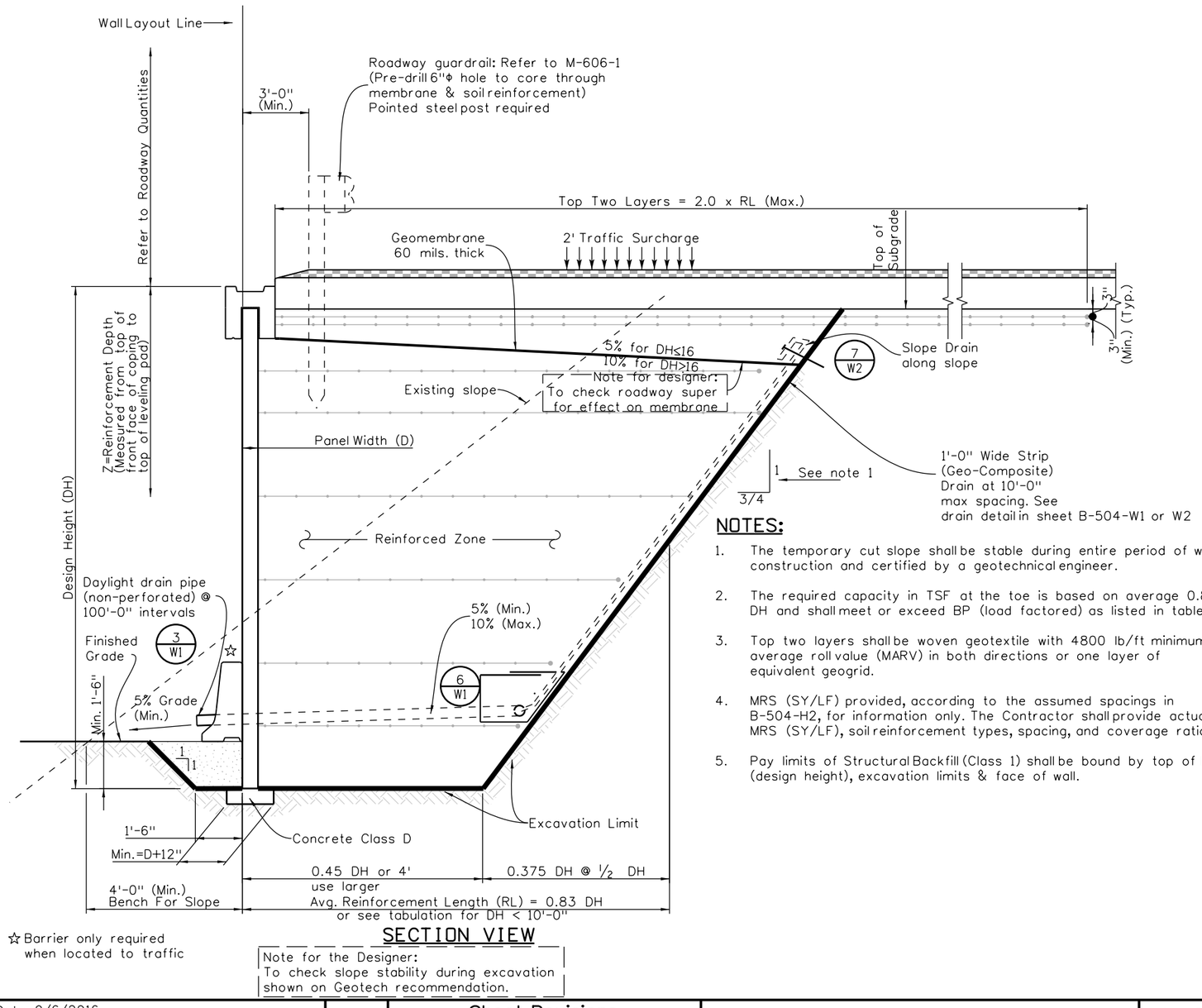
B-504-E2

(This sheet must be accompanied with B-504-H2)



☆ Barrier only required when located to traffic

SECTION VIEW

Note for the Designer:
To check slope stability during excavation shown on Geotech recommendation.

