related services are contracted separately.

2.3 Network Management Service. CenturyLink Network Management Service ("NMS") is a feature available for all Ports. For CenturyLink IQ+ Cloud Ports, the only available type of NMS is Monitor and Notification. Select Management or Comprehensive Management is available with domestic Ports. The feature provides performance reporting, change management, configuration management, fault monitoring, management and notification of CPE and network related issues. Customer may also request NMS management features for devices not associated with a CenturyLink IQ Networking Port in domestic locations with CenturyLink's prior approval. The NMS management types are set forth in more detail below.

(a) Monitor and Notification. Monitor and Notification can be included with CenturyLink IQ+ Ports and CenturyLink IQ+ Cloud Ports and is an optional NMS feature for the other Port types. CenturyLink will monitor the Customer devices 24x7x365 for up/down status using ICMP ping. CenturyLink will notify Customer if no response is received for a designated period. NMS will not provide any troubleshooting and incident resolution for device or network faults. "Monitor & Notification" is the only NMS option available for devices that do not support SNMP and/or are not certified for NMS.

(b) Select Management. Select Management can be included with any eligible domestic Port, except for CenturyLink IQ+ Cloud Ports. CenturyLink will monitor Customer devices 24x7x365 for up/down status as well as provide 24x7x365 remote performance monitoring, reporting, and ticketing via an NMS online portal for devices supported by CenturyLink, fault monitoring, management, and notification (detection, isolation, diagnosis, escalation and remote repair when possible), change management supported by CenturyLink (up to 12 changes per year), asset management (device inventory), and configuration management (inventory of customer physical and logical configuration). Customer must make change management requests via Control Center at <https://controlcenter.centurylink.com>. Select Management only supports basic routing functions. NMS does not include new CPE initial configuration, lab testing, lab modeling, or on-site work of CPE. The NMS supported device list and a standard change management list are available on request and are subject to change without notice.

(c) Comprehensive Management. Comprehensive Management can be included on any eligible Port except for CenturyLink IQ+ Cloud Ports. Comprehensive Management includes all of the Select Management features as well as total customer agency and change

**CENTURYLINK® LOYAL ADVANTAGE® SERVICE AGREEMENT
DOMESTIC CENTURYLINK IQ® NETWORKING SERVICE EXHIBIT**

management (up to 24 configuration changes per year) of complex routing functions within routers, switches, and firewall modules. This includes configuration and management of complex routing, switching, device NIC cards, firewall module configurations, and basic router internal firewall functions. CenturyLink acts as the Customer's single point of contact in managing the resolution of all service, device, and transport faults covered by Comprehensive Management and will work with any third party hardware and/or transport providers the Customer has under contract until all network issues are successfully resolved. With Internet security protocol ("IPSec"), CenturyLink can configure full mesh, partial mesh, or hub-and-spoke topologies with secure tunnels for remote communication between Customer locations. IPSec is only available on approved Cisco and Adtran devices. IPSec opportunities greater than 25 devices or with other manufacturer's devices require CenturyLink approval before submitting an order.

(d) CenturyLink Responsibilities. For NMS, CenturyLink will provide Customer with a nonexclusive service engineer team, which will maintain a Customer profile for the portion of the Customer's network where the devices covered by NMS reside. CenturyLink will work with Customer to facilitate resolution of service affecting issues with Select Management or Comprehensive Management.

(e) Customer Responsibilities.

(i) Customer must provide all information and perform all actions reasonably requested by CenturyLink in order to facilitate installation of NMS. If Customer limits or restricts CenturyLink's read/write access to a device, CenturyLink cannot support configuration backups. Customer is responsible for supporting CenturyLink in access, troubleshooting, and configuration requests made in accordance with normal troubleshooting and repair support activities. For Out-of-Band management related to fault isolation/resolution, Customer will provide and maintain a POTS line for each managed device. "Out-of-Band" means a connection between two devices that relies on a non-standard network connection, such as an analog dial modem, which must be a CenturyLink certified 56k external modem. Additionally, Customer will provide a dedicated modem for each managed device. It is not mandatory that Customer have a POTS line but Customer must understand that CenturyLink will not be able to troubleshoot issues if the device covered by NMS cannot be reached. Service related outages requiring access to the device for troubleshooting and repair purposes will impact the eligibility of any associated SLA credits.

(ii) For Comprehensive Management, Customer must execute the attached Letter of Agency (Attachment 1) to authorize CenturyLink to act as Customer's agent solely for the purpose of accessing Customer's transport services.

(iii) Depending on transport type, Customer's managed devices must comply with the following set of access requirements: (A) for NMS delivered via IP connectivity with an Internet Port or other public Internet service, devices must contain an appropriate version of OS capable of establishing IPsec VPNs; and (B) for NMS delivered with a Private Port, CenturyLink will configure a virtual circuit to access Customer's device at no additional charge. CenturyLink will add the NMS network operations center to the Customer closed user group to manage the devices within Customer's network.

(iv) Customer must provide a routable valid IP address to establish the NMS connection. Customer's primary technical interface person must be available during the remote installation process to facilitate installation of NMS. All Customer devices managed under NMS must be maintained under a contract from a CenturyLink approved onsite CPE maintenance provider. The response times for which Customer contracts with its CPE maintenance provider will affect CenturyLink's timing for resolution of problems involving Customer provided devices. The performance of the CPE maintenance provider is Customer's responsibility.

(v) Customer may not reverse engineer, decompile, disassemble or apply any other process or procedure to alter any CPE, software, or other component of this Service for any purpose.

2.4 End-to-End Performance Reporting. End-to-End Performance Reporting is a feature included with all Ports, except for Ports with VPLS. Customer must include CenturyLink as a member of each closed user group. The feature includes a report based on data collected from Customer's traffic within its closed user groups and measures availability, jitter, latency, and packet delivery between Customer's edge routers, between CenturyLink's routers, and between Customer's edge routers and CenturyLink's routers. The data contained in the report is measured differently than the goals contained in the SLA applicable to the Service and is for informational purposes only. Customer is not entitled to SLA credits based on the data in the report. Customer may access the report in the Control Center portal. Some quote forms or other associated documents may use "End-to-End Performance Monitoring" to mean "End-to-End Performance Reporting".

2.5 Multicast. Multicast is an optional feature for Private Ports. The feature enables IP multicast on the CenturyLink IP network. Customer must configure its edge devices with CenturyLink designated multicast protocol specifications and use the CenturyLink designated IP address range for Customer's multicast applications. The standard feature allows up to ten sources of multicast traffic per Customer, but CenturyLink may permit a limited number of additional sources.

2.6 VPLS. Layer 2 virtual private LAN service ("VPLS") is optional feature for Private Ports only. VPLS is not available for CenturyLink IQ+ Ports or CenturyLink IQ+ Cloud Ports. Private Ports with VPLS are supported on CenturyLink-certified Cisco equipment and are limited to the following connection and encapsulation methods: Ethernet 10 Mbps, 100 Mbps, 1000 Mbps with Ethernet encapsulation; DS1 and DS3 with Frame Relay encapsulation, and OC3 with ATM encapsulation. The following features are not available with Private Ports with VPLS: (a) usage reports; (b) the Precise Burstable or Data Transfer pricing methodologies; (c) the SLA's Reporting Goal; (d) VPN Extensions and (e) End-to-End Performance Reporting.

**CENTURYLINK® LOYAL ADVANTAGE® SERVICE AGREEMENT
DOMESTIC CENTURYLINK IQ® NETWORKING SERVICE EXHIBIT**

2.7 VPN Extensions. A VPN Extension is an optional feature for layer 3 multi-protocol label switching ("MPLS") Private Ports. The feature allows Customer to extend its Layer 3 MPLS closed user groups to Customer locations that are not served by CenturyLink's MPLS network ("Remote Location"). Customer can establish a tunnel through the Internet between the Customer's CPE at the Remote Location (separately purchased and managed by Customer) and the CenturyLink network device. The Customer provided CPE must support the CenturyLink service configurations and be installed as designated by CenturyLink or as otherwise agreed upon by the parties. Customer is responsible for the installation, operation, maintenance, use and compatibility of the Remote Location CPE. Customer will cooperate with CenturyLink in setting the initial configuration for the Remote Location CPE interface with the VPN Extension Service. Customer must use IP connectivity at the Remote Location that includes a static public IP address.

(a) Exclusions. CenturyLink will not debug problems on or configure any internal or external hosts or networks (e.g., routers, DNS servers, mail servers, www servers, and FTP servers). All communication regarding the VPN Extension must be between CenturyLink and a Customer approved site contact that has relevant experience and expertise in Customer's network operations. The following features are not available with VPN Extensions: (i) End-to-End Performance Reporting; (ii) QoS; (iii) VPLS; and (iv) Multicast. VPN Extensions are not subject to the SLA.

2.8 Backbone Prioritization/Priority Queuing. Backbone Prioritization and Priority Queuing is an optional feature available with individual domestic Private Ports, CenturyLink IQ+ Ports, and CenturyLink IQ+ Cloud Ports. When this feature is configured on such Port, traffic originating from that Port will be designated at a higher class of service to the CenturyLink IP network than traffic originating from such Ports without the feature or Internet Ports. If Customer desires the feature for traffic between two or more such Ports, the feature must be ordered for each such Port. The benefit from this feature is realized during periods of high network congestion. The feature may not be available at all locations or with Multicast in certain circumstances.

3. Ordering. For purposes of this Service Exhibit, "Order Form" means an electronic order confirmation process using an architecture confirmation document ("ACD") or other document that Customer and CenturyLink mutually agree to prior to submitting a Service order request. CenturyLink must approve each Order Form and Customer must send it via e-mail, fax, or other CenturyLink-approved electronic process to CenturyLink. Subject to availability, CenturyLink will assign /29 Internet address space for Customer during the use of a Port. Neither Customer nor any End Users will own or route these addresses. Upon termination of Service, Customer's access to the IP addresses will cease. If Customer requests special sequencing for Port installation, Customer must designate a Key Port. A "Key Port" is a Port that must be available on the network before adding additional domestic Port locations. The installation of the Key Port will determine the timelines for the installation of other domestic Ports. Customer may designate one Key Port within its CenturyLink IQ Networking network topology by notifying CenturyLink in writing of that request. Unless the parties otherwise agree in writing, Customer has sole responsibility for ordering, securing installation and ensuring proper operation of any and all equipment required to enable Customer to receive the Service.

4. Charges. Customer must pay all applicable MRCs and NRCs set forth in an attached pricing attachment, offer attachment, or a valid signed CenturyLink issued quote or Order Form. Charges will commence within five days after the date CenturyLink notifies Customer that Service is provisioned and ready for use ("Service Commencement Date"). Customer may order multiple Ports with multiple pricing methodologies in accordance with the pricing methodologies set forth below. Customer may change the pricing methodology (e.g., from Flat Rate to Precise Burstable) of a Port if: (a) the Port's new MRC remains the same or greater than the old MRC, and (b) the Port starts a new Service Term that is equal to or greater than the remaining number of months in the old Service Term, subject to a 12 month minimum. CenturyLink may change rates after the completion of a Port's Service Term with 60 days' notice. The net rate MRCs set forth in the pricing attachment, offer attachment or valid signed CenturyLink issued quote or Order Form will be used to calculate Contributory Charges. Net rate MRCs are lieu of all other rates, discounts, and promotions. The End-to-End Performance Reporting, VPN Extension, SIG and Multicast features are provided on a month-to-month basis and either party may cancel a feature with 30 days' prior written notice to the other party. CenturyLink may upon 30 days prior written notice to Customer modify those features, including without limitation, their rates. If a CenturyLink IQ+ Port uses Data Center Access as the access type, that Port will be understood to be a CenturyLink IQ+ Cloud Port.

4.1 Pricing Methodologies.

(a) Flat Rate. The Flat Rate pricing methodology bills Customer a specified MRC for a given Port speed regardless of Customer's actual bandwidth utilization.

(b) Tiered. The Tiered pricing methodology caps Customer's bandwidth at the tier specified on an Order Form and bills the Customer a fixed MRC based on that bandwidth tier regardless of Customer's actual bandwidth utilization. No more than once per month, Customer may change its specific bandwidth tier (e.g., 2 Mbps to 10 Mbps) within the applicable Port classification (e.g., Ethernet, Fast Ethernet). Customer may not change its bandwidth from one Port classification to another.

(c) Precise Burstable. Usage samples are taken every five minutes throughout the monthly billing cycle. Only one sample is captured for each five-minute period, even though there are actually two samples taken; one for inbound utilization and one for outbound utilization. The higher of these two figures is retained. At the end of the billing period, the samples are ordered from highest to lowest. The top 5% of the samples are discarded. The highest remaining sample is used to calculate the usage level, which is the 95th percentile of peak usage. For each Precise Burstable Port, Customer will pay an MRC calculated by multiplying Customer's 95th percentile of peak usage in a given month by the applicable MRC per Mbps. There is a minimum usage amount within each Precise Burstable Port

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classification ("Precise Burstable Minimum"). Customer will be billed the greater of the Precise Burstable Minimum or the actual charges based upon its 95th percentile of peak usage.

5. Term; Cancellation.

5.1 Term. The term of an individual Port (and associated features/Services, if applicable) begins on the Service Commencement Date for that Port and continues for (a) the service term shown on the valid signed CenturyLink issued quote, Order Form, or the pricing attachment or (b), if a service term is not shown in a quote, Order Form, or a pricing attachment, is co-terminus with the underlying agreement. If Service is installed at multiple Customer locations or with multiple Ports at a Customer location, each separate Port (and associated features/Services) will have its own Service Commencement Date. Upon expiration of a Service Term, individual domestic Ports (and associated features/Services) will remain in effect on a month-to-month basis until canceled by either party with 60 days' notice.

5.2 Cancellation. Upon cancellation of a Service, Customer will remain liable for charges accrued but unpaid as of the cancellation date. If a Port and associated features/Services is canceled by Customer other than for Cause, or by CenturyLink for Cause, before the conclusion of its Service Term or Upgrade Service Term (as described in the "Upgrades" section), Customer will pay a "Cancellation Charge" equal to the amounts set forth below. "Cause" means the failure of a party to perform a material obligation under the Agreement, which failure is not remedied: (a) for payment defaults by Customer, within five days of separate written notice from CenturyLink of such default; or (b) for any other material breach, within 30 days after written notice (unless a shorter notice period is identified in a Service Attachment).

(a) Domestic Internet Ports or Private Ports: (i) 100% of the Port and NMS MRCs multiplied by the number of months remaining in the first 12 months of the initial Service Term (or Upgrade Service Term), if any, plus (ii) 35% of the balance of those MRCs multiplied by the number of months remaining to complete the initial Service Term (or Upgrade Service Term) beyond the first 12 months, plus (iii) the amount of any NRCs discounted or waived if the Port has not remained installed for at least 12 months.

(b) CenturyLink IQ+ Ports and CenturyLink IQ+ Cloud Ports: (i) 100% of the CenturyLink IQ+ Port or CenturyLink IQ+ Cloud Port MRC (and associated features/Service MRCs if applicable) multiplied by the number of months remaining in the first 12 months of the initial Service Term, if any; plus (ii) 75% of the those MRCs multiplied by the number of months remaining to complete 24 months of the initial Service Term, if any; plus, if applicable, (iii) 50% of those MRCs multiplied by the number of months remaining to complete the remainder of the Service Term.

5.3 Waiver of Cancellation Charges.

(a) **Upgrades.** CenturyLink will waive the Cancellation Charges for a domestic Port if Customer: (i) upgrades a Port to another Port with a higher bandwidth (e.g., from a DS1 to a DS3) within the same pricing methodology and the new Port's MRC (with Local Access) is equal to or greater than the combined MRCs of the Port and the associated Local Access Service being terminated; or (ii) upgrades the Port type to a higher Port type (e.g., from an Internet Port to a Private Port or CenturyLink IQ+ Port) within the same pricing methodology. All upgraded Ports must start a new Service Term equal to or greater than the replaced Port's remaining Service Term, subject to a 12 month minimum ("Upgrade Service Term"). If Customer cancels the upgraded Port before the completion of the Upgrade Service Term, Customer will pay the Cancellation Charges set forth in the Cancellation section above. In some cases an upgrade to a Port may trigger a Local Access charge under the Local Access Service Exhibit. Customer can upgrade a CenturyLink IQ+ Port from 8x5 NBD Remote to 24x7 On-Site maintenance or upgrade a CenturyLink IQ+ Port's NMS feature to Select Management or Comprehensive Management without restarting the Service Term.

(b) **Migration to Other CenturyLink Services.** CenturyLink will waive the Cancellation Charges for a domestic Port if Customer migrates the Port to a new Data Bundle solution (a "New Service") as long as: (i) the New Service's MRC is equal to or greater than the combined MRCs of the Port and the associated Local Access Service being terminated; (ii) the New Service's minimum service term is at least as long as the then remaining Service Term of the Port being terminated; and (iii) the New Service is available.

6. Additional Disclaimer of Warranty. In addition to any other disclaimers of warranty stated in the Agreement, CenturyLink makes no warranty, guarantee, or representation, express or implied, that all security threats and vulnerabilities will be detected or that the performance of the Services will render Customer's systems invulnerable to security breaches. Customer is responsible for Customer's own network security policy (including applicable firewall and NAT policies) and security response procedures.

7. E-mail Notification. Customer acknowledges and agrees that CenturyLink may contact Customer via e-mail at the e-mail address provided to CenturyLink when Customer ordered the Service for any reason relating to the Service, including for purposes of providing Customer any notices required under the Agreement. Customer agrees to provide CenturyLink with any change to its e-mail address.

8. AUP. All use of the Services must comply with the AUP located at <http://www.centurylink.com/legal/>, which is subject to change. CenturyLink may reasonably change the AUP to ensure compliance with applicable laws and regulations and to protect CenturyLink's network and customers. Any changes to the AUP will be consistent with the purpose of the AUP to encourage responsible use of CenturyLink's networks, systems, services, Web sites, and products.

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9. SLA. Ports other than CenturyLink IQ+ Ports or CenturyLink IQ+ Cloud Ports are subject to the CenturyLink IQ Networking Service Level Agreement ("SLA"), CenturyLink IQ+ Ports and CenturyLink IQ+ Cloud Ports are subject to the CenturyLink IQ+ Port SLA and the NMS feature is subject to the NMS SLA. Each SLA is located at <http://www.centurylink.com/legal/> and subject to change. For Customer's claims related to Service or NMS feature deficiencies, interruptions or failures, Customer's exclusive remedies are limited to those remedies set forth in the applicable SLA.

10. Other Terms.

10.1 General. Any references to a Revenue Commitment or Contributory Charges will not apply to this Service Exhibit.

10.2. Cancellation and Termination Charges. This section replaces Section 4.6, the Cancellation and Termination Charges set forth in the Agreement:

Termination. Either party may terminate a specified Service: (a) as set forth above with 60 days' prior written notice to the other party, or (b) for Cause. Customer may cancel an Order (or portion thereof) for Service prior to the delivery of a Connection Notice upon written notice to CenturyLink identifying the affected Order and Service. If Customer does so, Customer will pay CenturyLink the termination charges set forth above, in addition to any and all charges that are accrued but unpaid as of the termination date. If the Agreement is terminated by Customer for any reason other than for Cause, or by CenturyLink for Cause prior to the conclusion of the Term, all Services are deemed terminated, and Customer will pay the termination charges set forth above, in addition to any and all charges that are accrued but unpaid as of the termination date.

10.3 Installation, Maintenance and Repair. The following are supplemental terms to the Scheduled Maintenance and Local Access section of the Agreement: (a) Provision of Services is subject to availability of adequate capacity and CenturyLink's acceptance of a complete Order Form and (b) Customer is responsible for any facility or equipment repairs on Customer's side of the demarcation point. Customer may request a technician dispatch for Service problems. Before dispatching a technician, CenturyLink will notify Customer of the dispatch fee. CenturyLink will assess a dispatch fee if it determines the problem is on Customer's side of the demarcation point or was not caused by CenturyLink's facilities or equipment on CenturyLink's side of the demarcation point. "Order Form" includes both order request forms and quotes issued by CenturyLink. If a CenturyLink service requires a quote to validate the Order Form pricing, the quote will take precedence over the order request form, but not over the Service Exhibit.

10.4 Service Notices. Notices for disconnection of Service must be submitted to CenturyLink via Email at: BusinessDisconnects@Centurylink.com. Notices of non-renewal for Services must be sent via e-mail to: CenturyLink, Attn.: CenturyLink NoRenew, e-mail: Norenew@centurylink.com. Notices for billing inquiries/disputes or requests for Service Level credits must be submitted to CenturyLink via Customer's portal at <https://www.centurylink.com/business/login/> or via Email at: Care.Inquiry@Centurylink.com. All other routine operational notices will be provided by Customer to its CenturyLink sales representative.

10.5 CPNI. CenturyLink is required by law to treat CPNI confidentially. Customer agrees that CenturyLink may share CPNI within its business operations (e.g., wireless, local, long distance, and broadband services divisions), and with businesses acting on CenturyLink's behalf, to determine if Customer could benefit from the wide variety of CenturyLink products and services, and in its marketing and sales activities. Customer may withdraw its authorization at any time by informing CenturyLink in writing. Customer's decision regarding CenturyLink's use of CPNI will not affect the quality of service CenturyLink provides Customer. "CPNI" means Customer Proprietary Network Information, which includes confidential account, usage, and billing-related information about the quantity, technical configuration, type, destination, location, and amount of use of a customer's telecommunications services. CPNI reflects the telecommunications products, services, and features that a customer subscribes to and the usage of such services, including call detail information appearing in a bill. CPNI does not include a customer's name, address, or telephone number.

10.6 Conflicts. If a conflict exists among the provisions of the Service Attachments, the order of priority will be as follows: the Service Exhibit and then the Agreement.

10.7 Fees. Charges for certain Services are subject to (a) a property tax surcharge of 4.75% and (b) a cost recovery fee of 5.1% per month to reimburse CenturyLink for various governmental taxes and surcharges. Such charges are subject to change by CenturyLink and will be applied regardless of whether Customer has delivered a valid tax exemption certificate. For additional details on taxes and surcharges that are assessed, visit <https://www.centurylink.com/taxes>.

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ATTACHMENT 1

COMPREHENSIVE MANAGEMENT

LIMITED LETTER OF AGENCY

between

NATRONA COUNTY GOVERNMENT ("Customer")

and

CenturyLink Communications, LLC f/k/a Qwest Communications Company, LLC ("CenturyLink")

This limited letter of agency ("LOA") hereby authorizes CenturyLink to act as the Customer's agent for the limited purpose of contacting Customer's designated Local Exchange Carrier ("LEC"), Interexchange Carrier ("IXC"), Internet Service Provider ("ISP"), or customer premises equipment ("CPE") maintenance provider in conjunction with CenturyLink Network Management Service. Network Management Service activities will consist of working with Customer's LEC, IXC, ISP, and/or CPE maintenance provider for the purpose of: (a) extracting information concerning transmission data elements carried over Customer's network connection; (b) identifying Customer's links or data link connection identifiers ("DLCIs"); (c) opening, tracking, and closing trouble tickets with the LEC, IXC, ISP, or CPE maintenance provider on Customer's transport links or CPE when an alarm or fault has been detected; (d) dispatching CPE repair personnel on behalf of Customer to CPE for which a fault has been detected; and (e) discussing fault information with the LEC, IXC or CPE maintenance provider on behalf of Customer to facilitate resolution of the problem.

CenturyLink does not assume any of Customer's liabilities associated with any of the services the Customer may use.

The term of this LOA will commence on the date of execution below and will continue in full force and effect until terminated with 30 days written notice by one party to the other or until the expiration or termination of the Network Management Service.

A copy of this LOA will, upon presentation to LEC, IXC, ISP, and/or CPE maintenance provider, as applicable, be deemed authorization for CenturyLink to proceed on Customer's behalf.

NATRONA COUNTY GOVERNMENT

Customer Company Name

Authorized Signature of Customer

Print or Type Name

Title

Date

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1. General. This Service Exhibit is applicable only where Customer orders CenturyLink Local Access Service (the "Service") and incorporates the terms of the Master Service Agreement or other service agreement and the RSS under which CenturyLink provides services to Customer (the "Agreement"). CenturyLink may subcontract any or all of the work to be performed under this Service Exhibit. All capitalized terms that are used but not defined in this Service Exhibit are defined in the Agreement or Order.

2. Service Description and Availability.

2.1 Description. Service provides the physical connection between the Service Address and the CenturyLink Domestic Network. If a generic demarcation point (such as a street address) is provided, the demarcation point for On-Net Access will be CenturyLink's Minimum Point of Entry (MPOE) at such location (as determined by CenturyLink). Off-Net Access demarcation points will be the off-net vendor's MPOE. If the Order identifies aspects of services that are procured by Customer directly from third parties, CenturyLink is not liable for such services. Customer may request additional wiring from the demarcation point to Customer's network interface equipment (where available). If Customer requests additional wiring, CenturyLink will notify Customer of the charge to be billed to Customer. Customer may either approve or disapprove CenturyLink providing the additional wiring. Additional wiring could entail electrical or optical cabling into 1) existing or new conduit or 2) bare placement in drop down ceilings, raised floors, or mounted to walls/ceilings. Once Service is accepted by Customer, the additional wiring then becomes property of and maintained by Customer. CenturyLink will maintain Service to the demarcation point only. Customer is responsible for any facility or equipment maintenance and repairs on Customer's side of the demarcation point. All equipment owned by CenturyLink remains property of CenturyLink. Customer disclaims any interest in any equipment, property or licenses used by CenturyLink to provide Service. CenturyLink will not provide Service to a residential location, even if business is conducted at that location. Service is not a standalone service and Customer must purchase the Service in connection with another CenturyLink service for which a local loop is required.

2.2 Types of Service Technologies. CenturyLink uses the following different technologies to provide Service. Some technologies or speeds may not be available in all areas or with certain types of Service.

(a) Special Access. "Special Access" means Service using digital signal bandwidths DS0, DS1 and DS3 or Optical Carrier signal bandwidths OC3, OC12, OC48 and OC192.

(b) Ethernet Local Access ("ELA"). ELA means Service under Ethernet technology and is available at bandwidths varying from 1 Mbps to 1,000 Mbps (1G) and 10G (Cross-Connect Access only).

(c) Wavelength Local Access. "Wavelength Local Access" means Service using wave division multiplexing technology. Wavelength Local Access is available at bandwidths of 1 GbE, 10 GbE LAN PHY, 2.5 G (OC48), 10 GbE WAN PHY (OC192), 40G, OTU1, OTU2, OTU3, 1G, 2G, 4G and 10G.

(d) DSL Local Access. "DSL Local Access" means access using digital subscriber line ("DSL") technology. DSL Local Access is available at bandwidths varying from 128 kbps/64 kbps to 15000 Mbps/1000 Mbps.

2.2.1 Use of IP Connection. In some locations, CenturyLink will enable the Service using "IP Connection" which is a Layer 3, symmetrical functionality that utilizes established IP and MPLS transport technologies. In such cases, Customer agrees that it will use IP Connection functionality only for the provision of either: (i) wireline broadband Internet access (as defined in applicable Federal Communications Commission orders and regulations), or (ii) wireline broadband Internet access plus additional information services, with wireline broadband Internet access constituting a principal use. CenturyLink can provision IP Connection functionality over multiple designs with MPLS transport supporting speeds up to 1G/1G.

2.3 Types of Service. CenturyLink offers the following three types of Service: CenturyLink Provided Access, Customer Provided Access or Cross-Connect Access.

2.3.1 CenturyLink Provided Access. "CenturyLink Provided Access" or "CLPA" means either On-Net Access or Off-Net Access. "On-Net Access" is provided on the CenturyLink owned and operated network. Any access not provided on the CenturyLink owned and operated network is "Off-Net Access." Customer may request a Preferred Provider for Off-Net Access from a list of available providers with whom CenturyLink has interconnect agreements. CenturyLink will attempt to use Customer's Preferred Provider, but both final routing and the provider actually used will be chosen by CenturyLink. If CenturyLink is unable to use Customer's Preferred Provider for a specific Service Address as designated in the pricing attachment or a quote, then the rate for Service at that Service Address may be subject to change. Where available for Special Access, ELA and Wavelength Local Access, Customer may request CenturyLink to provide a separate fiber facility path for a protection system between the local access provider's serving wire center and the Service Address ("Protect Route"). Protect Route uses backup electronics and two physically separate facility paths in the provisioning of Service. If the working facility or electronics fail, or the Service performance becomes impaired, the facility is designed to automatically switch to the Service protect path in order to maintain a near-continuous flow of information between locations. Special Access and ELA are also generally available as a central office meet point at a local access provider central office to which Customer has a dedicated connection. Unless otherwise covered by another SLA, On-Net Access is subject to the On-Net Local Access Service Level Agreement located at <http://www.centurylink.com/legal/docs/Local-Access-SLA.pdf>, which is subject to change.

2.3.2 Customer Provided Access. "Customer Provided Access" or "CPA" means a local loop that Customer orders from a local access provider to connect Customer's premises to the CenturyLink Domestic Network at a connection point specified by CenturyLink.

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CenturyLink will provide Customer with a limited letter of agency ("LOA"), which is incorporated by this reference, authorizing Customer to act as CenturyLink's agent so that Customer's local access provider will connect Customer's premises to the CenturyLink Domestic Network. Customer will also need to execute a CPA-DAR Addendum for CPA POP with ELA or Wavelength Local Access. Customer will pay a CPA charge to CenturyLink when Customer uses the following: (a) Special Access CPA dedicated facilities or ELA CPA virtual local area network ("VLAN"), both of which are dedicated entrance facilities CenturyLink leases from a local access provider and that carry traffic only from CenturyLink; or (b) ELA CPA POP, which requires CenturyLink to provide space and power for the local access provider to install Ethernet equipment; or (c) Wavelength Local Access. Customer will pay a CPA charge to CenturyLink when Customer uses Special Access CPA non-dedicated facilities owned by local access providers and that carry traffic from multiple carriers, including CenturyLink, if the provider charges CenturyLink for those facilities. CPA ELA VLAN is an access type where CenturyLink will provision and assign an Ethernet virtual circuit from a CenturyLink POP to a Customer designated Ethernet facility leased from a common Ethernet service provider. This access will be used to connect to a CenturyLink VLAN assignment on a CenturyLink IQ® Networking Private Port or E-Line. CenturyLink will not bill customer a CPA charge for an IP layer 3 expansion site because Customer, not CenturyLink, is responsible for ordering a cross-connect from the IP layer 3 expansion site manager to meet CenturyLink in the IP layer 3 expansion site's meet-me-room. CPA is the responsibility of Customer and CenturyLink will not pay for or troubleshoot components of CPA.

2.3.3 Cross-Connect Access. "Cross-Connect Access" or "XCA" means: (a) an intra-POP connection between certain Customer facilities with direct access to the CenturyLink Domestic Network and the CenturyLink backbone access point (either (i) located within CenturyLink's transport area where CenturyLink allows Customer to bring its own fiber directly to the CenturyLink fiber under an executed Direct Connect Agreement ("Direct Connect") or (ii) in an area where Customer has leased space in a CPOP, a remote collocation site, or a collocation hotel under a Telecommunications Collocation License Agreement or (b) a connection between a CenturyLink-determined data center and a CenturyLink IQ Networking Port, Optical Wavelength Service ("OWS"), or E-Line ("Data Center Access") under an executed CenturyLink TS Service Exhibit with a CenturyLink IQ Networking, OWS or E-Line Service Exhibit. Data Center Access is available in bandwidths of 100 Mbps, 1G, and 10G (CenturyLink IQ Networking and OWS only). Direct Connect requires splicing of Customer and CenturyLink fibers and cross-connection of individual circuits.

2.4 RSS. Customer understands that Service is an interstate telecommunications service, as defined by Federal Communications Commission regulations and represents while using the Service, more than 10% of its usage will be interstate usage.

3. Ordering. Customer may submit requests for Service in a form designated by CenturyLink ("Order"). CenturyLink will notify Customer of acceptance of an Order for Service by delivering (in writing or electronically) the date by which CenturyLink will install Service (the "Customer Commit Date"), or by delivering the Service. Provision of Services is subject to availability of adequate capacity and CenturyLink's acceptance of an Order. In lieu of installation Service Level credits, if CenturyLink's installation of Service is delayed by more than 30 business days beyond the Customer Commit Date, Customer may terminate the affected Service without liability upon written notice to CenturyLink, provided such written notice is delivered prior to CenturyLink delivering a Connection Notice for the affected Service. This termination right will not apply where CenturyLink is constructing facilities to a new location not previously served by CenturyLink.

4. Charges. Customer will pay the rates set forth in the attached pricing attachment or a quote or Order if the rates for Service at a particular Service Address are not included in the pricing attachment, and all applicable ancillary Service charges. CenturyLink invoices MRCs in advance and NRCs in arrears. If the delivery of a Connection Notice for any Service falls on any day other than the first day of the month, the first invoice to Customer will consist of: (a) the pro-rata portion of the applicable MRC covering the period from the delivery of the Connection Notice to the first day of the subsequent month; and (b) the MRC for the following month. Charges for Service will not be used to calculate Contributory Charges. Customer will receive the rates for Service as shown on the pricing attachment regardless of whether an NPA/NXX split or overlay occurs. If CenturyLink cannot complete installation due to Customer delay or inaction, CenturyLink may begin charging Customer and Customer must pay such charges.

4.1 Ancillary Charges. Ancillary charges applicable to Service include but are not limited to those ancillary services set forth in this section. If an ancillary charge applies in connection with provisioning a particular Service, CenturyLink will notify Customer of the ancillary charge to be billed to Customer. Customer may either approve or disapprove CenturyLink providing the ancillary service.

(a) Expedite. A local loop expedite charge applies to Orders where Customer requests the delivery of Service one or more days before the Customer Commit Date. Customer may only request to expedite CenturyLink Provided Access of Special Access and ELA Orders (where underlying local access provider allows CenturyLink to order an expedited service.)

(b) Construction. Construction charges apply if; (i) special construction is required to extend Service to the demarcation point; or (ii) other activities not covered under the Building Extension Service Schedule are required beyond the demarcation point, that cause CenturyLink to incur additional expenses for provisioning the Service ("Construction"). If Customer does not approve of the Construction charges after CenturyLink notifies Customer of the charges, the Service ordered will be deemed cancelled.

(c) Multiplexing. Customer may request multiplexing for Special Access where available. CenturyLink will multiplex lower level local loop into a higher local loop, or vice-versa, for an additional charge. CenturyLink offers multiplexing at a CPOP, at an On-Net Access building or at an ILEC/CLEC facility providing the Off-Net Access. For multiplexing at a CenturyLink On-Net Access building, CenturyLink provides multiplexed circuit handoffs to Customer at the same On-Net Access Service Address. For multiplexing at ILEC/CLEC facility, CenturyLink facilitates the delivery of multiplexed circuit handoffs to Customer at a single Service Address or at

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multiple Service Addresses per Customer's request. Multiplexing is generally available at DS1 and OCn circuit levels. Pricing for multiplexing at an ILEC/CLEC facility is on an individual case basis.

(d) Changes. Ancillary change charge applies where Customer requests CenturyLink to change a local loop to a different Service Address that is within the same Customer serving wire center as the existing local loop, but a Cancellation Charge does not apply.

5. Term; Cancellation.

5.1 Term. The term of an individual Service continues for the number of months specified in the attached pricing attachment for a particular Service Address or a quote or Order for Service issued by CenturyLink if the rates for Service at a particular Service Address are not included in the pricing attachment ("Service Term"). Excluding voice loops and Data Center Access with a month-to-month Service Term, the Service Term will not be less than 12 months. Service will continue month-to-month at the expiration of the Service Term at the existing rates, subject to adjustment by CenturyLink on 30 days' written notice.

5.2 Cancellation and Termination Charges.

(a) Customer may cancel an Order (or portion thereof) prior to the delivery of a Connection Notice upon written notice to CenturyLink identifying the affected Order and Service. If Customer does so, Customer will pay CenturyLink a cancellation charge equal to the sum of: (1) for Off-Net Access, third party termination charges for the cancelled Service; (2) for On-Net Access one month's monthly recurring charges for the cancelled Service; (3) the non-recurring charges for the cancelled Service; and (4) CenturyLink's out-of-pocket costs (if any) incurred in constructing facilities necessary for Service delivery.

(b) Customer may terminate a specified Service after the delivery of a Connection Notice upon 30 days' written notice to CenturyLink. If Customer does so, or if Service is terminated by CenturyLink as the result of Customer's default, Customer will pay CenturyLink a termination charge equal to the sum of: (1) all unpaid amounts for Service actually provided; (2) 100% of the remaining monthly recurring charges for months 1-12 of the Service Term; (3) 50% of the remaining monthly recurring charges for month 13 through the end of the Service Term; and (4) if not recovered by the foregoing, any termination liability payable to third parties resulting from the termination and any out-of-pocket costs of construction to the extent such construction was undertaken to provide Service hereunder. The charges in this Section represent CenturyLink's reasonable liquidated damages and are not a penalty.

(c) Customer Provided Access—Cancellation of Connectivity after Delivery of a Connection Notice. To cancel CPA, Customer must provide CenturyLink with a written disconnect firm order confirmation ("DFOC") notice from Customer's CPA provider along with notice to cancel the CPA. If Customer fails to provide CenturyLink with the DFOC notice within 30 calendar days after CenturyLink's receipt of the notice to cancel the CPA, or if CenturyLink disconnects CPA for Cause, then CenturyLink may disconnect the CPA or require the CPA provider to do so. Customer will remain liable for charges for the connectivity to CPA (even if Customer cannot use the CPA) until: (i) Customer furnishes the required DFOC to CenturyLink; or (ii) either party cancels the associated CPA with the CPA provider.

6. Provisioning, Maintenance and Repair. CenturyLink may re-provision any local access circuits from one off-net provider to another or to On-Net Access and such changes will be treated as scheduled maintenance. Scheduled maintenance will not normally result in Service interruption. If scheduled maintenance requires Service interruption CenturyLink will: (1) provide Customer seven days' prior written notice, (2) work with Customer to minimize interruptions and (3) use commercially reasonable efforts to perform such maintenance between midnight and 6:00 a.m. local time. Customer may request a technician dispatch for Service problems. Before dispatching a technician, CenturyLink will notify Customer of the dispatch fee. CenturyLink will assess a dispatch fee if it determines the problem is on Customer's side of the demarcation point or was not caused by CenturyLink's facilities or equipment on CenturyLink's side of the demarcation point. If third-party local access services are required for the Services, Customer will: (4) provide CenturyLink with circuit facility and firm order commitment information and design layout records to enable cross-connects to CenturyLink Service(s) (provided by CenturyLink subject to applicable charges), (5) cooperate with CenturyLink (including changing demarcation points and/or equipment and providing necessary LOAs) regarding circuit grooming or re-provisioning, and (6) where a related Service is disconnected, provide CenturyLink a written DFOC from the relevant third-party provider.

7. Other Terms.

7.1 General. Any references to a Revenue Commitment or Contributory Charges will not apply to this Service Exhibit.

7.2 Cancellation and Termination Charges. This Section replaces the Cancellation and Termination Charges Section in the Agreement:

Termination. Either party may terminate a specified Service: (a) as set forth above with 60 days' prior written notice to the other party, or (b) for Cause. Customer may cancel an Order (or portion thereof) for Service prior to the delivery of a Connection Notice upon written notice to CenturyLink identifying the affected Order and Service. If Customer does so, Customer will pay CenturyLink the termination charges set forth above, in addition to any and all charges that are accrued but unpaid as of the termination date. If the Agreement is terminated by Customer for any reason other than for Cause, or by CenturyLink for Cause prior to the conclusion of the Term, all Services are deemed terminated, and Customer will pay the termination charges set forth above, in addition to any and all charges that are accrued but unpaid as of the termination date.

**CENTURYLINK® LOCAL ACCESS
SERVICE EXHIBIT**

"Cause" means the failure of a party to perform a material obligation under the Agreement, which failure is not remedied: (a) for payment defaults by Customer, within five days of separate written notice from CenturyLink of such default; or (b) for any other material breach, within 30 days after written notice (unless a shorter notice period is identified in a Service Attachment).

7.3 Out-of-Service Credit. For Services without a Service Level or applicable out-of-service credit for service interruption in a Tariff, this Out-of-Service Credit is the Service Level provision for purposes of the Agreement. Customer must request the Out-of-Service Credit and open a trouble ticket to report to CenturyLink the interruption of Service to CenturyLink. If CenturyLink causes Downtime, CenturyLink will give Customer a credit; such credit will be paid as a percentage of the Customer's MRC based on the ratio of the number of minutes of Downtime relative to the total number of minutes in the month when the Downtime occurred. No credits will be given where the Downtime is caused by: (a) the acts or omissions of Customer, its employees, contractors or agents or its End Users; (b) the failure or malfunction of equipment, applications or systems not owned or controlled by CenturyLink or its international service providers; (c) Force Majeure Events; (d) scheduled service maintenance, alteration or implementation; (e) the unavailability of required Customer personnel, including as a result of failure to provide CenturyLink with accurate, current contact information; (f) CenturyLink's lack of access to the Customer premises where reasonably required to restore the Service; (g) Customer's failure to release the Service for testing or repair and continuing to use the Service on an impaired basis; (h) CenturyLink's termination of Service for Cause or Customer's violation of the Use of Service provisions in this Appendix or in the applicable Service Exhibit; or (i) improper or inaccurate network specifications provided by Customer. "Downtime" is an interruption of Service confirmed by CenturyLink that is measured from the time Customer opens a trouble ticket with CenturyLink to the time Service has been restored. "Cause" means the failure of a party to perform a material obligation under the Agreement, which failure is not remedied: (a) for payment defaults by Customer, within five days of separate written notice from CenturyLink of such default; or (b) for any other material breach, within 30 days after written notice.

7.4 Service Notices. Notices for disconnection of Service must be submitted to CenturyLink via Email at: BusinessDisconnects@Centurylink.com. Notices of non-renewal for Services must be sent via e-mail to: CenturyLink, Attn.: CenturyLink NoRenew, e-mail: Norenew@centurylink.com. Notices for billing inquiries/disputes or requests for Service Level credits must be submitted to CenturyLink via Customer's portal at <https://www.centurylink.com/business/login/> or via Email at: Care.Inquiry@Centurylink.com. All other routine operational notices will be provided by Customer to its CenturyLink sales representative.

7.5 Acceptable Use Policy and Use of Service. CenturyLink may also terminate Service for Cause under this Section where Customer's use of the Service: (a) is contrary to the Acceptable Use Policy incorporated by this reference and posted at <http://www.centurylink.com/legal/>, (b) constitutes an impermissible traffic aggregation or Access Arbitrage, (c) avoids Customer's obligation to pay for communication services, and (d) violates the Use of Service terms or compliance terms. Customer may have obligations under 47 CFR 9.5 relating to 911 if Customer combines the Service with other products creating a VoIP or VoIP-like service that facilitates the transmission of voice services.

7.6 CPNI. CenturyLink is required by law to treat CPNI confidentially. Customer agrees that CenturyLink may share CPNI within its business operations (e.g., wireless, local, long distance, and broadband services divisions), and with businesses acting on CenturyLink's behalf, to determine if Customer could benefit from the wide variety of CenturyLink products and services, and in its marketing and sales activities. Customer may withdraw its authorization at any time by informing CenturyLink in writing. Customer's decision regarding CenturyLink's use of CPNI will not affect the quality of service CenturyLink provides Customer. "CPNI" means Customer Proprietary Network Information, which includes confidential account, usage, and billing-related information about the quantity, technical configuration, type, destination, location, and amount of use of a customer's telecommunications services. CPNI reflects the telecommunications products, services, and features that a customer subscribes to and the usage of such services, including call detail information appearing in a bill. CPNI does not include a customer's name, address, or telephone number.

7.7 Conflicts. If a conflict exists among the provisions of the Service Attachments, the order of priority will be as follows: the Service Exhibit and then the Agreement.

7.8 Fees. Charges for certain Services are subject to (a) a property tax surcharge and (b) a cost recovery fee per month to reimburse CenturyLink for various governmental taxes and surcharges. Such charges are subject to change by CenturyLink and will be applied regardless of whether Customer has delivered a valid tax exemption certificate. For additional details on taxes and surcharges that are assessed, visit <http://www.centurylink.com/taxes>. Additional rates, charges and fees for Service elements not identified in the Agreement are located in the applicable Tariff. "Tariff" includes as applicable: CenturyLink state tariffs, price lists, price schedules, administrative guidelines, catalogs, and rate and term schedules incorporated by this reference and posted at <http://www.centurylink.com/tariffs>.

8. Definitions.

"CenturyLink Domestic Network" means the CenturyLink network located within the contiguous U.S., Alaska and Hawaii, which is comprised only of physical media, including switches, circuits, and ports that are operated by CenturyLink.

