

September 28, 2022

Mr. Frank Smeriglio, P.E.
Director of Public Works
Town of Wilton
238 Danbury Road
Wilton, CT 06897

RE: Scribner Hill Road Embankment Failure
Revised Cost Estimate

Dear Frank,

We have revised the cost estimate for the construction of the masonry block retaining wall and associated work. We extended the wall an additional 100 feet to the south as requested and have revised the plans accordingly. The estimated cost for construction of the wall is \$ 1,539,000.

The cost estimate does not include fees for additional survey, design, permitting, construction administration and inspection. For the purposes of budgeting, I suggest the following costs.

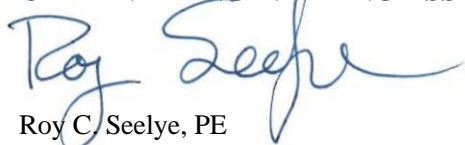
Survey	\$ 5,000
Design Services	\$ 100,000
Permits	\$ 5,000
Construction Administration	\$ 30,000
Inspection (3 months)	<u>\$ 75,000</u>
TOTAL	\$ 215,000

The total project cost is estimated at \$ 1,754,000

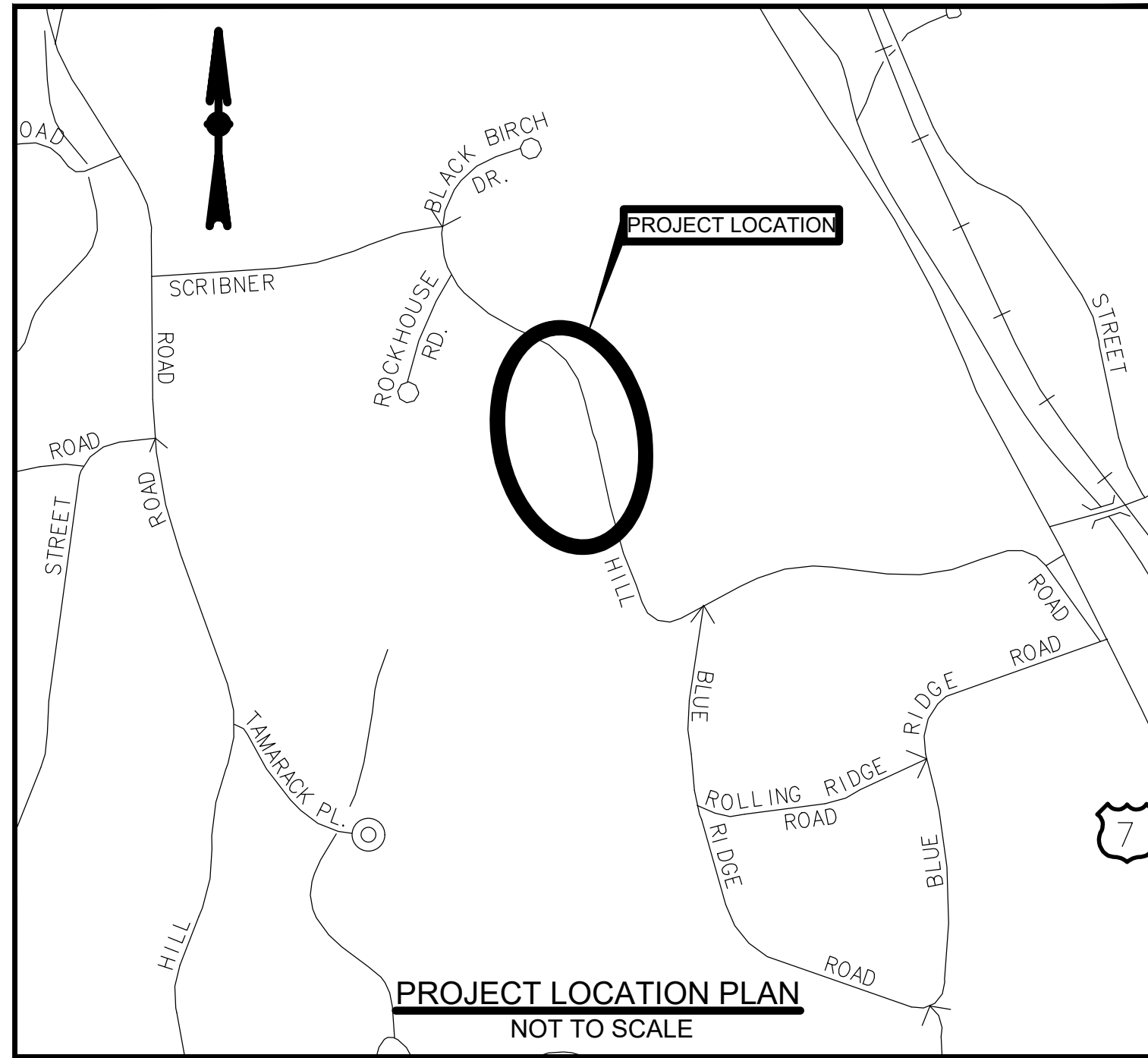
I have attached a copy of the cost estimate for your review and use. Please let us know if you require any further assistance.

