



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department Development Services Division

350 East Dahlia Avenue • Palmer, AK 99645
Phone (907) 861-7822

Email: permitcenter@matsugov.us

RECEIVED
JUN 20 2024

Mat-Su Borough
Development Services

BASIC APPLICATION FOR A CONDITIONAL USE PERMIT

NOTE: Carefully read instructions and applicable borough code. Fill out forms completely. Attach information as needed. Borough staff will not process incomplete applications.

Required Attachments:

- \$1,500 application fee
 Site plan as detailed on Page 2
 Narrative with operational details and all information required on Pages 1 and 2

Subject Property:

MSB Tax Account ID#(s): U04998000L02-4

Street Address: 4852 N. Parks Hwy., Trapper Creek, AK 99683

Facility/Business Name: Ark@Denali RV Resort Campground

Name of Property Owner

Yolanda Elizabeth D'Oyen

Mailing: P.O. Box 13289

Trapper Creek, AK 99683

Phone: Hm _____ Fax _____

Work _____ Cell _____

E-mail: _____

Name of Agent / Contact for application

Timothy Alley, PE, The Boutet Company, Inc

Mailing: 1508 E. Bogard Road #7

Wasilla, AK 99654

Phone: Hm _____ Fax _____

Work (907)357-6760 Cell (907) 830-2821

E-mail: talley@tbcak.com

Application is for a conditional use permit under MSB Code Chapter 17.17.

NARRATIVE	Attached
1. Provide a description of the use, in detail.	X
2. Is the conditional use compatible with and will it preserve or not materially detract from the value, character, and integrity of the surrounding area?	X

3. Will the granting of the conditional use permit be harmful to the public health, safety, convenience, and welfare?	X
4. Are sufficient setbacks, lot area, buffers, and other safeguards being provided?	X
5. Explain in detail how the proposed use meets each standard of the applicable MSB code.	X
6. Hours and days of the week of operation	X
7. Number of trips (average daily traffic and peak hour) associated with use	X
8. Noise and or sound mitigation measures	X
9. Mitigation measures to minimize or eliminate off-site impacts	X

SITE PLAN – Attach a detailed, to scale, site plan clearly showing the following information:	Attached
1. Proposed and existing structure(s) on the site, including well and septic system. Indicate which structure(s) will be used for this use. Draw lot dimensions and indicate setback distance of structure(s) from the lot lines, rights-of-way, and waterbodies.	X
2. Dimensions of all structures	X
3. Location of the use or uses to be made of the development	X
4. Location of other uses on the site	X
5. Signage – Existing and Proposed	See Narrative
6. Location and dimensions for all access points to and from the site to public rights-of-way or public access easements	X
7. Buffering – Fences, trees, topography or berms	X
8. Drainage	X
9. Vehicular and pedestrian circulation patterns	X
10. Exterior site lighting	N/A
11. Location and dimensions of parking areas to be provided	X
12. Location of other uses on the site	X
13. Scale and north arrow	X

OTHER – Attach all other permits, plans, and approvals, which are associated with the proposed use, such as: driveway permits, ADEC approvals, Fire Marshal reviews etc...	Attached	Applied For
Permit Name/#		

Prior to the public hearing, the applicant must also pay the mailing and advertising fees associated with the application. Staff will provide applicant with a statement of advertising and mailing charges. Payment must be made **prior** to the application presentation before the Borough Planning Commission.

OWNER'S STATEMENT: I am owner or authorized agent of the following property:

MSB Tax Account ID #(s) U04998000L02-4 and,
I hereby apply for approval an conditional use permit on that property as described in this application.

I understand all activity must be conducted in compliance with all applicable standards of MSB 17.60 and with all other applicable borough, state, and federal laws.

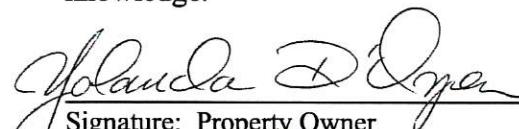
I understand that other rules such as local, state, and federal regulations, covenants, plat notes, and deed restrictions may be applicable and other permits or authorizations may be required. I understand that the borough may also impose conditions and safeguards designed to protect the public's health, safety, and welfare, and ensure the compatibility of the use with other adjacent uses.

I understand that it is my responsibility to identify and comply with all applicable rules and conditions, covenants, plat notes, and deed restrictions, including changes that may occur in such requirements.

I understand that changes from the approved conditional use permit may require further authorization by the Borough Planning Commission.

I grant permission for borough staff members to enter onto the property as needed to process this application and monitor compliance. Such access will at a minimum, be allowed when the activity is occurring and, with prior notice, at other times necessary to monitor compliance.

The information submitted in this application is accurate and complete to the best of my knowledge.

 Signature: Property Owner	Yolanda Elizabeth D'Oyen Printed Name	06/28/2023 Date
 Signature: Agent	Timothy Alley, PE Printed Name	06/28/2023 Date



The Boutet Company, Inc.
1508 E. Bogard Rd, Unit 7
Wasilla, AK 99654

Phone 907.357.6770
www.tbcak.com

September 12, 2024

Planning and Land Use Department
Matanuska- Susitna Borough
350 E. Dahlia Avenue
Palmer, AK 99645

Re: Ark@Denali – Application for Conditional use

To Whom It May Concern:

The Boutet Company has been retained by Frist Colony Developers on behalf of the owner, Yolanda D'Oyen for the development of a RV resort campground. TBC has prepared the following submittal in pursuit of Conditional Use Permit with the Matanuska-Susitna Borough. The Ark@Denali is a recreational vehicle campground located at mile 135.7 of the Parks Highway on an 85-acre parcel, legal description Township 29N range 5W section 16, US Survey 4998 Lot 2-4. The proposed development is within the Denali State Park Special Use area. As a private campground with commercial uses, the development is a conditional use as defined by Matanuska Susitna Borough Code 17.17.

The site was previously a gravel pit for use by the previous owner for local construction projects. The site was not reclaimed after gravel extraction causing slope failures around the site. The proposed development will stabilize these areas while improving the lot to meet the needs of the development and reduce the impact of previous gravel extraction. This is accomplished by adding more vegetation to the campground, that was previously cleared and flattened, while retaining as many trees as possible during construction. An existing residence will remain in the southeast corner of the lot. Ultimately, this development will stabilize the property and provide recreational opportunities within Denali State Park.

The Ark@Denali proposes to construct a total of 40 RV camping spaces, 14 duplex cabins and a dedicated space for tents and outdoor camping over two phases. The site is naturally separated by a large slope running north to south at the approximate midline of the site. Phase 1 will mostly develop the upper level nearest the Parks Highway, providing a convenience store, gift shop, viewing deck and other amenities along with pull-through RV sites with water, sewer, electric hook-ups and one trash collection site at the entrance. Ark@Denali includes parking for tour buses visiting the convenience store, souvenir shops, food concessions and for guided helicopter tours. Much of the site is connected with ADA compliant sidewalks with a minimum width of 5ft. It is anticipated that pedestrians from the campsites will utilize the access road shoulders within the campground area for access throughout the site as is typical within a campground. Phase 1 will also construct a 1,900 ft access road to the lower area of the site for future development of back-in RV sites, cabins, walk-in tent sites, and river access ramp. The cabins and river access are planned for construction with Phase 2. All sites will be for short term stays of less than 30 days.

Ark@Denali Recreation Resort
Conditional Use Permit Application
Page 2 of 5

The site intends to operate year-round providing RV, tent and cabin stays during the summer months (May 15-October 15). The development intends to make the most of the mountain views and northern lights in the winter with dry camping in the RV campground, cabin rentals and parking for winter use (October 15 to May 15). The convenience store will operate from 8:00 AM to 8:00 PM and be open year-round. The site reservation office will be open year-round 8:00 AM to 8:00 PM in the summer and 9:00 AM to 5:00 PM in the winter. The tent camping area and lower campground will be closed from October 15 to May 15. The development intends to provide Cabin stays and dry camping, parking for snowmachines and winter sports in the upper RV campground between October 15 and May 15. Management staff, including security, will be onsite 24 hours per day year-round.

Helicopter tours will be conducted by a third-party operator from the onsite helipad in the southwest portion of the site. All helicopter tours will be conducted as required by FAA and Alaska State Parks. Helicopter tours will be conducted within the hours of 9:00 AM to 5:00 PM from May 15 to September 30. A single helicopter may be stationed at the site for tours at the discretion of the operator. Tours may initiate from other locations with a stop to pick up additional passengers at the ARK. Tours will be approximately 1 hour in length and will take off and land at the proposed helipad with no landing within the park area. It is estimated that no more than 1 tour per hour on average will be conducted from the site. A DNR commercial use permit is only required when landing in the state park. Tour passengers will be escorted to the check-in office and helicopter by resort staff. The pilots will go over the safety requirements and measures with passengers prior boarding the aircraft.

A 1,000 gallon fuel tank will be onsite for storage and refueling of the helicopter. The fuel will be stored in an NFPA approved above ground storage tank with secondary containment to contain spills/leaks. A Hazardous Material Control Plan will be written for spill response and reporting. The HMCP will be stored at the Check-in office. A 100 lb wheeled fire extinguisher and two 20 lb minimum, high flow extinguishers will be maintained at the site and available within 50 feet of the fuel tanks. Extinguishers shall be classified 20-B:C as required by the fire code.

The development is entirely contained within the parcel. A portion of the cabins to be constructed with Phase 2 are within close proximity to the western OHW setback of 75 ft; however, retention of existing vegetation to the greatest extent possible is of the utmost importance to the owner and developer, in effort to maintain the outdoor recreation feel of the site. Four of the cabins are very close to the setback line such that the foundation is behind the setback and the deck extends beyond the setback line. Decks on the cabins shall be elevated no more than 18" above average grade per MSB 17.55. Tent sites are planned on the northern portion of the site, but much of the site will remain undeveloped. The development onsite is limited to existing disturbed/cleared area as much as possible to maintain the natural characteristics while stabilizing the issues created by previous gravel extraction operations and other uses by previous owners.

The recreational campground resort is being designed to provide a rustic, recreational feel to match the characteristics of the use and area. Camping and cabin rentals will be restricted to a 30-day maximum length. Preliminary building floorplans and elevations are provided with this application. The development will maintain all existing vegetation within 50' and structure setback of 75' from the Parks Highway right-of-way as required by MSB code 17.17. Much of the area to be developed into parking and RV campsites has been previously cleared. The site topography will require additional clearing and site

Ark@Denali Recreation Resort
Conditional Use Permit Application
Page 3 of 5

grading to make the lot developable. Natural vegetation will be left in place within the 50' setback from Parks Highway. Natural vegetation shall also be left along the Chulitna River wherever possible. Cabin construction will include the structures being founded on piles to alleviate the need for excavation and reduce the impact to the existing vegetation. Construction will be conducted in a manner to minimize the clearing of existing trees, particularly along the Parks Highway right of way and the edge of Chulitna River, with the intent of providing visual screening, reduce erosion potential and enhance the character of the site. A monument sign for identification of the development to the traveling public on the Parks Highway will be placed on property near the resort entrance and has been designed to meet MSB 17.17.130. A draft plan for this sign is attached. No portable, flashing, rotating, animated or intermittent lighted signs will be constructed.

The lower section of the site provides a retreat lawn area to be used for special events and large gatherings such as tent revival retreats, and wedding ceremonies. No larger gatherings nor amplified sound will be allowed in the RV camping area located nearer to the Parks Highway. In accordance with MSB 8.52 no sound amplifying devices such as radio, stereo, television, loudspeaker, amplified musical instrument or similar will create sound greater than 60 dB at the property line. This area is setback over 100' from the western property boundary (closest property line) with native vegetation to be retained to the maximum extent practicable around the proposed cabins for phase 2. The development will limit all gatherings to cease amplified noise at 10:00PM. Any events that would produce noise in excess of ambient levels will be permitted in accordance with MSB 8.55 and will follow all guidelines set in place by MSB 8.55.

A gravel access ramp will be provided to the Chulitna River. This access will be limited to foot traffic only for the launch of small personal watercraft not on trailers. Access to the Chulitna River will require a DNR State Parks Commercial Use Permit. Any further expansion of this access will require extensive design and permitting with various agencies and will be submitted under a new conditional use permit application.

Tent camping area will be provided by trail access from the parking lot north of the retreat lawn area. A 6' wide path will be constructed from the parking lot across an approximately 40' long by 6' wide bridge with 42" high railings to the tent camping sites. The bridge shall be designed and stamped by a structural engineer licensed in the State of Alaska. The bridge will be designed to span the ordinary highwater of an existing onsite creek, a minimum of 2' above the ordinary highwater of the onsite creek and as required by the loading characteristics. The bridge aesthetics will match the architectural theme of the development to fit in with the characteristics of the development to the best extent practicable. This creek is catalogued as an anadromous stream by the Alaska Department of Fish and Game and will require approval of a fish habitat permit for construction. The bridge will provide foot access to the tent camp sites and ATV access for the maintenance crews. Each site will eventually be supplied with a picnic table and fire ring. Use of the fire rings will be conducted as required by MSB 8.75.050 and will not allow the burning of trash or debris that will cause noxious fumes or be harmful to the environment. The management staff will also update campers regarding fire bans enacted by the State or local fire official.

Trash collection will be managed by the onsite staff. Bear proof trash receptacles will be located throughout the site nearest the camping areas with dumpsters located near the convenience store at the

site entrance. Management staff will collect trash daily for deposit in the dumpsters. The dumpsters will be emptied as needed by a local trash collection service.

Site drainage will consist of drainage ditches, swales and culverts to divert much of the site runoff to an onsite drainage basin and existing vegetation prior to draining to the onsite creek or Chulitna river to the greatest extent practicable. The upper area including the RV campground, access road and bus parking will drain down the existing slope in a riprap lined flume to the lower area to discharge into an onsite drainage basin. The basin will be sized to capture the increase in runoff from the 10yr 24-hr storm event, approximately 0.48 cubic feet per second (cfs). The lower cabin and parking will drain into a grass area in the center of the lower road and toward the drainage basin. A portion of the access road from the upper RV camping to the lower area will direct stormwater into the existing vegetation along the north side of the access road. An approximate 100' buffer of existing vegetation will be maintained to absorb and mitigate the runoff from this area. In the event that the onsite drainage basin exceeds its capacity the overflow will run through existing vegetation before entering the onsite creek and then into the Chulitna River. The total site runoff was estimated using the Rational Method ($Q=CiA$) to be 1.59 cfs total for the 10yr-24hr storm. The Chulitna River has an average of 22,500 cfs flowrate. If all runoff was directed to the nearby streams, it would have a minuscule impact on the overall flowrate.