"CPOP" means a CenturyLink-owned physical point of presence that lies directly on the CenturyLink Domestic Network where direct interconnection between the CenturyLink Domestic Network and a local access provider's network is possible.

**CENTURYLINK® LOCAL ACCESS
SERVICE EXHIBIT**

"Service Address" means the building where Customer receives Service. Only a building that is classified by CenturyLink as a business address can be a Service address.

**LOCAL ACCESS SERVICE EXHIBIT
PRICING ATTACHMENT**

Except as set forth in this pricing attachment, capitalized terms will have the definitions assigned to them in the Agreement or the Local Access Service Exhibit.

1. Customer will pay the MRCs and NRCs for Service at the particular Service Address; or NPA/NXX or CLLI if no Service Address is provided, set forth in the pricing table below. In addition, Customer will pay all MRCs or NRCs for any ancillary services provided as described in the Local Access Service Exhibit, including without limitation Construction charges. The MRCs and NRCs set forth below apply to new Service only and do not apply to Service ordered prior to the effective date of this pricing attachment. All MRCs and NRCs set forth in the below table apply per circuit and not per Service Address. Any modifications to any attribute of the particular Service in the pricing table below (i.e., the NPA/NXX or CLLI, Service Address, Type of Local Access, Service Term or circuit speed) will render the pricing below void, and Customer will pay the revised rates agreed upon by the parties for the particular Service at the Service Address or NPA/NXX or CLLI, as applicable. If a DS1 is bonded with one or more DS1s to create a higher speed NxDS1 at the same Service Address, the MRC for the DS1 may be multiplied by the number of bonded DS1s to determine the MRC for the NxDS1. Any future Service ordered will be charged the current quoted MRC and NRC per Service as specified on a valid CenturyLink quote or Order, not the MRC and NRC per Service specified below. No other discounts or promotions apply. Certain types of Service have separate service or agreement requirements as defined in the Local Access Service Exhibit.

NPA/NXX	Loop Tracking ID / CAR	Service Address	Type of Local Access	Service Term (in months)	Circuit Speed	Local Access Net Rate MRC	Install NRC
307232	200414742067	200 N. Center St., Casper, WY 82601	ELA Native - SingleCosLow	Co-terminus with underlying agreement	300 Mbps	\$546.00	\$0.00

2. **On-Net CenturyLink Provided Access Install NRC Discount.** Install NRCs specified above for On-Net CenturyLink Provided Access will receive a 100% discount so long as such Service ordered hereunder and subject to this discount remains installed and used by Customer for the duration of the first 12 months of the Service Term. Supplemental NRCs, including but not limited to: Construction, Extended Wiring, Local Loop Expedite, Local Loop Change Fee and Multiplexing, Customer Provided Access NRCs, and Cross-Connect NRCs are not eligible for any discount.

**ADDENDUM TO
RELEVANT CUSTOMER ORDER**

This Addendum ("Addendum") effective as of the last signature date (the "Addendum Effective Date"), by and between **CenturyLink Communications, LLC** ("CenturyLink") and **Natrona County - WY** ("Customer"), (the "Relevant Customer Order"), that Customer is executing contemporaneously with this Addendum and a copy of which is attached hereto.

WHEREAS, the parties wish to augment the Relevant Customer Order to incorporate revised terms applicable to the same.

NOW THEREFORE, the parties agree to modify the Relevant Customer Order in the following limited respects:

1. Notwithstanding anything to the contrary in the Relevant Customer Order the following language is added to the Terms and Conditions Governing this Order as Section 10:

10. Confidentiality. Neither party will, without the prior written consent of the other party: (a) disclose any of the terms of this Agreement; or (b) disclose or use (except as expressly permitted by, or required to achieve the purposes of, this Agreement) the Confidential Information of the other party. "Confidential Information" means any information that is not generally available to the public, whether of a technical, business, or other nature, and that: (a) the receiving party knows or has reason to know is confidential, proprietary, or trade secret information of the disclosing party; or (b) is of such a nature that the receiving party should reasonably understand that the disclosing party desires to protect the information from disclosure. Confidential Information will not include information that is in the public domain through no breach of this Agreement by the receiving party or is already known or is independently developed by the receiving party. Each party will use reasonable efforts to protect the other's Confidential Information and will use at least the same efforts to protect such Confidential Information as the party would use to protect its own. CenturyLink's consent may only be given by its Legal Department. A party may disclose Confidential Information if required to do so by a governmental agency, by operation of law, or if necessary in any proceeding to establish rights or obligations under this Agreement.

2. The following language is added to the Terms and Conditions Governing this Order as Section 11:

11. Governmental Immunity. Customer does not waive governmental immunity and specifically retains all immunities and defenses provided by the Wyoming Governmental Claims Act, Wyo. Stat. §§ 1-39-101, et seq.

3. **Limitation.** This Addendum shall apply to the Customer Order and shall have no applicability to any other Customer Order(s) that Customer may have submitted or may submit to CenturyLink in the future.

These terms and conditions have been read, are understood, and are hereby accepted.

CenturyLink Communications, LLC ("CenturyLink")

Natrona County - WY ("Customer")

By _____

By _____

Name _____

Name _____

Title _____

Title _____

**THIRD AMENDMENT TO THE AMOCO PROPERTY REUSE JOINT POWERS
AGREEMENT BETWEEN NATRONA COUNTY, WYOMING AND THE CITY OF
CASPER, WYOMING**

This Third Amendment to the Amoco Property Reuse Joint Powers Agreement is entered into this ____ day of _____, 2020, by and between NATRONA COUNTY, WYOMING, a body corporate and political subdivision of the State of Wyoming, (“County”) with an address of 200 North Center, Suite 115, Casper, WY 82601, and the CITY OF CASPER, WYOMING, a Wyoming Municipal Corporation (“City”), with an address of 200 N. David Street, Casper, Wyoming, 82601; the County and the City collectively referred to herein as the “Parties.”

RECITALS

WHEREAS, the Parties hereto entered into an Agreement entitled “The Amoco Property Reuse Joint Powers Agreement” (“Agreement”), dated October 20, 1998, the terms and conditions of which, as well as any subsequent amendments to the same, are hereby incorporated by reference as if fully set forth herein;

WHEREAS, Paragraph 3(B)(i) of the Agreement was previously amended by the Parties in the “First Amendment to the Amoco Property Reuse Joint Powers Agreement” (the “First Amendment”), dated May 4, 2010;

WHEREAS, the Parties desire to amend Paragraph 3(B)(i) of the First Amendment related to the maximum amount of terms a board member may serve before being required to be off the board for a certain period of time;

WHEREAS, this is being done to prevent the loss of institutional knowledge and experience if the terms of multiple board members end simultaneously.

NOW THEREFORE, the Parties agree by and between them as follows:

I: INCORPORATION OF RECITALS

The recitals set forth above are hereby incorporated herein at this point as if fully set forth as part of this Amendment.

II: AMENDMENT OF PARAGRAPH 3(B)(i) OF THE AGREEMENT

The Parties agree that Paragraph 3(B)(i) as contained in that First Amendment is hereby deleted from the Agreement in its entirety and replaced with the following:

(i)The said members shall be appointed within thirty days (30) of approval of this Agreement by the State Attorney General. These initial appointments shall be made by mutual Agreement with staggered terms of one (1) two (2) and three (3) years. Thereafter, appointments for a full term shall be for three (3) years. Appointees may be reappointed to a second and third term. Appointees may serve a maximum of three (3) consecutive terms, after which an appointee may be reappointed under the same terms and conditions of this provision after being off of the board for at least

one (1) year. Terms of initial members shall be calculated from January 1, 1998. Vacancies for unexpired terms shall be filled by appointment made by the governing body(ies) which made the appointment of the retiring member. All appointments of members of the Joint Powers Board shall be subject to revocation at the will of the governing body(ies) making such appointment at any time. All appointments of successional members shall be made by the governing body(ies) which made the appointment of the retiring member.

III: RATIFICATION OF THE AGREEMENT AS AMENDED

The Parties hereby ratify the terms and conditions of the Agreement as amended hereby. All other provisions of the October 20, 1998, Amoco Reuse Joint Powers Agreement and the Second Amendment to the Amoco Reuse Joint Powers Agreement dated February 4, 2014, shall remain in full force and effect. The provisions of the First Amendment to the Amoco Reuse Joint Powers Agreement dated May 4, 2010, are repealed and replaced in their entirety by this amendment.

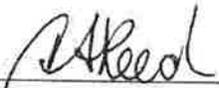
IV: MISCELLANEOUS AGREEMENTS OF THE PARTIES

This amendment may be executed by more than one copy, however, each copy shall constitute one in the same agreement.

This amendment shall constitute the entire understanding and agreement of the Parties and no amendment or modification of the terms of the Agreement of this amendment shall be valid or enforceable unless made in writing executed by all Parties hereto

IN WITNESS HEREOF, this amendment is executed on the day and year first written above.

APPROVED AS TO FORM:



Charmaine Reed

Natrona County Deputy Attorney

ATTEST:

THE BOARD OF THE COUNTY
COMMISSIONERS OF NATRONA COUNTY,
WYOMING

Tracy Good
County Clerk

Robert Hendry
Chairman

APPROVED AS TO FORM:

Wallace Trembath
Deputy City Attorney

ATTEST:

CITY OF CASPER, WYOMING,
A Municipal Corporation

Fleur Tremel
City Clerk

Steven K. Freel
Mayor

APPROVAL BY ATTORNEY GENERAL

In accordance with Wyoming Statute § 16-1-105(a)(ii), the Third Amendment to the Amoco Property Reuse Joint Powers Agreement as attached hereto was reviewed and the Attorney General determined that this modification is compatible with the laws and constitution of the State of Wyoming. The approval of this modification by the Attorney General is limited to the terms and conditions hereof, and the approval does not extend to any individual project not the financing of any individual project contemplated under the Agreement as modified.

Approved this ____ day of _____, 2020.

Bridget Hill
Attorney General
State of Wyoming

Resolution Number **27-20**

Entitled: A RESOLUTION AUTHORIZING SUBMISSION OF A CORONAVIRUS RELIEF GRANT APPLICATION TO THE STATE LOAN AND INVESTMENT BOARD ON BEHALF OF THE GOVERNING BODY FOR THE

NATRONA COUNTY PUBLIC LIBRARY

FOR THE PURPOSE OF:

funding the Natrona County Public Library COVID-19 Response as a reimbursement of expenses related to the COVID-19 novel coronavirus under the State of Wyoming's Coronavirus Relief Grant.

(State Purpose of Project)

WITNESSETH

WHEREAS, the Governing Body for the NATRONA COUNTY PUBLIC LIBRARY

desires to participate in the CORONAVIRUS RELIEF GRANT program to assist in financing this request; and

WHEREAS, the Governing Body of the NATRONA COUNTY PUBLIC LIBRARY

recognizes the need for the request; and

WHEREAS, the Coronavirus Relief Grant program requires that certain criteria be met, as described in the State Loan and Investment Board's Rules and Regulations governing the program, and to the best of our knowledge this application meets those criteria; and

WHEREAS, if any of the disbursed grant funds are later deemed to not comply with the SLIB criteria or the criteria of the CARES Act, the grant applicant agrees to repay the ineligible grant funds within 15 days of such finding to the Office of State Lands and Investments.

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BODY OF THE NATRONA COUNTY PUBLIC LIBRARY

that a grant application in the amount of

\$ 34,209.00

(Amount being requested)

be submitted to the State Loan and Investment Board for consideration at the next Board meeting after application processing to assist in funding the

Natrona County Public Library COVID-19 Response

(Name of Funds Requested)

BE IT FURTHER RESOLVED, that

Lisa B. Scroggins, Natrona County Library Director and Greta Lehnerz, Natrona County Library Business Manager

(Name and Title of Person(s))

are hereby designated as the authorized representatives of the

NATRONA COUNTY PUBLIC LIBRARY

to act on behalf of the Governing Body on all matters relating to this grant application.

PASSED, APPROVED AND ADOPTED THIS

(Date)

day of

July 2020

(Month)

(Year)

(Signature)

(Name and Title)

Attest:

(Signature)

(Name and Title)

OFFICE OF STATE LANDS AND INVESTMENTS

Coronavirus Relief Grant Program

Certification Statement

WHEREAS, the Governing Body for the
NATRONA COUNTY PUBLIC LIBRARY

Hereby Certifies that the funding being applied for under the WYOMING CORONAVIRUS RELIEF FUND GRANT program meets the requirements set forth under section 601(a) of the Social Security Act, as added by section 5001 of the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act"). It is further certified that the funding being applied for meets the requirements of 2020 Spec. Session 1, SEA No. 001.

The CARES Act provides that payments from the Grant Fund may only be used to cover costs that:

1. Are necessary expenditures incurred due to the public health emergency with respect to the Coronavirus Disease 2019;
2. Were not accounted for in the budget most recently approved as of March 27, 2020 (the date of enactment of the CARES Act); and
3. Were incurred during the period that begins on March 1, 2020 and ends on December 30, 2020.

If any of the disbursed grant funds are later deemed to not comply with the SLIB criteria or the criteria of the CARES Act, the grant applicant agrees to repay the ineligible grant funds within 15 days of such finding to the Office of State Lands and Investments.

BE IT FURTHER RESOLVED, that

Lisa Scroggins, Executive Director and Greta Lehnerz, Business Manager

(Name and Title of Person(s))

are hereby designated as the authorized representatives of the
Certification Statement

to act on behalf of the Governing Body on all matters relating to this grant application.

PASSED, APPROVED AND ADOPTED THIS

8th

(Date)

day of

July

(Month)

2020

(Year)

(Signature)

Kate Sarosy, Natrona County Library Board of Trustees

(Name and Title)

Attest:

(Signature)

(Name and Title)

State of Wyoming State Loan and Investment Board Coronavirus Relief Grant Program

APPLICANT INFORMATION

Applicant Category: Government Entity: County Entity Medical Entity: Tribal Council:

Applicant:

Mailing Address:

City: State: Zip:

E-Mail Address: Phone #:

Tax ID #:

Contact Person (Name and Title):

Phone #: E-Mail Address:

WYOMING CORONAVIRUS RELIEF FUND INFORMATION

CRG Funding Name:

Amount of Funding Requested: NOTE: This amount must match the amount on the submitted resolution

List all other funding sources for the project in the table below including the status and amount expended, if any.

Other Funding Source Description	Amount	Status*		Amount Expended	Funding Percentage
		Pending	Approved		
					0.00%
					0.00%
					0.00%
					0.00%
Total Other Funding	\$0			\$0	

*Documentation to support the status must be attached to the Application Packet.

Estimated Total Funding Request:

Balance of Request Unfunded:
Auto Calculated
(Estimated Project Costs less Amount Expended)

Estimated Funding Percentage: (Final Funding Percentage is Determined by Board Approved Amount)
% is auto calculated
(Amount Requested/Estimated Project Costs)

I certify that I am authorized to sign this application on behalf of our governing body, and the applicant will comply with all appropriate requirements, if approved. To the best of my knowledge and belief, the information in this application is true and correct. I understand the State may review any relevant documents or instruments relating to the analysis of this application.

I further certify by signing and submitting this application that all program eligibility criteria have been reviewed and this application reflects the criteria.

I understand that if grant funds spent are later found to be ineligible, the applicant will be requested to pay back the ineligible funds within 15 days to the Office of State Lands and Investments.

Signature _____ Date _____

Lisa B. Scroggins, Executive Director

Name and Title (typed)

Applicant: NATRONA COUNTY PUBLIC LIBRARY

CRG Request Type Natrona County Public Library COVID-19 Response

1. Are the funds being applied for to cover costs for necessary expenditures incurred due to the public health emergency with respect to the COVID-19?

Yes	No
x	

2. Are the funds being applied for used to cover costs that were not accounted for in the budget most recently approved as of March 27, 2020?

Yes	No
x	

3. Are the funds being applied for used to cover costs that were incurred during the period that begins on March 1, 2020, and ends on December 30, 2020?

Yes	No
x	

4. Will the funds be fully expended (not just encumbered) by December 30, 2020?

Yes	No
x	

5. Will there be reporting requirements (in addition to SLIB's) related to the use of the funds, if any? If yes, please explain below.

Yes	No
x	

As a branch of Natrona County that operates with an autonomous board of trustees, we will submit a duplicate copy of grant reporting to the Natrona County Board of Commissioners and to the Natrona County Clerk for their records. This is an internal accounting practice and is intended to ensure adequate grant oversight.

6. Please provide a description of the amount of all federal loans, grants or aid provided for COVID-19 related purposes including from the Coronavirus Aid, Relief and Economic Security (CARES) Act, Public Law 116-136, or other similarly purposed federal act for which the agency/entity is eligible for.

As far as I am aware, the Natrona County Library is not eligible for any grants for COVID-19 related expenses other than the Cononavirus Relief Grant Program to which this application pertains.

7. Please provide a description of the amount of all federal loans, grants or aid provided for COVID-19 related purposes including from the Coronavirus Aid, Relief and Economic Security (CARES) Act, Public Law 116-136, or other similarly purposed federal act for which the agency/entity has applied for.

The Natrona County Library has not applied for any other loans, grants or aid provided for COVID-19 related purposes because we do not qualify for any additional benefits.

8. Please provide a description of the amount of all federal loans, grants or aid provided for COVID-19 related purposes including from the Coronavirus Aid, Relief and Economic Security (CARES) Act, Public Law 116-136, or other similarly purposed federal act for which the agency/entity has received.

Not Applicable.

Applicant: NATRONA COUNTY PUBLIC LIBRARY

CRG Request Type Natrona County Public Library COVID-19 Response

1. Briefly describe the reason for which you are requesting funding. (Please attach extra pages if needed.)

In response to the COVID-19 novel Coronavirus, the Natrona County Library facility was closed to the public on March 16, 2020; however, NCL shifted resources so that we could continue to provide services through virtual and digital methods.

The library quickly discovered community demand for digital materials was much greater than ever before, so the library increased its digital collection. This increased demand was directly related to COVID-19 as the need arose from individuals being confined to their homes due to the virus. The increase in digital content provided access to reading materials for students who were confined to virtual education at home as well as adults, and addressed both educational and mental/emotional needs during the unprecedented times of community-wide isolation. Addressing this community need that resulted from COVID-19 required the purchase of additional digital services as noted in #2 below.

When the library reopened to the public on May 26, 2020, it followed a Staged Reopening Plan that was approved by the Casper-Natrona County Health Department. The plan included protective health measures such as:

- Requiring the use of hand sanitizer for patrons and staff,
- Requiring the use of face masks for staff and recommending them for patrons (if patrons do not have a mask and want one, we provide one upon request) Requiring use of face masks for everyone attending book sales events (staff, volunteers AND shoppers),
- Requiring the use of gloves for specific job duties,
- Ongoing disinfecting hard surfaces and a thorough top-to-bottom sanitizing of the facility during the closure,
- Installing spittle/sneeze shields at all public service desks,
- Establishing 6' social distancing standards on the floor using "social distance" rugs, decals, and tape,
- Setting up 6' social distancing barriers at service desks using line stanchions,
- Providing new bags for patrons to use to transport their items (historically we used donated/recycled "Wal-Mart" bags, but there is no efficient way to sanitize these quickly),
- Signage for the library interior and exterior explaining new protocols regarding covid-19,
- Taking temperatures as part of a daily staff pre-shift screening measure.

Implementing these protective health measures required the purchase of supplies as noted in #2 below.

In addition, and directly related to the COVID-19 pandemic, the number of digital content users in Natrona County increased. From March 8, through June 30, 2020 the Natrona County Library added 779 new and unique users to our Overdrive digital platform alone, which means that there was an increase in Natrona County residents who were relying on our digital collection to use our collection during the pandemic.

2. Describe how the funds being applied for are to cover costs for necessary expenditures incurred due to the public health emergency with respect to the COVID-19. (Please attach extra pages if needed.)

The funds were used to purchase the supplies needed to implement the measures outlined in our staged reopening document (as outlined above.) Specifically, we purchased disposable masks, washable/reusable masks, gloves, sanitizing wipes, disinfectant, hand soap, vinyl gloves, hand sanitizer, plexiglass and hardware to make sneeze shields, plastic bags for patron materials at checkout, signs to communicate COVID-19 reopening information, and no-touch thermometers. In addition, we also increased the quantity of cleaning towels from our supply company that are used to disinfect hard surfaces. The funds were used as follows:

SUPPLIES:

03/12/2020 Family Dollar	\$69.75	Bleach, buckets and funnels for filling disinfectant bottles	03/13/2020
NORCO	\$500.48	Virucidal disinfectant, hand soap, vinyl gloves, and hand sanitizer	
04/01/2020 Eagle Supply Co.	\$36.00	Rental - Additional cleaning towels for sanitization use	
04/24/2020 Amazon	\$123.54	Gloves and hand sanitizing wipes	
04/24/2020 Janway Company	\$1,670.86	Masks, floor decals, rug "social distance"	
05/11/2020 Home Depot	\$109.45	Plexiglass for spittle/sneeze shields	
05/12/2020 Wyo Safety Supply	\$795.00	Disposable masks	
05/14/2020 Bloedorn Lumber	\$70.19	Plexiglass for additional spittle/sneeze shields	
05/19/2020 Sam's Club	\$27.96	Bags for patron materials & holds delivery	
05/20/2020 Amazon	\$89.16	No-touch thermometers	
05/20/2020 Home Depot	\$26.20	Supplies for spittle/sneeze shields	
05/22/2020 NixSigns	\$690.38	Signage for COVID-19 restrictions for reopening	
06/19/2020 NORCO	\$225.09	Hand sanitizer	
06/26/2020 NORCO	\$58.32	Hospital grade disinfectant	
06/29/2020 Wyo Safety Supply	\$375.00	Disposable Masks for patron use	
07/01/2020 Wyo Safety Supply	\$375.00	Disposable Masks for booksales	
07/02/2020 NORCO	\$654.34	Touchless hand sanitizer and hand soap stands/dispensers	
Supplies subtotal	\$6,347.15		

DIGITAL CONTENT:

OverDrive (605 titles)	\$12,500.30	Digital Content - Youth Services (Children & Teen specific)
OverDrive (520 titles)	\$15,362.01	Digital Content - Mixed; For all age groups
Digital content subtotal	\$27,862.31	

Total COVID-19 expenses \$34,209.46

3. Describe how the funds being applied for were used or are to be used to cover costs that were not accounted for in the budget most recently approved as of March 27, 2020 for necessary expenditures incurred due to the public health emergency with respect to the COVID-19. (Please attach extra pages if needed.)

The funds were used to purchase the supplies needed to implement our reopening plan that was approved by the Casper-Natrona County Health Department, and to increase our digital collection to meet the needs and demands of students who transitioned to virtual at-home education and community members who were isolated and/or quarantined due to the COVID-19 pandemic. These were unbudgeted expenses, and were paid for with funds that were reallocated from other budgeted expenses. (As of the date of this application, Natrona County Public Library has incurred \$6,347.15 in supply expenses and \$34,139.71 in digital collection expenses that were not included in our original budget.)

Resolution Number **28-20**

Entitled: A RESOLUTION AUTHORIZING SUBMISSION OF A CORONAVIRUS RELIEF GRANT APPLICATION TO THE STATE LOAN AND INVESTMENT BOARD ON BEHALF OF THE GOVERNING BODY FOR THE

Natrona County Commission

FOR THE PURPOSE OF:

COVID-19 expense reimbursement, Casper/Natrona County International Airport.

(State Purpose of Project)

WITNESSETH

WHEREAS, the Governing Body for the Natrona County Commission

desires to participate in the CORONAVIRUS RELIEF GRANT program to assist in financing this request; and

WHEREAS, the Governing Body of the Natrona County Commission recognizes the need for the request; and

WHEREAS, the Coronavirus Relief Grant program requires that certain criteria be met, as described in the State Loan and Investment Board's Rules and Regulations governing the program, and to the best of our knowledge this application meets those criteria; and

WHEREAS, if any of the disbursed grant funds are later deemed to not comply with the SLIB criteria or the criteria of the CARES Act, the grant applicant agrees to repay the ineligible grant funds within 15 days of such finding to the Office of State Lands and Investments.

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BODY OF THE Natrona County Commission

that a grant application in the amount of \$ **46,854.83**

(Amount being requested)

be submitted to the State Loan and Investment Board for consideration at the next Board meeting after application processing to assist in funding the

Casper/Natrona County International Airport COVID Reimbursement Request

(Name of Funds Requested)

BE IT FURTHER RESOLVED, that

Glenn S. Januska, Airport Director

(Name and Title of Person(s))

are hereby designated as the authorized representatives of the Natrona County Commission to act on behalf of the Governing Body on all matters relating to this grant application.

PASSED, APPROVED AND ADOPTED THIS

21st day of **July** **2020**

(Date)

(Month)

(Year)

(Signature)

(Signature)

(Name and Title)

(Name and Title)

Attest:

(Signature)

(Signature)

(Name and Title)

(Name and Title)

LICENSE

Date 7-2-2020 Road CR 319 Oregon Trail

The BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF NATRONA, STATE OF WYOMING, (hereinafter called the "Board", hereby grants a license to Marc Nogle

(hereinafter called the "Licensee"), to construct, maintain, use and operate waterline (hereinafter called the "Facility"), located in Section 9 Township 31-83 N, Range W, upon the property of the County of Natrona, acquired for and utilized in the operation and maintenance of a county road in the locations and positions and in strict accordance with the specifications shown on the print dated _____, attached hereto, marked Exhibit "A", and by this reference specifically made a part hereof.

This license is granted upon such express terms and conditions as are inserted below, and should the Licensee at any time violate any of the said terms or conditions herein contained or use or attempt to use said facility for any other or different purpose than that above specified, or refuse or fail to comply with any rule or direction of the County Road and Bridge Superintendent, made by said Superintendent under his general supervisory powers of control and supervision of county roads for the use and safety of the general public, then the Board may, at its option, immediately revoke this license.

This license is subject to the following conditions:

FIRST. The work of constructing, altering and maintaining of the Facilities shall be prosecuted and completed in a good and workmanlike manner at the sole expense of the Licensee and under supervision of, and to satisfactorily meet the specifications of the County Road and Bridge Superintendent. Such work of construction, alteration and maintenance of the Facility shall be done in such a manner as to in no way interfere with the use, operation and maintenance by the County of Natrona of a county road for county road purposes, and in such manner as to in no way endanger the general public in use of said county road right-of-ways.

SECOND. The said Licensee shall give to the Board, through the County Road & Bridge Superintendent, at least ten days notice, in writing, before entering upon the county road right-of-way for the purpose of construction or alteration of the Facility or to make necessary repairs, except in case of genuine emergency requiring immediate repair, then in that event, the Licensee shall notify the Board, through the County Road & Bridge Superintendent, or local maintenance authority immediately enter upon the county road right-of-way and make necessary repairs. Licensee shall be responsible for any repairs necessary to road or right-of-way for 180 days after completion of construction.

THIRD. The said Licensee agrees to forever indemnify and defend the Board, their agents or employees, against and save them harmless from all liability for damage to property or injury to or death of persons, including all costs and expenses incident hereto, arising wholly or in part from or in connection with the existence of, construction, alteration, maintenance, repair, renewal, reconstruction, operation, use or removal of the said Facility as it pertains to county road property.

FOURTH. The Board reserves the right to use, occupy and enjoy its right-of-way for a county road and for county road purposes, in such manner and at such times as it shall desire, the same as if the instrument had not been executed by it. If any such use shall at any time necessitate any change in the location or manner of use of said Facility, or any part thereof, such change or alteration shall be made by the Licensee, at the sole expense of said Licensee, upon the demand of the Board, through the County Road & Bridge Superintendent, and neither the Board nor the County of Natrona shall be liable to the said Licensee on account thereof, or on account of any damage growing out of any use which the County of Natrona or the Board, or either of them, may make of its said right-of-way.

FIFTH. The Board shall have the right at any time to revoke this license by the giving of thirty (30) days notice in writing to the said Licensee, and at the expiration of the time limited by said notice, or upon the express revocation of this license for any of the causes enumerated herein, the Licensee shall promptly and in the manner directed by the Board, through the County Road & Bridge Superintendent, remove said Facility and each and every part thereof, hereby authorized, from the premises of the county road right-of-way and leave said premises in the same condition in which they were before the installation of said Facility. Upon the refusal or failure of the Licensee so to do, the Board may remove the Facility and each and every part thereof and restore the county road right-of-way to the same condition as before the granting of this license, and the Licensee hereby agrees promptly to pay to the County of Natrona the cost of said removal of the Facilities, and each and every part thereof.

SIXTH. The County of Natrona and the Board, for the purpose of this licensee, hereby disclaims any representation or implication that it retains any title in any county road right-of-way other than a perpetual easement for road purposes for so much land as described by the instrument conveying such easement. The Licensee by these present accepts notice and agrees that any expenses or damages incurred by said Licensee as a result of this disclaimer shall be borne by said Licensee at no expense whatsoever to the Board or the County of Natrona. It shall be also understood that on Access Facility Highways, ingress and egress shall be limited to those locations as designated by the Board, or their Designated Representative, and shown on plans on file in the office of the County Road Department and County Surveyor

SEVENTH. The waiver of any breach of any of the terms or conditions of this License shall be limited to the act or acts constituting such breach, and shall never be construed as being a continuing or permanent waiver of any such term or condition, all of which shall be and remain in full force and effect, as to the future acts or happenings, notwithstanding any such individual waiver or any breach thereof.

EIGHTH. The said Licensee agrees to locate underground facilities when needed by the County or other users for future construction and maintenance activities. This location information will include the marking of the facility on the ground, as specified by W.S. §37-12-301 et seq., with the appropriate color and including the nature and elevation of the utility and shall be tied both horizontally and vertically, by coordinates, by a licensed land surveyor to a public land survey corner. This information shall be shown on plans created by the utility company or facility owner and a copy will be sent to the Natrona County Surveyor's Office in Casper, Wyoming. Costs for identifying and locating the facility will be the responsibility of the utility company or facility owner on County right-of-ways.

No official or employee of the County of Natrona, other than the Board of County Commissioners, shall have authority to waive any term or condition herein contained. Any amendments to this license agreement shall be in writing, signed by the licensee and designated representative of the county commissioners.

Date of Commencement 7-15-2020
(Five (5) day notice must be given County Road & Bridge Superintendent before start of construction)

Date of Completion 7-20-2020
(County Road & Bridge Superintendent must be notified within five (5) days after construction)

IN WITNESS WHEREOF, The Board of County Commissioners, has caused this license to be executed on the _____ day of _____, A.D., 19 _____.

COUNTY OF NATRONA
By Michael Hays 7/4/2020
Road & Bridge Superintendent
By _____
County Surveyor
By _____
Chairman of the Board of County Commissioners.

ATTEST:

County Clerk

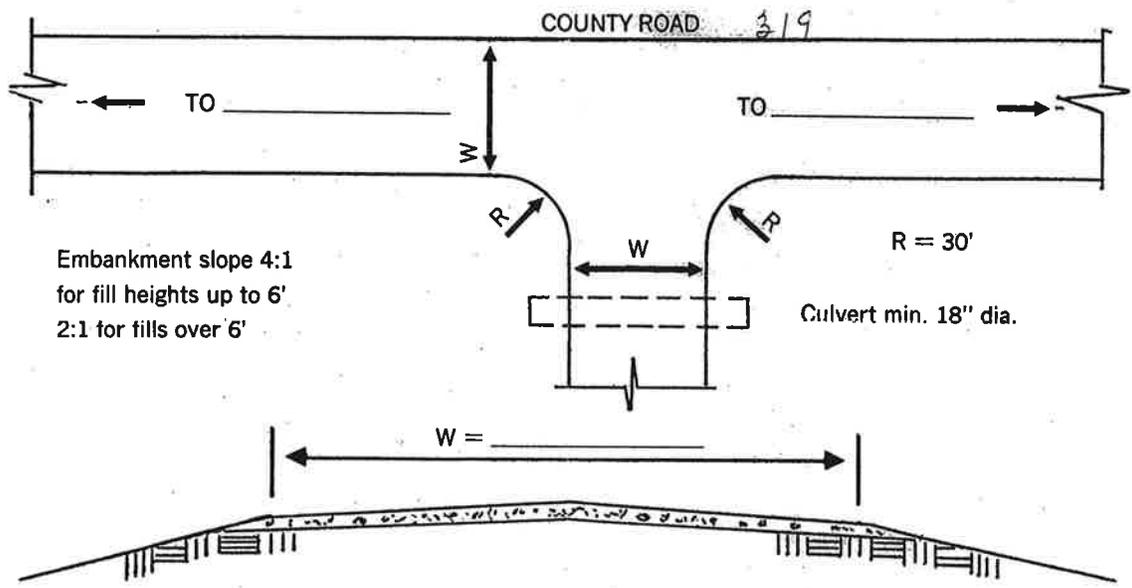
The undersigned, the Licensee mentioned in the forgoing License, hereby accepts the same, subject to the terms and conditions contained therein.
ATTEST: _____ Secretary Marc Nogle President.

(the original instrument must be recorded in the County Clerks office by Licensee)

COUNTY OF NATRONA
APPLICATION FOR AN APPROACH

Applicant: Marc Nogle

Address: 6010 Bell Valley Rd Casper, WY 82604 Phone 307-237-4292



Embankment slope 4:1
 for fill heights up to 6'
 2:1 for fills over 6'

Furnish the Following Information:

- 1) Location: Section 9, Township 31 North, Range 83 West.
- 2) County Road Designation _____
- 3) Surface of County Road _____
(Surface of approach must be same as surface of County Road.)
- 4) Soil Type _____
- 5) Sight Distance on County Road _____
- 6) Reason for Approach _____

7) Requirements:

- A) Approach must meet specifications for construction and surfacing of subdivision roads and streets.
- B) All disturbed areas must be seeded with a mixture and using methods approved by County Road Superintendent.
- C) Any changes to the approach required because of change to the County Road will not be the responsibility of the County.

Approved:

Michael R. [Signature]
 Road & Bridge Superintendent

Same
 Applicant _____ Date _____

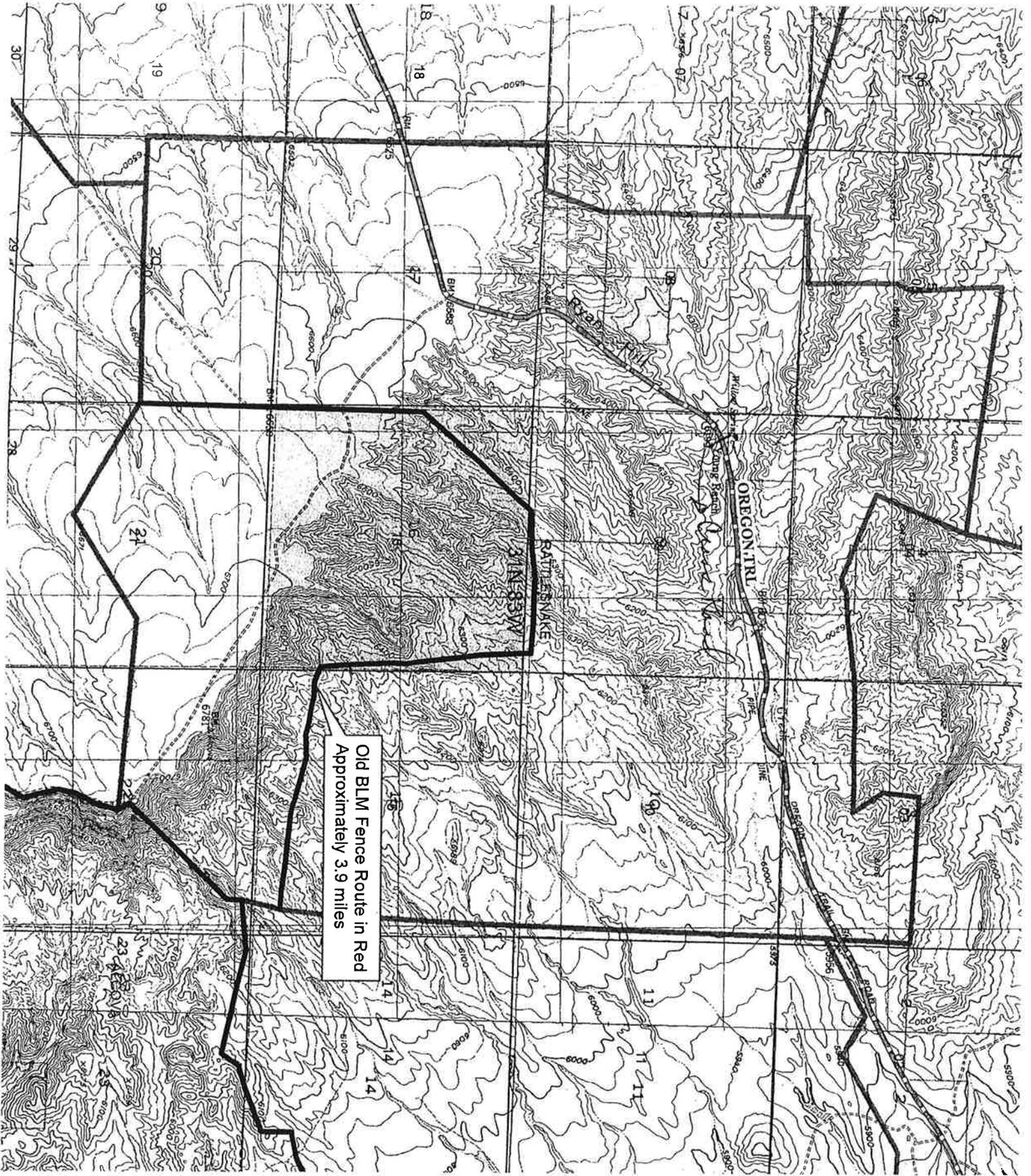
County Surveyor _____

Registered Engineer
 or
 Land Surveyor _____ Date _____

County Commissioner _____

Approval Date: _____

Completion Date: _____

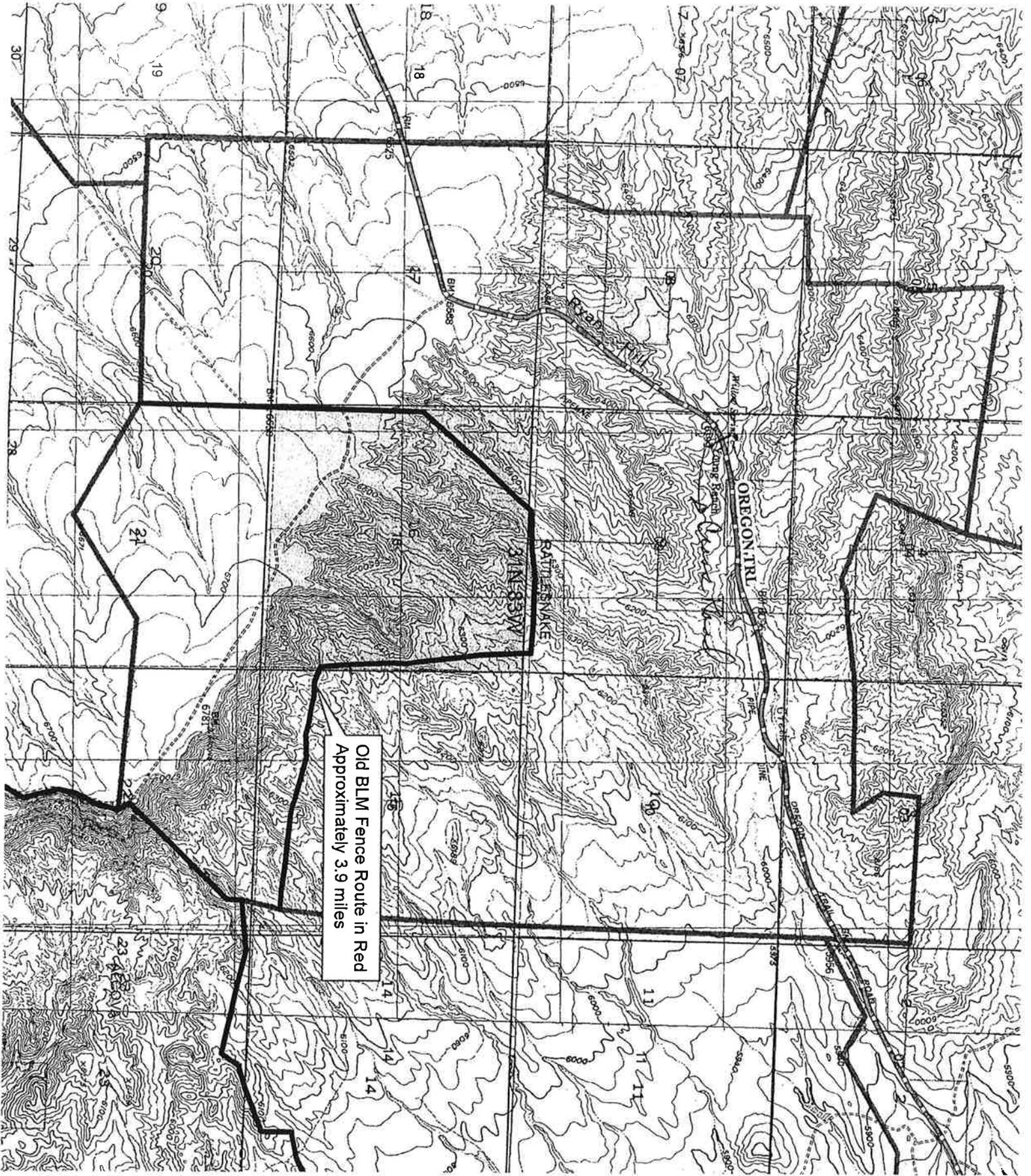


Old BLM Fence Route in Red
Approximately 3.9 miles

SALT LAKE

OREGON TRL

21 N 33 W



Old BLM Fence Route in Red
Approximately 3.9 miles

SALT LAKE

OREGON TRL

21 N 33 W

LICENSE

Date 7-1-2020 Road Bessemer Bend - 308

The BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF NATRONA, STATE OF WYOMING, (hereinafter called the "Board"), hereby grants a license to Colleen Morrison

(hereinafter called the "Licensee"), to construct, maintain, use and operate _____ (hereinafter called the "Facility"), located in Section 3 Township 32 N, Range 81 W, upon the property of the County of Natrona, acquired for and utilized in the operation and maintenance of a county road in the locations and positions and in strict accordance with the specifications shown on the print dated 7-1-20, attached hereto, marked Exhibit "A", and by this reference specifically made a part hereof.

This license is granted upon such express terms and conditions as are inserted below, and should the Licensee at any time violate any of the said terms or conditions herein contained or use or attempt to use said facility for any other or different purpose than that above specified, or refuse or fail to comply with any rule or direction of the County Road and Bridge Superintendent, made by said Superintendent under his general supervisory powers of control and supervision of county roads for the use and safety of the general public, then the Board may, at its option, immediately revoke this license.

This license is subject to the following conditions:

FIRST. The work of constructing, altering and maintaining of the Facilities shall be prosecuted and completed in a good and workmanlike manner at the sole expense of the Licensee and under supervision of, and to satisfactorily meet the specifications of the County Road and Bridge Superintendent. Such work of construction, alteration and maintenance of the Facility shall be done in such a manner as to in no way interfere with the use, operation and maintenance by the County of Natrona of a county road for county road purposes, and in such manner as to in no way endanger the general public in use of said county road right-of-ways.

SECOND. The said Licensee shall give to the Board, through the County Road & Bridge Superintendent, at least ten days notice, in writing, before entering upon the county road right-of-way for the purpose of construction or alteration of the Facility or to make necessary repairs, except in case of genuine emergency requiring immediate repair, then in that event, the Licensee shall notify the Board, through the County Road & Bridge Superintendent, or local maintenance authority immediately enter upon the county road right-of-way and make necessary repairs. Licensee shall be responsible for any repairs necessary to road or right-of-way for 180 days after completion of construction.

THIRD. The said Licensee agrees to forever indemnify and defend the Board, their agents or employees, against and save them harmless from all liability for damage to property or injury to or death of persons, including all costs and expenses incident hereto, arising wholly or in part from or in connection with the existence of, construction, alteration, maintenance, repair, renewal, reconstruction, operation, use or removal of the said Facility as it pertains to county road property.

FOURTH. The Board reserves the right to use, occupy and enjoy its right-of-way for a county road and for county road purposes, in such manner and at such times as it shall desire, the same as if the instrument had not been executed by it. If any such use shall at any time necessitate any change in the location or manner of use of said Facility, or any part thereof, such change or alteration shall be made by the Licensee, at the sole expense of said Licensee, upon the demand of the Board, through the County Road & Bridge Superintendent, and neither the Board nor the County of Natrona shall be liable to the said Licensee on account thereof, or on account of any damage growing out of any use which the County of Natrona or the Board, or either of them, may make of its said right-of-way.