Thank you.

CARDINAL ENGINEERING ASSOCIATES



Roy C. Seelye, PE
Senior Project Manager



TOWN OF WILTON

CONCEPTUAL PLAN

FOR THE

SCRIBNER HILL ROAD

SLOPE STABILIZATION



SEPTEMBER, 28 2022

BOARD OF SELECTMEN

LYNNE VANDERSLICE, FIRST SELECTMAN

JOSHUA COLE

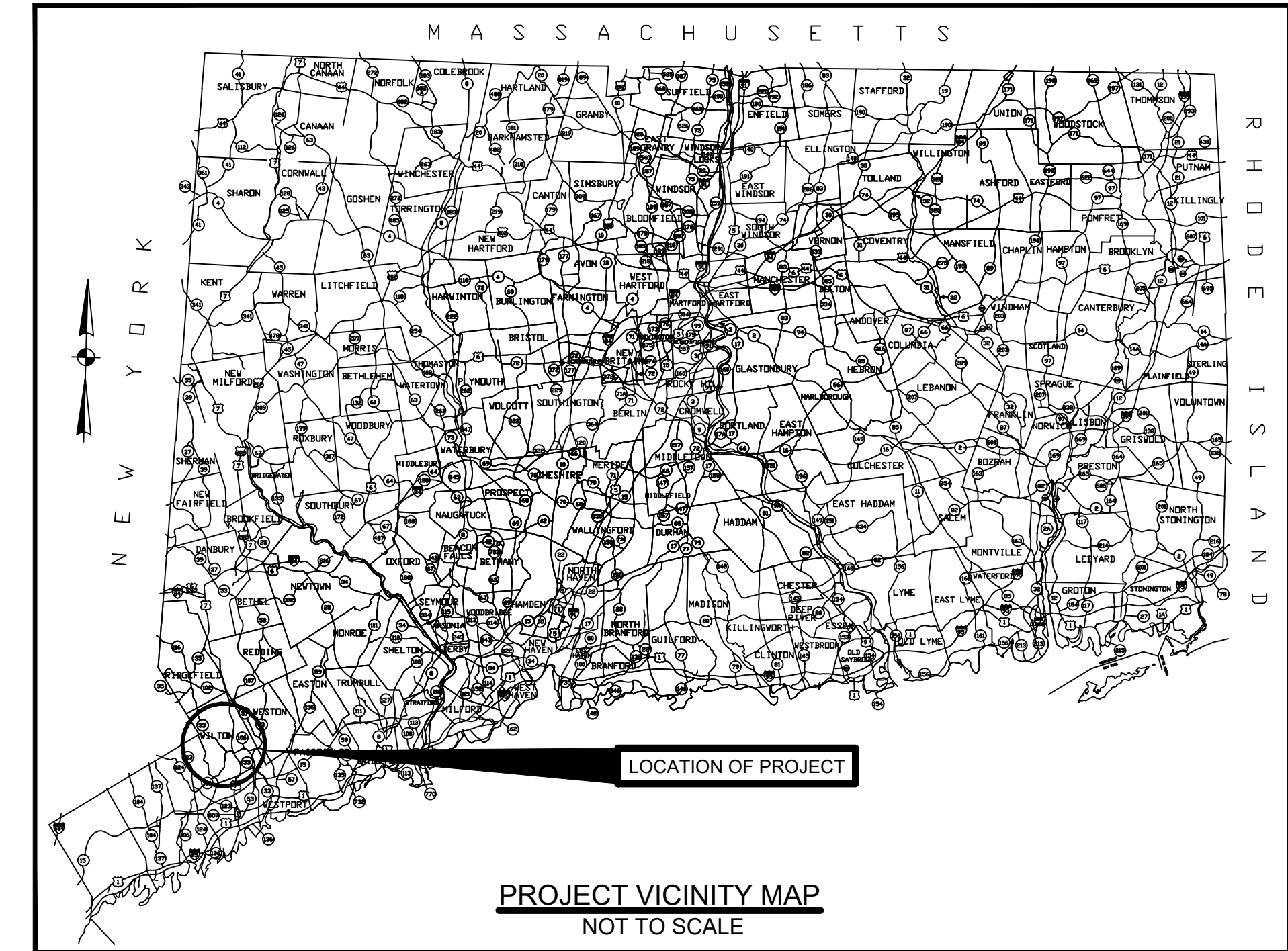
KIMBERLEY HEALY

BASAM NABULSI

ROSS TARTELL

TOWN ENGINEER

FRANK SMERIGLIO, P.E.



