

DRAWING REVISION LOG				
DATE	DRAWING NO.	REVISION NO.	DESCRIPTION	

BLACK ASH ESTATES RESUBDIVISION

LAND NOW OR FORMERLY
PACHAUG CAPITAL, LLC.
BLACK ASH ROAD & OLD COLCHESTER ROAD
MONTVILLE, CONNECTICUT

DRAWING INDEX:

TITLE	DWG. NO.
COVER SHEET	1
PROPERTY SURVEY	2
RECORD SUBDIVISION MAP	3
OVERALL PLAN	4
SITE DEVELOPMENT PLAN	5
SITE DEVELOPMENT PLAN	6
EROSION & SEDIMENTION CONTROL PLAN	7
SOILS, & SEPTIC DESIGN CALCULATIONS	8
NOTES & DETAILS	9
NOTES & DETAILS	10

APPLICANT:

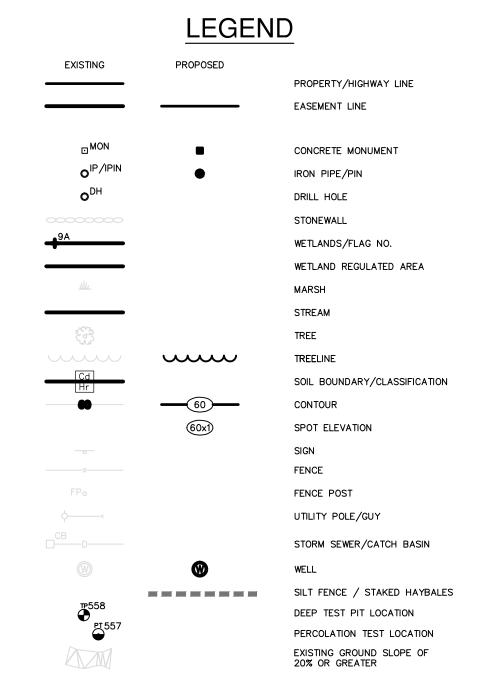
HARRY B. HELLER, ESQ.
HELLER, HELLER & MCCOY
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APPLICANT:

PACHAUG CAPITAL, LLC.
MR. ZACHARY WOOD, MEMBER
P.O. BOX 525
JEWETT CITY, CT 06351

PROPERTY OWNER:

PACHAUG CAPITAL, LLC.
MR. ZACHARY WOOD, MEMBER
P.O. BOX 525
JEWETT CITY, CT 06351



BENNETT & SMILAS ASSOCIATES, INC.

415 KILLINGWORTH ROAD, P.O. BOX 241

HIGGANUM, CONNECTICUT 06441

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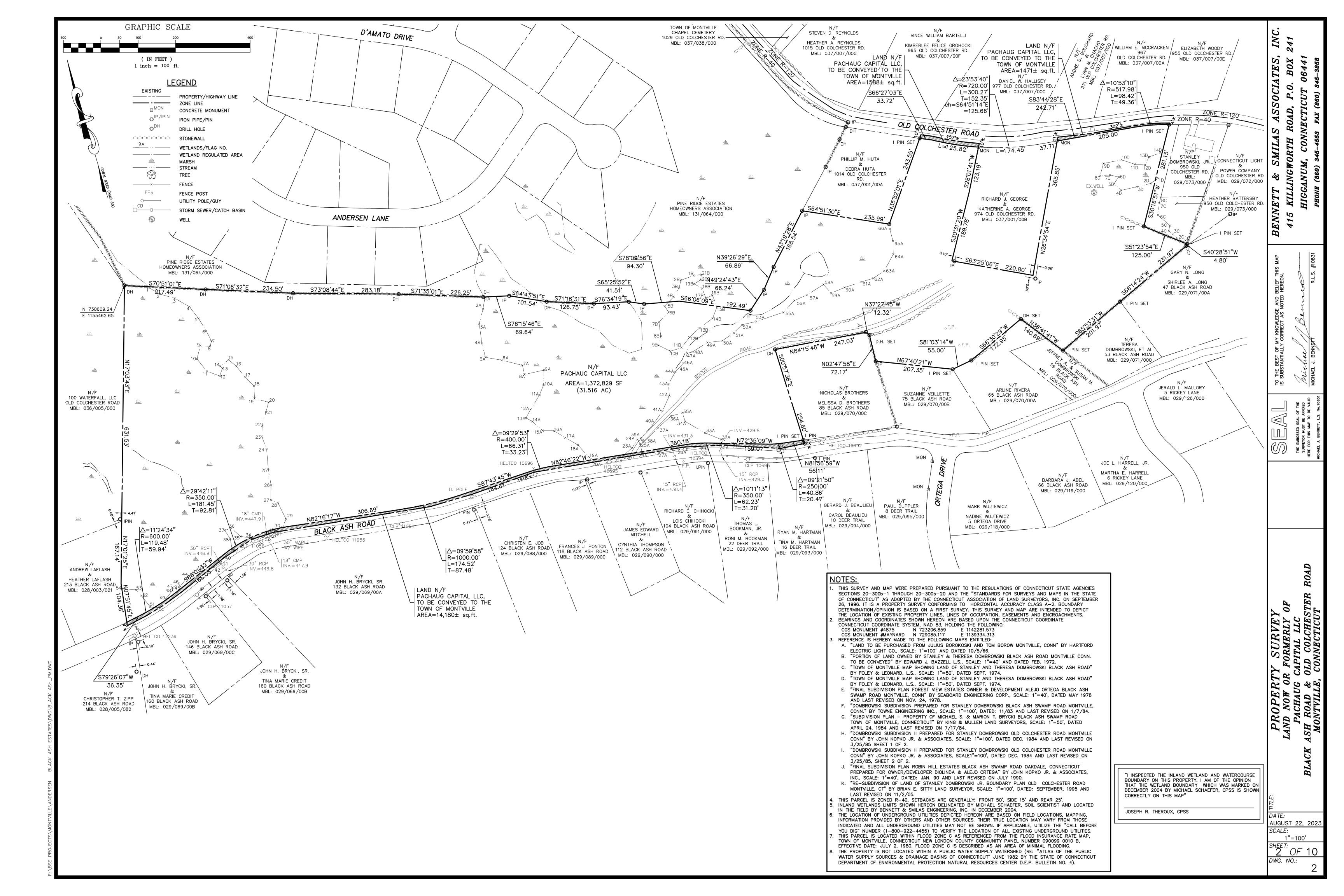