FIFTH. The Board shall have the right at any time to revoke this license by the giving of thirty (30) days notice in writing to the said Licensee, and at the expiration of the time limited by said notice, or upon the express revocation of this license for any of the causes enumerated herein, the Licensee shall promptly and in the manner directed by the Board, through the County Road & Bridge Superintendent, remove said Facility and each and every part thereof, hereby authorized, from the premises of the county road right-of-way and leave said premises in the same condition in which they were before the installation of said Facility. Upon the refusal or failure of the Licensee so to do, the Board may remove the Facility and each and every part thereof and restore the county road right-of-way to the same condition as before the granting of this license, and the Licensee hereby agrees promptly to pay to the County of Natrona the cost of said removal of the Facilities, and each and every part thereof.

SIXTH. The County of Natrona and the Board, for the purpose of this license, hereby disclaims any representation or implication that it retains any title in any county road right-of-way other than a perpetual easement for road purposes for so much land as described by the instrument conveying such easement. The Licensee by these present accepts notice and agrees that any expenses or damages incurred by said Licensee as a result of this disclaimer shall be borne by said Licensee at no expense whatsoever to the Board or the County of Natrona. It shall be also understood that on Access Facility Highways, ingress and egress shall be limited to those locations as designated by the Board, or their Designated Representative, and shown on plans on file in the office of the County Road Department and County Surveyor

SEVENTH. The waiver of any breach of any of the terms or conditions of this Licensee shall be limited to the act or acts constituting such breach, and shall never be construed as being a continuing or permanent waiver of any such term or condition, all of which shall be and remain in full force and effect, as to the future acts or happenings, notwithstanding any such individual waiver or any breach thereof.

EIGHTH. The said Licensee agrees to locate underground facilities when needed by the County or other users for future construction and maintenance activities. This location information will include the marking of the facility on the ground, as specified by W.S. §37-12-301 et seq., with the appropriate color and including the nature and elevation of the utility and shall be tied both horizontally and vertically, by coordinates, by a licensed land surveyor to a public land survey corner. This information shall be shown on plans created by the utility company or facility owner and a copy will be sent to the Natrona County Surveyor's Office in Casper, Wyoming. **Costs for identifying and locating the facility will be the responsibility of the utility company or facility owner on County right-of-ways.**

No official or employee of the County of Natrona, other than the Board of County Commissioners, shall have authority to waive any term or condition herein contained. Any amendments to this license agreement shall be in writing, signed by the licensee and designated representative of the county commissioners.

Date of Commencement 7-1-2020
(Five (5) day notice must be given County Road & Bridge Superintendent before start of construction)

Date of Completion 12-31-2020
(County Road & Bridge Superintendent must be notified within five (5) days after construction)

IN WITNESS WHEREOF, The Board of County Commissioners, has caused this license to be executed on the _____ day of _____, A.D., 19 _____.

COUNTY OF NATRONA
By Michael D. Hahn 7/6/2020
Road & Bridge Superintendent
By _____
County Surveyor
By _____
Chairman of the Board of County Commissioners.

ATTEST:

County Clerk

The undersigned, the Licensee mentioned in the forgoing License, hereby accepts the same, subject to the terms and conditions contained therein.
ATTEST:

Secretary
Colleen Morrison
President.

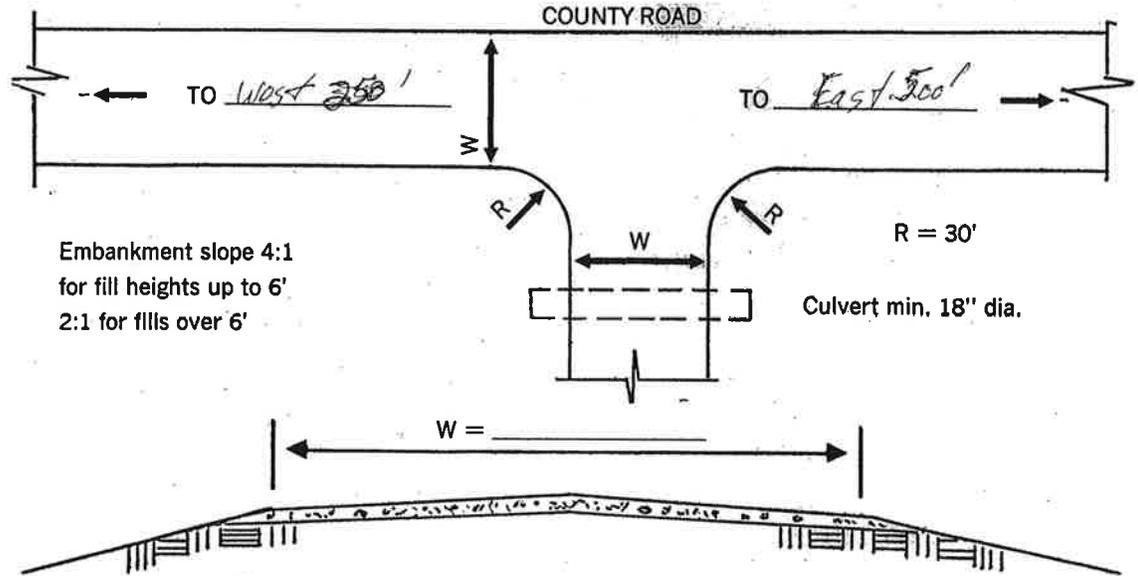
29-20-15

COUNTY OF NATRONA APPLICATION FOR AN APPROACH

12390

Applicant: Colleen Morrison

Address: 12429 Bessemer Bend Rd Phone 307-262-6101



Furnish the Following Information:

- 1) Location: Section 3, Township 32 North, Range 81 West.
- 2) County Road Designation Bessemer Bend Rd.
- 3) Surface of County Road Asphalt
(Surface of approach must be same as surface of County Road.)
- 4) Soil Type _____
- 5) Sight Distance on County Road 1/2 mile
- 6) Reason for Approach access to pasture

7) Requirements:

- A) Approach must meet specifications for construction and surfacing of subdivision roads and streets.
- B) All disturbed areas must be seeded with a mixture and using methods approved by County Road Superintendent.
- C) Any changes to the approach required because of change to the County Road will not be the responsibility of the County.

Approved:

Michael D. Hays 7/6/2020
Road & Bridge Superintendent

Colleen Morrison 7-1-2020
Applicant Date

County Surveyor _____

Registered Engineer or Land Surveyor _____ Date _____

County Commissioner _____

Approval Date: _____

Completion Date: _____

EXHIBIT 'A'

No. 29-20-15

COUNTY OF NATRONA

APPLICATION FOR road/gate access to pasture.

Applicant: Colleen Morrison

Address: 12429 Brossmer Bend Rd. Phone: 307-262-6101

Furnish the Following Information:

1) Location: Section 3, Township 32 North, Range 81 West.

2) County Road Designation Brossmer Bend Road

3) Surface of County Road Asphalt

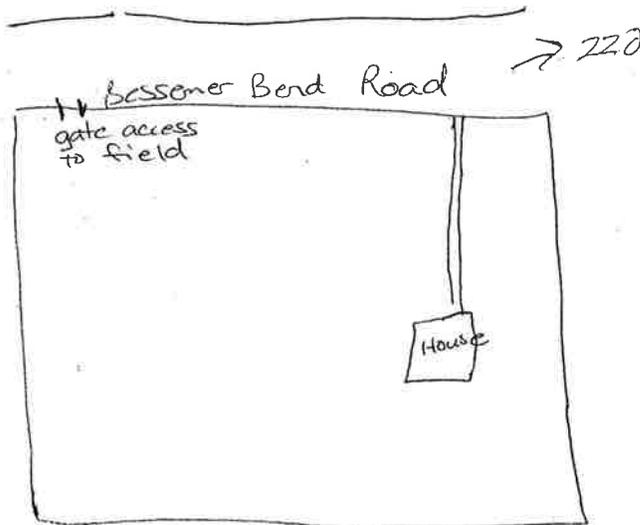
4) Soils Type where applicable _____

5) Reason for Application access to pasture

6) Specifications: (Attach 3 copies where applicable)

7) Plan: (Attach 3 copies where applicable)

SKETCH



Approved:

Michael DeFay 7/6/2020
Road and Bridge Superintendent

Colleen Morrison 7-1-2020
Applicant or Agent/ Date

County Engineer _____

Wyo. Reg. P.E. _____ Date

County Commissioner _____

Approval Date: _____

Completion Date: _____

LICENSE

Date 7/8/2020 Road CR 202 Zero Rd.

The BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF NATRONA, STATE OF WYOMING, (hereinafter called the "Board", hereby grants a license to Black Hills Wyoming Gas LLC

(hereinafter called the "Licensee"), to construct, maintain, use and operate 2" Gas line (hereinafter called the "Facility"), located in Section 34 Township 34 N, Range 80 W, upon the property of the County of Natrona, acquired for and utilized in the operation and maintenance of a county road in the locations and positions and in strict accordance with the specifications shown on the print dated _____, attached hereto, marked Exhibit "A", and by this reference specifically made a part hereof.

This license is granted upon such express terms and conditions as are inserted below, and should the Licensee at any time violate any of the said terms or conditions herein contained or use or attempt to use said facility for any other or different purpose than that above specified, or refuse or fail to comply with any rule or direction of the County Road and Bridge Superintendent, made by said Superintendent under his general supervisory powers of control and supervision of county roads for the use and safety of the general public, then the Board may, at its option, immediately revoke this license.

This license is subject to the following conditions:

FIRST. The work of constructing, altering and maintaining of the Facilities shall be prosecuted and completed in a good and workmanlike manner at the sole expense of the Licensee and under supervision of, and to satisfactorily meet the specifications of the County Road and Bridge Superintendent. Such work of construction, alteration and maintenance of the Facility shall be done in such a manner as to in no way interfere with the use, operation and maintenance by the County of Natrona of a county road for county road purposes, and in such manner as to in no way endanger the general public in use of said county road right-of-ways.

SECOND. The said Licensee shall give to the Board, through the County Road & Bridge Superintendent, at least ten days notice, in writing, before entering upon the county road right-of-way for the purpose of construction or alteration of the Facility or to make necessary repairs, except in case of genuine emergency requiring immediate repair, then in that event, the Licensee shall notify the Board, through the County Road & Bridge Superintendent, or local maintenance authority immediately enter upon the county road right-of-way and make necessary repairs. Licensee shall be responsible for any repairs necessary to road or right-of-way for 180 days after completion of construction.

THIRD. The said Licensee agrees to forever indemnify and defend the Board, their agents or employees, against and save them harmless from all liability for damage to property or injury to or death of persons, including all costs and expenses incident hereto, arising wholly or in part from or in connection with the existence of, construction, alteration, maintenance, repair, renewal, reconstruction, operation, use or removal of the said Facility as it pertains to county road property.

FOURTH. The Board reserves the right to use, occupy and enjoy its right of way for a county road and for county road purposes, in such manner and at such times as it shall desire, the same as if the instrument had not been executed by it. If any such use shall at any time necessitate any change in the location or manner of use of said Facility, or any part thereof, such change or alteration shall be made by the Licensee, at the sole expense of said Licensee, upon the demand of the Board, through the County Road & Bridge Superintendent, and neither the Board nor the County of Natrona shall be liable to the said Licensee on account thereof, or on account of any damage growing out of any use which the County of Natrona or the Board, or either of them, may make of its said right-of-way.

FIFTH. The Board shall have the right at any time to revoke this license by the giving of thirty (30) days notice in writing to the said Licensee, and at the expiration of the time limited by said notice, or upon the express revocation of this license for any of the causes enumerated herein, the Licensee shall promptly and in the manner directed by the Board, through the County Road & Bridge Superintendent, remove said Facility and each and every part thereof, hereby authorized, from the premises of the county road right-of-way and leave said premises in the same condition in which they were before the installation of said Facility. Upon the refusal or failure of the Licensee so to do, the Board may remove the Facility and each and every part thereof and restore the county road right-of-way to the same condition as before the granting of this license, and the Licensee hereby agrees promptly to pay to the County of Natrona the cost of said removal of the Facilities, and each and every part thereof.

SIXTH. The County of Natrona and the Board, for the purpose of this licensee, hereby disclaims any representation or implication that it retains any title in any county road right-of-way other than a perpetual easement for road purposes for so much land as described by the instrument conveying such easement. The Licensee by these present accepts notice and agrees that any expenses or damages incurred by said Licensee as a result of this disclaimer shall be borne by said Licensee at no expense whatsoever to the Board or the County of Natrona. It shall be also understood that on Access Facility Highways, ingress and egress shall be limited to those locations as designated by the Board, or their Designated Representative, and shown on plans on file in the office of the County Road Department and County Surveyor

SEVENTH. The waiver of any breach of any of the terms or conditions of this Licensee shall be limited to the act or acts constituting such breach, and shall never be construed as being a continuing or permanent waiver of any such term or condition, all of which shall be and remain in full force and effect, as to the future acts or happenings, notwithstanding any such individual waiver or any breach thereof.

EIGHTH. The said Licensee agrees to locate underground facilities when needed by the County or other users for future construction and maintenance activities. This location information will include the marking of the facility on the ground, as specified by W.S. §37-12-301 et seq., with the appropriate color and including the nature and elevation of the utility and shall be tied both horizontally and vertically, by coordinates, by a licensed land surveyor to a public land survey corner. This information shall be shown on plans created by the utility company or facility owner and a copy will be sent to the Natrona County Surveyor's Office in Casper, Wyoming. **Costs for identifying and locating the facility will be the responsibility of the utility company or facility owner on County right-of-ways.**

No official or employee of the County of Natrona, other than the Board of County Commissioners, shall have authority to waive any term or condition herein contained. Any amendments to this license agreement shall be in writing, signed by the licensee and designated representative of the county commissioners.

Date of Commencement _____
(Five (5) day notice must be given County Road & Bridge Superintendent before start of construction)

Date of Completion _____
(County Road & Bridge Superintendent must be notified within five (5) days after construction)

IN WITNESS WHEREOF, The Board of County Commissioners, has caused this license to be executed on the _____ day of _____, A.D., 19 _____.

COUNTY OF NATRONA
By Michael P. Hagan 7/8/20
Road & Bridge Superintendent
By _____
County Surveyor
By _____
Chairman of the Board of County Commissioners.

ATTEST:

County Clerk

The undersigned, the Licensee mentioned in the forgoing License, hereby accepts the same, subject to the terms and conditions contained therein.

ATTEST:

Secretary
Samuel J. Jeter
President. X

(the original instrument must be recorded in the County Clerks office by Licensee)

COUNTY OF NATRONA

APPLICATION FOR 2" Natural Gas line

Applicant: Black Hills Wyoming Gas LLC

Address: 1535 E Yellowstone Hwy Phone: 307-258-8731

Furnish the Following Information:

- 1) Location: Section 34, Township 34 North, Range 80 West.
- 2) County Road Designation CR 202
- 3) Surface of County Road Paved
- 4) Soils Type where applicable _____
- 5) Reason for Application To install a 2" Gas line to serve 6708200 Rd with natural Gas
- 6) Specifications: (Attach 3 copies where applicable)
- 7) Plan: (Attach 3 copies where applicable)

SKETCH



Approved: Michael A. [Signature]
 Road and Bridge Superintendent

[Signature]
 Applicant or Agent Date X

County Engineer _____

Wy. Reg. P.E. _____ Date

County Commissioner _____

Approval Date: _____

Completion Date: _____

LICENSE

Date 07/13/2020 Road Barrard St and Smith St

The BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF NATRONA, STATE OF WYOMING, (hereinafter called the "Board"), hereby grants a license to RETTEW Associates, Inc.

(hereinafter called the "Licensee"), to construct, maintain, use and operate monitoring wells 80 (hereinafter called the "Facility"), located in Section 122 Township 33 N, Range 80 W, upon the property of the County of Natrona, acquired for and utilized in the operation and maintenance of a county road in the locations and positions and in strict accordance with the specifications shown on the print dated 2/23/20, attached hereto, marked Exhibit "A", and by this reference specifically made a part hereof.

This license is granted upon such express terms and conditions as are inserted below, and should the Licensee at any time violate any of the said terms or conditions herein contained or use or attempt to use said facility for any other or different purpose than that above specified, or refuse or fail to comply with any rule or direction of the County Road and Bridge Superintendent, made by said Superintendent under his general supervisory powers of control and supervision of county roads for the use and safety of the general public, then the Board may, at its option, immediately revoke this license.

This license is subject to the following conditions:

FIRST. The work of constructing, altering and maintaining of the Facilities shall be prosecuted and completed in a good and workmanlike manner at the sole expense of the Licensee and under supervision of, and to satisfactorily meet the specifications of the County Road and Bridge Superintendent. Such work of construction, alteration and maintenance of the Facility shall be done in such a manner as to in no way interfere with the use, operation and maintenance by the County of Natrona of a county road for county road purposes, and in such manner as to in no way endanger the general public in use of said county road right-of-ways.

SECOND. The said Licensee shall give to the Board, through the County Road & Bridge Superintendent, at least ten days notice, in writing, before entering upon the county road right-of-way for the purpose of construction or alteration of the Facility or to make necessary repairs, except in case of genuine emergency requiring immediate repair, then in that event, the Licensee shall notify the Board, through the County Road & Bridge Superintendent, or local maintenance authority immediately enter upon the county road right-of-way and make necessary repairs. Licensee shall be responsible for any repairs necessary to road or right-of-way for 180 days after completion of construction.

THIRD. The said Licensee agrees to forever indemnify and defend the Board, their agents or employees, against and save them harmless from all liability for damage to property or injury to or death of persons, including all costs and expenses incident hereto, arising wholly or in part from or in connection with the existence of, construction, alteration, maintenance, repair, renewal, reconstruction, operation, use or removal of the said Facility as it pertains to county road property.

FOURTH. The Board reserves the right to use, occupy and enjoy its right-of-way for a county road and for county road purposes, in such manner and at such times as it shall desire, the same as if the instrument had not been executed by it. If any such use shall at any time necessitate any change in the location or manner of use of said Facility, or any part thereof, such change or alteration shall be made by the Licensee, at the sole expense of said Licensee, upon the demand of the Board, through the County Road & Bridge Superintendent, and neither the Board nor the County of Natrona shall be liable to the said Licensee on account thereof, or on account of any damage growing out of any use which the County of Natrona or the Board, or either of them, may make of its said right-of-way.

FIFTH. The Board shall have the right at any time to revoke this license by the giving of thirty (30) days notice in writing to the said Licensee, and at the expiration of the time limited by said notice, or upon the express revocation of this license for any of the causes enumerated herein, the Licensee shall promptly and in the manner directed by the Board, through the County Road & Bridge Superintendent, remove said Facility and each and every part thereof, hereby authorized, from the premises of the county road right-of-way and leave said premises in the same condition in which they were before the installation of said Facility. Upon the refusal or failure of the Licensee so to do, the Board may remove the Facility and each and every part thereof and restore the county road right-of-way to the same condition as before the granting of this license, and the Licensee hereby agrees promptly to pay to the County of Natrona the cost of said removal of the Facilities, and each and every part thereof.

SIXTH. The County of Natrona and the Board, for the purpose of this license, hereby disclaims any representation or implication that it retains any title in any county road right-of-way other than a perpetual easement for road purposes for so much land as described by the instrument conveying such easement. The Licensee by these present accepts notice and agrees that any expenses or damages incurred by said Licensee as a result of this disclaimer shall be borne by said Licensee at no expense whatsoever to the Board or the County of Natrona. It shall be also understood that on Access Facility Highways, ingress and egress shall be limited to those locations as designated by the Board, or their Designated Representative, and shown on plans on file in the office of the County Road Department and County Surveyor

SEVENTH. The waiver of any breach of any of the terms or conditions of this Licensee shall be limited to the act or acts constituting such breach, and shall never be construed as being a continuing or permanent waiver of any such term or condition, all of which shall be and remain in full force and effect, as to the future acts or happenings, notwithstanding any such individual waiver or any breach thereof.

EIGHTH. The said Licensee agrees to locate underground facilities when needed by the County or other users for future construction and maintenance activities. This location information will include the marking of the facility on the ground, as specified by W.S. §37-12-301 et seq., with the appropriate color and including the nature and elevation of the utility and shall be tied both horizontally and vertically, by coordinates, by a licensed land surveyor to a public land survey corner. This information shall be shown on plans created by the utility company or facility owner and a copy will be sent to the Natrona County Surveyor's Office in Casper, Wyoming. Costs for identifying and locating the facility will be the responsibility of the utility company or facility owner on County right-of-ways.

No official or employee of the County of Natrona, other than the Board of County Commissioners, shall have authority to waive any term or condition herein contained. Any amendments to this license agreement shall be in writing, signed by the licensee and designated representative of the county commissioners.

Date of Commencement 07/13/2020
(Five (5) day notice must be given County Road & Bridge Superintendent before start of construction)

Date of Completion 07/24/2020
(County Road & Bridge Superintendent must be notified within five (5) days after construction)

IN WITNESS WHEREOF, The Board of County Commissioners, has caused this license to be executed on the _____ day of _____, A.D., 19 _____.

COUNTY OF NATRONA
By Michael Blaser 7/13/2020
Road & Bridge Superintendent
County Surveyor
By _____
Chairman of the Board of County Commissioners.

ATTEST:

County Clerk

The undersigned, the Licensee mentioned in the forgoing License, hereby accepts the same, subject to the terms and conditions contained therein.
ATTEST:

Secretary

President.

EXHIBIT 'A'

COUNTY OF NATRONA

APPLICATION FOR Monitoring Well Install

Applicant: RETTEW Associates, Inc

Address: 110 N Parkway Dr, Suite 201, Golden, CO 80403 Phone: 303-746-0853
303-800-4912

Furnish the Following Information:

1) Location: Section 1+2, Township 33 North, Range 80 West

2) County Road Designation _____

3) Surface of County Road _____

4) Soils Type where applicable _____

5) Reason for Application Monitoring Well Install

6) Specifications: (Attach 3 copies where applicable)

Borehole w/ screen completed to depths betw 6 and 70'

7) Plan: (Attach 3 copies where applicable)

SKETCH

Approved:

Michael J. [Signature]
Road and Bridge Superintendent

County Engineer _____

County Commissioner _____

Approval Date: _____

Applicant or Agent _____ Date

Wyo. Reg. P.E. _____ Date

Completion Date: _____



NATRONA COUNTY

Development Department

200 North Center Street, Room 202
Casper, WY 82601

AGENDA
BOARD OF COUNTY
COMMISSIONERS MEETING
August 4, 2020

Planning Commission Recommendations

- Planning Commission Recommendation:** **Remove from Table/Approve**
CUP20-1 – A Conditional Use Permit (CUP) to allow land reclamation and drainage improvements. The CUP is for Lot 2 of Douglass Subdivision, the address being 3799 Douglass Rd.
- Planning Commission Recommendation:** **Approve**
PS20-2 – Request to subdivide a 5.04-acre parcel of land into 2 lots to be known as Zero Road Industrial Park, Lots 3A & 3B. This parcel currently has 2 buildings addressed as 1014 & 1028 N. Robertson Road.
- Planning Commission Recommendation:** **Approve**
CUP20-3 – A Conditional Use Permit (CUP) by Union Wireless/Hemphill for an 84-foot self-supporting communication tower on an existing site located at 56252 W. US Highway 20-26. Applicant is requesting 100-feet to include all appurtenances. This location is approximately 4 miles west of Hiland.
- Planning Commission Recommendation:** **Approve**
CUP20-4 – A Conditional Use Permit (CUP) by Union Wireless/Hemphill for an 84-foot self-supporting communication tower on an existing site located at 15303 Arminto Rd. Applicant is requesting 100-feet to include all appurtenances.
- Planning Commission Recommendation:** **Approve**
CUP20-5 – A Conditional Use Permit (CUP) by Union Wireless/Hemphill for an 84-foot self-supporting communication tower on an existing site located at 21755 State Highway 220. Applicant is requesting 100-feet to include all appurtenances. This location is east of Highway 220 and north of Grey Reef Rd.



NATRONA COUNTY

Development Department

200 North Center Street, Room 205
Casper, WY 82601

Jason Gutierrez, PE, Director
County web: www.natronacounty-wy.gov

Phone: 307-235-9435
Fax: 307-235-9436
Email: jgutierrez@natronacounty-wy.gov

"The purpose of the Natrona County Development Department is to provide necessary services to implement sound land use planning and economic development policies to protect and enhance the quality of life for present and future inhabitants of Natrona County."

MEMORANDUM

To: Board of County Commissioners

From: Jason Gutierrez, P.E., Director

Date: July 7, 2020

RE: Land reclamation and drainage improvements not associated with a building permit.

cc: Applicant, County Attorney, File

Planning and Zoning Commission Recommendation:

Approve w/conditions

At its March 10, 2020 meeting, the Planning Commission, with all Commissioners present, acted to recommend approval of the requested Conditional Use Permit to the Board of County Commissioners with the following conditions:

- The land reclamation shall be completed by the applicant and inspected by the County Engineer within 12 months of the Board of County Commissioner approval (Staff added).
- If upon inspection it is determined that remediation of drainage is required, plans will be presented to staff and brought back to Planning Commission for review and approval (Planning Commission added).

(Motion passed unanimously).

After the Planning Commission meeting, staff reached out to the neighborhood and hosted a meeting with a majority of the property owners to discuss the formation of an Improvement and Service District (ISD) for the continued maintenance of Douglass Road. Currently, the landowners are working towards the formation of the ISD.

CONDITIONAL USE PERMIT APPLICATION

(Please read GENERAL INFORMATION AND APPLICATION INSTRUCTIONS before filling out.)

I (We), the undersigned, do hereby petition the Board of County Commissioners of Natrona County, Wyoming, for a Conditional Use Permit, as provided in Chapter 11, 2000 Natrona Zoning Resolution.

Applicant's Name:

Applicant's Address:

Applicant's Phone:

Owner's Name:

Owner's Address:

Owner's Phone:

Explain why you are requesting this conditional use permit and detail the proposed use:

Legal description and size of property (If within a platted subdivision, give subdivision name, block and lot number. If not within a platted subdivision, give quarter-section, section, township and range.):

Current zoning of property:

Type of sewage disposal: Public Septic Holding Tank Other

Source of water:

This property was purchased from:

The date this property was purchased:

On separate sheets of paper, please respond to the following questions and provide explanations for your answers:

- * Will granting the conditional use permit contribute to an overburdening of County Services?
- * Will granting the conditional use permit cause undue traffic, parking, population density or environmental problems?
- * Will granting the conditional use permit impair the use of adjacent property or alter the character of the neighborhood?
- * Will granting the conditional use permit detrimentally affect the public health, safety and welfare?

I (We) hereby certify that I (We) have read and examined this application and know the same to be true and correct to the best of my (our) knowledge. Granting this request does not presume to give authority to violate or cancel any State or local laws. All information within, attached to or submitted with this application shall become part of the public record. **I (We) further understand that all application fees are non-refundable.** By signing the application I am (We are) granting the Development Department access to our property for inspections.

Applicant: German G. Treto
(Signature)

Date: 6-17-2019

Print Applicant Name: German G. Treto

Owner: Same as above
(Signature)

Date: 6-17-2019

Print Owner Name: German G. Treto



CASPER
200 PRONGHORN
CASPER, WY 82601
P: 307-266-2524

January 15, 2020

Trish Chavis
County Planner
Natrona County Development Department
200 North Center Street, Roo, 202
Casper, WY 82601

RE: Application for Conditional Use Permit for Land reclamation at 3799 Douglass Road

Ms. Chavis,

Mr. German Treto would like to request a conditional use permit to complete the site grading at his property located at 3799 Douglass Road. The following will explain how granting this CUP will not contribute to an overburdening of County services:

Will granting the conditional use permit contribute to an overburdening of County Services?

Response: Granting of the conditional use permit will not contribute to an overburdening of County services. The existing site currently does not have any hard surfacing creating difficult access during rain and snow events. The proposed grading plan and recycled asphalt surfacing improvements will improve site maneuverability allowing the County to better access the entire property. The grading plan also includes an updated grading of Douglass Road providing improved access not only to the site but to adjacent properties as well. The proposed grading plan also includes drainage improvements for the property and Douglass Road. Drainage from the property will now slope away from the building directing runoff to the east side of Douglass Road through a new storm sewer pipe and drainage ditch routing water away from existing downstream properties.

Will granting the conditional use permit cause undue traffic, parking, population density or environmental problems.

The updated grading plan will not only improve the existing property but will include the re-grading of Douglass Road improving access to surrounding properties. Increased traffic or the need for additional parking is not expected with the proposed grading improvements. Storm water runoff routing along the boundary of the site, hard surfacing improvements and conveying runoff along a newly established ditch on the east side of Douglass Road will help to prevent area erosion and minimize impacts to adjacent properties. The site grading plan also includes the installation of erosion control matting

CHEYENNE

RAWLINS

DEDICATED TO CLIENTS. DEFINED BY EXCELLENCE.

and site seeding to decrease overall erosion while minimizing impacts to downstream facilities. Improvements will also include the delineation of property lines, establish a visible property access site and be more accessible to emergency vehicles.

Will granting the conditional use permit impair the use of adjacent property or alter the character of the neighborhood?

Granting the conditional use permit will improve the use of adjacent property and will not alter the character of the neighborhood. The re-grading of Douglass Road will direct storm water runoff to the east side of the road minimizing impacts to the adjacent westerly properties. Adding recycled asphalt base to the road will improve the look of the road, increase access and reduce existing erosion.

Will granting the conditional use permit detrimentally affect the public health, safety and welfare?

Granting of the conditional use permit will not detrimentally affect the public health, safety and welfare. The proposed grading plan will clean up the existing area, provide hard surfacing to reduce vehicle tracking of mud off site and improve rodent control. Existing areas to receive recycled asphalt surfacing will include the removal of weeds and unsightly vegetation allowing for better fire control of the area. Site erosion and poorly directed storm water runoff will be improved with grading, the addition of storm sewer pipe and the installation of erosion control blankets.

Please feel free to contact me with any and questions or additional comments.

Sincerely,



Brad Holwegner
Project Manager

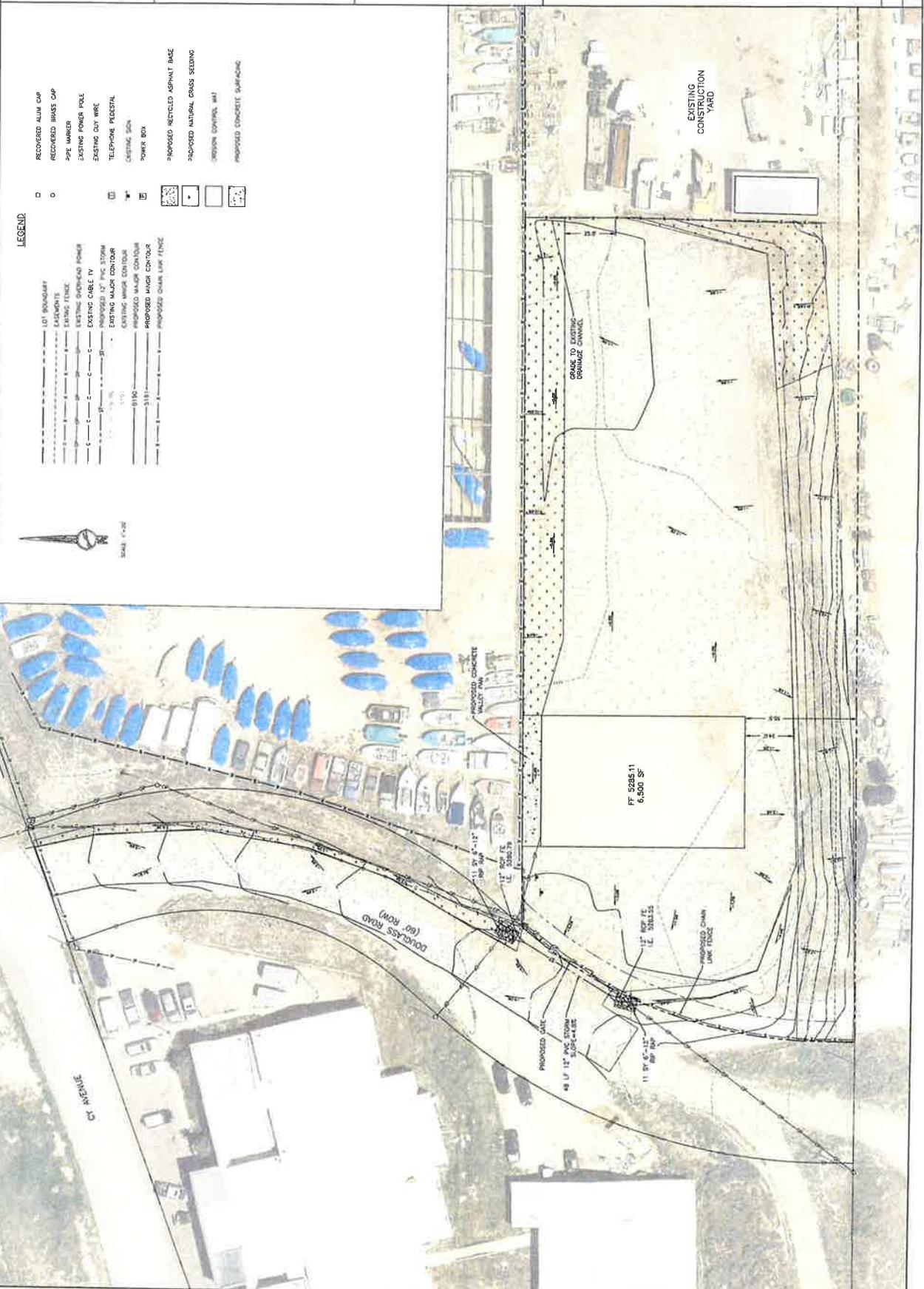


FOR: TRETO CONSTRUCTION, LLC
 CASPER, WY 82609
 P.O. BOX 50610
 GOSWAM TRETO

REVISIONS

TRETO CONSTRUCTION YARD EXPANSION
 GRADING PLAN
 3799 DOUGLASS ROAD
 NATRONA COUNTY, WYOMING

SHEET NO.
 01 OF 01
 DATE
 07/14/2019



- LEGEND**
- LOT BOUNDARY
 - EXISTING LOT BOUNDARY
 - EXISTING POWER POLE
 - EXISTING CABLE TV
 - EXISTING MAJOR CONDUIT
 - EXISTING MINOR CONDUIT
 - PROPOSED MAJOR CONDUIT
 - PROPOSED MINOR CONDUIT
 - PROPOSED CHAIN LINK FENCE
 - RECOVERED ALUM CAP
 - RECOVERED BRASS CAP
 - PIPE MARKER
 - EXISTING POWER POLE
 - EXISTING CABLE TV
 - TELEPHONE PEDESTAL
 - EXISTING SIGN
 - POWER BOX
 - PROPOSED RECYCLED ASPHALT BASE
 - PROPOSED NATURAL GRASS SEEDING
 - PROPOSED CONCRETE SURFACING

DRWG BY: BSH
 Ck'd By: BSH
 Acad File: TRET0 TRT 1/25/19
 Book No.:
 W.O. No.: 16979
 CASPER, WY 82609

CONDITIONAL USE PERMIT REQUEST

CUP20-1

Staff Report: Trish Chavis
February 25, 2020

For

March 10, 2020
Planning and Zoning Commission

And

April 7, 2020
Board of County Commissioner Meeting

Applicant: German G. Treto

Request: Land reclamation and drainage improvements not associated with a building permit.

Location and Zoning

The parcel is located south of CY Avenue on Douglass Road. The address being 3799 Douglass Road.

The subject parcel and the parcels to the north and west are zoned Commercial (C). The parcels to the east and south are zoned Light Industrial (LI).

Background

The applicant is applying for the CUP to come into compliance with the Zoning Resolution. A CUP is required for land reclamation and fill not controlled by the regulations of other governmental agencies or not associated with a building permit.

A letter was issued in April of 2019 for the applicant to apply for a CUP for unpermitted land reclamation. The Planning Department had received complaints about drainage from the subject parcel onto Douglass Rd., and adjacent properties as a result of grading without proper engineering.

The applicant is applying for general site grading to provide positive drainage away from the existing building and to prevent storm water draining onto adjacent properties.

General Standards
For
Conditional Use Permits

Criteria for Approval

1. Will granting the Conditional Use Permit contribute to an overburdening of county services?

No. The proposed grading plan and recycled asphalt surfacing improvements will improve the site for better access to the entire property. The grading plan also includes an updated grading of Douglass Road providing improved access not only to the site but to adjacent properties as well. The plan also includes drainage improvements for the property and Douglass Road.

Proposed Finding of Fact.

The grading and drainage improvements will make Douglass Road and the subject property more accessible for emergency response and any additional services. Douglass Road is not maintained by Natrona County but is dedicated to the use of the public.

2. Will granting the Conditional Use Permit cause undue traffic, parking, population density or environmental problems?

Increased traffic or the need for additional parking is not expected with the proposed grading improvements.

Proposed Finding of Fact.

By permitting land reclamation for drainage and grading, as designed by WLC, there will not be any negative impacts to traffic, parking, population density or environmental problems.

3. Will granting the Conditional Use Permit impair the use of adjacent property or alter the character of the neighborhood?

It will improve the use of adjacent property and will not alter the character of the neighborhood in a negative way. The re-grading of Douglass Road will direct storm water runoff to the east side of the road minimizing impacts to the adjacent westerly properties. Adding recycled asphalt base to the road will improve the look of the road, increase access and reduce existing erosion.

Proposed Finding of Fact.

By grading and providing for drainage on the subject property and Douglass Road, the CUP will not impair the use of adjacent property or alter the character of the neighborhood in a negative way.

4. Will granting the Conditional Use Permit detrimentally affect the public health, safety and welfare, or nullify the intent of the Development Plan or Zoning Resolution?

The proposed grading plan will clean up the existing area, provide for hard surfacing to reduce vehicle tracking of mud off site and improve rodent control. Existing areas to receive recycled asphalt surfacing will include the removal of weeds and unsightly vegetation allowing for better fire control of the area.

Proposed Finding of Fact.

The grading plan will provide for drainage, hard surfacing, improved access and stabilization of the southern property boundary. This will not be detrimental to the public health, safety and welfare. With an approved CUP, the land reclamation will be compliant with the Development Plan and Zoning Resolution.

Public Comment

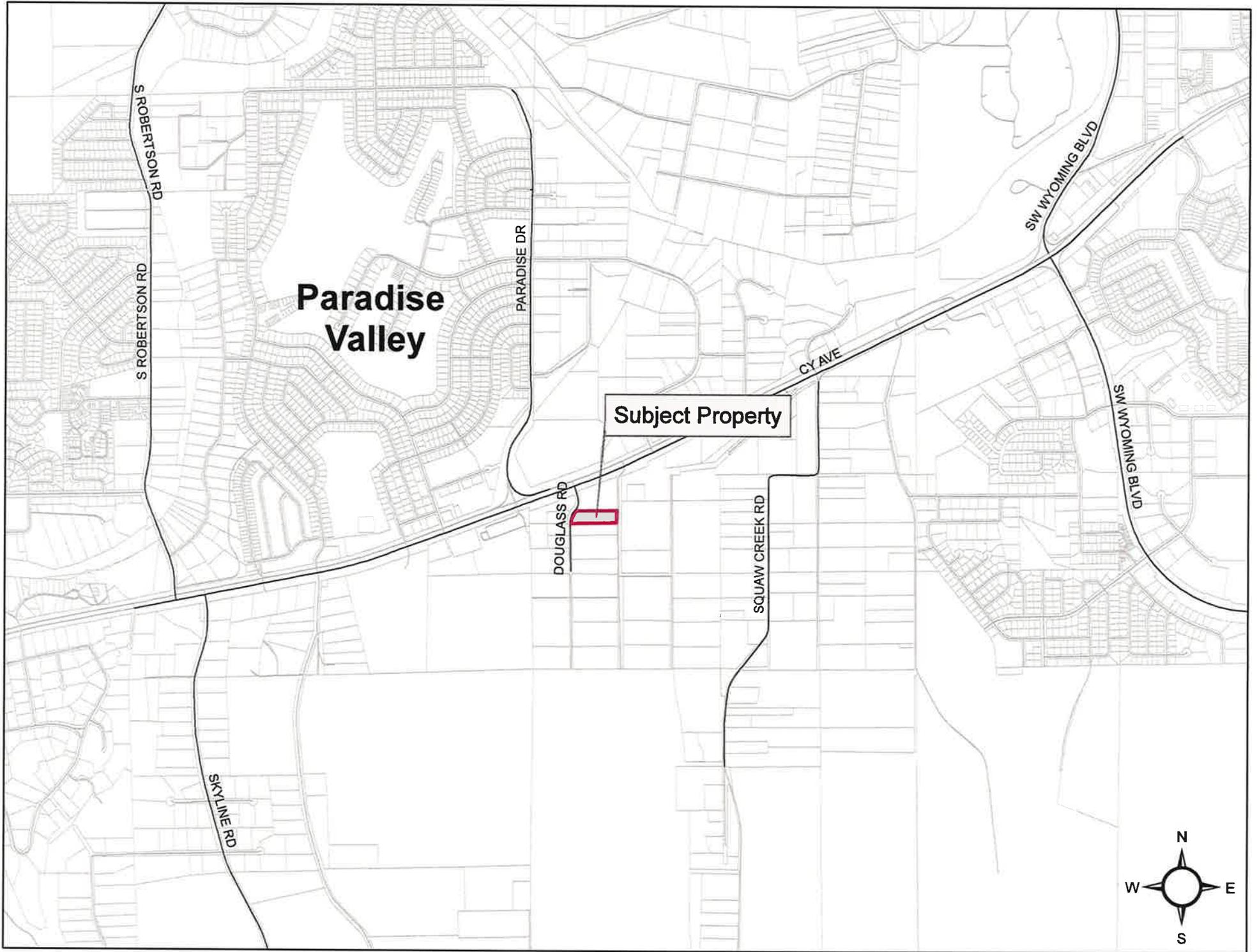
As of the date of this staff report there have been no comments received. Staff sent the public notice to 14 neighbors.

Recommendation

Staff proposes a motion and vote by the Planning and Zoning Commission to recommend approval of the requested Conditional Use Permit, by the Board of County Commissioners with the following condition:

- The land reclamation shall be completed by the applicant and inspected by the County Surveyor/Engineer within 12 months of the Board of County Commissioner approval.

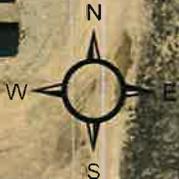
Staff also recommends the Planning Commission incorporate by reference all findings of fact set forth herein and make them a part thereof.





Subject Property

TAVARES RD





DOUGLAS RD

Subject Property

TAVARES RD













NATRONA COUNTY

Development Department

200 North Center Street, Room 205
Casper, WY 82601

Jason Gutierrez, PE, Director
County web: www.natronacounty-wy.gov

Phone: 307-235-9435
Fax: 307-235-9436
Email: jgutierrez@natronacounty-wy.gov

"The purpose of the Natrona County Development Department is to provide necessary services to implement sound land use planning and economic development policies to protect and enhance the quality of life for present and future inhabitants of Natrona County."

MEMORANDUM

To: Board of County Commissioners
From: Jason Gutierrez, P.E., Director
Date: July 15, 2020
RE: Request to plat two lots to be known as Zero Road Industrial Park, Lots 3A & 3B.
cc: Applicant, County Attorney, File

Planning and Zoning Commission Recommendation:

Approve

At its July 14, 2020 meeting, the Planning Commission, acted to recommend approval of the requested subdivision to the Board of County Commissioners.

(Motion passed unanimously)

Board of County Commissioners Review and Procedure: The following options are available to the Board of County Commissioners when acting on an item:

- Approve the application as recommended by the Planning Commission;
- Approve the application as submitted;
- Approve the application on its own conditions;
- Deny the application;
- Remand the application to the Planning Commission for reconsideration;
- Table to a date specific; or with the express consent of the applicant, the Board may table indefinitely or dismiss the application.

Applicant Name: Energy 307, LLC

Applicant Address: 6790 Casper Mountain Road, Casper, WY 82601

Applicant Phone: 307-215-6057

Owner Name: SAME

Owner Address: Same

Owner Phone: Same

Explain why you are requesting this major subdivision and detail the proposed use:

Plan to divide the parcel into two lots and develop both lots for commercial use

Legal description, acreage, and Parcel Identification number (PID) (if within a platted subdivision, give subdivision name, block and lot number. If not within a platted subdivision, give quarter-section, section, township and range).