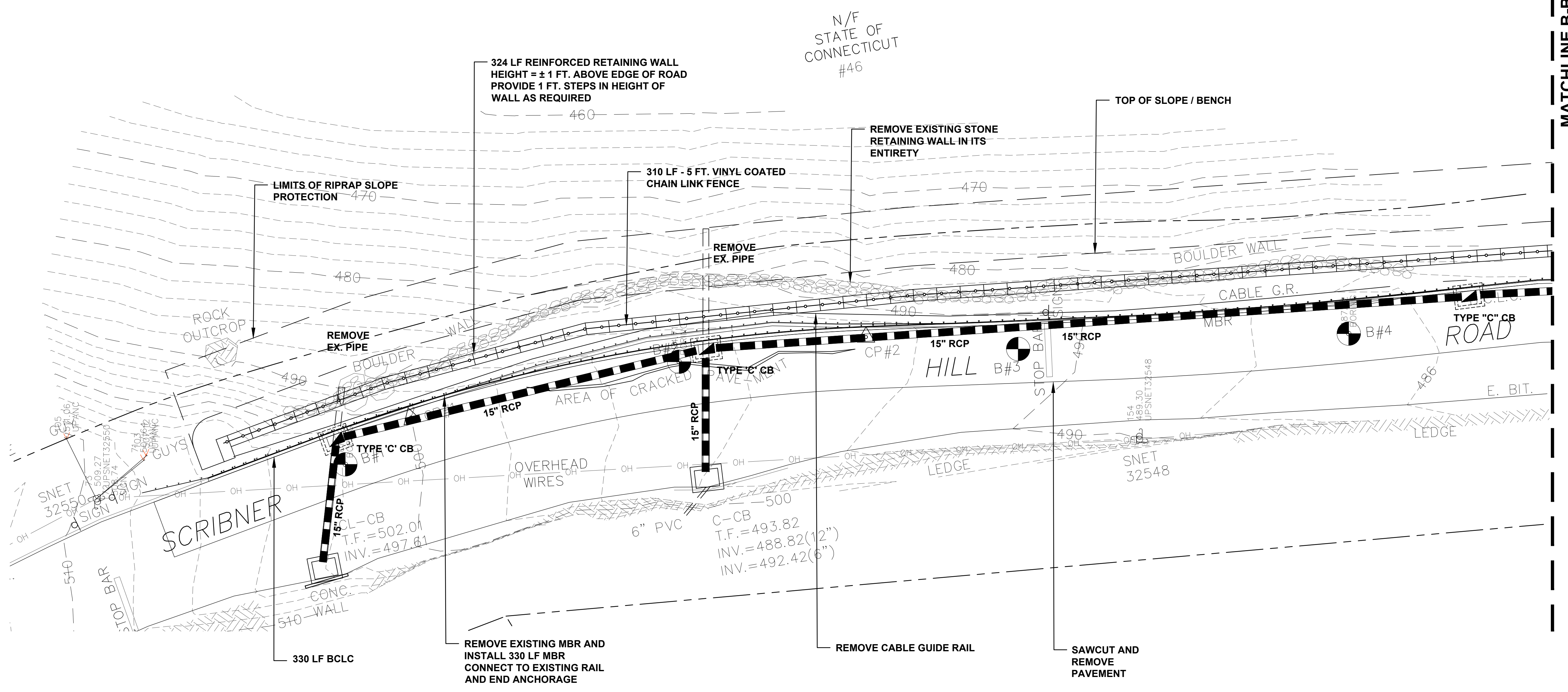
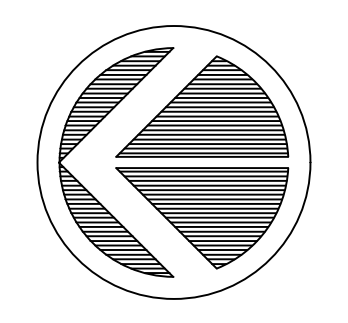
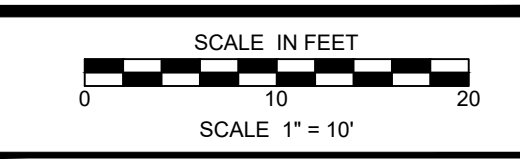
LIST OF DRAWING REVISIONS			
SHEET NO.	DESCRIPTION	DATE	BY
2,3	ADDITIONAL 100 FEET TO THE SOUTH	9.28.22	RCS

