


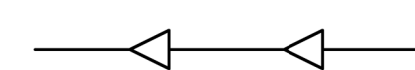



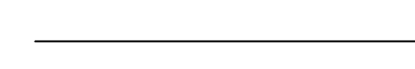




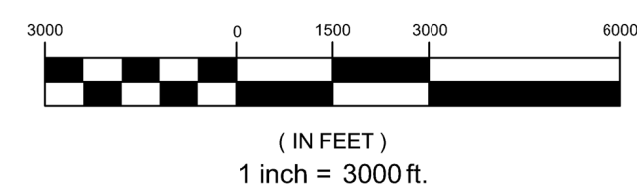
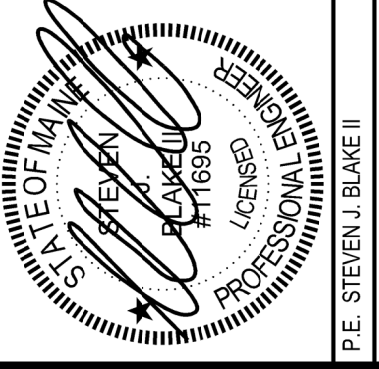




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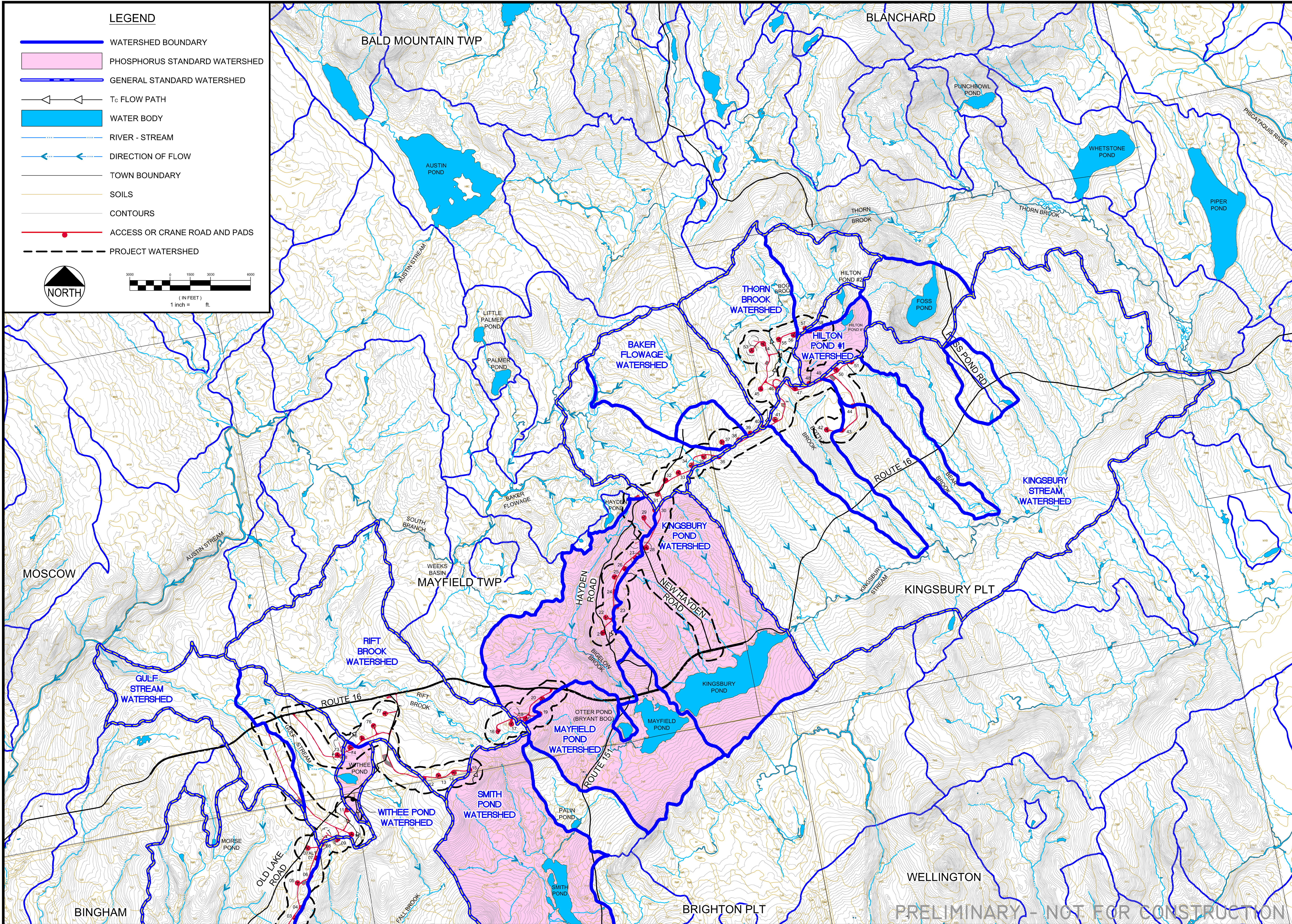
-  WATERSHED BOUNDARY
-  PHOSPHORUS STANDARD WATERSHED
-  GENERAL STANDARD WATERSHED
-  Tc FLOW PATH
-  WATER BODY
-  RIVER - STREAM
-  DIRECTION OF FLOW
-  TOWN BOUNDARY
-  SOILS
-  CONTOURS
-  ACCESS OR CRANE ROAD AND PADS
-  PROJECT WATERSHED






