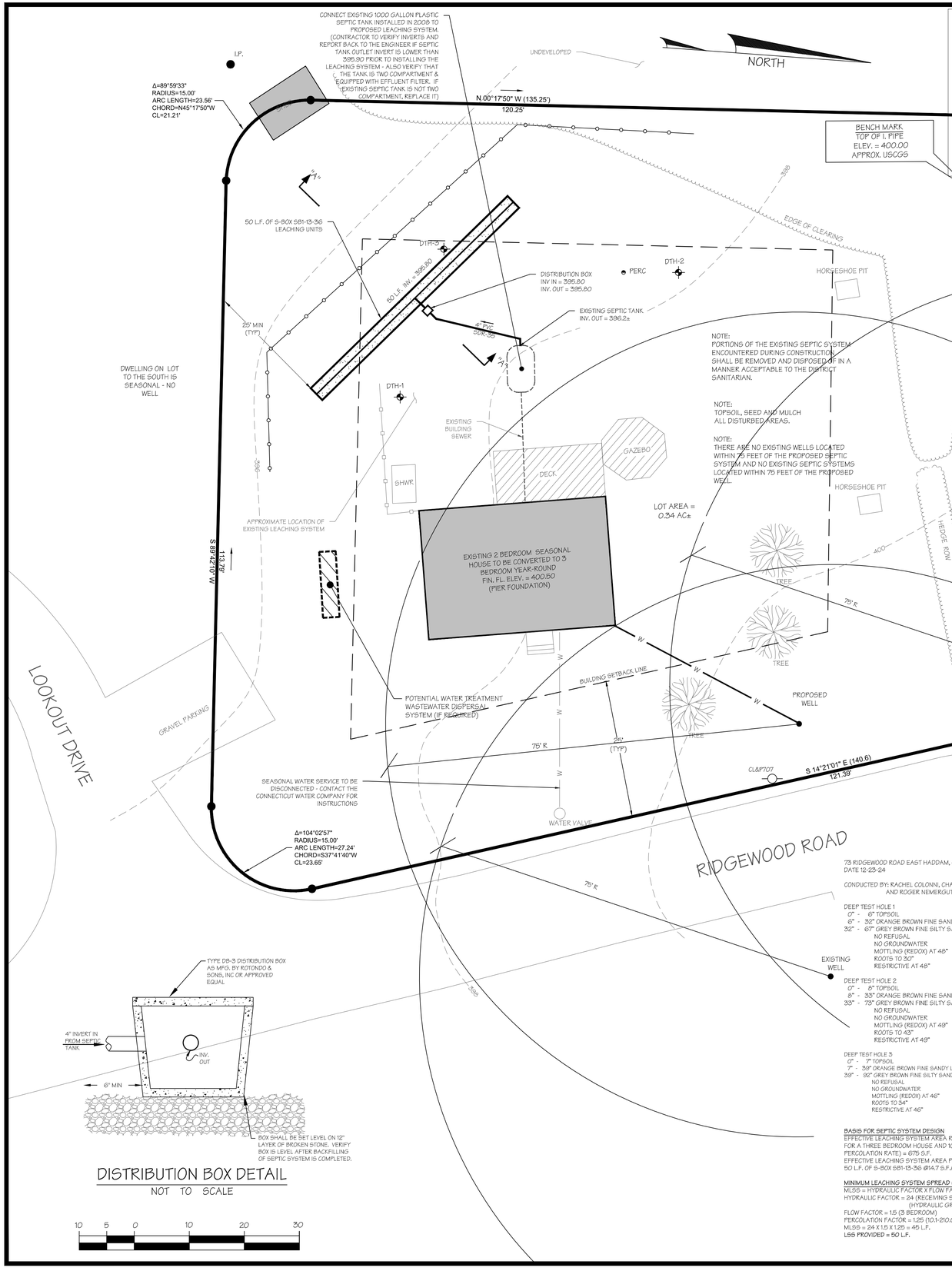
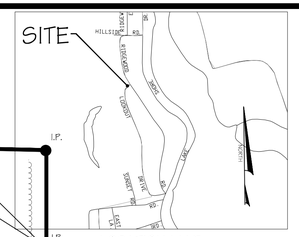
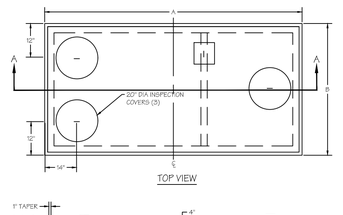
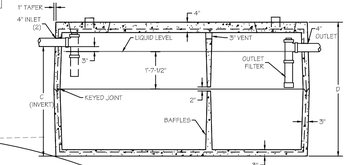