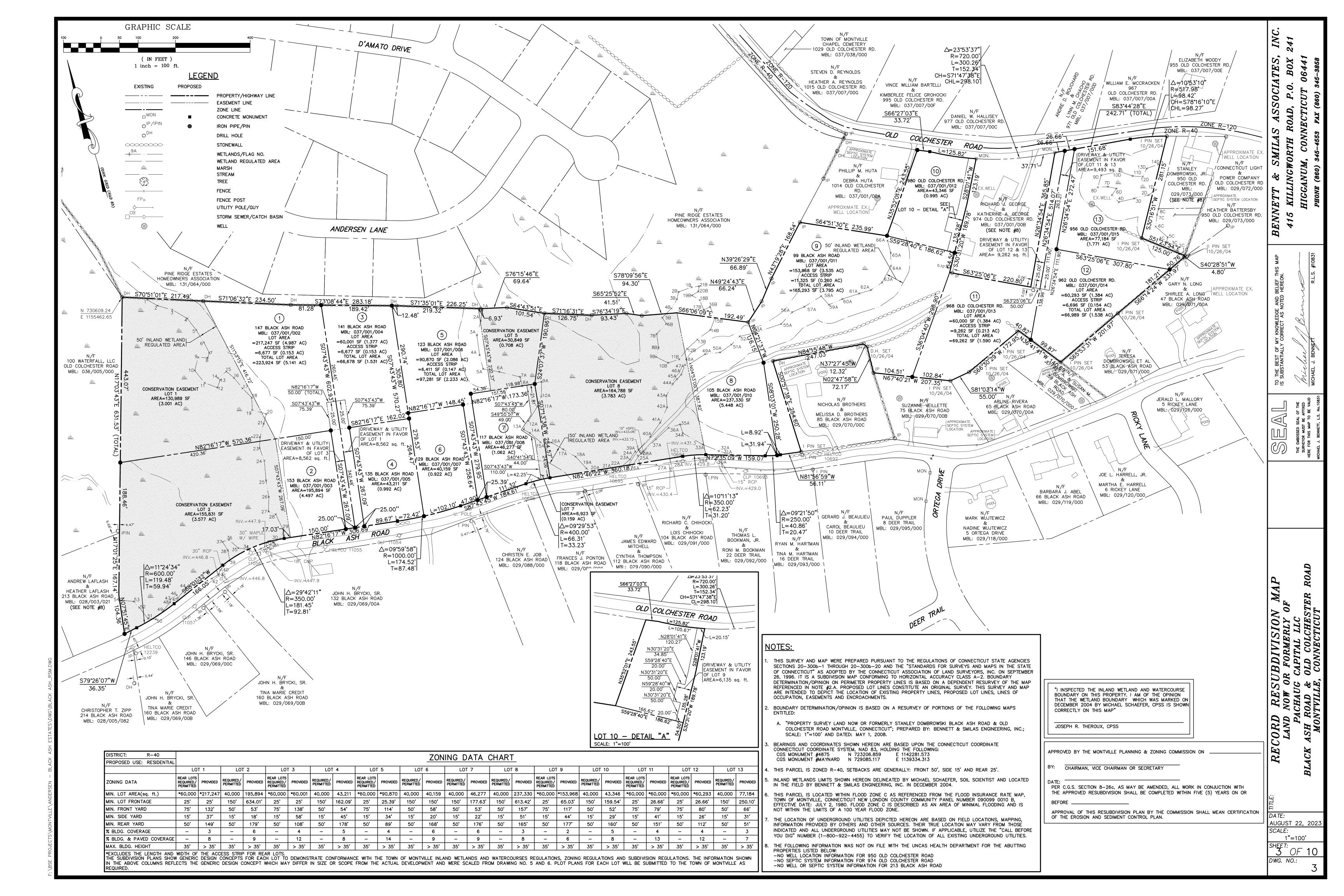
WENTWORTH CIVIL
ENGINEERS LLC

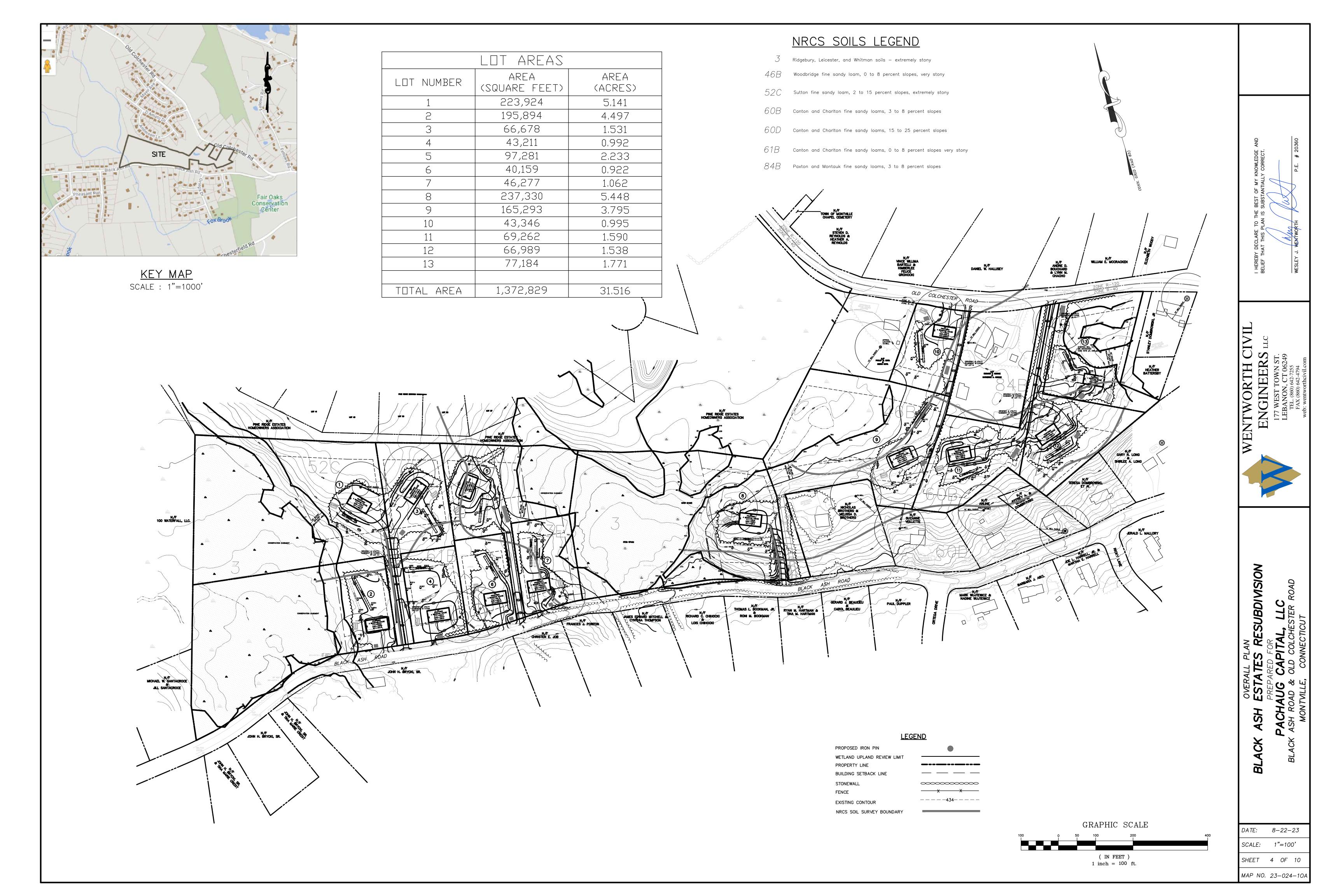
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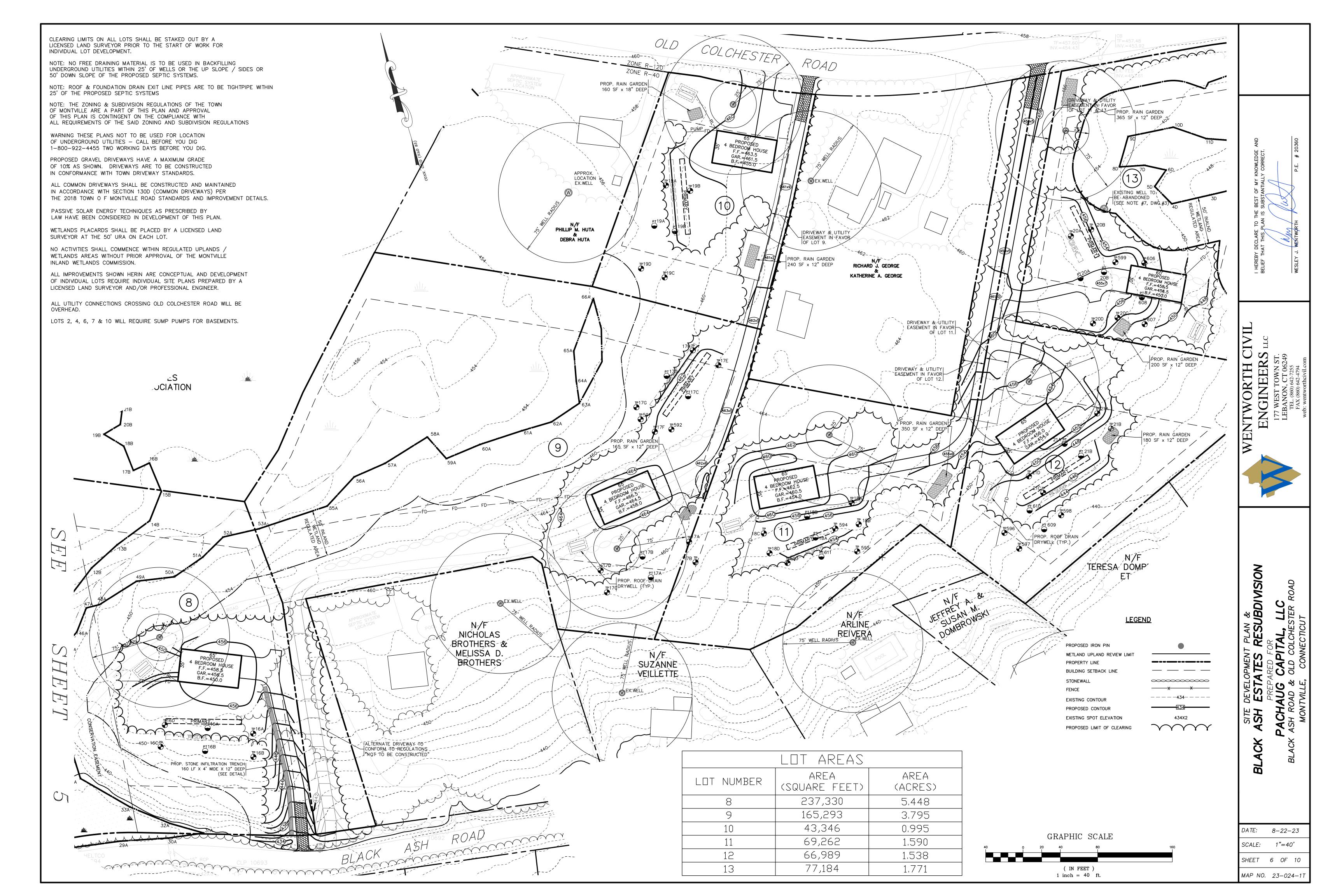
FILE NO.: GU20063 DATE: 8-22-23 SHEET 1 OF 10 MAP NO. 23-024-1C

