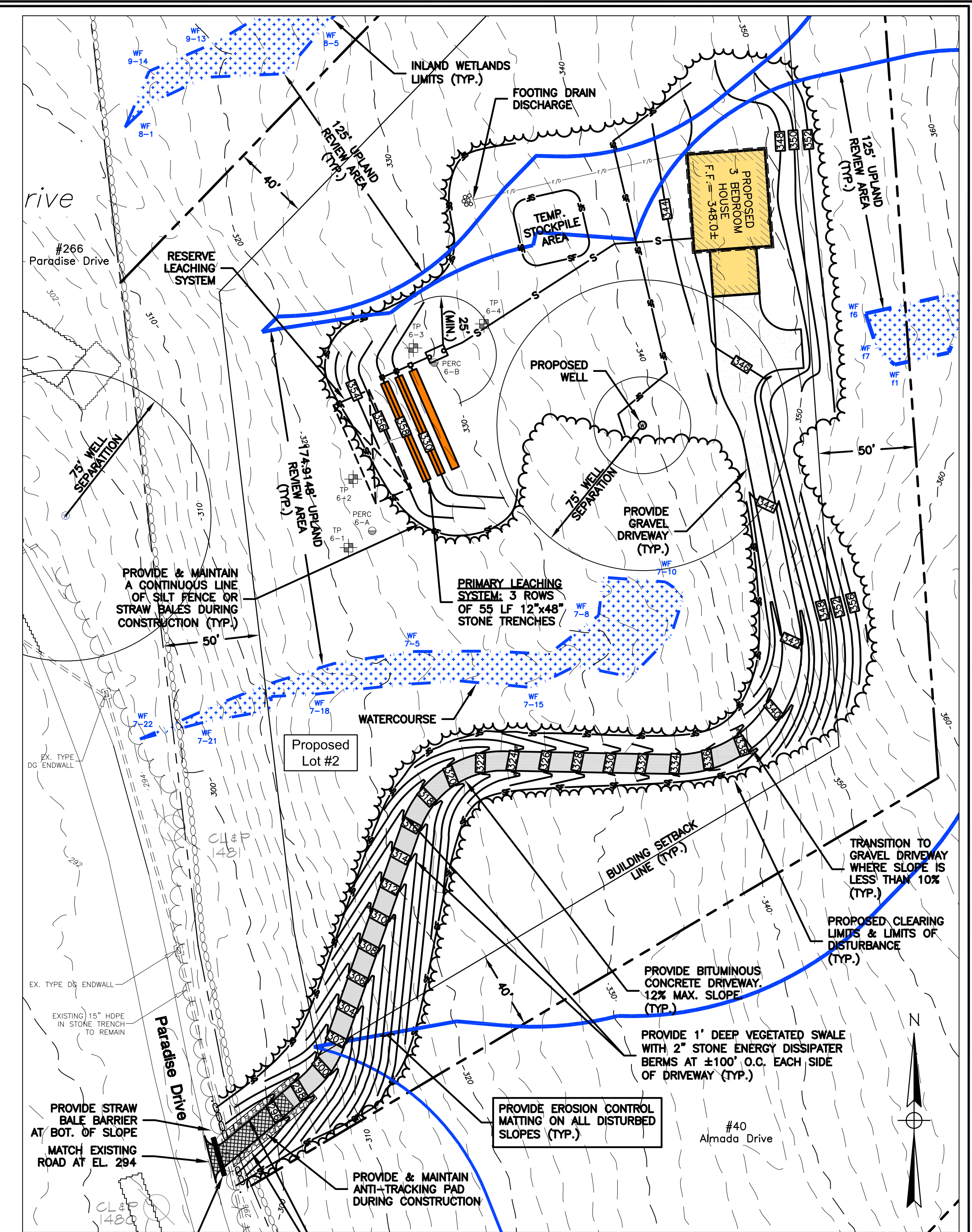


Conceptual Lot Development: Lot 1

SCALE: 1"=40'



Conceptual Lot Development: Lot 2

SCALE: 1"=40'

**Conceptual Lot 1 Development**

**TEST PIT DATA**  
 NDH File No. 12000186  
 Testing Conducted on 2/15/18  
 by Terra Bombard, R.S.

**TP 6A-1 (2018)**  
 Mottles: N/O  
 Ground Water: N/O  
 Ledger: 67"  
 0-9" Topsoil/Roots  
 9-28" Very Fine Loomy Sand/Moist  
 28-67" Compact Very Fine Loomy Sand

**TP 6A-2 (2018)**  
 Mottles: 20"  
 Ground Water: 20"  
 Ledger: 67"  
 0-8" Topsoil  
 8-20" Very Fine Loomy Sand/Wet  
 20-56" Groundwater

**TP 3 (2019)**  
 Mottles: 30"  
 Ground Water: N/O  
 Ledger: N/O  
 Roots: 42"  
 0-12" Topsoil  
 12-30" OB/YB Fine Sandy Loom  
 30-70" GR Sandy Loom Till. Mottled

**PERCOLATION TEST DATA**  
 Performed by CLA Engineers, Inc. on 9/28/20

Time	Measuredown (Inches)	Change (inches)
3:00	12"	-
3:05	15"	-3
3:10	18"	-3
3:15	20"	-2
3:20	21"	-1
3:25	22.5"	-1.5
3:30	24"	-1.5