LOCATION MAP
SCALE: 1"= 1000'



TOP VIEW



EXISTING LEACHING SYSTEM FOR 79 RIDGEWOOD ROAD (LOCATION BASED ON AS-BUILT ON FILE WITH THE TOWN)

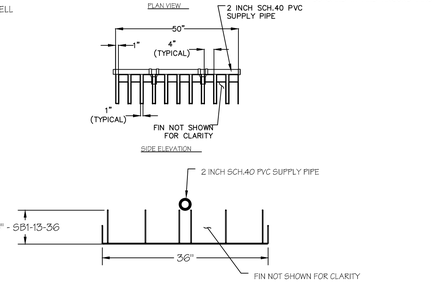
SIDE VIEW
(SECTION A-A)

SEPTIC TANK DETAIL
NOT TO SCALE

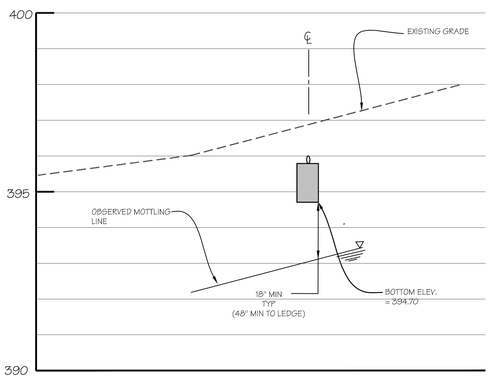
SEPTIC TANK SHALL BE 1,000 GALLON AS MANUFACTURED BY UNITED CONCRETE PRODUCTS, INC. YALESVILLE, CT (203-269-3118)

LIQUID CAPACITY	A LENGTH	B WIDTH	C INVERT	D HEIGHT
1000 Gal.	8'-6"	4'-10"	4'-7"	5'-4"
1000 Gal. Low Bay	10'-0"	5'-0"	3'-9"	4'-6"
1250 Gal.	10'-0"	5'-0"	4'-7"	5'-4"
1250 Gal. Low Bay	10'-6"	5'-8"	4'-0"	4'-9"
1500 Gal.	10'-6"	5'-8"	4'-7"	5'-5"
1500 Gal. Low Bay	11'-11"	6'-6"	3'-8"	4'-10"

PERCOLATION TEST		
1-3-25		
LOCATION: @ DTH -2		
HOLE DEPTH = 20"		
TIME	READING	CHANGE
13:17	6 2/8	---
13:22	7 3/8	1 1/8
13:27	8 1/8	6/8
13:32	8 6/8	5/8
13:37	9 4/8	6/8
13:42	10 7/8	1 3/8
13:47	11 3/8	4/8
13:52	11 5/8	2/8
13:57	12 1/8	4/8
14:02	12 4/8	3/8
14:07	12 7/8	3/8
14:12	13 2/8	3/8
14:17	13 5/8	3/8
PERCOLATION RATE = 13.3 MIN/INCH		



S-BOX SB1-13-36 DETAIL
NOT TO SCALE



SECTION "A - A"
SCALE: 1"= 10' H. & 1"= 2' V.

DISTRIBUTION BOX DETAIL
NOT TO SCALE

10 5 0 10 20 30

73 RIDGEWOOD ROAD EAST HADDAM, CONNECTICUT
DATE 12-23-24

CONDUCTED BY: RACHEL COLONNI, CHATHAM HEALTH DISTRICT
AND ROGER NEMERGUT, NEMERGUT CONSULTING

DEEP TEST HOLE 1
0" - 6" TOPSOIL
6" - 32" ORANGE BROWN FINE SANDY LOAM
32" - 67" GREY BROWN FINE SILTY SAND AND GRAVEL
NO REFUSAL
NO GROUNDWATER
MOTTLING (REDOX) AT 48"
ROOTS TO 30"
RESTRICTIVE AT 48"