LIST OF DRAWINGS		
SHEET NO.	TITLE	DRAWING
1	TITLE SHEET	TITLE
2	SITE PLAN	PLA-01
3	RETAINING WALL LAYOUT PLAN	LAY-01

TITLE
1

CARDINAL
ENGINEERING ASSOCIATES

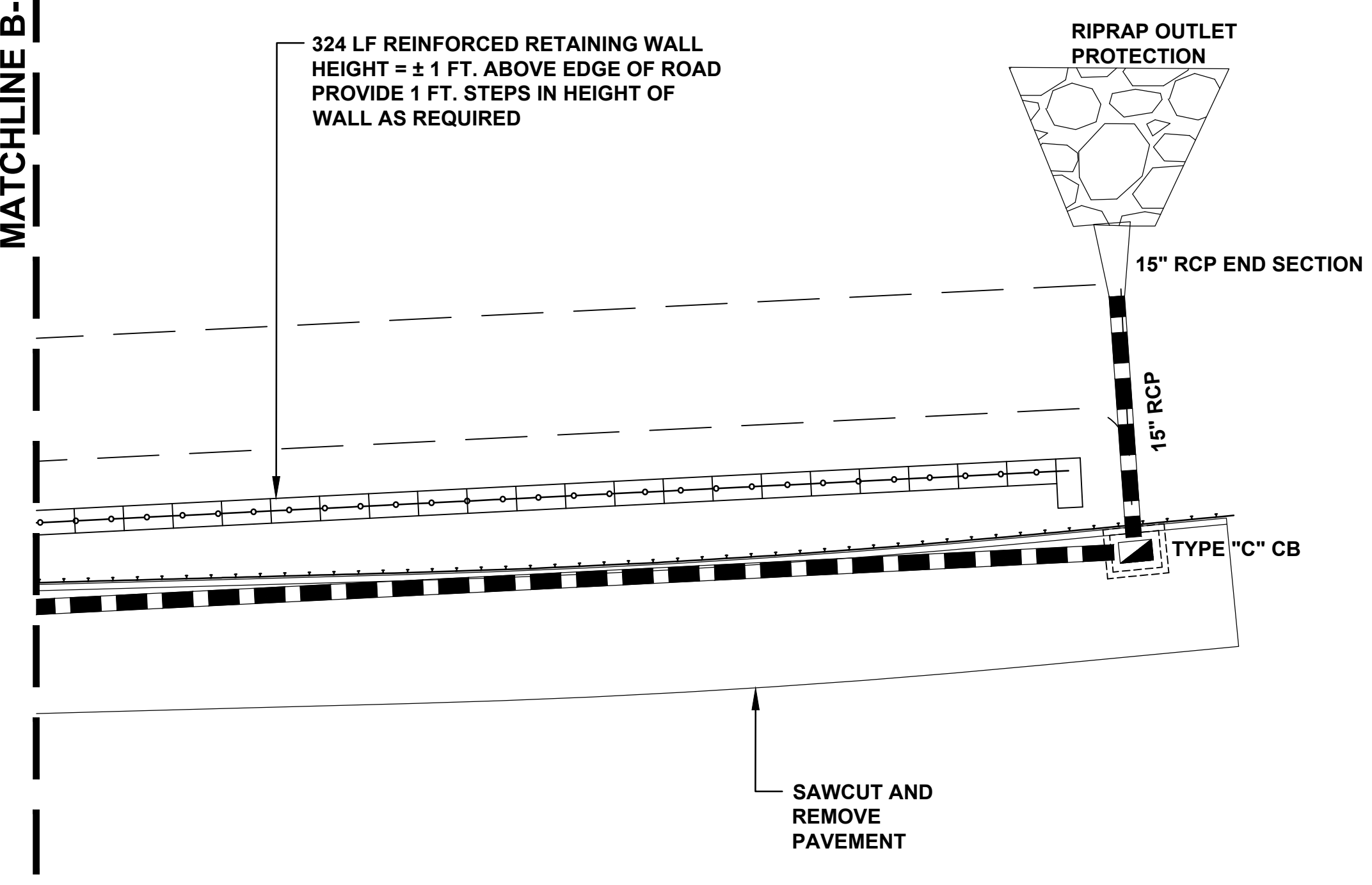
180 RESEARCH PKWY | MERIDEN, CT 06450 | 203-238-1969
457 BANTAM RD | LITCHFIELD, CT 06759 | 860-597-9106



