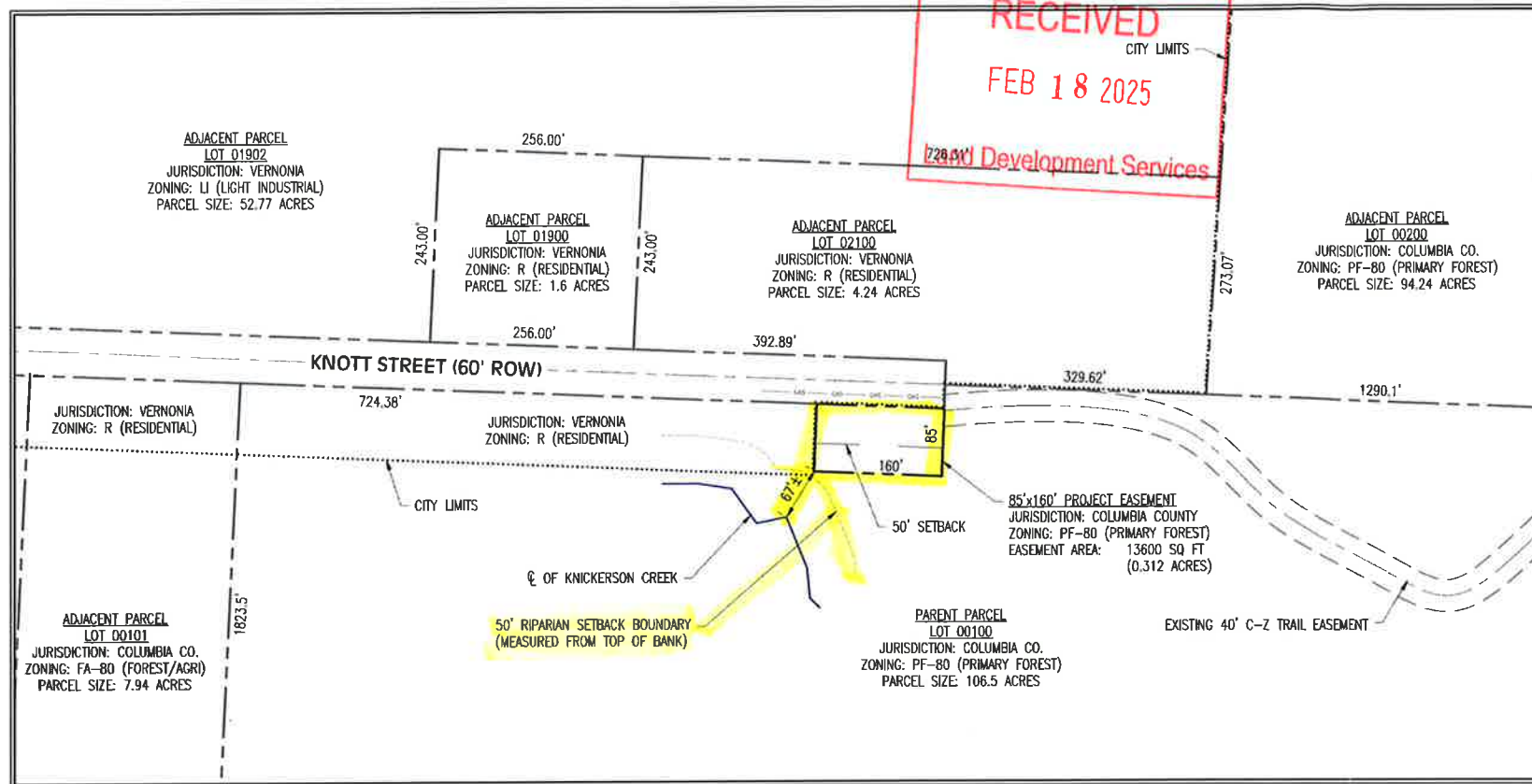


REVISION

RECEIVED  
CITY LIMITS  
FEB 18 2025  
728 (X) Development Services

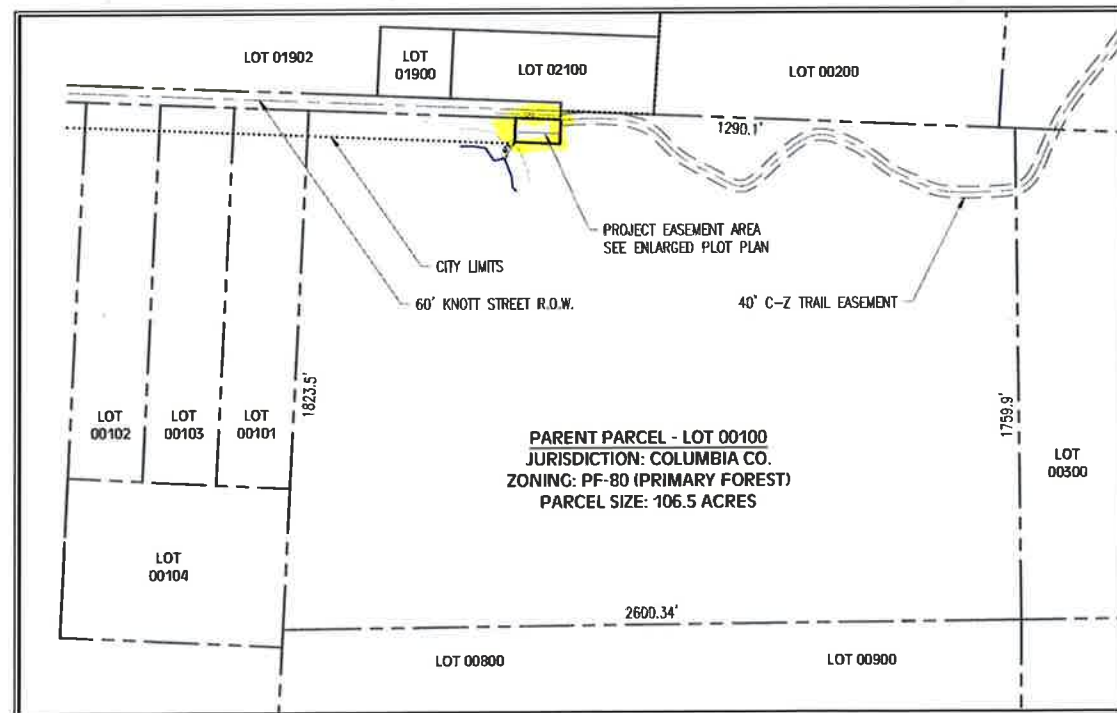
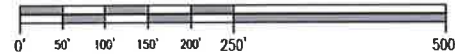
# HOLCE TRAILHEAD IMPROVEMENTS

END OF KNOTT STREET, VERNONIA, OREGON



ENLARGED PLOT PLAN

SCALE: 1" = 100'



OVERALL PLOT PLAN

SCALE: 1" = 300'



**PROJECT TEAM**

**OWNER / CONTRACTOR**  
COLUMBIA COUNTY  
320 STRAND STREET, SAINT HELENS, OR 97051  
CONTACT: RILEY BAKER  
PHONE: 971-328-2537  
EMAIL: riley.baker@columbiacountyor.gov

**ENGINEER OF RECORD**  
LOWER COLUMBIA ENGINEERING, LLC  
58640 McNUITY WAY, ST. HELENS, OR 97051  
CONTACT: ANDREW NIEMI, P.E.  
PHONE: 503-366-0399  
EMAIL: andrew@lowercolumbiaengr.com

**DEFERRED SUBMITTALS & SEPARATE PERMITS**

PLANS AND SPECIFICATIONS REQUIRED FOR THE WORK OF SPECIALTY TRADES MAY BE SUBMITTED AS DEFERRED SUBMITTALS IN ACCORDANCE WITH OSSC SECTION 107.3.4.2. THE FOLLOWING SPECIALTY TRADES WILL BE DESIGN-BUILD AND ARE THEREFORE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE OBTAINING SEPARATE PERMITS FOR THIS WORK AND IS RESPONSIBLE FOR ANY NECESSARY DESIGN AND/OR ENGINEERING TO MEET THE APPLICABLE CODE REQUIREMENTS:

REQUIRED SEPARATE PERMITS:  
- ELECTRICAL (IF APPLICABLE)

REQUIRED DEFERRED SUBMITTALS:  
- PICNIC STRUCTURE SHOP DRAWINGS  
- VAULT TOILET STRUCTURE SHOP DRAWINGS

**DRAWING DIRECTORY**

SHEET #	SHEET TITLE
G-1	COVER SHEET
G-2	GENERAL NOTES
C-1	EXISTING CONDITIONS PLAN
C-2	PROPOSED SITE PLAN
C-3	EROSION AND SEDIMENT CONTROL PLAN
C-4	GRADING AND DRAINAGE
L-1	LANDSCAPING PLAN
D-1	EROSION & SEDIMENT CONTROL DETAILS
D-2	CIVIL DETAILS
D-3	SIGNAGE DETAILS
A-1	PICNIC SHELTER
A-2	VAULT TOILET

**811**  
Know what's below.  
Call before you dig.

**UTILITY LOCATES**  
(48 HOUR NOTICE PRIOR TO EXCAVATION)

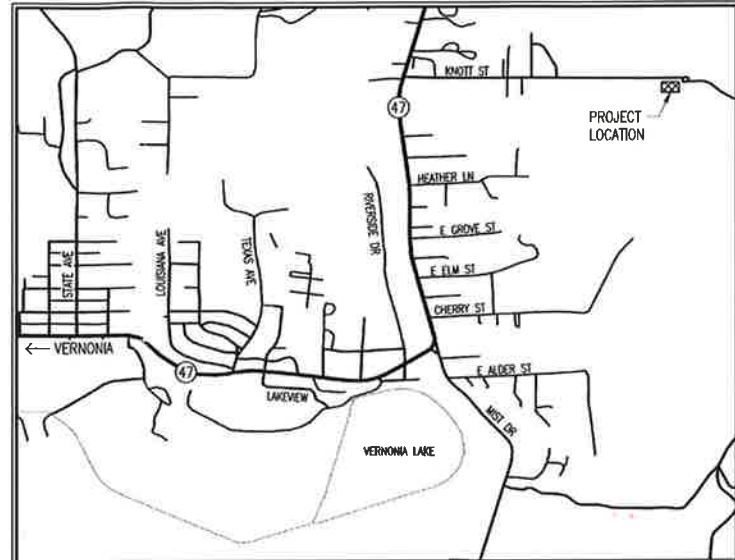
OREGON LAW REQUIRES YOU TO FOLLOW THE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES FROM THE CENTER BY CALLING 503-246-1987

ONE CALL SYSTEM: 800-332-2344 OR 811  
WEBSITE: [www.callbeforeyoudig.org](http://www.callbeforeyoudig.org)

PUBLIC WORKS MUST BE NOTIFIED 48 HOURS IN ADVANCE TO COORDINATE ANY TAPS OR WATER VALVE OPERATION. THE CONTRACTOR IS NOT ALLOWED TO OPERATE ANY WATER VALVES CONTROLLING FLOW TO NEW PIPING FROM THE CITY'S POTABLE WATER SYSTEM

**PROJECT DESCRIPTION**

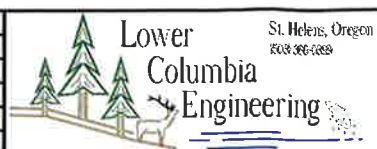
COLUMBIA COUNTY PROPOSES TO MAKE IMPROVEMENTS TO THE HOLCE TRAILHEAD SITE INCLUDING PICNIC SHELTER, VAULT TOILET, INFORMATION KIOSK, SUPPORTING PARKING AREA, AND NEW LANDSCAPING.