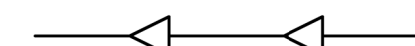



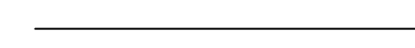




WATERSHED MAP (1 OF 2)																																					
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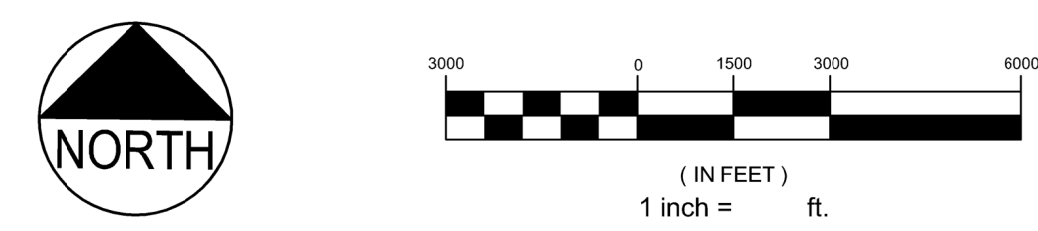
PRELIMINARY - NOT FOR CONSTRUCTION

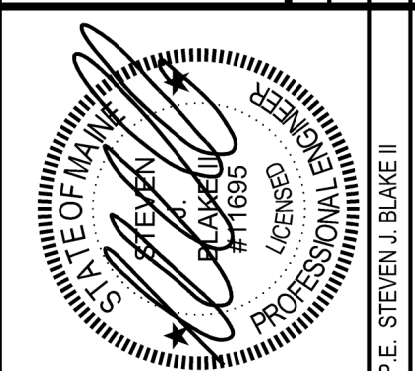
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-  WATERSHED BOUNDARY
-  PHOSPHORUS STANDARD WATERSHED
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PRELIMINARY - NOT FOR CONSTRUCTION