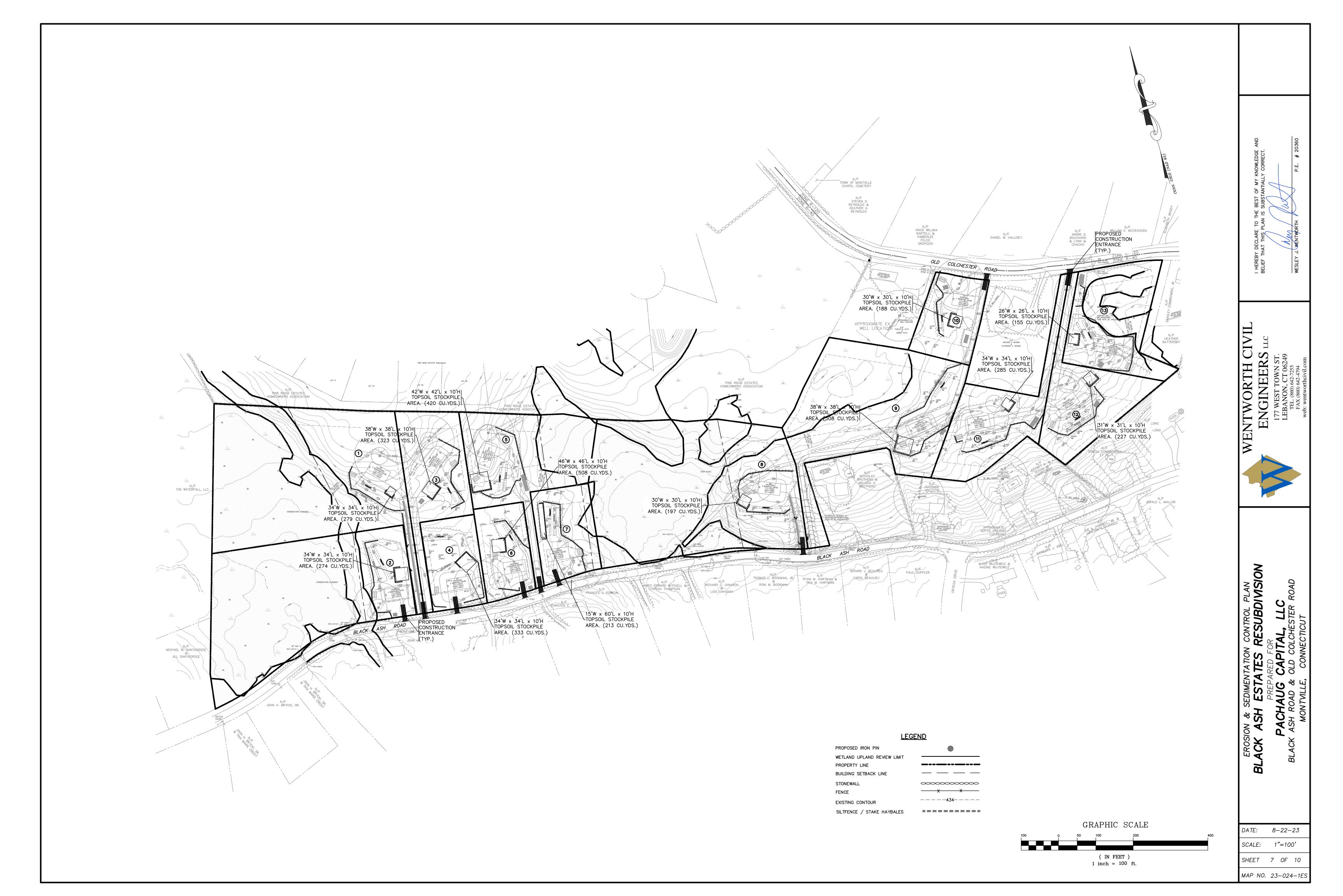












WATER @ 38" NO LEDGE

TEST HOLE DATA AS PERFORMED BY THE UNCAS HEALTH DEPARTMENT ON 5/21/08 AND WITNESSED BY BENNETT & SMILAS ENGINEERING, INC. <u>TP 570</u> 0−9" TOPSOIL <u>TP 554</u> 0-9" TOPSOIL TOPSOIL TOPSOIL TOPSOIL 12-23" BROWN SANDY LOAM 3-26" BROWN SANDY LOAM 9-28" BROWN FINE SANDY LOAM 9-27" BROWN SANDY LOAM 7-42" BROWN SANDY LOAM 23-48" GREY SANDY TILL 26-88" GREY SANDY TILL 28-72" GREY SANDY TILL W/LENSES 27-79" GREY MOTTLED TILL 42-84" SAND W/LENSES OF W/LENSES OF GRAVEL W/LENSES OF GRAVEL OF SAND AND GRAVEL 79-88" WATER SAND AND GRAVEL 48-89" WATER 71-83" WATER MOTTLING @ 28" MOTTLING @ 23" MOTTLING @ 26" MOTTLING @ 42" MOTTLING @ 23" NO WATER WATER @ 82" WATER @ 74" WATER @ 79" NO LEDGE WATER @ 25" NO LEDGE NO LEDGE NO LEDGE NO LEDGE <u>TP 555</u> 0-8" TOPSOIL TOPSOIL <u>TP 565</u> 0-6" TOPSOIL 11-34" BROWN FINE SANDY LOAM TOPSOIL TOPSOIL 3-30" BROWN SANDY LOAM 8-27" BROWN SANDY LOAM 2-20" BROWN SANDY LOAM 34-73" GREY SANDY TILL W/LENSES 6-23" BROWN FINE SANDY LOAM 27-68" GREY DENSE MOTTLED TILL 30-87" GREY SANDY TILL 20-88" GREY VERY SANDY TILL 23-80" GREY DENSE MOTTLED TILL OF SAND AND GRAVEL W/LENSES OF GRAVEL 68-84" WATER 60-77" WATER 80-94" WATER MOTTLING @ 34" MOTTLING @ 30" MOTTLING @ 24" NO WATER MOTTLING @ 20" MOTTLING @ 20" NO LEDGE WATER @ 70" WATER @ 65" WATER @ 85" WATER @ 35" NO LEDGE NO LEDGE NO LEDGE NO LEDGE <u>TP 572</u> 0-10" TOPSOIL <u>TP 556</u> 0-7" TOPSOIL <u>TP 561</u> 0-8" TOPSOIL TOPSOIL 10-25" BROWN FINE SANDY LOAM TOPSOIL 2-20" BROWN SANDY LOAM 7-36" BROWN SANDY LOAM 25-29" GREY DENSE MOTTLED TILL 8-22" BROWN FINE SANDY LOAM 10-20" BROWN SANDY LOAM 20-36" SANDY AND GRAVEL 36-88" GREY DENSE TILL 22-57" GREY DENSE MOTTLED TILL 29-83" WATER 20-56" GREY MOTTLED TILL 36-84" GREY COMPACT SAND 57-88" WATER MOTTLING @ 29" 56-76" WATER MOTTLING @ 19" MOTTLING @ 36" WATER @ 84" MOTTLING @ 21" WATER @ 28" MOTTLING @ 20" WATER @ 55" NO LEDGE WATER @ 28" NO LEDGE WATER @ 28" NO LEDGE NO LEDGE NO LEDGE <u>TP 573</u> 0-8" TOPSOIL TOPSOIL <u>TP 551</u> 0-3" TOPSOIL <u>TP 567</u> 0-10" TOPSOIL <u>TP 562</u> 0-12" TOPSOIL 8-34" BROWN SANDY LOAM 9-26" BROWN SANDY LOAM 34-67" GREY DENSE MOTTLED TILL 3-27" BROWN SANDY LOAM 26-83" GREY DENSE TILL 10-22" BROWN FINE SANDY LOAM 12-22" BROWN FINE SANDY LOAM 60-77" WATER 67-86" WATER 27-80" GREY SANDY TILL 22-70" GREY DENSE MOTTLED TILL 22-52" GREY DENSE MOTTLED TILL W/LENSES OF GRAVEL MOTTLING @ 23" 70-77" WATER MOTTLING @ 31" 52-81" WATER MOTTLING @ 27" WATER @ 77" WATER @ 33" MOTTLING @ 20" MOTTLING @ 21" WATER @ 41" NO LEDGE NO LEDGE WATER @ 32" WATER @ 25" NO LEDGE NO LEDGE <u>TP 558</u> 0-7" TOPSOIL NO LEDGE TOPSOIL <u>TP 568</u> 0-10" TOPSOIL 7-36" BROWN SANDY LOAM 7-20" BROWN SANDY LOAM <u>TP 563</u> 0-5" TOPSOIL TOPSOIL 20-52" GREY SANDY TILL W/LENSES 36-80" SAND AND GRAVEL 10-29" BROWN FINE SANDY LOAM 10-22" BROWN FINE SANDY LOAM OF SAND AND GRAVEL & SIL 52-81" WATER 5-23" BROWN SANDY LOAM 29-71" GREY TILL 22-54" GREY SANDY TILL W/LENSES 23-60" GREY VERY SANDY TILL OF SAND AND GRAVEL MOTTLING @ 36" 71-83" WATER 52-80" WATER 60-79" WATER WATER @ 77" 54-87" WATER NO LEDGE MOTTLING @ 21" MOTTLING @ 20" MOTTLING @ 22" MOTTLING @ 25" WATER @ 58" WATER @ 23" WATER @ 34" WATER @ 54" NO LEDGE NO LEDGE NO LEDGE NO LEDGE <u>TP 575</u> 0-8" TOPSOIL <u>TP 553</u> 0-5" TOPSOIL TOPSOIL 8-22" BROWN FINE SANDY LOAM 10-23" BROWN FINE SANDY LOAM 22-56" GREY MOTTLED TILL 5-22" BROWN SANDY LOAM 23-48" GREY SANDY TILL W/LENSES 56-77" WATER 22-84" GREY MOTTLED DENSE OF SAND AND GRAVEL MOTTLING @ 20" 48-87" WATER 84-86" WATER WATER @ 19" MOTTLING @ 23" MOTTLING @ 21" NO LEDGE WATER @ 24" WATER @ 36' NO LEDGE NO LEDGE PT 551 9:04 12 3/4" PT 567 2:02 12 1/2" PT 561 2:05 8 3/8" PT 572 2:05 5 1/4" 9:14 17 1/2" 8:06 11" 2:15 12 7/8" 2:12 14" 2:15 11" 2: 22 15 1/8" 2: 32 16" 9: 24 19 1/2" 8:16 13" 2:25 13 1/8" 9:34 20 7/8" 8:26 14 3/8" 2:35 14 7/8" 9: 44 22" 9: 54 23" 8: 36 15 1/2" 8: 46 17" 2: 42 17" 2:45 15 3/8" 2: 45 16" 2:52 17 7/8" 2:55 16 1/8" 2:55 16 7/8" 10:01 24 1/2" DRY 8:56 19" DRY 3:05 17 1/4" 3:02 18 3/4" 3: 05 17 3/4" DEPTH: 20" DEPTH: 20" DEPTH: 18" DEPTH: 18" DFPTH· 18" PERC RATE: 1"/10.0 MIN. PERC RATE: 1"/13.3 MIN. PERC RATE: 1"/11.4 MIN. PERC RATE: 1"/8.9 MIN. PERC RATE: 1"/11.4 MIN. PT 554 7:58 11 3/4" <u>PT 562</u> 2:06 7 5/8" PT 570 2:02 5 7/8" PT 548 9:05 8 3/8" 8: 08 14 1/4" 2:16 10 5/8" 2:12 8 3/4" 8:18 16 3/8" 9:15 11 7/8" 2: 26 13" 8:05 14 1/2" 8: 28 18 1/2" 2: 22 10 1/2" 9: 25 13 1/2" 8:15 17 3/8" 8: 38 19 1/2" 2: 32 12 1/4" 2:46 16 1/2" 9: 35 15" 8: 25 19 3/8" 2: 42 14" 8: 48 21 1/2" 9:45 16 1/8" 2:56 17" 8: 35 21" DRY 2:52 15" 8:58 23" DRY 3:06 18" DRY 3: 02 16" DEPTH: 18" 10:03 19" DRY DEPTH: 19" DEPTH: 18" PERC RATE: 1"/6.7 MIN. PERC RATE: 1"/6.2 MIN. DEPTH: 19" PERC RATE: 1"/20.0 MIN. PERC RATE: 1"/10.0 MIN. PERC RATE: 1"/7.3 MIN. PT 555 7:59 8 5/8" PT 571 2:00 9 1/2" 8:09 13 7/8" 2:13 14 5/8" 2:10 10 1/2" 2:20 11 1/2" 8: 19 16 7/8" 8: 29 19" 2:23 16 1/8" 2: 30 12" 8: 39 20" DRY 2: 43 18 3/8" 2:40 13 1/4" 2:53 19 3/8" DEPTH: 19" 2:50 14 1/4" 3:03 20 1/4" PERC RATE: 1"/10.0 MIN. 3:00 15 1/4" DEPTH: 18" DEPTH: 18"

Number of Bedrooms = 1" in 10.0 Min. Percolation Rate = 10.1-15% Average Slope = Depth to Restrictive Layer = 26" @ TP 548 Maximum Depth into Grade = 8" HF = 26, FF = 1.75, PF = 1.0MLSS = (26)(1.75)(1.0) = 46' (Required)MLSS = 58' (Provided)PRIMARY SEPTIC SYSTEM COMPONENTS 1,125 GAL. SEPTIC TANK (min.), PVC PIPE (1) ROW 58 LF GEOMATRIX GST 6212 RENCHES @ 10 SE/LE RESERVE SEPTIC SYSTEM (1) ROW 79 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF 1" in 10.0 Min. 2.1 - 3.0%