**VICINITY MAP**  
NOT TO SCALE

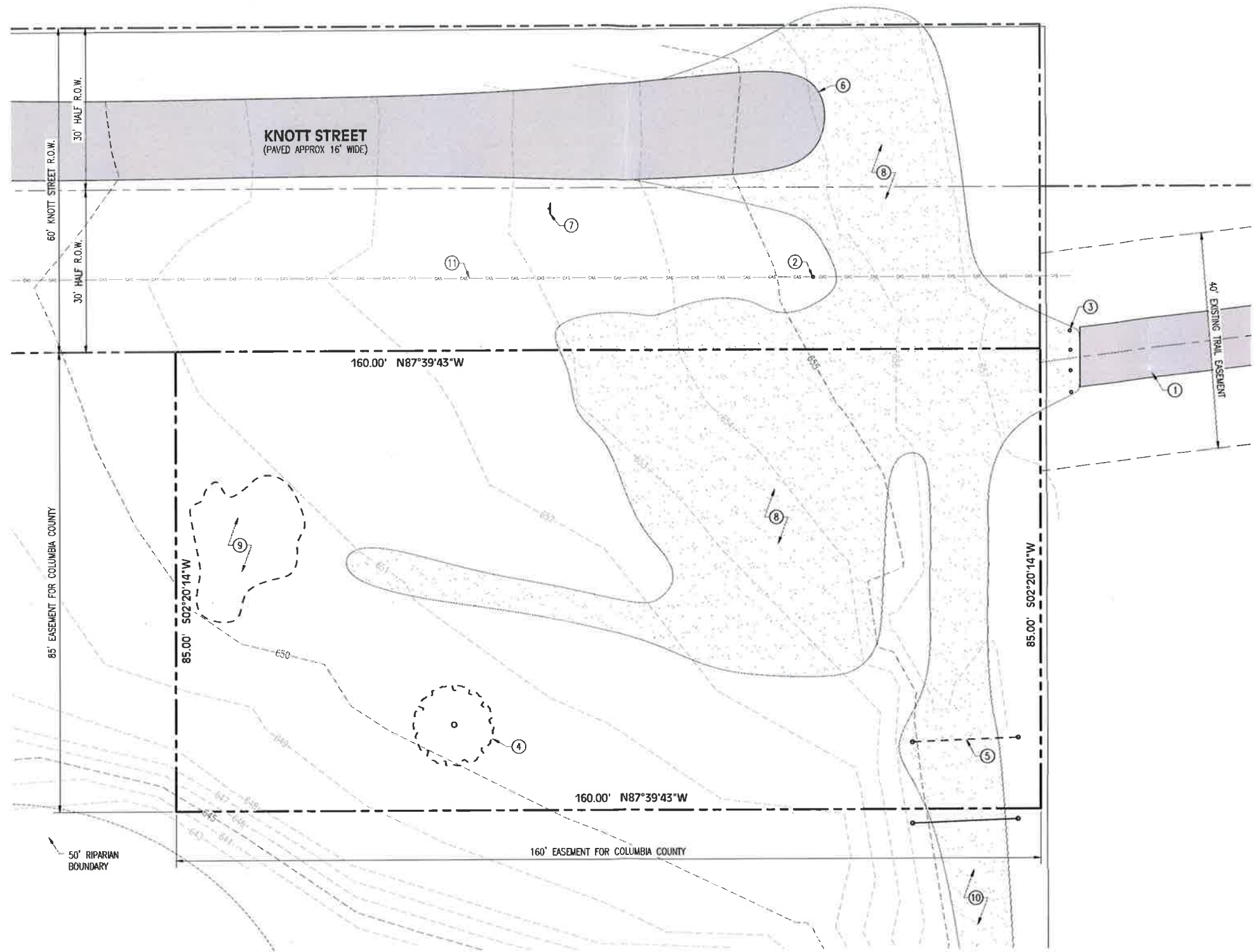
DATE: 02/18/2025  
REVISED PRINT  
VOID ALL PREVIOUS

REV.	REVISION RECORD	DATE
A	ISSUED FOR PERMIT	12/06/2024
B	SITE RELOCATED/RESIZED	02/18/2025



PROJ. NO.	3615	COVER SHEET
DWG. BY	BMK	HOLCE TRAILHEAD IMPROVEMENTS
APPR. BY		COLUMBIA COUNTY
FILE	D-3615-G-1	DATE: 11/21/2023

SHEET  
**G-1**



- EXISTING SITE KEYNOTES** ⓘ
- 1 EXISTING A.C. PAVED TRAIL
  - 2 EXISTING GAS MARKER TO REMAIN
  - 3 EXISTING REMOVABLE BOLLARDS
  - 4 EXISTING 10" FIR TREE TO BE REMOVED
  - 5 EXISTING GATE TO BE RELOCATED
  - 6 EXTENTS OF EXISTING ROADWAY
  - 7 EXISTING BIKE ROUTE SIGN TO BE RELOCATED
  - 8 EXISTING GRAVEL PAVING
  - 9 EXISTING CONCRETE DEBRIS PILE TO BE REMOVED
  - 10 EXISTING GRAVEL ACCESS DRIVE
  - 11 EXISTING 4" HIGH PRESSURE NATURAL GAS MAIN

**GAS MAIN NOTE:**  
 AN EXISTING NORTHWEST NATURAL 4" STEEL HIGH PRESSURE GAS MAIN IS LOCATED WITHIN THE SCOPE OF THIS PROJECT. ANY GRADING OR EXCAVATING TAKING PLACE IN PROXIMITY TO THIS GAS LINE MUST BE SUPERVISED BY A NORTHWEST NATURAL REPRESENTATIVE.

**EXISTING CONDITIONS PLAN**  
 SCALE: 1" = 10'



DATE: 02/18/2025  
**REVISED PRINT**  
 VOID ALL PREVIOUS

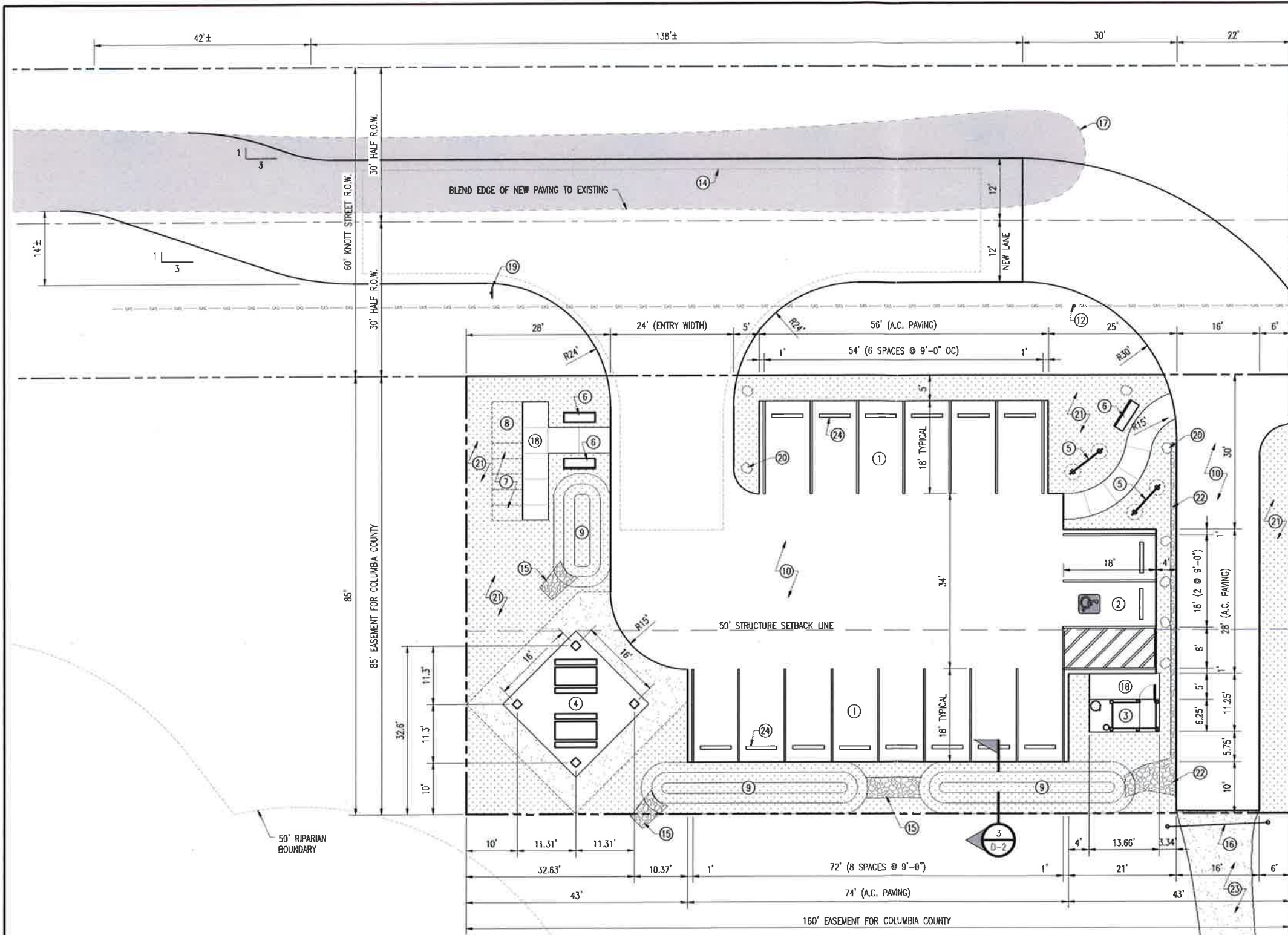
DATE: 09/16/2024  
**ISSUED FOR APPROVAL**

REV.	REVISION RECORD	DATE
A	ISSUED FOR PERMIT	12/06/2024
B	SITE RELOCATED/RESIZED	02/18/2025



PROJ. NO.	3615	EXISTING CONDITIONS PLAN
DWG. BY	BMK	HOLCE TRAILHEAD IMPROVEMENTS
APPR. BY		COLUMBIA COUNTY
FILE	D-3615-C-1	DATE 11/21/2023

**SHEET C-1**



**SITE PLAN KEYNOTES** (1)

- 1 9' x 18' PARKING STALLS W/ WHEELSTOPS  
SEE WHEELSTOP DETAIL 1 ON SHEET D-2
- 2 9' x 18' ACCESSIBLE STALL WITH 8' ACCESS AISLE  
SEE ODOT ACCESSIBLE PARKING DETAILS ON SHEET D-2
- 3 9' x 6' VAULT TOILET STRUCTURE, SEE SHEET A-2
- 4 20' x 20' PICNIC STRUCTURE, SEE SHEET A-1,  
WITH PICNIC TABLES BY COUNTY.
- 5 FREESTANDING INFORMATIONAL SIGNAGE, SEE SHT D-3
- 6 BENCHES BY COUNTY.
- 7 5 DESIGNATED BICYCLE PARKING SPACES,  
PROVIDE RIBBON RACK OR EQUAL BY COUNTY.
- 8 BICYCLE REPAIR STATION BY COUNTY
- 9 STORMWATER DETENTION/FILTRATION SWALES
- 10 ASPHALTIC CONCRETE (A.C) PAVING, SEE DETAIL 2/D-2.
- 11 EXISTING A.C. PAVED TRAIL
- 12 EXISTING GAS MARKER TO REMAIN
- 13 EXISTING REMOVABLE BOLLARDS
- 14 FIRE APPARATUS ALTERNATE HAMMERHEAD PER OREGON  
FIRE CODE FIGURE D103.1
- 15 OVERFLOW CHANNEL WITH 1 1/2 MINUS RIVER ROCK
- 16 EXISTING GATE RELOCATED TO THIS LOCATION
- 17 EXTENTS OF EXISTING ROADWAY
- 18 CONCRETE SIDEWALKS, TYPICAL  
4" THICK SLAB WITH #3 AT 12" O.C. EACH WAY,  
CENTERED IN SLAB. TOOLED CONTROL JOINTS AT  
APPROX 5'-0" O.C. BROOM FINISH.
- 19 RELOCATED BIKE ROUTE SIGNAGE
- 20 LARGE DECORATIVE BARRIER ROCKS OR LOG SEGMENTS
- 21 VEGETATED AREAS, TYPICAL, SEE LANDSCAPING PLAN
- 22 DRAINAGE CHANNEL WITH 1 1/2" MINUS RIVER ROCK
- 23 EXISTING GRAVEL ACCESS DRIVE
- 24 NEW CONCRETE WHEELSTOPS, SEE DETAIL 1/D-2

**LEGEND**

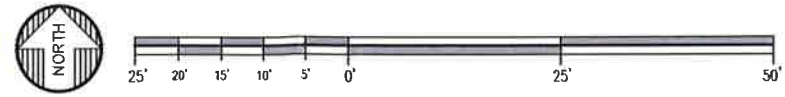
	PROJECT EASEMENT BOUNDARY LINE
	ADJACENT PARCEL PROPERTY LINE
	TRAIL EASEMENT BOUNDARY
	50' BUILDING SETBACK LINE
	SLOPE / FLOW DIRECTION
	A.C. PAVING
	VEGETATED AREAS / LANDSCAPING
	GRAVEL PAVING

**ADDITIONAL NOTES:**

1. SITE CONTOURS NOT SHOWN FOR CLARITY. SEE SHEET C-4 FOR CONTOURS AND GRADING INFORMATION.

**GAS MAIN NOTE:**  
AN EXISTING NORTHWEST NATURAL 4" STEEL HIGH PRESSURE GAS MAIN IS LOCATED WITHIN THE SCOPE OF THIS PROJECT. ANY GRADING OR EXCAVATING TAKING PLACE IN PROXIMITY TO THIS GAS LINE MUST BE SUPERVISED BY A NORTHWEST NATURAL REPRESENTATIVE.