Bingham Wind Project Mayfield Township, Maine Baker Flowage Watershed Treatment Calculations									
Impervious Area Road ID Descriptions:				BMP ID DESCRIPTIONS					
CR1	CRANE ROAD		AD	Road Side Buffer					
AR1	ACCESS ROAD		DT	Ditch Turnout Buffer					
13	TURBINE PAD SITE		LS	Level Spreader Buffer					
METR	M.E.T. Road								
Misc.	Miscellaneous Imp. Area								
Road ID	Start Station	End Station	BMP ID	Buffer Slope (%)	Buffer Length (ft)	New Impervious Area (ac)	Impervious Area Treated (ac)	Required Berm Length (ft)	Impervious Area Untreated (ac)
CR11	787+00	- 796+50	-	-	-	0.52	0.00		0.52
CR11	796+50	- 802+50	AD-N12	4.7%	55.00	0.33	0.33		0.00
CR11	802+50	- 804+00	-	-	-	0.08	0.00		0.08
CR11	804+00	- 807+50	AD-N13	6.8%	80.00	0.19	0.19		0.00
CR11	807+50	- 810+00	DT-N27	3.5%	120.00	0.14	0.14		0.00
CR11	810+00	- 812+00	-	-	-	0.11	0.00		0.11
CR11	812+00	- 815+50	LS-N28	5.3%	150.00	0.19	0.19	29.00	0.00
CR11	815+50	- 818+50	AD-N14	6.6%	80.00	0.17	0.17		0.00
CR11	818+50	- 824+00	LS-N31	5.0%	150.00	0.30	0.30	46.00	0.00
CR11	824+00	- 827+00	DT-N32	9.1%	120.00	0.17	0.17		0.00
CR11	827+00	- 831+00	-	-	-	0.22	0.00		0.22
CR11	831+00	- 833+50	AD-N14A	3.1%	55.00	0.14	0.14		0.00
CR11	833+50	- 841+50	AD-N14B	8.0%	80.00	0.44	0.44		0.00
CR11	841+50	- 842+50	-	-	-	0.06	0.00		0.06
CR11	842+50	- 855+50	LS-N34	6.0%	150.00	0.72	0.72	108.00	0.00
CR11	855+50	- 862+30	LS-N37	8.0%	150.00	0.37	0.37	57.00	0.00
T31	-	-	-	-	-	0.28	0.00		0.28
T32	-	-	AD-N13	3.9%	80.00	0.28	0.28		0.00
T33	-	-	AD-N14	6.7%	80.00	0.28	0.28		0.00
T34	-	-	AD-N14A	3.0%	80.00	0.28	0.28		0.00
T35	-	-	AD-N15	10.0%	55.00	0.28	0.28		0.00
T36	-	-	AD-N15A	6.0%	55.00	0.28	0.28		0.00
T37	-	-	AD-N16	8.1%	55.00	0.28	0.00		0.28
CR14	1100+00	- 1104+50	LS-N40	6.7%	150.00	0.25	0.25	75.00	0.00
CR12	900+00	- 904+50	LS-N40	6.7%	150.00	0.25	0.25	75.00	0.00
T38	-	-	AD-N17	14.7%	55.00	0.28	0.28		0.00
T39	-	-	AD-N18	10.3%	55.00	0.28	0.28		0.00
AR4	400+00	- 402+50	AD-N12	4.7%	55.00	0.14	0.14		0.00
AR4	402+50	- 404+00	-	-	-	0.02	0.00		0.02
AR4	404+00	- 406+50	DT-N26	8.3%	120.00	0.14	0.14		0.00
AR4	406+50	- 409+00	DT-N27	11.7%	120.00	0.14	0.14		0.00
AR4	409+00	- 410+50	DT-N28	13.3%	120.00	0.08	0.08		0.00
AR4	410+50	- 415+50	-	-	-	0.28	0.00		0.28
SUBSTATION*	-	-	-	-	-	1.95	1.95		0.00
Totals						9.90	8.06		1.84
*Portion of Substation will be treated by a gravel filter, see design memo appended to application.									
Impervious Area Treatment Calculations (Linear project)									
Total Proposed Impervious Area=				9.90	ac				
Total Treated Proposed Impervious Area=				8.06	ac				
Total Untreated Proposed Impervious Area=				1.84	ac				
Proposed Impervious Area Treatment Percentage=				81.38	%				