N/F
STATE OF
CONNECTICUT
#46

MATCHLINE B-B

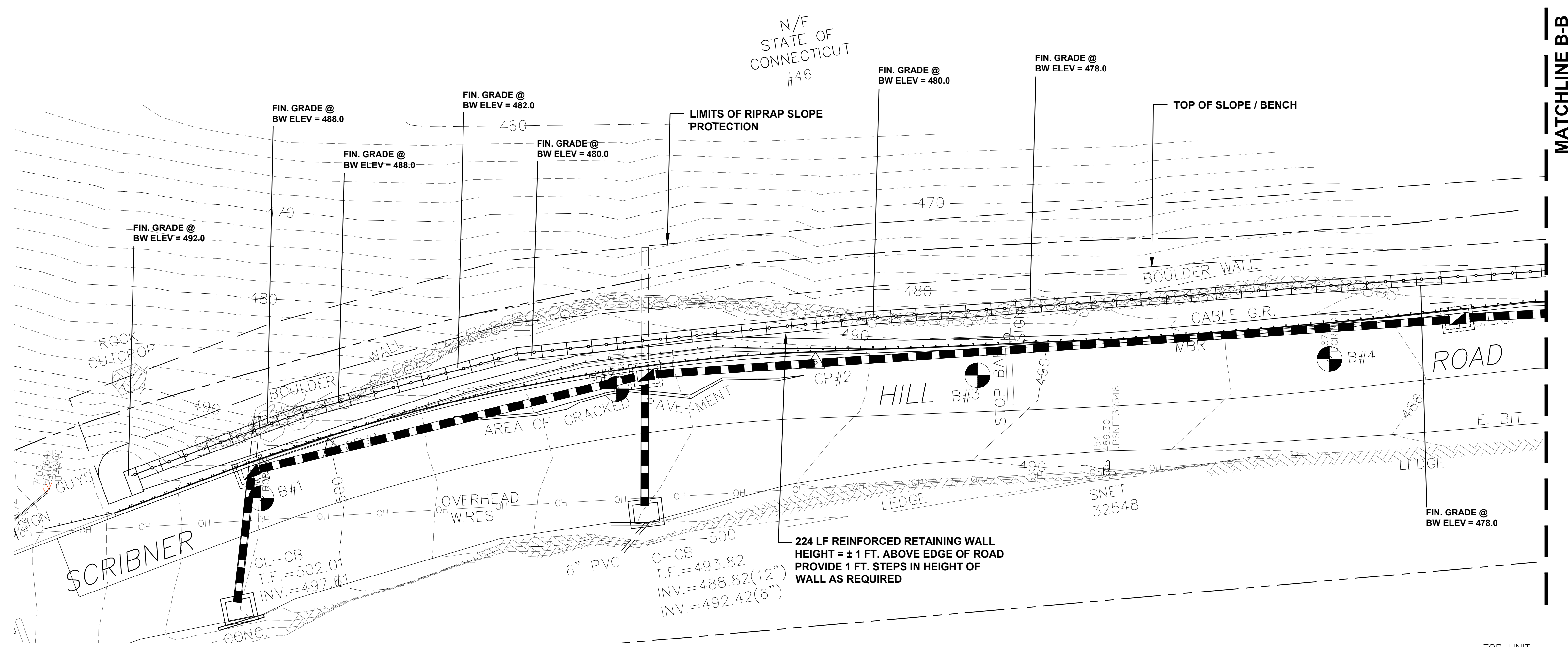
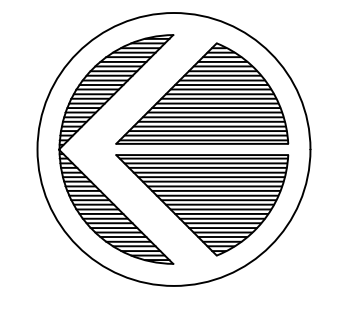
MATCHLINE B-B



File: D:\C\01_14_R020414_2021\2444_Embank Hill_Bd_Walk_Production_Drawing\A\2444_Embank Hill_RL15100.dwg PlotDate: 9/28/2022 2:10 PM
 Plot: D:\C\01_14_R020414_2021\2444_Embank Hill_Bd_Walk_Production_Drawing\A\2444_Embank Hill_RL15100.dwg