Min. Perc Rate = 4 min./inch

**SEPTIC SYSTEM DESIGN**  
**PRIMARY LEACHING AREA**  
 3 BEDROOM RESIDENCE  
 PERCOLATION RATE: 4 MIN./INCH  
 LEACHING AREA REQUIRED: 495 SF

USE 12"x48" STONE TRENCH  
 EFFECTIVE LEACHING AREA OF LEACHING TRENCH 3.0 SF/LF  
 REQUIRED LENGTH = 495 SF / 3.0 SF/LF = 165 LF

**MLSS CALCULATION**  
 HYDRAULIC FACTORS  
 DEPTH TO RESTRICTIVE LAYER = 20"  
 SLOPE = 6 VF / 71 LF = 8.4%  
 HYDRAULIC FACTOR (HF) = 30  
 FLOW FACTOR (FF) = 1.5  
 PERCOLATION FACTOR (PF) = 1.0 (UP TO 10.0 MIN./INCH)  
 MLSS REQUIRED: 30 x 1.5 x 1.0 = 45 LF

**PROPOSED SYSTEM**  
 USE 3 ROWS OF 55 LF  
 LEACHING AREA PROVIDED = 495 SF

**RESERVE LEACHING AREA**  
 USE SAME AS PRIMARY SYSTEM

**Conceptual Lot 2 Development**

**TEST PIT DATA**  
 NDH File No. 12000186  
 Testing Conducted on 8/6/20  
 by Sherry McGinn, R.S.

**TP 6-1**  
 Mottles: 28"  
 Ground Water: N/O  
 Roots: 28"  
 Ledger: 84"  
 0-12" Topsoil  
 12-28" OB Fine Sandy Loom  
 28-94" GR Mottled Sandy Loom Till

**TP 6-2**  
 Mottles: 32"  
 Ground Water: N/O  
 Roots: 32"  
 Ledger: 100"  
 0-13" Topsoil  
 13-32" OB Fine Sandy Loom  
 32-100" GR Mottled Sandy Loom Till

**TP 6-3**  
 Mottles: 24"  
 Ground Water: N/O  
 Roots: 24"  
 Ledger: 84"  
 0-8" Topsoil  
 8-24" RB Fine Sandy Loom  
 24-84" GR Mottled Sandy Loom Till

**TP 6-4**  
 Mottles: 30"  
 Ground Water: N/O  
 Roots: 30"  
 Ledger: 89"  
 0-11" Topsoil  
 11-30" YB/RB Fine Sandy Loom  
 30-89" GR Mottled Sandy Loom Till

**PERCOLATION TEST DATA**  
 Performed by CLA Engineers, Inc. on 8/6/20

Time	Measuredown (Inches)	Change (inches)
1:16	3.25	-
1:18	7.25	4
1:20	9	1.75
1:22	11	2
1:24	12.25	1.25
1:26	13.25	1
1:28	14.5	1.25
1:30	15.5	1
1:32	16.5	1
1:34	17	0.5
1:36	17.5	0.5
1:38	18	0.5
1:40	18.5	0.5
1:42	19	0.5

Perc 6-A: Presoak @ 12:22, 5"  
 Perc 6-B: Presoak @ 12:27 pm, 6.5"

Per Rate = 4 min./inch

**PERCOLATION TEST DATA**  
 Performed by CLA Engineers, Inc. on 8/6/20

Time	Measuredown (Inches)	Change (inches)
12:50	4.25	-
12:52	7.75	3.5
12:54	11	3.25
12:56	13.25	2.25
12:58	14.75	1.5
1:00	16.25	1.5
1:02	17.5	1.25
1:04	18.75	1.25
1:06	19.5	0.75
1:08	20.75	1.25
1:10	21.25	0.5
1:12	22.5	1.25

Per Rate = 4 min./inch

**SEPTIC SYSTEM DESIGN**  
**PRIMARY LEACHING AREA**  
 3 BEDROOM RESIDENCE  
 PERCOLATION RATE: 4 MIN./INCH  
 LEACHING AREA REQUIRED: 495 SF

USE 12"x48" STONE TRENCH  
 EFFECTIVE LEACHING AREA OF LEACHING TRENCH 3.0 SF/LF  
 REQUIRED LENGTH = 495 SF / 3.0 SF/LF = 165 LF

**MLSS CALCULATION**  
 HYDRAULIC FACTORS  
 DEPTH TO RESTRICTIVE LAYER = 24"  
 SLOPE = 10 VF / 86 LF = 11.6%  
 HYDRAULIC FACTOR (HF) = 28  
 FLOW FACTOR (FF) = 1.5  
 PERCOLATION FACTOR (PF) = 1.0 (UP TO 10.0 MIN./INCH)  
 MLSS REQUIRED: 28 x 1.5 x 1.0 = 39 LF

**PROPOSED SYSTEM**  
 USE 3 ROWS OF 55 LF  
 LEACHING AREA PROVIDED = 495 SF

**RESERVE LEACHING AREA**  
 USE SAME AS PRIMARY SYSTEM



**CLA Engineers, Inc.**  
 CIVIL · STRUCTURAL · SURVEYING

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Subdivision Plan Prepared for Paul R. Lehto  
 #40 Almada Drive, Brooklyn, Connecticut

**Two Lot Resubdivision**  
 40 Almada Drive  
 Brooklyn, Connecticut

Lot Development Plan  
 Lot 1 & Lot 2

Project No. CLA-6383  
 Proj. Engineer K.J.H.  
 Date: 3/31/2021  
 Sheet No. 7



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