Bingham Wind Project Bingham, Maine Fall Brook Watershed Treatment Calculations									
Impervious Area Road ID Descriptions:				BMP ID DESCRIPTIONS					
CR1	CRANE ROAD		AD	Roadside Buffer					
AR1	ACCESS ROAD		DT	Ditch Turnout Buffer					
13	TURBINE PAD SITE		LS	Level Spreader Buffer					
METR	M.E.T. Road								
Misc.	Miscellaneous Imp. Area								
Road ID	Start Station	End Station	BMP ID	Buffer Slope (%)	Buffer Length (ft)	New Impervious Area (ac)	Impervious Area Treated (ac)	Required Berm Length (ft)	Impervious Area Untreated (ac)
CR1	38+00	- 40+00	DT-S9	6.0%	120.00	0.09	0.09		0.00
CR1	40+00	- 45+00	LS-S11	6.7%	150.00	0.28	0.28	42.00	0.00
CR1	45+00	- 52+50	AD-S7	9.0%	55.00	0.41	0.41		0.00
CR1	52+50	- 54+50	DT-S13	3.3%	120.00	0.11	0.11		0.00
CR1	54+50	- 64+50	AD-S9	8.3%	80.00	0.55	0.55		0.00
CR1	64+50	- 68+00	LS-S17	9.3%	150.00	0.19	0.19	35.00	0.00
CR1	68+00	- 71+50	AD-S11	1.6%	55.00	0.19	0.19		0.00
CR1	71+50	- 77+00	LS-S18	8.0%	150.00	0.30	0.30	46.00	0.00
CR1	77+00	- 78+50	AD-S12	13.7%	55.00	0.08	0.08		0.00
CR1	78+50	- 79+50	-	-	-	0.06	0.00		0.06
CR1	79+50	- 81+00	DT-S19	13.8%	120.00	0.08	0.08		0.00
CR1	81+00	- 95+50	AD-S13	14.5%	120.00	0.80	0.80		0.00
CR1	95+50	- 98+50	-	-	-	0.17	0.00		0.17
CR1	98+50	- 110+00	AD-S15	20.0%	55.00	0.63	0.63		0.00
CR1	110+00	- 111+50	-	-	-	0.08	0.00		0.08
CR1	111+50	- 114+00	DT-S21	32.0%	120.00	0.14	0.14		0.00
CR5	327+00	- 333+00	AD-S24	4.5%	80.00	0.33	0.33		0.00
CR5	333+00	- 335+50	-	-	-	0.14	0.00		0.14
CR5	335+50	- 338+50	AD-S24A	4.9%	80.00	0.17	0.17		0.00
CR5	338+50	- 340+00	-	-	-	0.08	0.00		0.08
CR5	340+00	- 359+00	AD-S24B	-	80 / 55	1.05	1.05		0.00
CR4	250+00	- 255+50	LS-S25	10.0%	150.00	0.30	0.30	55.00	0.00
T9	-	-	AD-S3	3.5%	55.00	0.28	0.14		0.14
T8	-	-	AD-S6	9.0%	55.00	0.28	0.14		0.14
T7 ALT	-	-	AD-S18	12.0%	55.00	0.28	0.20		0.08
T7	-	-	AD-S8	10.4%	55.00	0.28	0.28		0.00
T6	-	-	AD-S10	15.8%	55.00	0.28	0.28		0.00
T5	-	-	AD-S11	12.7%	55.00	0.28	0.28		0.00
T4	-	-	-	-	-	0.28	0.00		0.28
T3	-	-	-	-	-	0.28	0.00		0.28
T2	-	-	-	-	-	0.28	0.00		0.28
T1	-	-	AD-S16	24.0%	55.00	0.28	0.28		0.00
Totals						9.03	7.31		1.72
Impervious Area Treatment Calculations (Linear project)									
Total Proposed Impervious Area=				9.03	ac				
Total Treated Proposed Impervious Area=				7.31	ac				
Total Untreated Proposed Impervious Area=				1.72	ac				
Proposed Impervious Area Treatment Percentage=				80.92	%				