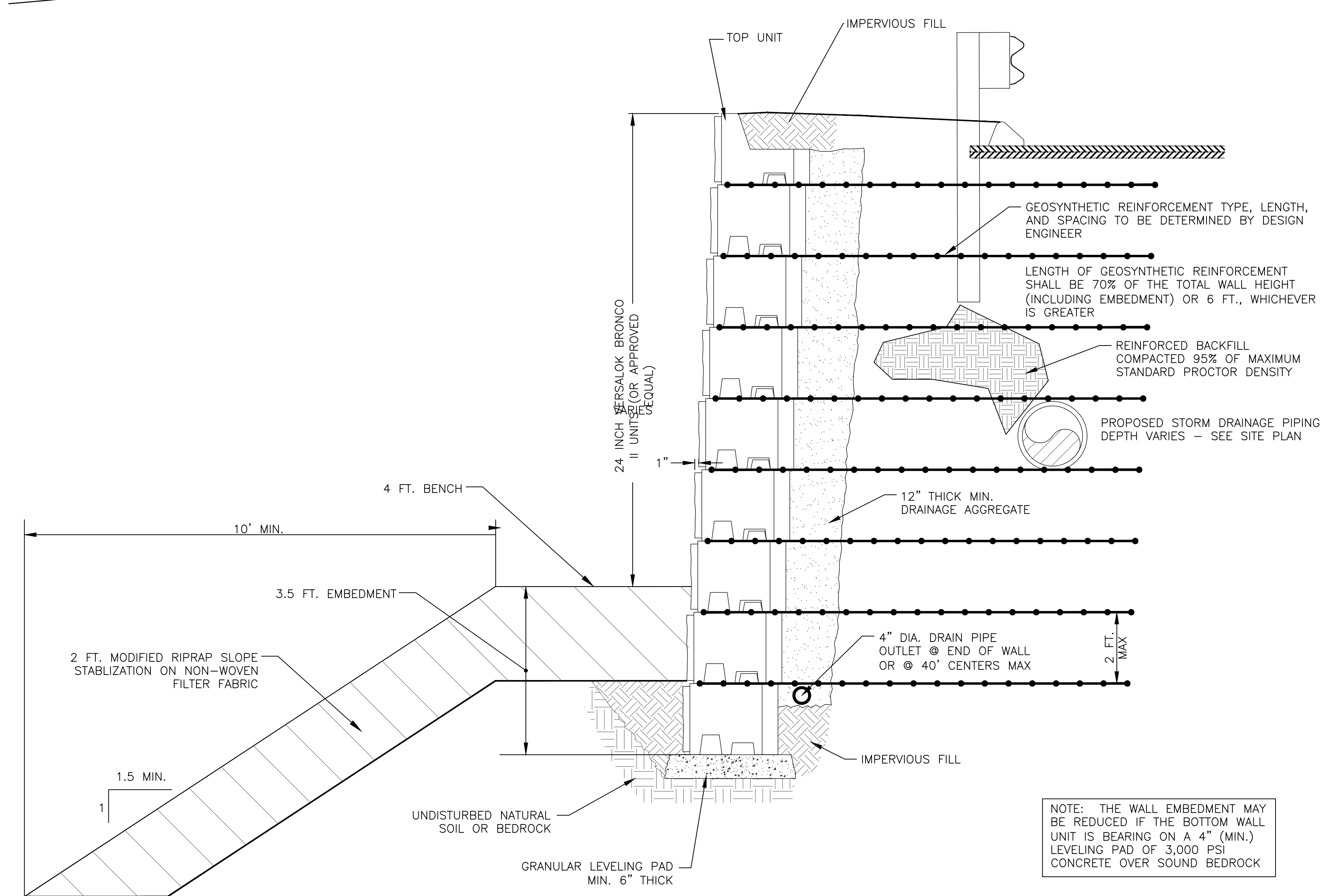
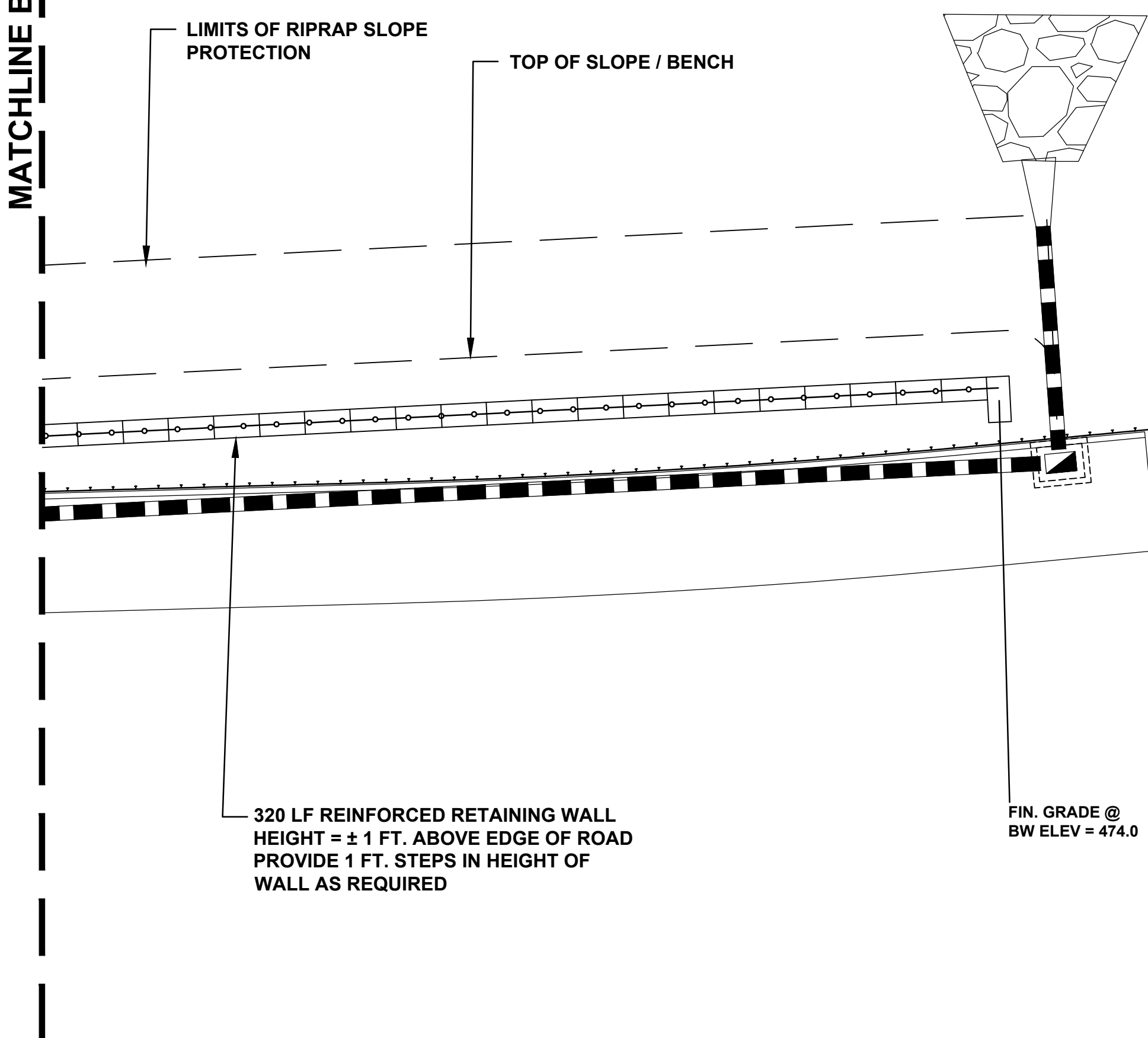
9/28/2022	RCS								
1	ADDITIONAL 100 FEET TO THE SOUTH								
DATE: September 2022	SCALE: AS NOTED	DESIGNED BY: RCS	DRAWN BY: RCS	CHECKED BY: GG	APPROVED BY: JAC				
CARDINAL ENGINEERING ASSOCIATES 480 RESEARCH PARKWAY MERIDEN, CT 06460 203-268-4816 487 BANTAM ROAD LITCHFIELD, CT 06751 860-397-7186		EMABNAKEMENT STABILIZATION SCRIBNER HILL ROAD WILTON, CONNECTICUT SITE PLAN							
		PLA-01							
2									