The development will be served by onsite water and wastewater systems. These systems are being designed to meet the Alaska Department of Environmental Conservation regulations for public/community water and wastewater systems. The water system will utilize a well for community water with a pumphouse and water storage to meet the development water demand. A state-of-the-art wastewater treatment facility is planned for capturing, treating and discharging wastewater. The water and wastewater systems will be designed with flexibility to operate portions during the winter months in order to keep the convenience and gift stores open year-round.

Traffic generation to and from the site is estimated to be minimal. The development will occur across approximately 30 acres of the site. Using the International Transportation Engineering Trip Generation Manual (ITE) guidance for a Campground/RV park (ITE Code 416) the peak PM hour trip generation is estimated at 29 vehicles per hour. With the additional cabins to be constructed with Phase 2, commercial use for the convenience store, observation deck and helicopter tours; it is estimated, on average, that a total of 200 vehicles per day and no more than 40 peak hour trips will be generated by the site.

The development is within the initial stages of design, with the CUP application being the first to be applied for. Due to the financial requirements of further design and permitting, the developer is requesting that the "use" be approved prior to seeking any additional permits. The following agency permits are required for this development and will be obtained as required for the project:

1. Alaska State Fire Marshal Fire and Life Safety Review
2. Alaska Department of Transportation Driveway/Approach Road Review
3. Alaska Department of Environmental Conservation (ADEC) Water Approval to Construct/Operate
4. ADEC Wastewater Approval to Construct/Operate
5. ADNR Commercial Use Permit
6. ADF&G Fish Habitat Permit

Ark@Denali Recreation Resort
Conditional Use Permit Application
Page 5 of 5

We anticipate and request that completion of these permits will be a condition of approval for this CUP. Other items that would be requested as a condition of approval include bridge design and final building design.

The development team is confident that this is a project that meets the characteristics of the Denali Park area and will provide camping and recreational opportunities to experience the natural beauty of Alaska, ultimately bolstering the tourism in the Mat-Su Borough and Denali Park. It should be noted that approval of this CUP will have a twofold impact on the property. First, it will allow a great recreational opportunity to local and out of state residents, as stated above, and secondly, remediate a site that was once used as a gravel pit and left in disarray.

On behalf of the owner and developer, we request that the development be approved as a conditional use within the Denali Special Use District. Please feel free to contact me with any questions or request for further information.

Sincerely,

THE BOUTET COMPANY, INC.

A handwritten signature in blue ink, appearing to read "T. Alley".

Tim Alley, P.E.

Principal/Project Manager

GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE STATE OF ALASKA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION 2017 EDITION (ADOT SS).
- DRAWING SCALES ON SHEETS WITHIN THESE PLANS MAY VARY AND SHOULD BE NOTED PRIOR TO USE. THESE PLANS WERE CREATED FOR 22X34 PLAN SET AND AT A SPECIFIC DRAWING SCALE. ANY REPRODUCTION OR PUBLISHING OF THESE PLANS MAY RESULT IN DISTORTION OF SCALE AND SHALL BE VERIFIED PRIOR TO USE.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO BEGINNING CONSTRUCTION. THE PERMITS SHALL BE MAINTAINED AT THE JOB SITE.
- CONTRACTOR SHALL MAINTAIN "REDLINE" RECORD DRAWINGS ON A CLEAN SET OF CONSTRUCTION DRAWINGS IN ACCORDANCE WITH MSB DIVISION 65.00 CONSTRUCTION SPECIFICATIONS FOR CONSTRUCTION SURVEY. THE "REDLINES" SHALL BE KEPT CURRENT ON A DAILY BASIS AND SHALL BE AVAILABLE TO THE ENGINEER FOR INSPECTION ON THE JOBSITE. CONTRACTOR SHALL RECORD SURVEY NOTES AND SUBMIT DAILY TO THE ENGINEER.
- CONTRACTOR SHALL RECORD SURVEY NOTES FOR SUBMITTAL WITH AS-BUILT PLANS, INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD. CONTRACTOR SHALL RECORD ALL DEVIATIONS FROM THE PLANS.
- THE CONTRACTOR SHALL VERIFY IN FIELD, ALL ELEVATIONS, DIMENSIONS, FLOW LINES, EXISTING CONDITIONS, AND POINTS OF CONNECTIONS WITH ADJOINING PROPERTY (PUBLIC OR PRIVATE). ANY DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH WORK.
- CONTRACTOR SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATE IN, THE PUBLIC RIGHTS OF WAY OF THE STATE OF ALASKA (SOA) AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT.
- AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS AND ALL BMP's WEEKLY, PRIOR TO A FORECASTED RAIN EVENT AND WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORM WATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS FROZEN GROUND CONDITIONS OR SUSPENSION OF LAND DISTURBANCE ACTIVITIES.
- ACCUMULATED SEDIMENT IN BMP's SHALL BE REMOVED AT REGULAR INTERVALS, WITHIN 24 HOURS AFTER A STORM WATER RUNOFF EVENT, AND PRIOR TO THE NEXT ANTICIPATED STORM EVENT. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.
- MAINTAIN A MINIMUM OF TEN (10) FEET HORIZONTAL AND EIGHTEEN (18) INCHES VERTICAL SEPARATION BETWEEN WATER AND SANITARY OR STORM SEWER MAINS AND SERVICES. SANITARY AND STORM SEWER PIPE JOINTS SHALL BE PLACED AT LEAST NINE (9) FEET FROM ANY WATERLINE CROSSING.
- MAINTAIN A MINIMUM OF 36-INCHES OF VERTICAL SEPARATION BETWEEN ANY STORM SEWER (STORM DRAIN OR FOOTING DRAIN) AND WATERLINE (MAINS OR SERVICES) OR SANITARY SEWER (MAINS OR SERVICES). IF 36-INCHES CANNOT BE MAINTAINED, PROVIDE A MINIMUM OF 4-INCH THICK INSULATION.
- ALL WATER/SEWER PIPE INSULATION SHALL BE RIGID BOARD, HIGH DENSITY EXTRUDED POLYSTYRENE, MIN. 60 P.S.I., FOR UNDERGROUND INSTALLATIONS EQUIVALENT TO R-20 PER FOUR (4) INCH THICK INSULATION.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED PROPERTY, INCLUDING DRAINAGE SWALES, DISTURBED BY CONTRACT ACTIVITIES TO PRE-CONSTRUCTION CONDITION.
- WORK AND MATERIALS REQUIRED FOR REMOVING LITTER OR DEBRIS THAT EXISTS WITHIN THE PROJECT LIMITS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "CLEARING AND GRUBBING" (OR INCIDENTAL TO THE PROJECT) AND NO SEPARATE PAYMENT SHALL BE MADE.
- THESE NOTES CONTAIN INFORMATION NECESSARY FOR THE PROPER EXECUTION OF THE WORK CONTAINED ON THESE IMPROVEMENT PLANS. THESE NOTES APPLY TO ALL PLAN SHEETS. ADDITIONAL CONSTRUCTION NOTES MAY ALSO BE SHOWN ON INDIVIDUAL PLAN SHEETS. THE CONTRACTOR IS RESPONSIBLE TO READ AND COMPLY WITH ALL NOTES SHOWN ON THIS SET OF PLANS. THE TERM "CONTRACTOR", AS USED IN THESE NOTES AND ELSEWHERE IN THIS PLAN SET, MEANS THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS AND INDIVIDUALS AUTHORIZED TO PERFORM WORK SHOWN ON THESE IMPROVEMENT PLANS. THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL NOTES APPLICABLE TO HIS/HER WORK. ALL CONTRACTORS ARE DIRECTED TO CONTACT THIS ENGINEER FOR ANY QUESTIONS REGARDING THE STATED OR IMPLIED MEANING OF ANY NOTE OR OTHER INFORMATION CONTAINED ON THESE IMPROVEMENT PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT HIS/HER CONTRACT FOR SERVICES INCLUDES THE RESPONSIBILITIES DEFINED BY THE APPLICABLE NOTES.
- ALL QUANTITIES SHOWN HEREIN AND PRODUCED BY THE BOUTET COMPANY ARE APPROXIMATE AND USED FOR PERMITTING ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT QUANTITY TAKE-OFFS FOR BIDDING AND CONSTRUCTION PURPOSE.

EXCAVATION:

- ORGANIC MATERIAL SHALL BE REMOVED FROM ALL AREAS RECEIVING STRUCTURAL FILL TO A DEPTH TO BE DETERMINED BY THE ENGINEER. NO ORGANIC MATERIAL OR OTHER DELETERIOUS MATERIAL SHALL BE UTILIZED FOR BACKFILL. UNLESS APPROVED BY THE ENGINEER.
- CLASSIFIED FILL SHALL BE PLACED IN LIFTS NOT TO EXCEED 12-INCHES IN DEPTH AND SHALL BE COMPACTED TO 95% M.D.
- FINISH GRADE (FG) REPRESENTS THE ELEVATION OF THE FINISHED SURFACE. THIS INCLUDES LANDSCAPE AREAS, PAVED OR CONCRETE SURFACES, ROCK RIP-RAP SURFACE AND ELEVATION AT EXTERIOR OF STRUCTURE FOUNDATION, UNLESS OTHERWISE DENOTED ON DETAIL OR SPECIAL LABEL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST SUBGRADE OR TOP SOIL TO ALLOW FOR FINISHED SURFACE MATERIAL DIMENSIONS. IF DETAIL IS PROVIDED FOR SPECIAL AREA, DETAIL SHALL DENOTE FINISH GRADES. PROPOSED CONTOURS REFLECT FINISH GRADE.
- CUT AND FILL SLOPES SHALL NOT EXCEED SLOPES AS SPECIFIED ON PLAN.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE A STORM WATER PREVENTION AND POLLUTION PLAN (SWPPP) IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT AND ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION REQUIREMENTS.

WATER SYSTEM NOTES:

THE FOLLOWING IS THE BASIS OF THE CURRENT LEVEL OF DESIGN. DESIGN CALCULATIONS AND SYSTEM DESIGN WILL BE REFINED AS ADDITIONAL STRUCTURE INFORMATION IS PROVIDED.

- ALL MATERIALS WITHIN DIRECT CONTACT WITH WATER SHALL BE LOW LEAD AND NSF 61 CERTIFIED.
- ALL DISINFECTION AND TREATMENT CHEMICALS SHALL BE NSF 60 CERTIFIED.
- PHASE 1 ESTIMATED PEAK INSTANTANEOUS DEMAND (PID): 188 GPM
- WELL:**
 - 4.1. DEPTH: 100' DEPTH (ESTIMATED)
 - 4.2. CASING: 8" A53B STEEL WITH 10' MIN SLOTTED SCREEN
 - 4.3. YIELD: 50 GPM (ESTIMATED)
 - 4.4. GROUTING: BENTONITE GROUT REQUIRED 10' MIN CONTINUES WITHIN FIRST 20' FROM SURFACE
 - 4.5. PITLESS ADAPTER: 2" AT 10' MIN BELOW FINAL GRADE
 - 4.6. PUMP: RATED FOR MIN 50 GPM AT 150 FT HEAD. ASSUMING 20 PSI SERVICE PRESSURE AT PUMPHOUSE.
 - 4.7. TESTING: DISINFECT WELL PER AWWA C654 PRIOR TO OPERATION. PROVIDE COMPREHENSIVE WATER PANEL TESTING AS REQUIRED BY ADEC.
- WELL TO PUMPHOUSE WATER MAIN:**
 - 5.1. MATERIAL: 2" HDPE SDR 11 PE 4710
 - 5.2. INSTALLATION: BURY 10' MINIMUM DEPTH TO TOP OF PIPE PER ADOT SS SECTION 627.
 - 5.3. TESTING: FLUSH, CHLORINATE AND PRESSURE TEST PER ADOT SS SECTION 627. SAMPLE FOR BACTERIA PER ADOT SS SECTION 627.
- WATER DISTRIBUTION LINE:**
 - 6.1. MATERIAL: 4" HDPE SDR 11 PE 4710
 - 6.2. INSTALLATION: BURY 10' MINIMUM DEPTH TO TOP OF PIPE PER ADOT SS SECTION 627.
 - 6.3. TESTING: FLUSH, CHLORINATE AND PRESSURE TEST PER ADOT SS SECTION 627. SAMPLE FOR BACTERIA PER ADOT SS SECTION 627.
- WATER SERVICE LINES:**
 - 7.1. MATERIAL: RV CAMPGROUND HOOKUPS: 1" HDPE SDR 11 PE 4710
CONVENIENCE STORE: 2" HDPE SDR 11 PE 4710
BATHHOUSE: 2" HDPE SDR 11 PE 4710
BURY 10' MINIMUM DEPTH TO TOP OF PIPE PER ADOT SS SECTION 627.
FLUSH, CHLORINATE AND PRESSURE TEST PER ADOT SS SECTION 627. SAMPLE FOR BACTERIA PER ADOT SS SECTION 627.
 - 7.2. INSTALLATION: 7.3. TESTING:
- STORAGE:**
 - 8.1. MATERIAL: 3,000 GALLON HDPE NSF 61 CERTIFIED
 - 8.2. SIZE: MINIMUM STORAGE IS EQUAL TO THE DIFFERENCE OF THE SYSTEM PEAK INSTANTANEOUS DEMAND (PID) FLOW AND WELL OUTPUT FLOW FOR 20 MINUTES (PID GPM - W GPM) x 20 MINUTES = 2,760 GALLONS
 - 8.3. PUMP: EQUAL TO THE PID AT PRESSURE REQUIRED TO PROVIDE 20 PSI AT FURTHEST FIXTURE. DISTRIBUTION PUMP RATED FOR 188 GPM AT 145 FT HD CONTROLLED BY VARIABLE FREQUENCY DEVICE (VFD)

WASTEWATER SYSTEM NOTES:

THE FOLLOWING IS THE BASIS OF THE CURRENT LEVEL OF DESIGN. DESIGN CALCULATIONS AND SYSTEM DESIGN WILL BE REFINED AS ADDITIONAL STRUCTURE INFORMATION IS PROVIDED.