Bingham Wind Project Mayfield Township and Moscow, Maine Gulf Stream Watershed Treatment Calculations									
Impervious Area Road ID Descriptions:				BMP ID DESCRIPTIONS					
CR1	CRANE ROAD		AD	Roadside Buffer					
AR1	ACCESS ROAD		DT	Ditch Turnout Buffer					
13	TURBINE PAD SITE		LS	Level Spreader Buffer					
METR	M.E.T. Road								
Misc.	Miscellaneous Imp. Area								
Road ID	Start Station	End Station	BMP ID	Buffer Slope (%)	Buffer Length (ft)	New Impervious Area (ac)	Impervious Area Treated (ac)	Required Berm Length (ft)	Impervious Area Untreated (ac)
AR1	10+00	- 11+50	-	-	-	0.02	0.00		0.02
AR1	11+50	- 16+00	AD-S36	2.4%	80.00	0.25	0.25		0.00
AR1	16+00	- 23+00	LS-S75	3.5%	150.00	0.39	0.39	58.00	0.00
AR1	23+00	- 24+50	-	-	-	0.08	0.00		0.08
AR1	24+50	- 26+50	DT-S76	3.9%	120.00	0.11	0.11		0.00
AR1	26+50	- 30+00	-	-	-	0.05	0.00		0.05
AR1	30+00	- 32+50	DT-S77	4.8%	120.00	0.03	0.03		0.00
AR1	32+50	- 35+00	DT-S78	7.8%	120.00	0.14	0.14		0.00
AR1	35+00	- 37+50	DT-S79	4.3%	120.00	0.14	0.14		0.00
AR1	37+50	- 40+00	DT-S80	15.0%	120.00	0.14	0.14		0.00
AR1	40+00	- 42+50	DT-S81	10.6%	120.00	0.14	0.14		0.00
AR1	42+50	- 45+00	DT-S82	4.8%	120.00	0.14	0.14		0.00
AR1	45+00	- 47+50	DT-S83	5.5%	120.00	0.14	0.14		0.00
AR1	47+50	- 51+00	DT-S84	4.8%	120.00	0.19	0.19		0.00
AR1	51+00	- 55+00	-	-	-	0.06	0.00		0.06
AR1	55+00	- 57+50	DTS-85	1.7%	120.00	0.14	0.14		0.00
AR1	57+50	- 59+50	DTS-86	1.9%	120.00	0.11	0.11		0.00
AR1	59+50	- 62+00	DTS-87	4.8%	120.00	0.14	0.14		0.00
AR1	62+00	- 64+50	DTS-88	4.6%	120.00	0.14	0.14		0.00
AR1	64+50	- 67+00	DTS-89	2.5%	120.00	0.14	0.14		0.00
AR1	67+00	- 70+50	DTS-90	1.9%	120.00	0.19	0.19		0.00
AR1	70+50	- 73+00	DT-S91	2.8%	120.00	0.14	0.14		0.00
AR1	73+00	- 79+00	LS-S92	5.3%	150.00	0.33	0.33	50.00	0.00
AR1	79+00	- 82+00	DTS-95	6.9%	120.00	0.17	0.17		0.00
AR1	82+00	- 84+00	-	-	-	0.11	0.00		0.11
AR1	84+00	- 87+00	AD-S37	6.0%	55.00	0.17	0.17		0.00
AR1	87+00	- 90+50	-	-	-	0.05	0.00		0.05
AR1	90+50	- 93+00	DT-96A	7.8%	120.00	0.03	0.03		0.00
AR1	93+00	- 97+00	AD-S38	11.0%	55.00	0.22	0.22		0.00
AR1	97+00	- 99+00	-	-	-	0.03	0.00		0.03
AR1	99+00	- 107+00	AD-S38A	6.8%	80.00	0.44	0.44		0.00
AR1	107+00	- 112+00	LS-S72	6.7%	150.00	0.28	0.28	84.00	0.00
AR1	112+00	- 113+50	LS-S73	4.0%	150.00	0.08	0.08	55.00	0.00
CR3	200+00	- 217+00	AD-S2	4.3%	55.00	0.94	0.94		0.00