SCALE IN FEET
0 10 20
SCALE 1" = 10'



MATCHLINE B-B

MATCHLINE B-B



REINFORCED RETAINING WALL
24 INCH VERSALOK BRONCO II UNITS
SCALE: NONE

NOTE: THE WALL EMBEDMENT MAY BE REDUCED IF THE BOTTOM WALL UNIT IS BEARING ON A 4" (MIN.) LEVELING PAD OF 3,000 PSI CONCRETE OVER SOUND BEDROCK

File: D:\C01114_01\324424\324424_01.dwg, 9/28/2022, 3:45 PM
 Path: D:\C01114_01\324424_01.dwg, 9/28/2022, 3:45 PM
 Plot: D:\C01114_01\324424_01.dwg, 9/28/2022, 3:45 PM

<p>CARDINAL ENGINEERING ASSOCIATES 480 RESEARCH PARKWAY, MERIDEN, CT 06460 (203) 238-4169 487 BANTAM ROAD LITCHFIELD, CT 06757 (860) 377-7106</p>	DATE: September 2022 SCALE: AS NOTED DESIGNED BY: RCS DRAWN BY: RCS CHECKED BY: GG APPROVED BY: JAC	NO. _____ REVISION _____ DATE _____ BY _____
	ADDITIONAL 100 FEET TO THE SOUTH	
	EMANKEMENT STABILIZATION SCRIBNER HILL ROAD WILTON, CONNECTICUT RETAINING WALL LAYOUT PLAN	
LAY-01		3



180 Research Parkway
 Meriden, Connecticut 06450
 (203) 238-1969

OPINION OF PROBABLE CONSTRUCTION COST

Town **Town of Wilton**
 Project **Scribner Hill Rd Slope Stabilization**
 Project # **2444**
 Calculated by RCS DATE 9/28/2022
 Checked by