- DESIGN FLOW:**
 - RV CAMPSITES WITH HOOK-UP: 21.7 GALLONS PER DAY/PERSON, 4 PEOPLE PER SITE, 27 SITES = 3425 GPD
 - RV CAMPSITE WITHOUT HOOK-UP (DUMP STATION): 50 GAL/SITE/DAY, 12 CAMPSITES = 600 GPD
 - CONVENIENCE STORE: 10.6 GPD/EMPLOYEE, 2.6 GPD/CUSTOMER, 8 EMPLOYEES, 1000 CUSTOMERS PER DAY = 2685 GPD
 - APARTMENT: 150 GPD/BEDROOM, 1 BEDROOM = 150 GPD
LAUNDRY/BATHHOUSE: 15 GPD/FIXTURE UNIT, 44 TOTAL FIXTURE UNITS = 660 GPD
- WASTEWATER PIPING:**
 - 3.1. MATERIALS: 4" ABS OR PVC C900
 - 3.2. PRESSURE PIPE: 1.5" PVC SCHEDULE 40
 - 3.3. INSTALLATION: PER ADOT SS SECTION 627
 - 3.3. TESTING: PER ADOT SS SECTION 627
- TANK SIZING:**
 - TANK 1: CONVENIENCE STORE, APARTMENT, LAUNDRY/BATHHOUSE = 3500 GPD
 - TANK 2: 2 DAYS RETENTION => 7,000 GALLON TANK
 - TANK 3: RV CAMPSITES W/ HOOK-UP = 3424 GPD, 2 DAYS RETENTION => 7000 GALLON TANK
 - DUMPSTATION = 600 GPD, 7 DAYS RETENTION => 4500 GALLON TANK
 - 1 DAY STORAGE OF TOTAL DISCHARGE, 7960 GPD DISCHARGE => 8000 GALLON TANK
- EFFLUENT TREATMENT:**
 - MAXIMUM DAILY DISCHARGE: 7960 GPD
 - AVERAGE DAILY DISCHARGE: MDD/2 = 3980 GPD
- ORGANIC LOADING:**
 - TANK 1: BOD = 225 mg/L, TSS = 75 mg/L
 - TANK 2: BOD = 300 mg/L, TSS = 100 mg/L
 - TANK 3: BOD = 1800 mg/L, TSS = 800 mg/L
 - SYSTEM: BOD = 364 mg/L, TSS = 136 mg/L
 - AVERAGE DAILY ORGANIC LOAD = 12 LB/DAY
 - TEXTILE AREA REQUIRED = 300 SF
 - TREATMENT TANK => ORENCO AX-MAX300-42
- TREATMENT TANK:**
- EFFLUENT DISCHARGE:**
 - ABSORPTION FIELD/TRENCHES WITH 8,000 SF TOTAL EFFECTIVE AREA. FINAL SIZE & ORIENTATION TO BE DETERMINED WITH FINAL DESIGN.

ABBREVIATIONS

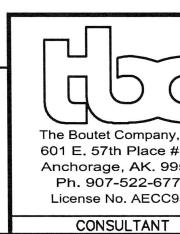
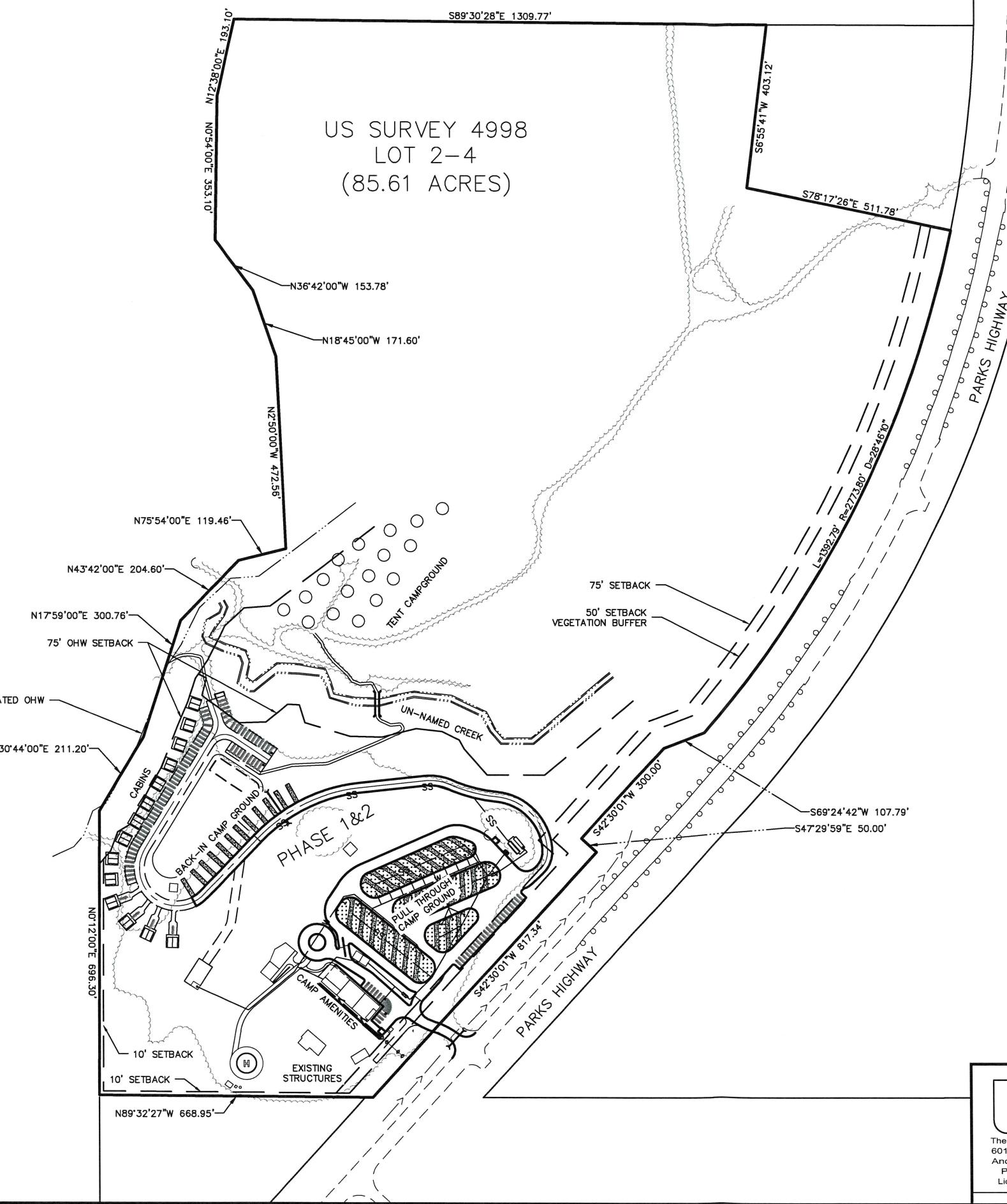
ABS	ACRYLONITRILE BUTADIENE STYRENE, SCHEDULE 40	MDD	MAXIMUM DRY DENSITY
ADEC	ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION	MJ	MECHANICAL JOINT
AL-MON	ALUMINUM MONUMENT	MIN	MINIMUM
AWWA	AMERICAN WATER WORKS ASSOCIATION	NPT	NATIONAL PIPE THREAD
AWG	AMERICAN WIRE GUAGE	NSF	NATIONAL SANITATION FOUNDATION
APPROX	APPROXIMATE	OSHA	OCCUPATIONAL SAFETY AND HEATH ADMINISTRATION
BGS	BELLOW GROUND SURFACE	OC	ON CENTER
BOP	BOTTOM OF PIPE	O&M	OPERATIONS AND MAINTENANCE
BLDG	BUILDING	ORIG	ORIGINAL
CL	CENTERLINE	PVC	POLYVINYL CHLORIDE
CMP	CORRUGATED METAL PIPE	PSI	POUNDS PER SQUARE INCH
CONST	CONSTRUCT	PL/t	PROPERTY LINE
DIA/Ø	DIAMETER	RT	RIGHT
DIP	DUCTILE IRON PIPE	ROW	RIGHT-OF-WAY
ELEV	ELEVATION	SSMH	SANITARY SEWER MANHOLE
EX	EXISTING	SCH	SCHEDULE
FT	FOOT	SP	SINGLE PUMPER
F&I	FURNISH AND INSTALL	SF	SQUARE FEET/FOOT
FG	FINAL GRADE	SS	STAINLESS STEEL
FH	FIRE HYDRANT	STD	STANDARD/STANDARDS
GALVS	GALVANIZED STEEL	SOA	STATE OF ALASKA
GV	GATE VALVE	STA	STATION
HDPE	HIGH DENSITY POLYETHYLENE PIPE	SWPPP	STORMWATER POLLUTION PREVENTION PLAN
HMWPE	HIGH MOLECULAR WEIGHT POLYETHYLENE	TBC	TOP BACK OF CURB
H	HORIZONTAL	TBM	TEMPORARY BENCHMARK
IAW	IN ACCORDANCE WITH	TOP	TEST HOLE
IE	INVERT ELEVATION	TOP	TOP OF PIPE
IN	INCH/INCHES	VB	VALVE BOX
INV	INVERT	V	VERTICAL
IPS	IRON PIPE SIZE	W/	WITH
L-POLE	LIGHT POLE	YPC	YELLOW PLASTIC CAP
LF	LINEAR FOOT/FEET		
LIP	LIP OF CURB		
LT	LEFT		
MAX	MAXIMUM		

RECEIVED
OCT 16 2024
Mat-Su Borough
Development Services



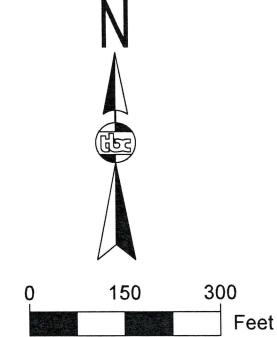
Know what's below.
Call before you dig.

THE ARK AT DENALI MATANUSKA-SUSITNA, ALASKA	
NOTES	
HORZ SCALE: VERT SCALE:	DATE: 10/16/2024
SHEET 1 OF 10	



CONSULTANT

SEAL



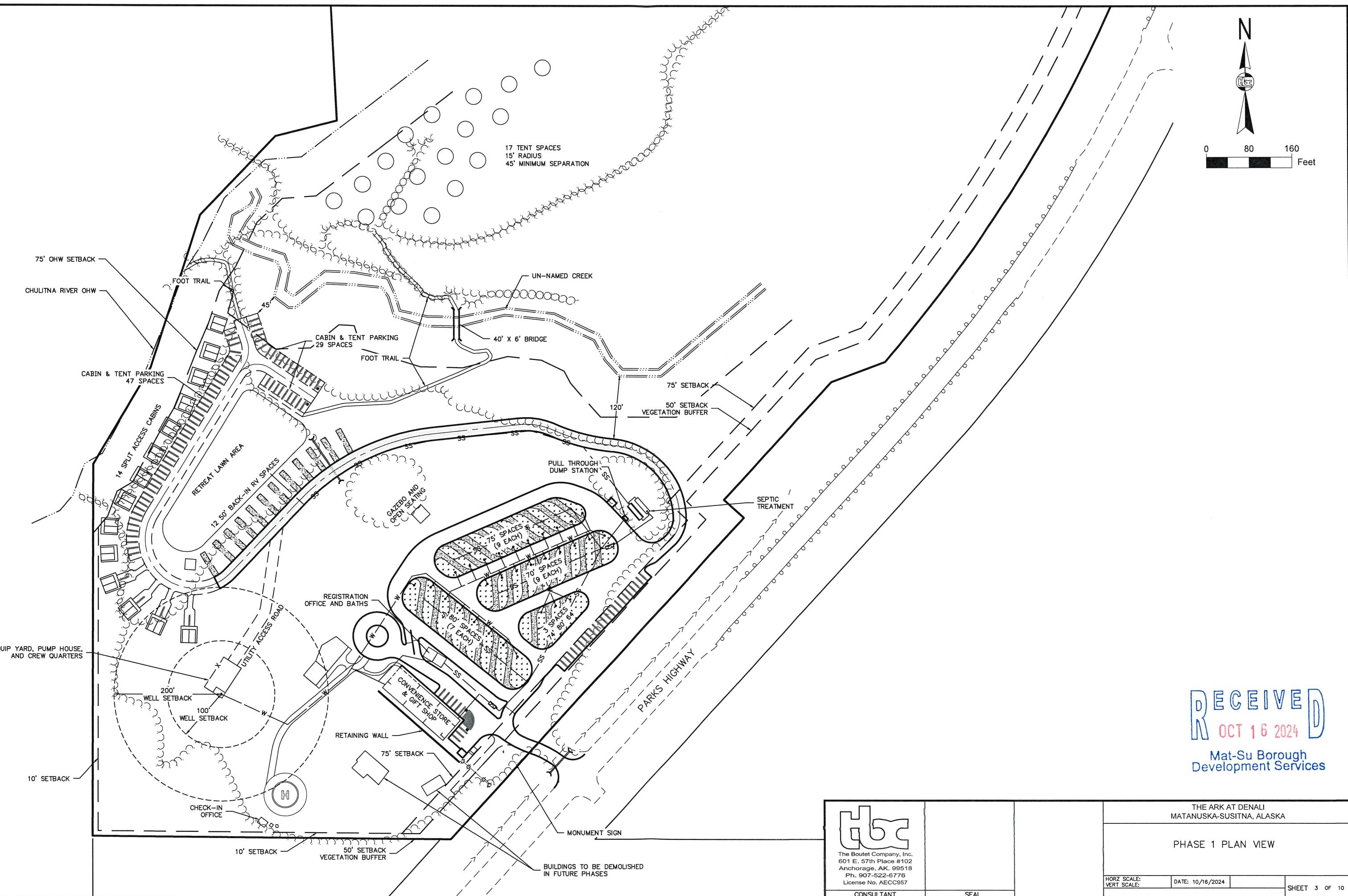
RECEIVED
OCT 16 2024
Mat-Su Borough
Development Services