Lot 3 Zero Road Industrial Park
PID# 33800310200300

Current zoning of property: LI

Type of sewage disposal Public Septic Holding Tank Other

Source of Water: Town of Mills

This property was purchased from: Daniel J McGlade

The date this property was purchased: 10/19/17

I (We) hereby certify that I (We) have read and examined this application and know the same to be true and correct to the best of my (our) knowledge. Granting this request does not presume to give authority to violate or cancel the provisions of any other State or local laws. Falsification or misrepresentation is grounds for voiding this request, if granted. All information within, attached to or submitted with this application shall become part of the public record. I (We) further understand that all application fees are non-refundable.

Applicant: 
(Signature)

Date: 5-26-2020

Print Name: Dan McGlade

Owner: 
(Signature)

Date: 5-26-2020

Print Name: Dan McGlade


Initials

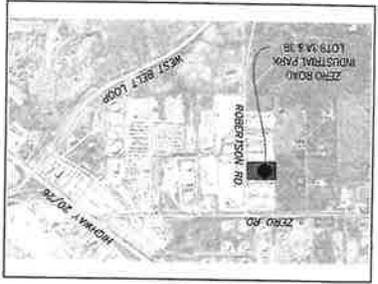
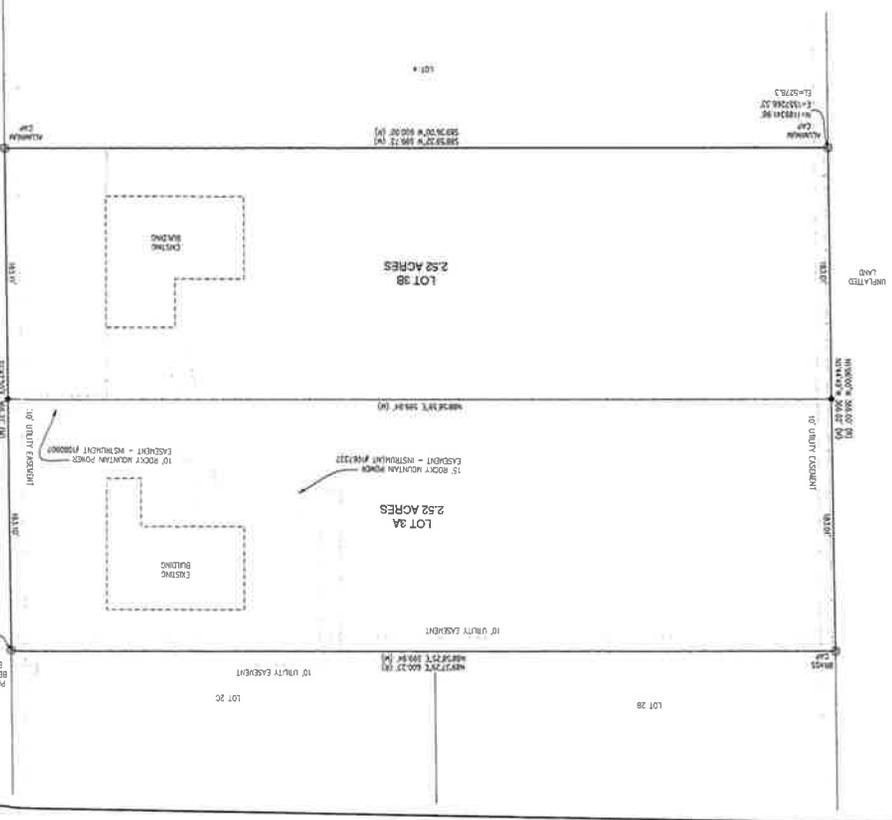
I (We) are aware that the Legal notice fees and the County Surveyor fees must be reimbursed to the Development Department prior to the recording of the Subdivision plat. In the event that the Subdivision is not approved, withdrawn, or not recorded, we are still responsible for the County Surveyor fees.



SCALE: 1" = 40'
0 40' 80'



- NOTES
1. THERE IS A 10' BUFFER ZONE BETWEEN THE PROPERTY LINES AND THE ADJACENT PUBLIC HIGHWAY.
 2. THERE IS A 10' BUFFER ZONE BETWEEN THE PROPERTY LINES AND THE ADJACENT PUBLIC HIGHWAY.
 3. THE DIMENSIONED ANGLE AT THE POINT OF BEGINNING IS 207.2241', AND THE COMBINED FACTOR IS 0.9999991.
 4. BEARING FROM BEARING ARE GIVEN BY THE FORM OF WELLS MEASUREMENTS.
 5. PUBLIC WORKS IS PROHIBITED BY THE FORM OF WELLS MEASUREMENTS.
 6. NO PUBLIC WORKS IS PROHIBITED.



VICINITY MAP
NO SCALE

APPROVALS

APPROVED: BOARD OF COUNTY COMMISSIONERS OF MARION COUNTY, WORKING BY RESOLUTION PASSED THIS _____ DAY OF _____ 2020.

ATTEST: COUNTY CLERK _____

BOARD CHAIRMAN _____

APPROVED AND APPROX: THIS _____ DAY OF _____ 2020.

COUNTY HEALTH DEPARTMENT _____

COUNTY DEVELOPMENT DIRECTOR _____

COUNTY SHERIFF _____

CERTIFICATE OF DEDICATION

STATE OF IOWA }
COUNTY OF MARION }
I, the undersigned, County Clerk, do hereby certify that the following parcels of land being lots 3 A and 3 B of the subdivision known as ZERO ROAD INDUSTRIAL PARK, MARION COUNTY, IOWA, were laid out and dedicated to the public use of the people of Marion County, Iowa, by the Board of Commissioners of Marion County, Iowa, on this _____ day of _____, 2020.

THE BOARD OF COMMISSIONERS OF MARION COUNTY, IOWA, HAS ORDERED THAT THE FOLLOWING PARCELS OF LAND BEING LOTS 3 A AND 3 B OF THE SUBDIVISION KNOWN AS ZERO ROAD INDUSTRIAL PARK, MARION COUNTY, IOWA, BE DEDICATED TO THE PUBLIC USE OF THE PEOPLE OF MARION COUNTY, IOWA, BY THE BOARD OF COMMISSIONERS OF MARION COUNTY, IOWA, ON THIS _____ DAY OF _____, 2020.

THE BOARD OF COMMISSIONERS OF MARION COUNTY, IOWA, HAS ORDERED THAT THE FOLLOWING PARCELS OF LAND BEING LOTS 3 A AND 3 B OF THE SUBDIVISION KNOWN AS ZERO ROAD INDUSTRIAL PARK, MARION COUNTY, IOWA, BE DEDICATED TO THE PUBLIC USE OF THE PEOPLE OF MARION COUNTY, IOWA, BY THE BOARD OF COMMISSIONERS OF MARION COUNTY, IOWA, ON THIS _____ DAY OF _____, 2020.

THE BOARD OF COMMISSIONERS OF MARION COUNTY, IOWA, HAS ORDERED THAT THE FOLLOWING PARCELS OF LAND BEING LOTS 3 A AND 3 B OF THE SUBDIVISION KNOWN AS ZERO ROAD INDUSTRIAL PARK, MARION COUNTY, IOWA, BE DEDICATED TO THE PUBLIC USE OF THE PEOPLE OF MARION COUNTY, IOWA, BY THE BOARD OF COMMISSIONERS OF MARION COUNTY, IOWA, ON THIS _____ DAY OF _____, 2020.

CERTIFICATE OF SURVEYOR

STATE OF IOWA }
COUNTY OF MARION }
I, the undersigned, Surveyor, do hereby certify that the following parcels of land being lots 3 A and 3 B of the subdivision known as ZERO ROAD INDUSTRIAL PARK, MARION COUNTY, IOWA, were laid out and dedicated to the public use of the people of Marion County, Iowa, by the Board of Commissioners of Marion County, Iowa, on this _____ day of _____, 2020.

THE BOARD OF COMMISSIONERS OF MARION COUNTY, IOWA, HAS ORDERED THAT THE FOLLOWING PARCELS OF LAND BEING LOTS 3 A AND 3 B OF THE SUBDIVISION KNOWN AS ZERO ROAD INDUSTRIAL PARK, MARION COUNTY, IOWA, BE DEDICATED TO THE PUBLIC USE OF THE PEOPLE OF MARION COUNTY, IOWA, BY THE BOARD OF COMMISSIONERS OF MARION COUNTY, IOWA, ON THIS _____ DAY OF _____, 2020.

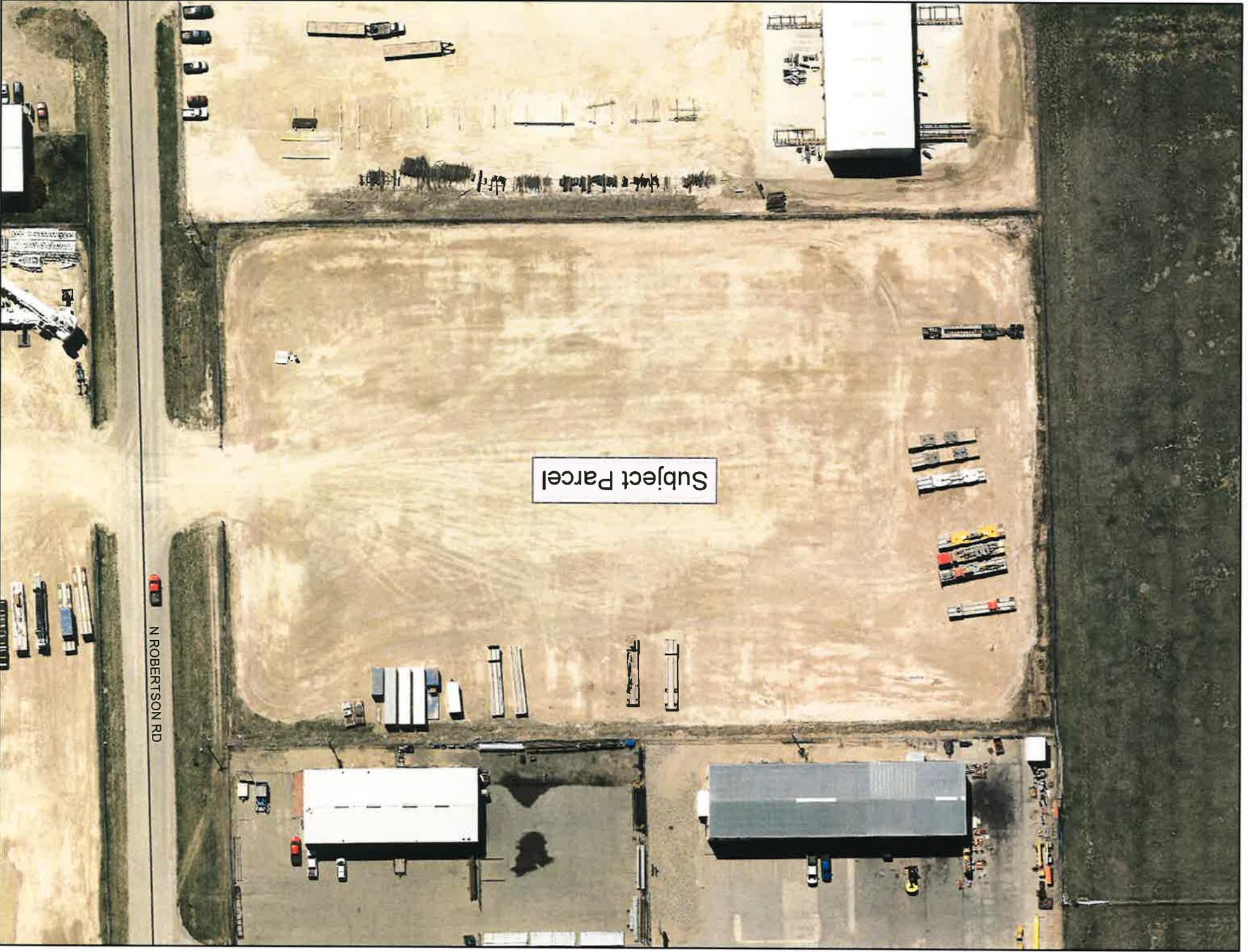
THE BOARD OF COMMISSIONERS OF MARION COUNTY, IOWA, HAS ORDERED THAT THE FOLLOWING PARCELS OF LAND BEING LOTS 3 A AND 3 B OF THE SUBDIVISION KNOWN AS ZERO ROAD INDUSTRIAL PARK, MARION COUNTY, IOWA, BE DEDICATED TO THE PUBLIC USE OF THE PEOPLE OF MARION COUNTY, IOWA, BY THE BOARD OF COMMISSIONERS OF MARION COUNTY, IOWA, ON THIS _____ DAY OF _____, 2020.

THE BOARD OF COMMISSIONERS OF MARION COUNTY, IOWA, HAS ORDERED THAT THE FOLLOWING PARCELS OF LAND BEING LOTS 3 A AND 3 B OF THE SUBDIVISION KNOWN AS ZERO ROAD INDUSTRIAL PARK, MARION COUNTY, IOWA, BE DEDICATED TO THE PUBLIC USE OF THE PEOPLE OF MARION COUNTY, IOWA, BY THE BOARD OF COMMISSIONERS OF MARION COUNTY, IOWA, ON THIS _____ DAY OF _____, 2020.



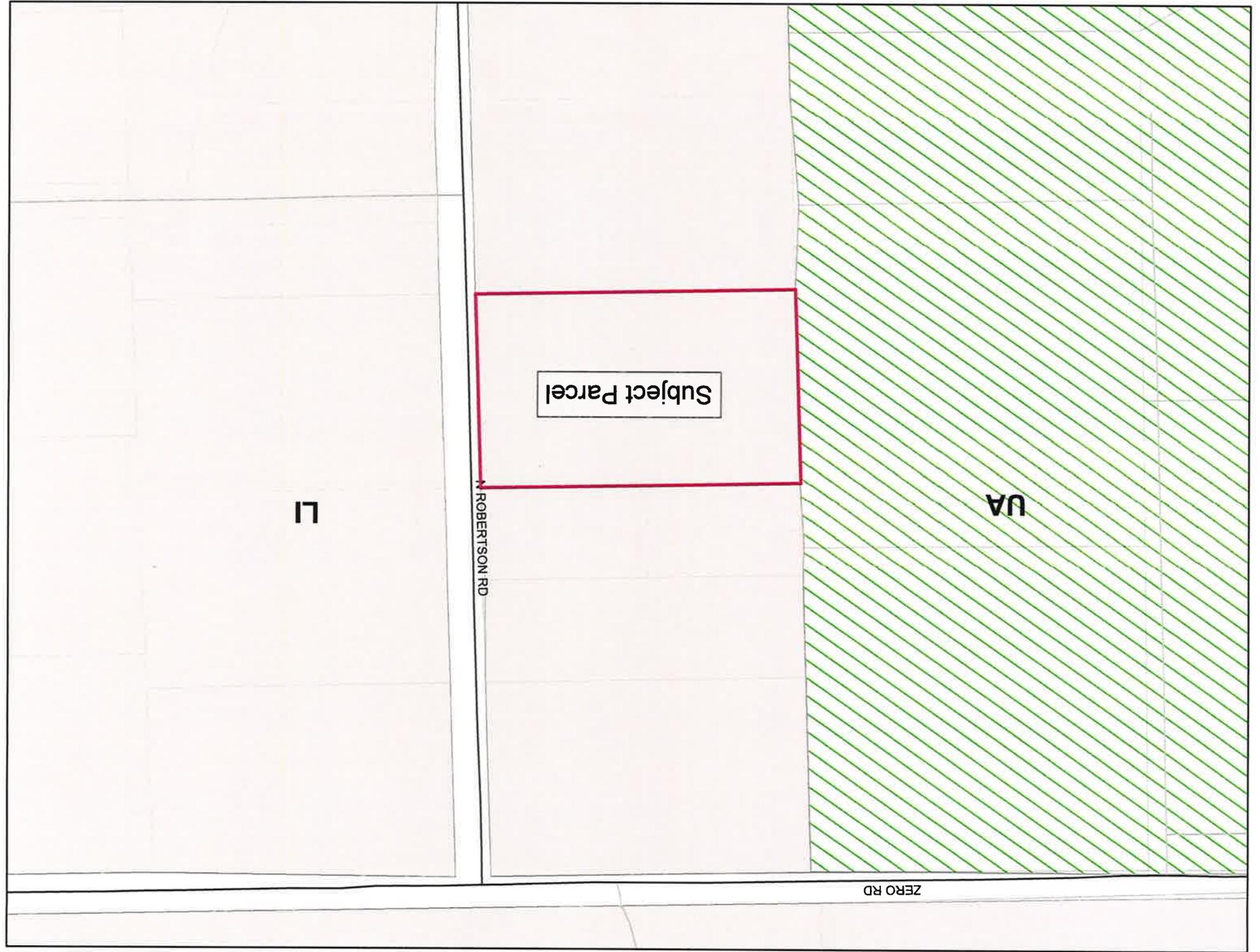
**ZERO ROAD INDUSTRIAL PARK
LOTS 3A & 3B**

BEING A PORTION OF LOT 1 (NEWLY)
OF SECTION 1, T20N, R20W, S20E, 6TH P.M.
MARION COUNTY, IOWA
MAY, 2020



Subject Parcel

N ROBERTSON RD



Subject Parcel

LI

UA

N ROBERTSON RD

ZERO RD



W YELLOWSTONE HWY

WEST BELT LOOP

N ROBERTSON RD

ZERO RD

SIX MILE RD

SIX MILE RD

Subject Parcel

PS20-2

STAFF REPORT: Trish Chavis
June 10, 2020

For

July 14, 2020
Planning and Zoning Commission Meeting
&
August 4, 2020
Board of County Commissioner Meeting

APPLICANT: Energy 307, LLC

REQUEST: To subdivide a 5.04-acre parcel of land into 2 lots to be known as Zero Road Industrial Park, Lots 3A & 3B.

LOCATION AND ZONING

The parcel currently has 2 buildings addressed as 1014 & 1028 N. Robertson Rd.

The subject parcel, parcels to the north, east, and south are zoned Light Industrial (LI). The parcels to the west are zoned Urban Agriculture (UA).

DEFINITION AND APPLICATION

1. Intent and purpose. The intent and purpose of the Light Industrial (LI) district is to provide for light manufacturing and storage facilities. Zoning Resolution of Natrona County, Wyoming, Chapter VI, Section 11 at page 42.

2. Major Subdivision. A Major Subdivision is a division of one parcel into two or more parcels. Subdivision Regulations of Natrona County, Wyoming, Chapter 2, Section 1d at page 9.

The proposed subdivision will consist of two lots.

GENERAL STANDARDS
FOR
MAJOR SUBDIVISIONS

1. Criteria for Approval

- a) The subdivision is consistent with the Natrona County Development Plan and the Natrona County Zoning Resolution.

The proposed subdivision is located in Neighbor 14 (West Belt Loop/Robertson) of the 2016 Development Plan. The Development Plan recommends industrial development with residential development closer to Mills.

Proposed Finding of Fact. The proposed subdivision is developed and does comply with the Development Plan and Zoning Resolution.

- b) The subdivision is in conformance with the General Provision (Chapter 1) and Subdivision Design Standards (Chapter 7).

Proposed Finding of Fact. This subdivision has been processed in accordance with the applicable General Provisions and Subdivision Design Standards of the 2013 Natrona County Subdivision Regulations.

- c) The applicant has provided evidence that a sufficient water supply system will be acquired in terms of quantity, quality, and dependability for the type of subdivision proposed.

The existing structures are currently supplied water from an existing Mills waterline.

Proposed Finding of Fact. Both structures currently have water served by the Town of Mills.

- d) The applicant has provided evidence that a public sewage disposal system will be established and, if other methods are proposed, evidence that the system complies with state and local laws and regulations.

Proposed Finding of Fact. Both structures have newly installed septic systems that were approved through the Department of Environmental Quality (DEQ).

- e) The applicant has provided evidence to show all areas of the proposed subdivision, which may involve soil or topographical conditions presenting hazards or requiring special precautions, have been identified by the applicant and the proposed uses of the areas are compatible with such areas.

The subdivision does not lie within any established flood plain. There are no soil or topographical conditions that currently exist.

- f) Necessary services, including fire/police protection, schools, recreation, utilities, open space and transportation system, are available to serve the proposed subdivision.

This subdivision will be within the Natrona County Sheriff's jurisdiction. The proposed subdivision has adequate utility easements provided. This will be an area of industrial/commercial uses, no recreation or schools are proposed.

- g) The subdivision appears to be compatible with the surrounding area, not detrimental to the future development of the area, and not detrimental to the health, safety, and general welfare of the inhabitants of the area and the County.

Proposed Finding of Fact. The subdivision is developed. There will be no detriment to the health, safety and general welfare of the inhabitants of the area and the County.

- h) Documentation satisfactory to the Board of County Commissioners that the Improvement and Service District requirements have been met.

Proposed Finding of Fact. Access to the subdivision is from Robertson Road and is maintained by NC Road & Bridge. An Improvement and Service District will not be required for this subdivision.

- i) Documentation that the subdivider has adequate financial resources to develop and complete water and/or sewage systems or any facility proposed or represented to be the responsibility of the subdivider, but not limited to the above mentioned.

As stated above, the systems are in place, no financial guarantee is required.

PUBLIC COMMENT

The property owners within 1/4 mile were notified resulting in 9 neighbors being notified.

As of the date of this staff report, no comments have been received.

PROPOSED MOTION

Staff proposes that the Planning and Zoning Commission enter a motion and vote to recommend approval of the requested major subdivision by the Board of County Commissioners and incorporate by reference all findings of fact set forth herein and make them a part thereof.



NATRONA COUNTY

Development Department

200 North Center Street, Room 205
Casper, WY 82601

Jason Gutierrez, PE, Director
County web: www.natronacounty-wy.gov

Phone: 307-235-9435
Fax: 307-235-9436
Email: jgutierrez@natronacounty-wy.gov

"The purpose of the Natrona County Development Department is to provide necessary services to implement sound land use planning and economic development policies to protect and enhance the quality of life for present and future inhabitants of Natrona County."

MEMORANDUM

To: Board of County Commissioners

From: Jason Gutierrez, P.E., Director

Date: July 15, 2020

RE: CUP20-3 Construct an 84-foot self-supporting communication tower to allow for the expansion of an existing Union Wireless site. The applicant is requesting 100-foot total height to include all appurtenances.

cc: Applicant, County Attorney, File

Planning and Zoning Commission Recommendation:

Approve

At its July 14, 2020 meeting, the Planning Commission, acted to recommend approval of the requested Conditional Use Permit to the Board of County Commissioners.

(Motion passed unanimously).

Board of County Commissioners Review and Procedure: The following options are available to the Board of County Commissioners when acting on an item:

- Approve the application as recommended by the Planning Commission;
- Approve the application as submitted;
- Approve the application on its own conditions;
- Deny the application;
- Remand the application to the Planning Commission for reconsideration;
- Table to a date specific; or with the express consent of the applicant, the Board may table indefinitely or dismiss the application.



Site Name: Poison Creek
Site Address: 56252 W. US Highway 20-26, Casper WY 82604
GEOCODE: 37882730000700 **Lat/Long:** 43 8 26.5 -107 24 29.04

Purpose of Request

Union Wireless is committed to improving coverage and expanding network capacity to meet customer demand throughout the State of Wyoming. The existing Wireless Communication Facility (WCF) provides residents, visitors and businesses with high quality reliable wireless service for both personal & business, in addition to enhancing emergency services.

Union Wireless is proposing the following at the existing WCF located at 56252 W. US Highway 20-26, Casper.

Details of Request

Union Wireless is proposing a new 80' self-support tower at the existing WCF, but **requesting approval for a 100' self-support tower**. The existing site footprint will be expanded to accommodate the upgrades as detailed on the attached site plan/elevation (see sheet C2-1). The existing 50' Union self-support tower will remain for a period to accommodate the transfer of equipment to the new tower.

The proposed upgrades are necessary to allow Union Wireless to continue providing the best possible service to the adjacent community, in addition to enhancing emergency service capabilities through FIRSTNET.

Technical Information

Steel four leg 80' self-support tower designed to accommodate multiple carriers, please see Exhibit A for tower structural/technical details.

Valmont self-support tower, proposed antennas are COMMSCOPE NNH4-65C-R6-V3, please see Exhibit A for tower structural/technical details and Exhibit B for antenna spec's.

Union/Hemphill is proposing an 80' Self-Support Tower with 3 sectors of antennas, please see Exhibit A for tower details. No lighting is required at the proposed location/height per FAA TowAir.

The proposed frequency range is 698-896 MHz to 1695-2360 MHz

Please see Exhibit B - Antenna Spec's for the actual intended transmission, effective radiated power etc.

Please see Exhibit B - Antenna Spec's for direction of maximum lobes and associated radiation of the antennas etc.

Please see Exhibit C - NIER Report.

Union Wireless is an FCC licensed carrier, therefore all transmissions will be within the allocated frequencies and will not cause interference with any other licensed transmission.

Please see the Exhibit D – Union FCC License Info.

Please see Exhibit F for information on proposed tower foundation, soils etc.

FAA does not require lighting for the proposed height, which is typical for sites under 200' unless the site is very close to an Airport.

The proposed 80' Self-Support tower will replace the existing 40' Union Self-support at the existing cell-site, and is structurally designed to accommodate multiple carriers.

Please see Exhibit A with information on the tower/foundation engineering compliant with local, County, State and Federal structural requirements.

Grounding and Bonding, please sheets E4-1, G1-1 and G1-2 for details.

The existing cell-site is far removed from the nearest residential. The site is visible from US HWY 20-26, however setback far enough to not be in the peripheral view of passing traffic.

Please see the attached photo simulations of the before and after views.

The subject location is an existing cell-site. The proposed changes mainly in tower height will be noticeable but should have little visual impact or public concern give the setback of the existing sites.

The existing cell-site currently has screening in place, so Union Wireless will continue to maintain the current screening to maintain consistency with the existing screening.

Please let me know if you need any additional information.

Sincerely,

A handwritten signature in black ink that reads "Declan Murphy". The signature is written in a cursive, slightly slanted style.

Declan Murphy
Coal Creek Consulting for Union Wireless/Hemphill
2166 E. University Dr. #201, Tempe, AZ 85281
Tel: (602) 326-0111
Email: dmurphy@coal-creek.com

and Zoning Commission and Board of County Commissioners shall require showings concerning all of the following:

1. The owner of record or contract purchaser has signed the application.
2. Granting the conditional use permit will not contribute to an overburdening of County Services.
3. Granting the conditional use will not cause undue traffic, parking, population density, or environmental problems.
4. Granting the conditional use permit will not impair the use of adjacent property or alter the character of the neighborhood.
5. Granting the conditional use permit will not detrimentally affect the public health, safety, and welfare, or nullify the intent of the Development Plan or the Zoning Resolution.

APPLICATION INSTRUCTIONS

This is an application for a conditional use permit for wireless telecommunication facilities on the parcel described hereon. By completing the application form and providing the other requested information, your application will be acted upon in the fastest, fairest manner prescribed by law.

Person preparing report:

Name: Declan Murphy for Union Wireless/Hemphill

Address: 2166 E University Drive, Suite 201, Tempe AZ 85281

Phone Number: 602 326 0111

Property Owner:

Name: Deer Creek Ranch Inc

Mailing Address: 112 Missouri Road, Shoshoni WY 82649

Phone Number: 307 856 4401

Physical Address: US Hwy 20, Casper WY 82601

Tax map parcel no: 37882730000700

Name: Declan Murphy for Union Wireless/Hemphill

Address: 2166 E. University Drive, Suite 201, Tempe AZ 85281

Phone Number: 602 326 0111

Legal form (Corporation, LLC, etc.): Union Telephone Company

If purchased tower, date of purchase: Original Lease date 9/16/2008

GPS coordinates of tower: Lat/Long: 43 8 26.5 -107 24 29.04

Original Conditional Use Permit resolution number:

Dated of original Conditional Use Permit:

Operator:

Name: Union Wireless

Address: PO Box 160, Mountain View WY 82939

Phone Number: 602 326 0111

Signatures

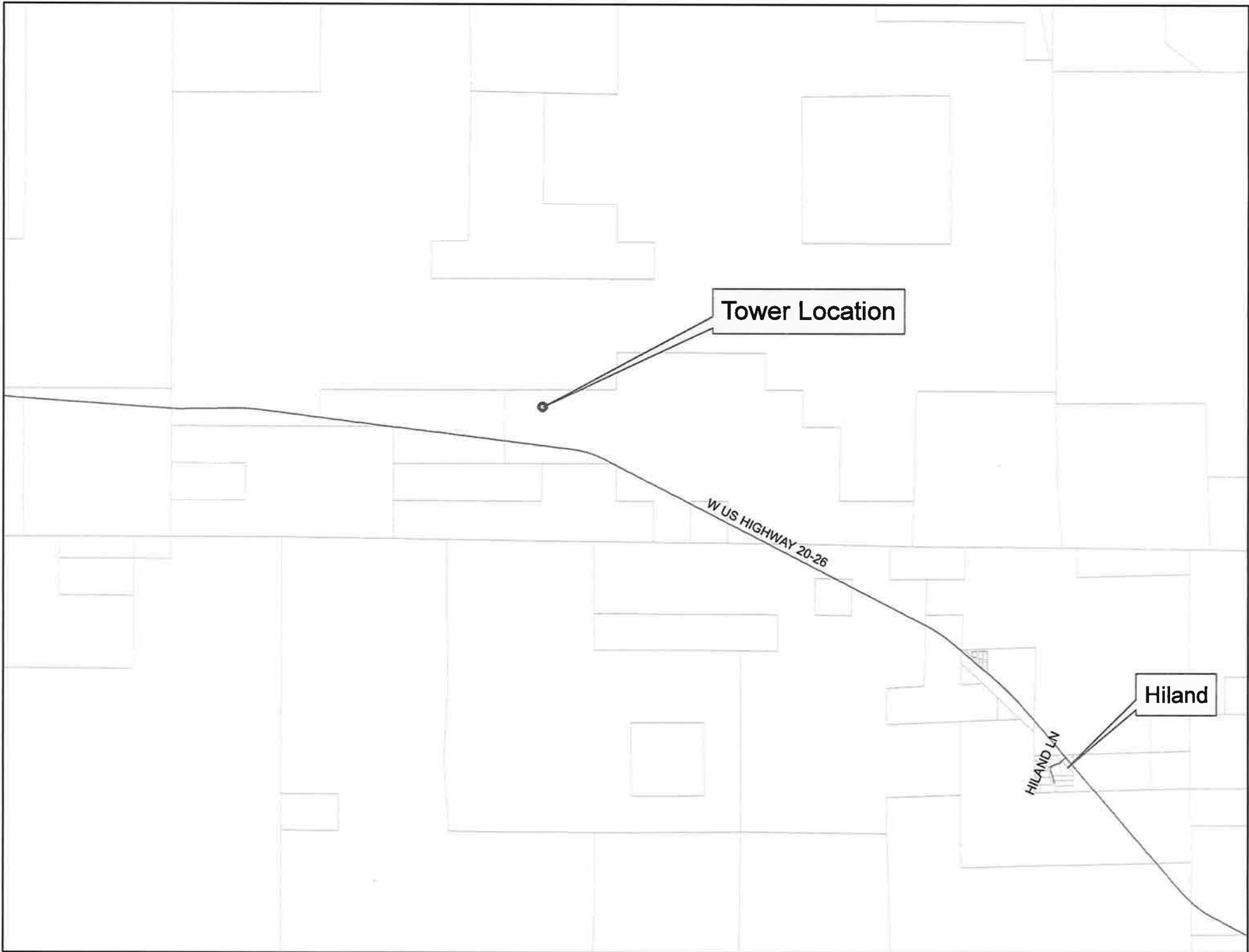
I (We) hereby certify that I (We) have read and examined this application and know the same to be true and correct to the best of my (our) knowledge. Granting this request does not presume to give authority to violate or cancel the provisions of any other State or local laws. Falsification or misrepresentation is grounds for voiding this request, if granted. All information within, attached to or submitted with this application shall become part of the public record, except as modified by applicable regulations. I (We) further understand that all application fees are non-refundable. By signing the application I am (We are) granting the Development Department access to our property for inspections.

Applicant: Declan Murphy (Signature) Date: 3-3-20

Print Applicant Name: Declan Murphy

Owner: Robert P. Pingetzer MAN (Signature) Date: 5-28-2020

Print Owner Name: Robert Pingetzer man
Pingetzer Six Iron Ranch LLC

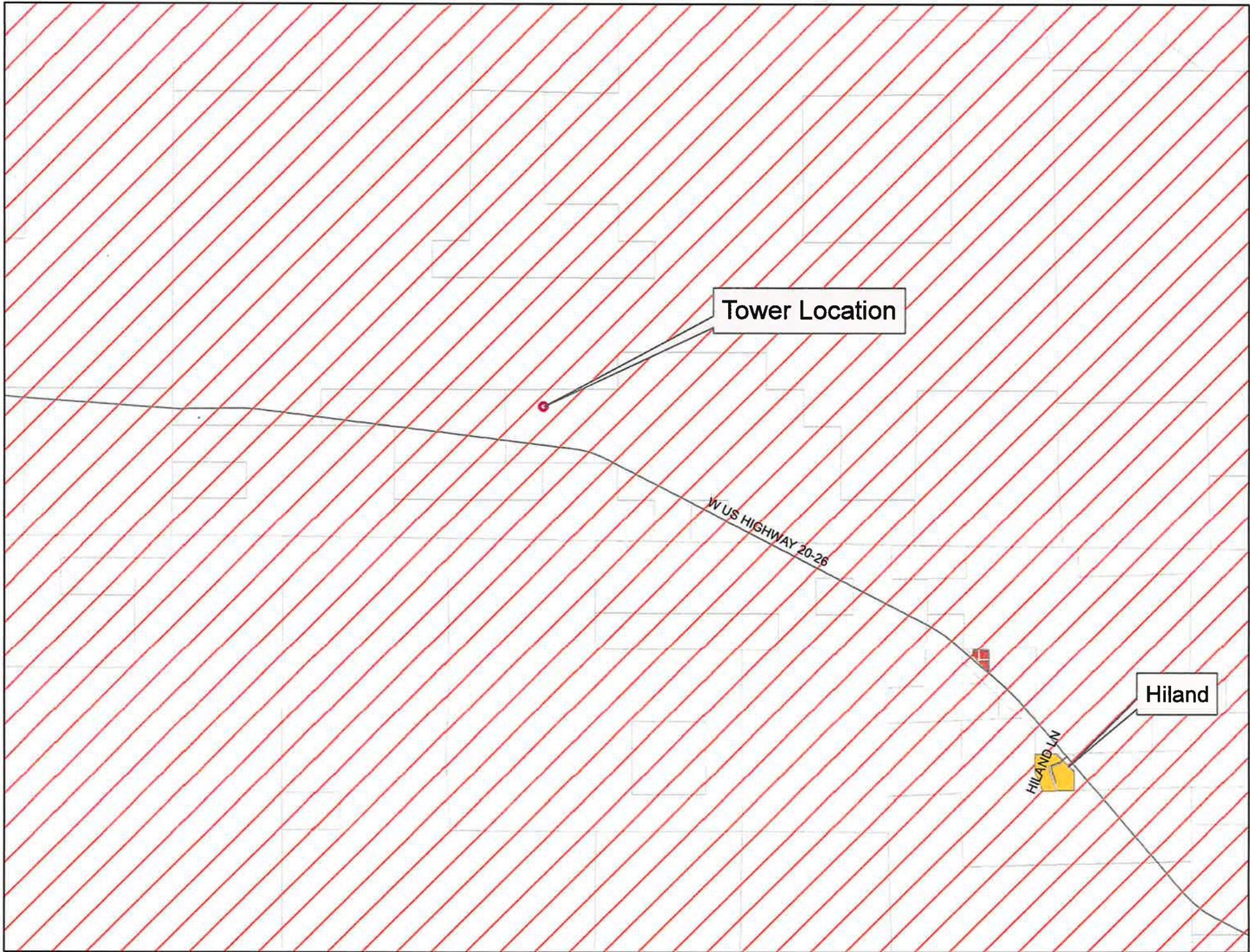


Tower Location

W US HIGHWAY 20-26

Hiland

HILAND LN



Tower Location

W US HIGHWAY 20-26

Hiland

HILAND LN

PHOTO SIMULATIONS

12063 - Poison Creek

LAT 43° 8' 26.25"

LONG -107° 24' 29.04"



Note: Simulations are an artistic illustration created to represent how the proposed project may look once constructed. Simulations are create to match the current design as accurately as possible, but are not guaranteed to match the final build.



Before:



PHOTO SIMULATIONS

12063 - Poison Creek

LAT 43° 8' 26.25"

LONG -107° 24' 29.04"

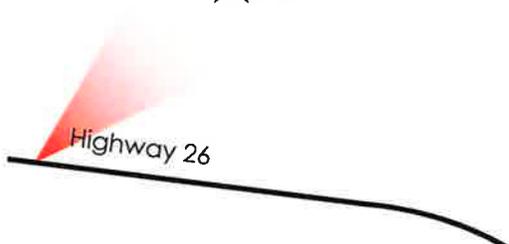
After:



View 1
Looking Northeast



Highway 26



Before:



PHOTO SIMULATIONS

12063 - Poison Creek

LAT 43° 8' 26.25"

LONG -107° 24' 29.04"

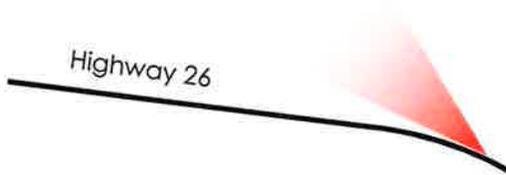
After:



View 2
Looking Northwest



Highway 26





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

GEOTECHNICAL ENGINEERING REPORT
NEW HEMPHILL 4-LEG SELF-SUPPORT TOWER
POISON CREEK – SITE # 12063
US HIGHWAY 20
NATRONA COUNTY, CASPER, WYOMING

Prepared for:

Hemphill, LLC
1350 North Louisville Avenue
Tulsa, Oklahoma 74115

Prepared by:



Springfield, MO
4168 W. Kearney Springfield, MO 65803
Call 417.864.6000 Fax 417.864.6004
www.ppimo.com

PROJECT NUMBER: 261436

May 13, 2020

May 13, 2020

Hemphill, LLC
1350 North Louisville Avenue
Tulsa, Oklahoma 74115

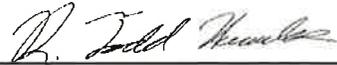
Attn: Mr. Scot Tinker, Director of Tower Operations
Email: scot.tinker@hemphill.com

RE: Geotechnical Engineering Report
New Hemphill 4-Leg Self-Support Tower - Poison Creek
US Highway 20
Natrona County, Casper, Wyoming
PPI Project Number: 261436

Dear Mr. Tinker:

Attached, please find the report summarizing the results of the geotechnical investigation conducted for the proposed New Hemphill 4-Leg Self-Support Tower in Natrona County, Casper, Wyoming. We appreciate this opportunity to be of service. If you have any questions, please don't hesitate to contact this office.

PALMERTON & PARRISH, INC.
By:



R. Todd Hercules, P.E.
Geotechnical Engineer

PALMERTON & PARRISH, INC.
By:



Brandon R. Parrish, P.E.
Vice-President



Submitted: One (1) Electronic .pdf Copy

BRP/BRP/RTH

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APPENDICES

- Appendix I - Figure
- Appendix II - Boring Log & Key To Symbols
- Appendix III - General Notes
- Appendix IV – Grain Size Test
- Appendix V - Important Information Regarding Your Geotechnical Report

EXECUTIVE SUMMARY

A Geotechnical Investigation was performed for the proposed New Hemphill 4-Leg Self-Support Tower located near US Highway 20 in Natrona County, Casper, Wyoming. It is understood that a new 80-foot Self-Support Tower will be constructed at the project site. Cut and fill depths are anticipated to be less than 1 foot across the subject site to provide finished subgrade elevations.

Based upon the information obtained from the boring drilled and subsequent laboratory testing, the site is suitable for the proposed Self-Support Tower. Important geotechnical considerations for the project are summarized below. However, users of the information contained in the report must review the entire report for specific details pertinent to geotechnical design considerations.

- Subsurface soils consisted of poorly-graded sand with silt extending the depth of the subsurface exploration. Sparse vegetation was noted at the ground surface;
 - The poorly-graded sand was generally loose to dense and excavatable without rock excavation equipment. The poorly-graded sands may be collapsible in excavations;
 - Mat foundations bearing on loose sands for the new Self-Support Tower can be designed for an allowable bearing capacity of 2,300 psf. Mat foundations bearing on medium dense sands at a depth of 8 feet or more for the new Self-Support Tower can be designed for an allowable bearing capacity of 5,000 psf. Micropiles may be used in conjunction with the mat foundation to resist overturning and lateral loads and provide additional bearing capacity. Alternatively, the proposed Self-Support Tower can be supported by a drilled pier foundation;
 - Drilled pier design parameters have been included in Section 8. Collapsible materials may be encountered in the drilled pier excavations. Accordingly, it is recommended that the drilled pier contractor have casing available in case these conditions are encountered;
-

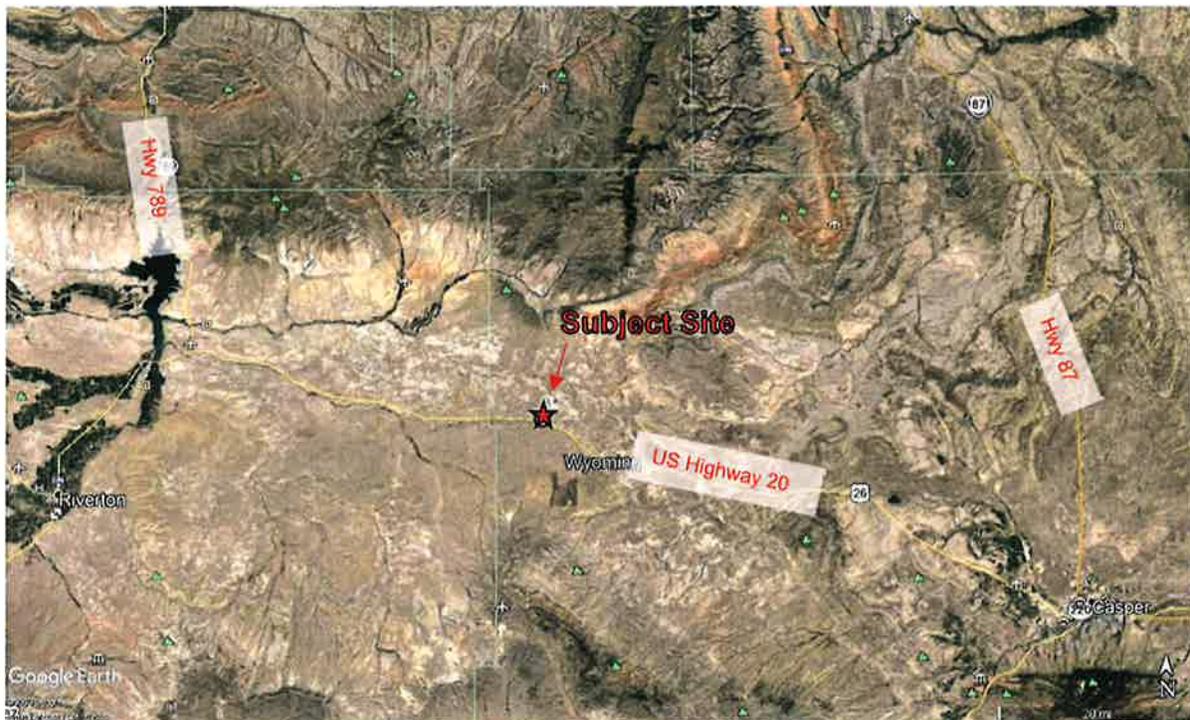
EXECUTIVE SUMMARY - CONTINUED

- The project site classifies as a Site Class D in accordance with Section 1613 of the 2012 International Building Code (IBC); and
 - Construction materials testing should be performed on tower foundations by a qualified engineer and close monitoring of subgrade preparation work is considered critical to achieve adequate subgrade performance.
-

**GEOTECHNICAL ENGINEERING REPORT
NEW HEMPHILL 4-LEG SELF-SUPPORT TOWER
POISON CREEK
US HIGHWAY 20
NATRONA COUNTY, CASPER, WYOMING**

1.0 INTRODUCTION

This is the report of the Geotechnical Investigation performed for the proposed New Hemphill 4-Leg Self-Support Tower located near US Highway 20 in Natrona County, Casper, Wyoming. This investigation was in accordance with a letter proposal dated October 8, 2019, and authorized by Mr. Scot Tinker with Hemphill. The approximate site location is shown below:



2.0 PROJECT PURPOSE

The purpose of this Geotechnical Investigation was to provide information for foundation design and construction planning for the proposed Self-Support Tower. PPI's scope of services includes field and laboratory testing, investigation of the subsurface conditions in the vicinity of the tower base, engineering analysis of collected data and development of recommendations for foundation design and construction planning, and preparation of this Engineering Report.