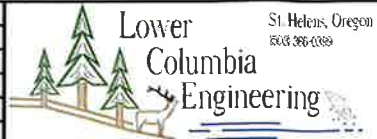
**PROPOSED SITE PLAN**  
SCALE: 1" = 10'



DATE: 02/18/2025  
REVISED PRINT  
VOID ALL PREVIOUS

DATE: 09/16/2024  
ISSUED  
FOR APPROVAL

REV.	REVISION RECORD	DATE
A	ISSUED FOR PERMIT	12/06/2024
B	SITE RELOCATED/RESIZED	02/18/2025



PROJ. NO.	3615	PROPOSED SITE PLAN
DWG. BY	BMK	HOLCE TRAILHEAD IMPROVEMENTS
APPR. BY		COLUMBIA COUNTY
FILE	D-3615-C-2	DATE 06/10/2024

SHEET  
**C-2**

**GENERAL ESC NOTES**

- DO NOT DISTURB A LARGER AREA THAN CAN BE STABILIZED BY THE END OF EACH WORK DAY.
- SOIL EXPOSURE SHALL BE MINIMIZED BY COVERING WITH STRAW, VEGETATION, MATTING OR MULCHING. DUST PRODUCING SURFACES SHALL BE SPRINKLED TO CONTROL DUST. RESEED DISTURBED AREAS WITH NATIVE GRASS SEEDINGS.
- LIMIT CONSTRUCTION ACCESS TO AS FEW OF ROUTES AS PRACTICALLY POSSIBLE. MINIMIZE TRACKING OF SOILS AND DEBRIS INTO ROADWAY.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ANY SEDIMENT THAT ACCUMULATES ON ADJACENT PROPERTIES.
- NECESSARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED ONCE CONSTRUCTION AREA IS STABILIZED OR AS DIRECTED BY THE LOCAL WATER ASSOCIATION.
- CONTRACTOR IS RESPONSIBLE FOR MINIMIZING PROPERTY DAMAGE. ANY DAMAGE SHALL BE REPAIRED BY CONTRACTOR.

**EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION**

- ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- THE "STAGING", SHALL BE MOVED TO AN APPROPRIATE LOCATION TO ACCOMMODATE IMPROVEMENTS.
- INLET PROTECTION SHALL BE IN-PLACE IMMEDIATELY FOLLOWING PAVING ACTIVITIES.

**GRADING, STREET & UTILITY EROSION AND SEDIMENT CONTROL CONSTRUCTION NOTES:**

- SEED USED FOR TEMPORARY OR PERMANENT SEEDING SHALL BE COMPOSED OF ONE OF THE FOLLOWING MIXTURES, UNLESS OTHERWISE AUTHORIZED:
  - DWARF GRASS MIX (MIN. 100 LB./AC.)
    - DWARF PERENNIAL RYEGRASS (80% BY WEIGHT)
    - CREeping RED FESCUE (20% BY WEIGHT)
  - STANDARD HEIGHT GRASS MIX (MIN. 100LB./AC.)
    - ANNUAL RYEGRASS (40% BY WEIGHT)
    - TURF-TYPE FESCUE (60% BY WEIGHT)
- SLOPE TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY.
- LONG TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE.
- TEMPORARY SLOPE STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, WOOD CHIPS, OR OTHER APPROVED MEASURES.
- STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. DURING "WET WEATHER" PERIODS, STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.
- EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR MATS, OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.
- AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, TIRE WASHES, STREET SWEEPING, AND VACUUMING MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.
- SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.
- AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CAN NOT BE CONSTRUCTED GREATER THAN 50' FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERMS OR TEMPORARY SETTLING PITS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.
- SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.
- AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN-OFF INTO THE STORM WATER SYSTEM.
- USE BMPs SUCH AS CHECK-DAMS, BERMS, AND INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.
- COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE SUBSTANCES TO THE STORM WATER SYSTEM.

**FOUNDATION NOTES**

- CONCRETE DESIGN IS BASED ON A COMPRESSIVE STRENGTH OF 2,500 PSI. ALL CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AFTER 28 DAYS.
- ALL REINFORCING SHALL BE SPLICED AND/OR BENT #4 BAR DIAMETERS TO FULLY DEVELOP THE CAPACITY OF THE BAR.
- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60, BILLET STEEL DEFORMED BARS.
- ALL FOUNDATIONS SHALL BE CARRIED DOWN TO THE ELEVATIONS SHOWN OR TO SUITABLE UNDISTURBED, FULLY CONSOLIDATED SOIL, FREE OF ORGANIC MATERIAL, WHICHEVER IS LOWER.
- ANY FILL MATERIAL UNDER SLAB AND FOUNDATIONS SHALL BE 3/4" MINUS CRUSHED ROCK, PLACED IN LAYERS NOT EXCEEDING 8" IN DEPTH AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY. ANY SLOPES SHALL BE 2 HORIZONTAL UNITS FOR 1 VERTICAL UNIT MAXIMUM, COMPACTION TESTING IS REQUIRED FOR ANY FILL OVER 12" THICK.
- ALL BACKFILL SHALL BE EVENLY PLACED IN LAYERS NOT EXCEEDING 8" IN DEPTH AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY. REMOVE ANY STANDING WATER PRIOR TO BACKFILLING. BACKFILL SHALL NOT BE PLACED AGAINST WALL UNTIL SUFFICIENT STRENGTH AND SUPPORT HAS BEEN ACHIEVED.
- VERIFY THAT ALL APPROPRIATE UTILITIES HAVE BEEN INSTALLED PRIOR TO EACH PHASE OF WORK.
- ALL CONCRETE MIX POURED IN A NON-CONTROLLED ENVIRONMENT SHALL CONTAIN 3% AIR ENTRAINMENT PER ASTM C260. ALL WALKING SURFACES SHALL RECEIVE A SLIP RESISTANT FINISH.
- CONTRACTOR IS RESPONSIBLE FOR ALL SITE DRAINAGE ISSUES PER CIVL ENGINEER. ALL FINISHED GRADES SHALL SLOPE AWAY FROM ALL STRUCTURES TO APPROPRIATE COLLECTION SYSTEM.
- CONTRACTOR IS RESPONSIBLE FOR PROPERLY LOCATING ALL DESIGN ELEMENTS PRIOR TO STARTING CONSTRUCTION.
- GEOTECHNICAL ISSUES AND DESIGN ARE BY RAPID SOIL SOLUTIONS. GEOTECHNICAL VALUES HAVE BEEN BASED ON THE GEOTECHNICAL REPORT DATED 30 JULY 2024 WITH A BEARING CAPACITY OF 2,000 PSF.

**FINISH NOTES**

- OWNER IS RESPONSIBLE FOR SECURITY ISSUES SUCH AS DOOR LOCKS, ALARMS AND VIEW HOLES.
- ALL FINISH ISSUES SHALL BE AGREED UPON BY CONTRACTOR AND OWNER.
- ALL EXTERNAL HORIZONTAL TRIM SHALL HAVE GALVANIZED Z-FLASHING TO PREVENT WATER FROM ENTERING WALL.
- ALL JOINTS SHALL BE PROPERLY SEALED AND ALL SURFACES SHALL BE PRIMED AND PAINTED WITH A MINIMUM OF TWO FINISH COATS, COLOR BY OWNER.
- BATHROOMS AND SHOWER ROOMS ARE TO HAVE A SMOOTH, HARD, NON-ABSORBENT SURFACE THAT EXTENDS UP THE WALL A MINIMUM OF 4 INCHES. WALLS AT TOILETS AND URINALS SHALL HAVE AN SMOOTH, HARD, NON-ABSORBENT SURFACE THAT EXTENDS UP TO A HEIGHT OF 4 FEET ABOVE FINISH FLOOR AND SHOWER STALLS TO 6 FEET ABOVE FINISH FLOOR PER THE REQUIREMENTS OF SECTION 1209.

**PROJECT SPECIFIC PLANS, DETAILS, AND NOTES TAKE PRECEDENCE OVER THESE GENERAL NOTES**

**GENERAL NOTES**

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST OSSC (WITH APPROPRIATE AMENDMENTS) NDS, AISC AND ACI SPECIFICATIONS.
- CONTACT ENGINEER WITH ANY UNCERTAINTIES PRIOR TO PROCEEDING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SUPPORT OF STRUCTURES AND EMBANKMENTS.
- DO NOT SCALE DRAWINGS.
- ALL SITE DESIGN ISSUES ARE THE RESPONSIBILITY OF OTHERS.
- ALL SUPPLY & DRAINAGE PIPE WILL MEET THE REQUIREMENTS OF THE CURRENT OPSC.

**STEEL NOTES**

- ALL STEEL SHALL BE NEW DOMESTIC STOCK. HOT ROLLED SHAPES AND PLATES SHALL CONFORM TO ASTM A992 WITH A MINIMUM YIELD STRENGTH OF 50,000 PSI. SQUARE AND RECTANGULAR TUBING SHALL BE COLD FORMED, ELECTRIC RESISTANCE WELDED AND CONFORM TO ASTM A500-GRADE B, WITH A MINIMUM YIELD STRENGTH OF 46,000 PSI. ROUND PIPE SHALL CONFORM TO ASTM A53-GRADE B, WITH A MINIMUM YIELD STRENGTH OF 35,000 PSI. LIGHT GAUGE SHAPES SHALL CONFORM TO ASTM A1011, GRADE 55, WITH A MINIMUM YIELD STRENGTH OF 55 KSI.
- ALL WELDING SHALL BE OF SIZE AND TYPE APPROPRIATE FOR THE MEMBERS BEING WELDED PER APPROPRIATE AWS SPECIFICATIONS USING E70XX ELECTRODES. IN GENERAL ALL JOINTS SHALL BE FULLY WELDED WITH A FILLET WELD THAT IS 1/16" LESS THAN THE THINNEST MEMBER BEING JOINED, UNLESS NOTED OTHERWISE. CONTACT ENGINEER WITH ANY UNCERTAINTIES PRIOR TO PROCEEDING. TAKE EXTREME CARE TO NOT OVERHEAT EMBEDS IN CONCRETE.
- ALL TEMPORARY SHORING FOR CONSTRUCTION PURPOSES AND SAFETY PROCEDURES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL STRUCTURAL STEEL SHALL BE POWDER COATED, HOT DIPPED GALVANIZED, OR PRIMED AND PAINTED PER INDUSTRIAL STANDARDS. VERIFY FINISH WITH OWNER.
- ALL BOLT ASSEMBLIES SHALL INCLUDE BOLT, NUT AND LARGE HARDENED FLAT WASHER. BOLTS SHALL CONFORM TO ASTM A325, UNLESS NOTED OTHERWISE. TIGHTEN ALL BOLTS UTILIZING THE "TURN-OF-NUT" METHOD.
- INSTALL ALL ITEMS PER MANUFACTURER'S SPECIFICATIONS.
- ALL DIMENSIONS SHALL BE VERIFIED BY CONTRACTOR PRIOR TO PROCEEDING. CONTRACTOR IS RESPONSIBLE FOR DEVELOPING FABRICATION SHOP DRAWINGS. SUCH DRAWINGS SHALL BE APPROVED BY THE ENGINEER PRIOR TO PROCEEDING.

**CONCRETE FLOORS & SLABS**

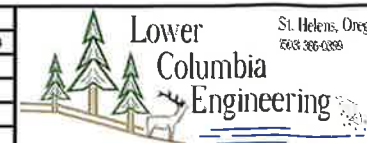
- ALL INTERIOR CONCRETE FLOORS ARE TO HAVE A SMOOTH HARD TROWELED FINISH.
- ALL EXTERIOR SLABS SHALL HAVE BROOM FINISH.