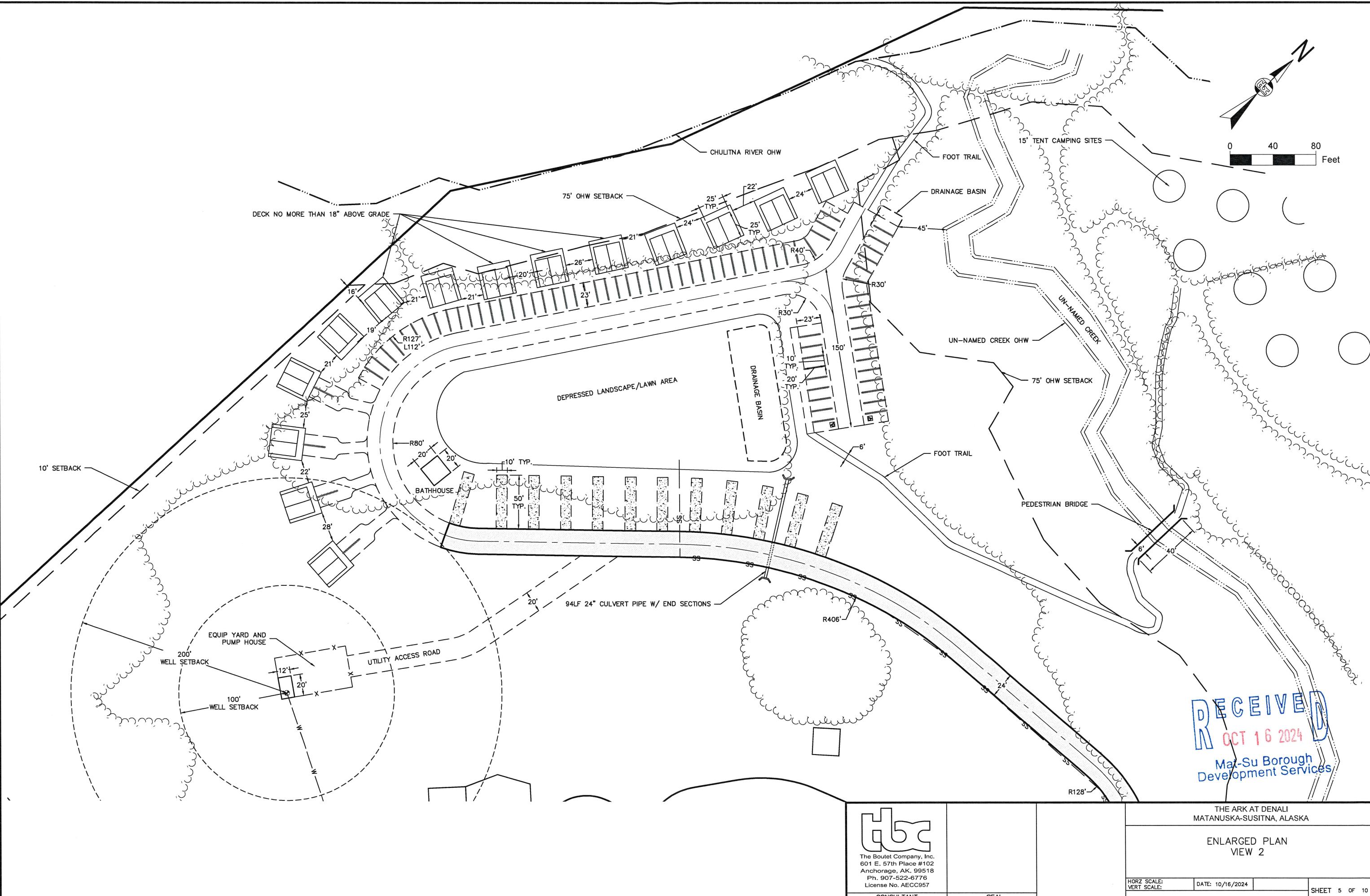
THE ARK AT DENALI
MATANUSKA-SUSITNA, ALASKA

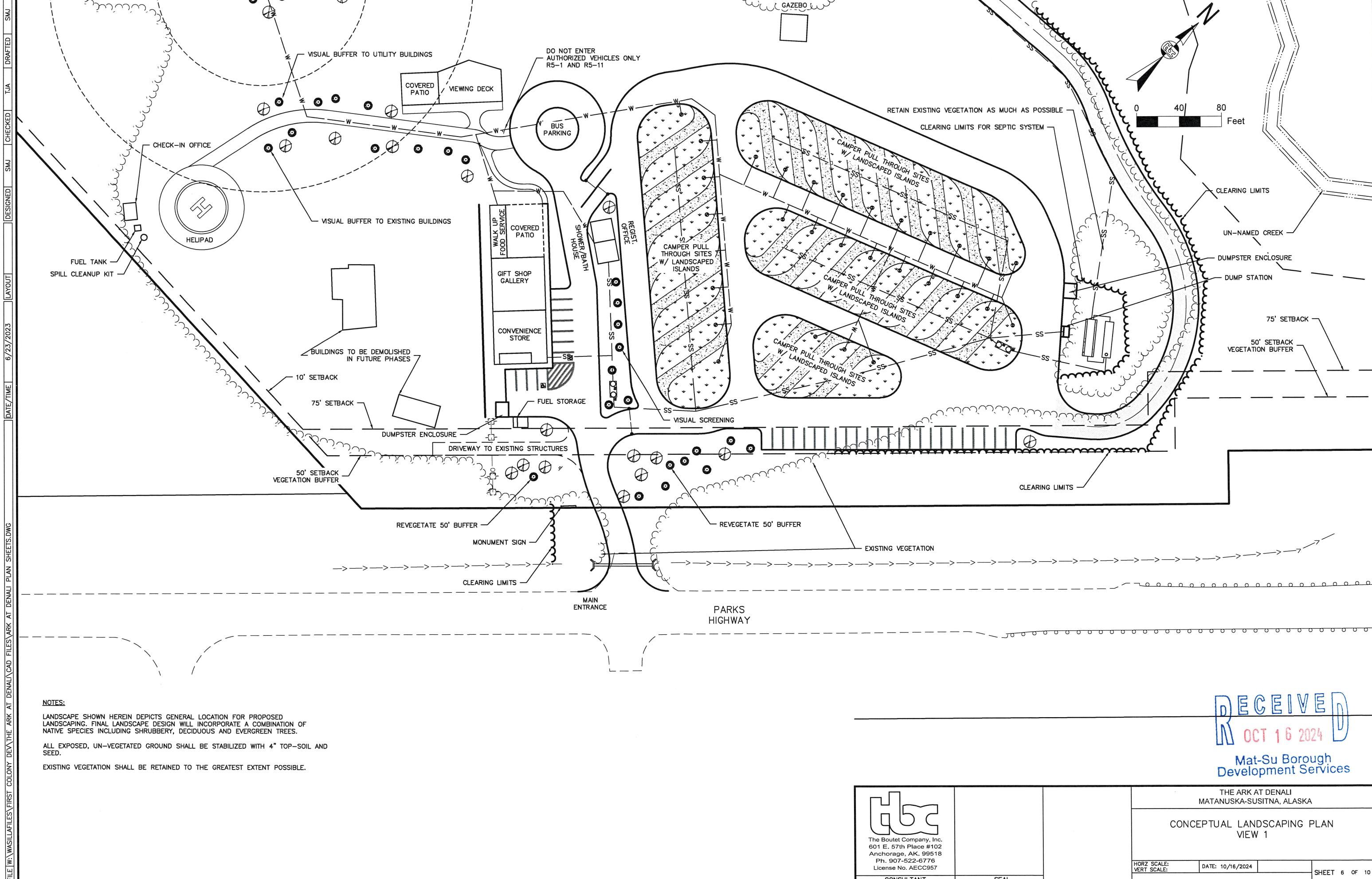
OVERALL PLAN VIEW

HORZ SCALE:	DATE: 10/16/2024
VERT SCALE:	

SHEET 2 OF 10





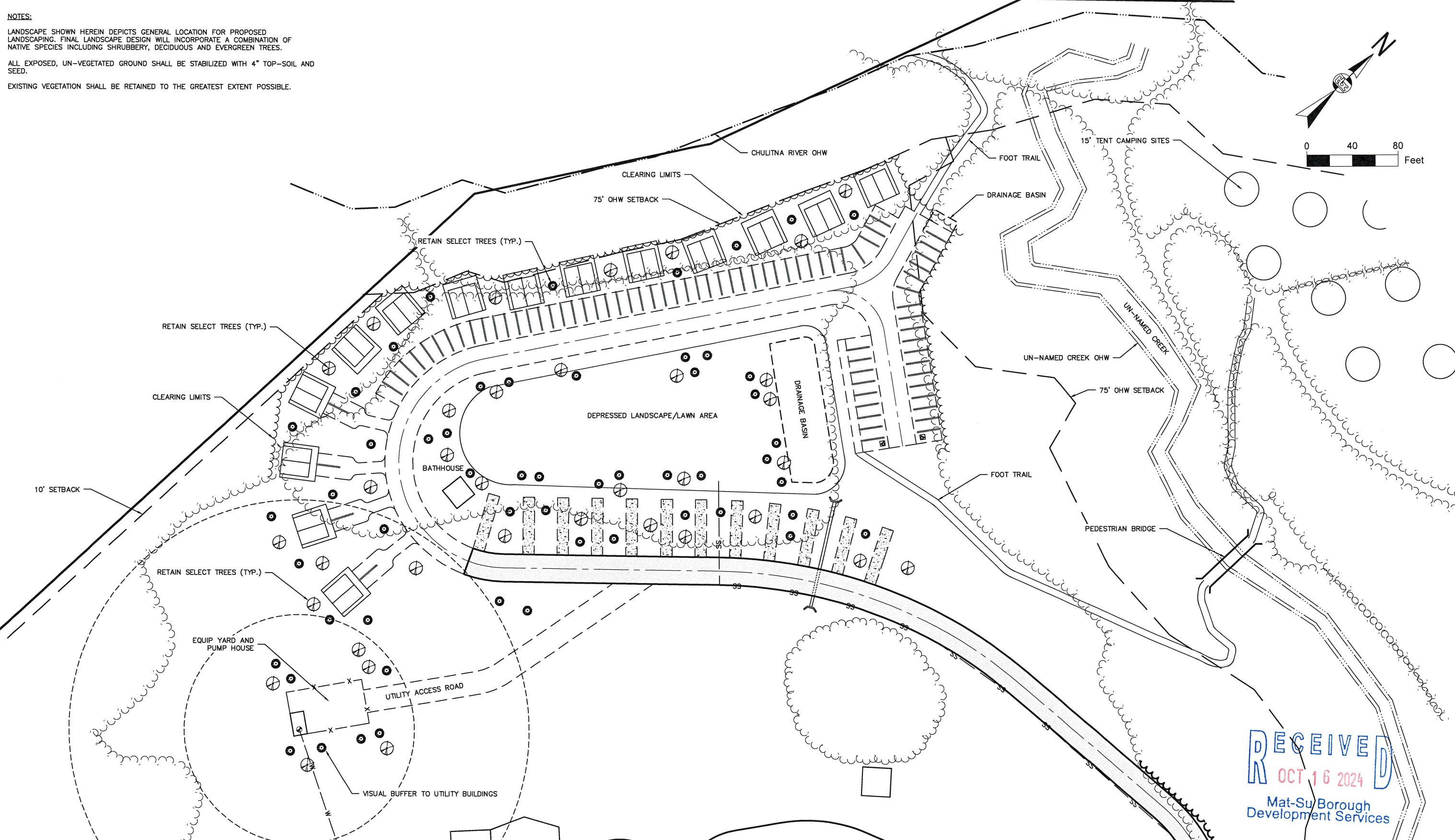


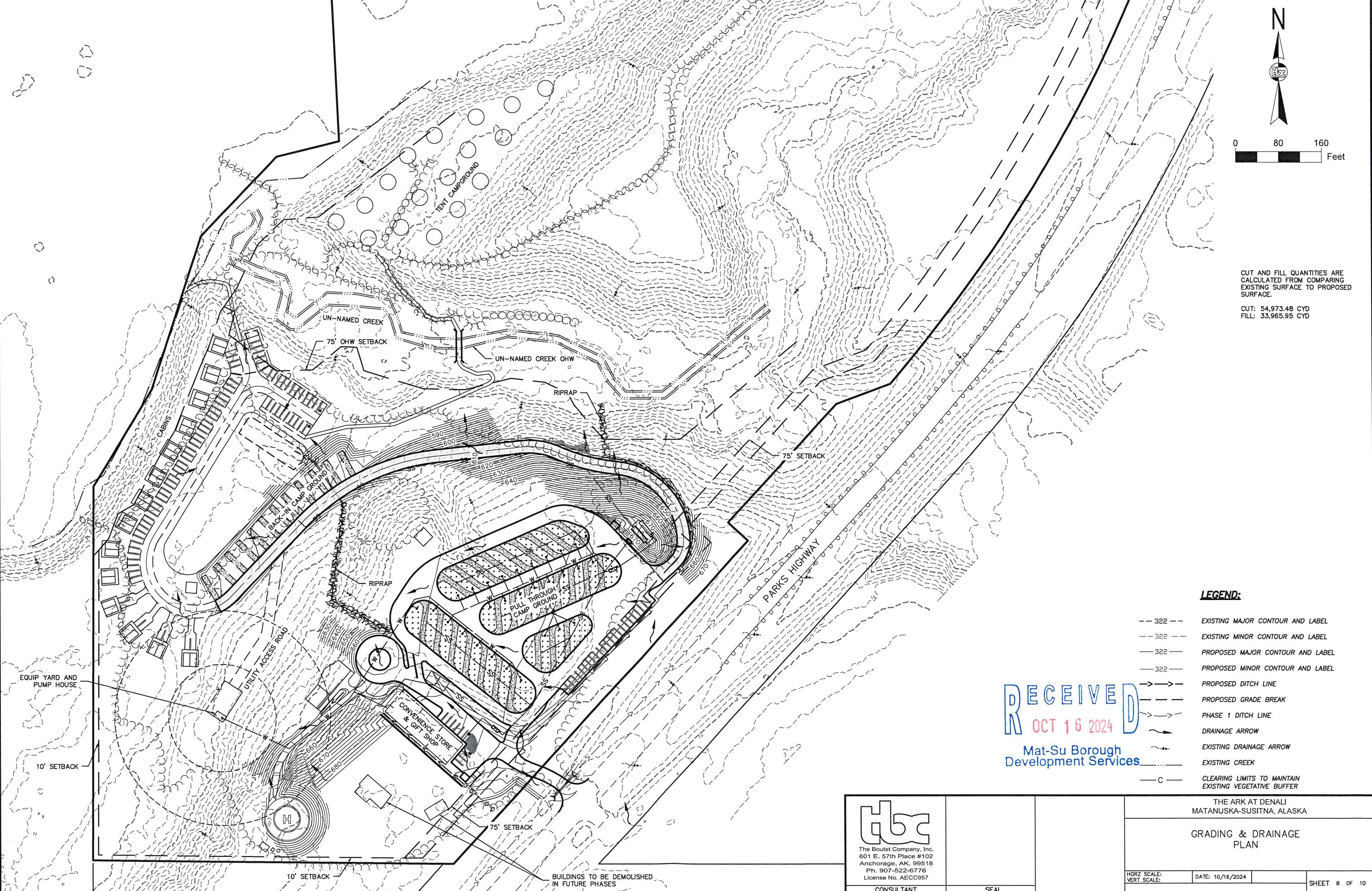
NOTES:

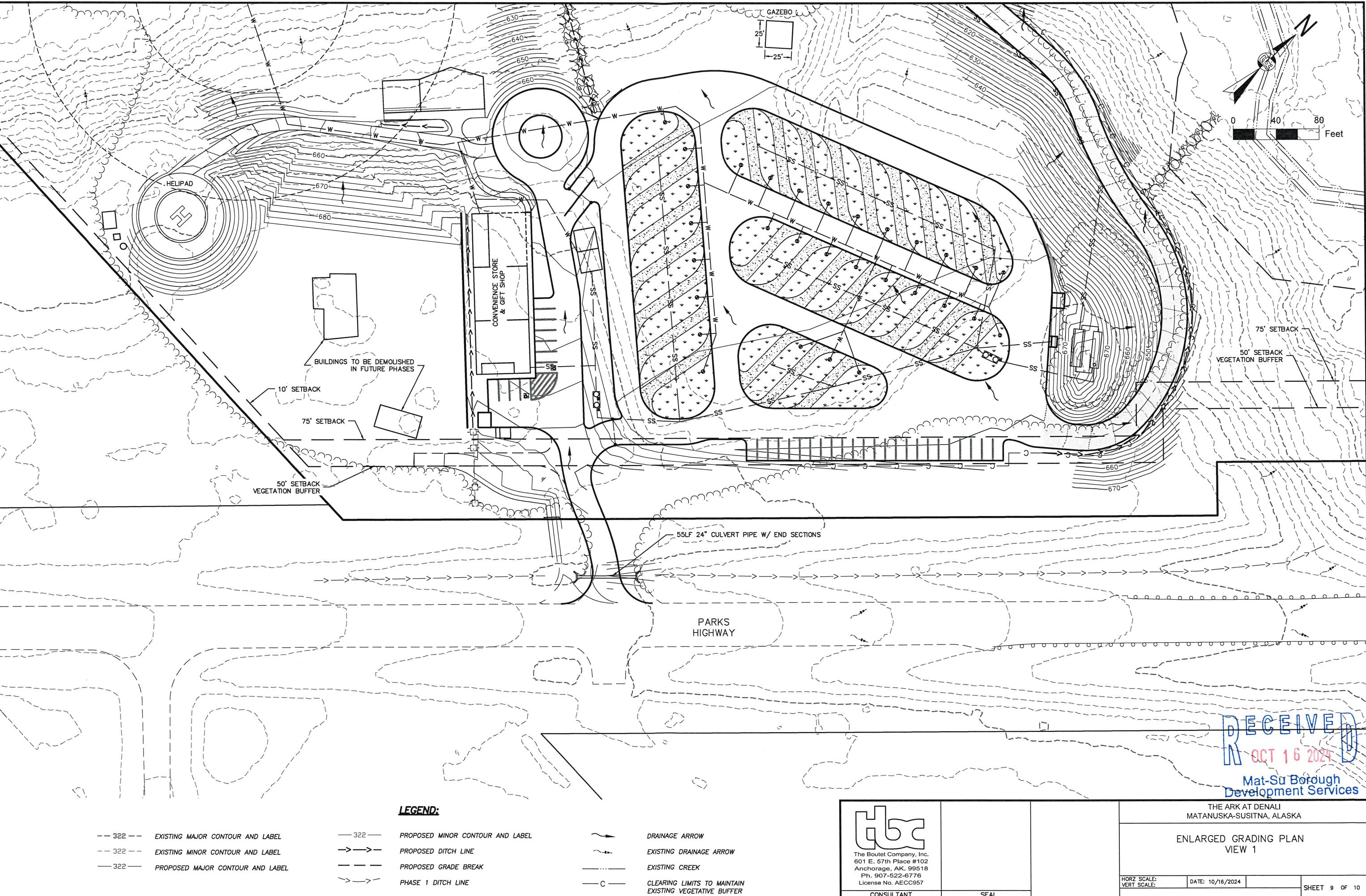
LANDSCAPE SHOWN HEREIN DEPICTS GENERAL LOCATION FOR PROPOSED LANDSCAPING. FINAL LANDSCAPE DESIGN WILL INCORPORATE A COMBINATION OF NATIVE SPECIES INCLUDING SHRUBBRY, DECIDUOUS AND EVERGREEN TREES.

ALL EXPOSED, UN-VEGETATED GROUND SHALL BE STABILIZED WITH 4" TOP-SOIL AND SEED.

EXISTING VEGETATION SHALL BE RETAINED TO THE GREATEST EXTENT POSSIBLE.





**LEGEND:**

— 322 — EXISTING MAJOR CONTOUR AND LABEL
— 322 — EXISTING MINOR CONTOUR AND LABEL
— 322 — PROPOSED MAJOR CONTOUR AND LABEL

— 322 — PROPOSED MINOR CONTOUR AND LABEL
→ → → — PROPOSED DITCH LINE
— — — PROPOSED GRADE BREAK
→ → → — PHASE 1 DITCH LINE

→ — DRAINAGE ARROW
— — — EXISTING DRAINAGE ARROW
— — — EXISTING CREEK
— C — CLEARING LIMITS TO MAINTAIN EXISTING VEGETATIVE BUFFER



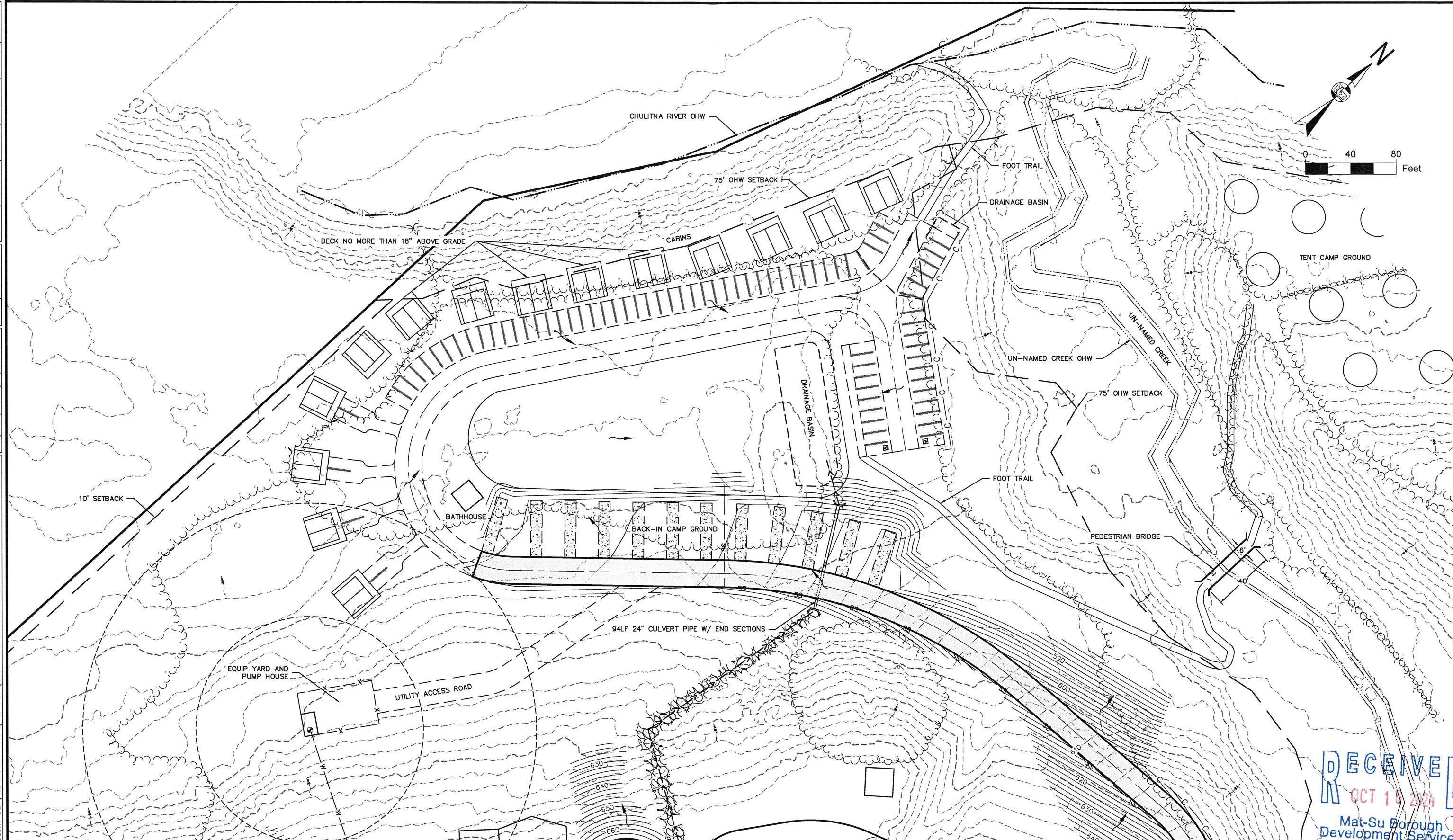
CONSULTANT

SEAL

RECEIVED
OCT 16 2024
Mat-Su Borough
Development Services

THE ARK AT DENALI
MATANUSKA-SUSITNA, ALASKAENLARGED GRADING PLAN
VIEW 1

HORZ SCALE: VERT SCALE:	DATE: 10/16/2024	SHEET 9 OF 10
----------------------------	------------------	---------------

**LEGEND:**

— 322 — EXISTING MAJOR CONTOUR AND LABEL
 — 322 — EXISTING MINOR CONTOUR AND LABEL
 — 322 — PROPOSED MAJOR CONTOUR AND LABEL

— 322 — PROPOSED MINOR CONTOUR AND LABEL
 →→→ PROPOSED DITCH LINE
 — — — PROPOSED GRADE BREAK
 →→→ PHASE 1 DITCH LINE

→ DRAINAGE ARROW
 →→ EXISTING DRAINAGE ARROW
 —— EXISTING CREEK
 — C — CLEARING LIMITS TO MAINTAIN EXISTING VEGETATIVE BUFFER



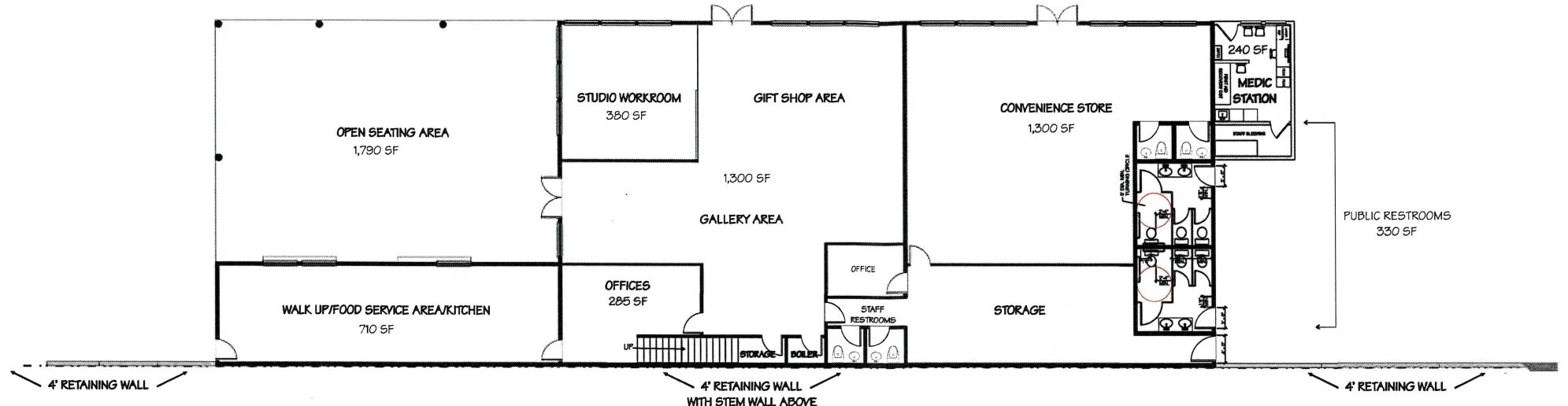
CONSULTANT

SEAL

RECEIVED
OCT 16 2024
Mat-Su Borough
Development Services

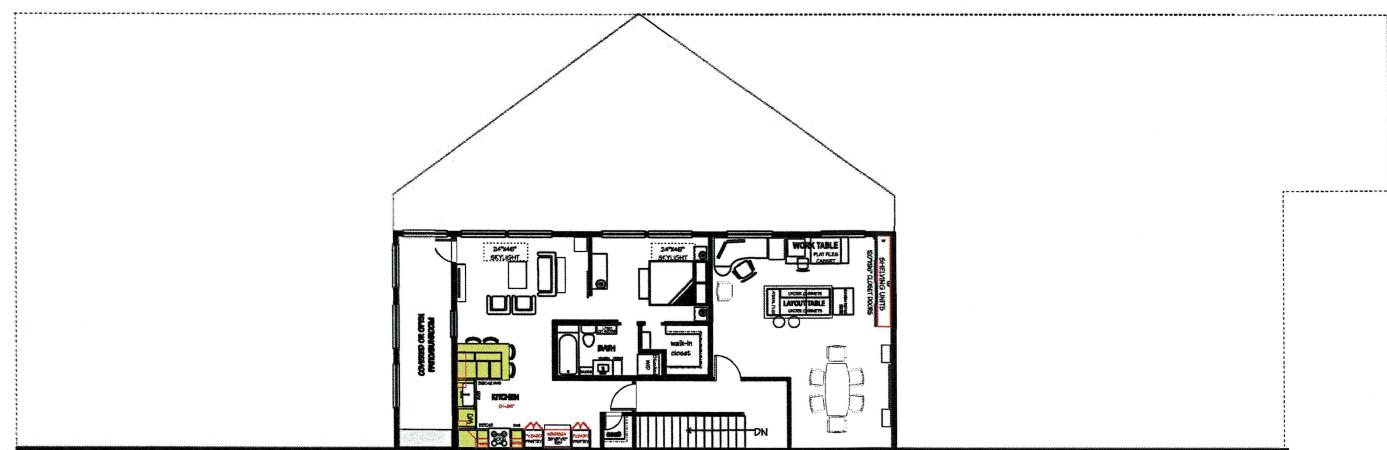
THE ARK AT DENALI
MATANUSKA-SUSITNA, ALASKAENLARGED GRADING PLAN
VIEW 2

HORZ SCALE:	DATE: 10/16/2024
VERT SCALE:	
SHEET 10 OF 10	



PROPOSED GROUND FLOOR PLAN

7,490 SF
 SCALE: 1/8" = 1'-0"