3.0 PROJECT DESCRIPTION

It is understood that a new 80-foot Self-Support Tower supported upon either a mat foundation or drilled piers is proposed at the project site. It is understood that micropiles may be utilized in combination with a mat foundation for additional overturning, lateral loading, and bearing capacity. Foundation loadings, both compressive and overturning are anticipated to be moderate. Cut and fill depths are anticipated to be less than 1 foot across the subject site to provide finished subgrade elevations.

4.0 SUBSURFACE INVESTIGATION

Subsurface conditions were investigated through completion of a subsurface boring and subsequent laboratory testing. Below is a picture of the boring location:



4.1 Subsurface Boring

The tower center was selected and staked in the field by the Client. The approximate boring location is shown on [Figure 1, Boring Location Plan](#). The Wyoming One-Call System was notified prior to the investigation to assist in locating buried public utilities.

A log of the boring showing descriptions of soil and rock units encountered, as well as results of field tests, laboratory tests and a “Key to Symbols” are presented in [Appendix II](#).

The boring was drilled on April 25, 2020 using air rotary methods and a 4-inch O.D. tricone bit powered by an ATV-mounted drill-rig. Soil samples were generally collected at 2.5 to 5-foot centers during drilling using a split spoon sampler while performing the Standard Penetration Test (SPT) in general accordance with ASTM D1586. Please refer to Appendix III for general notes regarding boring logs and additional soil sampling information.

4.2 Laboratory Testing

Collected samples were sealed and transported to the laboratory for further evaluation and visual examination. Laboratory soil testing included the following:

- Moisture Content (ASTM D2216); and
- Grain Size Analysis (ASTM D6913).

Laboratory test results are shown on each boring log in Appendix II and are summarized in the following table.

Depth (ft.)	Moisture Content (%)	USCS Symbol	Percent Passing No. 200 Sieve (%)
0	6.3	SP-SM	12
13.5	4.2	SP-SM	9

5.0 SITE GEOLOGY

Based on information available from the Wyoming Geological Survey, the subject site is located over dune sand and loess. These materials consist primarily of sand in active and dormant dune formations. Loess materials are windblown materials that are deposited in a “card house stacked” fashion and are collapsible if exposed to water.

The subject site is located on wind deposits according to the Wyoming Geological Survey. Accordingly, windblown deposits and/or the hazards of windblown material may impact the subject site in the future. Hazards include drift of dunes and soils which may partially bury structures or temporarily close roadways. Vegetation disturbance, if any, in these areas should be kept to a minimum.

6.0 GENERAL SITE SUBSURFACE CONDITIONS

Based upon subsurface conditions encountered within the boring drilled at the project site, generalized subsurface conditions are summarized in the table below. Soil stratification lines on the boring log indicate approximate boundary lines between different types of soil units based upon observations made during drilling. In-situ transitions between soil types are typically gradual.

6.1 Subsurface Stratums

Generalized subsurface conditions are summarized in the table below:

Depth	Stratum	Subsurface Material	Density/Consistency
0 to 50 feet	Sand	Poorly-Graded Sand, with Silt (SP-SM)	Loose to Dense

6.2 Groundwater

Shallow groundwater was not observed within the boring on the date drilled. Groundwater levels should be expected to fluctuate with changes in site grading, precipitation, and regional groundwater levels. Groundwater may be encountered during wetter periods.

7.0 EARTHWORK

Grading plans for the proposed Self-Support Tower were not provided. Grading for the project site is anticipated to have less than 1 foot of cut and/or fill to establish final grades. The initial phase of site preparation should include the steps listed below;

- Clearing and grubbing of any vegetation within the tower footprint; and
- Areas scheduled to receive controlled fill, if any, should be proof-rolled and approved in accordance with the following section of this report.

7.1 Site Preparation

Proof-rolling consists essentially of rolling the ground surface with a loaded tandem axle dump truck or similar heavy rubber-tired construction equipment and noting any areas which rut or deflect during rolling. All soft subgrade areas identified during proof-

rolling should be undercut and replaced with compacted fill as outlined below. Proof-rolling, undercutting and replacement should be monitored by a qualified representative of the Geotechnical Engineer.

7.2 Fill Material Types

Fill Type ¹	USCS Classification	Acceptable Location for Placement
Low Volume Change (LVC) Engineered Fill ²	CL, GC, or SC (LL < 45%)	All locations and elevations
On-Site Natural Soils	SP-SM	All locations and elevations
Rock Fill ³	GW	All locations and elevations

1. Controlled, compacted fill should consist of approved materials that are free of organic matter and debris and contain maximum rock size of 4 to 6 in. Frozen material should not be used and fill should not be placed on a frozen subgrade. A sample of each material type should be submitted to the Geotechnical Engineer for evaluation prior to its use.
2. Low plasticity cohesive soil or granular soil having at least 15% low plasticity fines.
3. See Section 7.2.1 if rock fill will be utilized at the project site.

7.2.1 Rock Fill

If rock is to be used as the primary filling medium, embankments should be constructed using rock having maximum dimensions in excess of 4 inches, but no greater than 8 inches. Rock material should be placed in horizontal layers having a thickness of approximately the maximum size of the larger rock comprising the lift, but not greater than 12 inches. Rocks or boulders too large to permit placing in a 12-inch thick lift should be reduced in size as necessary to permit placement or be bladed over the edge of the fill and not used in the compacted fill. Rock fill should not be dumped into place but should be distributed in horizontal lifts by blading and dozing in such a manner as to ensure proper placement into final position in the embankment. Finer material including rock fines and limited soil fines should be worked into the rock voids during this blading operation. Excessive soil and rock fine particles preventing interlock of cobble and boulder sized rock should be prohibited. Rock fill should be consolidated by a minimum of three (3) passes of a large diameter self-propelled vibratory compactor. Terminal fill slopes using rock may be constructed 1.5 horizontal to 1 vertical for fill height of 15 feet or less. The testing of rock fill quality should include the requirements that a representative of the Geotechnical Engineer be present daily, but not necessarily

continuously during the placement of the fill to observe the placement of rock fill in order to determine fill quality and to observe that the contractors work sequence is in compliance with this specification. Progress reports indicative of the quality of the fill should be made at regular intervals to the Owner. If improper placement procedures are observed during the placement of the fill the Geotechnical Engineer should inform the Contractor, and no additional fill should be permitted on the affected area until the condition causing the low densities has been corrected and the fill has been reworked to obtain sufficient density.

7.3 Compaction Requirements

Item	Description
Subgrade Scarification Depth	At least 8 inches
Fill Lift Thickness	8-inch (loose)
Compaction Requirements ¹	<ul style="list-style-type: none"> 70% Relative Density, or compacted by a minimum of three (3) passes of a self-propelled smooth drum vibratory compactor; or 95% Standard Proctor Density (ASTM D-698).
Moisture Content	<ul style="list-style-type: none"> ± 2% optimum moisture for CL, SC, or GC soil types.
Recommended Testing Frequency	<ul style="list-style-type: none"> One (1) Field Density (compaction) test for each 2,500 sq. ft. of fill within the footprint of the Self-Support Tower; One (1) Field Density (compaction) test for each 5,000 sq. ft. of fill within non-structure areas; A minimum of three (3) tests per lift; and Visual observation of the compaction process should be documented with no testing required <u>if</u> a performance compaction specification (i.e. number of passes) is utilized.
<p>1. We recommend that engineered fill (including scarified compacted subgrade) be tested for moisture content and compaction during placement. Should the results of the in-place density tests indicate the specified moisture or compaction limits have not been met, the area represented by the test should be reworked and retested as required until the specified moisture and compaction requirements are achieved.</p>	

7.4 Excavations

Based upon the subsurface conditions encountered during this investigation, the on-site soils typically classify as Type C in accordance with OSHA regulations. Temporary excavations in soils classifying as Type C with a total height of less than 20 feet should be cut no steeper than 1.5H:1V in accordance with OSHA guidelines. Confirmation of

soil classification during construction, as well as construction safety (including shoring, if required), is the responsibility of the contractor.

8.0 TOWER FOUNDATION RECOMMENDATIONS

The proposed Self-Support Tower is anticipated to either be supported on a shallow mat foundation or on drilled pier foundations. It is understood that micropiles may be utilized in addition to a mat foundation to help resist overturning and lateral loads. Based upon the conditions encountered in the boring performed at the project site, the site subsurface materials are suitable for either a mat foundation or drilled pier foundations. Recommendations for mat foundations and drilled piers are included in the following sections.

8.1 Shallow Mat Foundations

Based upon the subsurface conditions encountered near the proposed Self-Support Tower and anticipated site grading, footings for the proposed Self-Support Tower are anticipated to bear in loose natural soils with additional support from micropiles. Alternatively, the mat foundation excavation may be extended to a minimum depth of 8 feet to bear on the medium dense sand in this location. Design bearing capacities for both options have been included in the shallow foundation design recommendation table below. Please refer to the section below for recommendations regarding shallow foundations.

8.2 Shallow Foundation Design Recommendations

Description	Mat Foundation Parameters on Loose Sands (Bearing Above 8 ft.)	Mat Foundation Parameters on Medium Dense Sands (Bearing at 8 ft. or Below)
Net allowable bearing pressure ¹	Loose Sand: 2,300 psf	Dense Sand: 5,000 psf
Ultimate bearing pressure ²	Loose Sand: 6,900 psf	Dense Sand: 15,000 psf
Transient (wind) loading <u>ONLY</u> – Allowable Bearing Pressure ³	Loose Sand: 3,450 psf	Dense Sand: 7,500 psf
Minimum embedment below finished grade for frost protection and variation in soil moisture ⁴	Loose Sand: 5 feet	A minimum of 8 feet to bear on the medium dense sand.
Estimated total settlement ⁵	1 inch or less	
Allowable passive pressure ⁶	600 psf	800 psf
Coefficient of sliding friction ⁷	0.5 (natural soils)	0.6 (natural soils)
<p>1. The recommended net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation. The recommended pressure considers all unsuitable and/or soft or loose soils, if encountered, are undercut and replaced with tested and approved new engineered fill. Footing excavations should be free of loose and disturbed material, debris, and water when concrete is placed. A factor of safety value of 3 has been applied to these values.</p> <p>2. No factor of safety has been applied to this value.</p> <p>3. The allowable bearing capacity may be increased to this value <u>only</u> for transient or wind loading.</p> <p>4. For footings beneath unheated areas. It is anticipated that additional depth may be required for overturning and uplift design considerations.</p> <p>5. The foundation movement will depend upon the variations within the subsurface soil profile, the structural loading conditions, the embedment depth of the footings, the thickness of compacted fill, and the quality of the earthwork operations.</p> <p>6. Allowable passive pressure value considers a factor of safety of about 2. Passive pressure value applies to undisturbed native clay or properly compacted fill. If formed footings are constructed, the space between the formed side of a footing and excavation sidewall should be cleaned of all loose material, debris, and water and backfilled with tested and approved fill compacted to at least 95% of the material's Standard Proctor dry density. Passive resistance should be neglected for the upper 5 feet of the soil below the final adjacent grade due to strength loss from freeze/thaw and shrink/swell.</p> <p>7. Coefficient of friction value is an ultimate value and does not contain a factor of safety.</p>		

8.3 Uplift

Resistance of shallow spread footings to uplift (U_p) may be based upon the dead weight of the concrete footing structure (W_c) and the weight of soil backfill contained in an inverted cone or pyramid directly above the footings (W_s). The following parameters may be used in design:

Description	Weights
Weight of Concrete (W_c)	150 pcf
Weight of Soil Resistance (W_s)	100 pcf
Weight for on-site soils placed in accordance with Section 7	

The base of the cone or pyramid should be the top of the footing and the pyramid or cone sides should form an angle of 30 degrees with the vertical. Allowable uplift capacity (U_p) should be computed as the lesser of the two (2) equations listed below:

$$U_P = (W_s/2.0) + (W_c/1.25) \text{ or } U_P = (W_s + W_c)/1.5$$

If additional uplift and/or overturning load resistance is required for the project site consideration may be given to the use of rock anchors. Rock anchor design values are included in Section 8.4.

8.4 Anchor Design Values

It is understood that a combination of mat foundations and micropiles, of Case 1 type (directly loaded piles), may be utilized for the proposed Self-Support Tower. The following tables contain passive pressures and preliminary grout to ground bond strengths needed for use in the design of micropiles. These values, at their corresponding depths, should be used in conjunction with the following micropile design values.

It is understood that a total of three (3) possible installation methods may be utilized for micropile installation at the subject sites. Due to the variable installation procedures, grout to ground bond strengths are variable between these installation methods and have been included as separate bond strengths accordingly. The installation methods are noted below:

- Micropile Type "A" – Grout is gravity installed by tremie methods after drilling. This method is generally used for rock sockets;
- Micropile Type "B" – After drilling, grout is pressure grouted through casing or hollow stem auger during casing or auger removal; and
- Micropile Type "E" – High water content grout is utilized in drilling through a continuously threaded, hollow-core steel bar then replaced with pressurized structural grout near the completion of drilling.

Stratum	Applicable Depth (ft.)	Unit Weight (pcf)	Friction Angle, ϕ (Degrees)	Coefficient of Passive Pressure	Preliminary Grout-to-Ground Ultimate Bond Strength ² (psi)		
					A	B	E
Surface Material and Sand	0 to 5	Moist: 120	Ignore	Ignore	-	-	-
Sand	5 to 10	Moist: 120	30	3.0	10	10	10
Sand	10 to 30	Moist: 125	32	3.3	14	18	18
Sand	30 to 50	Moist: 125	32	3.3	22	30	30
Sand ¹	Over 50	Moist: 125	32	3.3	22	30	30

1. Assumes soils are equal to or better than those at depths greater than the boring termination depth. This should be confirmed in the field during installation of micropiles.
 2. Bond Values are based upon subsurface data obtain in 1 Boring and assume full time observation by a qualified Geotechnical Inspector experienced with micropiles during installation.

8.5 Drilled Pier Foundation Recommendations

Based upon the conditions encountered in the boring and subsequent laboratory testing, the proposed Self-Support Tower may be supported on a system of drilled piers bearing within the poorly-graded sand material. The drilled shaft should be plumb (no more than 2 percent of the shaft length off vertical), and the drilled shaft should have a relatively flat bottom. Essentially all groundwater, if encountered, should be removed from the drilled pier shaft prior to concrete placement. If it is not possible to remove nearly all (2 to 3 inches max) of the groundwater from the drilled shaft excavation, concrete should be placed via tremie methods.

The method of concrete placement and vibration should be selected by the Structural Engineer. Required strength and mix design characteristics should also be specified by the Structural Engineer or other members of the Design Team.

The sand layers were excavatable with air rotary methods; however, casing may be required at the subject site due to possible collapsible sandy material.

8.6 Bearing Capacity and Uplift Resistance for a Drilled Shaft

The design parameters summarized in the table below may be utilized for bearing capacity and uplift capacity design for drilled shafts as described above. Allowable end bearing pressures and side friction values are summarized in the table below.

Stratum¹	Applicable Depth (ft.)	Allowable End Bearing Pressure (ksf)²	Allowable Side Friction (ksf)³
Surface Material and Sand	Ground surface to 1 shaft diameter or a minimum of 5 feet	Ignore	Ignore
Sand	5 feet to 10 feet	Not Recommended	0.6
Sand	10 feet to 20 feet	6.0	1.1
Sand	20 feet to 30 feet	8.0	1.3
Sand	30 feet to 40 feet	10.0	1.5
Sand	40 feet to 50 feet	14.0	1.5

1. If soft soils are encountered in plan bottom of shaft during drilling, the shaft should be deepened until an acceptable bearing stratum is encountered.
2. End bearing pressure values assume a Factor of Safety of 3.0 or greater.
3. Side friction values include a Factor of Safety of ~1.5. These values should be used with **Factored Loads** during structural design. Side Friction may be used for computation of Uplift and Compressive Capacity in soil.

8.7 Lateral Loadings

It is anticipated that designers will most likely utilize LPILE for completion of deep foundation lateral capacity design for the tower foundations. LPILE uses finite difference computer models based on the horizontal modulus of subgrade reaction (K_h).

The values listed in the table below may be utilized for Drilled Pier Analysis in LPILE. Please also notice that the table states to “ignore” lateral support for the depth from 0 to 1 pier diameter or a minimum of 5 feet. This notation is intended to account for the fact that near-surface soils are significantly disturbed during drilled shaft excavation, which greatly reduces the lateral support provided. Designers should use their judgment and make an appropriate reduction of soil strength parameters in this zone.

Values summarized in the table below are based upon published correlations, and field and laboratory data collected during this subsurface investigation. Values shown below are ultimate values representative of in-situ soil properties, and do not include

a Factor of Safety. These values may be used to compute resistance to lateral loading of the overburden soils. **The appropriate Factor of Safety should be chosen by the designer.**

Stratum (Model)	Applicable Depth	Unit Weight ¹ (pcf)	Friction Angle, ϕ (Degrees)	Submerged Modulus, k (pci)	Above Water Table Modulus, k (pci)
Surface Material and Sand (Sand)	Ground surface to 1 shaft diameter or a minimum of 5 feet	Moist: 120	Ignore	Ignore	Ignore
Sand (Sand)	1 shaft diameter or a minimum of 5 feet to 10 feet	Moist: 120	30	20	25
Sand (Sand)	10 feet to 40 feet	Moist: 125	32	60	90
Sand (Sand)	40 feet to 50 feet (and below)	Moist: 125	32	125	225

1. Buoyant unit weight should be utilized for soils that extend below the design groundwater level. Groundwater was not encountered at the project site.

9.0 SEISMIC CONSIDERATIONS

Code Used	Site Classification
2012 International Building Code (IBC) ¹	D
1. In general accordance with the 2012 International Building Code, Section 1613	

10.0 CONSTRUCTION OBSERVATION & TESTING

The construction process is an integral design component with respect to the geotechnical aspects of a project. Since geotechnical engineering is influenced by variable depositional and weathering processes and because we sample only a small portion of the soils affecting the performance of the proposed Self-Support Tower, unanticipated or changed conditions can be disclosed during grading. Proper geotechnical observation and testing during construction is imperative to allow the Geotechnical Engineer the opportunity to evaluate assumptions made during the design process. Therefore, we recommend that PPI be kept apprised of design modifications and construction schedule of the proposed project to observe compliance with the design concepts and geotechnical recommendations, and to allow design changes in the event

that subsurface conditions or methods of construction differ from those assumed while completing this study. We recommend that during construction all earthwork be monitored by a representative of PPI, including site preparation, placement of all engineered fill and trench backfill, and all foundation excavations as outlined below.

- An experienced Geotechnical Engineer should observe the subgrade throughout the proposed project site immediately following stripping to evaluate the native soils, identify areas requiring undercutting, and evaluate the suitability of the exposed surface for fill placement;
- An experienced Engineer or Engineering Technician should monitor and test all fill placed within the Self-Support Tower area to determine whether the type of material, moisture content, and degree of compaction are within recommended limits; and
- An experienced Technician or Engineer should observe drilled pier excavations. Where unsuitable bearing conditions are observed, PPI should be contacted to provide remedial procedures.

11.0 REPORT LIMITATIONS

This report has been prepared in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area. Palmerton & Parrish, Inc. observed that degree of care and skill generally exercised by other consultants under similar circumstances and conditions. Palmerton & Parrish's findings and conclusions must be considered not as scientific certainties, but as opinions based on our professional judgment concerning the significance of the data gathered during the course of this investigation. Other than this, no warranty is implied or intended.



SCALE: 1" = 25'

LEGEND

 Boring Location

NOTES

- Aerial image from Google Earth Pro.
- Site drawing provided by the Client.
- Not intended for use in design.

Project: Posion Creek - Site # 12063 - Self Support Tower - Casper, Wyoming
 Client: Hemphill, LLC

Boring Location Plan

DATE: April 24, 2020

Project Number: 261436

PPI PALMERTON & PARRISH, INC.
 GEOTECHNICAL AND MATERIALS ENGINEERS/MATERIALS TESTING LABORATORIES/ENVIRONMENTAL SERVICES

FIGURE 1



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Springfield, Missouri 65803
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GEOTECHNICAL BORING LOG

BORING NUMBER

1

PAGE 1 OF 1

CLIENT Hemphill, LLC PROJECT NAME Poison Creek Self-Support Tower
 PROJECT NO. 261436 PROJECT LOCATION Casper, Wyoming
 DATE STARTED 4/25/20 COMPLETED 4/25/20 SURFACE ELEVATION _____ BENCHMARK EL. _____
 DRILLER CW DRILL RIG CME-550x GROUND WATER LEVELS _____
 HAMMER TYPE Auto AT TIME OF DRILLING None
 LOGGED BY CJ CHECKED BY RTH AT END OF DRILLING _____
 NOTES _____

BORING LOG - PPI - PPI STD TEMPLATE.GDT - 5/14/20 08:50 - S:_MASTER PROJECT FILE\2019\WY\HEMPHILL-261436-WY_CO & UT REGISTRATIONS-SUBDRILLED2020\POISON CREEK\LOGS\POISON CREEK - GINT.GPJ

DEPTH (ft)	DRILLING METHOD	STRATA SYMBOL	MATERIAL DESCRIPTION Unified Soil Classification System	SAMPLE TYPE NUMBER	RECOVERY % (RQD %)	CORRECTED BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT (pcf)				ELEVATION (ft)	
								20	40	60	80		
0	AIR ROTARY - 4" O.D. Tricone		POORLY-GRADED SAND, w/Silt, Fine to Medium Grained, Brown to Tannish Brown, Slight Reaction to HCL, Slightly Moist, Loose to Dense (SP-SM)	SPT 1		4-4-5 (9)							
				SPT 2		4-4-5 (9)							
				SPT 3		5-3-4 (7)							
				SPT 4		5-7-8 (15)							
10				SPT 5		7-12-9 (21)							
				SPT 6		4-7-8 (15)							
20				SPT 7		8-3-12 (15)							
				SPT 8		9-12-13 (25)							
30				SPT 9		7-13-16 (29)							
				SPT 10		9-13-13 (26)							
40				SPT 11		8-14-18 (32)							
50				SPT 12		10-24-21 (45)							

50.0 ft

Bottom of borehole at 50.0 feet.



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KEY TO SYMBOLS

CLIENT Hemphill, LLC

PROJECT NAME Poison Creek Self-Support Tower

PROJECT NO. 261436

PROJECT LOCATION Casper, Wyoming

LITHOLOGIC SYMBOLS (Unified Soil Classification System)



SP-SM: USCS Poorly-graded Sand with Silt

SAMPLER SYMBOLS



Standard Penetration Test

WELL CONSTRUCTION SYMBOLS

ABBREVIATIONS

LL - LIQUID LIMIT (%)
 PI - PLASTIC INDEX (%)
 W - MOISTURE CONTENT (%)
 DD - DRY DENSITY (PCF)
 NP - NON PLASTIC
 -200 - PERCENT PASSING NO. 200 SIEVE
 PP - POCKET PENETROMETER (TSF)

TV - TORVANE
 PID - PHOTOIONIZATION DETECTOR
 UC - UNCONFINED COMPRESSION
 ppm - PARTS PER MILLION
 Water Level at Time Drilling, or as Shown
 Water Level at End of Drilling, or as Shown
 Water Level After 24 Hours, or as Shown

KEY TO SYMBOLS - PPI STD TEMPLATE.GDT - 5/14/20 08:50 - S:_MASTER PROJECT FILE\2019\WY\HEMPHILL-261436-WY_CO & UT REGISTRATIONS-SUBDRILLED\2020\POISON CREEK\LOGS\POISON CREEK - GINT.GPJ

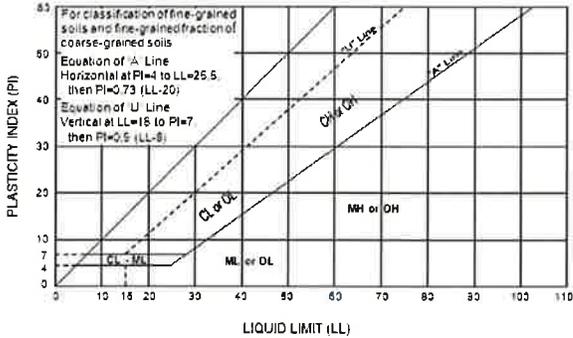


GENERAL NOTES

SOIL PROPERTIES & DESCRIPTIONS

COHESIVE SOILS

Consistency	Unconfined Compressive Strength (Qu)	Pocket Penetrometer Strength	N-Value
	(psf)	(tsf)	(blows/ft)
Very Soft	<500	<0.25	0-1
Soft	500-1000	0.25-0.50	2-4
Medium Stiff	1001-2000	0.50-1.00	5-8
Stiff	2001-4000	1.00-2.00	9-15
Very Stiff	4001-8000	2.00-4.00	16-30
Hard	>8000	>4.00	31-60
Very Hard			>60



Group Symbol	Group Name
CL	Lean Clay
ML	Silt
OL	Organic Clay or Silt
CH	Fat Clay
MH	Elastic Silt
OH	Organic Clay or Silt
PT	Peat
CL-CH	Lean to Fat Clay

Plasticity		Moisture	
Description	Liquid Limit (LL)	Descriptive Term	Guide
Lean	<45%	Dry	No indication of water
Lean to Fat	45-49%	Moist	Indication of water
Fat	≥50%	Wet	Visible water

Fine Grained Soil Sub Classification	Percent (by weight) of Total Sample
Terms: SILT, LEAN CLAY, FAT CLAY, ELASTIC SILT	PRIMARY CONSTITUENT
Sandy, gravelly, abundant cobbles, abundant boulders with sand, with gravel, with cobbles, with boulders	>30-50]
scattered sand, scattered gravel, scattered cobbles, scattered boulders	>15-30] – secondary coarse grained constituents
a trace sand, a trace gravel, a few cobbles, a few boulders	5-15]
	<5]
The relationship of clay and silt constituents is based on plasticity and normally determined by performing index tests. Refined classifications are based on Atterberg Limits tests and the Plasticity Chart.	

NON-COHESIVE (GRANULAR) SOILS

RELATIVE DENSITY	N-VALUE	MOISTURE CONDITION	
		Descriptive Term	Guide
Very Loose	0-4	Dry	No indication of water
Loose	5-10	Moist	Damp but no visible water
Medium Dense	11-24	Wet	Visible free water, usually soil is below water table.
Dense	25-50		
Very Dense	≥51		

**GRAIN SIZE IDENTIFICATION		
Name	Size Limits	Familiar Example
Boulder	12 in. or more	Larger than basketball
Cobbles	3 in. to 12 in.	Grapefruit
Coarse Gravel	¾-in. to 3 in.	Orange or lemon
Fine Gravel	No. 4 sieve to ¾-in.	Grape or pea
Coarse Sand	No. 10 sieve to No. 4 sieve	Rock salt
Medium Sand	No. 40 sieve to No. 10 sieve	Sugar, table salt
Fine Sand*	No. 200 sieve to No. 40 sieve	Powdered sugar
Fines	Less than No. 200 sieve	

*Particles finer than fine sand cannot be discerned with the naked eye at a distance of 8 inches.

Coarse Grained Soil Sub Classification	Percent (by weight) of Total Sample
Terms: GRAVEL, SAND, COBBLES, BOULDERS	PRIMARY CONSTITUENT
Sandy, gravelly, abundant cobbles, abundant boulders with gravel, with sand, with cobbles, with boulders	>30-50]
scattered gravel, scattered sand, scattered cobbles, scattered boulders	>15-30] – secondary coarse grained constituents
a trace gravel, a trace sand, a few cobbles, a few boulders	5-15]
	<5]
Silty (MH & ML)*, clayey (CL & CH)*	<15]
(with silt, with clay)*	5-15] – secondary fine grained constituents
(trace silt, trace clay)*	<5]
*Index tests and/or plasticity tests are performed to determine whether the term "silt" or "clay" is used.	

*Modified after Ref. ASTM D2487-93 & D2488-93

**Modified after Ref. Oregon DOT 1987 & FHWA 1997

***Modified after Ref. AASHTO 1988, DM 7.1 1982, and Oregon DOT 1987



GENERAL NOTES

BEDROCK PROPERTIES & DESCRIPTIONS

ROCK QUALITY DESIGNATION (RQD)	
Description of Rock Quality	*RQD (%)
Very Poor	< 25
Poor	25-50
Fair	50-75
Good	75-90
Excellent	90-100

*RQD is defined as the total length of sound core pieces 4 in. or greater in length, expressed as a percentage of the total length cored. RQD provides an indication of the integrity of the rock mass and relative extent of seams and bedding planes.

SCALE OF RELATIVE ROCK HARDNESS		
Term	Field Identification	Approx. Unconfined Compressive Strength (tsf)
Extremely Soft	Can be indented by thumbnail	2.6-10
Very Soft	Can be peeled by pocket knife	10-50
Soft	Can be peeled with difficulty by pocket knife	50-260
Medium Hard	Can be grooved 2 mm deep by firm pressure of knife	260-520
Moderately Hard	Requires one hammer blow to fracture	520-1040
Hard	Can be scratched with knife or pick only with difficulty	1040-2610
Very Hard	Cannot be scratched by knife or sharp pick	>2610

DEGREE OF WEATHERING	
Slightly Weathered	Rock generally fresh, joints stained and discoloration extends into rock up to 25mm (1 in), open joints may contain clay, core rings under hammer impact.
Weathered	Rock mass is decomposed 50% or less, significant portions of rock show discoloration and weathering effects, cores cannot be broken by hand or scraped by knife.
Highly Weathered	Rock mass is more than 50% decomposed, complete discoloration of rock fabric, core may be extremely broken and gives clunk sound when struck by hammer, may be shaved with a knife.

GRAIN SIZE (TYPICALLY FOR SEDIMENTARY ROCKS)		
Description	Diameter (mm)	Field Identification
Very Coarse Grained	>4.76	Individual grains can easily be distinguished by eye.
Coarse Grained	2.0-4.76	
Medium Grained	0.42-2.0	Individual grains can be distinguished by eye.
Fine Grained	0.074-0.42	Individual grains can be distinguished by eye with difficulty.
Very Fine Grained	<0.074	Individual grains cannot be distinguished by unaided eye.

VOIDS	
Pit	Voids barely seen with the naked eye to 6mm *1/4-inch)
Vug	Voids 6 to 50mm (1/4 to 2 inches) in diameter
Cavity	50 to 6000mm (2 to 24 inches) in diameter
Cave	> 600mm

BEDDING THICKNESS	
Very Thick Bedded	> 3' Thick
Thick Bedded	1' to 3' Thick
Medium Bedded	4" to 1' Thick
Thin Bedded	1-1/4" to 4" Thick
Very Thin Bedded	1/2" to 1-1/4" Thick
Thickly Laminated	1/8" to 1/2" Thick
Thinly Laminated	1/8" or less (paper thin)

DRILLING NOTES

Drilling & Sampling Symbols		
NQ – Rock Core (2-inch diameter)	CFA- Continuous Flight (Solid Stem) Auger	WB – Wash Bore or Mud Rotary
HQ – Rock Core (3-inch diameter)	SS – Split Spoon Sampler	TP – Test Pit
HSA – Hollow Stem Auger	ST – Shelby Tube	HA – Hand Auger

Soil Sample Types

Shelby Tube Samples: Relatively undisturbed soil samples were obtained from the borings using thin wall (Shelby) tube samplers pushed hydraulically into the soil in advance of drilling. This sampling, which is considered to be undisturbed, was performed in accordance with the requirements of ASTM D 1587. This type of sample is considered best for the testing of "in-situ" soil properties such as natural density and strength characteristics. The use of this sampling method is basically restricted to soil containing little to no chert fragments and to softer shale deposits.

Split Spoon Samples: The Standard Penetration Test is conducted in conjunction with the split-barrel sampling procedure. The "N" value corresponds to the number of blows required to drive the last 1 foot of an 18-inch long, 2-inch O.D. split-barrel sampler with a 140 lb. hammer falling a distance of 30 inches. The Standard Penetration Test is carried out according to ASTM D-1586.

Water Level Measurements

Water levels indicated on the boring logs are levels measured in the borings at the times indicated. In permeable materials, the indicated levels may reflect the location of groundwater. In low permeability soils, shallow groundwater may indicate a perched condition. Caution is merited when interpreting short-term water level readings from open bore holes. Accurate water levels are best determined from piezometers.

Automatic Hammer

Palmerton and Parrish, Inc.'s CME's are equipped with automatic hammers. The conventional method used to obtain disturbed soil samples used a safety hammer operated by company personnel with a cat head and rope. However, use of an automatic hammer allows a greater mechanical efficiency to be achieved in the field while performing a Standard Penetration resistance test based upon automatic hammer efficiencies calibrated using dynamic testing techniques.

*Modified after Ref. ASTM D2487-93 & D2488-93

**Modified after Ref. Oregon DOT 1987 & FHWA 1997

***Modified after Ref. AASHTO 1988, DM 7.1 1982, and Oregon DOT 1987



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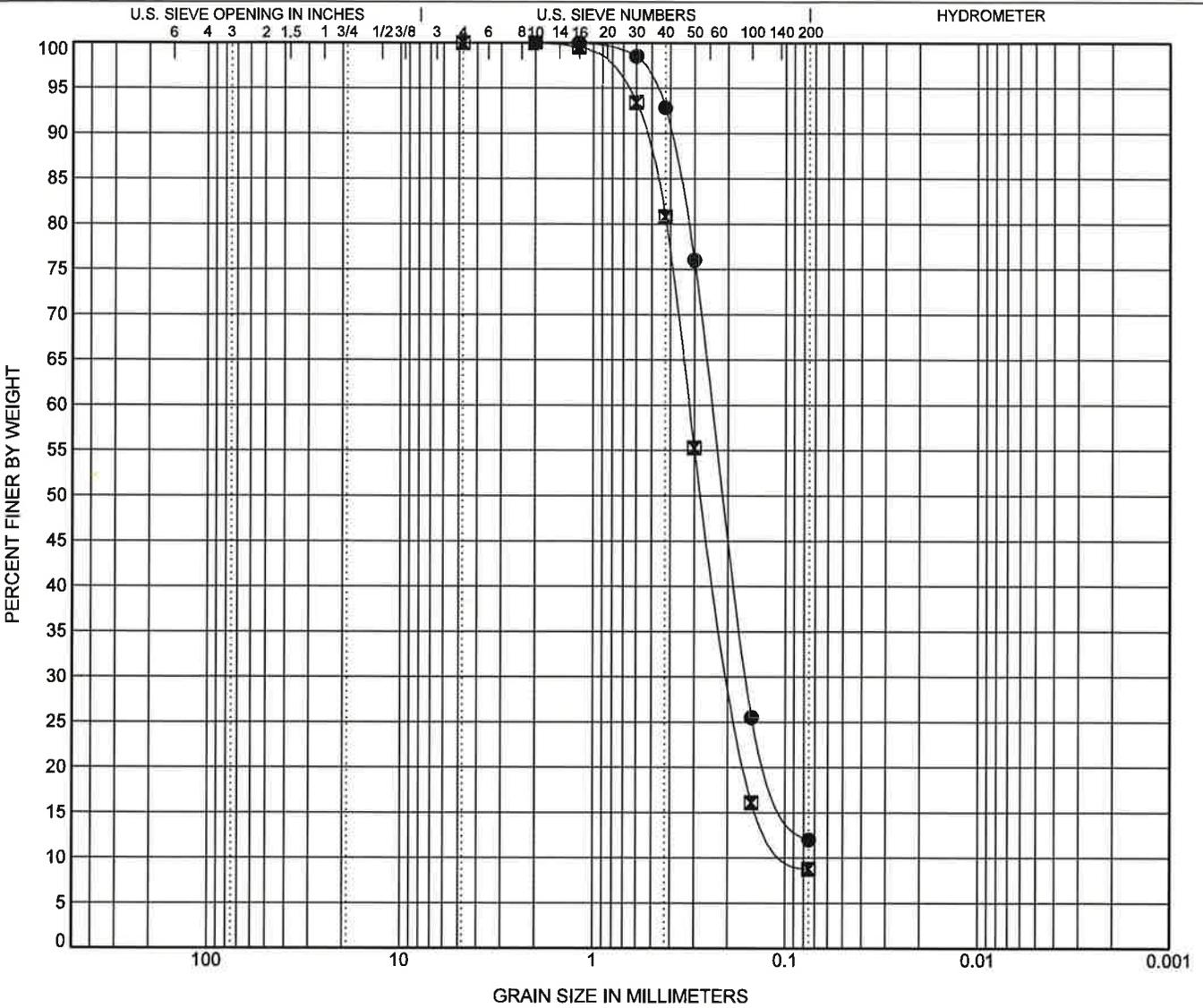
GRAIN SIZE DISTRIBUTION

CLIENT Hemphill, LLC

PROJECT NAME Poison Creek Self-Support Tower

PROJECT NO. 261436

PROJECT LOCATION Casper, Wyoming



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

BOREHOLE	DEPTH	Classification					LL	PL	PI	Cc	Cu
● 1	0.0	POORLY-GRADED SAND, with Silt								1.56	3.56
☒ 1	13.5	POORLY-GRADED SAND, with Silt								1.37	3.81
BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay		
● 1	0.0	2	0.241	0.16		0.0	88.0	12.0			
☒ 1	13.5	4.75	0.32	0.192	0.084	0.0	91.2	8.8			

GRAIN SIZE - PPI STD TEMPLATE.GDT - 5/11/20 16:43 - S:\MASTER PROJECT FILE\2019\WY\HEMPHILL-261436-WY_CO & UT REGISTRATIONS-SUBDRILLED\2020\POISON CREEK\LOGS\POISON CREEK - GINT.GPJ

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, clients can benefit from a lowered exposure to the subsurface problems that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed below, contact your GBA-member geotechnical engineer. Active involvement in the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Geotechnical-Engineering Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. *Those who rely on a geotechnical engineering report prepared for a different client can be seriously misled. No one except authorized client representatives should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. And no one – not even you – should apply this report for any purpose or project except the one originally contemplated.*

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical engineering report did not read it *in its entirety*. Do not rely on an executive summary. Do not read selected elements only. *Read this report in full.*

You Need to Inform Your Geotechnical Engineer about Change

Your geotechnical engineer considered unique, project-specific factors when designing the study behind this report and developing the confirmation-dependent recommendations the report conveys. A few typical factors include:

- the client's goals, objectives, budget, schedule, and risk management preferences;
- the general nature of the structure involved, its size, configuration, and performance criteria;
- the structure's location and orientation on the site; and
- other planned or existing site improvements, such as retaining walls, access roads, parking lots, and underground utilities.

Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.*

This Report May Not Be Reliable

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it, e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, that it could be unwise to rely on a geotechnical-engineering report whose reliability may have been affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If your geotechnical engineer has not indicated an "apply-by" date on the report, ask what it should be, and, in general, if you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying it. A minor amount of additional testing or analysis – if any is required at all – could prevent major problems.*

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface through various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing were performed. The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgment to form opinions about subsurface conditions throughout the site. Actual site-wide subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team from project start to project finish, so the individual can provide informed guidance quickly, whenever needed.*

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, *they are not final*, because the geotechnical engineer who developed them relied heavily on judgment and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* revealed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to return that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a full-time member of the design team, to:

- confer with other design team members,
- help develop specifications,
- review pertinent elements of other design professionals' plans and specifications, and
- be on hand quickly whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction observation.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated subsurface conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for informational purposes only.* To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report, but they may rely on the factual data relative to the specific times, locations, and depths/elevations referenced. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only from the design drawings and specifications.* Remind constructors that they may

perform their own studies if they want to, and *be sure to allow enough time to permit them to do so.* Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase one" or "phase two" environmental site assessment – differ significantly from those used to perform a geotechnical engineering study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations, e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. As a general rule, *do not rely on an environmental report prepared for a different client, site, or project, or that is more than six months old.*

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, none of the engineer's services were designed, conducted, or intended to prevent uncontrolled migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration.* Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists.*



Telephone: 301/565-2733

e-mail: info@geoprofessional.org www.geoprofessional.org

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CONDITIONAL USE PERMIT REQUEST
FOR A
TELECOMMUNICATION SITE

CUP20-3

Staff Report: Trish Chavis
June 10, 2020

For

July 14, 2020
Planning and Zoning Commission

And

August 4, 2020
Board of County Commissioner Meeting

Applicant: Declan Murphy, Union Wireless/Hemphill

Request: Construct an 84-foot self-supporting communication tower to allow for the expansion of an existing Union Wireless site. The applicant is requesting 100-feet total height to include all appurtenances.

Location and Zoning

The parcel is located approximately 4 miles west of Hiland on W. US Highway 20-26.

The subject parcel and all surrounding parcels are zoned Ranching, Agricultural and Mining (RAM).

Proposal

Union has applied for a CUP to construct an 84-foot communication tower to replace their existing 45' tower. The applicant is request the CUP to have a total height of 100-feet. This will include the additional antennas and lightening rod.

The proposed upgrades are necessary to allow Union Wireless to continue providing service to the adjacent community, in addition to enhancing emergency service capabilities through FirstNet.

FirstNet is the First Responder Network Authority, and is an independent authority authorized by Congress in 2012, to develop, build and operate the nationwide, broadband network that equips first responders.

General Standards
For
Conditional Use Permits

Criteria for Approval

1. Will granting the Conditional Use Permit contribute to an overburdening of county services?

Proposed Finding of Fact. Granting the Conditional Use permit will not contribute to an overburdening of county services. County services and infrastructure will not be necessary for this permit. The tower would provide needed cell service to the area, which will add E-911 capabilities through the carrier's networks, and promote greater coverage and reach for local law enforcement and emergency services.

2. Will granting the Conditional Use Permit cause undue traffic, parking, population density or environmental problems?

Proposed Finding of Fact. The facility is unmanned and will not cause undue traffic or parking. Routine maintenance for the tower and antennas will be limited. There will be no affects to population density.

3. Will granting the Conditional Use Permit impair the use of adjacent property or alter the character of the neighborhood?

Proposed Finding of Fact. The surrounding ranch consists of approximately 1,260 acres. The addition of a taller communication tower will not impair the use of adjacent properties.

4. Will granting the Conditional Use Permit detrimentally affect the public health, safety and welfare, or nullify the intent of the Development Plan or Zoning Resolution?

The addition of the proposed tower would not be damaging or inconsistent with the surrounding area. The proposed tower is consistent with the intent of both the Development Plan and the Zoning Resolution.

Proposed Finding of Fact. The proposed tower will be constructed in accordance with all applicable building, electrical and plumbing codes. With an approved CUP, the tower will comply with the Zoning Resolution and the Development Plan. This site will provide wireless coverage to residents and travelers as well as provides for valuable E911 services and FirstNet capabilities.

Key Communication Tower Regulations

Artificially Lighted: There is no requirement for lighting until the tower reaches 200 feet. The proposed tower does not meet the requirement for FAA review.

Setbacks: Setbacks from roads and structures is 110% of the tower height. The nearest road is ¼ mile away and does meet setbacks.

Documentation demonstrating need: The proposed site is situated to provide effective coverage to the area. The existing tower's current loading and height is insufficient to provide adequate service so a taller tower would be needed.

Public Comment

As of the date of this staff report there have been no comment received.

Staff sent the public notice to 6 neighbors within 3 miles.

Recommendation

Staff proposes a motion and vote by the Planning and Zoning Commission to recommend approval of the requested Conditional Use Permit, by the Board of County Commissioners and incorporate by reference all findings of fact set forth herein and make them a part thereof.



NATRONA COUNTY

Development Department

200 North Center Street, Room 205
Casper, WY 82601

Jason Gutierrez, PE, Director
County web: www.natronacounty-wy.gov

Phone: 307-235-9435
Fax: 307-235-9436
Email: jgutierrez@natronacounty-wy.gov

"The purpose of the Natrona County Development Department is to provide necessary services to implement sound land use planning and economic development policies to protect and enhance the quality of life for present and future inhabitants of Natrona County."

MEMORANDUM

To: Board of County Commissioners

From: Jason Gutierrez, P.E., Director

Date: July 15, 2020

RE: CUP20-4 Construct an 84-foot self-supporting communication tower to allow for the expansion of an existing Union Wireless site. The applicant is requesting 100-foot total height to include all appurtenances.

cc: Applicant, County Attorney, File

Planning and Zoning Commission Recommendation:

Approve

At its July 14, 2020 meeting, the Planning Commission, acted to recommend approval of the requested Conditional Use Permit to the Board of County Commissioners.

(Motion passed unanimously).

Board of County Commissioners Review and Procedure: The following options are available to the Board of County Commissioners when acting on an item:

- Approve the application as recommended by the Planning Commission;
- Approve the application as submitted;
- Approve the application on its own conditions;
- Deny the application;
- Remand the application to the Planning Commission for reconsideration;
- Table to a date specific; or with the express consent of the applicant, the Board may table indefinitely or dismiss the application.



