



STATE OF ALASKA 85412
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING, LAND & WATER
Alaska Hydrologic Survey

WATER WELL LOG Revised 08/18/2016

Drilling Started: 7 / 8 / 2024 Completed: 7 / 9 / 2024 Pump Install: / /

City/Borough	Subdivision	Block	Lot	Property Owner Name & Address
				Three Bears Alaska ,

Well location: Latitude 64.04075 Longitude -145.73071
Meridian F Township 010S Range 010E Section 14 SW 1/4 of SW 1/4 of SE 1/4

BOREHOLE DATA: (from ground surface)
Suggest T.M. Hanna's hydrogeologic classification system*
https://my.ngwa.org/NC_Product?id=a18500000BYub3AAD

	Depth	
	From	To
sand	0	5
sandy gravel	5	17
hard pack gravel	17	37
hard pack gravel	37	57
silty sludge	57	137
gravelly silty sludge	137	157
concrete gravel sand	157	177
hard pack silt rock	177	197
pea gravel	197	217

Include description or sketch of well location (include road names, buildings, etc.):

Drilling method: ☒ Air rotary, ☐ Cable tool, ☐ Other
Well use: ☐ Public supply, ☐ Domestic, ☐ Reinjection, ☐ Hydrofracking
☒ Commercial, ☐ Observation/Monitoring, ☐ Test/Exploratory, ☐ Cooling,
☐ Irrigation/Agriculture, ☐ Grounding, ☐ Recharge/Aquifer Storage,
☐ Heating, ☐ Geothermal Exploration, ☐ Other

Fluids used:

Depth of hole: 220 ft Casing stickup: 3 ft

Casing type: steel Casing thickness: .25 inches

Casing diameter: 6 inches Casing depth: 217 ft

Liner type: Depth: ft Diameter: inches

Note:

Well intake opening type: ☒ Open end, ☐ Open hole, ☐ Other open end

Screen type: Screen mesh size:

Screen start: ft, Screen stop: ft, Perforated ☒ Yes ☐ No

Perforation description: slotted Perf from: 212 ft, Perf

to: 220 ft, Perf from: ft, Perf to: ft

Gravel packed ☐ Yes ☒ No Gravel start: ft, Gravel stop: ft

Note:

Static water (from top of casing): 65 ft on 7 / 9 / 2024 Artesian well ☐

Pumping level & yield: 155 feet after 24 hours at 50 gpm

Method of testing: flow test

Development method: air surge Duration: 24

Recovery rate: 50 gpm

Grout type: bentonite Volume 250lbs

Depth: From 5 ft, To 200 ft

Final pump intake depth: ft Model:

Pump size: hp Brand name:

Was well disinfected upon completion? ☐ Yes ☒ No

Method of disinfection:

Was water quality tested? ☐ Yes ☒ No

Water quality parameters tested:

Well driller name:

Company name: DELTA DRILLING

Mailing address:

City: State: AK Zip:

Phone number: () -

Driller's signature:

Date: / /

Anchorage Municipal Code 15.55.060(I) and North Pole Ordinance 13.32.030(D) require that a copy of this well log be submitted to the Development Services Department/City within 30 days of well completion.

City Permit Number:

Date of Issue: / /

Parcel Identification Number: - -

AS 41.08.020(b)(4) and AAC 11 AAC 93.140(a) require that a copy of the well log be submitted to the Department of Natural Resources within 45 days of well completion. Well logs may be submitted using the online well log reporting system available at:

<https://dnr.alaska.gov/welts/>

OR email electronic well logs to

dnr.water.reports@alaska.gov



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WATER WELL LOG Revised 08/18/2016

Drilling Started: 7/8/24 Completed: 7/9/24 Pump Install: / /

City/Borough	Subdivision	Block	Lot	Property Owner Name & Address
Del Norte				Three Bears

Well location: Latitude _____ Longitude _____
Meridian _____ Township _____ Range _____ Section _____ 1/4 of _____ 1/4 of _____ 1/4 of _____ 1/4

BOREHOLE DATA: (from ground surface)

Suggest T.M. Hanna's hydrogeologic classification system*
<https://my.ngwa.org/NC/Product?id=a185000000BYub3AAD>

Depth

From To

Stick up	0	3
Sand	3	8
Sandy gravel	8	20
Hard pack gravel	20	40
Hard pack gravel	40	60
Silty silt	60	140
gravely silty silt	140	160
Concrete gravel sand	160	180
Hard pack silt rock	180	200
Pen gravel	200	220