PROPOSED SECOND FLOOR PLAN

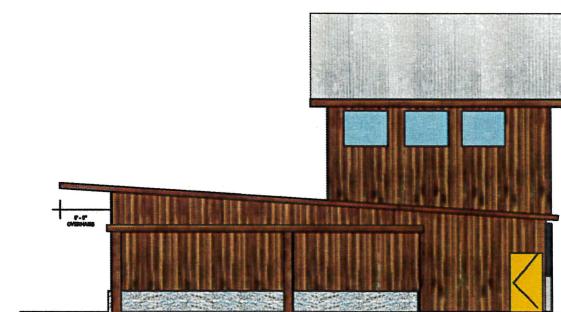
1,450 SF
 SCALE: 1/8" = 1'-0"



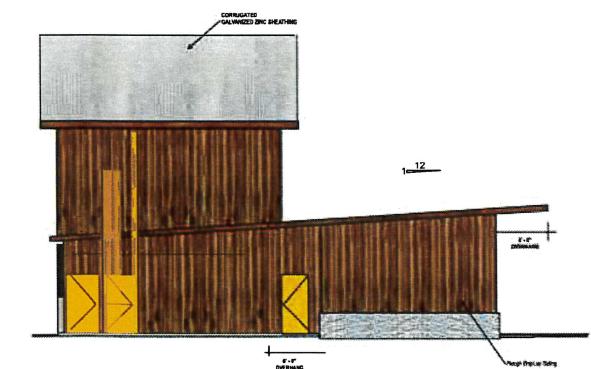
REVISIONS	
GC lic# 936427	DBE, MBE, WBE # 47664
B&B/E BPI # 5030336	email: vdoyen@ueldevcorp.com
	973 E. Badillo St, Ste B • Covina, CA 91724
	Tel: (626) 298-9991 • Fax: (609) 982-3070
UEL DEVELOPMENT CORP design, general construction planning, development energy upgrade performance	
SUBMITTAL DATES	
OWNER APPROVAL:	
THE ARK@DENALI PROPOSED RV RESORT CAMPGROUND	
4852 N. PARKS HIGHWAY, MM 135.5	
TRAPPER CREEK, AK 99663	
DATE: 4/12/23	RECEIVED
SHEET TITLE: PROPOSED MAIN BUILDING FLOOR PLAN	OCT 16 2024
SHEET NO:	
JOB NO: 0820	
A1.0	Mat-Su Borough Development Services



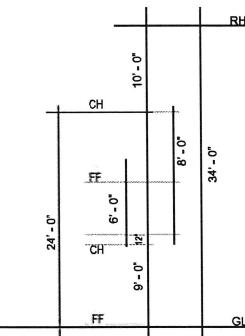
NORTH ELEVATION



WEST ELEVATION



EAST ELEVATION



PROPOSED ELEVATIONS

SCALE: 1/8" = 1'-0"

GC lic# 936427	DBE, MBE, WBE #47664	REVISIONS
BABE BP # 5030336	△	△
email: ydoyen@ueldevcorp.com	△	△
973 E. Badillo St, Ste B • Covina, CA 91724	△	△
Tel: (626) 296-3991 • Fax: (909) 992-3070		

UEL
DEVELOPMENT CORP
design : general construction
planning : development
energy upgrade performance

SUBMITTAL DATES

OWNER APPROVAL:

THE ARK@DENALI
PROPOSED RV RESORT CAMPGROUND
4852 N. PARKS HIGHWAY, MM 135.5
TRAPPER CREEK, AK 99683

DATE: 4/12/23

SHEET TITLE:

PROPOSED
MAIN BUILDING
ELEVATIONS

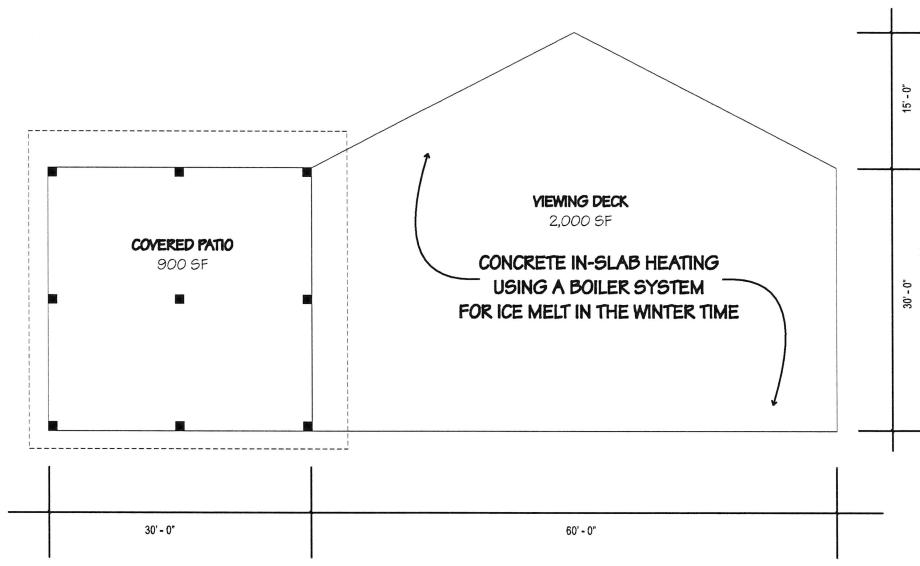
SHEET NO:

JOB NO:

A3.0

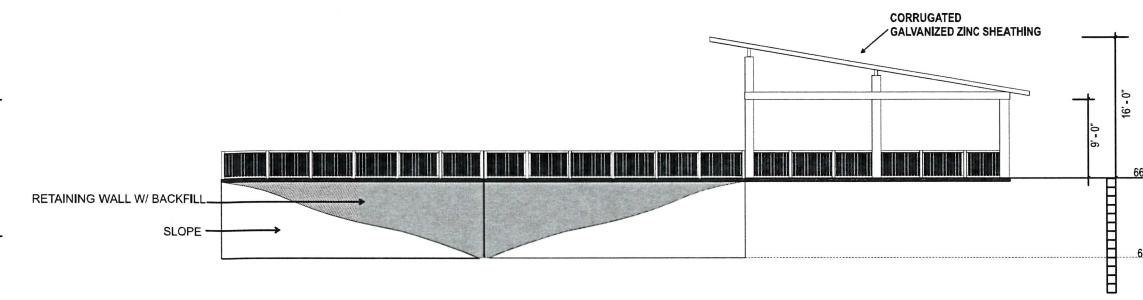
0820

RECEIVED
Mat-Su Borough
Development Services
Oct 16 2024

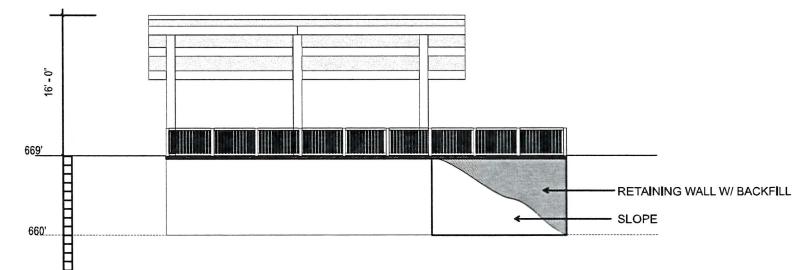


PROPOSED VIEW DECK & COVERED PATIO

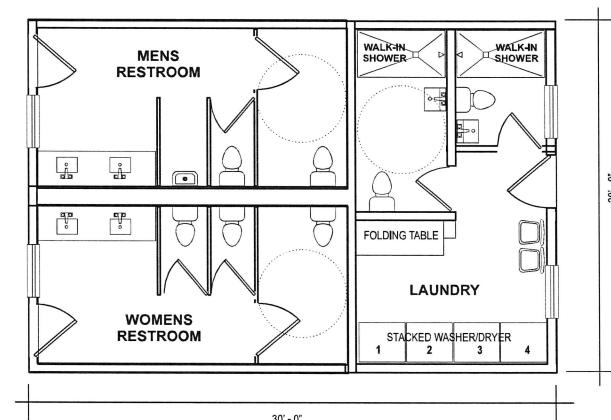
SCALE: 1/8" = 1'-0"



WEST ELEVATION

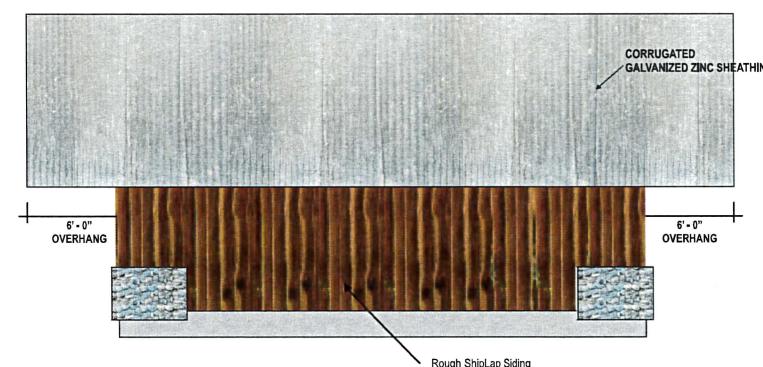
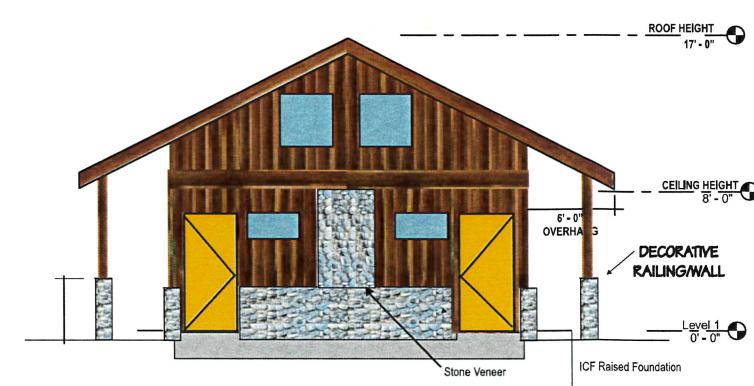


NORTH ELEVATION



REST ROOMS/BATH HOUSE/LAUNDRY

600 SF
SCALE 1/4" = 1'



THE ARK@DENALI
PROPOSED RV RESORT CAMPGROUND
4852 N. PARKS HIGHWAY, MM 135.5
TRAPPER CREEK, AK 99683

DATE: 4/12/23
SHEET TITLE: TYPICAL BATH HOUSE & VIEWING DECK
SHEET NO: A4.0
JOB NO: 0820

UEL
DEVELOPMENT CORP
design · general construction
planning · development
energy upgrade performance

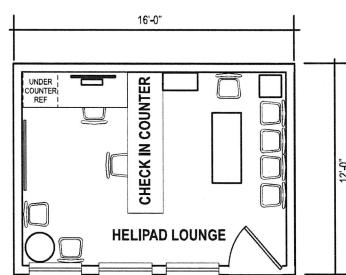
SUBMITTAL DATES
OWNER APPROVAL:

REVISIONS

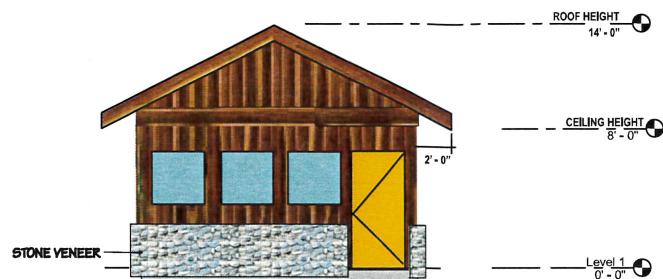
DBE, MBE, WBE #47664
BA/BE/EP # 5030336
email: ydoyen@yeldcorp.com
973 E. Badillo St, Ste B - Covina, CA 91724
Tel: (626) 296-3991 • Fax: (909) 992-3070

RECEIVED
Mat-Su Borough
Development Services
Oct 16 2024

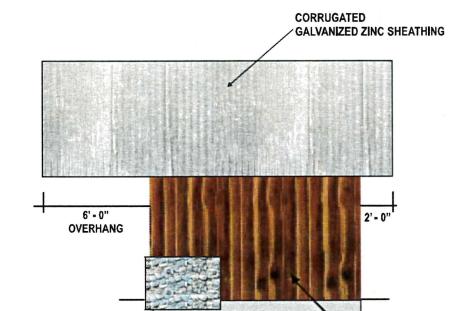
REVISIONS	
△	△
△	△
△	△
GC lic# 936427 DBE, MBE, WBE #47664 BA/BE SR # 5030336 email: yodoyen@leidenvcorp.com 973 E. Badillo St, Ste B • Covina, CA 91724 Tel: (626) 296-9991 • Fax: (909) 982-3070	
UEL DEVELOPMENT CORP design: general construction planning: development energy upgrade performance	
SUBMITTAL DATES	
OWNER APPROVAL:	
THE ARK@DENALI PROPOSED RV RESORT CAMPGROUND 4852 N. PARKS HIGHWAY, MM 135.5 TRAPPER CREEK, AK 99683 RECEIVED Oct 16 2024 McDonald's Building Mackay, Idaho	
DATE: 4/12/23 SHEET TITLE: STRUCTURES & ELEVATIONS SHEET NO: A4.2 JOB NO: 0820	



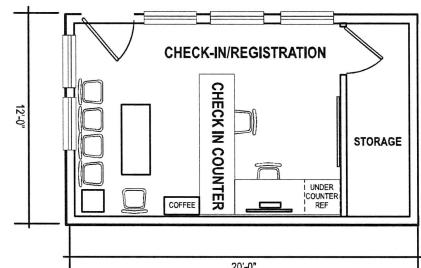
HELIPAD CHECK-IN/LOUNGE
192 SF
SCALE 1/4" = 1'