**APPLICABILITY**

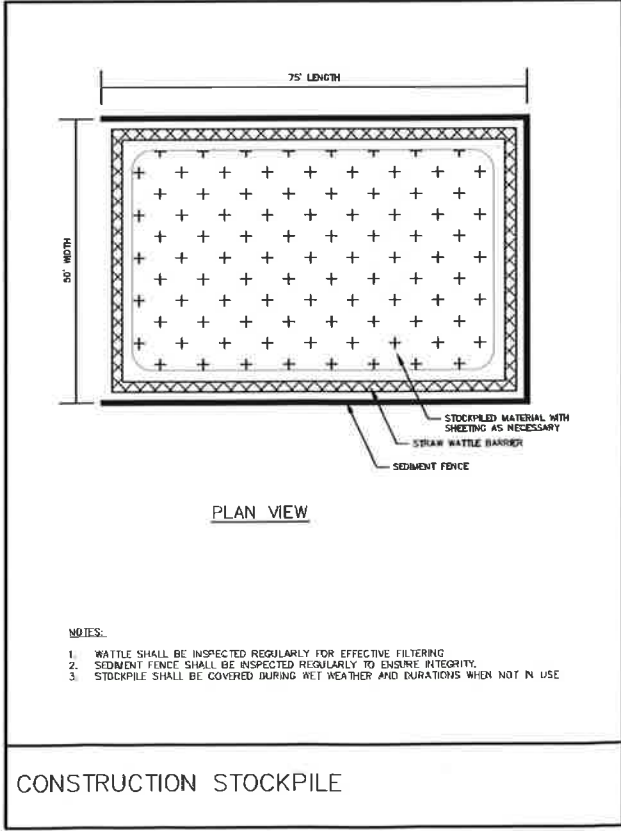
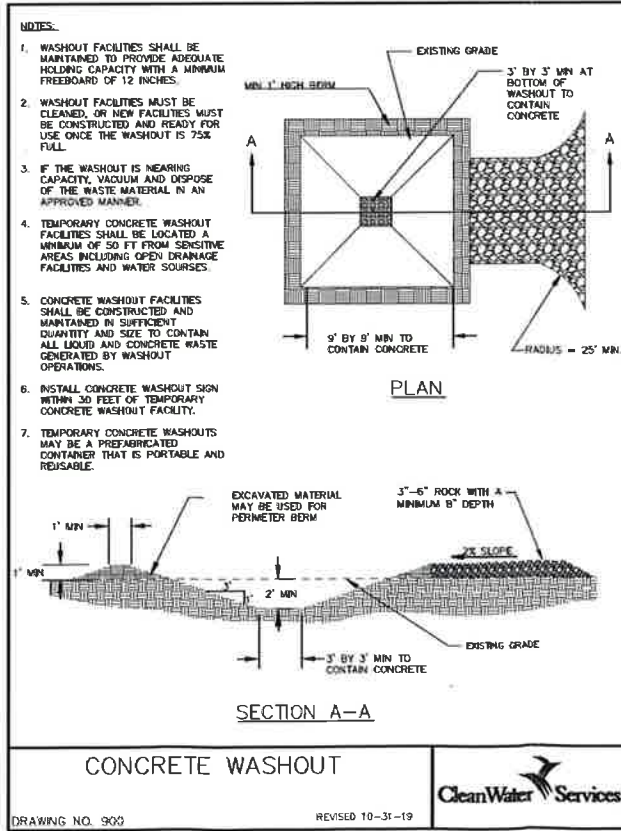
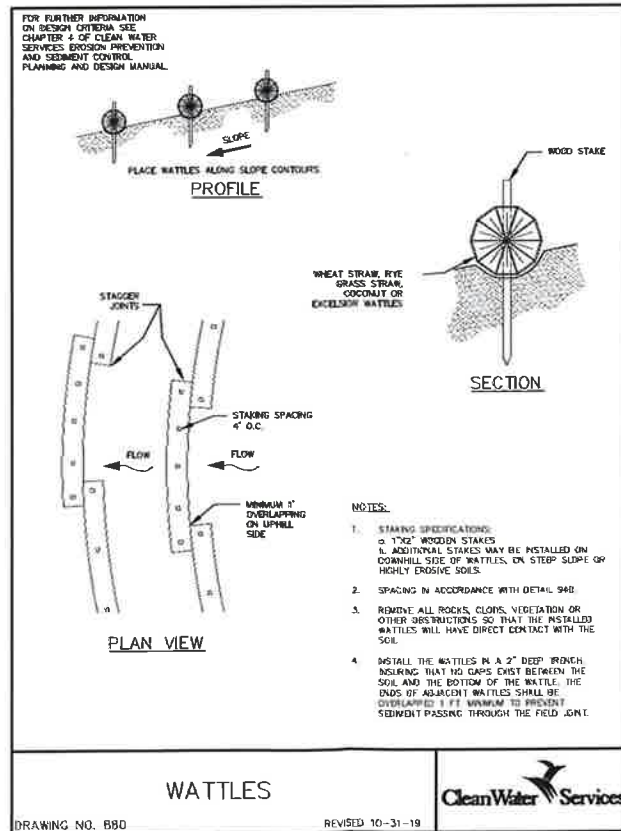
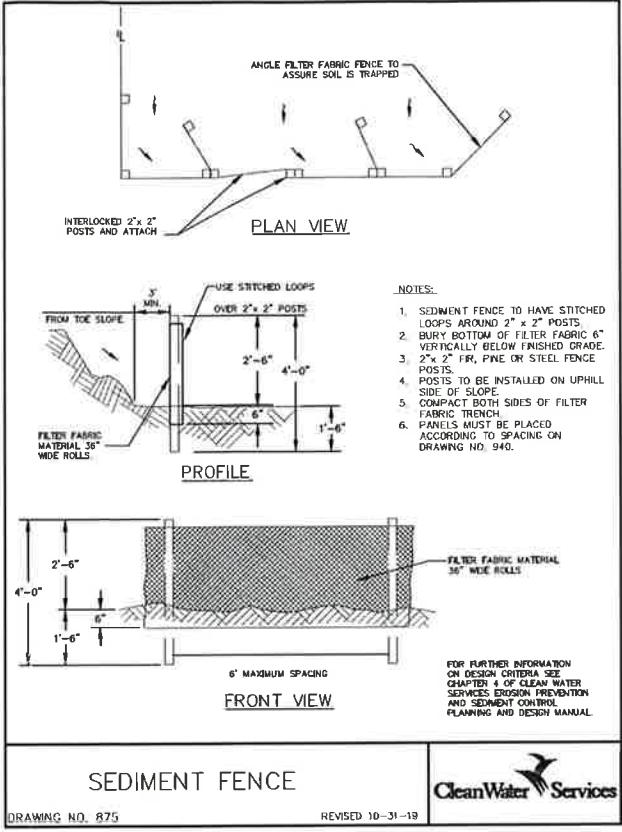
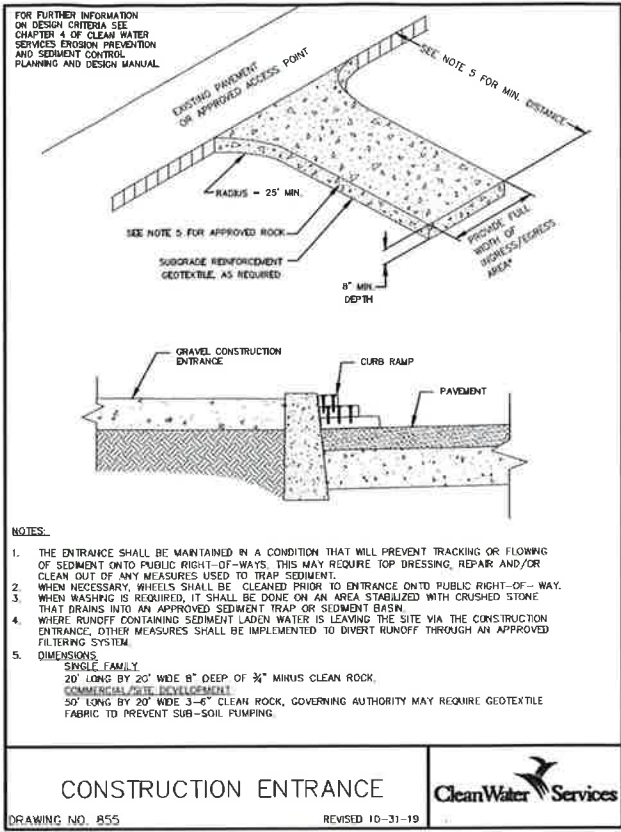
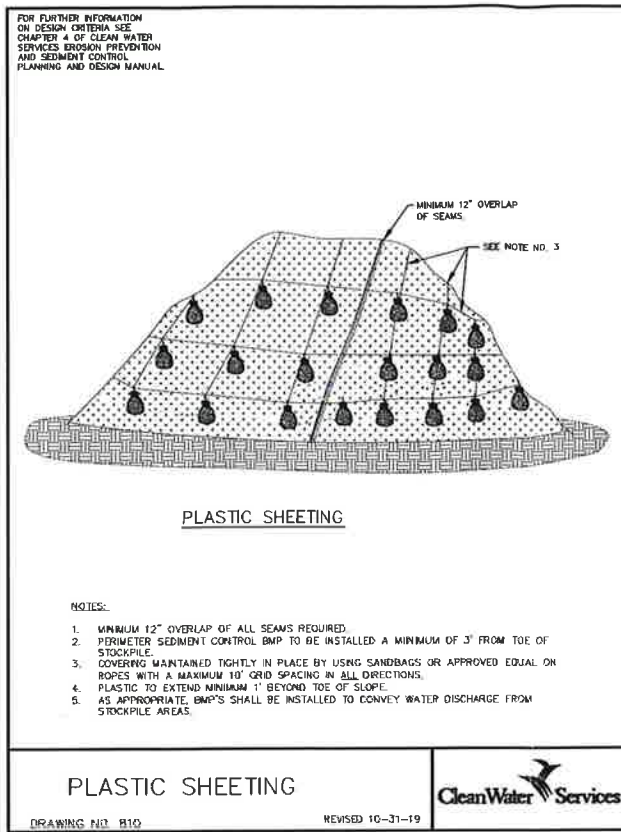
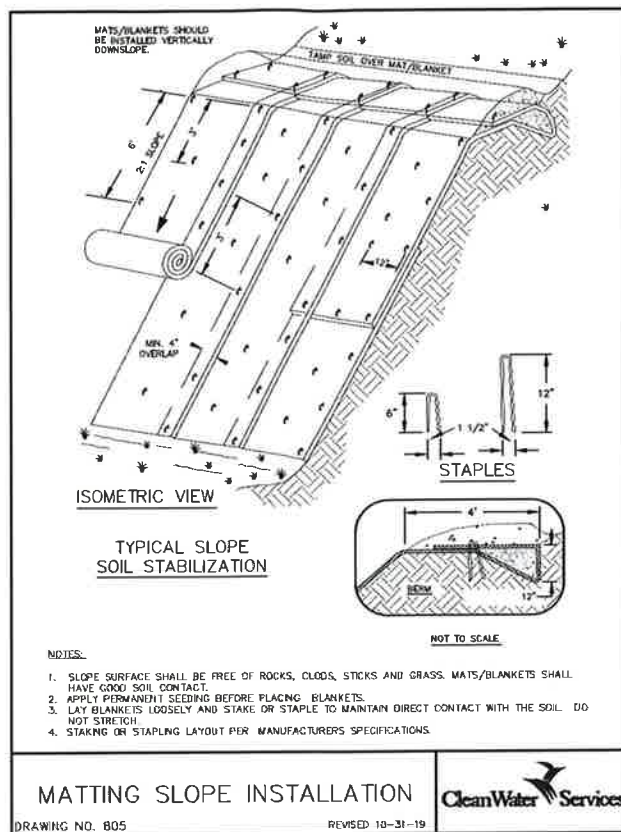
THE PURPOSE OF THIS SHEET IS TO PROVIDE GENERAL INFORMATION AND REQUIREMENTS FOR ITEMS THAT ARE NOT SPECIFICALLY ADDRESSED WITHIN THE DESIGN PLANS. NOT ALL OF THE GENERAL NOTES OR SPECIFICATIONS PROVIDED ON THIS SHEET ARE APPLICABLE TO THIS PROJECT. SPECIFIC INFORMATION INCLUDED IN THE DESIGN PLANS TAKES PRECEDENCE OVER THE GENERAL NOTES PROVIDED ON THIS SHEET. FOR ASPECTS OF THE PROJECT THAT ARE NOT SPECIFICALLY ADDRESSED IN THE DESIGN PLANS OR ON THIS SHEET, THE CONTRACTOR SHOULD FOLLOW COMMON INDUSTRY STANDARDS AND LEVEL OF CARE FOR THIS TYPE OF CONSTRUCTION. FOR SUCH ITEMS, THE CONTRACTOR SHALL PROVIDE A SUBMITTAL THAT DESCRIBES THE PROPOSED WORK IN DETAIL. APPROVAL OF THIS SUBMITTAL BY THE OWNER OR THEIR REPRESENTATIVE IS REQUIRED PRIOR TO PROCEEDING WITH ANY CONSTRUCTION ACTIVITY. CONTACT THE OWNER OR THEIR REPRESENTATIVE WITH ANY QUESTIONS OR UNCERTAINTIES PRIOR TO PROCEEDING WITH BIDDING OR EXECUTING ANY CONSTRUCTION ACTIVITY.