Drilling method: ☒ Air rotary, ☐ Cable tool, ☐ Other

Well use: ☐ Public supply, ☐ Domestic, ☐ Reinjection, ☐ Hydrofracking

☒ Commercial, ☐ Observation/Monitoring, ☐ Test/Exploratory, ☐ Cooling,

☐ Irrigation/Agriculture, ☐ Grounding, ☐ Recharge/Aquifer Storage,

☐ Heating, ☐ Geothermal Exploration, ☐ Other

Fluids used:

Depth of hole: 220 ft Casing stickup: 3 ft

Casing type: Steel Casing thickness: .250 inches

Casing diameter: 6.6 inches Casing depth: 217 ft

Liner type: _____ Depth: _____ ft Diameter: _____ inches

Note:

Well intake opening type: ☒ Open end, ☐ Open hole, ☐ Other

Screen type: _____ Screen mesh size: _____

Screen start: _____ ft, Screen stop: _____ ft, Perforated ☐ Yes ☐ No

Perforation description: slotted Perf from: _____ ft, Perf

to: _____ ft, Perf from: _____ ft, Perf to: _____ ft

Gravel packed ☐ Yes ☐ No Gravel start: _____ ft, Gravel stop: _____ ft

Note: Bottom of foot

Static water (from top of casing): 405 ft on 7/9/24 Artesian well ☐

Pumping level & yield: 217 feet after 24 hours at 150 gpm

Method of testing: flow test

Development method: Air Surge Duration: 24 hrs

Recovery rate: 150 gpm

Grout type: 3/8 Benbrite Volume 5x 50 lb bag

Depth: From 5 ft, To 200 ft

Include description or sketch of well location (include road names, buildings, etc.):

Final pump intake depth: _____ ft Model: _____

Pump size: _____ hp Brand name: _____

Was well disinfected upon completion? ☐ Yes ☐ No

Method of disinfection: _____

Was water quality tested? ☐ Yes ☐ No

Water quality parameters tested: _____

Well driller name: Craig Henry

Company name: Del Norte Drilling

Mailing address: P.O. Box 834

City: Del Norte State: AK Zip: 94737

Phone number: (907) 740-4846

Driller's signature: [Signature]

Date: 7/9/24

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0 15 30 60
HORIZONTAL SCALE
(1" = 30' PLOTTED AT 22"x34")

NOTES

1. SEE SHEET C0.1 FOR GENERAL NOTES.
2. WATERLINE TO RV DUMP TO HAVE BACKFLOW PREVENTER IN STRUCTURE. WATERLINE TO BE USED SEASONALLY. INCLUDED FUTURE DOWNSTREAM OF BACKFLOW PREVENTER SO WATERLINE CAN BE FLUSHED OUT WITH COMPRESSED AIR IN THE FALL.