Site Name: Waltman

Site Address: 15303 Arminto Road, Waltman WY 82604

GEOCODE: 36861910000700 **Lat/Long:** 43 4 14.94325 -107 11 26.25296

Purpose of Request

Union Wireless is committed to improving coverage and expanding network capacity to meet customer demand throughout the State of Wyoming. The existing Wireless Communication Facility (WCF) provides residents, visitors and businesses with high quality reliable wireless service for both personal & business, in addition to enhancing emergency services.

Union Wireless is proposing the following at the existing WCF located at 15303 Arminto Road, Waltman.

Details of Request

Union Wireless is proposing a new 80' self-support tower at the existing WCF, but **requesting approval for a 100' self-support tower**. The existing site footprint will be expanded to accommodate the upgrades as detailed on the attached site plan/elevation (see sheet C2-1). The existing 45' Union self-support tower will remain for a period to accommodate the transfer of equipment to the new tower.

The proposed upgrades are necessary to allow Union Wireless to continue providing the best possible service to the adjacent community, in addition to enhancing emergency service capabilities through FIRSTNET.

Technical Information

Steel four leg 80' self-support tower designed to accommodate multiple carriers, please see Exhibit A for tower structural/technical details.

Valmont self-support tower, proposed antennas are COMMSCOPE NNH4-65C-R6-V3, please see Exhibit A for tower structural/technical details and Exhibit B for antenna spec's.

Union/Hemphill is proposing an 80' Self-Support Tower with 3 sectors of antennas, please see Exhibit A for tower details. No lighting is required at the proposed location/height per FAA TowAir.

The proposed frequency range is 698-896 MHz to 1695-2360 MHz

Please see Exhibit B - Antenna Spec's for the actual intended transmission, effective radiated power etc.

Please see Exhibit B - Antenna Spec's for direction of maximum lobes and associated radiation of the antennas etc.

Please see Exhibit C - NIER Report.

Union Wireless is an FCC licensed carrier, therefore all transmissions will be within the allocated frequencies and will not cause interference with any other licensed transmission.

Please see the Exhibit D – Union FCC License Info.

Please see Exhibit F for information on proposed tower foundation, soils etc.

FAA does not require lighting for the proposed height, which is typical for sites under 200' unless the site is very close to an Airport.

The proposed 80' Self-Support tower will replace the existing 40' Union Self-support at the existing cell-site, and is structurally designed to accommodate multiple carriers.

Please see Exhibit A with information on the tower/foundation engineering compliant with local, County, State and Federal structural requirements.

Grounding and Bonding, please sheets E4-1, G1-1 and G1-2 for details.

The existing cell-site is far removed from the nearest residential. The site is visible from US HWY 20, however setback far enough to not be in the peripheral view of passing traffic.

Please see the attached photo simulations of the before and after views.

The subject location is an existing cell-site. The proposed changes mainly in tower height will be noticeable but should have little visual impact or public concern give the setback of the existing sites.

The existing cell-site currently has screening in place, so Union Wireless will continue to maintain the current screening to maintain consistency with the existing screening.

Please let me know if you need any additional information.

Sincerely,

A handwritten signature in black ink that reads "Declan Murphy". The signature is written in a cursive, slightly slanted style.

Declan Murphy
Coal Creek Consulting for Union Wireless/Hemphill
2166 E. University Dr. #201, Tempe, AZ 85281
Tel: (602) 326-0111
Email: dmurphy@coal-creek.com

and Zoning Commission and Board of County Commissioners shall require showings concerning all of the following:

1. The owner of record or contract purchaser has signed the application.
2. Granting the conditional use permit will not contribute to an overburdening of County Services.
3. Granting the conditional use will not cause undue traffic, parking, population density, or environmental problems.
4. Granting the conditional use permit will not impair the use of adjacent property or alter the character of the neighborhood.
5. Granting the conditional use permit will not detrimentally affect the public health, safety, and welfare, or nullify the intent of the Development Plan or the Zoning Resolution.

APPLICATION INSTRUCTIONS

This is an application for a conditional use permit for wireless telecommunication facilities on the parcel described hereon. By completing the application form and providing the other requested information, your application will be acted upon in the fastest, fairest manner prescribed by law.

Person preparing report:

Name: Declan Murphy for Union Wireless/Hemphill

Address: 2166 E University Drive, Suite 201, Tempe AZ 85281

Phone Number: 602 326 0111

Property Owner:

Name: DEM Ranch Trust

Mailing Address: PO Box 24, Powder River, WY 82648

Phone Number: 307 258 5243

Physical Address: 15303 Arminto Road, Waltman WY 82604

Tax map parcel no: 36861910000700

Applicant:

Name: Declan Murphy for Union Wireless/Hemphill

Address: 2166 E University Drive, Suite 201, Tempe AZ 85281

Phone Number: 602 326 0111

Legal form (Corporation, LLC, etc.) Union Telephone Company

If purchased tower, date of purchase: Original Lease date 9/17/2008

GPS coordinates of tower: Lat/Long: 43 4 14.94325 -107 11 26.25296

Original Conditional Use Permit resolution number:

Dated of original Conditional Use Permit:

Operator:

Name: Union Wireless

Address: PO Box 160, Mountain View WY 82939

Phone Number: 602 326 0111

Signatures

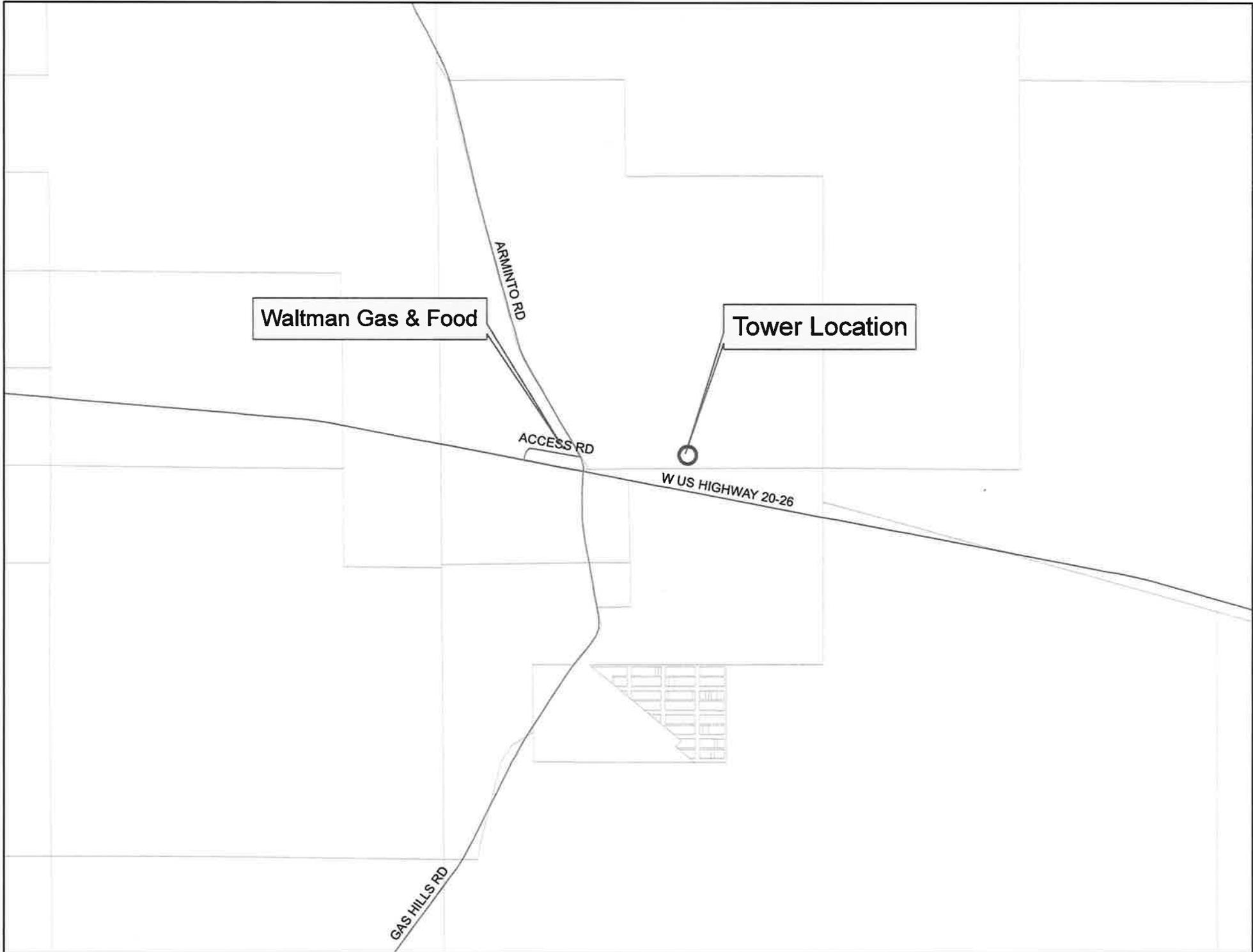
I (We) hereby certify that I (We) have read and examined this application and know the same to be true and correct to the best of my (our) knowledge. Granting this request does not presume to give authority to violate or cancel the provisions of any other State or local laws. Falsification or misrepresentation is grounds for voiding this request, if granted. All information within, attached to or submitted with this application shall become part of the public record, except as modified by applicable regulations. **I (We) further understand that all application fees are non-refundable.** By signing the application I am (We are) granting the Development Department access to our property for inspections.

Applicant: Declan Murphy Date: 3/3/20
(Signature)

Print Applicant Name: Declan Murphy

Owner: D.C. Miller Date: 5-20-20
(Signature)

Print Owner Name: D.C. Miller, Trustee



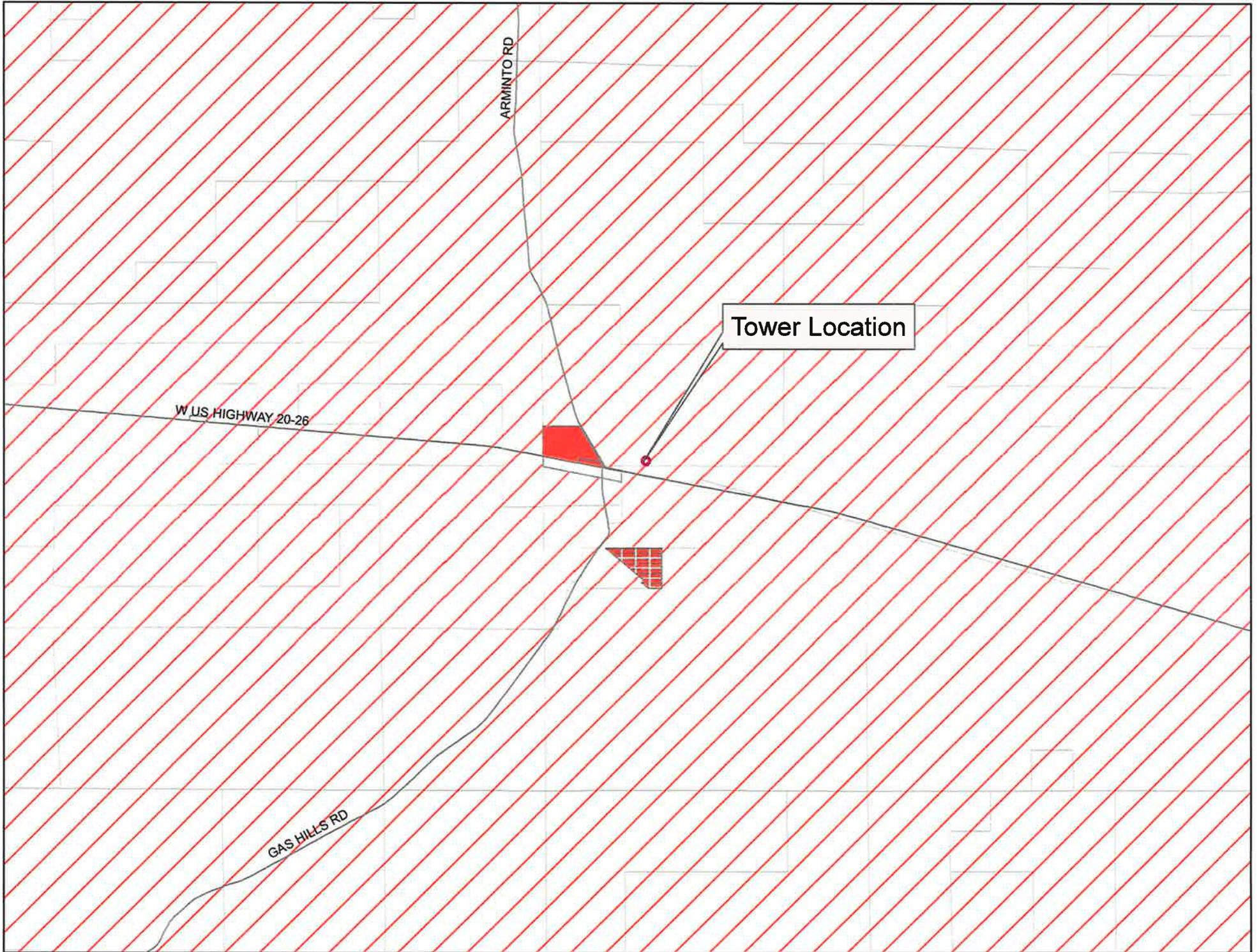


PHOTO SIMULATIONS

12037 - Waltman

LAT 43° 4' 14.94325"

LONG -107° 11' 26.25296"



Note: Simulations are an artistic illustration created to represent how the proposed project may look once constructed. Simulations are create to match the current design as accurately as possible, but are not guaranteed to match the final build.



Before:



PHOTO SIMULATIONS

12037 - Waltman

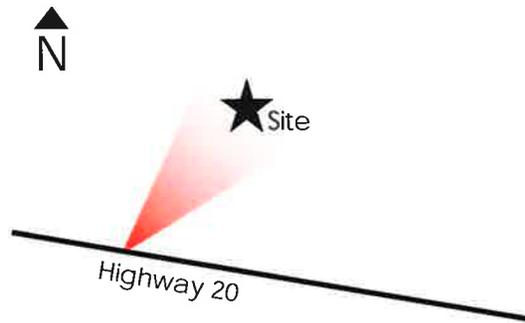
LAT 43° 4' 14.94325"

LONG -107° 11' 26.25296"

After:



View 1
Looking Northeast



Before:

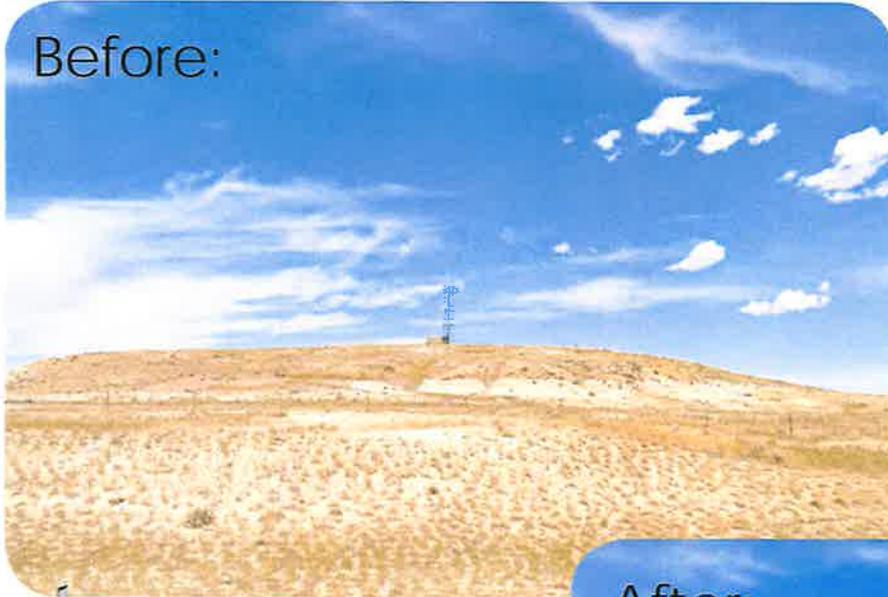


PHOTO SIMULATIONS

12037 - Waltman

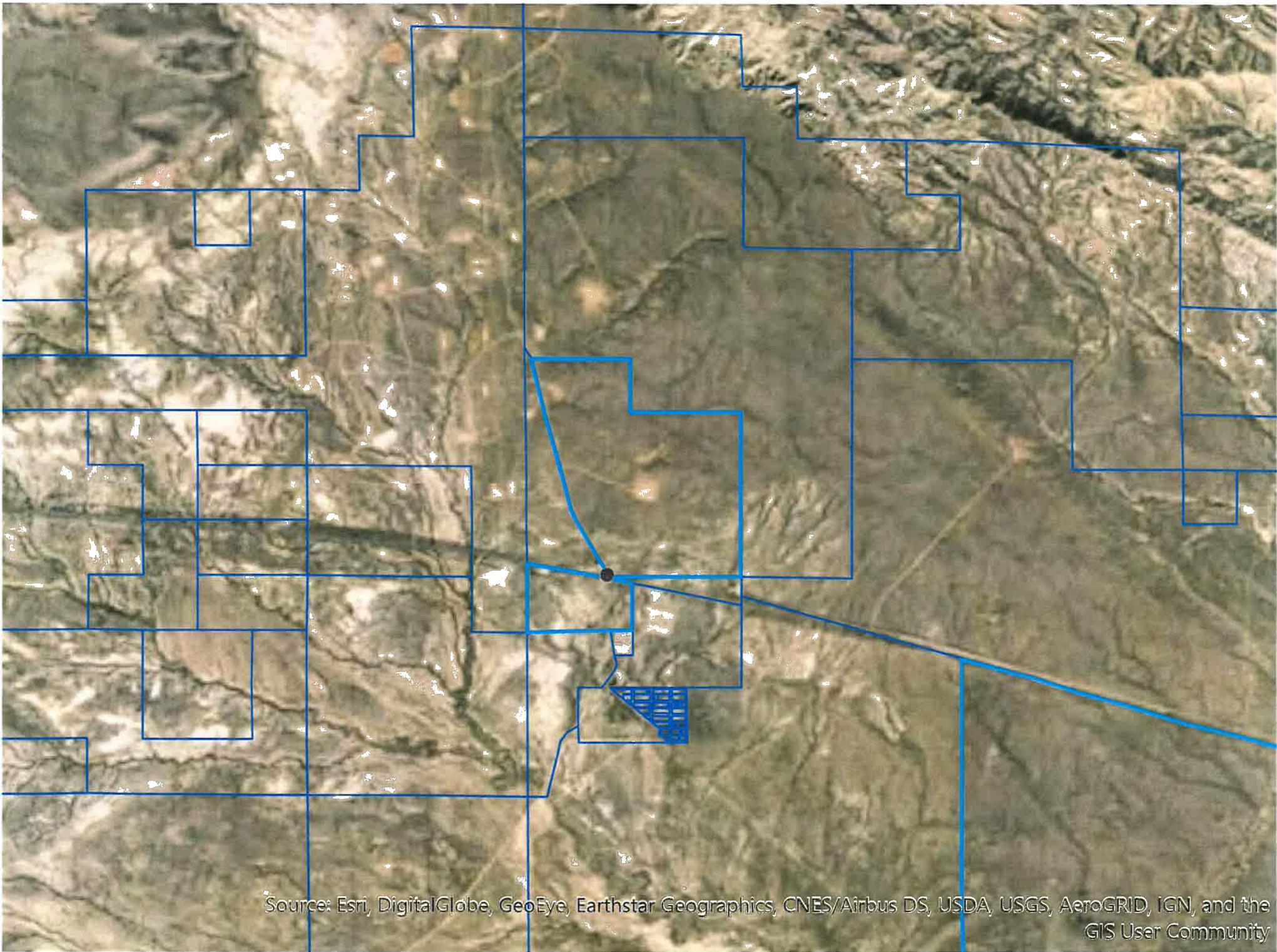
LAT 43° 4' 14.94325"

LONG -107° 11' 26.25296"

View 2
Looking North

After:





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

GEOTECHNICAL ENGINEERING REPORT
NEW HEMPHILL 4-LEG SELF-SUPPORT TOWER
WALTMAN
1 ARMINTO ROAD
NATRONA COUNTY, WYOMING

Prepared for:

Hemphill, LLC
1350 North Louisville Avenue
Tulsa, Oklahoma 74115

Prepared by:



Springfield, MO
4168 W. Kearney Springfield, MO 65803
Call 417.864.6000 Fax 417.864.6004
www.ppimo.com

PROJECT NUMBER: 261436

December 6, 2019

December 6, 2019

Hemphill, LLC
1350 North Louisville Avenue
Tulsa, Oklahoma 74115

Attn: Mr. Scot Tinker, Director of Tower Operations
Email: scot.tinker@hemphill.com

RE: Geotechnical Engineering Report
New Hemphill 4-Leg Self-Support Tower - Waltman
1 Arminto Road
Natrona County, Wyoming
PPI Project Number: 261436

Dear Mr. Tinker:

Attached, please find the report summarizing the results of the geotechnical investigation conducted for the proposed New Hemphill 4-Leg Self-Support Tower in Natrona County, Wyoming. We appreciate this opportunity to be of service. If you have any questions, please don't hesitate to contact this office.

PALMERTON & PARRISH, INC.
By:



R. Todd Hercules, P.E.
Geotechnical Engineer

PALMERTON & PARRISH, INC.
By:



Brandon R. Parrish, P.E.
Vice-President



Submitted: One (1) Electronic .pdf Copy

BRP/BRP/RTH

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APPENDICES

- Appendix I - Figures
- Appendix II - Boring Logs & Key To Symbols
- Appendix III - General Notes
- Appendix IV – Grain Size Test
- Appendix V - Important Information Regarding Your Geotechnical Report

EXECUTIVE SUMMARY

A Geotechnical Investigation was performed for the proposed New Hemphill 4-Leg Self-Support Tower located at 1 Arminto Road in Natrona County, Wyoming. It is understood that a new 80-foot Self-Support Tower will be constructed at the project site. Cut and fill depths are anticipated to be less than 2 feet across the subject site to provide finished subgrade elevations.

Based upon the information obtained from the borings drilled and subsequent laboratory testing, the site is suitable for the proposed Self-Support Tower. Important geotechnical considerations for the project are summarized below. However, users of the information contained in the report must review the entire report for specific details pertinent to geotechnical design considerations.

- Surface soils consisted of clayey sand to approximately 5.5 feet below the ground surface. Below the clayey sand layer was a sandstone layer that transitioned into a claystone/siltstone layer extending to the boring termination depth;
 - Sandstone bedrock and claystone bedrock was generally excavatable without rock excavation equipment; however, hard layers within the bedrock may be encountered requiring rock excavation equipment. It is recommended that rock excavation equipment be available during excavations or drilled piers;
 - Mat foundations bearing on sandstone for the proposed new Self-Support Tower can be designed for an allowable bearing capacity of 6,000 psf. Alternatively, the proposed Self-Support Tower can be supported by a drilled pier foundation;
 - Drilled pier design parameters have been included in Section 8. Rock coring or rock bits may be required to advance the drilled piers through possible boulder and cobble zones. Additionally, some collapsible materials may be encountered in the drilled pier excavations. Accordingly, it is recommended that the drilled pier contractor have casing available in case these conditions are encountered;
-

EXECUTIVE SUMMARY - CONTINUED

- The project site classifies as a Site Class C in accordance with Section 1613 of the 2012 International Building Code (IBC); and
 - Palmerton & Parrish, Inc. should be retained for construction observation and construction materials testing. Close monitoring of subgrade preparation work is considered critical to achieve adequate pavement and subgrade performance.
-

GEOTECHNICAL ENGINEERING REPORT
NEW HEMPHILL 4-LEG SELF-SUPPORT TOWER
WALTMAN
1 ARMINTO ROAD
NATRONA COUNTY, WYOMING

1.0 INTRODUCTION

This is the report of the Geotechnical Investigation performed for the proposed New Hemphill 4-Leg Self-Support Tower located at 1 Arminto Road in Natrona County, Wyoming. This investigation was in accordance with a letter proposal dated October 8, 2019, and authorized by Mr. Scot Tinker with Hemphill. The approximate site location is shown below:



2.0 PROJECT PURPOSE

The purpose of this Geotechnical Investigation was to provide information for foundation design and construction planning for the proposed Self-Support Tower. PPI's scope of services includes field and laboratory testing, investigation of the subsurface conditions in the vicinity of the tower base, engineering analysis of collected data and development of recommendations for foundation design and construction planning, and preparation of this Engineering Report.

3.0 PROJECT DESCRIPTION

It is understood that a new 80-foot Self-Support Tower supported upon either a mat foundation or drilled piers is proposed at the project site. Foundation loadings, both compressive and overturning are anticipated to be moderate. Cut and fill depths are anticipated to be less than 2 feet across the subject site to provide finished subgrade elevations.

4.0 SUBSURFACE INVESTIGATION

Subsurface conditions were investigated through completion of a subsurface boring and subsequent laboratory testing. Below is a picture of the existing tower site.



4.1 Subsurface Boring

The boring location was selected and staked in the field by the Client. The approximate boring location is shown on [Figure 1, Boring Location Plan](#). The Missouri One-Call System was notified prior to the investigation to assist in locating buried public utilities.

A log of the boring showing descriptions of soil and rock units encountered, as well as results of field tests, laboratory tests and a “Key to Symbols” are presented in [Appendix II](#).

The boring was drilled on November 4, 2019 using 4.5-inch O.D. continuous flight augers powered by an ATV-mounted drill-rig. Soil samples were generally collected at 2.5 to 5-foot centers during drilling using a split spoon sampler while performing the Standard Penetration Test (SPT) in general accordance with ASTM D1586. Please refer to [Appendix III](#) for general notes regarding boring logs and additional soil sampling information.

4.2 Laboratory Testing

Collected samples were sealed and transported to the laboratory for further evaluation and visual examination. Laboratory soil testing included the following:

- Unconfined Compressive strength of Rock Core (ASTM D7012);
- Moisture Content (ASTM D2216);
- Grain Size Analysis (ASTM D6913); and
- Pocket Penetrometers.

Laboratory test results are shown on each boring log in [Appendix II](#) and are summarized in the following table.

Depth (ft.)	Liquid Limit (LL)	Plastic Limit (PL)	Plasticity Index (PI)	Moisture Content (%)	USCS Symbol	Percent Passing No. 200 Sieve (%)
3.5	30	20	10	11.7	SC	41

5.0 SITE GEOLOGY

Based on information available from the Wyoming Geological Survey, the subject site is located over the Wind River Formation. This formation consists of variegated red and white claystone and siltstone with a thinly bedded conglomerate. Some volcanic tuff is noted near the upper portion of this formation.

The subject site is located near known wind deposits according to the Wyoming Geological Survey. Though the subject site was not indicated to be within the included windblown deposit area, the site is within ½ mile of a windblown deposit area based on information provided by the Wyoming Geological Survey. Accordingly, windblown deposits and/or the hazards of windblown material may impact the subject site in the future. Hazards include drift of dunes and soils which may partially bury structures or temporarily close roadways.

6.0 GENERAL SITE SUBSURFACE CONDITIONS

Based upon subsurface conditions encountered within the borings drilled at the project site, generalized subsurface conditions are summarized in the table below. Soil stratification lines on the boring log indicate approximate boundary lines between different types of soil units based upon observations made during drilling. In-situ transitions between soil types are typically gradual.

6.1 Subsurface Stratums

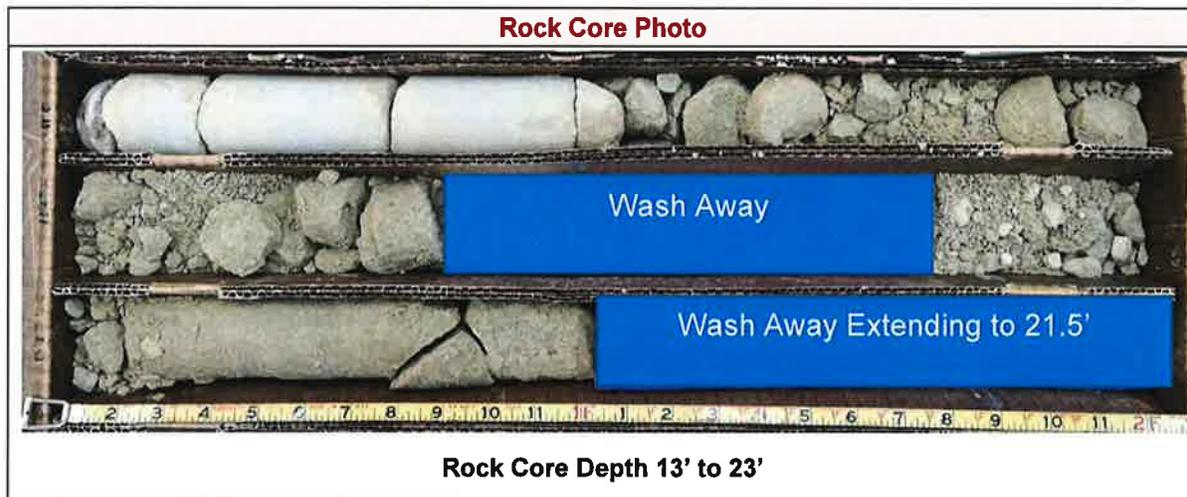
Generalized subsurface conditions are summarized in the table below:

Depth	Stratum	Subsurface Material	Density
0 to 5.5 foot	Overburden	Clayey Sand	Loose to Medium Dense
5.5 to 24.7 feet	Sandstone	Silty Sandstone, Weakly Cemented	Soft to Medium Hard Rock
24.7 to 34.3 feet	Claystone	Claystone/Siltstone	Soft Rock

6.1.1 Rock Core

Rock coring was attempted using an NQ₂ sized core barrel with a diamond embedded core bit in the Silty Sandstone unit at the subject site. Rock coring was

advanced from 11.5 to 21.5 feet below the ground surface and was discontinued at 21.5 feet due to poor recovery. The resulting rock core was boxed and transported to PPI's office for further inspection. Based on the rock core obtained, the bedrock at the subject site consists of a claystone/siltstone unit. A uniaxial rock core test was performed on the silty sandstone at approximately 11.7' below the ground surface indicating a strength of 4,223 psi. Based on measurements performed in the laboratory, the silty sandstone rock core had a unit weight of approximately 157 pcf. A photo of the rock core obtained is included below:



6.2 Groundwater

Shallow groundwater was not observed within the boring on the date drilled. Groundwater levels should be expected to fluctuate with changes in site grading, precipitation, and regional groundwater levels. Groundwater may be encountered during wetter periods.

7.0 EARTHWORK

Grading plans for the proposed Self-Support Tower were not provided. Grading for the project site is anticipated to have less than 2 feet of cut and/or fill to establish final grades. The initial phase of site preparation should include the steps listed below;

- Clearing and grubbing of any vegetation within the tower footprint; and

- Areas scheduled to receive controlled fill should be proof-rolled and approved in accordance with the following section of this report.

7.1 Site Preparation

Proof-rolling consists essentially of rolling the ground surface with a loaded tandem axle dump truck or similar heavy rubber-tired construction equipment and noting any areas which rut or deflect during rolling. All soft subgrade areas identified during proof-rolling should be undercut and replaced with compacted fill as outlined below. Proof-rolling, undercutting and replacement should be monitored by a qualified representative of the Geotechnical Engineer.

7.2 Fill Material Types

Fill Type ¹	USCS Classification	Acceptable Location for Placement
Low Volume Change (LVC) Engineered Fill ²	CL, GC, or SC (LL < 45%)	All locations and elevations
On-Site Natural Soils	SC	All locations and elevations
Rock Fill ³	GW	All locations and elevations
<ol style="list-style-type: none"> 1. Controlled, compacted fill should consist of approved materials that are free of organic matter and debris and contain maximum rock size of 4 to 6 in. Frozen material should not be used and fill should not be placed on a frozen subgrade. A sample of each material type should be submitted to the Geotechnical Engineer for evaluation prior to its use. 2. Low plasticity cohesive soil or granular soil having at least 15% low plasticity fines. 3. See Section 7.2.1 if rock fill will be utilized at the project site. 		

7.2.1 Rock Fill

If rock is to be used as the primary filling medium, embankments should be constructed using rock having maximum dimensions in excess of 4 inches, but no greater than 8 inches. Rock material should be placed in horizontal layers having a thickness of approximately the maximum size of the larger rock comprising the lift, but not greater than 12 inches. Rocks or boulders too large to permit placing in a 12-inch thick lift should be reduced in size as necessary to permit placement or be bladed over the edge of the fill and not used in the compacted fill. Rock fill should not be dumped into place but should be distributed in horizontal lifts by blading and dozing in such a manner as to ensure proper placement into final position in the embankment. Finer material including rock fines and limited soil

finer should be worked into the rock voids during this blading operation. Excessive soil and rock fine particles preventing interlock of cobble and boulder sized rock should be prohibited. Rock fill should be consolidated by a minimum of three (3) passes of a large diameter self-propelled vibratory compactor. Terminal fill slopes using rock may be constructed 1.5 horizontal to 1 vertical for fill height of 15 feet or less. The testing of rock fill quality should include the requirements that a representative of the Geotechnical Engineer be present daily, but not necessarily continuously during the placement of the fill to observe the placement of rock fill in order to determine fill quality and to observe that the contractors work sequence is in compliance with this specification. Progress reports indicative of the quality of the fill should be made at regular intervals to the Owner. If improper placement procedures are observed during the placement of the fill the Geotechnical Engineer should inform the Contractor, and no additional fill should be permitted on the affected area until the condition causing the low densities has been corrected and the fill has been reworked to obtain sufficient density.

7.3 Compaction Requirements

Item	Description
Subgrade Scarification Depth	At least 8 inches
Fill Lift Thickness	8-inch (loose)
Compaction Requirements ¹	<ul style="list-style-type: none"> 95% Standard Proctor Density (ASTM D-698)
Moisture Content	<ul style="list-style-type: none"> ± 2% optimum moisture for CL, SC, or GC soil types; or 0 to 4% above optimum for CH soil types
Recommended Testing Frequency	<ul style="list-style-type: none"> One (1) Field Density (compaction) test for each 2,500 sq. ft. of fill within the footprint of the Self-Support Tower; One (1) Field Density (compaction) test for each 5,000 sq. ft. of fill within non-structure areas; A minimum of three (3) tests per lift; and Visual observation of the compaction process should be documented with no testing required if a performance compaction specification (i.e. number of passes) is utilized.
<p>1. We recommend that engineered fill (including scarified compacted subgrade) be tested for moisture content and compaction during placement. Should the results of the in-place density tests indicate the specified moisture or compaction limits have not been met, the area represented by the test should be reworked and retested as required until the specified moisture and compaction requirements are achieved.</p>	

7.4 Excavations

Based upon the subsurface conditions encountered during this investigation, the on-site soils typically classify as Type B in accordance with OSHA regulations. Temporary excavations in soils classifying as Type B with a total height of less than 20 feet should be cut no steeper than 1H:1V in accordance with OSHA guidelines. Confirmation of soil classification during construction, as well as construction safety (including shoring, if required), is the responsibility of the contractor.

Generally, excavations are anticipated to be capable of being performed with traditional excavation equipment in the clayey sand layer; however, excavations into the sandstone layer may require rock excavation equipment. It is recommended that rock excavation equipment be available during excavations if excavations extend to the sandstone unit.

8.0 TOWER FOUNDATION RECOMMENDATIONS

The proposed Self-Support Tower is anticipated to either be supported on a shallow mat foundation or on drilled pier foundations. Based upon the conditions encountered in the boring performed at the project site, the site subsurface materials are suitable for either a mat foundation or drilled pier foundations. Recommendations for mat foundations and drilled piers are included in the following sections.

8.1 Shallow Mat Foundations

Based upon the subsurface conditions encountered near the proposed Self-Support Tower and anticipated site grading, footings for the proposed Self-Support Tower are anticipated to bear on competent sandstone. Please refer to the section below for recommendations regarding shallow foundations.

8.2 Shallow Foundation Design Recommendations

Description	Mat Foundation Parameters
Net allowable bearing pressure ¹	Sandstone: 6,000 psf
Ultimate bearing pressure ²	Sandstone: 18,000 psf
Transient (wind) loading <u>ONLY</u> – Allowable Bearing Pressure ³	Sandstone: 7,500 psf
Minimum embedment below finished grade for frost protection and variation in soil moisture ⁴	5 feet
Estimated total settlement ⁵	1 inch or less
Allowable passive pressure ⁶	600 psf
Coefficient of sliding friction ⁷	0.5 (natural soils/controlled fill)
<ol style="list-style-type: none"> The recommended net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation. The recommended pressure considers all unsuitable and/or soft or loose soils, if encountered, are undercut and replaced with tested and approved new engineered fill. Footing excavations should be free of loose and disturbed material, debris, and water when concrete is placed. A factor of safety value of 3 has been applied to these values. No factor of safety has been applied to this value. The allowable bearing capacity may be increased to this value <u>only</u> for transient or wind loading. For footings beneath unheated areas. It is anticipated that additional depth may be required for overturning and uplift design considerations. The foundation movement will depend upon the variations within the subsurface soil profile, the structural loading conditions, the embedment depth of the footings, the thickness of compacted fill, and the quality of the earthwork operations. Allowable passive pressure value considers a factor of safety of about 2. Passive pressure value applies to undisturbed native clay or properly compacted fill. If formed footings are constructed, the space between the formed side of a footing and excavation sidewall should be cleaned of all loose material, debris, and water and backfilled with tested and approved fill compacted to at least 95% of the material's Standard Proctor dry density. Passive resistance should be neglected for the upper 5 feet of the soil below the final adjacent grade due to strength loss from freeze/thaw and shrink/swell. Coefficient of friction value is an ultimate value and does not contain a factor of safety. 	

8.3 Uplift

Resistance of shallow spread footings to uplift (U_p) may be based upon the dead weight of the concrete footing structure (W_c) and the weight of soil backfill contained in an inverted cone or pyramid directly above the footings (W_s). The following parameters may be used in design:

Description	Weights
Weight of Concrete (W_c)	150 pcf
Weight of Soil Resistance (W_s)	100 pcf
Weight for on-site soils placed in accordance with <u>Section 7</u>	

The base of the cone or pyramid should be the top of the footing and the pyramid or cone sides should form an angle of 30 degrees with the vertical. Allowable uplift capacity (U_p) should be computed as the lesser of the two (2) equations listed below:

$$U_P = (W_s/2.0) + (W_c/1.25) \text{ or } U_P = (W_s + W_c)/1.5$$

8.4 Drilled Pier Foundation Recommendations

Based upon the conditions encountered in the boring and subsequent laboratory testing, the proposed Self-Support Tower may be supported on a system of drilled piers bearing within the sandstone or claystone bedrock. The drilled shaft should be plumb (no more than 2 percent of the shaft length off vertical), and the drilled shaft should have a relatively flat bottom. Essentially all groundwater, if encountered, should be removed from the drilled pier shaft prior to concrete placement. If it is not possible to remove nearly all (2 to 3 inches max) of the groundwater from the drilled shaft excavation, concrete should be placed via tremie methods.

The method of concrete placement and vibration should be selected by the Structural Engineer. Required strength and mix design characteristics should also be specified by the Structural Engineer or other members of the Design Team.

Drilled pier installation may require core barrels or rock bits to penetrate the medium hard sandstone bedrock stratum. Casing may be required at the subject site due to dry clayey sand material.

8.5 Bearing Capacity and Uplift Resistance for a Drilled Shaft

The design parameters summarized in the table below may be utilized for bearing capacity and uplift capacity design for drilled shafts as described above. Allowable end bearing pressures and side friction values are summarized in the table below.

Stratum¹	Applicable Depth (ft.)	Allowable End Bearing Pressure (ksf)²	Allowable Side Friction (ksf)³
Overburden	Ground surface to 1 shaft diameter or a minimum of 5.5 feet	Ignore	Ignore
Sandstone	5.5 feet to 12 feet	6.0	0.8
Sandstone ⁴	12 to 20 feet	15	2.0
Claystone ⁴	20 feet to 34.3 feet	10	1.0
<ol style="list-style-type: none"> 1. If soft soils are encountered in plan bottom of shaft during drilling, the shaft should be deepened until an acceptable bearing stratum is encountered. 2. End bearing pressure values assume a Factor of Safety of 3.0 or greater. 3. Side friction values include a Factor of Safety of ~1.5. These values should be used with Factored Loads during structural design. Side Friction may be used for computation of Uplift and Compressive Capacity in soil. 4. Applicable depths of these layers are based on a drilled pier parameter less than 4.5 feet, if larger drilled piers are utilized, applicable depths of these layers may need to be adjusted. 			

8.6 Lateral Loadings

It is anticipated that designers will most likely utilize LPILE for completion of deep foundation lateral capacity design for the tower foundations. LPILE uses finite difference computer models based on the horizontal modulus of subgrade reaction (K_h).

The values listed in the table below may be utilized for Drilled Pier Analysis in LPILE. Please also notice that the table states to “ignore” lateral support for the depth from 0 to 1 pier diameter or a minimum of 5 feet. This notation is intended to account for the fact that near-surface soils are significantly disturbed during drilled shaft excavation, which greatly reduces the lateral support provided. Designers should use their judgment and make an appropriate reduction of soil strength parameters in this zone.

Values summarized in the table below are based upon published correlations, and field and laboratory data collected during this subsurface investigation. Values shown below are ultimate values representative of in-situ soil properties, and do not include a Factor of Safety. These values may be used to compute resistance to lateral loading of the overburden soils. **The appropriate Factor of Safety should be chosen by the designer.**

Stratum (Model)	Applicable Depth	Unit Weight ¹ (pcf)	Undrained Cohesion, c (psf)	Static Modulus, k (pci)	Cyclic Modulus, k (pci)	Strain Factor ϵ_{50}
Overburden	Ground surface to 1 shaft diameter or a minimum of 5.5 feet	Moist: 125	Ignore	Ignore	Ignore	Ignore
Sandstone (Stiff Clay Without Water)	5.5 feet to 12 feet	Moist: 135	2,000	680	280	0.006
Sandstone (Strong Rock)	12 feet to 20 feet	Moist: 150	Uniaxial Compressive Strength (psi)			
			4,200			
Claystone (Strong Rock)	20 feet to bottom of shaft	Moist: 140	1,500			

1. Buoyant unit weight should be utilized for soils that extend below the design groundwater level. Groundwater was not encountered at the project site.

9.0 SEISMIC CONSIDERATIONS

Code Used	Site Classification
2012 International Building Code (IBC) ¹	C
1. In general accordance with the 2012 International Building Code, Section 1613	

10.0 CONSTRUCTION OBSERVATION & TESTING

The construction process is an integral design component with respect to the geotechnical aspects of a project. Since geotechnical engineering is influenced by variable depositional and weathering processes and because we sample only a small portion of the soils affecting the performance of the proposed Self-Support Tower, unanticipated or changed conditions can be disclosed during grading. Proper geotechnical observation and testing during construction is imperative to allow the Geotechnical Engineer the opportunity to evaluate assumptions made during the design process. Therefore, we recommend that PPI be kept apprised of design modifications and construction schedule of the proposed project to observe compliance with the design concepts and geotechnical recommendations, and to allow design changes in the event that subsurface conditions or methods of construction differ from those assumed while completing this study. We recommend that during construction all earthwork be monitored by a representative of PPI, including site preparation, placement of all engineered fill and trench backfill, and all foundation excavations as outlined below.

- An experienced Geotechnical Engineer or Engineering Technician of PPI should observe the subgrade throughout the proposed project site immediately following stripping to evaluate the native soils, identify areas requiring undercutting, and evaluate the suitability of the exposed surface for fill placement;
- An experienced Engineering Technician of PPI should monitor and test all fill placed within the Self-Support Tower area to determine whether the type of material, moisture content, and degree of compaction are within recommended limits; and
- An experienced Technician or Engineer should observe drilled pier excavations. Where unsuitable bearing conditions are observed, PPI should be contacted to provide remedial procedures.

11.0 REPORT LIMITATIONS

This report has been prepared in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area. Palmerton & Parrish, Inc. observed that degree of care and skill generally exercised by other consultants under similar circumstances and conditions. Palmerton & Parrish's findings and conclusions must be considered not as scientific certainties, but as opinions based on our professional judgment concerning the significance of the data gathered during the course of this investigation. Other than this, no warranty is implied or intended.