DEEP TEST HOLE 2
0" - 8" TOPSOIL
8" - 33" ORANGE BROWN FINE SANDY LOAM
33" - 75" GREY BROWN FINE SILTY SAND AND GRAVEL
NO REFUSAL
NO GROUNDWATER
MOTTLING (REDOX) AT 49"
ROOTS TO 43"
RESTRICTIVE AT 49"

DEEP TEST HOLE 3
0" - 7" TOPSOIL
7" - 39" ORANGE BROWN FINE SANDY LOAM
39" - 92" GREY BROWN FINE SILTY SAND AND GRAVEL
NO REFUSAL
NO GROUNDWATER
MOTTLING (REDOX) AT 46"
ROOTS TO 34"
RESTRICTIVE AT 46"

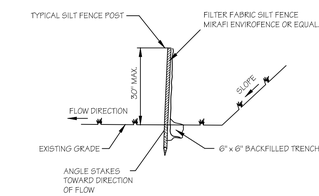
BASIS FOR SEPTIC SYSTEM DESIGN
EFFECTIVE LEACHING SYSTEM AREA REQUIRED BY THE STATE HEALTH CODE FOR A THREE BEDROOM HOUSE AND 10.1 TO 20.0 MINUTE PER INCH PERCOLATION RATE) = 675 S.F.
EFFECTIVE LEACHING SYSTEM AREA PROVIDED:
50 L.F. OF S-BOX SB1-13-36 @14.7 S.F./L.F. = 735 S.F.

MINIMUM LEACHING SYSTEM SPREAD (M.L.S.S.)
MLSS = HYDRAULIC FACTOR X FLOW FACTOR X PERCOLATION FACTOR
HYDRAULIC FACTOR = 24 (RECEIVING SOIL DEPTH= 42.1" - 48.0")
(HYDRAULIC GRADIENT = 4.1 -6.0%)
FLOW FACTOR = 1.5 (3 BEDROOM)
PERCOLATION FACTOR = 1.25 (10.1-21.0.0 MINUTES PER INCH)
MLSS = 24 X 1.5 X 1.25 = 45 L.F.
LSS PROVIDED = 50 L.F.

GENERAL NOTES:
1. PROPOSED CONSTRUCTION SHALL CONFORM TO THE 2024 STATE OF CONNECTICUT PUBLIC HEALTH CODE AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL AS AMENDED.
2. ELEVATIONS AND CONTOURS ARE BASED ON AN ASSUMED DATUM.
3. ELEVATIONS SHOWN REFER TO THE INVERT (FLOW LINE) OF THE PROPOSED LEACHING SYSTEM UNLESS NOTED OTHERWISE.
4. PERCOLATION RATE FOR DESIGN = 10.1 - 20.0 MINUTES PER INCH.
5. THE MINIMUM DISTANCE FROM WELL TO SEPTIC IS 75 FEET.
6. LEACHING SYSTEM AREA SHALL BE LIMED, FERTILIZED, SEEDED AND MULCHED UPON COMPLETION OF THE PROJECT.
7. SEPTIC TANK CONSTRUCTION JOINTS SHALL BE SEALED WITH ASPHALT CEMENT. ALL PIPE CONNECTIONS TO THE SEPTIC TANK AND AND DISTRIBUTION BOXES SHALL BE SEALED WITH A POLYETHYLENE GASKET "POLY-LOK" OR APPROVED EQUAL.
8. SEPTIC TANK BAFFLES SHALL CONFORM TO SECTION VA-1 TECHNICAL STANDARDS OF THE STATE HEALTH CODE.
9. IF FIELD CONDITIONS, (LEDGE, GROUNDWATER, MOTTLING) ARE ENCOUNTERED AT AT SHALLOWER DEPTHS THAN SHOWN IN THE DEEP TEST HOLE RESULTS, CONSTRUCTION SHALL BE HALTED AND THE ENGINEER CONTACTED IMMEDIATELY.
10. SOIL TEST RESULTS SERVING AS THE BASIS FOR THIS DESIGN WERE CONDUCTED BY THE CHATHAM HEALTH DISTRICT AND NEMERGUT CONSULTING.
11. NO DEVIATIONS FROM THE APPROVED DESIGN PLAN SHALL BE ALLOWED WITHOUT THE PRIOR APPROVAL OF THE SANITARIAN OR THE DESIGN ENGINEER.
12. EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO FIELD MODIFICATION, AS NECESSARY, AS REQUIRED BY THE DESIGN ENGINEER OR TOWN OFFICIALS.
13. STRIP AND STOCKPILE EXISTING TOPSOIL LAYER FROM WITHIN THE PROPOSED LEACHING SYSTEM IN THOSE AREAS WHERE THE BOTTOM OF THE PROPOSED LEACHING SYSTEM IS AT, OR ABOVE, THE BOTTOM OF THE EXISTING TOPSOIL LAYER OR IN THOSE AREAS WHERE SEPTIC SYSTEM FILL IS REQUIRED.
14. SELECT FILL MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:
    A. THE FILL MATERIAL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THE THREE (3) INCH SIEVE.
    B. UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED ON THE #4 SIEVE (THIS IS THE GRAVEL PORTION OF THE SAMPLE).
    C. THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN REWEIGHED AND THE SIEVE ANALYSIS STARTED.
    D. THE REMAINING SAMPLES SHALL MEET THE FOLLOWING GRADATION CRITERIA:

SIEVE SIZE	PERCENT PASSING WET SIEVE	PERCENT PASSING DRY SIEVE
#4	100	100
#10	70-100	70-100
#40	10-50 *	10-75
#100	0-20	0-5
#200	0-5	0-2.5

    * PERCENT PASSING THE #40 SIEVE MAY BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.
    THE FILL SHALL BE PLACED IN 12" MAXIMUM LIFTS AFTER THE STRIPPED LEACHING SYSTEM AREA HAS BEEN SCARIFIED. TRUCKS OR OTHER CONSTRUCTION EQUIPMENT SHALL NOT BE DRIVEN OVER THE SCARIFIED AREA PRIOR TO FILL PLACEMENT. PRIOR TO FILL PLACEMENT ANY SMEARED FILL AREAS SHALL BE RE-SCARIFIED.
15. PRIOR TO PLACEMENT, FILL MATERIAL SHALL BE INSPECTED AND APPROVED BY THE HEALTH DISTRICT AND THE DESIGN ENGINEER.
16. SEPTIC TANKS SHALL BE TWO COMPARTMENT TANKS WITH HEAVY DUTY STEEL HANDLES FOR MANHOLE ACCESS COVERS AND EFFLUENT FILTERS INSTALLED ON OUTLET BAFFLES.
17. ALL PIPE DOWNSTREAM OF THE OF THE SEPTIC TANK (EXCEPT FOR LEACHING TRENCHES) SHALL BE 4" DIAMETER P.V.C. ASTM D3034 SDR 35 OR APPROVED EQUAL..
18. THE SITE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" 1-800-922-4455 PRIOR TO CONSTRUCTION TO VERIFY THE EXTENT AND LOCATION OF EXISTING UNDERGROUND UTILITIES.
19. THE LEACHING SYSTEM SHALL BE PROPERLY COVERED BY THE LICENSED SYSTEM INSTALLER WITHIN TWO (2) WORKING DAYS FOLLOWING THE LOCAL HEALTH DISTRICT'S FINAL INSPECTION AND APPROVAL.
20. IMMEDIATELY UPON COMPLETION OF THE SEPTIC SYSTEM INSTALLATION AND FINAL APPROVAL BY THE HEALTH DISTRICT, THE SEPTIC SYSTEM SHALL BE BACKFILLED, TOPSOILED,SEEDED AND MULCHED. THE FINAL GRADING SHALL CONFORM TO THE DESIGN PLAN AND SHALL ENSURE THAT SURFACE RUNOFF IS DIRECTED AWAY FROM THE THE LEACHING SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES SHALL NOT BE REMOVED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED IN DISTURBED AREAS.
21. THE DESIGN ENGINEER SHALL BE CONTACTED PRIOR TO BACKFILLING THE SEPTIC SYSTEM TO ALLOW FOR TAKING THE NECESSARY FIELD MEASUREMENTS FOR THE PREPARATION OF AN "AS-BUILT" SEPTIC SYSTEM PLAN AS REQUIRED BY THE HEALTH DISTRICT PRIOR TO THE ISSUANCE OF A PERMIT TO DISCHARGE OR A CERTIFICATE OF OCCUPANCY.
22. NO GRADING OR OTHER DISTURBANCE OF THE AREA OF THE PROPOSED SEPTIC SYSTEM WILL BE ALLOWED PRIOR TO THE INSTALLATION. NO PARKING, EQUIPMENT STORAGE OR TRAFFIC IN THE AREA OF THE SEPTIC SYSTEM WILL BE ALLOWED.
23. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY, THE SEPTIC SYSTEM SHALL BE STAKED OUT BY THE PROJECT SURVEYOR.
24. THE DISTRICT SANITARIAN AND THE ENGINEER SHALL BE CONTACTED AT LEAST 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION. NO PORTION OF THE SYSTEM SHALL BE COVERED WITHOUT INSPECTION AND APPROVAL OF THE SANITARIAN AND THE ENGINEER.
25. THE MINIMUM DISTANCE FROM UTILITY TRENCH (GAS/ELECTRIC/CABLE T.V./TELEPHONE) TO SEPTIC SYSTEM IS 5 FEET.
26. CONSTRUCT STORM WATER SWALES, AS REQUIRED,TO DIRECT SURFACE RUNOFF AWAY FROM THE SEPTIC SYSTEM.
27. BOUNDARY SURVEY INFORMATION TAKEN FROM MAP ENTITLED " PROPERTY SURVEY PREPARED FOR JOHN MAASZ 73 RIDGEWOOD ROAD EAST HADDAM, CONNECTICUT" DATED MARCH 31, 2025 AS PREPARED BY ROB HELLSTROM LAND SURVEYING, HEBRON, CONNECTICUT.
28. TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY WILLIAM B. BERGAN, L.S., WATERFORD CONNECTICUT.
29. IF A LARGE CAPACITY BATHTUB IS INSTALLED THE SEPTIC TANK SHALL BE INCREASED AS FOLLOWS:
    - 100 - 200 GALLON TUB CAPACITY - ADD 250 GALLONS TO SEPTIC TANK CAPACITY
    -OVER 200 GALLON TUB CAPACITY - ADD 500 GALLONS TO SEPTIC TANK CAPACITY
30. IF A GARBAGE DISPOSAL IS INSTALLED, THE SEPTIC TANK SHALL BE INCREASED INSTALLER BY 250 GALLONS. GARBAGE DISPOSALS ARE NOT RECOMMENDED SINCE THEY INCREASE THE SOLIDS LOADING ON THE SEPTIC TANK AND MAY PREMATURELY CLOG EFFLUENT FILTER.
31. ALL SEPTIC TANKS AND PUMP CHAMBERS REQUIRING RISERS SHALL MAINTAIN THE ORIGINAL COVERS ON THE TANKS, HAVE RISER COVERS THAT WEIGH AT LEAST 100 LBS. OR INSTALL A SAFETY DEVICE BELOW THE RISER TO PREVENT INDIVIDUALS FROM FALLING INTO A TANK.
32. ALL BELOW GRADE TANK OR COVER HANDLES SHALL CONTAIN OR BE FITTED WITH A MATERIAL THAT CAN BE LOCATED WITH A METAL DETECTOR.