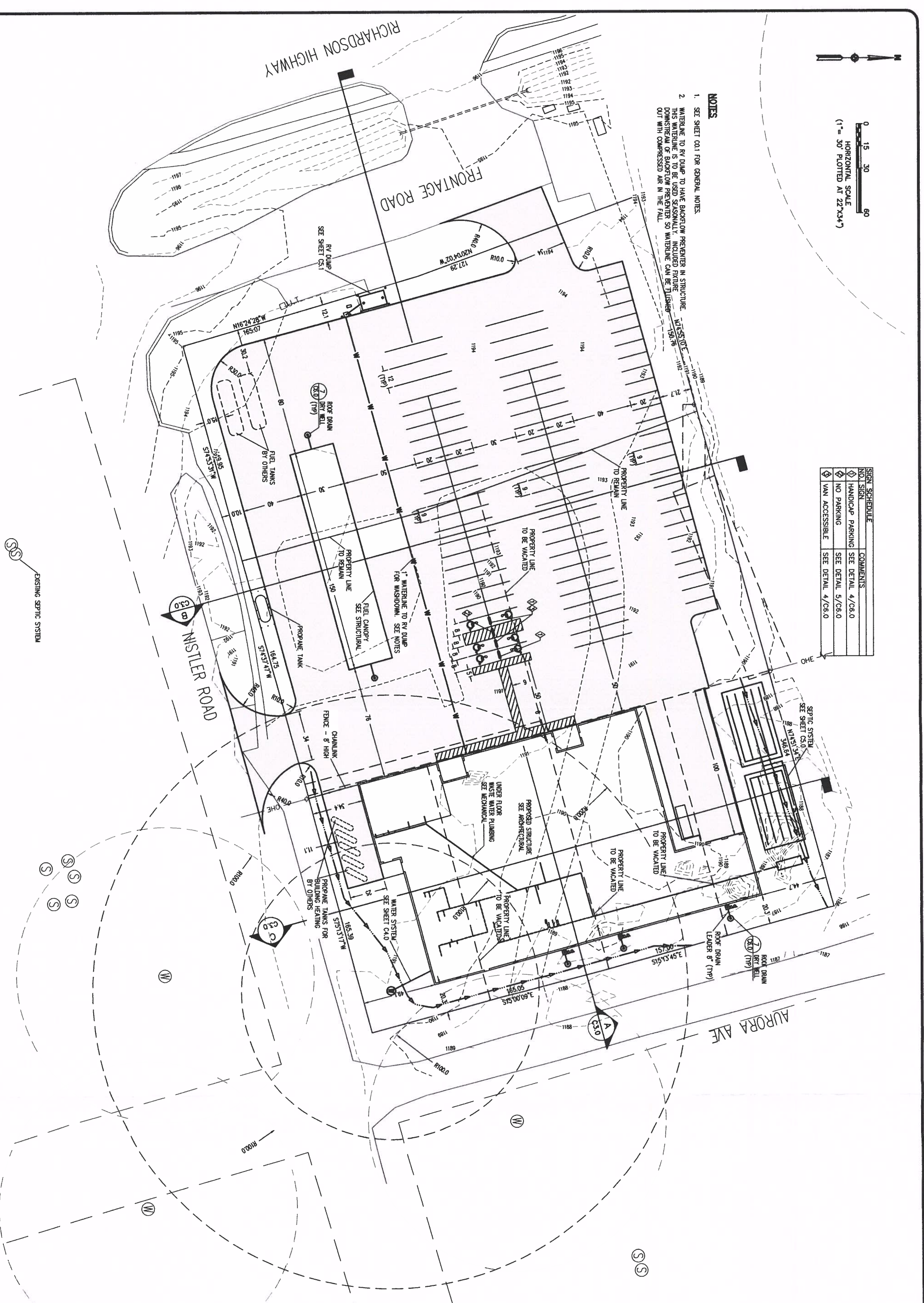
NO. SIGN	COMMENTS
1	HANDICAP PARKING SEE DETAIL 4/C&O
2	NO PARKING SEE DETAIL 5/C&O
3	VAN ACCESSIBLE SEE DETAIL 4/C&O