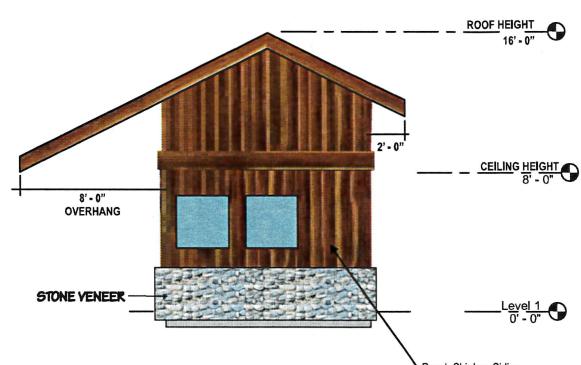
WEST ELEVATION



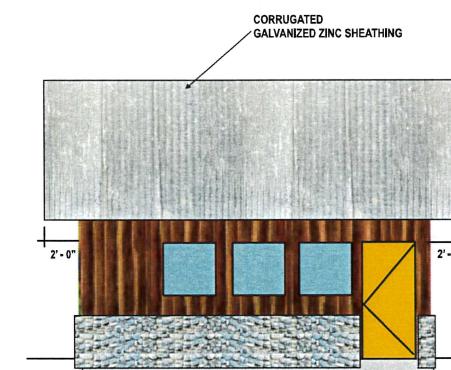
SOUTH ELEVATION



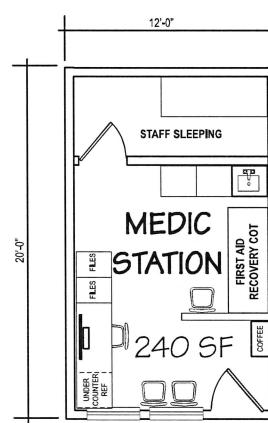
RV/CAMPGROUND REGISTRATION OFFICE
240 SF
SCALE 1/4" = 1'



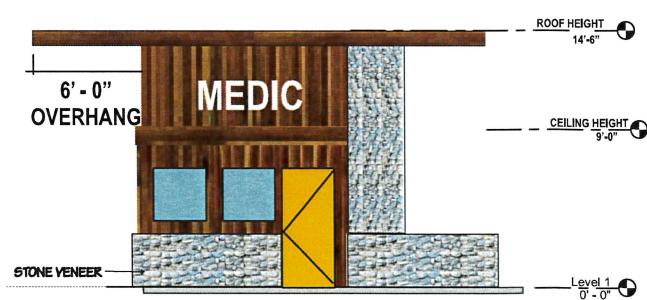
WEST ELEVATION



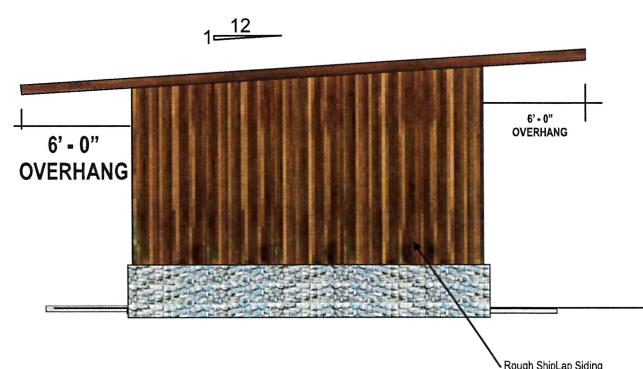
NORTH ELEVATION



MEDIC STATION WEST SIDE OF MAIN BUILDING
240SF
SCALE 1/4" = 1'

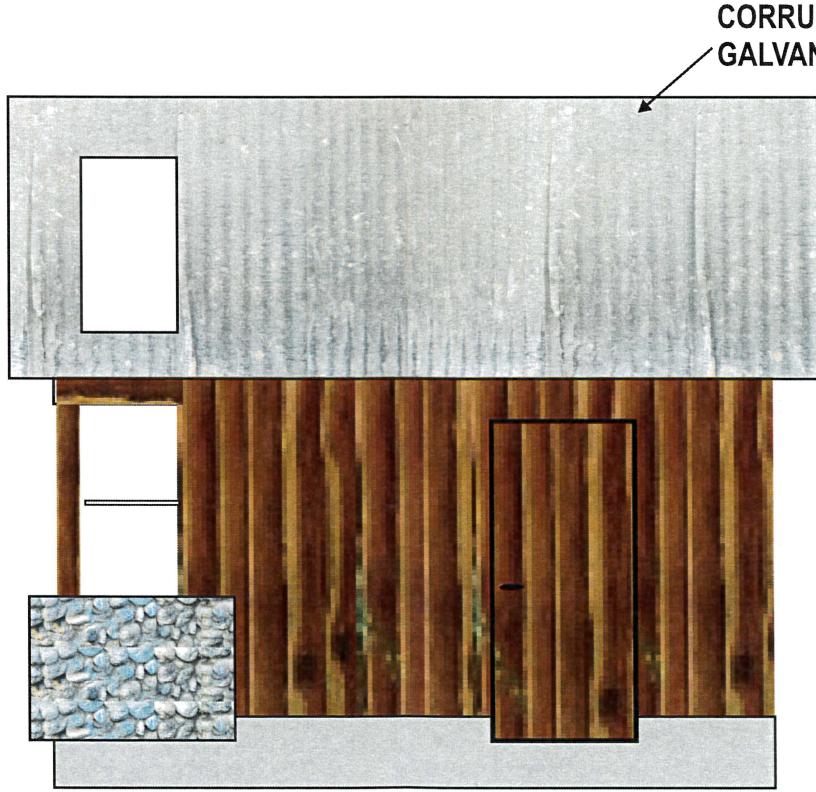
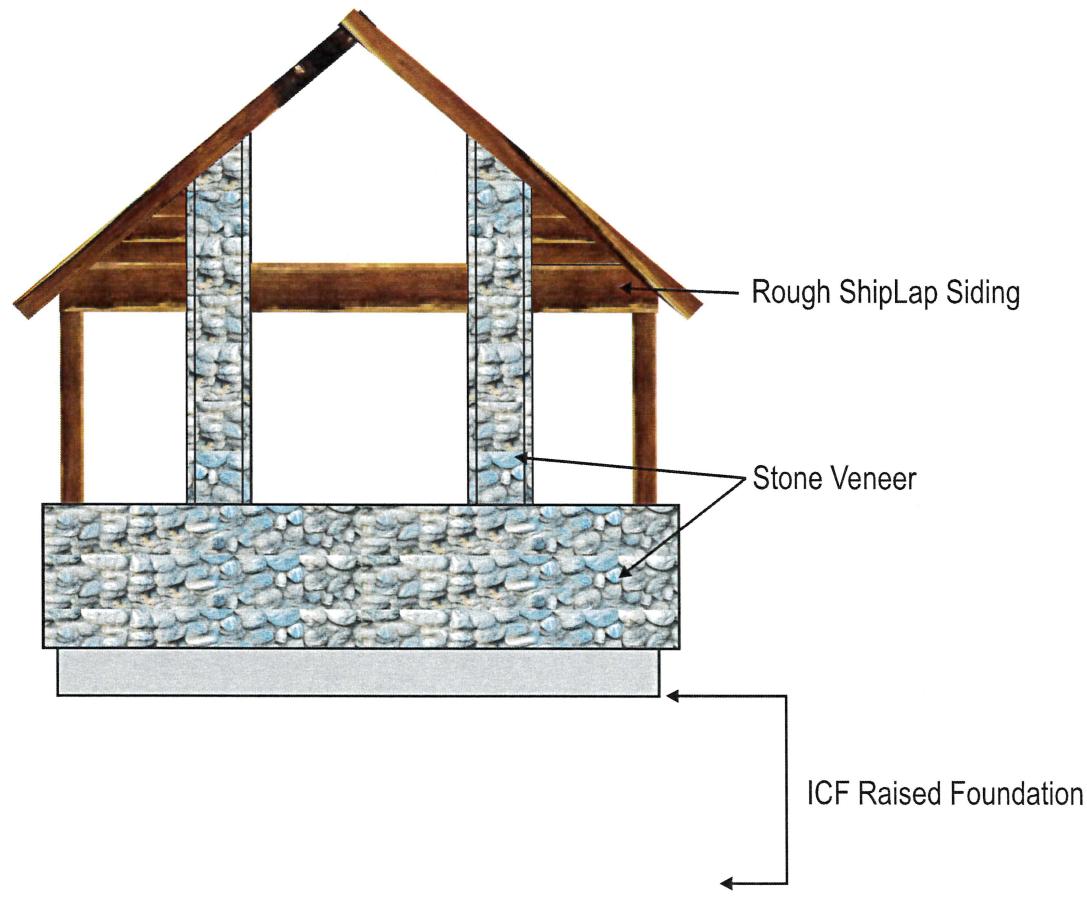
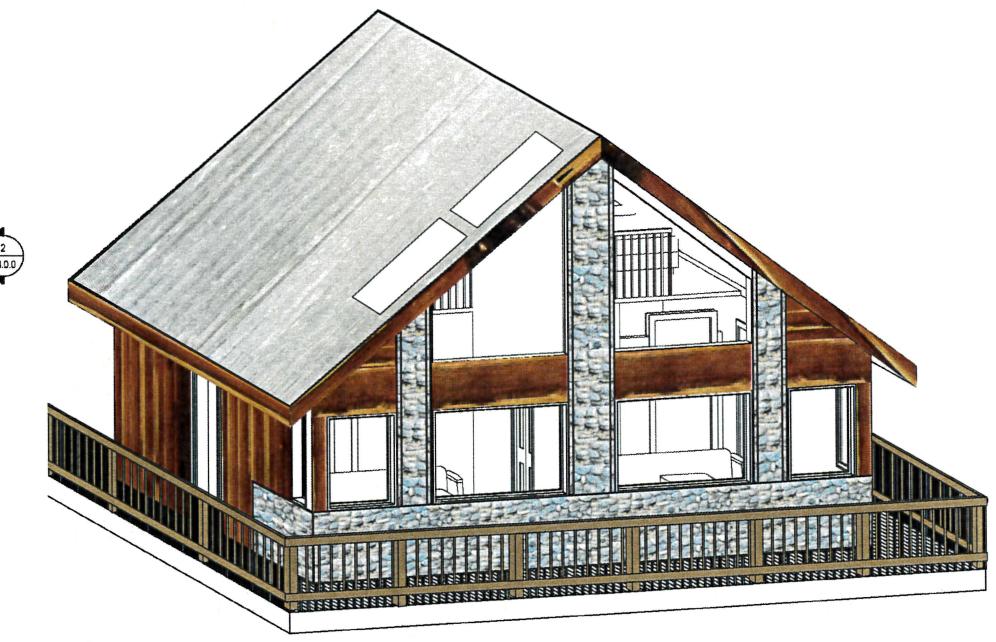
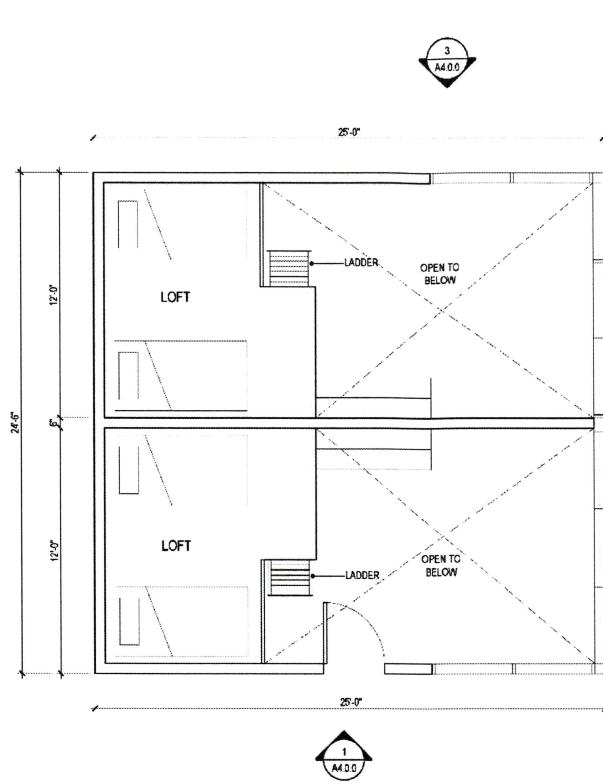
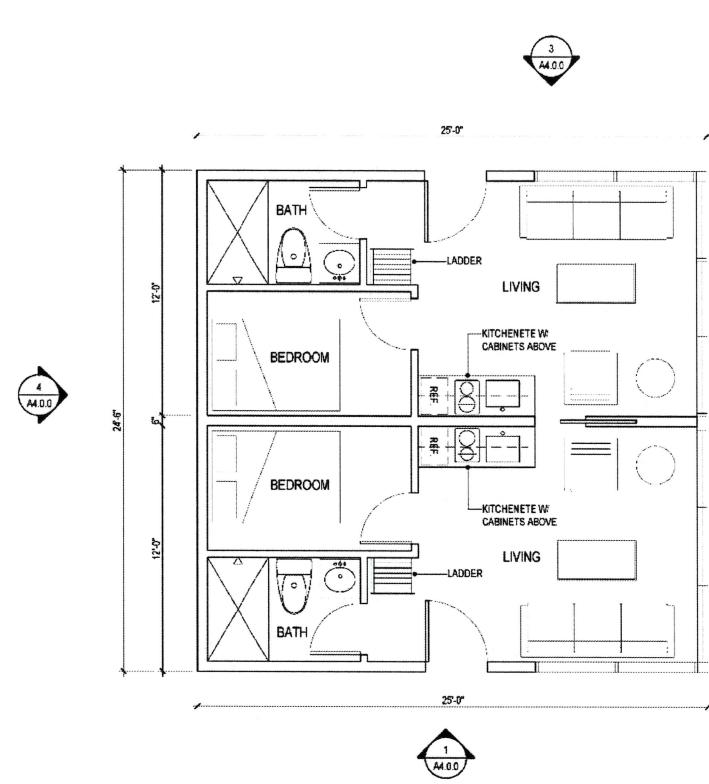


NORTH ELEVATION



EAST ELEVATION

RECEIVED
Oct 16 2024
McDonald's Building
Mackay, Idaho



RECEIVED
OCT 16 2024
Mat-Su Borough
Development Services

REVISIONS	
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
UEL DEVELOPMENT CORP	
design - general construction	
planning - development	
energy upgrade performance	
SUBMITTAL DATES	
OWNER APPROVAL:	
DATE:	
SHEET TITLE:	PROPOSED PLAN UNITS
SHEET NO.:	
JOB NO.:	

SCHEMATIC DESIGN

ADDRESS

PROJECT
4852 PARKS HWY

MT. DENALI TRAILER PARK &
CAMP SITE DEVELOPMENT.