S:_MASTER PROJECT FILE\2019\WY\Hemphill-261436-WY, CO & UT Registrations-Sub\Drilled\Waltman\CAD\261436 - Waltman



SCALE: 1" = 30'

Image From Google Earth Pro

Project: New Hemphill 4-Leg Self-Support Tower - Waltman
Client: Hemphill, LLC

LEGEND



 Boring Location

Boring Location Plan

DATE: December 6, 2019

Project Number: 261436

PPI PALMERTON & PARRISH, INC.
GEOTECHNICAL AND MATERIALS ENGINEERS/MATERIALS TESTING LABORATORIES/ENVIRONMENTAL SERVICES

FIGURE 1



4168 W. Kearney
Springfield, Missouri 65803
Telephone: (417) 864-6000
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GEOTECHNICAL BORING LOG

BORING NUMBER

1

PAGE 1 OF 1

CLIENT Hemphill, LLC PROJECT NAME Waltman - New 80' Tower
 PROJECT NO. 261436 PROJECT LOCATION Natrona County, Wyoming
 DATE STARTED 11/17/19 COMPLETED 11/17/19 SURFACE ELEVATION _____ BENCHMARK EL. _____
 DRILLER MR DRILL RIG 2019 CME-55 GROUND WATER LEVELS _____
 HAMMER TYPE Auto AT TIME OF DRILLING None
 LOGGED BY EV CHECKED BY RTH AT END OF DRILLING _____
 NOTES _____

BORING LOG - PPI - PPI STD TEMPLATE.GDT - 12/4/19 15:25 - S:_MASTER PROJECT FILE\2019\WY\HEMPHILL-261436-WY_CO & UT REGISTRATIONS-SUBDRILLED\WALTMAN\LOGS\WALTMAN - GINT.GPJ

DEPTH (ft)	DRILLING METHOD	STRATA SYMBOL	MATERIAL DESCRIPTION Unified Soil Classification System	SAMPLE TYPE NUMBER	RECOVERY % (RQD %)	CORRECTED BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT (pcf)				ELEVATION (ft)
								20	40	60	80	
0	HSA - 3.5" I.D.		CLAYEY SAND, Brown, Slightly Moist, Loose to Medium Dense (SC)	SPT 1		4-3-4 (7)						
5.5 ft				SPT 2		8-9-8 (17)	4.5					
5	ROTARY - 3 5/8" O.D.		SILTY SANDSTONE, Grayish Brown, Fine Grained, Weakly Cemented, Soft to Medium Hard	SPT 3		21-46-56 (102)						
10				SPT 4		21-34-60 (94)						
15				NQ 1	80 (23)							
20				NQ 2	0 (0)							
24.7 ft	SPT 5		43-65/5"									
25	ROTARY - 3 5/8" O.D.		CLAYSTONE/SILTSTONE, Brownish Tan, Soft	SPT 6		51-62-65/3"	4.5					
30												
34.3 ft				SPT 7		49-65/4"	4.5					

Bottom of borehole at 34.3 feet.



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KEY TO SYMBOLS

CLIENT Hemphill, LLC

PROJECT NAME Waltman - New 80' Tower

PROJECT NO. 261436

PROJECT LOCATION Natrona County, Wyoming

LITHOLOGIC SYMBOLS (Unified Soil Classification System)



CLAYSTONE: Claystone



SANDSTONE: Sandstone



SC: USCS Clayey Sand

SAMPLER SYMBOLS



NQ



Standard Penetration Test

WELL CONSTRUCTION SYMBOLS

ABBREVIATIONS

LL - LIQUID LIMIT (%)
 PI - PLASTIC INDEX (%)
 W - MOISTURE CONTENT (%)
 DD - DRY DENSITY (PCF)
 NP - NON PLASTIC
 -200 - PERCENT PASSING NO. 200 SIEVE
 PP - POCKET PENETROMETER (TSF)

TV - TORVANE
 PID - PHOTOIONIZATION DETECTOR
 UC - UNCONFINED COMPRESSION
 ppm - PARTS PER MILLION
 Water Level at Time
 Drilling, or as Shown
 Water Level at End of
 Drilling, or as Shown
 Water Level After 24
 Hours, or as Shown

KEY TO SYMBOLS - PPI STD TEMPLATE.GDT - 12/4/19 15:25 - S:\MASTER PROJECT FILE\2018\WYHEMPHILL-261436-WY- CO & UT REGISTRATIONS-SUBDRILLED\WALTMANLOGS\WALTMAN - GINT.GPJ

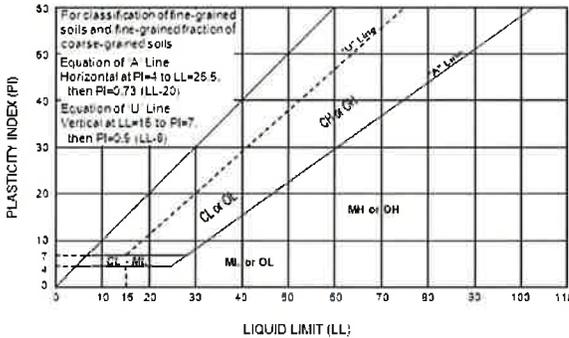


GENERAL NOTES

SOIL PROPERTIES & DESCRIPTIONS

COHESIVE SOILS

Consistency	Unconfined Compressive Strength (Qu)	Pocket Penetrometer Strength	N-Value
	(psf)	(tsf)	(blows/ft)
Very Soft	<500	<0.25	0-1
Soft	500-1000	0.25-0.50	2-4
Medium Stiff	1001-2000	0.50-1.00	5-8
Stiff	2001-4000	1.00-2.00	9-15
Very Stiff	4001-8000	2.00-4.00	16-30
Hard	>8000	>4.00	31-60
Very Hard			>60



Group Symbol	Group Name
CL	Lean Clay
ML	Silt
OL	Organic Clay or Silt
CH	Fat Clay
MH	Elastic Silt
OH	Organic Clay or Silt
PT	Peat
CL-CH	Lean to Fat Clay

Plasticity		Moisture	
Description	Liquid Limit (LL)	Descriptive Term	Guide
Lean	<45%	Dry	No indication of water
Lean to Fat	45-49%	Moist	Indication of water
Fat	≥50%	Wet	Visible water

Fine Grained Soil Sub Classification	Percent (by weight) of Total Sample
Terms: SILT, LEAN CLAY, FAT CLAY, ELASTIC SILT Sandy, gravelly, abundant cobbles, abundant boulders with sand, with gravel, with cobbles, with boulders scattered sand, scattered gravel, scattered cobbles, scattered boulders a trace sand, a trace gravel, a few cobbles, a few boulders	PRIMARY CONSTITUENT
	>30-50]
	>15-30] – secondary coarse grained constituents
	5-15]
	<5]
The relationship of clay and silt constituents is based on plasticity and normally determined by performing index tests. Refined classifications are based on Atterberg Limits tests and the Plasticity Chart.	

NON-COHESIVE (GRANULAR) SOILS

**GRAIN SIZE IDENTIFICATION		
Name	Size Limits	Familiar Example
Boulder	12 in. or more	Larger than basketball
Cobbles	3 in. to 12 in.	Grapefruit
Coarse Gravel	¾-in. to 3 in.	Orange or lemon
Fine Gravel	No. 4 sieve to ¾-in.	Grape or pea
Coarse Sand	No. 10 sieve to No. 4 sieve	Rock salt
Medium Sand	No. 40 sieve to No. 10 sieve	Sugar, table salt
Fine Sand*	No. 200 sieve to No. 40 sieve	Powdered sugar
Fines	Less than No. 200 sieve	
*Particles finer than fine sand cannot be discerned with the naked eye at a distance of 8 inches.		

RELATIVE DENSITY	N-VALUE	MOISTURE CONDITION	
		Descriptive Term	Guide
Very Loose	0-4	Dry	No indication of water
Loose	5-10	Moist	Damp but no visible water
Medium Dense	11-24	Wet	Visible free water, usually soil is below water table.
Dense	25-50		
Very Dense	≥51		

Coarse Grained Soil Sub Classification	Percent (by weight) of Total Sample
Terms: GRAVEL, SAND, COBBLES, BOULDERS Sandy, gravelly, abundant cobbles, abundant boulders with gravel, with sand, with cobbles, with boulders scattered gravel, scattered sand, scattered cobbles, scattered boulders a trace gravel, a trace sand, a few cobbles, a few boulders Silty (MH & ML)*, clayey (CL & CH)* (with silt, with clay)* (trace silt, trace clay)*	PRIMARY CONSTITUENT
	>30-50]
	>15-30] – secondary coarse grained constituents
	5-15]
	<5]
	<15]
	5-15] – secondary fine grained constituents
	<5]
*Index tests and/or plasticity tests are performed to determine whether the term "silt" or "clay" is used.	

*Modified after Ref. ASTM D2487-93 & D2488-93

**Modified after Ref. Oregon DOT 1987 & FHWA 1997

***Modified after Ref. AASHTO 1988, DM 7.1 1982, and Oregon DOT 1987



GENERAL NOTES

BEDROCK PROPERTIES & DESCRIPTIONS

ROCK QUALITY DESIGNATION (RQD)	
Description of Rock Quality	*RQD (%)
Very Poor	< 25
Poor	25-50
Fair	50-75
Good	75-90
Excellent	90-100

*RQD is defined as the total length of sound core pieces 4 in. or greater in length, expressed as a percentage of the total length cored. RQD provides an indication of the integrity of the rock mass and relative extent of seams and bedding planes.

SCALE OF RELATIVE ROCK HARDNESS		
Term	Field Identification	Approx. Unconfined Compressive Strength (tsf)
Extremely Soft	Can be indented by thumbnail	2.6-10
Very Soft	Can be peeled by pocket knife	10-50
Soft	Can be peeled with difficulty by pocket knife	50-260
Medium Hard	Can be grooved 2 mm deep by firm pressure of knife	260-520
Moderately Hard	Requires one hammer blow to fracture	520-1040
Hard	Can be scratched with knife or pick only with difficulty	1040-2610
Very Hard	Cannot be scratched by knife or sharp pick	>2610

DEGREE OF WEATHERING	
Slightly Weathered	Rock generally fresh, joints stained and discoloration extends into rock up to 25mm (1 in), open joints may contain clay, core rings under hammer impact.
Weathered	Rock mass is decomposed 50% or less, significant portions of rock show discoloration and weathering effects, cores cannot be broken by hand or scraped by knife.
Highly Weathered	Rock mass is more than 50% decomposed, complete discoloration of rock fabric, core may be extremely broken and gives clunk sound when struck by hammer, may be shaved with a knife.

GRAIN SIZE (TYPICALLY FOR SEDIMENTARY ROCKS)		
Description	Diameter (mm)	Field Identification
Very Coarse Grained	>4.76	Individual grains can easily be distinguished by eye.
Coarse Grained	2.0-4.76	
Medium Grained	0.42-2.0	Individual grains can be distinguished by eye.
Fine Grained	0.074-0.42	Individual grains can be distinguished by eye with difficulty.
Very Fine Grained	<0.074	Individual grains cannot be distinguished by unaided eye.

VOIDS	
Pit	Voids barely seen with the naked eye to 6mm *1/4-inch)
Vug	Voids 6 to 50mm (1/4 to 2 inches) in diameter
Cavity	50 to 6000mm (2 to 24 inches) in diameter
Cave	> 600mm

BEDDING THCKNESS	
Very Thick Bedded	> 3' Thick
Thick Bedded	1' to 3' Thick
Medium Bedded	4" to 1' Thick
Thin Bedded	1-1/4" to 4" Thick
Very Thin Bedded	1/2" to 1-1/4" Thick
Thickly Laminated	1/8" to 1/2" Thick
Thinly Laminated	1/8" or less (paper thin)

DRILLING NOTES

Drilling & Sampling Symbols		
NQ – Rock Core (2-inch diameter)	CFA- Continuous Flight (Solid Stem) Auger	WB – Wash Bore or Mud Rotary
HQ – Rock Core (3-inch diameter)	SS – Split Spoon Sampler	TP – Test Pit
HSA – Hollow Stem Auger	ST – Shelby Tube	HA – Hand Auger

Soil Sample Types

Shelby Tube Samples: Relatively undisturbed soil samples were obtained from the borings using thin wall (Shelby) tube samplers pushed hydraulically into the soil in advance of drilling. This sampling, which is considered to be undisturbed, was performed in accordance with the requirements of ASTM D 1587. This type of sample is considered best for the testing of "in-situ" soil properties such as natural density and strength characteristics. The use of this sampling method is basically restricted to soil containing little to no chert fragments and to softer shale deposits.

Split Spoon Samples: The Standard Penetration Test is conducted in conjunction with the split-barrel sampling procedure. The "N" value corresponds to the number of blows required to drive the last 1 foot of an 18-inch long, 2-inch O.D. split-barrel sampler with a 140 lb. hammer falling a distance of 30 inches. The Standard Penetration Test is carried out according to ASTM D-1586.

Water Level Measurements

Water levels indicated on the boring logs are levels measured in the borings at the times indicated. In permeable materials, the indicated levels may reflect the location of groundwater. In low permeability soils, shallow groundwater may indicate a perched condition. Caution is merited when interpreting short-term water level readings from open bore holes. Accurate water levels are best determined from piezometers.

Automatic Hammer

Palmerton and Parrish, Inc.'s CME's are equipped with automatic hammers. The conventional method used to obtain disturbed soil samples used a safety hammer operated by company personnel with a cat head and rope. However, use of an automatic hammer allows a greater mechanical efficiency to be achieved in the field while performing a Standard Penetration resistance test based upon automatic hammer efficiencies calibrated using dynamic testing techniques.

*Modified after Ref. ASTM D2487-93 & D2488-93

**Modified after Ref. Oregon DOT 1987 & FHWA 1997

***Modified after Ref. AASHTO 1988, DM 7.1 1982, and Oregon DOT 1987

Important Information about This Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, clients can benefit from a lowered exposure to the subsurface problems that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed below, contact your GBA-member geotechnical engineer. Active involvement in the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Geotechnical-Engineering Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. *Those who rely on a geotechnical-engineering report prepared for a different client can be seriously misled. No one except authorized client representatives should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. And no one – not even you – should apply this report for any purpose or project except the one originally contemplated.*

Read this Report In Full

Costly problems have occurred because those relying on a geotechnical engineering report did not read it *in its entirety*. Do not rely on an executive summary. Do not read selected elements only. *Read this report in full.*

You Need to Inform Your Geotechnical Engineer about Change

Your geotechnical engineer considered unique, project-specific factors when designing the study behind this report and developing the confirmation-dependent recommendations the report conveys. A few typical factors include:

- the client's goals, objectives, budget, schedule, and risk-management preferences;
- the general nature of the structure involved, its size, configuration, and performance criteria;
- the structure's location and orientation on the site; and
- other planned or existing site improvements, such as retaining walls, access roads, parking lots, and underground utilities

Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.*

This Report May Not Be Reliable

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, that it could be unwise to rely on a geotechnical engineering report whose reliability may have been affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If your geotechnical engineer has not indicated an "apply-by" date on the report, ask what it should be, and, in general, if you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying it. A minor amount of additional testing or analysis – if any is required at all – could prevent major problems.*

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface through various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing were performed. The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgment to form opinions about subsurface conditions throughout the site. Actual site-wide subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team from project start to project finish, so the individual can provide informed guidance quickly, whenever needed.*

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, *they are not final*, because the geotechnical engineer who developed them relied heavily on judgment and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* revealed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a full-time member of the design team, to:

- confer with other design-team members,
- help develop specifications,
- review pertinent elements of other design professionals' plans and specifications, and
- be on hand quickly whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction observation.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for informational purposes only*. To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report, but they may rely on the factual data relative to the specific times, locations, and depths/elevations referenced. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only from the design drawings and specifications*. Remind constructors that they may

perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely*. Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase one" or "phase two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures*. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. As a general rule, *do not rely on an environmental report prepared for a different client, site, or project, or that is more than six months old*.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, none of the engineer's services were designed, conducted, or intended to prevent uncontrolled migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration*. Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists*.



Telephone: 301/565-2733

e-mail: info@geoprofessional.org www.geoprofessional.org

CONDITIONAL USE PERMIT REQUEST
FOR A
TELECOMMUNICATION SITE

CUP20-4

Staff Report: Trish Chavis
June 9, 2020

For

July 14, 2020
Planning and Zoning Commission

And

August 4, 2020
Board of County Commissioner Meeting

Applicant: Declan Murphy, Union Wireless/Hemphill

Request: Construct an 84-foot self-supporting communication tower to allow for the expansion of an existing Union Wireless site. The applicant is requesting 100-feet total height to include all appurtenances.

Location and Zoning

The parcel is located just east of the Waltman Food & Gas on W. US Highway 20-26.

The subject parcel and all surrounding parcels are zoned Ranching, Agricultural and Mining (RAM).

Proposal

Union has applied for a CUP to construct an 84-foot communication tower to replace their existing 45' tower. The applicant is request the CUP to have a total height of 100-feet. This will include the additional antennas and lightening rod.

The proposed upgrades are necessary to allow Union Wireless to continue providing service to the adjacent community, in addition to enhancing emergency service capabilities through FirstNet.

FirstNet is the First Responder Network Authority, and is an independent authority authorized by Congress in 2012, to develop, build and operate the nationwide, broadband network that equips first responders.

General Standards
For
Conditional Use Permits

Criteria for Approval

1. Will granting the Conditional Use Permit contribute to an overburdening of county services?

Proposed Finding of Fact. Granting the Conditional Use permit will not contribute to an overburdening of county services. County services and infrastructure will not be necessary for this permit. The tower would provide needed cell service to the area, which will add E-911 capabilities through the carrier's networks, and promote greater coverage and reach for local law enforcement and emergency services.

2. Will granting the Conditional Use Permit cause undue traffic, parking, population density or environmental problems?

Proposed Finding of Fact. The facility is unmanned and will not cause undue traffic or parking. Routine maintenance for the tower and antennas will be limited. There will be no affects to population density.

3. Will granting the Conditional Use Permit impair the use of adjacent property or alter the character of the neighborhood?

Proposed Finding of Fact. The surrounding ranch consists of approximately 3,460 acres. The addition of a taller communication tower will not impair the use of adjacent properties.

4. Will granting the Conditional Use Permit detrimentally affect the public health, safety and welfare, or nullify the intent of the Development Plan or Zoning Resolution?

The addition of the proposed tower would not be damaging or inconsistent with the surrounding area. The proposed tower is consistent with the intent of both the Development Plan and the Zoning Resolution.

Proposed Finding of Fact. The proposed tower will be constructed in accordance with all applicable building, electrical and plumbing codes. With an approved CUP, the tower will comply with the Zoning Resolution and the Development Plan. This site will provide wireless coverage to residents and travelers as well as provides for valuable E911 services and FirstNet capabilities.

Key Communication Tower Regulations

Artificially Lighted: There is no requirement for lighting until the tower reaches 200 feet. The proposed tower does not meet the requirement for FAA review.

Setbacks: Setbacks from roads and structures is 110% of the tower height. The nearest road is 490-feet away and does meet setbacks.

Documentation demonstrating need: The proposed site is situated to provide effective coverage to the area. The existing tower's current loading and height is insufficient to provide adequate service so a taller tower would be needed.

Public Comment

As of the date of this staff report there have been no comment received.

Staff sent the public notice to 25 neighbors within 3 miles.

Recommendation

Staff proposes a motion and vote by the Planning and Zoning Commission to recommend approval of the requested Conditional Use Permit, by the Board of County Commissioners and incorporate by reference all findings of fact set forth herein and make them a part thereof.



NATRONA COUNTY

Development Department

200 North Center Street, Room 205
Casper, WY 82601

Jason Gutierrez, PE, Director
County web: www.natronacounty-wy.gov

Phone: 307-235-9435
Fax: 307-235-9436
Email: jgutierrez@natronacounty-wy.gov

"The purpose of the Natrona County Development Department is to provide necessary services to implement sound land use planning and economic development policies to protect and enhance the quality of life for present and future inhabitants of Natrona County."

MEMORANDUM

To: Board of County Commissioners

From: Jason Gutierrez, P.E., Director

Date: July 15, 2020

RE: CUP20-5 Construct an 84-foot self-supporting communication tower to allow for the expansion of an existing Union Wireless site. The applicant is requesting 100-foot total height to include all appurtenances.

cc: Applicant, County Attorney, File

Planning and Zoning Commission Recommendation:

Approve

At its July 14, 2020 meeting, the Planning Commission, acted to recommend approval of the requested Conditional Use Permit to the Board of County Commissioners with the following condition:

(Motion passed unanimously).

Board of County Commissioners Review and Procedure: The following options are available to the Board of County Commissioners when acting on an item:

- Approve the application as recommended by the Planning Commission;
- Approve the application as submitted;
- Approve the application on its own conditions;
- Deny the application;
- Remand the application to the Planning Commission for reconsideration;
- Table to a date specific; or with the express consent of the applicant, the Board may table indefinitely or dismiss the application.



Site Name: Grey Reef
Site Address: 21755 State Highway 220, Alcova WY 82620
GEOCODE: 30820740002300 **Lat/Long:** 42 34 04.1 -106 42 40.9

Purpose of Request

Union Wireless is committed to improving coverage and expanding network capacity to meet customer demand throughout the State of Wyoming. The existing Wireless Communication Facility (WCF) provides residents, visitors and businesses with high quality reliable wireless service for both personal & business, in addition to enhancing emergency services.

Union Wireless is proposing the following at the existing WCF located at 21755 State Highway 220, Alcova WY 82620.

Details of Request

Union Wireless is proposing a new 80' self-support tower at the existing WCF, but **requesting approval for a 100' self-support tower**. The existing site footprint will be expanded to accommodate the upgrades as detailed on the attached site plan/elevation (see sheet C2-1). The existing 45' Union self-support tower will remain for a period to accommodate the transfer of equipment to the new tower.

The proposed upgrades are necessary to allow Union Wireless to continue providing the best possible service to the adjacent community, in addition to enhancing emergency service capabilities through FIRSTNET.

Technical Information

Steel four leg 80' self-support tower designed to accommodate multiple carriers, please see Exhibit A for tower structural/technical details.

Valmont self-support tower, proposed antennas are COMMSCOPE NNH4-65C-R6-V3, please see Exhibit A for tower structural/technical details and Exhibit B for antenna spec's.

Union/Hemphill is proposing an 80' Self-Support Tower with 3 sectors of antennas, please see Exhibit A for tower details. No lighting is required at the proposed location/height per FAA TowAir.

The proposed frequency range is 698-896 MHz to 1695-2360 MHz

Please see Exhibit B - Antenna Spec's for the actual intended transmission, effective radiated power etc.

Please see Exhibit B - Antenna Spec's for direction of maximum lobes and associated radiation of the antennas etc.

Please see Exhibit C - NIER Report.

Union Wireless is an FCC licensed carrier, therefore all transmissions will be within the allocated frequencies and will not cause interference with any other licensed transmission.

Please see the Exhibit D – Union FCC License Info.

Please see Exhibit F for information on proposed tower foundation, soils etc.

FAA does not require lighting for the proposed height, which is typical for sites under 200' unless the site is very close to an Airport.

The proposed 80' Self-Support tower will replace the existing 40' Union Self-support at the existing cell-site, and is structurally designed to accommodate multiple carriers.

Please see Exhibit A with information on the tower/foundation engineering compliant with local, County, State and Federal structural requirements.

Grounding and Bonding, please sheets E4-1, G1-1 and G1-2 for details.

The existing cell-site is far removed from the nearest residential. The site is visible from US HWY 220 and Grey Reef Road, however setback far enough to not be in the peripheral view of passing traffic.

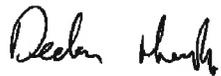
Please see the attached photo simulations of the before and after views.

The subject location is an existing cell-site. The proposed changes mainly in tower height will be noticeable but should have little visual impact or public concern give the setback of the existing sites.

The existing cell-site currently has screening in place, so Union Wireless will continue to maintain the current screening to maintain consistency with the existing screening.

Please let me know if you need any additional information.

Sincerely,

A handwritten signature in black ink that reads "Declan Murphy". The signature is written in a cursive style with a large initial 'D'.

Declan Murphy
Coal Creek Consulting for Union Wireless/Hemphill
2166 E. University Dr. #201, Tempe, AZ 85281
Tel: (602) 326-0111
Email: dmurphy@coal-creek.com

and Zoning Commission and Board of County Commissioners shall require showings concerning all of the following:

1. The owner of record or contract purchaser has signed the application.
2. Granting the conditional use permit will not contribute to an overburdening of County Services.
3. Granting the conditional use will not cause undue traffic, parking, population density, or environmental problems.
4. Granting the conditional use permit will not impair the use of adjacent property or alter the character of the neighborhood.
5. Granting the conditional use permit will not detrimentally affect the public health, safety, and welfare, or nullify the intent of the Development Plan or the Zoning Resolution.

APPLICATION INSTRUCTIONS

This is an application for a conditional use permit for wireless telecommunication facilities on the parcel described hereon. By completing the application form and providing the other requested information, your application will be acted upon in the fastest, fairest manner prescribed by law.

Person preparing report:

Name: Declan Murphy for Union Wireless/Hemphill

Address: 2166 E University Drive, #201, Tempe AZ 85281

Phone Number: 602 326 0111

Property Owner:

Name: Bret & Candy Van Rensselaer

Mailing Address: Casper WY

Phone Number: 307-237-1182

Physical Address: 21755 State Highway 220, Alcova WY 82620

Tax map parcel no: 30820740002300

Applicant:

Name: Declan Murphy for Union Wireless/Hemphill

Address: 2166 E University Drive, #201, Tempe AZ 85281

Phone Number: 602 326 0111

Legal form (Corporation, LLC, etc.) Union Telephone Company

If purchased tower, date of purchase: Lat/Long 42 34 04.1 -106 42 40.9

GPS coordinates of tower: Lat/Long 42 34 04.1 -106 42 40.9

Original Conditional Use Permit resolution number: CUP 10-0002

Dated of original Conditional Use Permit: 3/2/2010

Operator:

Name: Union Wireless

Address: PO Box 160, Mountain View WY 82939

Phone Number: 602 326 0111

Signatures

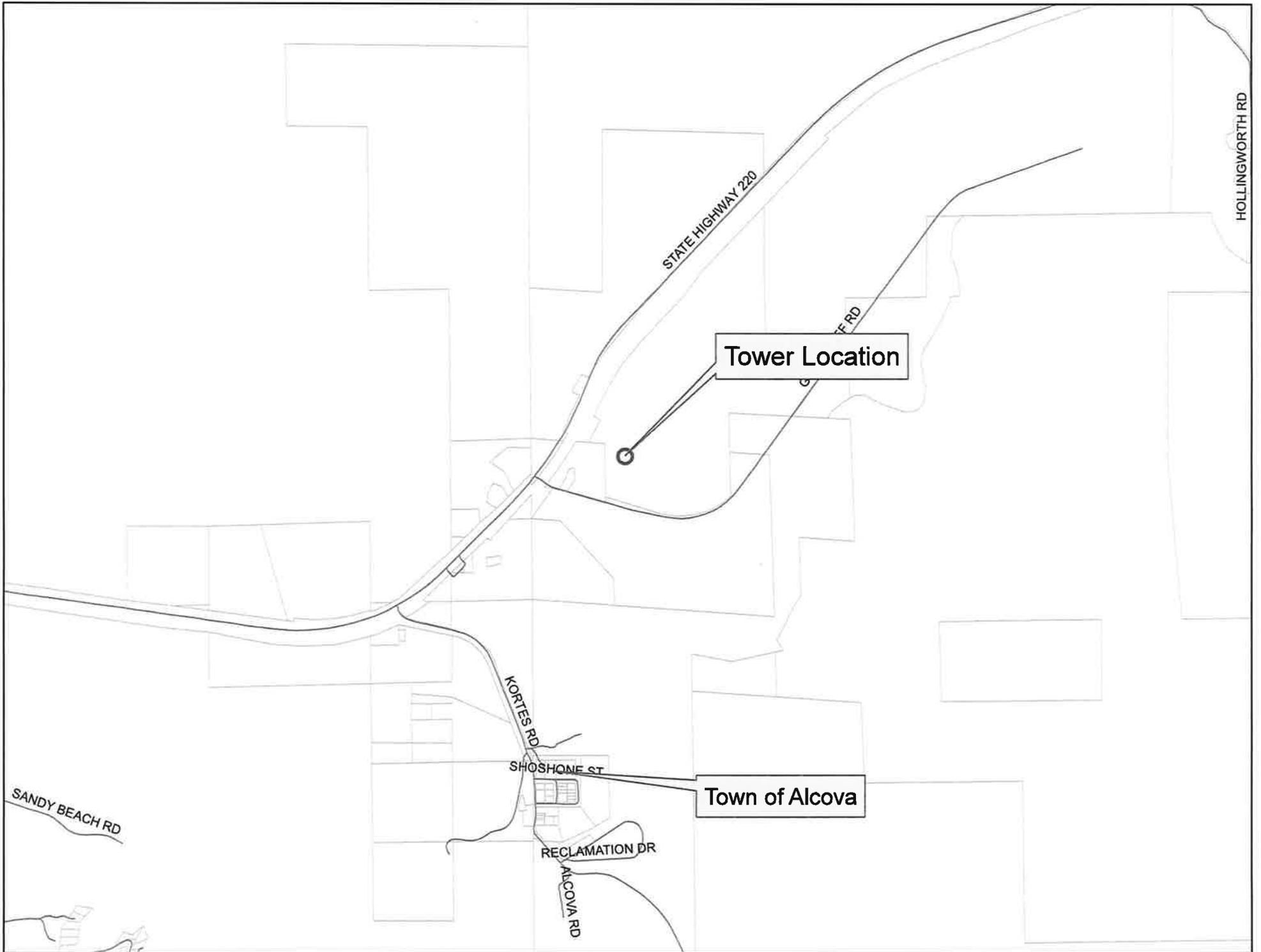
I (We) hereby certify that I (We) have read and examined this application and know the same to be true and correct to the best of my (our) knowledge. Granting this request does not presume to give authority to violate or cancel the provisions of any other State or local laws. Falsification or misrepresentation is grounds for voiding this request, if granted. All information within, attached to or submitted with this application shall become part of the public record, except as modified by applicable regulations. **I (We) further understand that all application fees are non-refundable.** By signing the application I am (We are) granting the Development Department access to our property for inspections.

Applicant: Declan Murphy Date: 4-20-20
(Signature)

Print Applicant Name: Declan Murphy

Owner: [Signature] Date: 5-20-20
(Signature)

Print Owner Name: BRET VAN ZEUSSELHEVE



STATE HIGHWAY 220

HOLLINGWORTH RD

Tower Location

SANDY BEACH RD

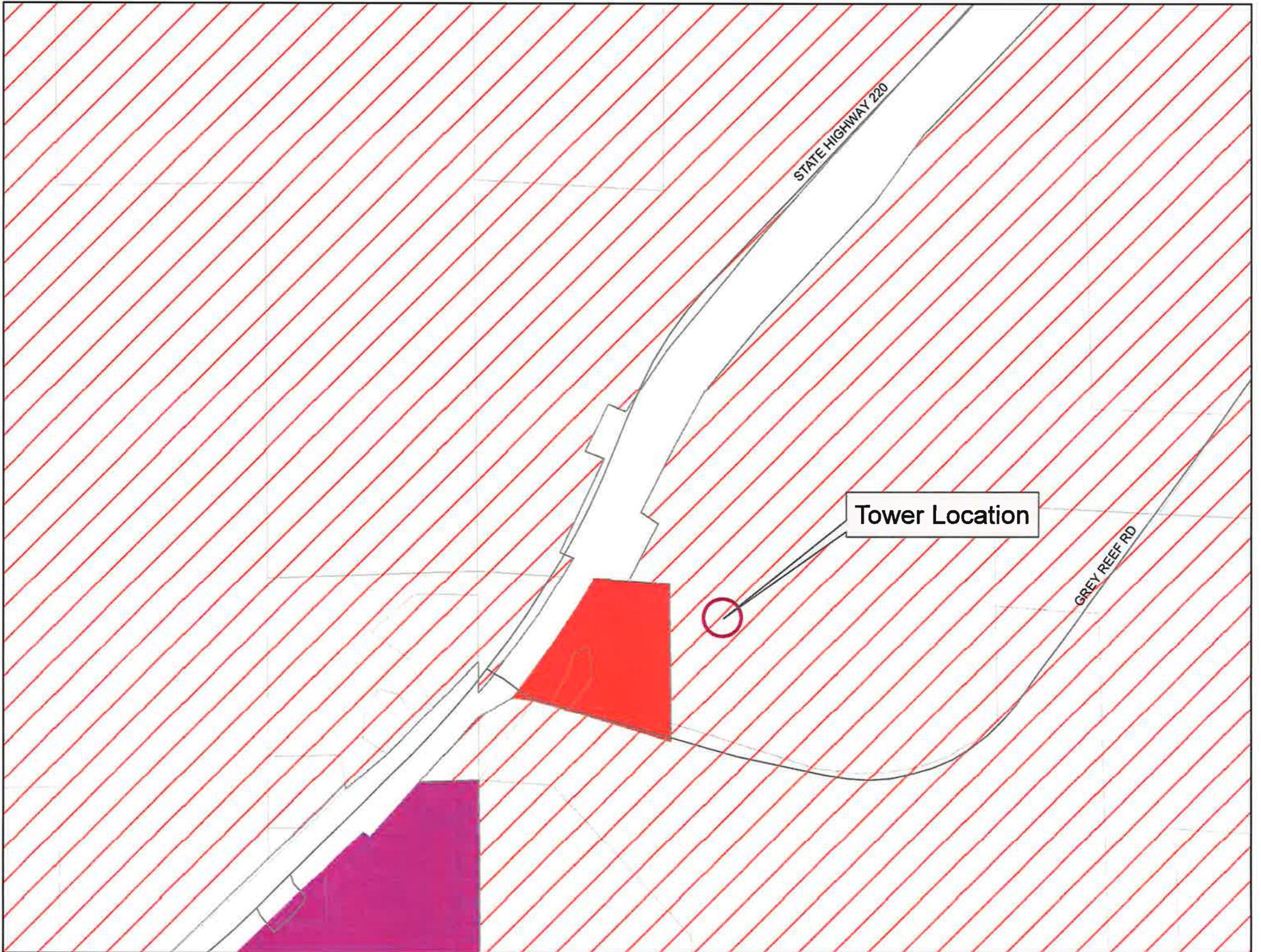
KORTES RD

SHOSHONE ST

Town of Alcova

RECLAMATION DR

ALCOVA RD



STATE HIGHWAY 220

Tower Location

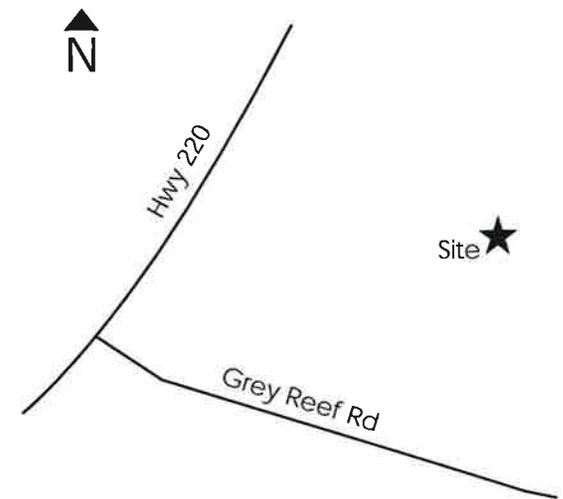
GREY REEF RD

PHOTO SIMULATIONS

12048 - Grey Reef

LAT 42° 34' 4.1"

LONG -106° 42' 40.9"



Note: Simulations are an artistic illustration created to represent how the proposed project may look once constructed. Simulations are create to match the current design as accurately as possible, but are not guaranteed to match the final build.



Before:



PHOTO SIMULATIONS

12048 - Grey Reef

LAT 42° 34' 4.1"

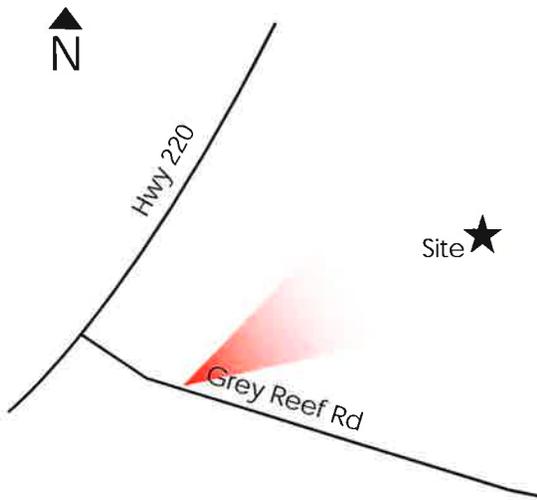
LONG -106° 42' 40.9"

After:



View 1

Looking Northeast



Before:



PHOTO SIMULATIONS

12048 - Grey Reef

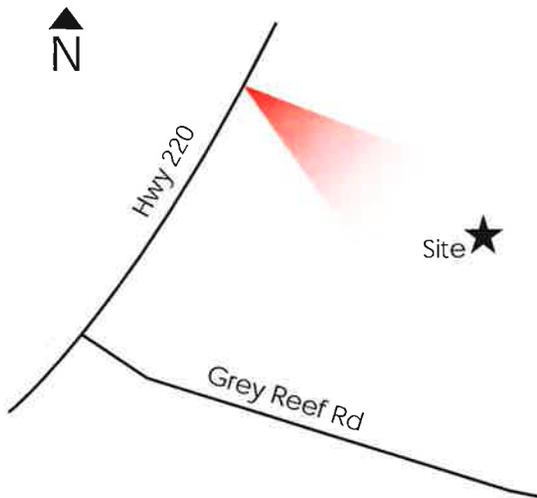
LAT 42° 34' 4.1"

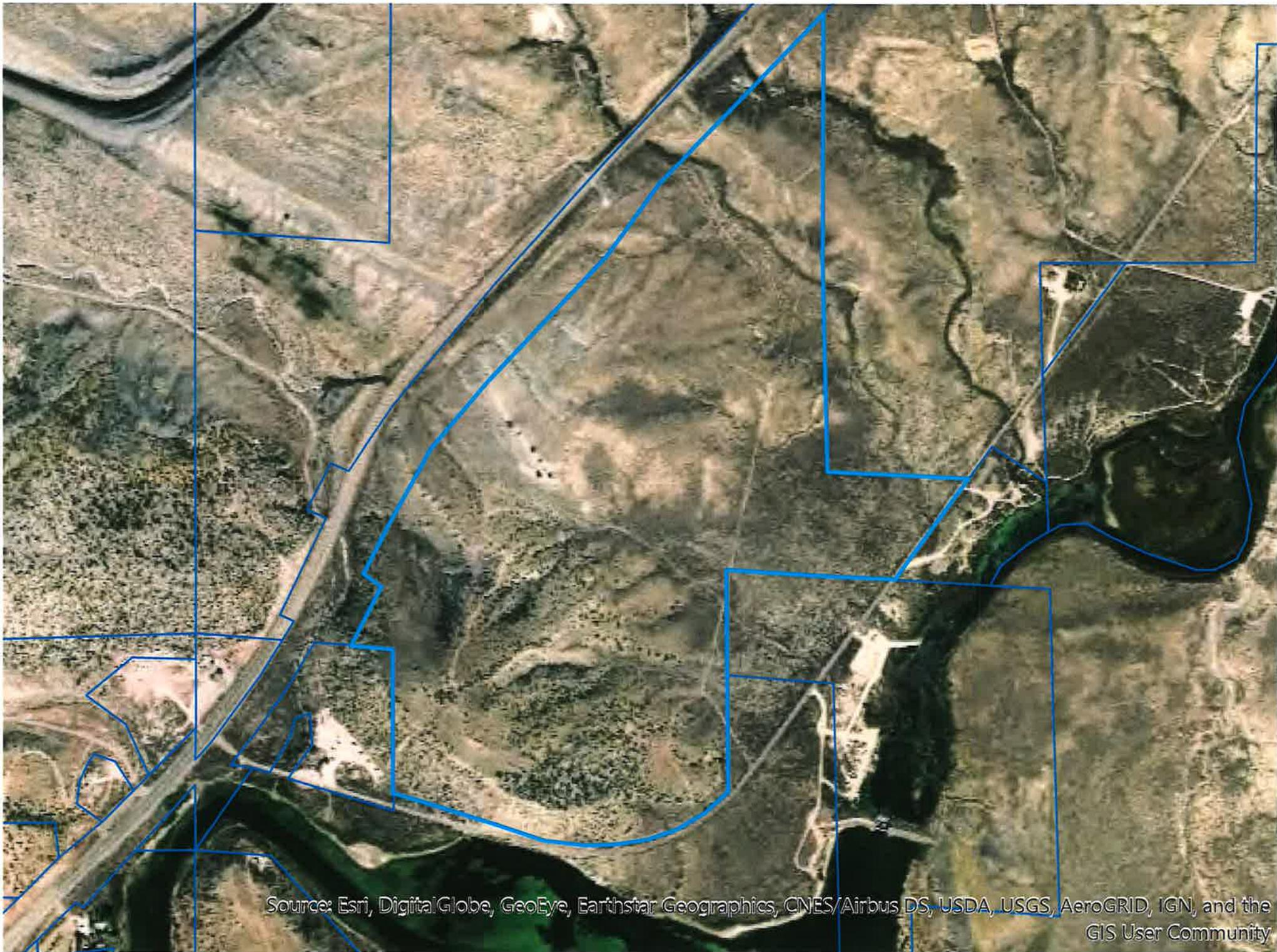
LONG -106° 42' 40.9"

After:



View 2
Looking Southeast





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

GEOTECHNICAL ENGINEERING REPORT
NEW HEMPHILL 4-LEG SELF-SUPPORT TOWER
GREY REEF
21755 WEST HIGHWAY 220
NATRONA COUNTY, ALCOVA, WYOMING

Prepared for:

Hemphill, LLC
1350 North Louisville Avenue
Tulsa, Oklahoma 74115

Prepared by:



Springfield, MO
4168 W. Kearney Springfield, MO 65803
Call 417.864.6000 Fax 417.864.6004
www.ppimo.com

PROJECT NUMBER: 261436

May 13, 2020

May 13, 2020

Hemphill, LLC
1350 North Louisville Avenue
Tulsa, Oklahoma 74115

Attn: Mr. Scot Tinker, Director of Tower Operations
Email: scot.tinker@hemphill.com

RE: Geotechnical Engineering Report
New Hemphill 4-Leg Self-Support Tower - Grey Reef
21755 West Highway 220
Natrona County, Alcova, Wyoming
PPI Project Number: 261436

Dear Mr. Tinker:

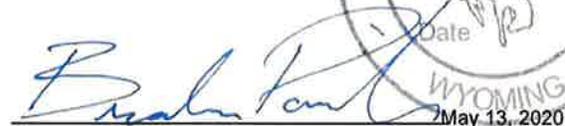
Attached, please find the report summarizing the results of the geotechnical investigation conducted for the proposed New Hemphill 4-Leg Self-Support Tower in Natrona County, Alcova, Wyoming. We appreciate this opportunity to be of service. If you have any questions, please don't hesitate to contact this office.

PALMERTON & PARRISH, INC.
By:



R. Todd Hercules, P.E.
Geotechnical Engineer

PALMERTON & PARRISH, INC.
By:



Brandon R. Parrish, P.E.
Vice-President

Submitted: One (1) Electronic .pdf Copy

BRP/BRP/RTH

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APPENDICES

- Appendix I - Figure
- Appendix II - Boring Log & Key To Symbols
- Appendix III - General Notes
- Appendix IV – Grain Size Test
- Appendix V - Important Information Regarding Your Geotechnical Report

EXECUTIVE SUMMARY

A Geotechnical Investigation was performed for the proposed New Hemphill 4-Leg Self-Support Tower located at 21755 West Highway 220 in Natrona County, Alcova, Wyoming. It is understood that a new 80-foot Self-Support Tower will be constructed at the project site. Cut and fill depths are anticipated to be less than 2 feet across the subject site to provide finished subgrade elevations.

Based upon the information obtained from the boring drilled and subsequent laboratory testing, the site is suitable for the proposed Self-Support Tower. Important geotechnical considerations for the project are summarized below. However, users of the information contained in the report must review the entire report for specific details pertinent to geotechnical design considerations.