Bingham Wind Project Kingsbury Plantation, Maine Kingsbury Stream Watershed Treatment Calculations									
Impervious Area Road ID Descriptions:				BMP ID DESCRIPTIONS					
CR1	CRANE ROAD			AD	Roadside Buffer				
AR1	ACCESS ROAD			DT	Ditch Turnout Buffer				
13	TURBINE PAD SITE			LS	Level Spreader Buffer				
METR	M.E.T. Road								
Misc.	Miscellaneous Imp. Area								
Road ID	Start Station	End Station	BMP ID	Buffer Slope (%)	Buffer Length (ft)	New Impervious Area (ac)	Impervious Area Treated (ac)	Required Berm Length (ft)	Impervious Area Untreated (ac)
CR19	1500+00	- 1533+50	AD-N40	14.0%	55.00	1.85	1.85		0.00
CR19	1533+50	- 1536+00	DT-N104	8.7%	120.00	0.14	0.14		0.00
CR19	1536+00	- 1538+50	DT-N105	9.1%	120.00	0.14	0.14		0.00
CR19	1538+50	- 1541+00	AD-N41	9.8%	55.00	0.14	0.14		0.00
CR19	1541+00	- 1543+50	-	-	-	0.14	0.00		0.14
CR19	1543+50	- 1546+00	DT-N106	11.0%	120.00	0.14	0.14		0.00
CR19	1546+00	- 1555+00	AD-N42	9.5%	55.00	0.50	0.50		0.00
CR19	1555+00	- 1558+00	DT-N108	11.0%	120.00	0.17	0.17		0.00
CR19	1558+00	- 1563+00	LS-N110	8.7%	150.00	0.28	0.28	42.00	0.00
T42	-	-	AD-N43	8.8%	55.00	0.28	0.28		0.00
T43	-	-	-	-	-	0.28	0.00		0.28
T44	-	-	AD-N40	14.0%	55.00	0.28	0.28		0.00
CR12	904+50	- 913+00	AD-N17A	11.0%	55.00	0.47	0.47		0.00
CR12	913+00	- 917+50	LS-N46	6.7%	150.00	0.25	0.25	38.00	0.00
CR12	917+50	- 929+40	LS-N48	7.3%	150.00	0.66	0.66	99.00	0.00
CR12	929+40	- 933+50	LS-N54	11.0%	120.00	0.23	0.23	41.00	0.00
CR12	933+50	- 942+00	LS-N57	10.0%	150.00	0.47	0.47	85.00	0.00
CR12	942+00	- 946+50	-	-	-	0.25	0.00		0.25
CR12	946+50	- 950+50	AD-N21	7.8%	80.00	0.22	0.22		0.00
CR12	950+50	- 952+50	-	-	-	0.11	0.00		0.11
CR12	952+50	- 953+50	AD-N23	9.2%	80.00	0.06	0.06		0.00
CR12	953+50	- 955+00	-	-	-	0.08	0.00		0.08
CR12	955+00	- 956+50	AD-N24	10.0%	80.00	0.08	0.08		0.00
CR12	956+50	- 959+18	-	-	-	0.15	0.00		0.15
T41	-	-	AD-N20	15.3%	55.00	0.28	0.28		0.00
CR15	1100+00	- 1102+50	AD-N25	8.1%	55.00	0.14	0.14		0.00
CR25	1102+50	- 1103+50	-	-	-	0.06	0.00		0.06
CR15	1103+50	- 1105+00	AD-N25	8.1%	55.00	0.08	0.08		0.00
CR15	1105+00	- 1108+00	-	-	-	0.17	0.00		0.17
CR15	1108+00	- 1110+30	DT-N57	2.5%	120.00	0.13	0.13		0.00
T46	-	-	-	-	-	0.28	0.00		0.28
CR16	1213+10	- 1215+00	DT-N72	6.7%	120.00	0.10	0.10		0.00
CR16	1215+00	- 1219+50	AD-N29	13.0%	55.00	0.25	0.25		0.00
CR16	1219+50	- 1222+50	-	-	-	0.17	0.00		0.17
CR16	1222+50	- 1225+50	DT-N91	11.7%	120.00	0.17	0.17		0.00
CR16	1225+50	- 1227+00	-	-	-	0.08	0.00		0.08
CR16	1227+00	- 1233+00	LS-N92	6.0%	150.00	0.33	0.33	50.00	0.00
CR16	1233+00	- 1235+00	-	-	-	0.11	0.00		0.11
CR16	1235+00	- 1241+00	AD-N36	12.0%	55.00	0.33	0.33		0.00
CR16	1241+00	- 1249+00	LS-N95	5.3%	150.00	0.44	0.44	67.00	0.00
CR16	1249+00	- 1255+00	-	-	-	0.33	0.00		0.33
CR16	1255+00	- 1257+50	DT-N98	4.2%	120.00	0.14	0.14		0.00
CR16	1257+50	- 1259+00	-	-	-	0.08	0.00		0.08
CR16	1259+00	- 1266+50	AD-N38A	6.4%	55.00	0.41	0.41		0.00
CR16	1266+50	- 1269+50	-	-	-	0.17	0.00		0.17
T47	-	-	AD-N30	-	-	0.28	0.00		0.28
T49	-	-	AD-N37	6.3%	55.00	0.28	0.28		0.00
T50	-	-	AD-N38	6.5%	55.00	0.28	0.28		0.00
T51	-	-	AD-N39	10.8%	55.00	0.28	0.28		0.00
T36	-	-	AD-N15A	5.5%	55.00	0.28	0.28		0.00
Totals						12.96	9.82		3.14
Impervious Area Treatment Calculations (Linear project)									
Total Proposed Impervious Area=				12.96	ac				
Total Treated Proposed Impervious Area=				9.82	ac				
Total Untreated Proposed Impervious Area=				3.14	ac				
Proposed Impervious Area Treatment Percentage=				75.80	%				