RICHARDSON HIGHWAY

FRONTAGE ROAD

INSLER ROAD

AURORA AVE

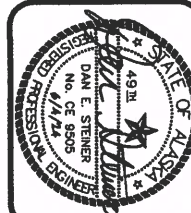


THREE BEARS ALASKA, INC.
GROCERY STORE AND GAS STATION

DELTA JUNCTION, ALASKA

SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC

5900 W. DEWBERRY DR. PH: (907) 357-5609
WASILLA, AK 99623 FAX: (907) 357-5608

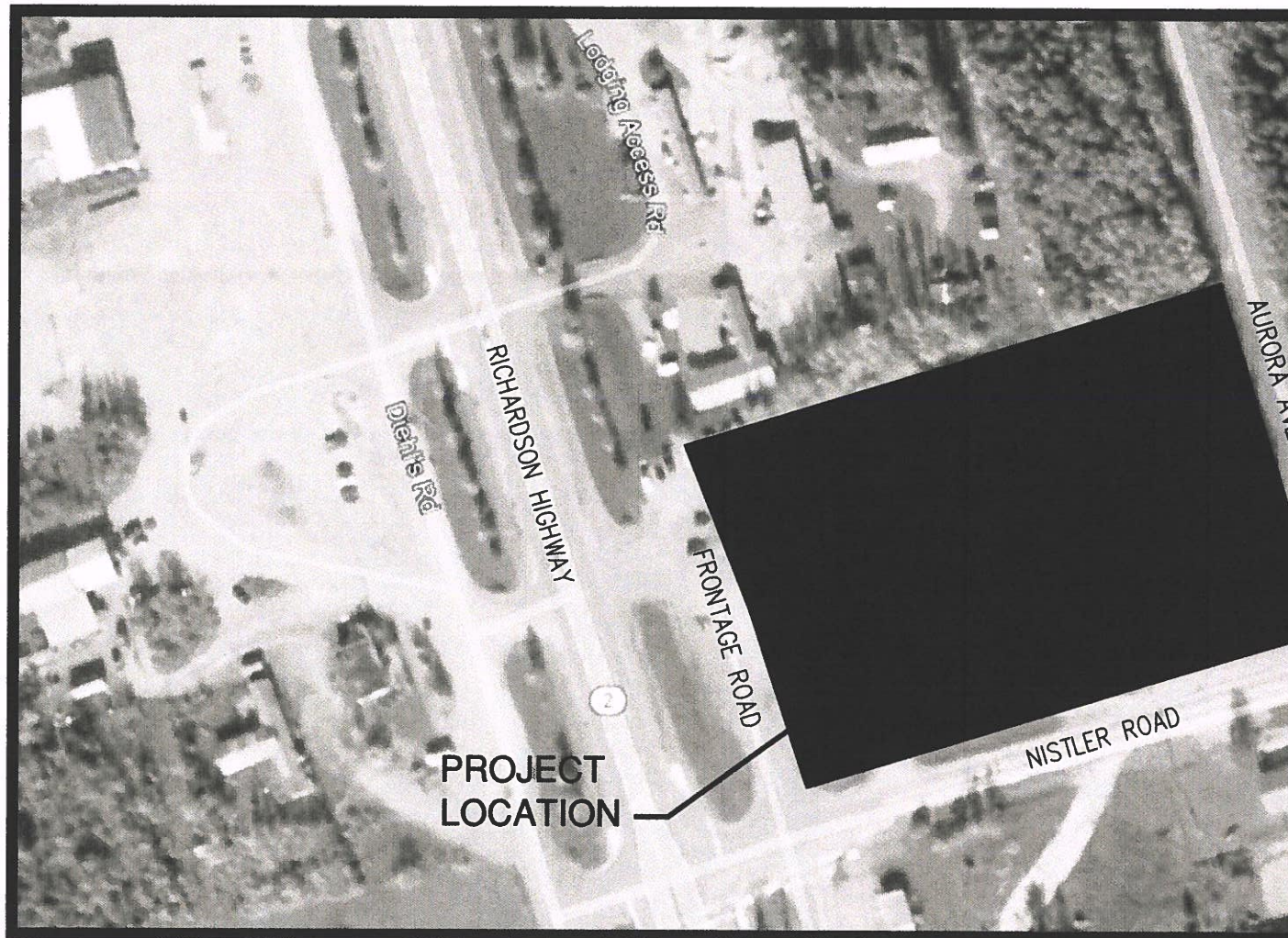


BY	DATE	REVISIONS

JOB NO.: 24-008
DATE: 6/4/2024
DRAWN: DES
REVIEWED: DES

SHEET TITLE
SITE PLAN

SHEET
C1.0



LOCATION MAP

GENERAL NOTES

1. THE GENERAL NOTES APPLY TO ALL PARTS OF CONSTRUCTION INCLUDING WATER AND SEWER.
2. CAUTION, EXISTING UTILITIES SHOWN ARE NOT COMPREHENSIVE. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION / CONSTRUCTION, AND SHALL CALL FOR UTILITY LOCATES A MINIMUM OF TWO UTILITY WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION.
3. ALL FILL AND BACKFILL SHALL BE COMPACTED TO 95% MAX. DENSITY AT OPTIMUM MOISTURE AS DETERMINED BY ASTM D-1557.
4. ANY PIPE INSULATION SHALL BE RIGID BOARD, HIGH DENSITY EXTRUDED POLYSTYRENE, MIN. 40 P.S.I., FOR UNDERGROUND INSTALLATIONS EQUIVALENT TO R-20 PER FOUR (4) INCH THICK INSULATION.
5. CONTRACTOR SHALL VERIFY AND RECORD THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD AND RECORD ANY CHANGES ON THE CONTRACTOR RECORD DRAWINGS.
6. DUST CONTROL FOR ENTIRE PROJECT WILL BE MAINTAINED AT ALL TIMES.