Number of Bedrooms = Percolation Rate = Average Slope = Depth to Restrictive Layer = 21" @ TP 553 Maximum Depth into Grade = 3" HF = 54, FF = 1.75, PF = 1.0MLSS = (54)(1.75)(1.0) = 95' (Required) MLSS = 104' (Provided)PRIMARY SEPTIC SYSTEM COMPONENTS 1,125 GAL. SEPTIC TANK (min.), PVC PIPE

1) ROW 104 LF GEOMATRIX GST 6206 TRENCHES @ 5.9 SF/LF RESERVE SEPTIC SYSTEM 1) ROW 95 LF GEOMATRIX GST 6206 TRENCHES @ 5.9 SF/LF

Number of Bedrooms = 1" in 20.0 Min. Percolation Rate = 6.1-8.0% Average Slope = Depth to Restrictive Layer = 21" @ TP 562 Maximum Depth into Grade = 3" HF = 34, FF = 1.75, PF = 1.25MLSS = (34)(1.75)(1.25) = 75' (Required) MLSS = 79' (Provided)

PRIMARY SEPTIC SYSTEM COMPONENTS
1,125 GAL. SEPTIC TANK (min.), PVC PIPE 1) ROW 79 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF

RESERVE SEPTIC SYSTEM (1) ROW 79 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF

Number of Bedrooms = 1" in 3.6 Min. Percolation Rate = 2.1 - 3.0%Average Slope = Depth to Restrictive Layer = 33" @ TP 582 Maximum Depth into Grade = 15" HF = 34, FF = 1.75, PF = 1.0MLSS = (34)(1.75)(1.0) = 60' (Required) MLSS = 60' (Provided)

PRIMARY SEPTIC SYSTEM COMPONENTS
1.125 GAL. SEPTIC TANK (min.), PVC PIPE 1) ROW 60 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF

RESERVE SEPTIC SYSTEM (1) ROW 58 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF

M.L.S.S. AND SEPTIC SYSTEM CALCULATIONS

Number of Bedrooms = 1" in 11.4 Min. Percolation Rate = 4.1-6.0% Average Slope = Depth to Restrictive Layer = 20" @ TP 567 Maximum Depth into Grade = 2" HF = 42, FF = 1.75, PF = 1.25MLSS = (42)(1.75)(1.25) = 92' (Required)MLSS = 92' (Provided)

PRIMARY SEPTIC SYSTEM COMPONENTS
1,125 GAL. SEPTIC TANK (min.), PVC PIPE (1) ROW 92 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF RESERVE SEPTIC SYSTEM (1) ROW 79 LF GEOMATRIX GST 6212

TRENCHES @ 10 SF/LF

Number of Bedrooms = 1" in 10.0 Min. Percolation Rate = Average Slope = 4.1 - 6.0%Depth to Restrictive Layer = 22" @ TP 568 Maximum Depth into Grade = 4" HF = 42, FF = 1.75, PF = 1.0MLSS = (42)(1.75)(1.0) = 74' (Required)MLSS = 74' (Provided)

PRIMARY SEPTIC SYSTEM COMPONENTS 1,125 GAL. SEPTIC TANK (min.), PVC PIPE (1) ROW 74 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF RESERVE SEPTIC SYSTEM (1) ROW 58 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF

Number of Bedrooms = 1" in 11.4 Min. Percolation Rate = 6.1-8.0% Average Slope = Depth to Restrictive Layer = 19" @ TP 572 Maximum Depth into Grade = 1" HF = 34, FF = 1.75, PF = 1.25MLSS = (34)(1.75)(1.25) = 75' (Required)MLSS = 79' (Provided)

PRIMARY SEPTIC SYSTEM COMPONENTS 1,125 GAL. SEPTIC TANK (min.), PVC PIPE (1) ROW 79 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF RESERVE SEPTIC SYSTEM (1) ROW 79 LF GEOMATRIX GST 6212

TRENCHES @ 10 SF/LF

Number of Bedrooms = Percolation Rate = 1" in 13.3 Min. 10.1-15% Average Slope = Depth to Restrictive Layer = NONE Maximum Depth into Grade = 35" MLSS NEED NOT BE CONSIDERED PRIMARY SEPTIC SYSTEM COMPONENTS
1,125 GAL. SEPTIC TANK (min.), PVC PIPE (1) ROW 79 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF RESERVE SEPTIC SYSTEM

(1) ROW 79 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF

Number of Bedrooms = Percolation Rate = 1" in 13.3 Min. 4.1-6.0% Average Slope = Depth to Restrictive Laver = 25" @ TP 17G Maximum Depth into Grade = 2" HF = 34, FF = 1.75, PF = 1.25MLSS = (34)(1.75)(1.25) = 75' (Required)

MLSS = 79' (Provided)PRIMARY SEPTIC SYSTEM COMPONENTS 1,125 GAL. SEPTIC TANK (min.), PVC PIPE (1) ROW 79 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF RESERVE SEPTIC SYSTEM (1) ROW 79 LF GEOMATRIX GST 6212

TRENCHES @ 10 SF/LF

Number of Bedrooms = Percolation Rate = Average Slope =

1" in 20.0 Min. 3.1-4.0% Depth to Restrictive Layer = 25" @ TP 19A Maximum Depth into Grade = 7" HF = 42, FF = 1.75, PF = 1.25MLSS = (42)(1.75)(1.25) = 92' (Required)MLSS = 92' (Provided)

PRIMARY SEPTIC SYSTEM COMPONENTS 1,125 GAL. SEPTIC TANK (min.), PVC PIPE (1) ROW 92 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF RESERVE SEPTIC SYSTEM

(1) ROW 79 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF

Number of Bedrooms = 1" in 20 Min. Percolation Rate = Average Slope = 8.1-10% Depth to Restrictive Layer = 33" @ TP 594 Maximum Depth into Grade = 15" HF = 24, FF = 1.75, PF = 1.25MLSS = (24)(1.75)(1.25) = 53' (Required) MLSS = 58' (Provided)

PRIMARY SEPTIC SYSTEM COMPONENTS
1.125 GAL. SEPTIC TANK (min.), PVC PIPE (1) ROW 58 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF RESERVE SEPTIC SYSTEM (1) ROW 58 LF GEOMATRIX GST 6212

TRENCHES @ 10 SF/LF

Number of Bedrooms = Percolation Rate = 1" in 13.3 Min. Average Slope = 8.1-10% Depth to Restrictive Layer = NONE Maximum Depth into Grade = 17" HF = 24, FF = 1.75, PF = 1.25 MLSS = (24)(1.75)(1.25) = 53' (Required) MLSS = 79' (Provided)PRIMARY SEPTIC SYSTEM COMPONENTS

1,125 GAL. SEPTIC TANK (min.), PVC PIPE

(1) ROW 79 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF RESERVE SEPTIC SYSTEM (1) ROW 79 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF

PUMP SEPTIC SYSTEM REQUIRED. Number of Bedrooms = Percolation Rate = 1" in 10.0 Min. Average Slope = 4.1-6.0% Depth to Restrictive Layer = 26" @ TP 20C Maximum Depth into Grade = 8" HF = 34, FF = 1.75, PF = 1.0MLSS = (34)(1.75)(1.0) = 60' (Required) MLSS = 60' (Provided)

PRIMARY SEPTIC SYSTEM COMPONENTS (1) ROW 60 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF

RESERVE SEPTIC SYSTEM (1) ROW 58 LF GEOMATRIX GST 6212 TRENCHES @ 10 SF/LF

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TEST HOLE DATA AS PERFORMED BY THE UNCAS HEALTH DEPARTMENT ON 10/15/08

AND 10/16/08 AND WITNESSED BY BENNETT & SMILAS ENGINEERING, INC.

PERC RATE: 1"/11.4 MIN.

<u>TP 510</u> 0-11" TOPSOIL <u>TP 585</u> 0-10" TOPSOIL 11-34" SILTY LOAM 10-25" SILTY LOAM 25-72" SILT & FINE-MED SAND 34-86" SILT & FINE-MED SAND MOTTLING @ 31" HEAVY MOTTLING @ 25" WATER @ 45" WATER @ 36" NO LEDGE NO LEDGE RESTRICTIVE @ 31" RESTRICTIVE @ 25" <u>TP 581</u> 0-9" TOPSOIL <u>TP 589</u> 0-10" TOPSOIL 9-32" SILTY LOAM 10-24" SILTY LOAM 32-90" COARSE SAND & SILT 24-74" SILT & MED SAND NO MOTTLING MOTTLING @ 24" NO WATER WATER @ 50" NO LEDGE NO LEDGE RESTRICTIVE @ 24"

<u>TP 582</u> 0-10" TOPSOIL 10-33" SILTY LOAM 33-86" MED-COARSE SAND W/SILT MOTTLING @ 33" WATER @ 87" NO LEDGE RESTRICTIVE @ 33" <u>TP 583</u> 0-11" TOPSOIL

11-35" SILTY LOAM 35-96" MED-COARSE SAND & SILT MOTTLING @ 32" WATER @ 87" NO LEDGE RESTRICTIVE @ 32" <u>TP 584</u> 0-10" TOPSOIL 10-33" SILTY LOAM 33-100" MED-COARSE SAND W/SILT

NO LEDGE

0-10" TOPSOIL 10-28" SILTY LOAM 28-57" MED SAND & FINE SILT MOTTLING @ 28" NO WATER LEDGE @ 57" RESTRICTIVE @ 28"

0-10" TOPSOIL

NO MOTTLING

NO WATER

10-27" SILTY LOAM

LEDGE @ 31" - 45"

RESTRICTIVE @ 31"

<u>TP 593</u> 0-11" TOPSOIL 11-19" LOAM 19-80" MED-COARSE SAND, SOME SILT, STONES NO MOTTLING NO WATER NO LEDGE <u>TP 594</u> 0-10" TOPSOIL 10-35" SILTY LOAM 35-96" FINE-MED SAND & SILT, ROCKS

NO MOTTLING NO WATER NO LEDGE RESTRICTIVE @ 33" <u>TP 595</u> 0-14" TOPSOIL 14-40" SILTY LOAM 40-81" FINE-MED SILTY SAND 27-45" SILT & FINE-MED SAND MOTTLING @ 34" NO WATER NO LEDGE RESTRICTIVE @ 34" <u>TP 596</u>

LEDGE @ 34" RESTRICTIVE @ 34" 0-5" TOPSOIL 5-9" BROWN SANDY LOAM 9-70" GREY SANDY TILL NO MOTTLING NO WATER NO LEDGE

6-43" BROWN SANDY LOAM 43-70" GREY SANDY TILL NO MOTTLING NO WATER NO LEDGE <u>TP 599</u> 0-7" TOPSOIL 7-26" BROWN SANDY LOAM 26-59" GREY SANDY TILL MOTTLING @ 26" NO WATER LEDGE @ 59" RESTRICTIVE @ 26" <u>TP 606</u> 0-8" TOPSOIL 8-24" BROWN SANDY LOAM 24-62" GREY MOTTLED TILL

PERC RATE: 1"/10.0 MIN.