Bingham Wind Project Mayfield Township, Maine Rift Brook Watershed Treatment Calculations									
Impervious Area Road ID Descriptions:				BMP ID DESCRIPTIONS					
CR1	CRANE ROAD			AD	Roadside Buffer				
AR1	ACCESS ROAD			DT	Ditch Turnout Buffer				
13	TURBINE PAD SITE			LS	Level Spreader Buffer				
METR	M.E.T. Road								
Misc.	Miscellaneous Imp. Area								
Road ID	Start Station	End Station	BMP ID	Buffer Slope (%)	Buffer Length (ft)	New Impervious Area (ac)	Impervious Area Treated (ac)	Required Berm Length (ft)	Impervious Area Untreated (ac)
CR8	53400	- 54050	LS-S56	5.3%	150.00	0.36	0.36	54.00	0.00
CR8	54050	- 54350	AD-S33	2.9%	55.00	0.17	0.17		0.00
CR8	54350	- 54950	LS-S54	8.0%	150.00	0.33	0.33	50.00	0.00
CR8	54950	- 55600	AD-S35	21.0%	55.00	0.36	0.36		0.00
T16	-	-	AD-S35	21.0%	55.00	0.28	0.28		0.00
T17/CR 23	-	-	AD-S34	9.8%	55.00	0.38	0.38		0.00
CR5	31786	- 32400	-	0.0%	-	0.34	0.00		0.34
CR5	32400	- 32650	DT-S34	4.0%	120.00	0.14	0.14		0.00
CR5	35900	- 36050	-	0.0%	-	0.08	0.00		0.08
CR5	36050	- 37150	AD-S23	7.6%	80.00	0.61	0.61		0.00
CR5	37150	- 37400	DT-S31	6.6%	120.00	0.14	0.14		0.00
CR5	37400	- 38250	AD-S22	5.3%	55.00	0.47	0.47		0.00
CR5	38250	- 38550	LS-S29	6.0%	150.00	0.17	0.17	25.00	0.00
CR5	38550	- 38800	-	0.0%	-	0.14	0.00		0.14
CR5	38800	- 39300	AD-S21	4.9%	80.00	0.28	0.28		0.00
CR5	39300	- 39800	LS-S27	3.3%	150.00	0.28	0.28	42.00	0.00
CR5	39800	- 40050	DT-S30	4.2%	120.00	0.14	0.14		0.00
CR5	40050	- 40300	DT-S32	5.8%	120.00	0.14	0.14		0.00
CR5	40300	- 40400	AD-S20	4.0%	55.00	0.06	0.06		0.00
T12	-	-	-	0.0%	-	0.28	0.00		0.28
T13	-	-	AD-S22	5.3%	55.00	0.28	0.28		0.00
T14	-	-	-	0.0%	-	0.28	0.00		0.28
CR7	50000	- 50700	-	0.0%	-	0.00	0.00		0.00
CR7	50700	- 52600	-	0.0%	-	0.44	0.00		0.44
CR7	52600	- 52950	AD-S29	3.3%	55.00	0.19	0.19		0.00
CR7	52950	- 53110	-	-	-	0.09	0.00		0.09
CR26	210000	- 210250	AD-S26	4.9%	55.00	0.14	0.14		0.00
CR26	210250	- 210500	LS-S39	2.0%	150.00	0.14	0.14	52.00	0.00
T76	-	-	AD-S27	2.6%	55.00	0.28	0.28		0.00
CR27	220000	- 220750	-	0.0%	-	0.28	0.00		0.28
T77	-	-	AD-S28	7.0%	80.00	0.28	0.28		0.00
CR6	40000	- 40150	-	0.0%	-	0.08	0.00		0.08
CR6	40150	- 40524	LS-S41	4.0%	150.00	0.21	0.21	31.00	0.00
CR6	40524	- 40900	LS-S39	2.0%	150.00	0.21	0.21	52.00	0.00
CR6	40900	- 41300	AD-S26	4.9%	55.00	0.22	0.22		0.00
CR6	41300	- 41350	-	-	-	0.03	0.00		0.03
CR6	41350	- 41500	AD-S26	4.9%	55.00	0.08	0.08		0.00
CR6	41500	- 41900	-	-	-	0.22	0.00		0.22
CR6	41900	- 43026	LS-S44	4.0%	150.00	0.62	0.62	94.00	0.00
T75	-	-	AD-S29	3.4%	55.00	0.28	0.28		0.00
Totals						9.45	7.19		2.25
Impervious Area Treatment Calculations (Linear project)									
Total Proposed Impervious Area=				9.45	ac				
Total Treated Proposed Impervious Area=				7.19	ac				
Total Untreated Proposed Impervious Area=				2.25	ac				
Proposed Impervious Area Treatment Percentage=				76.15	%				