NOTES:

1. The temporary cut slope shall be stable during entire period of wall construction and certified by a geotechnical engineer.
2. The required capacity in TSF at the toe is based on average 0.83 DH and shall meet or exceed BP (load factored) as listed in table.
3. Top two layers shall be woven geotextile with 4800 lb/ft minimum average roll value (MARV) in both directions or one layer of equivalent geogrid.
4. MRS (SY/LF) provided, according to the assumed spacings in B-504-H2, for information only. The Contractor shall provide actual MRS (SY/LF), soil reinforcement types, spacing, and coverage ratio.
5. Pay limits of Structural Backfill (Class 1) shall be bound by top of DH (design height), excavation limits & face of wall.

	DH (FT)	RL**(FT) (Min.)	RL**(FT) (Avg.)	RL**(FT) (Max.)	MRS (CY/LF)	MRS (SY/LF)	BM1 (CY/LF)	PLG (Ft/LF)	BP (TSF)
	2.000	4.000	4.750	5.500	0.352	2.444	0.477	5.50	0.505
	2.667	4.000	5.000	6.000	0.494	3.222	0.619	6.00	0.621
	3.333	4.000	5.250	6.500	0.648	3.472	0.773	6.50	0.753
	4.000	4.000	5.500	7.000	0.815	4.333	0.940	7.00	0.904
	4.667	4.000	5.750	7.500	0.994	4.611	1.119	7.50	1.076
	5.333	4.000	6.000	8.000	1.185	4.889	1.310	8.00	1.272
	6.000	4.000	6.250	8.500	1.389	5.167	1.514	8.50	1.497
	6.667	4.000	6.500	9.000	1.605	6.167	1.730	9.00	1.755
	7.333	4.000	6.750	9.500	1.833	6.472	1.958	9.50	2.051
	8.000	4.000	7.000	10.000	2.074	6.778	2.199	10.00	2.393
	8.667	4.000	7.250	10.500	2.327	7.083	2.452	10.50	2.790
	9.333	4.200	7.700	11.200	2.662	8.400	2.787	11.20	3.029
	10.000	4.500	8.250	12.000	3.056	9.000	3.181	12.00	3.170
	10.667	4.800	8.800	12.800	3.477	9.600	3.602	12.80	3.310
	11.333	5.100	9.350	13.600	3.925	10.200	4.050	13.60	3.451
	12.000	5.400	9.900	14.400	4.400	11.900	4.525	14.40	3.593
	12.667	5.700	10.450	15.200	4.902	12.561	5.027	15.20	3.734
	13.333	6.000	11.000	16.000	5.432	13.222	5.557	16.00	3.876
	14.000	6.300	11.550	16.800	5.989	15.167	6.114	16.80	4.018
	14.667	6.600	12.100	17.600	6.573	15.889	6.698	17.60	4.160
	15.333	6.900	12.650	18.400	7.184	16.611	7.309	18.40	4.302
***	16.000	7.200	13.200	19.200	7.822	18.800	7.947	19.20	4.444
	16.667	7.500	13.750	20.000	8.488	19.583	8.613	20.00	4.587
	17.333	7.800	14.300	20.800	9.180	20.367	9.305	20.80	4.729
	18.000	8.100	14.850	21.600	9.900	22.800	10.025	21.60	4.872
	18.667	8.400	15.400	22.400	10.647	23.644	10.772	22.40	5.014
	19.333	8.700	15.950	23.200	11.421	24.489	11.546	23.20	5.157
	20.000	9.000	16.500	24.000	12.222	27.167	12.347	24.00	5.300
	20.667	9.300	17.050	24.800	13.051	28.072	13.176	24.80	5.443
	21.333	9.600	17.600	25.600	13.906	28.978	14.031	25.60	5.586
	22.000	9.900	18.150	26.400	14.789	31.900	14.914	26.40	5.728
	22.667	10.200	18.700	27.200	15.699	32.867	15.824	27.20	5.871
	23.333	10.500	19.250	28.000	16.636	33.833	16.761	28.00	6.014
	24.000	10.800	19.800	28.800	17.600	37.000	17.725	28.80	6.157
	24.667	11.100	20.350	29.600	18.591	38.028	18.716	29.60	6.300
	25.333	11.400	20.900	30.400	19.610	39.056	19.735	30.40	6.444
	26.000	11.700	21.450	31.200	20.656	42.467	20.781	31.20	6.587
	26.667	12.000	22.000	32.000	21.728	43.556	21.853	32.00	6.730
	27.333	12.300	22.550	32.800	22.828	44.644	22.953	32.80	6.873
	28.000	12.600	23.100	33.600	23.956	48.300	24.081	33.60	7.016
	28.667	12.900	23.650	34.400	25.110	49.450	25.235	34.40	7.159
	29.333	13.200	24.200	35.200	26.291	53.289	26.416	35.20	7.303
	30.000	13.500	24.750	36.000	27.500	54.500	27.625	36.00	7.446
	30.667	13.800	25.300	36.800	28.736	58.522	28.861	36.80	7.589
	31.333	14.100	25.850	37.600	29.999	59.794	30.124	37.60	7.732
	32.000	14.400	26.400	38.400	31.289	64.000	31.414	38.40	7.876
	32.667	14.700	26.950	39.200	32.606	65.333	32.731	39.20	8.019
	33.333	15.000	27.500	40.000	33.951	69.722	34.076	40.00	8.162
	34.000	15.300	28.050	40.800	35.322	71.117	35.447	40.80	8.305
	34.667	15.600	28.600	41.600	36.721	75.689	36.846	41.60	8.449
	35.333	15.900	29.150	42.400	38.147	77.144	38.272	42.40	8.592
	36.000	16.200	29.700	43.200	39.600	81.900	39.725	43.20	8.736
	36.667	16.500	30.250	44.000	41.080	86.778	41.205	44.00	8.879
	37.333	16.800	30.800	44.800	42.588	91.778	42.713	44.80	9.022
	38.000	17.100	31.350	45.600	44.122	96.900	44.247	45.60	9.166
	38.667	17.400	31.900	46.400	45.684	102.144	45.809	46.40	9.309
	39.333	17.700	32.450	47.200	47.273	107.511	47.398	47.20	9.452
	40.000	18.000	33.000	48.000	48.889	113.000	49.014	48.00	9.596