DATE: 12/06/2024
REVISED PRINT
VOID ALL PREVIOUS
DATE: 09/16/2024
ISSUED FOR APPROVAL

REV.	REVISION RECORD	DATE
A	ISSUED FOR PERMIT	12/06/2024



PROJ. NO. 3615	GENERAL NOTES
DWG. BY BMK	HOLCE TRAILHEAD IMPROVEMENTS
APPR. BY	COLUMBIA COUNTY
FILE D-3615-G-2	DATE 11/21/2023



DATE: 12/06/2024  
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PROJ. NO. 3615	EROSION & SEDIMENT CONTROL DETAILS
DWG. BY BMK	HOLCE TRAILHEAD IMPROVEMENTS
APPR. BY	COLUMBIA COUNTY
FILE D-3615-D-1	DATE 11/21/2023

SHEET D-1

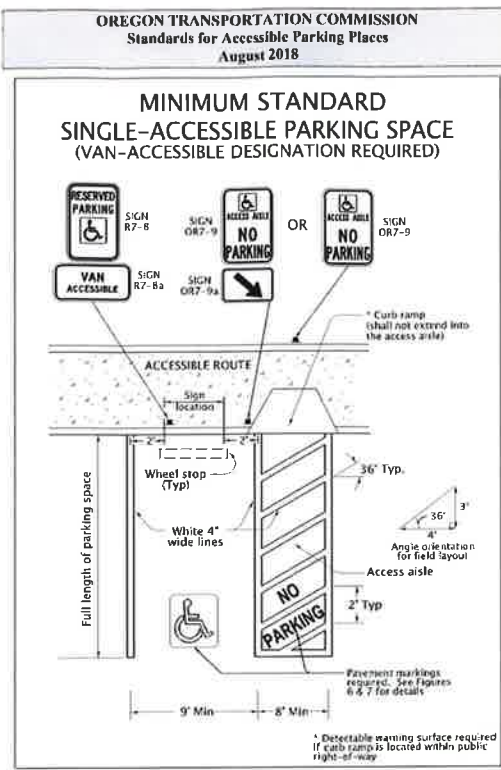


Figure 1

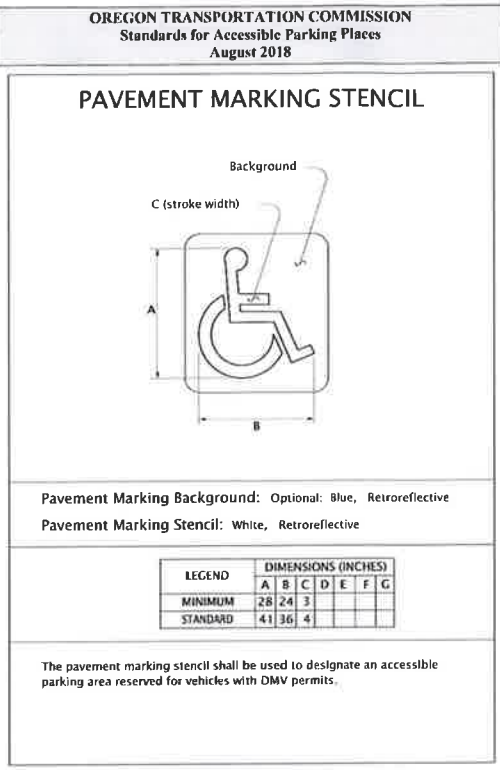
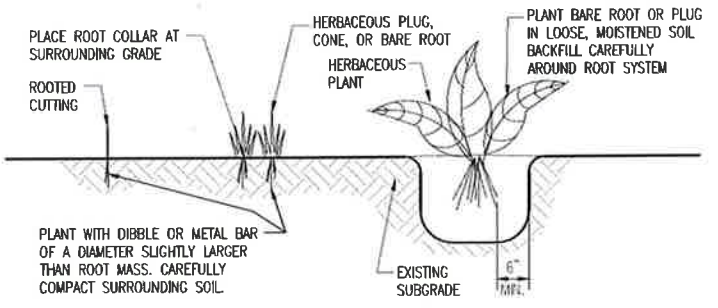
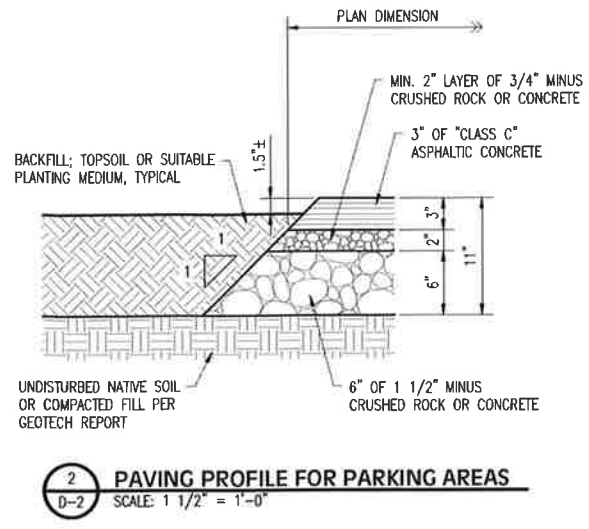
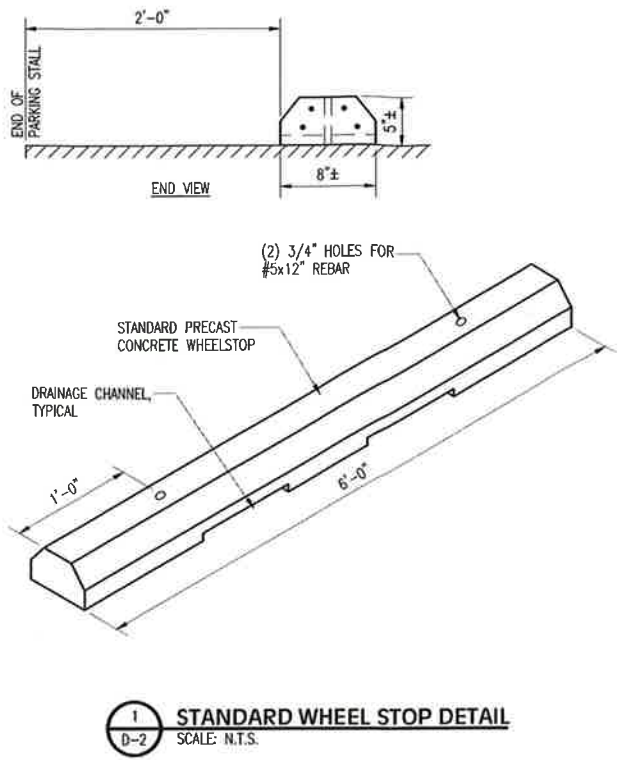


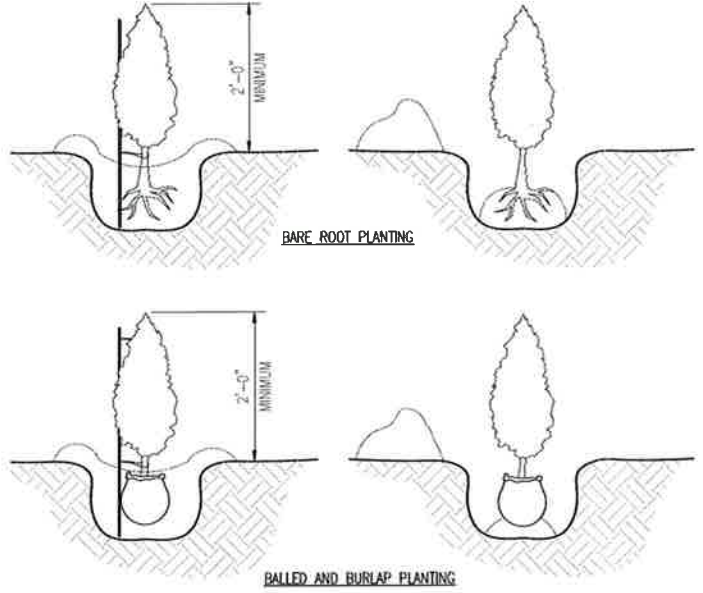
Figure 6



Figure 7

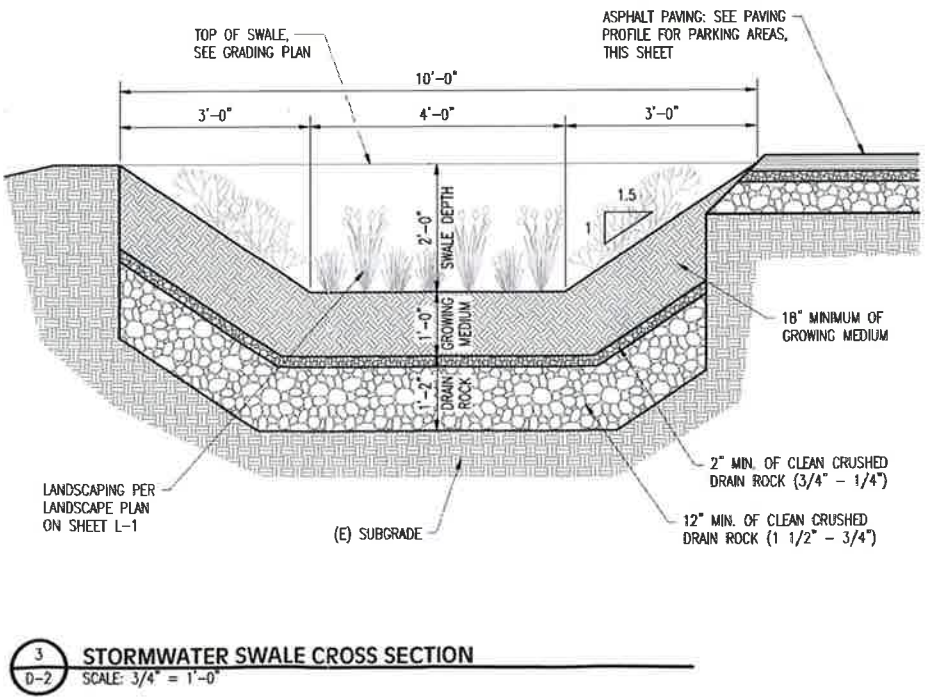


BAREROOT, PLUG ROOTED CUTTING DETAIL



TYPICAL PLANTING DETAILS

- BARE ROOT PLANTING NOTES:**
- SOAK BARE ROOT PLANTS FOR 24 HRS BEFORE PLANTING.
  - DIG HOLE APPROXIMATELY 2x ROOT BALL DIAMETER.
  - BACKFILL A CONE SHAPED MOUND IN THE HOLE.
  - SPREAD ROOTS EVENLY ON MOUND.
  - FILL 3/4 FULL, COMPACT GENTLY AND ADJUST PLANT ALIGNMENT.
  - COMPLETE FILL AND CREATE RIDGE AROUND PLANT FOR A WATERING BASIN.
  - WATER THOROUGHLY.
  - STAKE AS NECESSARY.
- BALLED AND BURLAP PLANTING NOTES:**
- DIG HOLE TWICE AS LARGE AS ROOT BALL.
  - BACKFILL A CONE SHAPED MOUND IN THE HOLE.
  - INSTALL TREE AND OPEN BURLAP TO FULLY EXPOSE SURFACE SOIL.
  - FILL 3/4 FULL, COMPACT GENTLY AND ADJUST PLANT ALIGNMENT.
  - COMPLETE FILL AND CREATE RIDGE AROUND PLANT FOR A WATERING BASIN.
  - STAKE AS NECESSARY.
  - WATER THOROUGHLY.



3 STORMWATER SWALE CROSS SECTION

- PLANTING NOTES**
- PLANTING PLAN SHOULD BE CONSIDERED A GENERAL GUIDELINE ONLY. APPROXIMATE PLANT NUMBERS ARE BASED ON SPACING AS STATED. PLANT MATURITY AND SIZE WILL DICTATE SPACING.
  - SPECIES SELECTION MAY BE ADJUSTED BASED ON AVAILABILITY.
  - PLANTS SHOULD BE SPACED AND GROUPED IN RANDOM FASHION TO REPLICATE A NATURAL LOOKING CONFIGURATION.
  - PLANTS SHOULD BE INSTALLED IN THE FALL AFTER THE RAIN HAS ARRIVED (USUALLY AFTER OCTOBER 15TH).
  - PLANTS SHOULD BE WATERED DEEPLY APPROXIMATELY ONCE PER MONTH FOR THE FIRST SUMMER AFTER PLANTING AND ONCE IN AUGUST THE SECOND SUMMER AFTER PLANTING.
  - PLANTS SHALL BE PLACED WITH SUNLIGHT NEED TAKEN INTO CONSIDERATION.
  - PRIOR TO PLANTING IDENTIFY HEALTHY PLANTS TO REMAIN OR TO BE SALVAGED.
  - FINAL PLANT PLACEMENT AND RELATED PLANT SCHEDULES SHALL BE APPROVED BY OWNER PRIOR TO SUBMITTING TO CITY FOR APPROVAL.
  - MULCH SHALL BE ADDED BETWEEN PLANTINGS TO PREVENT EROSION.
  - TOPSOIL MIXTURE SHALL BE A STANDARD FROM A SAND AND GRAVEL SUPPLIER.
  - USE ROOT GUARD, MINIMUM SIZE 10"L x 1.5"D CENTERED ON TREE FOR ANY TREES WITHIN 5 FEET OR LESS OF SIDEWALKS OR PAVED AREAS.