0-6" TOPSOIL

MOTTLING @ 24" WATER @ 57" LEDGE @ 60" RESTRICTIVE @ 24" <u>TP 607</u> 0-3" TOPSOIL 3-19" BROWN SANDY LOAM 19-48" GREY SANDY TILL NO MOTTLING NO WATER LEDGE @ 48" RESTRICTIVE @ 48"

PT 608 10: 31 4" 10: 36 8" 10: 46 12 3/4" 10: 56 16" 11:02 17 7/8" DRY DEPTH: 20" PERC RATE: 1"/5.3 MIN. 8:59 6 3/4" 9:09 8 3[']/4" 9: 19 10 1/2" 9: 29 12" 9:39 13 3/8" 9: 49 14 5/8" 9: 59 15 3/4" DEPTH: 20" PERC RATE: 1"/8.9 MIN.

DEPTH: 20" PERC RATE: 1"/11.4 MIN. PT 614 12:50 6 1/4" PT 610 8:55 2 5/8" 1:00 10 1/2" 1:10 12 7/8" 9:00 3 3/4" 1:20 14 3/8" 9:10 5 1/8" 1:30 15 1/2" 9:20 6 3/4" 1:40 16 3/8" DRY 9:30 8 1/8" 9:40 9 1/4" 9: 50 10 1/8" 10: 00 11" DEPTH: 20" PERC RATE: 1"/11.4 MIN. PT 611 1:09 3 1/8" 1:14 6"

1:54 13 3[']/4" 2:04 14 3/4" 2:14 15 3/4" DEPTH: 20"

1: 24 8 1/2" 1: 34 10 1/2"

1:44 12 1/8'

DEPTH: 20" PERC RATE: 1"/11.4 MIN. PT 615 12:51 3 3/4" 12:56 7 3/8" 1:06 12 3/4" 1:16 15 1/2" 1: 24 18 1/2" DRY DEPTH: 21" PERC RATE: 1"/3.6 MIN.

PT 612 12: 22 3 1/2"

12:27 6 3/8"

DEPTH: 20"

PT 613 12: 47 5 1/2"

12:57 9 1/8" 1:07 11 1/8" 1:17 12 7/8"

1: 27 14 1/2"

1:37 15 3/8"

1: 47 16 1/4"

12: 37 10 3/8"

12: 47 12 3[']/8"

12:57 14 3/8" DRY

PERC RATE: 1"/5.0 MIN.

PERC RATE: 1"/10.0 MIN

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CALCULATIONS RESUBDIMISION ESTATES DESIGN

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CHAUG TH ROAD & B

DATE: 8-22-23 SCALE: NONE

SHEET 8 OF 10

MAP NO. 23-024-1N

THE SUBDIVISION PLANS SHOW GENERIC DESIGN CONCEPTS FOR EACH LOT TO DEMONSTRATE CONFORMANCE WITH THE TOWN OF MONTVILLE INLAND WETLANDS AND WATERCOURSES REGULATIONS. ZONING REGULATIONS AND SUBDIVISION REGULATIONS. THE INFORMATION SHOWN IN THE ABOVE REFLECTS THE GENERIC DESIGN CONCEPT AND MAY DIFFER IN SIZE AND SCOPE FROM THE ACTUAL DEVELOPMENT.

SEPTIC SYSTEM MATERIAL = 60 C.Y.

TOTAL IMPORTED MATERIAL = 100 C.Y.

TOPSOIL STOCKPILE	AREA CALCULATIONS
LOT 1 DISTURBED AREA = 21,500 SF VOLUME OF TOPSOIL = 279 CY STOCKPILE DIMENSIONS = 34'W x 34'L x 10'H	LOT 9 DISTURBED AREA = 23,781 SF VOLUME OF TOPSOIL = 308 CY STOCKPILE DIMENSIONS = 36'W x 36'L x 10'H
LOT 2 DISTURBED AREA = 21,126 SF VOLUME OF TOPSOIL = 274 CY STOCKPILE DIMENSIONS = 34'W x 34'L x 10'H	LOT 10 DISTURBED AREA = 14,483 SF VOLUME OF TOPSOIL = 188 CY STOCKPILE DIMENSIONS = 30'W x 30'L x 10'H
LOT 3 DISTURBED AREA = 24,917 SF VOLUME OF TOPSOIL = 323 CY STOCKPILE DIMENSIONS = $38\text{'W} \times 38\text{'L} \times 10\text{'H}$	LOT 11 DISTURBED AREA = 22,025 SF VOLUME OF TOPSOIL = 285 CY STOCKPILE DIMENSIONS = 34'W x 34'L x 10'H
LOT 4 DISTURBED AREA = 25,667 SF VOLUME OF TOPSOIL = 333 CY STOCKPILE DIMENSIONS = 34'W x 34'L x 10'H	LOT 12 DISTURBED AREA = 17,501 SF VOLUME OF TOPSOIL = 227 CY STOCKPILE DIMENSIONS = 31'W x 31'L x 10'H
LOT 5 DISTURBED AREA = 32,447 SF VOLUME OF TOPSOIL = 420 CY STOCKPILE DIMENSIONS = 42'W x 42'L x 10'H	LOT 13 DISTURBED AREA = 11,986 SF VOLUME OF TOPSOIL = 155 CY STOCKPILE DIMENSIONS = 26'W x 26'L x 10'H
LOT 6 DISTURBED AREA = 16,445 SF VOLUME OF TOPSOIL = 508 CY STOCKPILE DIMENSIONS = 46'W x 46'L x 10'H	
LOT_7 DISTURBED AREA = 20,098 SF	

THE SUBDIVISION PLANS SHOW GENERIC DESIGN CONCEPTS FOR EACH LOT TO DEMONSTRATE CONFORMANCE

WITH THE TOWN OF MONTVILLE INLAND WETLANDS AND WATERCOURSES REGULATIONS, ZONING REGULATIONS AND SUBDIVISION REGULATIONS. THE INFORMATION SHOWN IN THE ABOVE REFLECTS THE GENERIC DESIGN

ROOF DRAIN
TREATMENT CALCULATIONS
FOR TYPICAL LOT

CONCEPT AND MAY DIFFER IN SIZE AND SCOPE FROM THE ACTUAL DEVELOPMENT.

-RAIN VOLUME ROOF AREA = 2,275 SF

VOLUME OF TOPSOIL = 213 CY

LOT 8
DISTURBED AREA = 22,947 SF

VOLUME OF TOPSOIL = 197 CY

STOCKPILE DIMENSIONS = 60'W x 15'L x 10'H

STOCKPILE DIMENSIONS = 30'W x 30'L x 10'H

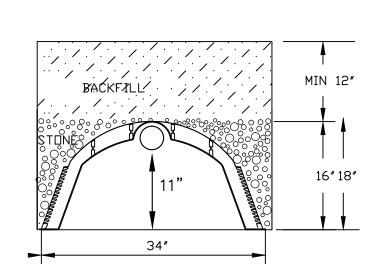
PROVIDE STORAGE FOR 1" OF RAINFALL 2,275 SF X 1" X (1'/12") = 190 CF

-DRYWELL SIZING

USE 16" HIGH CAPACITY QUICK 4 INFILTRATORS BACKFILLED WITH STONE

HIGH CAPACITY QUICK 4 INFILTRATORS + STONE = 3.83 CF STORAGE PER LINEAR FOOT

190 CF \div 3.83 CF/LF = 48 LF OF INFIL. W/ STONE (REQUIRED) PROVIDE 8 INFILTRATOR UNITS W/ STONE (6 LF/CHAMBER) PER LOT.



HI-CAPACITY INFILTRATOR CHAMBERS W/ STONE =3.83 FT3/LF INSTALL PER MANUFACTURERS INSTRUCTIONS ROOF DRAIN DETAIL HI-CAPACITY QUICK 4 CHAMBERS WITH STONE

NOT TO SCALE

	<u> </u>
	NOT TO SCAL
OUSE	GUTTER DOWNSPOUT 4" SDR 35 TEE OVERFLOW OUTLET DRAIN TO DAYLIGHT AT GRADE
	4" SDR 35 PVC ROOF DRAIN TO GALLERY DRYWELL
	ROOF DRAIN

DOWNSPOUT DETAIL

NOT TO SCALE

INFILTRATION TRENCH NOT TO SCALE	<u>DETAIL</u>
GUTTER DOWNSPOUT 4" SDR 35 TEE OVERFLOW OUTLET DRAIN TO DAYLIGHT AT GRADE	
4" SDR 35 PVC ROOF DRAIN TO GALLERY DRYWELL	TOPSOIL
ROOF DRAIN	

4" MIN. TOPSOIL

3/4" STONE

	RAIN GARDEN:	
	*MAINTENANCE OF ALL STORMWATER FACILITES IS THE RESPONSIBILITY OF THE PROPERTY OWNERS. ALL INDIVIDUAL PLOT PLANS SHALL HAVE THE MAINTENANCE PLAN, RAIN GARDEN, SPILLWAY & LEVEL SPREADER DETAILS ON THEM.	
	FIRST SEASON - WEED (3-5" LAYER OF MULCH WILL LIMIT WEEDS) - WATER (GENERAL RULE OF THUMB IS 1" OF WATER PER WEEK)	
	ANNUAL	
<u>ETAIL</u>	EARLY SPRING - CUIT AND REMOVE DEAD STALKS AND SEED HEADS FROM PREVIOUS SEASON. - REMOVE STICKS AND DEBRIS - WEED - PRUNE SHRUBS IF NECESSARY - WHERE PLANTS ARE TOO CROWDED, DIVIDE AND MOVE PLANTS TO DIFFERENT AREA	
	- REPLENISH MULCH TO 3-5" LAYER	
	SPRING AND SUMMER - WEED - WATER DURING SEVERE DROUGHT	
	FALL - REMOVE WEEDS AND DISEASED PLANTS	
	- REMOVE WEEDS AND DISEASED PLANTS - CUT BACK DEAD STALKS - REMOVE EXCESS TREE LEAVES FROM GARDEN - IF FALL IS DRY, WATER PLANTS UNTIL GROUND BEGINS TO FREEZE (EARLY NOVEMBER)	
FINISHED GRADE		FINISHED GRADE
TOPSOIL 72. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10		4" MULCH
	// ,	
	// 4	_
		PLANTING MEDIUM 50% SAND
		30% TOPSOIL 20% PEAT
		2000 1 2000
	" 0	
	/	

RAIN GARDEN DESIGN

WATER

QUALITY

VOLUME

535 CF

105 CF

150 CF

100 CF

730 CF

120 CF

110 CF

240 CF

240 CF (FRONT)

165 CF (REAR)

240 CF

365 CF (FRONT)

180 CF

190 CF

350 CF (REAR)

% IMPERVIOUS

WITHIN DRAIN.