** RL for top two geotextile layers = 2.0 x RL (Max.)

*** For example spacing on B-504-H2: DH=16' requires 27.36 SY/LF reinforcement corresponding to 6.637 CY/LF volume of MRS with Class 1 backfill paid separately

Revision Dates	(Preliminary Stage Dny)
09-16	

Quantities	INITIAL	DATE
Quantities By		
Checked By		

Detail	INITIAL	DATE
Detailed By		
Checked By		

Design	INITIAL	DATE
Designed By		
Checked By		

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Print Date: 9/6/2016
File Name: Sheet_B-504-E2.dgn
Horiz. Scale: 1:4 Vert. Scale: As Noted
Staff Bridge Branch-Unit 0XXX Unit Leader Initials

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation
4201 East Arkansas Avenue
Room 107
Denver, CO 80222
Phone: 303-757-9309 FAX: 303-757-9197
Staff Bridge Branch Initials

As Constructed
No Revisions:
Revised:
Void:

TRUNCATED BASE PANEL FACING GRS WALL WITH ROADWAY RAIL AND 3/4:1 SOIL EXCAVATION/FILL

Designer:	XXXXXXX	Structure Numbers	Wall-X-XX-XX
Detailer:	XXXXXXX		Wall-X-XX-XX
Sheet Subset:	Wall	Subset Sheets:	WXX of XXX

Project No./Code
Project Number
Code
Sheet Number