DATE: 12/06/2024  
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DATE: 09/16/2024  
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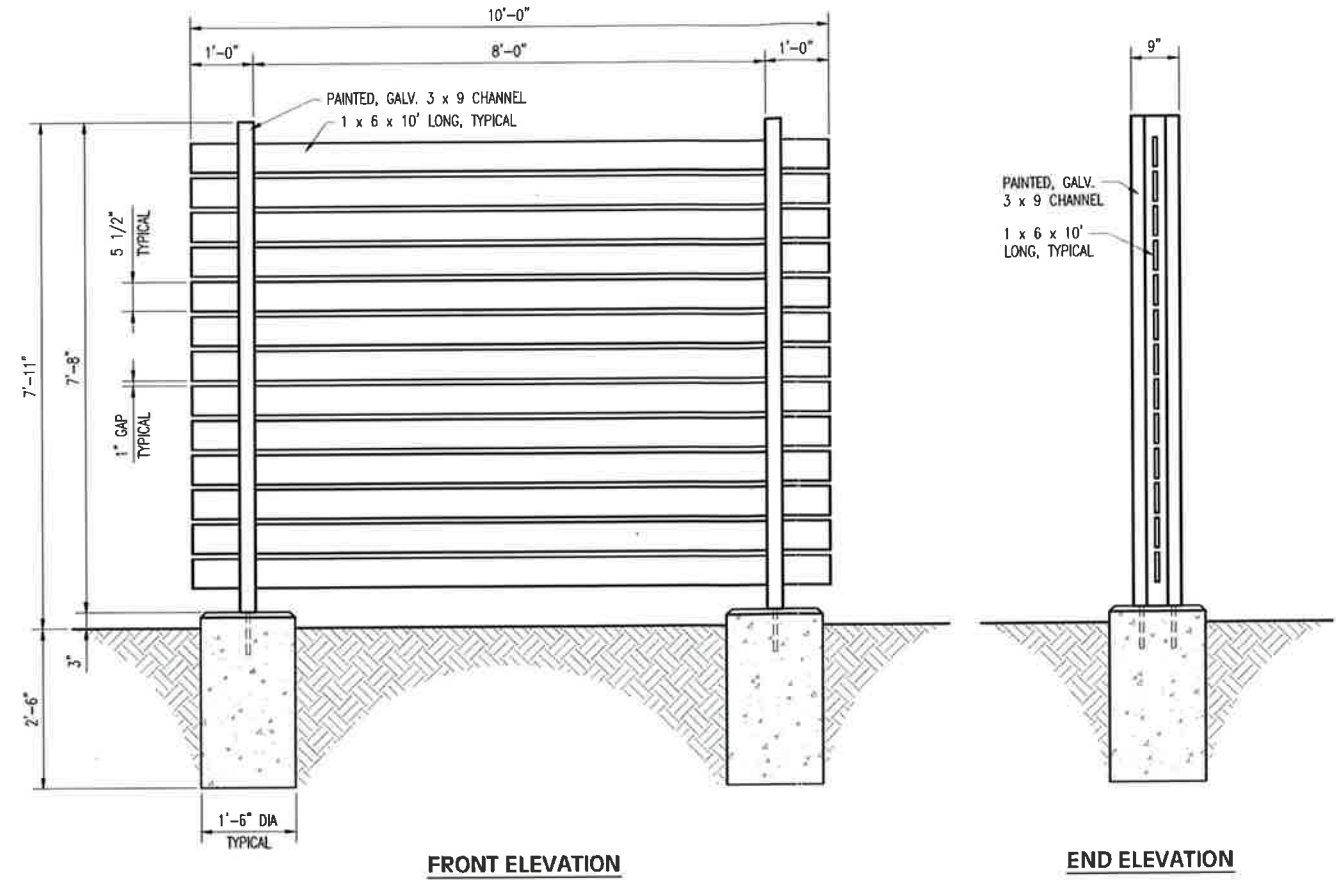
REV.	REVISION RECORD	DATE
A	ISSUED FOR PERMIT	12/06/2024



PROJ. NO. 3615	CIVIL DETAILS
OWG. BY BMK	HOLCE TRAILHEAD IMPROVEMENTS
APPR. BY	COLUMBIA COUNTY
FILE D-3615-D-2	DATE 11/21/2023



HOLCE TRAILHEAD SIGNAGE



1 TRAILHEAD SIGNAGE ASSEMBLY DETAIL  
SCALE: 3/4" = 1'-0"

REQUIRED WAIVER OF REMONSTRANCE SIGNAGE PER PLANNING DEPT:  
SIGNAGE SHALL BE PROVIDED INDICATING THAT THE TRAILHEAD AND C-Z TRAIL ARE WITHIN A FORESTRY RESOURCE AREA AND TRAIL USERS SHOULD BE AWARE THAT LOGGING RELATED ACTIVITIES MAY BE OCCURRING IN THE AREA. (FINAL WORDING OF SIGNAGE TO BE VERIFIED WITH THE COUNTY.)



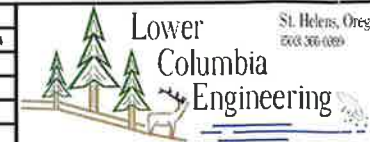
EXAMPLE INTERPRETIVE SIGNAGE

2 EXAMPLE TRAILHEAD SIGNAGE  
SCALE: 3/4" = 1'-0"

DATE: 12/06/2024  
REVISED PRINT  
VOID ALL PREVIOUS

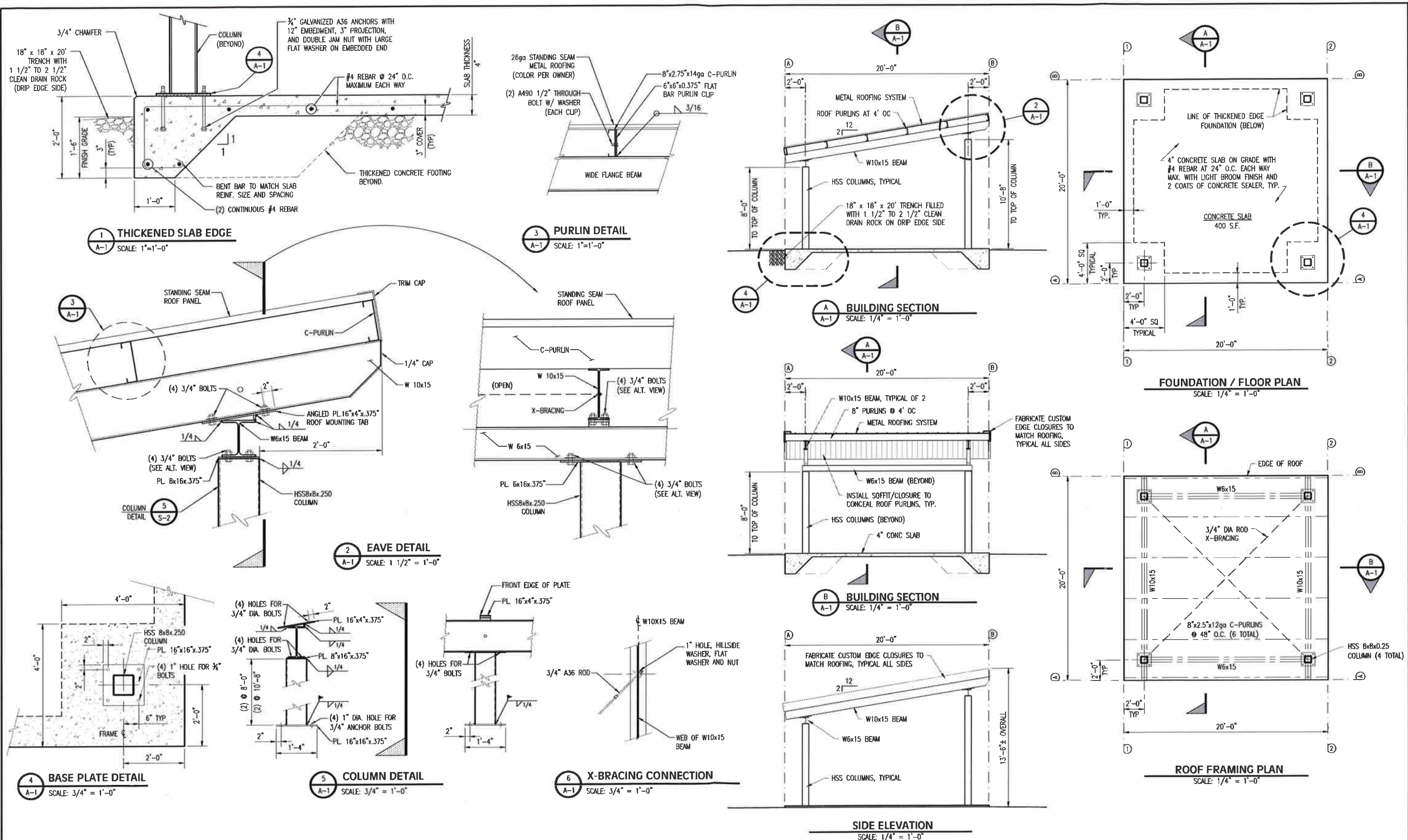
REV.	REVISION RECORD	DATE
1	ISSUED FOR PERMIT	12/06/2024