AREA

62%

40%

8%

16%

27%

91%

38% (FRONT)

59%(REAR)

38%

14% (FRONT)

13% (REAR)

39%

FILTER FABRIC

IMPERVIOUS

AREA

6500 SF

1200 SF

1800 SF

1200 SF

6000 CF

1200 SF

1200 SF

3000 SF

2700 SF (FRONT)

2000 SF (REAR)

2700 SF

3400 SF (FRONT)

3200 SF (REAR)

1900 SF

2200 SF

LOT

DRAINAGE AREA

10500 SF

3000 SF

3800 SF

1400 SF

73000 SF

7500 SF

4400 SF

3300 SF

7200 SF (FRONT

3400 (REAR)

7200 SF

25000(FRONT)

25000 (REAR)

8400 SF

5700 SF

VOL. PROVIDED

INFILTRATION TRENCH - $4' \times 1' \times 0.4 \text{ voids} = 1.6 \text{ cf/lf}$

105 SF X 12" DEEP

150 SF X 12" DEEP

100 SF X 12" DEEP

500 SF X 18" DEEP

120 SF X 12" DEEP

110 SF X 12" DEEP

INFILTRATION TRENCH - $4' \times 1' \times 0.4 \text{ voids} = 1.6 \text{ cf/lf}$

240 SF X 12" DEEP (FRONT) 165 SF X 12" DEEP (REAR)

160 SF X 18" DEEP

365 SF X 12" DEEP (FRONT) 350 SF X 12" DEEP (REAR)

180 SF X 12" DEEP

190 SF X 12" DEEP

- STABILIZE ANY ERODED AREAS BELOW ROOF DRAIN DOWNSPOUT BY REPLANTING DURING GROWING SEASON AND ARMOR AREAS W/ JUTE NETTING AND PLANTINGS OR IF EROSION PERSISTS, CRUSHED STONE / RIP

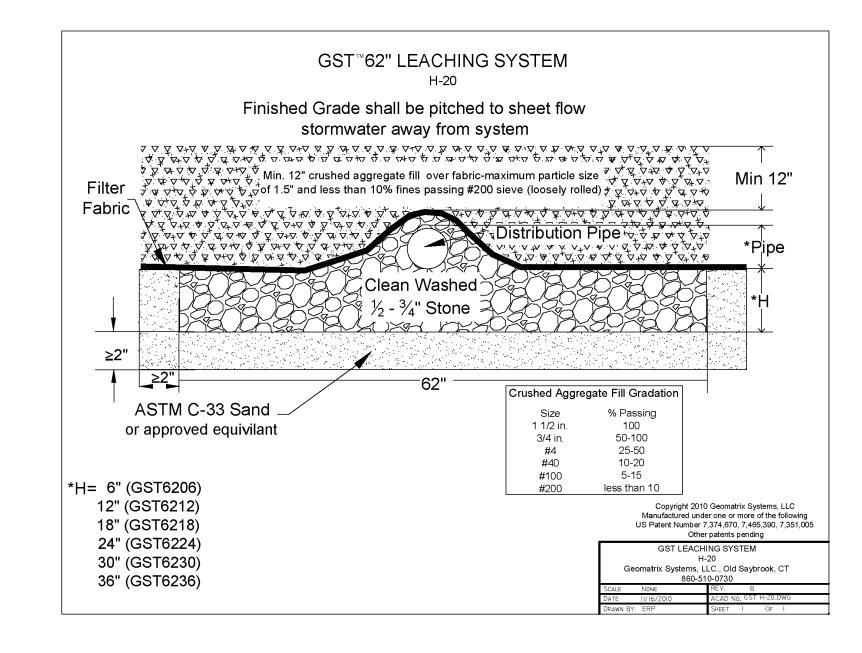
LOT 8 INFILTRATION TRENCH: — INSPECT BI-ANNUALLY. REMOVE DEBRIS, TRASH AND SEDIMENT AS REQUIRED.

OPERATIONS & MAINTENANCE:

- STABILIZE ANY ERODED AREAS WITHIN TRENCH W/ CRUSHED STONE. STABILIZE ANY ERODED AREAS BELOW INFILTRATION TRENCH BY REPLANTING DURING GROWING SEASON AND ARMOR AREAS W/ JUTE NETTING AND PLANTINGS OR IF EROSION PERSISTS,

RAIN GARDEN SECTION

ADDITIONAL SEPTIC SYSTEM DESIGN NOTES



Geomatrix GSTTM Leaching System Installation Instructions

- This installation procedure serves as a general overview of the installation procedure for Geomatrix GST. The system drawings should be strictly adhered to and an authorized representative of Geomatrix Systems, LLC must be present unless the contractor is certified by Geomatrix Systems.
- 1 Layout system
- 2 Prepare site and remove any trees with a drip line falling within 10 feet of the leaching system.
- 3 Excavate trench to specified elevation and a minimum of 66" wide. 4 Rake/scarify sidewall and bottom of trench to address any smearing of fines, and
- then do not walk in trench bottom. 5 Install a minimum of 2" of ASTM C-33 sand
- in the bottom of the excavation and rake the sand bed level.
- 6 Set string and place wood strips along both sides of system location.
- 7 Set the GST forms on top of wood strips. 8 Place ASTM C-33 sand into void space between trench sidewall and GST form,
- including the area between what will become the stone fingers and uniformly
- 9 Place clean CT DOT #6 stone into the interior of the GST form.
- 10 Pull first form and "leap frog" GST form ahead of last GST form.
- 11 Repeat sequence until desired trench length is installed. 12 Install distribution piping on top of, and in the center of, the GST leaching system.
- 13 Place stone around the distribution pipe. Install provided GST inspection port 14 Put approved filter fabric over the system.
- 15 Backfill system to ensure uniform cover exists over the top of the system
- (a minimum of 6" is required).
- 16 Finish grade over the system should ensure that storm water and sheet flow are
- diverted away from the leaching system, septic tank and pump tank if present. 17 Seed grass over disturbed area.
- 18 Maintain the area to prevent against tree roots from impacting the system. 19 Properly service the septic tank every 3 - 5 years or as advised by the regulatory
- agency or your service provider. 20 Fix leaking plumbing fixtures immediately.
- *Notes: If the GST is to be installed under an area where vehicle traffic is likely, a
- minimum of 12" of cover and a load distribution system is recommended to prevent soil compaction adjacent to the infiltrative surface.
- Discharging a garbage disposal and/or water softener into septic system and GST leach
- field is NOT recommended.
- Any questions call Geomatrix Systems 860-663-3993 01/28/08 © 2007 Geomatrix Systems, LLC

BY THE TOWN HEALTH DEPARTMENT.

NOTES: (THE FOLLOWING NOTES MAY APPLY) THE LEACHING AREA IS TO BE STRIPPED OF ALL UNSUITABLE SOILS AND FILLED WITH CLEAN SAND, LAID IN SIX INCH LIFTS. FILL TO BE MECHANICALLY COMPACTED TO 90% MAXIMUM DENSITY. A MINIMUM SEPERATION DISTANCE OF 18" BETWEEN THE MOTTLING/GROUND WATER LAYER AND BOTTOM OF THE LEACHING ARE MUST BE MAINTIANED.

INSTALLATION OF ALL SEWAGE DISPOSAL SYSTEMS SHALL NOT OCCUR DURING WET WEATHER TO AVOID SOIL SMEARING. FILLING OF STRIPPED AREAS SHALL NOT BE PERMITTED WHILE SMEARING OF THE SOILS OCCURS, ALL SMEARED SURFACES SHALL

BE RAKED OR PLOWED PRIOR TO ANY FILLING AND AS DIRECTED

"SELECT FILL MATERIAL" AND "SELECT BACK FILL MATERIAL", PLACED WITHIM. AND ADJACENT TO PROPOSED LEACHING AREAS SHALL BE COMPRISED OF CLEAN SAND AND GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE FILL MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE APPROVED BY A PROFESSIONAL ENGINEER FOR USE WITHIN THE LEACHING AREA:

1. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THREE (3) INCHES. 2. 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). 3. THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN REWEIGHED AND THE SIEVE ANALYSIS STARTED. 4. THE REMAINING SAMPLE SHALL MEËT THE FOLLOWING GRADATION CRITERIA:

> SIEVE SIZE PERCENT PASSING WET SIEVE 70% - 100% 70% - 100% 10% - 50%* 0% - 20%

*NOTE: PERCENT PASSING THE #40 SIEVE CAN 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 RESPONSIBILITY FOR THE PREPARATION OF A LEACHING AREA UTILIZING "SELECT MATERIAL" IS THAT OF THE LICENSED INSTALLER. THE INSTALLER SHALL TAKE THE NECESSARY STEPS TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOILS FROM OVERCOMPACTION AND SILTATION ONCE EXPOSED.

- B. ENDS OF GST TRENCH TO BE CAPPED
- C, NO SOURCES OF POLLUTION WITHIN 75' OF PROPOSED WELL.

DATE: 8-22-23 NONE SCALE:

SHEET 9 OF 10 MAP NO. 23-024-1N ALL DRIVEWAY SHOULDERS SHOULD BE STABILIZED IMMEDIATELY UPON COMPLETION OF ROUGH GRADING. SHOULDER SEED BED PREPARATION SHOULD FOLLOW THE GENERAL NOTES PROVIDED. HAY BALES OR FILTER FABRIC SHOULD BE USED TO ENTRAP ANY SEDIMENT GENERATED FROM EXPOSED SOIL SURFACES. DRIVEWAY ROADBEDS SHALL BE STABILIZED WITH COMPACTED ROAD AGGREGATE AS SOON AS POSSIBLE.