4852 PARKS HWY
WILLOW, AK 99683
DATE: 01.08.2021

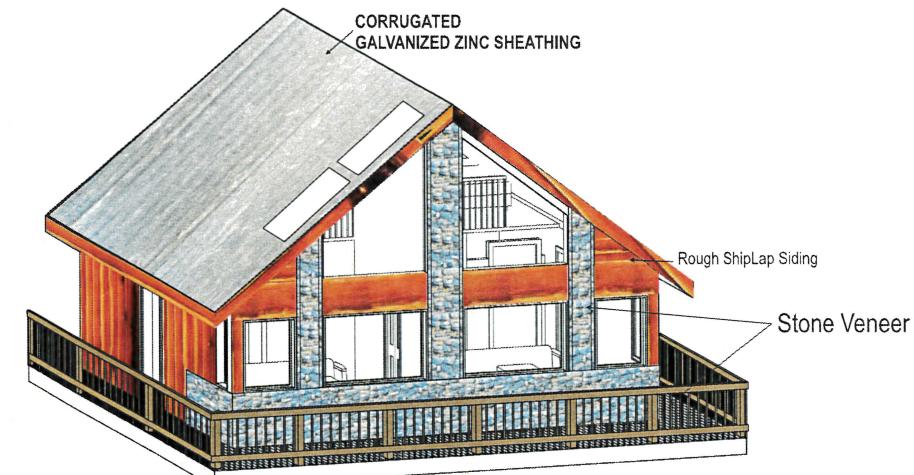
REVISION/ISSUE _____
DATE _____

NOTES:

1. THE DESIGN SHOWN ON THIS DRAWING IS THE PROPERTY OF ZT ARCHITECTURE AND LAND DEVELOPMENT AND IS NOT TO BE USED OR DISCLOSED IN WHOLE OR IN PART, EXCEPT IN ACCORDANCE WITH A CONTRACT, LICENSE OR AGREEMENT IN WRITING WITH ZT ARCHITECTURE.

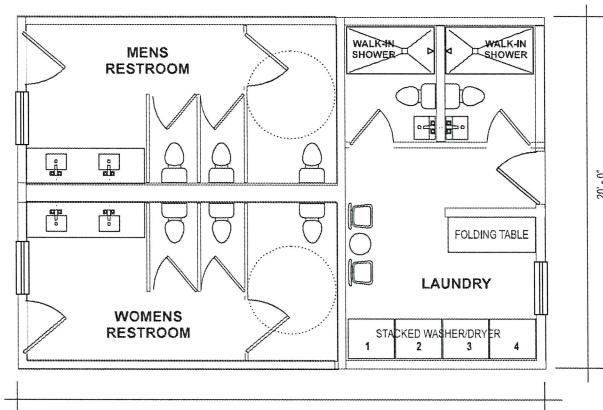
2. DO NOT SCALE, ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.

3. DO NOT DUPLICATE.



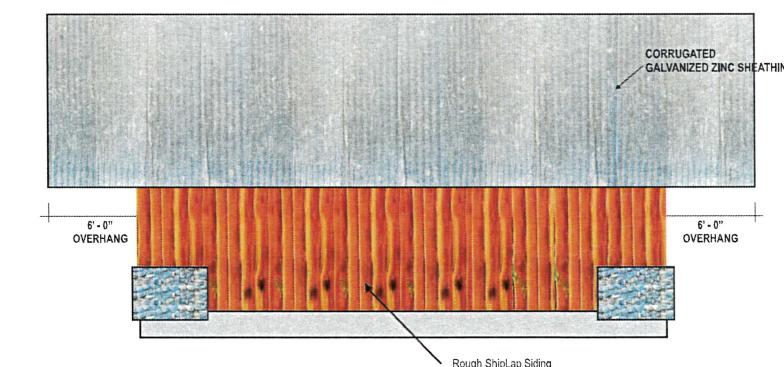
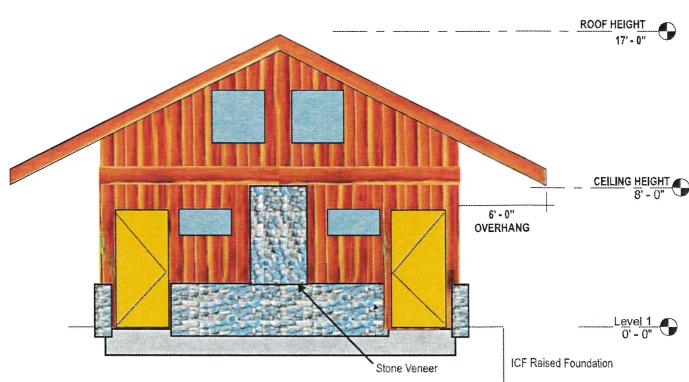
CABIN "A"

625/1,250 SF
SCALE 1/4" = 1'



REST ROOMS/BATH HOUSE/LAUNDRY

600 SF
SCALE 1/4" = 1'



DESIGN BY:

SHEET TITLE:
CABIN TYPE "A"

TYPICAL BATH HOUSE

SCALE: AS NOTED
SHEET NO. _____

A5.0.1

DRAWN BY: RECEIVED
OCT 16 2024
Mat-Su Borough
Development Services

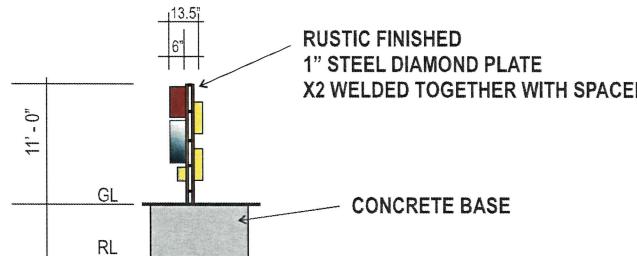


PROPOSED LOCATION OF FRONT SIGNAGE

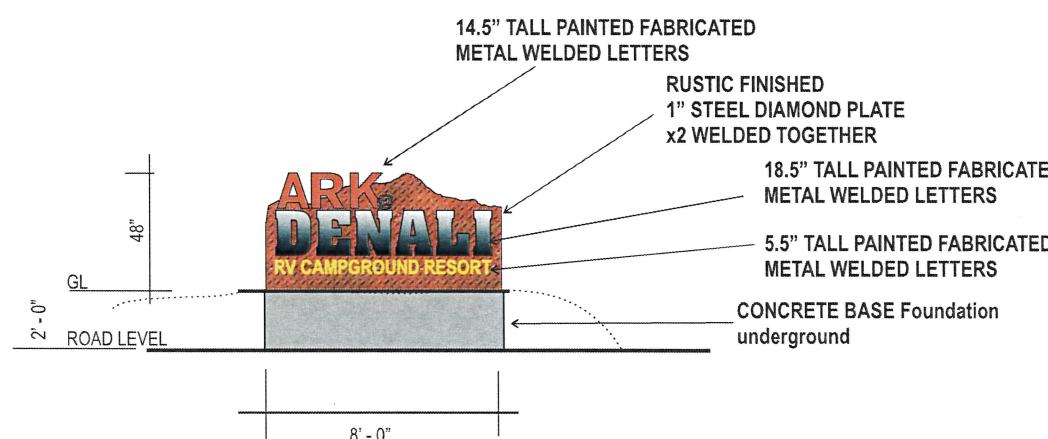
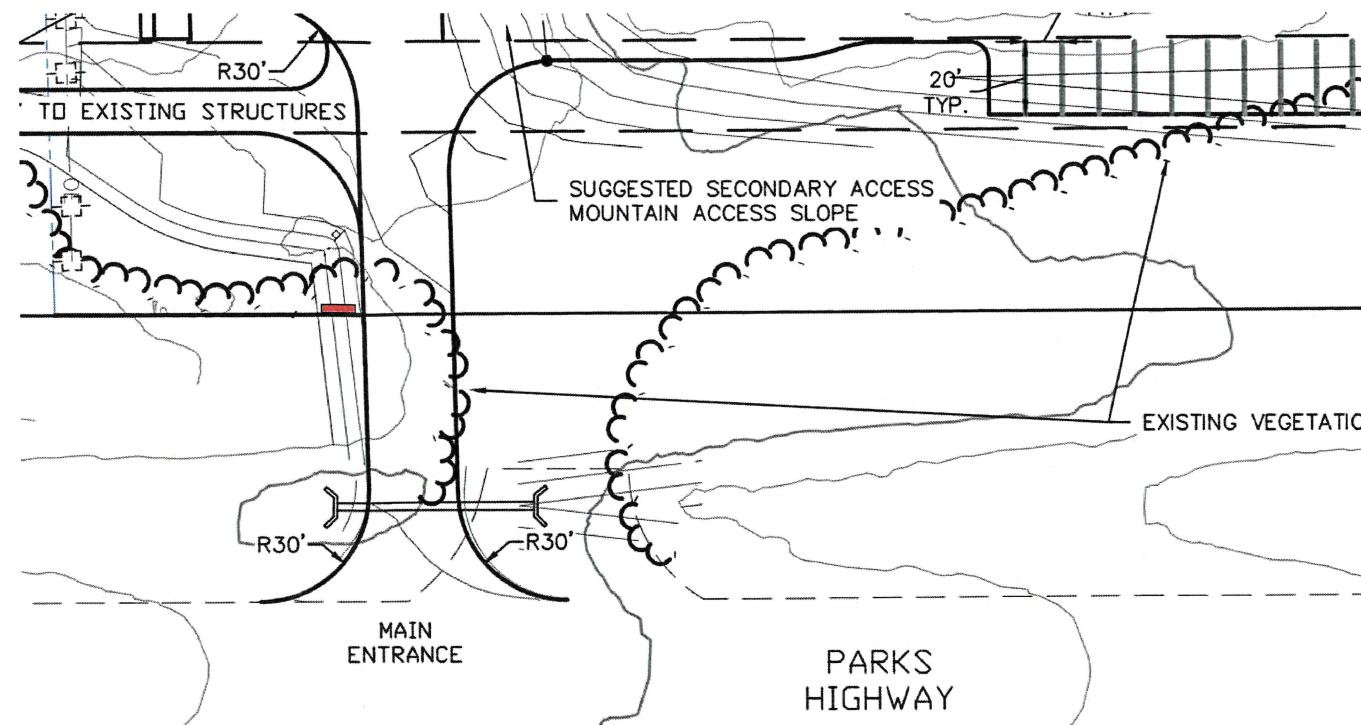
MONUMENT FRONT ENTRY SIGNAGE

MM 135.5 GEORGE PARKS HWY

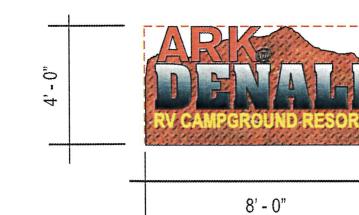
RECEIVED
OCT 16 2024
Mat-Su Borough
Development Services



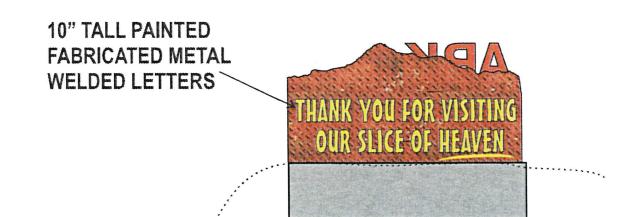
SIDE ELEVATION



FRONT ELEVATION



SIGNAGE = 32SF
Compliance with Denali SPUD limit of 32SF
MSB 17.17.030(B)(45)



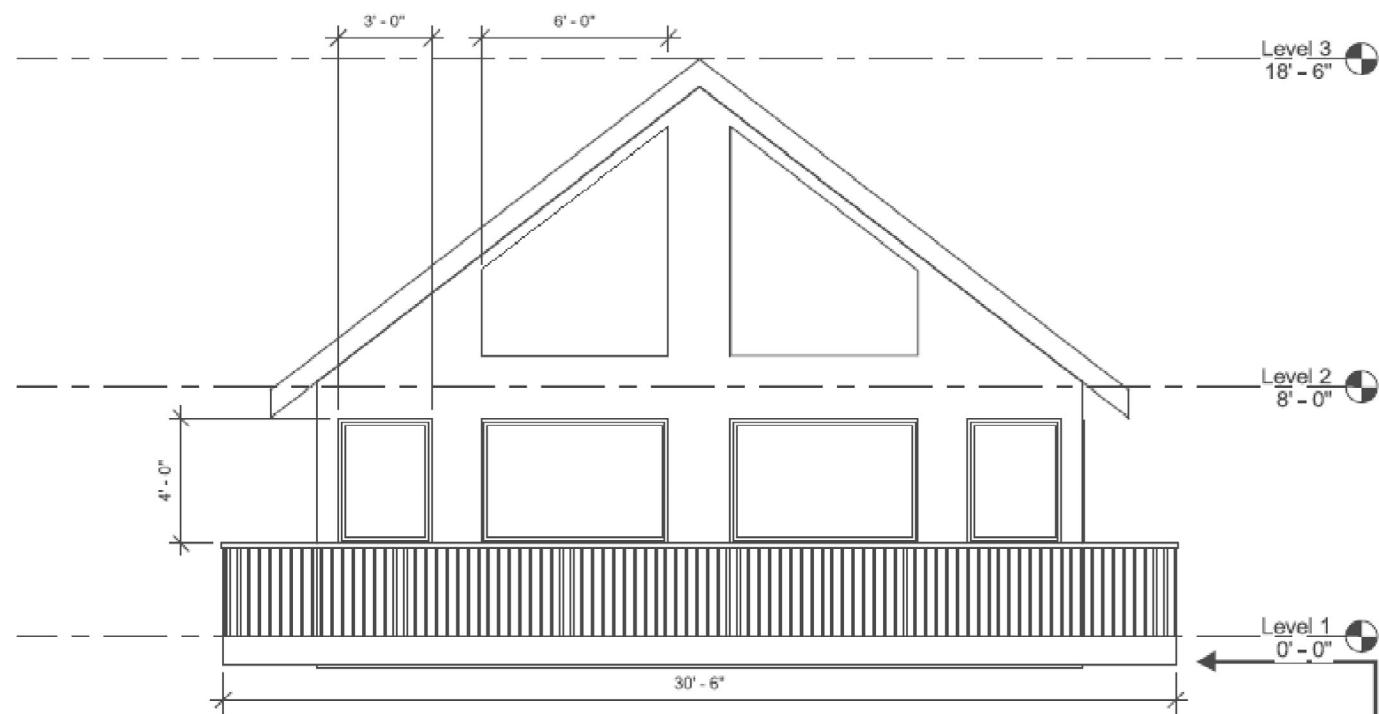
REAR/EXIT ELEVATION

MONUMENT FRONT ENTRY SIGNAGE

RECEIVED
OCT 16 2024

Mat-Su Borough
Development Services

(6) South
1/4" = 1'-0"



(4) East
1/4" = 1'-0"

ICF Raised Foundation