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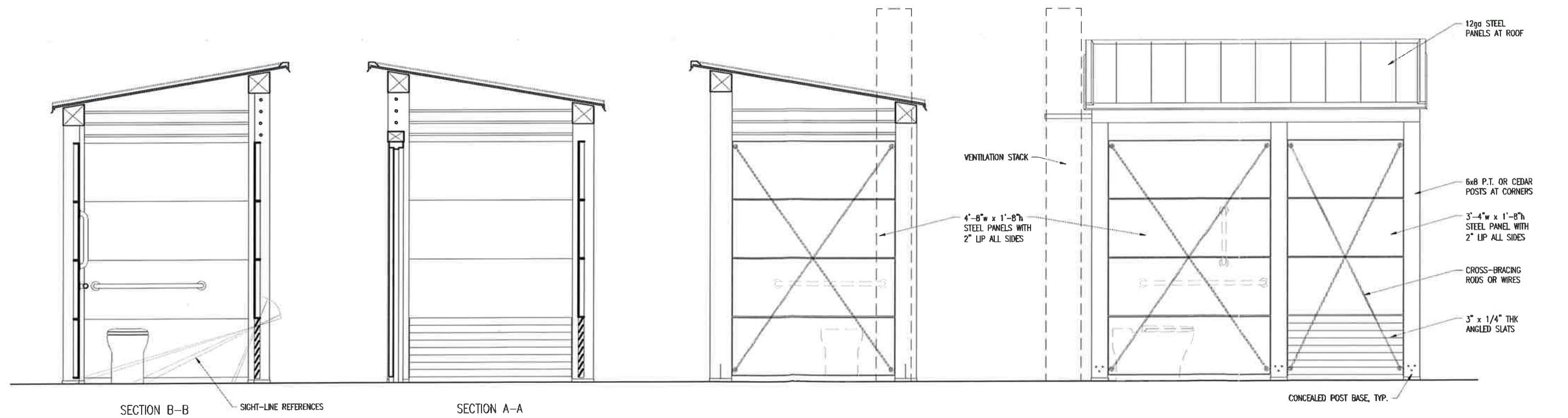
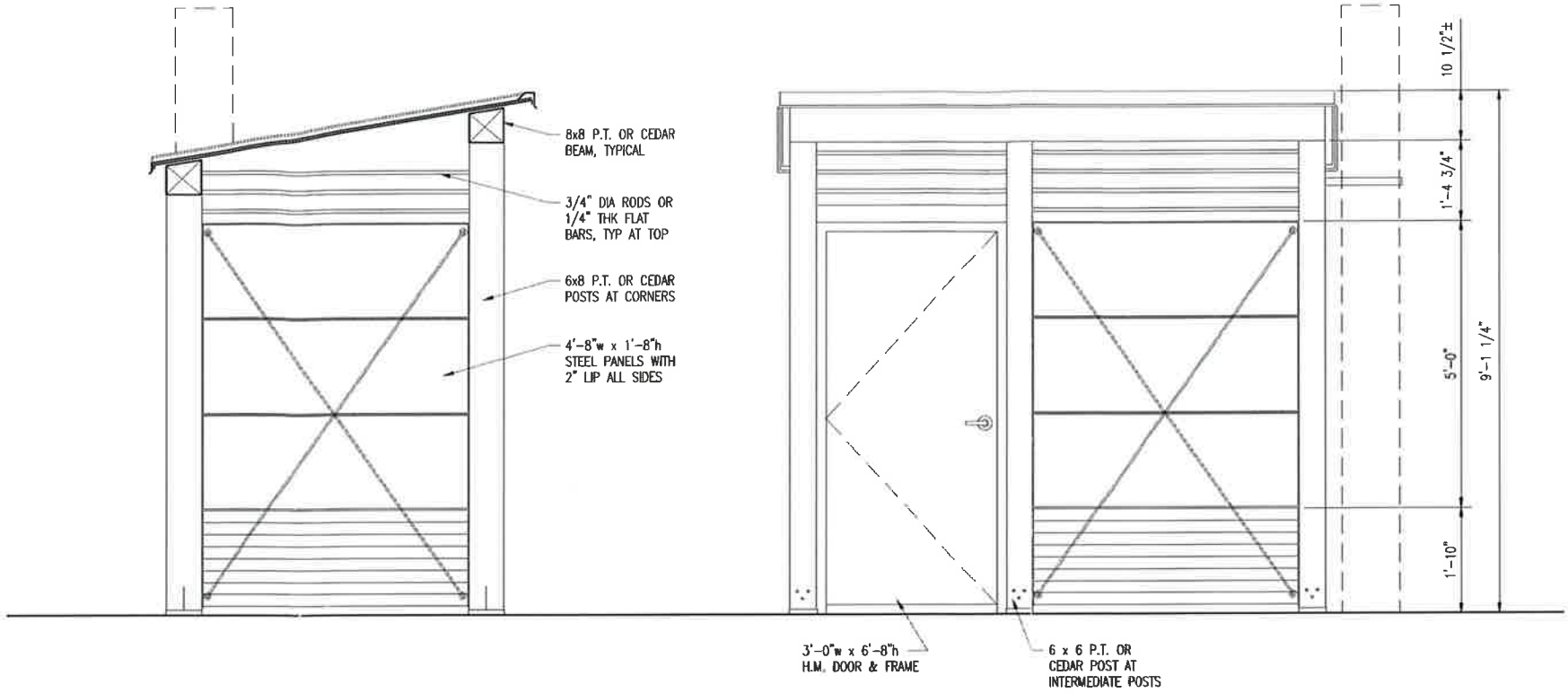
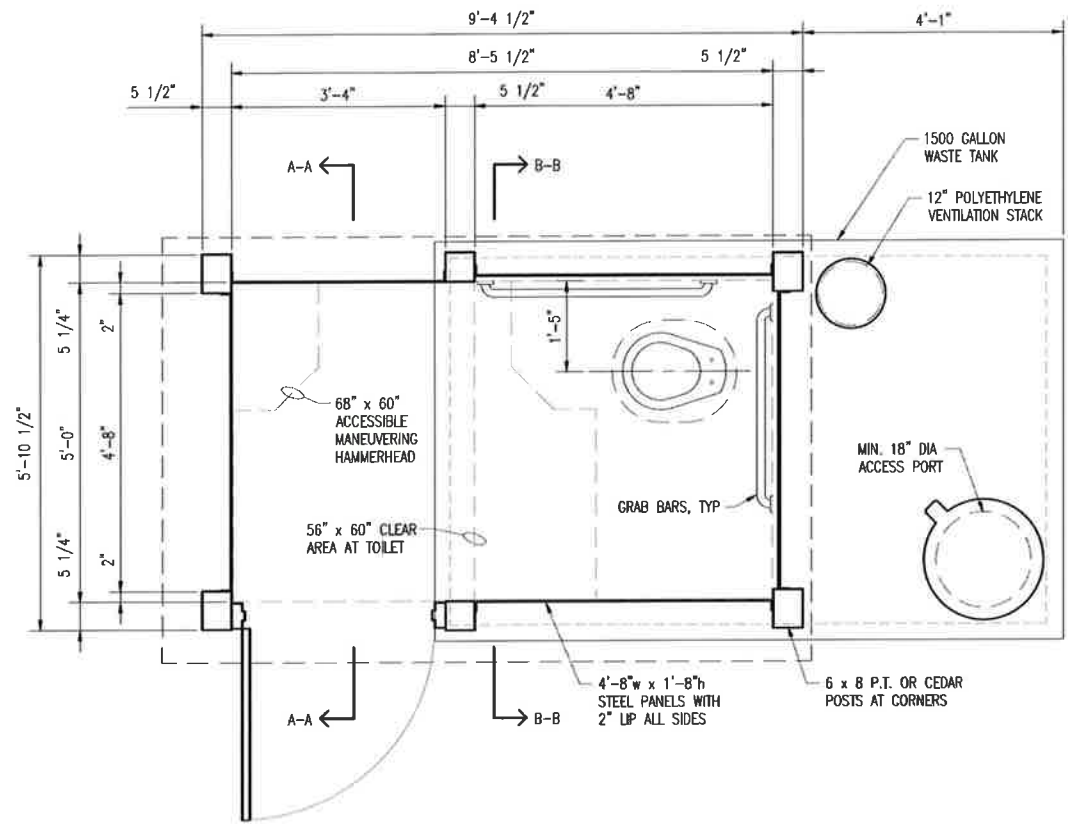
PROJ. NO.	3615	SIGNAGE DETAILS
DWG. BY	BMK	HOLCE TRAILHEAD IMPROVEMENTS
APPR. BY	COLUMBIA COUNTY	SHEET
FILE	D-3615-D-3	DATE 11/21/2023

D-3



DATE: 12/06/2024 REVISED PRINT VOID ALL PREVIOUS	REV. REVISION RECORD	DATE		PROJ. NO. 3615	PICNIC SHELTER
DATE: 09/16/2024 ISSUED FOR APPROVAL	A ISSUED FOR PERMIT	12/06/2024		St. Helens, Oregon 503.866.0389	OWG. BY BMK
				APPR. BY	COLUMBIA COUNTY
				FILE D-3615-A-1	DATE 11/21/2023

SHEET **A-1**



1 CONCEPT DRAWINGS  
 A-1 SCALE: 3/4" = 1'-0"

DATE: 12/06/2024  
 REVISED PRINT  
 VOID ALL PREVIOUS

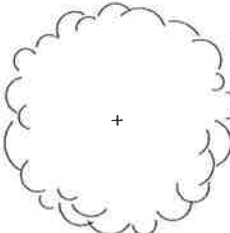
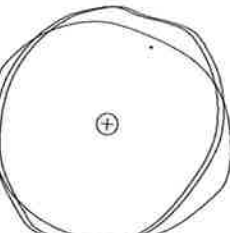


















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PROJ. NO. 3615	VAULT TOILET
DWG. BY: BMK	HOLCE TRAILHEAD IMPROVEMENTS
APPR. BY:	COLUMBIA COUNTY
FILE: D-3615-A-2	DATE: 06/10/2024

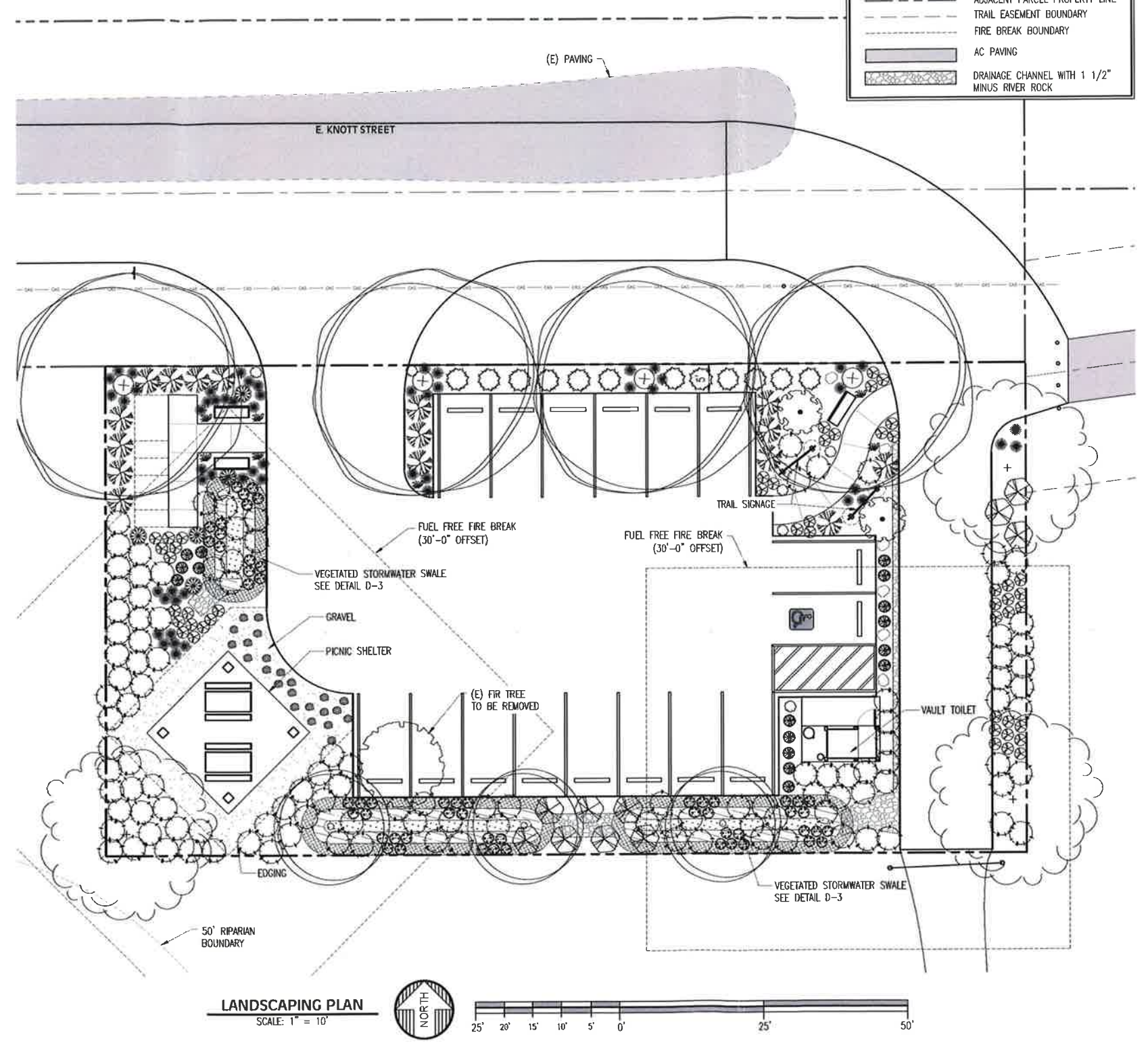
SHEET A-2

**PLANTING LEGEND**

-  CASCARA (TREE)  
30'H x 30'W  
QUANTITY: 3
-  OREGON WHITE OAK  
40'H x 40'W IN 10 YEARS  
QUANTITY: 4
-  QUAKING ASPEN  
40'H x 20'W  
QUANTITY: 3
-  PACIFIC WAX MYRTLE  
8'H x 8'W  
QUANTITY: 2
-  MANZANITA "SUNSET"  
4'H x 4'-6" W  
QUANTITY: 16
-  PROSTRATE ROCKROSE  
2'H x SPREADING  
QUANTITY: 16
-  REDWING DOGWOOD "KELSEY"  
2'H x 2'W  
QUANTITY: 55
-  DOUGLAS SPIRAEA  
6'H x 5'W  
QUANTITY: 10
-  TALL OREGON GRAPE  
15'H x 8'W  
QUANTITY: 12
-  BEACH DAISY  
1'H x 2'W  
QUANTITY: 6
-  PACIFIC COAST IRIS  
1'H x 2'W  
QUANTITY: 7
-  RIVERBANK LUPINE  
3'H x 3'W  
QUANTITY: 5
-  COMMON YARROW  
2'H x 2'W  
QUANTITY: 57
-  CREEPING OREGON GRAPE  
2'H x 4'W  
QUANTITY: 121
-  SLENDER CINQUEFOIL  
2'H x 2'W  
QUANTITY: 48
-  BASALT STEPPERS  
18" DIAMETER
-  LARGE DECORATIVE BARRIER  
ROCKS OR LOG SEGMENTS
-  BOTTOM OF SWALE  
DAGGER-LEAF RUSH  
PLANTED 18" O.C.
-  MIDDLE OF SWALE  
TUFTED HAIRGRASS  
PLANTED 18" O.C.
-  TOP OF SWALE / GROUND COVER MIX OF  
KAMIKIKICK AND BEACH DAISY  
PLANTED 18" O.C.