TOPSOIL AND EXCAVATED SUBSOIL FROM THE FOUNDATION AREA SHOULD BE STOCKPILED WITHIN THE AREA OF DISTURBANCE IF NOT USED FOR ONSITE REGRADING. EACH STOCKPILE MUST BE ADEQUATELY RINGED WITH SEDIMENT CONTROL MATERIALS (I.E. HAY

ANY ADDITIONAL STOCKPILING OF LUMBER OR BUILDING MATERIALS SHOULD ALSO BE CONFINED TO THE AREA OF DISTURBANCE. SIMILARY, VEHICULAR MOVEMENT SHOULD BE DIRECTED TO ESTABLISHED PARKING AREAS. PROPOSED LEACHING SYSTEM AREAS NOT BE IMPACTED BY VEHICULAR TRAFFIC OR UTILIZED AS PARKING DEVELOPMENT OF SEWAGE DISPOSAL LEACHING AREAS SHOULD BE STAGED TO FOLLOW EXISTING VEGETATION IN COORDINATION WITH APPROVED SEPTIC SYSTEM DESIGN. RESERVE AREAS SHOULD REMAIN UNALTERED IF SITE CONDITIONS PERMIT.

SOIL BOUNDARIES AND SOIL TYPES TAKEN FROM "SOIL SURVEY NEW LONDON COUNTY, CONNECTICUT", USDA SCS. WETLAND BOUNDARIES VERIFIED IN FIELD. STUMPAGE AND DEBRIS SHALL NOT BE BURIED ON SITE.

PLOT PLANS FOR EACH LOT SHALL INDICATE PROPOSED SEDIMENTATION AND EROSION CONTROLS. ALSO THE PROPOSED HOUSE LOCATION, LOT GRADING LIMIT OF TREE CLEARING, DRIVEWAY DESIGN, SEPTIC SYSTEM DESIGN AND SITE DRAINAGE PLAN SHAL UPON APPROVAL OF INDIVIDUAL SITE PLAN DEVELOPMENT, THE LIMITS OF DEVELOPMENT

SHOULD BE ESTABLISHED IN THE FIELD FOR EACH PROPOSED RESIDENTIAL STRUCTURE. DISTURBANCE LIMITS OF 25-30 FEET BEYOND THE PHYSICAL DIMENSIONS OF THE STRUCTURE ARE RECOMMENDED. LEACHING FIELDS ARE TO BE LOCATED IN AREAS DESIGNATED ON SUBDIVISION PLAN.

SITE NARRATIVE

IN GENERAL THIS SITE CONSISTS OF 25.46 ACRES OF LAND TO BE DEVELOPED INTO 6 RESIDENTIAL BUILDING LOTS. HOUSES WILL BE SERVED BY ONSITE PRIVATE WELLS AND ONSITE SUBSURFACE SEPTIC SYSTEMS. THE NATURE OF THE PROPOSED CONSTRUCTION ACTIVITIES INCLUDE MINIMAL CLEARING AND GRUBBING, TOPSOIL STRIPPING, FOUNDATION EXCAVATION AND INSTALLATION OF DRIVEWAY, SEPTIC SYSTEM & WELL. ALL ACTIVITIES ARE DESIGNED WITH A STRONG FOCUS ON

SOME GENERAL KEYS TO SUCCESSFUL EROSION & SEDIMENTATION CONTROLS ARE AS FOLLOWS:

- 1. KEEP CLEARING AND GRUBBING OF VEGETATION TO AN ABSOLUTE MINIMUM. 2. MINIMIZE TIME OF EXPOSURE OF UNPROTECTED SOIL SURFACES.
- 3. STABILIZE ALL GRADED AREAS WITH MULCH AND VEGETATION IMMEDIATELY AFTER GRADING.
- 4. DIVERT RUNOFF AWAY FROM STEEPLY SLOPED & DISTURBED AREAS.
- 5. MONITOR AND MAINTAIN CONTROLS REGULARLY (WEEKLY).

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION AS MAY BE REQUIRED, DURING THE CONSTRUCTION OF THE PROJECT.

IN GENERAL, ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSE, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT, INSOFAR AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS, AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES AND WATERBODIES, AND TO PREVENT, INSOFAR AS

CONSTRUCTION METHODS, IN GENERAL, SHALL BE IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE STATE OF CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION.

LAND GRADING

- THE RESHAPING OF THE GROUND SURFACE BY EXCAVATION AND FILLING OR A COMBINATION OF BOTH, TO OBTAIN PLANNED GRADES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING BASIC CRITERIA:
- A) THE CUT FACE OF EARTH EXCAVATION SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO
- B) THE PERMANENT EXPOSED FACES OF FILLS SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
- C) THE CUT FACE OF ROCK EXCAVATION SHALL NOT BE STEEPER THAN ONE HORIZONTAL TO FOUR VERTICAL (1:4). D) NO FILL SHOULD BE PLACED WHERE IT WILL SLIDE, OR WASH UPON THE PREMISES OF
- ANOTHER OWNER OR UPON ADJACENT WETLANDS, WATERCOURSE OR WATERBODY.
- E) INSTALLATION OF SEDIMENT AND EROSION CONTROLS SUCH AS HAY BALES AND SILT FENCES SHALL BE ESTABLISHED PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITIES. ALL SEDIMENT AND EROSION CONTROL STRUCTURES MUST BE MONITORED AND MAINTAINED BY THE CONTRACTOR UNTIL THE SOIL SURFACE IS STABILIZED.
- F) IF NECESSARY, LATERAL WATER DIVERSIONS SHALL BE INSTALLED ACROSS THE GRADED ROADWAY TO PREVENT DOWNSLOPE OUTWASH AND EROSION.
- G) HAY BALES SHALL BE STAKED AND SILT FENCES SHALL BE PROPERLY SECURED. SEDIMENT WILL BE REMOVED FROM ALL CATCHMENTS AS NECESSARY.
- H) PRIOR TO ANY REGRADING, STONE APRON SHALL BE PLACED BY THE ENTRANCE TO THE WORK AREA IN ORDER TO REDUCE MUD AND OTHER SEDIMENTS FROM LEAVING THE SITE.
- PROVISIONS SHOULD BE MADE TO CONDUCT SURFACE WATER SAFELY TO STORM DRAINS, TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FILL SLOPES.

EXCAVATIONS SHOULD NOT BE MADE SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTY WITHOUT PROTECTING SUCH PROPERTY FROM EROSION, SLIDING, SETTLING OR CRACKING.

INSTALLATION OF EROSION & SEDIMENTATION CONTROLS

INSTALL SITE CONSTRUCTION ENTRANCE FOR DRIVEWAY

STRIP & STOCKPILE TOPSOIL

BUILDING CONSTRUCTION

INSTALL WELL & SEPTIC SYSTEM

FERTILIZE, LIME. SEED, & MULCH

ESTABLISHMENT OF VEGATATION

REMOVE EROSION & SEDIMENT

ACTUAL DATE:

CONST. STARTING DATE DEPENDS ON APPROVAL DATE OF PROJECT, BONDING & WEATHER CONDITIONS.

SHOULD BE PLANTED BETWEEN: 4-15 & 6-15 OR 8-15 & 9-15 (FOR PERMANENT) IF NOT MULCH WITH STRAW & MULCH NETS

3-1 & 6-15 OR 8-1 & 10-1 (FOR TEMPORARY) IF NOT MULCH WITH STRAW & MULCH NETS

CONTROLS

GRADE, TOPSOIL & STABILIZE

CLEARING & GRUBBING

INSTALL DRIVEWAY

CONTROLS

INSPECTION & MAINTENANCE OF EROSION & SEDIMENTATION

<u>TOPSOILING</u>

- GENERAL: TOPSOIL SHALL BE SPREAD OVER ALL EXPOSED AREAS IN ORDER TO PROVIDE A SOIL MEDIUM HAVING FAVORABLE CHARACTERISTICS FOR THE ESTABLISHMENT, GROWTH AND MAINTENANCE OF VEGETATION.
- 2. REMOVE ALL LARGE STONES, TREE LIMBS, ROOTS, AND CONSTRUCTION DEBRIS.
- 3. APPLY LIME ACCORDING TO SOIL TEST OR AT THE RATE OF TWO (2) TONS PER ACRE.
- 1. TOPSOIL SHOULD HAVE PHYSICAL, CHEMICAL AND BIOLOGICAL CHARACTERISTICS FAVORABLE TO THE GROWTH OF PLANTS.
- 2. TOPSOIL SHOULD HAVE A SANDY OR LOAMY TEXTURE.
- 3. AN ORGANIC MATTER CONTENT OF OVER TWO (2%) PERCENT IS HIGHLY DESIRABLE. AVOID LIGHT COLORED LOWER SUBSOIL MATERIAL.

1. AVOID SPREADING WHEN TOPSOIL IS WET OR FROZEN.

2. SPREAD TOPSOIL UNIFORMLY TO A DEPTH OF AT LEAST FOUR (4") INCHES.

EROSION CHECKS

1. TEMPORARY PERVIOUS BARRIERS USING BALES OF HAY OR STRAW, HELD IN PLACE WITH STAKES DRIVEN THROUGH THE BALES AND INTO THE GROUND, OR SEDIMENT FILTER FABRIC FASTENED TO A FENCE POST AND BURIED INTO THE GROUND, SHALL BE INSTALLED AND MAINTAINED AS REQUIRED TO CHECK EROSION AND REDUCE SEDIMENTATION.

1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.

- 2. EACH BALE SHALL BE EMBEDDED INTO THE SOIL A MINIMUM OF FOUR (4") INCHES.
- 3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY WOOD STAKES OR REINFORCEMENT
- BARS DRIVEN THROUGH THE BALES AND INTO THE GROUND. THE FIRST STAKE IN EACH
 BALE SHALL BE ANGLED TOWARD THE PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER. 4. FILTER FABRIC SHALL BE SECURELY FASTENED AT THE TOP OF A THREE (3') FOOT HIGH FENCE AND BURIED A MINIMUM OF FOUR (4") INCHES INTO THE SOIL. SEAMS BETWEEN
- SECTIONS OF FILTER FABRIC SHALL OVERLAP A MINIMUM OF TWO (2') FEET.

INSTALLATION AND MAINTENANCE:

- 1. BALED HAY EROSION BARRIERS SHALL BE INSTALLED AT ALL STORM SEWER INLETS.
- BALED HAY EROSION BARRIERS AND SEDIMENT FILTER FENCES SHALL BE INSTALLED AT APPROPRIATE DURING CONSTRUCTION.
- ALL EROSION CHECKS SHALL BE MAINTAINED UNTIL ADJACENT AREAS ARE STABILIZED.
- 4. INSPECTION SHALL BE FREQUENT (AT MINIMUM MONTHLY AND BEFORE AND AFTER HEAVY RAIN) AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- 5. EROSION CHECKS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORMWATER FLOW OR DRAINAGE.