SURVEY NOTES

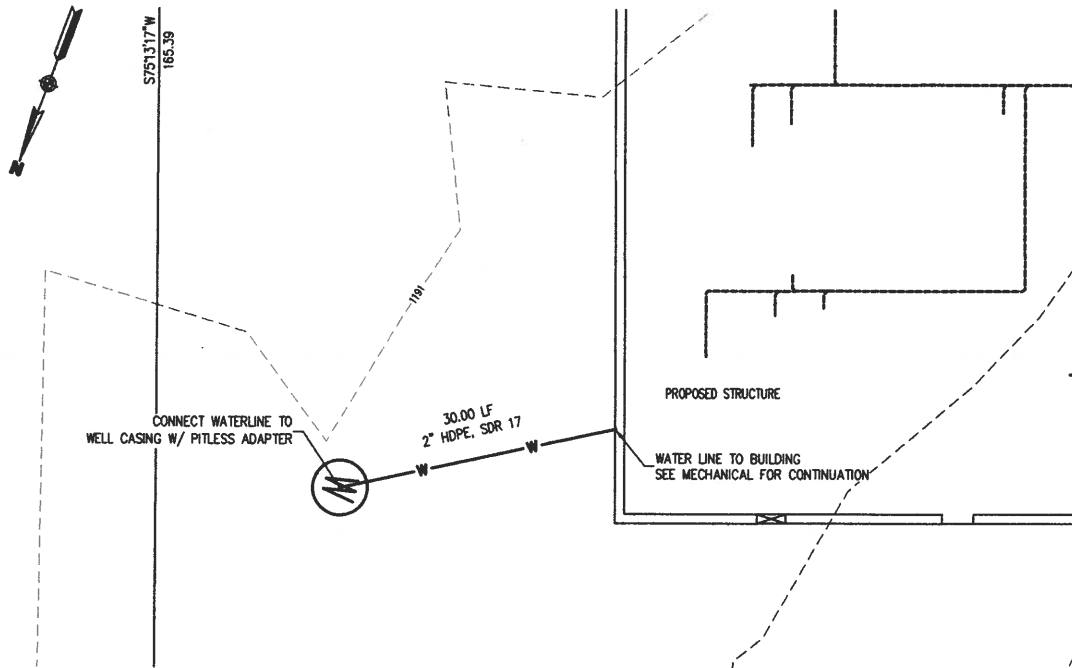
1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE POSITION OF THE HORIZONTAL AND VERTICAL CONTROL USED.
2. SITE SURVEY PERFORMED BY ALASKA RIM.

GENERAL WATER NOTES

1. ALL MATERIALS IN DIRECT CONTACT WITH THE WATER MUST BE CERTIFIED TO CONFORM WITH ANSI/NFS STANDARD 61 BY AN ANSI ACCREDITED ORGANIZATION.
2. ALL MATERIAL USED IN THE CONSTRUCTION OF THE WATER SYSTEM MUST BE LEAD FREE.
3. ALL PARTS OF THE WATER SYSTEM TO BE DISINFECTED PER AWWA C651-05.
4. ALL DISINFECTION CHEMICALS AND ANY OTHER CHEMICAL ADDITIVES USED FOR WATER TREATMENT MUST BE CERTIFIED BY AN ANSI ACCREDITED ORGANIZATION TO CONFORM WITH ANSI/NFS STANDARD 60 FOR USE IN POTABLE WATER SYSTEMS.
5. THERE ARE KNOWN POINTS OF CONTAMINATION THAT ARE REQUIRED TO BE OUTSIDE THE 200' WELL PROTECTION RADIUS THAT ARE WITHIN THIS RADIUS. A WAIVER FOR THESE POINTS IS REQUESTED.
6. TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THERE ARE NO KNOWN POINTS OF CONTAMINATION THAT ARE REQUIRED TO BE OUTSIDE THE 100' WELL PROTECTION RADIUS THAT ARE WITHIN THIS RADIUS.
7. ANY BUTT FUSION OF HDPE PIPE MUST BE COMPLETED BY AN INDIVIDUAL WHO CAN SHOW COMPETENCE IN THIS WORK. THIS CAN BE SHOWN BY EXPERIENCE OR BY COMPLETING A MANUFACTURES TRAINING COURSE.
8. PORTIONS OF THE 200' WELL PROTECTION RADIUS ARE ON ADJACENT PROPERTIES. THE OWNER IS ENCOURAGED TO CONTACT THESE PROPERTY OWNERS AND INFORM THEM OF THIS AND DISCUSS WHAT NEEDS TO BE KEPT OUT OF THE WELL PROTECTION RADIUS.

GENE

1. SEI



NOTES

1. SEE SHEET C0.1 FOR GENERAL WATER NOTES AND KEY MAP.
2. SEE MECHANICAL SHEETS FOR WATER SERVICE WITHIN BUILDING FOOTPRINT.
3. EXACT LOCATIONS OF EXISTING UTILITIES UNKNOWN. CALL THE LOCATE CENTER OF ALASKA. EXCAVATE WITH CAUTION.

WATER S
SEE PLA
FOR SIZ
SEE DET
FOR INSI