**LEGEND**

-  PROJECT EASEMENT BOUNDARY LINE
-  ADJACENT PARCEL PROPERTY LINE
-  TRAIL EASEMENT BOUNDARY
-  FIRE BREAK BOUNDARY
-  AC PAVING
-  DRAINAGE CHANNEL WITH 1 1/2" MINUS RIVER ROCK



**LANDSCAPING PLAN**  
SCALE: 1" = 10'

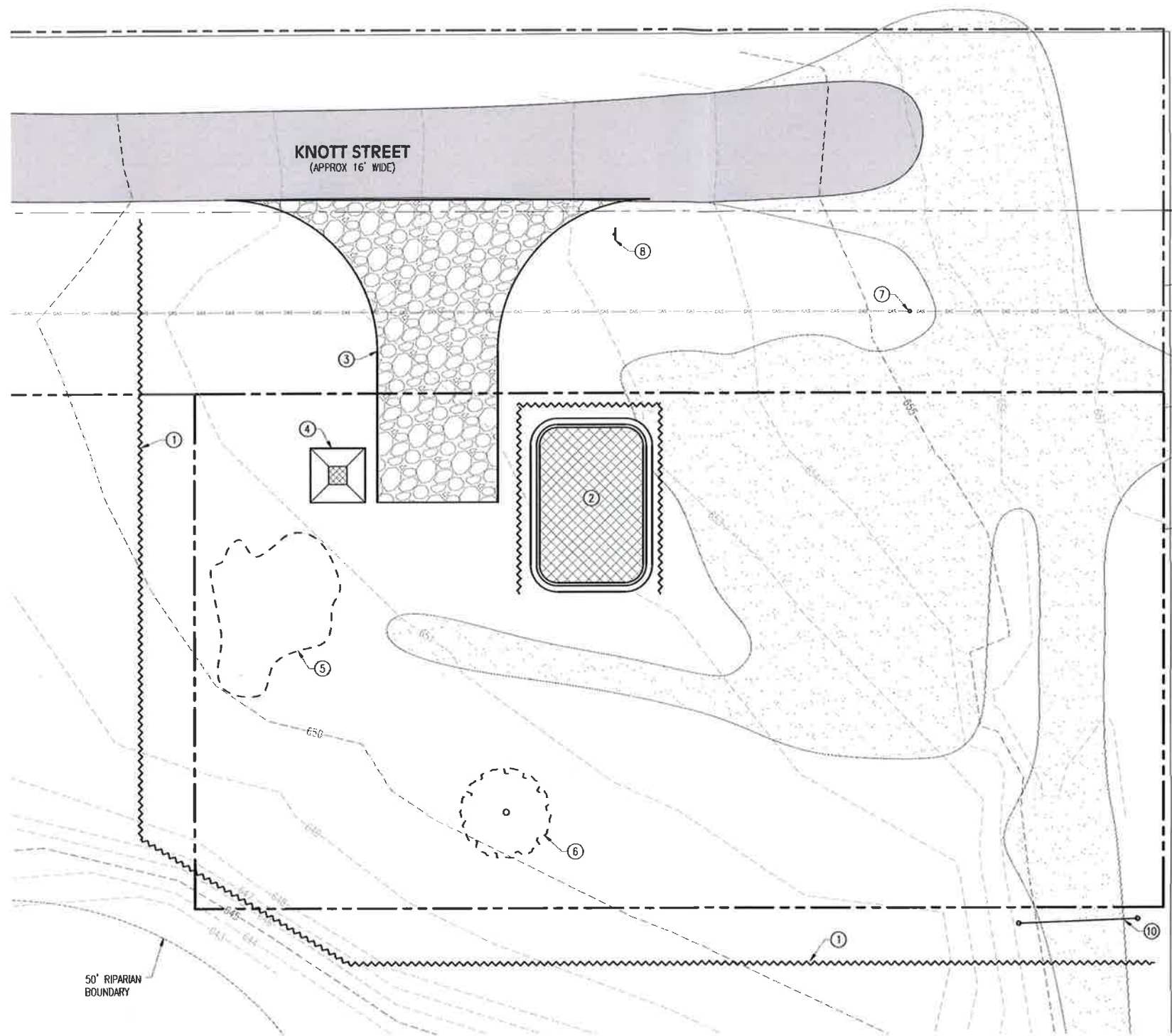
DATE: 02/18/2025  
**REVISED PRINT**  
VOID ALL PREVIOUS

DATE: 08/16/2024  
ISSUED FOR APPROVAL

REV.	REVISION RECORD	DATE
A	ISSUED FOR PERMIT	12/06/2024
B	SITE RELOCATED/RESIZED	02/18/2025



PROJ. NO.	3615	LANDSCAPING PLAN
DWG. BY	BMK	HOLCE TRAILHEAD IMPROVEMENTS
APPR. BY		COLUMBIA COUNTY
FILE	D-3615-L-1	DATE 06/10/2024



- ESC SITE KEYNOTES** #
- 1 SEDIMENT FENCE, SEE DETAIL 875 ON SHEET D-1
  - 2 CONSTRUCTION STOCKPILE, SEE DETAIL ON SHEET D-1
  - 3 CONSTRUCTION ENTRANCE, SEE DETAIL 855 ON D-1
  - 4 CONCRETE WASHOUT, SEE DETAIL 900 ON SHEET D-1
  - 5 EXISTING CONCRETE WASTE TO BE REMOVED
  - 6 FIR TREE TO BE REMOVED
  - 7 GAS MARKER TO REMAIN, PROTECT IN PLACE
  - 8 SIGN TO BE RELOCATED PER SHEET C-2
  - 9 BOLLARDS TO REMAIN, PROTECT IN PLACE
  10. RELOCATED GATE

- LEGEND**
- PROJECT EASEMENT BOUNDARY LINE
  - ADJACENT PARCEL PROPERTY LINE
  - TRAIL EASEMENT BOUNDARY
  - ~ SEDIMENT FENCING
  - SLOPE / FLOW DIRECTION
  - ▭ A.C. PAVING

- ADDITIONAL NOTES:**
1. SEE GENERAL EROSION AND SEDIMENT CONTROL NOTES ON SHEET C-2.
  2. SEE SHEET C-4 FOR EXTENTS OF NEW GRADING.
  3. A WETLANDS DETERMINATION #2022-0141 HAS BEEN PREPARED FOR THIS SITE. GRADING ACTIVITIES IN EXCESS OF 50 C.Y. WITHIN A WETLANDS AREA, WILL REQUIRE A STATE GRADE AND FILL PERMIT.

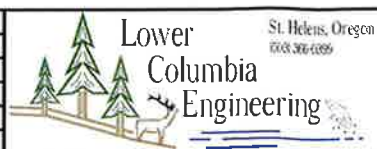
**EROSION AND SEDIMENT CONTROL PLAN**  
SCALE: 1" = 10'



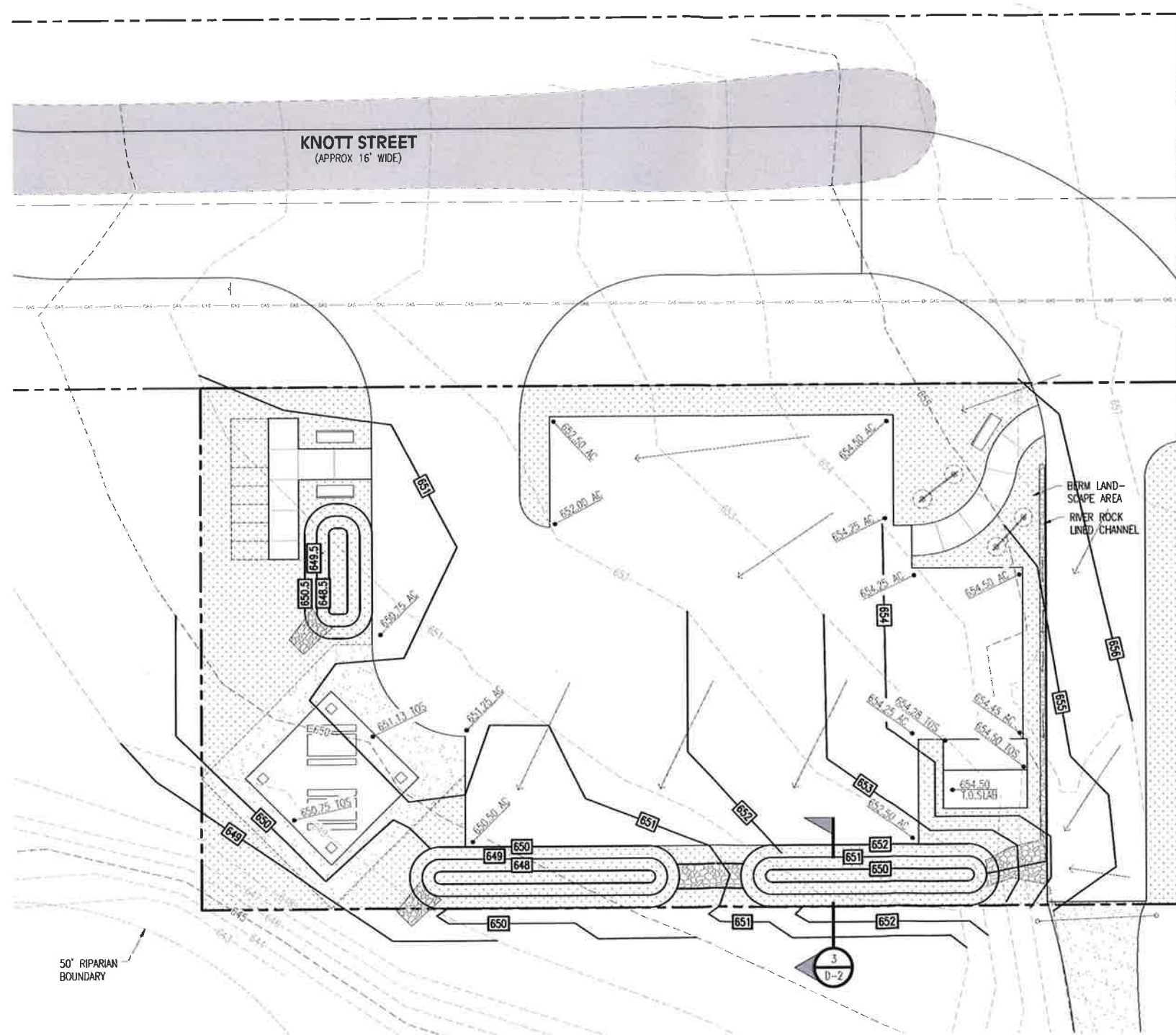
DATE: 02/18/2025  
**REVISED PRINT**  
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DATE: 09/16/2024  
**ISSUED FOR APPROVAL**

REV.	REVISION RECORD	DATE
A	ISSUED FOR PERMIT	12/06/2024
B	SITE RELOCATED/RESIZED	02/18/2025



PROJ. NO.	3615	EROSION AND SEDIMENT CONTROL PLAN
DWG. BY	BMK	HOLCE TRAILHEAD IMPROVEMENTS
APPR. BY		COLUMBIA COUNTY
FILE	D-3615-C-3	DATE 11/21/2023



**GRADING PLAN LEGEND**

	PROJECT EASEMENT BOUNDARY LINE
	ADJACENT PARCEL PROPERTY LINE
	TRAIL EASEMENT BOUNDARY
	MAJOR CONTOUR (EXISTING)
	MINOR CONTOUR (EXISTING)
	NEW CONTOUR LINE
	SLOPE DOWN / FLOW DIRECTION
	VEGETATED AREAS / LANDSCAPING
	GRAVEL PAVING

- ADDITIONAL NOTES:**
- SEE GENERAL EROSION AND SEDIMENT CONTROL NOTES ON SHEET G-2.
  - SEE SHEET C-3 FOR EROSION AND SEDIMENT CONTROL PLAN.
  - A WETLANDS DETERMINATION #2022-0141 HAS BEEN PREPARED FOR THIS SITE. GRADING ACTIVITIES IN EXCESS OF 50 C.Y., WITHIN A WETLANDS AREA, WILL REQUIRE A STATE GRADE AND FILL PERMIT.

**GAS MAIN NOTE:**  
 AN EXISTING NORTHWEST NATURAL 4" STEEL HIGH PRESSURE GAS MAIN IS LOCATED WITHIN THE SCOPE OF THIS PROJECT. ANY GRADING OR EXCAVATING TAKING PLACE IN PROXIMITY TO THIS GAS LINE MUST BE SUPERVISED BY A NORTHWEST NATURAL REPRESENTATIVE.

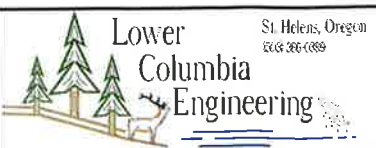
**GRADING AND DRAINAGE PLAN**  
 SCALE: 1" = 10'



DATE: 02/18/2025  
 REVISED PRINT  
 VOID ALL PREVIOUS

REV.	REVISION RECORD	DATE
A	ISSUED FOR PERMIT	12/06/2024
B	SITE RELOCATED/RESIZED	02/18/2025

DATE: 09/16/2024  
 ISSUED FOR APPROVAL



PROJ. NO.	3615	GRADING AND DRAINAGE
DWG. BY	BMK	HOLCE TRAILHEAD IMPROVEMENTS
APPR. BY		COLUMBIA COUNTY
FILE	D-3615-C-4	DATE 06/10/2024

**SHEET C-4**