- The soils explored at the subject site consisted of well-graded gravel with clay and sand. Sparse vegetation was noted at the ground surface. The well-graded gravel layer transitioned into a clayey sand layer at approximately 18 feet below the ground surface. Varying amounts of granite gravels and limestone nodules were also noted within this material;
 - The subsurface soils were generally medium dense to very dense and excavatable without rock excavation equipment; however, intact, hard limestone sections or boulders may be encountered that may require rock excavation equipment. It is recommended that rock excavation equipment be available during excavations;
 - Mat foundations bearing on medium dense to very dense native soil for the new Self-Support Tower can be designed for an allowable bearing capacity of 5,000 psf. Micropiles may be used in conjunction with the mat foundation to resist overturning and lateral loads and provide additional bearing capacity. Alternatively, the proposed Self-Support Tower can be supported by a drilled pier foundation;
 - Drilled pier design parameters have been included in Section 8. Some collapsible materials may be encountered in the drilled pier excavations. Accordingly, it is
-

EXECUTIVE SUMMARY - CONTINUED

recommended that the drilled pier contractor have casing available in case these conditions are encountered;

- The project site classifies as a Site Class D in accordance with Section 1613 of the 2012 International Building Code (IBC); and
 - Construction materials testing should be performed on tower foundations by a qualified engineer and close monitoring of subgrade preparation work is considered critical to achieve adequate subgrade performance.
-

GEOTECHNICAL ENGINEERING REPORT
NEW HEMPHILL 4-LEG SELF-SUPPORT TOWER
GREY REEF
21755 WEST HIGHWAY 220
NATRONA COUNTY, ALCOVA, WYOMING

1.0 INTRODUCTION

This is the report of the Geotechnical Investigation performed for the proposed New Hemphill 4-Leg Self-Support Tower located at 21755 West Highway 220 in Natrona County, Alcova, Wyoming. This investigation was in accordance with a letter proposal dated October 8, 2019, and authorized by Mr. Scot Tinker with Hemphill. The approximate site location is shown below:



2.0 PROJECT PURPOSE

The purpose of this Geotechnical Investigation was to provide information for foundation design and construction planning for the proposed Self-Support Tower. PPI's scope of services includes field and laboratory testing, investigation of the subsurface conditions in the vicinity of the tower base, engineering analysis of collected data and development of recommendations for foundation design and construction planning, and preparation of this Engineering Report.

3.0 PROJECT DESCRIPTION

It is understood that a new 80-foot Self-Support Tower supported upon either a mat foundation or drilled piers is proposed at the project site. It is understood that micropiles may be utilized in combination with a mat foundation for additional overturning, lateral loading, and bearing capacity. Foundation loadings, both compressive and overturning are anticipated to be moderate. Cut and fill depths are anticipated to be less than 2 feet across the subject site to provide finished subgrade elevations.

4.0 SUBSURFACE INVESTIGATION

Subsurface conditions were investigated through completion of a subsurface boring and subsequent laboratory testing. Below is a picture of the boring location:



4.1 Subsurface Boring

The tower center was selected and staked in the field by the Client. The approximate boring location is shown on [Figure 1, Boring Location Plan](#). The Wyoming One-Call System was notified prior to the investigation to assist in locating buried public utilities.

A log of the boring showing descriptions of soil and rock units encountered, as well as results of field tests, laboratory tests and a “Key to Symbols” are presented in [Appendix II](#).

The boring was drilled on April 23, 2020 using 4.5-inch O.D. continuous flight augers to a depth of 30 feet and air rotary methods with a 2.9-inch tricone bit past a depth of 35 feet powered by an ATV-mounted drill-rig. Soil samples were generally collected at 2.5 to 5-foot centers during drilling using a split spoon sampler while performing the Standard Penetration Test (SPT) in general accordance with ASTM D1586. Please refer to [Appendix III](#) for general notes regarding boring logs and additional soil sampling information.

4.2 Laboratory Testing

Collected samples were sealed and transported to the laboratory for further evaluation and visual examination. Laboratory soil testing included the following:

- Moisture Content (ASTM D2216);
- Grain Size Analysis (ASTM D6913); and
- Pocket Penetrometers.

Laboratory test results are shown on each boring log in [Appendix II](#) and are summarized in the following table.

Depth (ft.)	Moisture Content (%)	USCS Symbol	Percent Passing No. 200 Sieve (%)
6	2.5	GW-GC	9
18.5	2.5	SC	20

5.0 SITE GEOLOGY

Based on information available from the Wyoming Geological Survey, the subject site is located over the Cloverly, Morrison, and Sundance Formation. These formations contain sandstone, bentonitic claystone, limestone, glauconitic sandstone and shale. Some amount of chert-pebble conglomerate is also noted at the subject site. The claystone in this area is noted to be locally bentonitic and may be expansive. Boulders encountered in the subsurface exploration are anticipated to be limestone nodules or areas of conglomerate.

6.0 GENERAL SITE SUBSURFACE CONDITIONS

Based upon subsurface conditions encountered within the boring drilled at the project site, generalized subsurface conditions are summarized in the table below. Soil stratification lines on the boring log indicate approximate boundary lines between different types of soil units based upon observations made during drilling. In-situ transitions between soil types are typically gradual.

6.1 Subsurface Stratum

Generalized subsurface conditions are summarized in the table below:

Depth	Stratum	Subsurface Material	Density/Consistency
0 to 18 feet	Gravel	Well-Graded Gravel, with clay and sand (GW-GC)	Medium Dense to Very Dense
18 to 35 feet	Sand	Clayey Sand, with gravel (SC)	Dense to Very Dense

6.2 Groundwater

Shallow groundwater was not observed within the boring on the date drilled. Groundwater levels should be expected to fluctuate with changes in site grading,

precipitation, and regional groundwater levels. Groundwater may be encountered during wetter periods.

7.0 EARTHWORK

Grading plans for the proposed Self-Support Tower were not provided. Grading for the project site is anticipated to have less than 2 feet of cut and/or fill to establish final grades. The initial phase of site preparation should include the steps listed below;

- Clearing and grubbing of any vegetation within the tower footprint; and
- Areas scheduled to receive controlled fill, if any, should be proof-rolled and approved in accordance with the following section of this report.

7.1 Site Preparation

Proof-rolling consists essentially of rolling the ground surface with a loaded tandem axle dump truck or similar heavy rubber-tired construction equipment and noting any areas which rut or deflect during rolling. All soft subgrade areas identified during proof-rolling should be undercut and replaced with compacted fill as outlined below. Proof-rolling, undercutting and replacement should be monitored by a qualified representative of the Geotechnical Engineer.

7.2 Fill Material Types

Fill Type ¹	USCS Classification	Acceptable Location for Placement
Low Volume Change (LVC) Engineered Fill ²	CL, GC, or SC (LL < 45%)	All locations and elevations
On-Site Natural Soils	GW-GC or SC	All locations and elevations
Rock Fill ³	GW	All locations and elevations

1. Controlled, compacted fill should consist of approved materials that are free of organic matter and debris and contain maximum rock size of 4 to 6 in. Frozen material should not be used and fill should not be placed on a frozen subgrade. A sample of each material type should be submitted to the Geotechnical Engineer for evaluation prior to its use.
2. Low plasticity cohesive soil or granular soil having at least 15% low plasticity fines.
3. See [Section 7.2.1](#) if rock fill will be utilized at the project site.

7.2.1 Rock Fill

If rock is to be used as the primary filling medium, embankments should be constructed using rock having maximum dimensions in excess of 4 inches, but no

greater than 8 inches. Rock material should be placed in horizontal layers having a thickness of approximately the maximum size of the larger rock comprising the lift, but not greater than 12 inches. Rocks or boulders too large to permit placing in a 12-inch thick lift should be reduced in size as necessary to permit placement or be bladed over the edge of the fill and not used in the compacted fill. Rock fill should not be dumped into place but should be distributed in horizontal lifts by blading and dozing in such a manner as to ensure proper placement into final position in the embankment. Finer material including rock fines and limited soil fines should be worked into the rock voids during this blading operation. Excessive soil and rock fine particles preventing interlock of cobble and boulder sized rock should be prohibited. Rock fill should be consolidated by a minimum of three (3) passes of a large diameter self-propelled vibratory compactor. Terminal fill slopes using rock may be constructed 1.5 horizontal to 1 vertical for fill height of 15 feet or less. The testing of rock fill quality should include the requirements that a representative of the Geotechnical Engineer be present daily, but not necessarily continuously during the placement of the fill to observe the placement of rock fill in order to determine fill quality and to observe that the contractors work sequence is in compliance with this specification. Progress reports indicative of the quality of the fill should be made at regular intervals to the Owner. If improper placement procedures are observed during the placement of the fill the Geotechnical Engineer should inform the Contractor, and no additional fill should be permitted on the affected area until the condition causing the low densities has been corrected and the fill has been reworked to obtain sufficient density.

7.3 Compaction Requirements

Item	Description
Subgrade Scarification Depth	At least 8 inches
Fill Lift Thickness	8-inch (loose)
Compaction Requirements ¹	<ul style="list-style-type: none"> 95% Standard Proctor Density (ASTM D-698)
Moisture Content	<ul style="list-style-type: none"> ± 2% optimum moisture for CL, SC, or GC soil types; or 0 to 4% above optimum for CH soil types.
Recommended Testing Frequency	<ul style="list-style-type: none"> One (1) Field Density (compaction) test for each 2,500 sq. ft. of fill within the footprint of the Self-Support Tower; One (1) Field Density (compaction) test for each 5,000 sq. ft. of fill within non-structure areas; A minimum of three (3) tests per lift; and Visual observation of the compaction process should be documented with no testing required <u>if</u> a performance compaction specification (i.e. number of passes) is utilized.
<p>1. We recommend that engineered fill (including scarified compacted subgrade) be tested for moisture content and compaction during placement. Should the results of the in-place density tests indicate the specified moisture or compaction limits have not been met, the area represented by the test should be reworked and retested as required until the specified moisture and compaction requirements are achieved.</p>	

7.4 Excavations

Based upon the subsurface conditions encountered during this investigation, the on-site soils typically classify as Type B in accordance with OSHA regulations. Temporary excavations in soils classifying as Type B with a total height of less than 20 feet should be cut no steeper than 1H:1V in accordance with OSHA guidelines. Confirmation of soil classification during construction, as well as construction safety (including shoring, if required), is the responsibility of the contractor.

8.0 TOWER FOUNDATION RECOMMENDATIONS

The proposed Self-Support Tower is anticipated to either be supported on a shallow mat foundation or on drilled pier foundations. It is understood that micropiles may be utilized in addition to a mat foundation to help resist overturning and lateral loads. Based upon the conditions encountered in the boring performed at the project site, the site subsurface materials are suitable for either a mat foundation or drilled pier foundations. Recommendations for mat foundations and drilled piers are included in the following sections.

8.1 Shallow Mat Foundations

Based upon the subsurface conditions encountered near the proposed Self-Support Tower and anticipated site grading, footings for the proposed Self-Support Tower are anticipated to bear in medium dense to very dense natural soils. Please refer to the section below for recommendations regarding shallow foundations.

8.2 Shallow Foundation Design Recommendations

Description	Mat Foundation Parameters
Net allowable bearing pressure ¹	Native Soil: 5,000 psf
Ultimate bearing pressure ²	Native Soil: 15,000 psf
Transient (wind) loading <u>ONLY</u> – Allowable Bearing Pressure ³	Native Soil: 7,500 psf
Minimum embedment below finished grade for frost protection and variation in soil moisture ⁴	5 feet
Estimated total settlement ⁵	1 inch or less
Allowable passive pressure ⁶	800 psf
Coefficient of sliding friction ⁷	0.6 (natural soils)

1. The recommended net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation. The recommended pressure considers all unsuitable and/or soft or loose soils, if encountered, are undercut and replaced with tested and approved new engineered fill. Footing excavations should be free of loose and disturbed material, debris, and water when concrete is placed. A factor of safety value of 3 has been applied to these values.
2. No factor of safety has been applied to this value.
3. The allowable bearing capacity may be increased to this value only for transient or wind loading.
4. For footings beneath unheated areas. It is anticipated that additional depth may be required for overturning and uplift design considerations.
5. The foundation movement will depend upon the variations within the subsurface soil profile, the structural loading conditions, the embedment depth of the footings, the thickness of compacted fill, and the quality of the earthwork operations.
6. Allowable passive pressure value considers a factor of safety of about 2. Passive pressure value applies to undisturbed native clay or properly compacted fill. If formed footings are constructed, the space between the formed side of a footing and excavation sidewall should be cleaned of all loose material, debris, and water and backfilled with tested and approved fill compacted to at least 95% of the material's Standard Proctor dry density. Passive resistance should be neglected for the upper 5 feet of the soil below the final adjacent grade due to strength loss from freeze/thaw and shrink/swell.
7. Coefficient of friction value is an ultimate value and does not contain a factor of safety.

8.3 Uplift

Resistance of shallow spread footings to uplift (U_p) may be based upon the dead weight of the concrete footing structure (W_c) and the weight of soil backfill contained

in an inverted cone or pyramid directly above the footings (W_s). The following parameters may be used in design:

Description	Weights
Weight of Concrete (W_c)	150 pcf
Weight of Soil Resistance (W_s)	100 pcf
Weight for on-site soils placed in accordance with <u>Section 7</u>	

The base of the cone or pyramid should be the top of the footing and the pyramid or cone sides should form an angle of 30 degrees with the vertical. Allowable uplift capacity (U_p) should be computed as the lesser of the two (2) equations listed below:

$$U_p = (W_s/2.0) + (W_c/1.25) \text{ or } U_p = (W_s + W_c)/1.5$$

If additional uplift and/or overturning load resistance is required for the project site consideration may be given to the use of rock anchors. Rock anchor design values are included in Section 8.4.

8.4 Rock Anchor Design Values

It is understood that a combination of mat foundations and micropiles, of Case 1 type (directly loaded piles), may be utilized for the proposed Self-Support Tower. The following tables contain passive pressures and preliminary grout to ground bond strengths needed for use in the design of micropiles. These values, at their corresponding depths, should be used in conjunction with the following micropile design values.

It is understood that a total of three (3) possible installation methods may be utilized for micropile installation at the subject sites. Due to the variable installation procedures, grout to ground bond strengths are variable between these installation methods and have been included as separate bond strengths accordingly. The installation methods are noted below:

- Micropile Type "A" – Grout is gravity installed by tremie methods after drilling. This method is generally used for rock sockets;

- Micropile Type “B” – After drilling, grout is pressure grouted through casing or hollow stem auger during casing or auger removal. Due to the pressure applied to the grout, greater bond strength is achieved over Type “A” (in soils only); and
- Micropile Type “E” – High water content grout is utilized in drilling through a continuously threaded, hollow-core steel bar then replaced with pressurized structural grout near the completion of drilling. Due to the pressure applied to the grout, greater bond strength is achieved over Type “A” (in soils only).

Stratum	Applicable Depth (ft.)	Unit Weight (pcf)	Friction Angle, ϕ (Degrees)	Coefficient of Passive Pressure	Preliminary Grout-to-Ground Ultimate Bond Strength ² (psi)		
					A	B	E
Gravel	0 to 5	Moist: 125	Ignore	Ignore	-	-	-
Gravel	5 to 10	Moist: 125	32	3.3	20	30	30
Gravel	10 to 18	Moist: 125	32	3.3	25	35	35
Sand	18 to 35	Moist: 125	30	3.0	20	28	28
Sand ¹	Over 35 feet ¹	Moist: 125	30	3.0	25	32	32

1. Assumes soils are equal to or better than those at depths greater than the boring termination depth. This should be confirmed in the field during installation of micropiles.
2. Bond Values are based upon subsurface data obtain in 1 Boring and assume full time observation by a qualified Geotechnical Inspector experienced with micropiles during installation.

8.5 Drilled Pier Foundation Recommendations

Based upon the conditions encountered in the boring and subsequent laboratory testing, the proposed Self-Support Tower may be supported on a system of drilled piers bearing within the clayey sand. The drilled shaft should be plumb (no more than 2 percent of the shaft length off vertical), and the drilled shaft should have a relatively flat bottom. Essentially all groundwater, if encountered, should be removed from the drilled pier shaft prior to concrete placement. If it is not possible to remove nearly all (2 to 3 inches max) of the groundwater from the drilled shaft excavation, concrete should be placed via tremie methods.

The method of concrete placement and vibration should be selected by the Structural Engineer. Required strength and mix design characteristics should also be specified by the Structural Engineer or other members of the Design Team.

Generally, the well-graded gravel and clayey sand layers were excavatable with solid flight augers with increased effort. Casing may be required at the subject site due to possible collapsible gravel or sand material

8.6 Bearing Capacity and Uplift Resistance for a Drilled Shaft

The design parameters summarized in the table below may be utilized for bearing capacity and uplift capacity design for drilled shafts as described above. Allowable end bearing pressures and side friction values are summarized in the table below.

Stratum ¹	Applicable Depth (ft.)	Allowable End Bearing Pressure (ksf) ²	Allowable Side Friction (ksf) ³
Gravel	Ground surface to 1 shaft diameter or a minimum of 5 feet	Ignore	Ignore
Gravel	1 shaft diameter or a minimum of 5 feet to 10 feet	Not Recommended	0.4
Gravel	10 feet to 18 feet	12.0	0.7
Sand	18 feet to 30 feet	16.0	1.2
Sand	30 feet to 35 feet	20.0	1.2

1. If soft or loose soils are encountered in plan bottom of shaft during drilling, the shaft should be deepened until an acceptable bearing stratum is encountered.
2. End bearing pressure values assume a Factor of Safety of 3.0 or greater.
3. Side friction values include a Factor of Safety of ~1.5. These values should be used with **Factored Loads** during structural design. Side Friction may be used for computation of Uplift and Compressive Capacity in soil.

8.7 Lateral Loadings

It is anticipated that designers will most likely utilize LPILE for completion of deep foundation lateral capacity design for the tower foundations. LPILE uses finite difference computer models based on the horizontal modulus of subgrade reaction (K_h).

The values listed in the table below may be utilized for Drilled Pier Analysis in LPILE. Please also notice that the table states to “ignore” lateral support for the depth from 0 to 1 pier diameter or a minimum of 5 feet. This notation is intended to account for the fact that near-surface soils are significantly disturbed during drilled shaft excavation, which greatly reduces the lateral support provided. Designers should use their judgment and make an appropriate reduction of soil strength parameters in this zone.

Values summarized in the table below are based upon published correlations, and field and laboratory data collected during this subsurface investigation. Values shown below are ultimate values representative of in-situ soil properties, and do not include a Factor of Safety. These values may be used to compute resistance to lateral loading of the overburden soils. **The appropriate Factor of Safety should be chosen by the designer.**

Stratum (Model)	Applicable Depth	Unit Weight ¹ (pcf)	Friction Angle, ϕ (Degrees)	Submerged Modulus, k (pci)	Above Water Table Modulus, k (pci)
Gravel (Sand)	Ground surface to 1 shaft diameter or a minimum of 5 feet	Moist: 125	Ignore	Ignore	Ignore
Gravel (Sand)	1 shaft diameter or a minimum of 5 feet to 10 feet	Moist: 125	32	60	90
Gravel (Sand)	10 feet to 18 feet	Moist: 135	32	125	225
Clayey Sand (Sand)	18 feet to 30 feet	Moist: 135	30	125	225
Clayey Sand (Sand)	30 feet to 35 feet	Moist: 135	30	125	225

1. Buoyant unit weight should be utilized for soils that extend below the design groundwater level. Groundwater was not encountered within the 35 feet explored at the project site.

9.0 SEISMIC CONSIDERATIONS

Code Used	Site Classification
2012 International Building Code (IBC) ¹	D
1. In general accordance with the 2012 International Building Code, Section 1613	

10.0 CONSTRUCTION OBSERVATION & TESTING

The construction process is an integral design component with respect to the geotechnical aspects of a project. Since geotechnical engineering is influenced by variable depositional and weathering processes and because we sample only a small portion of the soils affecting the performance of the proposed Self-Support Tower, unanticipated or changed conditions can be disclosed during grading. Proper geotechnical observation and testing during construction is imperative to allow the Geotechnical Engineer the opportunity to evaluate assumptions made during the design

process. Therefore, we recommend that PPI be kept apprised of design modifications and construction schedule of the proposed project to observe compliance with the design concepts and geotechnical recommendations, and to allow design changes in the event that subsurface conditions or methods of construction differ from those assumed while completing this study. We recommend that during construction all earthwork be monitored by a representative of PPI, including site preparation, placement of all engineered fill and trench backfill, and all foundation excavations as outlined below.

- An experienced Geotechnical Engineer should observe the subgrade throughout the proposed project site immediately following stripping to evaluate the native soils, identify areas requiring undercutting, and evaluate the suitability of the exposed surface for fill placement;
- An experienced Engineer or Engineering Technician should monitor and test all fill placed within the Self-Support Tower area to determine whether the type of material, moisture content, and degree of compaction are within recommended limits; and
- An experienced Technician or Engineer should observe drilled pier excavations. Where unsuitable bearing conditions are observed, PPI should be contacted to provide remedial procedures.

11.0 REPORT LIMITATIONS

This report has been prepared in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area. Palmerton & Parrish, Inc. observed that degree of care and skill generally exercised by other consultants under similar circumstances and conditions. Palmerton & Parrish's findings and conclusions must be considered not as scientific certainties, but as opinions based on our professional judgment concerning the significance of the data gathered during the course of this investigation. Other than this, no warranty is implied or intended.



SCALE: 1" = 25'

LEGEND

 Boring Location

NOTES

- Aerial image from Google Earth Pro.
- Not intended for use in design.

Project: Grey Reef- Self Support Tower - Alcova, Wyoming
Client: Hemphill, LLC

Boring Location Plan

DATE: April 24, 2020

Project Number: 261436

 **PALMERTON & PARRISH, INC.**
GEOTECHNICAL AND MATERIALS ENGINEERS/MATERIALS TESTING LABORATORIES/ENVIRONMENTAL SERVICES

FIGURE 1



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GEOTECHNICAL BORING LOG

BORING NUMBER

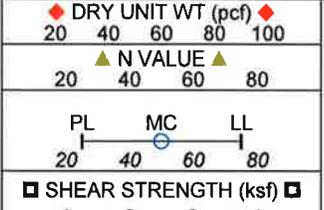
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PAGE 1 OF 1

CLIENT Hemphill, LLC PROJECT NAME Grey Reef Self-Support Tower
 PROJECT NO. 261436 PROJECT LOCATION Natrona County, Alcova, Wyoming
 DATE STARTED 4/23/20 COMPLETED 4/25/20 SURFACE ELEVATION _____ BENCHMARK EL _____
 DRILLER CW DRILL RIG CME-550x GROUND WATER LEVELS _____
 HAMMER TYPE Auto AT TIME OF DRILLING None
 LOGGED BY CJ CHECKED BY RTH AT END OF DRILLING _____
 NOTES _____

BORING LOG - PPI - PPI STD TEMPLATE.GDT - 5/11/20 15:14 - S:_MASTER PROJECT FILE\2019\WYHEMPHILL-261436-WY_CO & UT REGISTRATIONS-SUB\DRILLED\2020\GREY REEF LOGS\GRAY REEF - GINT.GPJ

DEPTH (ft)	DRILLING METHOD	STRATA SYMBOL	MATERIAL DESCRIPTION Unified Soil Classification System	SAMPLE TYPE NUMBER	RECOVERY % (RQD %)	CORRECTED BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT (pcf)				ELEVATION (ft)
								20	40	60	80	
0	CFA - 4.5" O.D.		WELL-GRADED GRAVEL, w/ Clay and Sand, Granite Gravel, Brown, Moist to Slightly Moist, Medium Dense to Very Dense (GW-GC)	SPT 1		5-10-13 (23)	2.5					
5				SPT 2		13-14-8 (22)						
10				SPT 3		10-16-26 (42)						
15				SPT 4		9-9-21 (30)						
18.0				SPT 5		10-22-51 (73)						
20	AIR ROTARY - 2.9" O.D. Tricone		CLAYEY SAND, w/ Gravel Limestone Nodules, Brown, Moist to Slightly Moist, Very Dense (SC)	SPT 6		18-39-52 (91)						
25				SPT 7		21-39-66 (105)						
30				SPT 8		21-14-26 (40)						
35				SPT 9		47-66/4"						
			- Dense from 28.5' to 33.5'									
			Bottom of borehole at 35.0 feet.									





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KEY TO SYMBOLS

CLIENT Hemphill, LLC

PROJECT NAME Grey Reef Self-Support Tower

PROJECT NO. 261436

PROJECT LOCATION Natrona County, Alcova, Wyoming

LITHOLOGIC SYMBOLS (Unified Soil Classification System)



GW-GC: USCS Well-graded Gravel with Clay



SC: USCS Clayey Sand

SAMPLER SYMBOLS



Standard Penetration Test

WELL CONSTRUCTION SYMBOLS

ABBREVIATIONS

LL - LIQUID LIMIT (%)
 PI - PLASTIC INDEX (%)
 W - MOISTURE CONTENT (%)
 DD - DRY DENSITY (PCF)
 NP - NON PLASTIC
 -200 - PERCENT PASSING NO. 200 SIEVE
 PP - POCKET PENETROMETER (TSF)

TV - TORVANE
 PID - PHOTOIONIZATION DETECTOR
 UC - UNCONFINED COMPRESSION
 ppm - PARTS PER MILLION
 ∇ Water Level at Time
 Drilling, or as Shown
 ∇ Water Level at End of
 Drilling, or as Shown
 ∇ Water Level After 24
 Hours, or as Shown

KEY TO SYMBOLS - PPI STD TEMPLATE.GDT - 5/11/20 15:14 - S:_MASTER PROJECT FILE\2019\WY\HEMPHILL-261436-WY_CO & UT REGISTRATIONS-SUBDRILLED\2020\GREY REEF\LOGS\GRAY REEF - GINT.GPJ

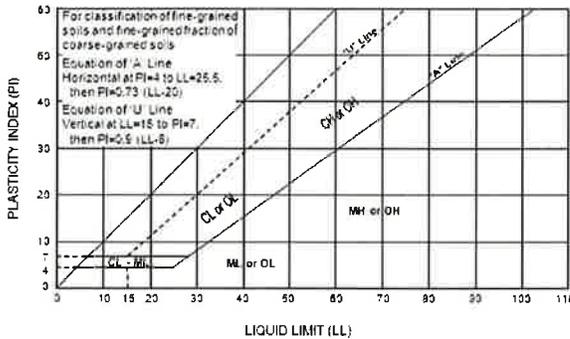


GENERAL NOTES

SOIL PROPERTIES & DESCRIPTIONS

COHESIVE SOILS

Consistency	Unconfined Compressive Strength (Qu)	Pocket Penetrometer Strength	N-Value
	(psf)	(tsf)	(blows/ft)
Very Soft	<500	<0.25	0-1
Soft	500-1000	0.25-0.50	2-4
Medium Stiff	1001-2000	0.50-1.00	5-8
Stiff	2001-4000	1.00-2.00	9-15
Very Stiff	4001-8000	2.00-4.00	16-30
Hard	>8000	>4.00	31-60
Very Hard			>60



Group Symbol	Group Name
CL	Lean Clay
ML	Silt
OL	Organic Clay or Silt
CH	Fat Clay
MH	Elastic Silt
OH	Organic Clay or Silt
PT	Peat
CL-CH	Lean to Fat Clay

Plasticity		Moisture	
Description	Liquid Limit (LL)	Descriptive Term	Guide
Lean	<45%	Dry	No indication of water
Lean to Fat	45-49%	Moist	Indication of water
Fat	≥50%	Wet	Visible water

Fine Grained Soil Sub Classification	Percent (by weight) of Total Sample
Terms: SILT, LEAN CLAY, FAT CLAY, ELASTIC SILT Sandy, gravelly, abundant cobbles, abundant boulders with sand, with gravel, with cobbles, with boulders scattered sand, scattered gravel, scattered cobbles, scattered boulders a trace sand, a trace gravel, a few cobbles, a few boulders	PRIMARY CONSTITUENT
	>30-50]
	>15-30] – secondary coarse grained constituents
	5-15]
	<5]
The relationship of clay and silt constituents is based on plasticity and normally determined by performing index tests. Refined classifications are based on Atterberg Limits tests and the Plasticity Chart.	

NON-COHESIVE (GRANULAR) SOILS

RELATIVE DENSITY	N-VALUE	MOISTURE CONDITION	
		Descriptive Term	Guide
Very Loose	0-4	Dry	No indication of water
Loose	5-10	Moist	Damp but no visible water
Medium Dense	11-24	Wet	Visible free water, usually soil is below water table.
Dense	25-50		
Very Dense	≥51		

**GRAIN SIZE IDENTIFICATION		
Name	Size Limits	Familiar Example
Boulder	12 in. or more	Larger than basketball
Cobbles	3 in. to 12 in.	Grapefruit
Coarse Gravel	¾-in. to 3 in.	Orange or lemon
Fine Gravel	No. 4 sieve to ¾-in.	Grape or pea
Coarse Sand	No. 10 sieve to No. 4 sieve	Rock salt
Medium Sand	No. 40 sieve to No. 10 sieve	Sugar, table salt
Fine Sand*	No. 200 sieve to No. 40 sieve	Powdered sugar
Fines	Less than No. 200 sieve	

*Particles finer than fine sand cannot be discerned with the naked eye at a distance of 8 inches.

Coarse Grained Soil Sub Classification	Percent (by weight) of Total Sample
Terms: GRAVEL, SAND, COBBLES, BOULDERS Sandy, gravelly, abundant cobbles, abundant boulders with gravel, with sand, with cobbles, with boulders scattered gravel, scattered sand, scattered cobbles, scattered boulders a trace gravel, a trace sand, a few cobbles, a few boulders Silty (MH & ML)*, clayey (CL & CH)* (with silt, with clay)* (trace silt, trace clay)*	PRIMARY CONSTITUENT
	>30-50]
	>15-30] – secondary coarse grained constituents
	5-15]
	<5]
	<15]
	5-15] – secondary fine grained constituents
	<5]
*Index tests and/or plasticity tests are performed to determine whether the term "silt" or "clay" is used.	

*Modified after Ref. ASTM D2487-93 & D2488-93

**Modified after Ref. Oregon DOT 1987 & FHWA 1997

***Modified after Ref. AASHTO 1988, DM 7.1 1982, and Oregon DOT 1987



GENERAL NOTES

BEDROCK PROPERTIES & DESCRIPTIONS

ROCK QUALITY DESIGNATION (RQD)	
Description of Rock Quality	*RQD (%)
Very Poor	< 25
Poor	25-50
Fair	50-75
Good	75-90
Excellent	90-100

*RQD is defined as the total length of sound core pieces 4 in. or greater in length, expressed as a percentage of the total length cored. RQD provides an indication of the integrity of the rock mass and relative extent of seams and bedding planes.

SCALE OF RELATIVE ROCK HARDNESS		
Term	Field Identification	Approx. Unconfined Compressive Strength (tsf)
Extremely Soft	Can be indented by thumbnail	2.6-10
Very Soft	Can be peeled by pocket knife	10-50
Soft	Can be peeled with difficulty by pocket knife	50-260
Medium Hard	Can be grooved 2 mm deep by firm pressure of knife	260-520
Moderately Hard	Requires one hammer blow to fracture	520-1040
Hard	Can be scratched with knife or pick only with difficulty	1040-2610
Very Hard	Cannot be scratched by knife or sharp pick	>2610

DEGREE OF WEATHERING	
Slightly Weathered	Rock generally fresh, joints stained and discoloration extends into rock up to 25mm (1 in), open joints may contain clay, core rings under hammer impact.
Weathered	Rock mass is decomposed 50% or less, significant portions of rock show discoloration and weathering effects, cores cannot be broken by hand or scraped by knife.
Highly Weathered	Rock mass is more than 50% decomposed, complete discoloration of rock fabric, core may be extremely broken and gives clunk sound when struck by hammer, may be shaved with a knife.

GRAIN SIZE (TYPICALLY FOR SEDIMENTARY ROCKS)		
Description	Diameter (mm)	Field Identification
Very Coarse Grained	>4.76	Individual grains can easily be distinguished by eye.
Coarse Grained	2.0-4.76	
Medium Grained	0.42-2.0	Individual grains can be distinguished by eye.
Fine Grained	0.074-0.42	Individual grains can be distinguished by eye with difficulty.
Very Fine Grained	<0.074	Individual grains cannot be distinguished by unaided eye.

VOIDS	
Pit	Void barely seen with the naked eye to 6mm *1/4-inch)
Vug	Void 6 to 50mm (1/4 to 2 inches) in diameter
Cavity	50 to 6000mm (2 to 24 inches) in diameter
Cave	> 600mm

BEDDING THICKNESS	
Very Thick Bedded	> 3' Thick
Thick Bedded	1' to 3' Thick
Medium Bedded	4" to 1' Thick
Thin Bedded	1-1/4" to 4" Thick
Very Thin Bedded	1/2" to 1-1/4" Thick
Thickly Laminated	1/8" to 1/2" Thick
Thinly Laminated	1/8" or less (paper thin)

DRILLING NOTES

Drilling & Sampling Symbols		
NQ – Rock Core (2-inch diameter)	CFA- Continuous Flight (Solid Stem) Auger	WB – Wash Bore or Mud Rotary
HQ – Rock Core (3-inch diameter)	SS – Split Spoon Sampler	TP – Test Pit
HSA – Hollow Stem Auger	ST – Shelby Tube	HA – Hand Auger

Soil Sample Types

Shelby Tube Samples: Relatively undisturbed soil samples were obtained from the borings using thin wall (Shelby) tube samplers pushed hydraulically into the soil in advance of drilling. This sampling, which is considered to be undisturbed, was performed in accordance with the requirements of ASTM D 1587. This type of sample is considered best for the testing of "in-situ" soil properties such as natural density and strength characteristics. The use of this sampling method is basically restricted to soil containing little to no chert fragments and to softer shale deposits.

Split Spoon Samples: The Standard Penetration Test is conducted in conjunction with the split-barrel sampling procedure. The "N" value corresponds to the number of blows required to drive the last 1 foot of an 18-inch long, 2-inch O.D. split-barrel sampler with a 140 lb. hammer falling a distance of 30 inches. The Standard Penetration Test is carried out according to ASTM D-1586.

Water Level Measurements

Water levels indicated on the boring logs are levels measured in the borings at the times indicated. In permeable materials, the indicated levels may reflect the location of groundwater. In low permeability soils, shallow groundwater may indicate a perched condition. Caution is merited when interpreting short-term water level readings from open bore holes. Accurate water levels are best determined from piezometers.

Automatic Hammer

Palmerton and Parrish, Inc.'s CME's are equipped with automatic hammers. The conventional method used to obtain disturbed soil samples used a safety hammer operated by company personnel with a cat head and rope. However, use of an automatic hammer allows a greater mechanical efficiency to be achieved in the field while performing a Standard Penetration resistance test based upon automatic hammer efficiencies calibrated using dynamic testing techniques.

*Modified after Ref. ASTM D2487-93 & D2488-93

**Modified after Ref. Oregon DOT 1987 & FHWA 1997

***Modified after Ref. AASHTO 1988, DM 7.1 1982, and Oregon DOT 1987



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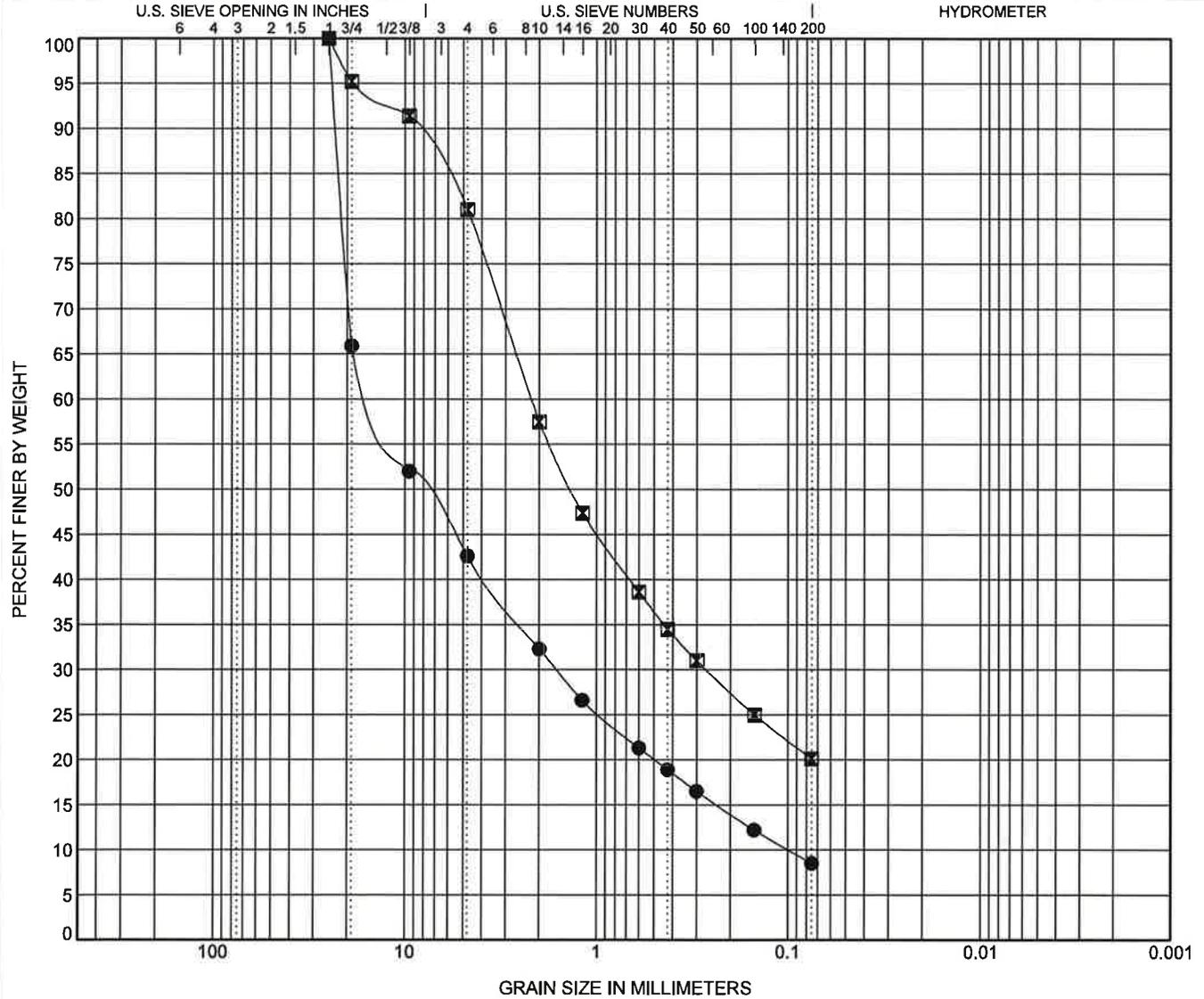
GRAIN SIZE DISTRIBUTION

CLIENT Hemphill, LLC

PROJECT NAME Grey Reef Self-Support Tower

PROJECT NO. 261436

PROJECT LOCATION Natrona County, Alcova, Wyoming



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
● 1	6.0	WELL-GRADED GRAVEL, with Clay and Sand				1.87	142.52
☒ 1	18.5	CLAYEY SAND, with Gravel					

BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● 1	6.0	25	14.157	1.621	0.099	57.4	34.1	8.5	
☒ 1	18.5	25	2.193	0.267		19.0	60.9	20.1	

GRAIN SIZE - PPI STD TEMPLATE.GDT - 5/12/20 11:00 - S:\MASTER PROJECT FILE\2019\WY\HEMPHILL-261436-WY_CO & UT REGISTRATIONS-SUBDRILLED\2020\GREY REEF\LOGS\GRAY REEF - GINT.GPJ

Important Information about This Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, clients can benefit from a lowered exposure to the subsurface problems that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed below, contact your GBA-member geotechnical engineer. Active involvement in the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Geotechnical-Engineering Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. *Those who rely on a geotechnical engineering report prepared for a different client can be seriously misled. No one except authorized client representatives should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. And no one – not even you – should apply this report for any purpose or project except the one originally contemplated.*

Read this Report In Full

Costly problems have occurred because those relying on a geotechnical engineering report did not read it *in its entirety*. Do not rely on an executive summary. Do not read selected elements only. *Read this report in full.*

You Need to Inform Your Geotechnical Engineer about Change

Your geotechnical engineer considered unique, project-specific factors when designing the study behind this report and developing the confirmation-dependent recommendations the report conveys. A few typical factors include:

- the client's goals, objectives, budget, schedule, and risk-management preferences;
- the general nature of the structure involved, its size, configuration, and performance criteria;
- the structure's location and orientation on the site; and
- other planned or existing site improvements, such as retaining walls, access roads, parking lots, and underground utilities.

Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.*

This Report May Not Be Reliable

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, that it could be unwise to rely on a geotechnical-engineering report whose reliability may have been affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If your geotechnical engineer has not indicated an "apply-by" date on the report, ask what it should be, and, in general, if you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying it. A minor amount of additional testing or analysis – if any is required at all – could prevent major problems.*

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface through various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing were performed. The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgment to form opinions about subsurface conditions throughout the site. Actual site-wide subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team from project start to project finish, so the individual can provide informed guidance quickly, whenever needed.*

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, *they are not final*, because the geotechnical engineer who developed them relied heavily on judgment and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* revealed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a full-time member of the design team, to:

- confer with other design-team members,
- help develop specifications,
- review pertinent elements of other design professionals' plans and specifications, and
- be on hand quickly whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction observation.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated subsurface conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for informational purposes only.* To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report, but they may rely on the factual data relative to the specific times, locations, and depths/elevations referenced. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may

perform their own studies if they want to, and *be sure to allow enough time to permit them to do so.* Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase one" or "phase two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. *As a general rule, do not rely on an environmental report prepared for a different client, site, or project, or that is more than six months old.*

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, none of the engineer's services were designed, conducted, or intended to prevent uncontrolled migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration.* Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists.*



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CONDITIONAL USE PERMIT REQUEST

FOR A

TELECOMMUNICATION SITE

CUP20-5

Staff Report: Trish Chavis

June 9, 2020

For

July 14, 2020

Planning and Zoning Commission

And

August 4, 2020

Board of County Commissioner Meeting

Applicant: Declan Murphy, Union Wireless/Hemphill

Request: Construct an 84-foot self-supporting communication tower to allow for the expansion of an existing Union Wireless site. The applicant is requesting 100-foot total height to include all appurtenances.

Location and Zoning

The parcel is located east of the Highway 220 and north of Grey Reef Rd.

The subject parcel and all surrounding parcels are zoned Ranching, Agricultural and Mining (RAM).

Proposal

Union has applied for a CUP to construct an 84-foot communication tower to replace their existing 45' tower. The applicant is request the CUP to have a total height of 100-feet. This will include the additional antennas and lightening rod.

The proposed upgrades are necessary to allow Union Wireless to continue providing service to the adjacent community, in addition to enhancing emergency service capabilities through FirstNet.

FirstNet is the First Responder Network Authority, and is an independent authority authorized by Congress in 2012, to develop, build and operate the nationwide, broadband network that equips first responders.

General Standards
For
Conditional Use Permits

Criteria for Approval

1. Will granting the Conditional Use Permit contribute to an overburdening of county services?

Proposed Finding of Fact. Granting the Conditional Use permit will not contribute to an overburdening of county services. County services and infrastructure will not be necessary for this permit. The tower would provide needed cell service to the area, which will add E-911 capabilities through the carrier's networks, and promote greater coverage and reach for local law enforcement and emergency services.

2. Will granting the Conditional Use Permit cause undue traffic, parking, population density or environmental problems?

Proposed Finding of Fact. The facility is unmanned and will not cause undue traffic or parking. Routine maintenance for the tower and antennas will be limited. There will be no affects to population density.

3. Will granting the Conditional Use Permit impair the use of adjacent property or alter the character of the neighborhood?

Proposed Finding of Fact. The surrounding ranch consists of approximately 218 acres. The addition of a taller communication tower will not impair the use of adjacent properties.

4. Will granting the Conditional Use Permit detrimentally affect the public health, safety and welfare, or nullify the intent of the Development Plan or Zoning Resolution?

The addition of the proposed tower would not be damaging or inconsistent with the surrounding area. The proposed tower is consistent with the intent of both the Development Plan and the Zoning Resolution.

Proposed Finding of Fact. The proposed tower will be constructed in accordance with all applicable building, electrical and plumbing codes. With an approved CUP, the tower will comply with the Zoning Resolution and the Development Plan. This site will provide wireless coverage to residents and travelers as well as provides for valuable E911 services and FirstNet capabilities.

Key Communication Tower Regulations

Artificially Lighted: There is no requirement for lighting until the tower reaches 200 feet. The proposed tower does not meet the requirement for FAA review.

Setbacks: Setbacks from roads and structures is 110% of the tower height. The nearest road is approximately 900-feet away and does meet setbacks.

Documentation demonstrating need: The proposed site is situated to provide effective coverage to the area. The existing tower's current loading and height is insufficient to provide adequate service so a taller tower would be needed.

Public Comment

As of the date of this staff report there have been no comment received.

Staff sent the public notice to 34 neighbors within 3 miles.

Recommendation

Staff proposes a motion and vote by the Planning and Zoning Commission to recommend approval of the requested Conditional Use Permit, by the Board of County Commissioners with the following condition:

- 1) Union Wireless provide an updated lease with landowner within 6 months of BOCC approval.

Staff also recommends that the Planning Commission incorporate by reference all findings of fact set forth herein and make them a part thereof.