Item Number	Items	Unit	Quantities	Unit Price	Cost
1	0201001A CLEARING AND GRUBBING	LS	1	*	*
2	0202000A EARTH EXCAVATION	CY	260	\$24.00	\$6,240.00
3	0203000 STRUCTURE EXCAVATION - EARTH (COMPLETE)	CY	3,250	\$40.00	\$130,000.00
4	0203100 STRUCTURE EXCAVATION - ROCK (COMPLETE)	CT	350	\$100.00	\$35,000.00
5	0202529 CUT BITUMINOUS CONCRETE PAVEMENT	LF	360	\$3.00	\$1,080.00
6	0209001 FORMATION OF SUBGRADE	SY	420	\$4.00	\$1,680.00
7	0213100 GRANULAR FILL	CY	45	\$60.00	\$2,700.00
8	0216000 PERVIOUS STRUCTURE BACKFILL	CY	3250	\$70.00	\$227,500.00
9	0219001 SEDIMENTATION CONTROL SYSTEM	LF	400	\$6.00	\$2,400.00
10	0219011 SEDIMENTATION CONTROL SYSTEM AT CATCH BASIN	EA	6	\$120.00	\$720.00
11	0286001.10 ROCK IN DRAINAGE TRENCH EXCAVATION 0' - 10' DEEP	CY	90	\$110.00	\$9,900.00
12	0304002 PROCESSED AGGREGATE BASE	CY	175	\$45.00	\$7,875.00
13	0406171 HMA S 0.5	TON	100	\$122.00	\$12,200.00
14	0406236 MATERIAL FOR TACK COAT	GAL	75	\$6.00	\$450.00
15	0406999A ASPHALT ADJUSTMENT COST	EST	1	\$3,750.00	\$3,750.00
16	0601733.40 CONCRETE MUD SLAB	CY	50	\$800.00	\$40,000.00
17	0507105A CONNECTION TO EXISTING MANHOLE AND/OR CATCH BASIN	EA	2	\$8,000.00	\$16,000.00
18	0586001.10 TYPE "C" CATCH BASIN - 0' - 10' DEEP	EA	4	\$4,500.00	\$18,000.00
19	0686000.15 15" R.C. PIPE - 0' - 10' DEEP	LF	364	\$75.00	\$27,300.00
20	0686700.15 15" REINFORCED CONCRETE DRAINAGE PIPE END	EA	1	\$1,200.00	\$1,200.00
21	0703011 INTERMEDIATE RIP RAP	CY	400	\$130.00	\$52,000.00
22	0755001 NON-WOVEN FILTER FABRIC	SY	500	\$4.00	\$2,000.00
23	0601650 CONCRETE BLOCK RETAINING WALL	SF	4720	\$75.00	\$354,000.00
24	0755009 GEOTEXTILE	SY	5440	\$5.50	\$29,920.00
25	0912499 REMOVE CABLE GUIDE RAIL	LF	200	\$6.00	\$1,200.00
26	0912503 REMOVE MBR	LF	330	\$5.50	\$1,815.00
27	910310 METAL BEAM RAIL (R-B MASH)	LF	330	\$30.00	\$9,900.00
28	0815001 BITUMINOUS CONCRETE LIP CURB	LF	330	\$8.00	\$2,640.00
29	0944000 FURNISHING AND PLACING TOPSOIL	SY	600	\$7.00	\$4,200.00
30	0950005 TURF ESTABLISHMENT	SY	600	\$2.00	\$1,200.00
31	0970006 TRAFFICPERSON (MUNICIPAL POLICE OFFICER)	EST	1	\$3,500.00	\$3,500.00
32	0970007 TRAFFICPERSON (UNIFORMED FLAGGER)	HR	200	\$50.00	\$10,000.00
33	0971001A MAINTENANCE AND PROTECTION OF TRAFFIC	LS	1	*	*



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Town **Town of Wilton**
Project **Scribner Hill Rd Slope Stabilization**
Project # **2444**
Calculated by RCS DATE 9/28/2022
Checked by

Item Number	Items	Unit	Quantities	Unit Price	Cost
34	0975004 MOBILIZATION AND PROJECT CLOSE-OUT	LS	1	*	*
35	0980001 CONSTRUCTION STAKING	LS	1	*	*
					\$0.00
Major Items Subtotal					\$1,016,370.00
Minor Items Subtotal (0% at Final Design)		20	% of Major Items Subtotal		\$203,274.00
Contract Items Subtotal					\$1,219,644.00

*** Other Item Allowances**

Clearing and Grubbing	2	% of Contract Items Subtotal	\$	24,393
M & P of Traffic	2	% of Contract Items Subtotal	\$	24,393
Mobilization	5	% of Contract Items Subtotal	\$	60,982
Construction Staking	1	% of Contract Items Subtotal	\$	12,196
Other Items Subtotal				\$ 121,964
CONTRACT SUBTOTAL				\$ 1,341,608

Inflation Costs (Simple Method)

Date of Estimate (provide date of estimate)	Sep-22	
Anticipated Bid Date (provide anticipated bid date)	Mar-23	
Base Years	0.5	
Annual Inflation (3.5% annually, 0% at Final Design)	8.5%	
Inflation Subtotal	4.3% of Subtotal	\$ 57,018

TOTAL CONTRACT COST ESTIMATE (Rounded to nearest \$1000)	\$ 1,399,000
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Project Costs Summary (Construction Phase)				
Contract Cost Estimate (Line "G")				\$ 1,399,000
Contingencies	10.0%			\$ 139,900
Incidentals	0.0%			\$ -
ROW				n/a
Utilities				n/a
TOTAL PROJECT COST(Rounded to nearest \$1000)	LS			\$ 1,539,000