SILT FENCE DETAIL
NOT TO SCALE

LEGEND:
EXISTING CONTOUR ---100---
PROPOSED CONTOUR 100
DEEP TEST HOLE
PERCOLATION TEST P

NEMERGUT CONSULTING
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KILLINGWORTH, CONNECTICUT 06419
PHONE: 860.663.2384
NEMERGUTCONSULTING.COM

STATE OF CONNECTICUT ROGER D. NEMERGUT NO. 10008 REGISTERED PROFESSIONAL ENGINEER

ROGER D. NEMERGUT
PROFESSIONAL ENGINEER
LIC. NO. 10008

JASON A. NEMERGUT
PROFESSIONAL ENGINEER
LIC. NO. 26088

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THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS THE DESIGN ENGINEER'S RAISED, PROFESSIONAL SEAL APPEARS ON THE PLAN; AND THE OWNER/CONTRACTOR HAS CONTACTED THE DESIGN ENGINEER TO VERIFY THAT THEY ARE IN POSSESSION OF THE LATEST APPROVED DESIGN PLANS.

YEAR-ROUND CONVERSION PLAN

JOHN MAASZ
73 RIDGEWOOD ROAD
EAST HADDAM CONNECTICUT
MAP: 87 LOT: 65

DATE: 8-28-25
DESIGNED BY: J.A.N.
CHECKED BY: R.D.N.
SCALE: 1" = 10'

NO.	DATE	REVISIONS

SHEET

1 OF 1