ALL WINDBLOWN SEDIMENTS SHALL BE CONTROLLED AT ALL TIMES. THE SITE CONTRACTOR IS RESPONSIBLE FOR APPLYING DUST CONTROL AS OFTEN AS NEEDED TO PREVENT ANY WINDBLOWN SEDIMENTS FROM LEAVING THE SITE. PREDETERMINED TRAFFIC ROUTES FOR ALL TRAFFIC SHALL BE ESTABLISHED BY THE SITE CONTRACTOR TO STABILIZED ROUTES. TEMPORARY AND PERMANENT MULCHING AND TEMPORARY AND PERMANENT VEGETATIVE COVER SHALL BE USED TO MINIMIZE THE NEED FOR DUST CONTROL. MECHANICAL SWEEPERS SHALL BE USED ON ALL PAVED SURFACES TO PREVENT DUST BUILD UP DURING THE COURSE OF SITE WORK.

CONSTRUCTION SCHEDULE

- 1. SPRAY ON ADHESIVES ARE ACCEPTABLE AND SHOULD BE APPLIED ACCORDING TO
- 2. WATER IS ACCEPTABLE BUT MUST BE APPLIED OFTEN IN HOT, DRY WEATHER.
- CALCIUM CHLORIDE IS ACCEPTABLE BUT MUST BE APPLIED AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE.
- 4. CRUSHED STONE OR COARSE GRAVEL CAN ALSO BE USED.

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TEMPORARY VEGETATIVE COVER GENERAL:

- TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED ON ALL UNPROTECTED AREAS THAT PRODUCE SEDIMENT, AREAS WHERE FINAL GRADING HAS BEEN COMPLETED AND AREAS WHERE THE ESTIMATED PERIOD OF BARE SOIL EXPOSURE IS LESS THAN 12 MONTHS.
- SITE PREPARATION: 1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
- 2. REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
- 3. APPLY LIME ACCORDING TO SOIL TEST OR AT A RATE OF ONE (1) TON OF GROUND DOLOMITIC LIMESTONE PER ACRE (5 LBS. PER 100 SQUARE FEET).
- 4. APPLY FERTILIZER ACCORDING TO SOIL TEST OR AT THE RATE OF 300 LBS. OF
- 10-10-10 PER ACRE (7 LBS. PER 1,000 SQUARE FEET.) UNLESS HYDROSEEDED, WORK IN LIME AND FERTILIZER TO A DEPTH OF FOUR (4") INCHES USING A DISK OR ANY SUITABLE EQUIPMENT.
- 6. TILLAGE SHOULD ACHIEVE A REASONABLY UNIFORM, LOOSE SEEDBED. WORK ON CONTOUR IF SITE IS SLOPING.

ESTABLISHMENT:

- USE ANNUAL RYEGRASS AT A RATE OF 40 LBS/AC. OR SUITABLE EQUIVALENT AS SPECIFIED IN THE "GUIDELINES".
- WINTER STABILIZATION PLANTINGS TO BE NO LATER THAN OCTOBER 1ST. THIS INCLUDES
- 3. APPLY SEED UNIFORMLY ACCORDING TO THE RATE INDICATED BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
- UNLESS HYDROSEEDED, COVER RYEGRASS SEEDS WITH NOT MORE THAN 1/4 INCH OF SOIL WITH SUITABLE EQUIPMENT. COVER SUDANGRASS AND SMALL GRAINS WITH 1/2 INCH SOIL. MULCH IMMEDIATELY AFTER SEEDING, IF REQUIRED, ACCORDING TO THE GUIDELINES IN

PERMANENT VEGETATIVE COVER

PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED AS VARIOUS SECTIONS OF THE PROJECT ARE COMPLETED IN ORDER TO STABILIZE THE SOIL, REDUCE DOWNSTREAM DAMAGE FROM SEDIMENT AND RUNOFF AND TO ENHANCE THE AESTHETIC NATURE OF THE SITE. IT WILL BE APPLIED TO ALL CONSTRUCTION AREAS SUBJECT TO EROSION WHERE FINAL GRADING HAS BEEN COMPLETED AND A PERMANENT COVER IS NEEDED.

- INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
- 2. REMOVE LOOSE ROCK, STONE AND CONSTRUCTION DEBRIS FROM AREA. 3. PERFORM ALL PLANTING OPERATIONS PARALLEL TO THE CONTOURS OF THE SLOPE.
- 4. APPLY TOPSOIL AS INDICATED ELSEWHERE HEREIN.

5. APPLY FERTILIZER ACCORDING TO SOIL TEST OR:

WORK DEEPLY IN SOIL, BEFORE SEEDING, 300 LBS OF 10–10–10 FERTILIZER PER ACRE (7 LBS PER 1,000 SQUARE FEET); THEN SIX (6) TO EIGHT (8) WEEKS LATER APPLY ON THE SURFACE AN ADDITIONAL 300 LBS OF 10–10–10 FERTILIZER PER ACRE.

WORK DEEPLY IN SOIL, BEFORE SEEDING, 600 LBS OF 10-10-10 FERTILIZER PER ACRE (14 LBS PER 1,000 SQUARE FEET).

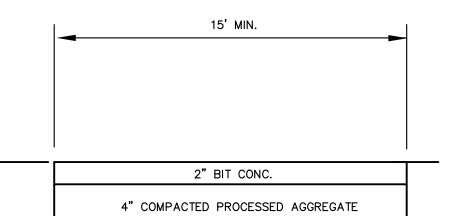
- SMOOTH AND FIRM SEEDBED WITH CULTIPACKER OR OTHER SIMILAR EQUIPMENT PRIOR TO SEEDING (EXCEPT WHEN HYDROSEEDING).
- 2. SELECT ADAPTED SEED MIXTURE AS FOLLOWS. NOTE RATES AND THE SEEDING DATES.

SUNNY TO PARTIALLY SUNNY SITES

			LBS./ACRE	LBS./1000 S.F.	
KENTUCKY BLUEGRASS			20	0.50	
	CREEPING RED FESCUE		20	0.50	
	PERENNIAL RYEGRASS		05	0.10	
		TOTAL	45	1.10	
	SHADY SITES				
	CREEPING RED FESCUE		50	1.00	
	PERENNIAL RYEGRASS		05	0.10	
		TOTAL	55	1.10	
	DROUGHTY SITES				
	CREEPING RED FESCUE		40	1.00	
	TALL FESCUE		20	0.50	
		TOTAL	60	1.50	

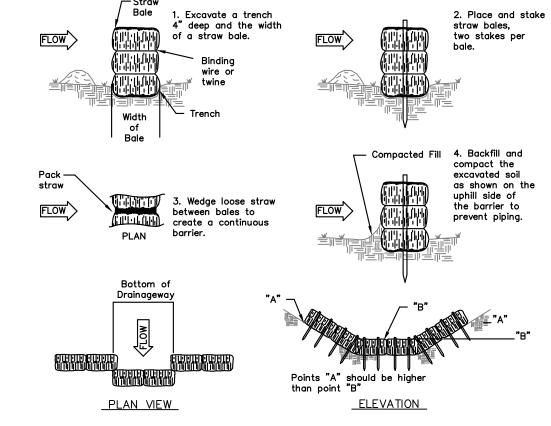
- 3. FINAL SEEDING SHALL TAKE PLACE PRIOR TO OCTOBER 1ST AS SEEDING AFTER THIS DATE RUNS A DISTINCT CHANCE OF FAILURE DUE TO ADVERSE WEATHER. ANY AREAS THAT ARE DISTURBED BETWEEN OCTOBER 1ST AND APRIL 1ST SHALL BE STABILIZED BY NON-VEGETATIVE MEANS SUCH AS HEAVY MULCHING WITH A BINDER OR JUTE MATTING WHICH WILL HAVE TO BE REMOVED BEFORE FINAL SEEDING AND THEN REPLACED AFTER
- 4. APPLY SEED UNIFORMLY ACCORDING TO RATE INDICATED, BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
- 5. COVER GRASS AND LEGUME SEEDS WITH NOT MORE THAN 1/4 INCH OF SOIL WITH SUITABLE
- MULCH IMMEDIATELY AFTER SEEDING, IF REQUIRED, ACCORDING TO THE GUIDELINES IN THE "GUIDELINES".

USE PROPER INOCULANT ON ALL LEGUME SEEDINGS, USE FOUR (4) TIMES NORMAL RATE WHEN HYDROSEEDING.



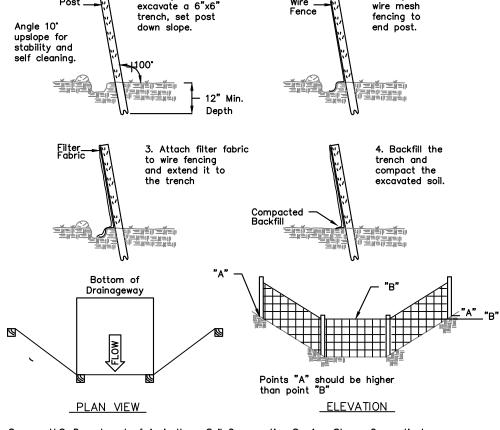
15' COMMON DRIVEWAY DETAIL

8" COMPACTED BANKRUN GRAVEL



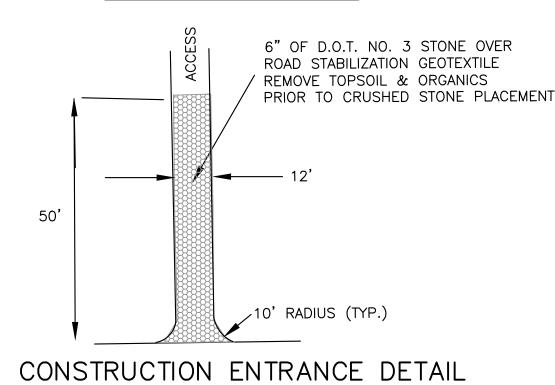
Source: U.S. Department of Agriculture, Soil Conservation Service, Storrs, Connecticut PLACEMENT AND CONSTRUCTION
OF A STRAW BALE BARRIER

1. Set post and



Source: U.S. Department of Agriculture, Soil Conservation Service, Storrs, Connecticut

PLACEMENT AND CONSTRUCTION OF A SYNTHETIC FILTER BARRIER



NO SCALE

ORTE

DATE: 8-22-23 NONE SHEET 10 OF 10

MAP NO. 23-024-1N