Bingham Wind Project Kingsbury Plantation, Maine Thorn Brook Watershed Treatment Calculations									
Impervious Area Road ID Descriptions:				BMP ID DESCRIPTIONS					
CR1	CRANE ROAD			AD	Roadside Buffer				
AR1	ACCESS ROAD			DT	Ditch Turnout Buffer				
13	TURBINE PAD SITE			LS	Level Spreader Buffer				
METR	M.E.T. Road								
Misc.	Miscellaneous Imp. Area								
Road ID	Start Station	End Station	BMP ID	Buffer Slope (%)	Buffer Length (ft)	New Impervious Area (ac)	Impervious Area Treated (ac)	Required Berm Length (ft)	Impervious Area Untreated (ac)
T55	-	-	AD-N33	7.8%	55.00	0.28	0.28		0.00
T56	-	-	-	0.0%	-	0.28	0.00		0.28
CR15	111030	- 111550	LS-N60	6.7%	150.00	0.29	0.29	43.00	0.00
CR15	111550	- 111800	DT-N61	5.7%	120.00	0.14	0.14		0.00
CR15	111800	- 112277	-	0.0%	-	0.26	0.00		0.26
CR16	120000	- 120250	DT-N70	6.7%	120.00	0.14	0.14		0.00
CR16	120250	- 120750	AD-N30	13.0%	55.00	0.28	0.28		0.00
CR16	120750	- 121310	LS-N71	12.0%	150.00	0.31	0.31	47.00	0.00
METR4	4000	- 4442	DT-N68	9.1%	120.00	0.12	0.12		0.00
CR24	200000	- 200400	AD-N26	11.5%	55.00	0.22	0.22		0.00
T45	-	-	AD-N26	11.5%	55.00	0.28	0.28		0.00
CR25	201000	- 201400	AD-N26	11.5%	55.00	0.22	0.22		0.00
CR25	201400	- 201450	-	0.0%	-	0.03	0.00		0.03
CR25	201450	- 201800	AD-N26	11.5%	55.00	0.19	0.19		0.00
CR25	201800	- 202400	LS-N63	10.0%	150.00	0.33	0.33	60.00	0.00
CR25	202400	- 203100	LS-N66	10.7%	150.00	0.39	0.39	95.00	0.00
CR25	203100	- 203600	AD-N27	8.7%	55.00	0.28	0.28		0.00
CR25	203600	- 203700	-	0.0%	-	0.06	0.00		0.06
CR25	203700	- 204550	AD-N28	20.0%	55.00	0.47	0.47		0.00
CR25	204550	- 205100	-	0.0%	-	0.30	0.00		0.30
CR25	205100	- 205250	DT-N69	11.6%	120.00	0.08	0.08		0.00
CR13	100000	- 100150	AD-N31	13.3%	55.00	0.08	0.08		0.00
T57	-	-	AD-N31	13.3%	55.00	0.28	0.28		0.00
CR18	140000	- 140250	LS-N66	10.7%	150.00	0.14	0.14	95.00	0.00
CR18	140250	- 141130	-	0.0%	-	0.48	0.00		0.48
CR18	141130	- 141500	LS-N89	6.7%	150.00	0.20	0.20	3	

Bingham Wind Project														
Mayfield Township, Maine														
Mayfield Pond Watershed Treatment Calculations														
SOIL GROUPS														
Impervious Area Road ID Descriptions:				BMP ID DESCRIPTIONS								SOIL GROUPS		
CR1	CRANE ROAD			AD	Roadside Buffer								Abram	D
AR1	ACCESS ROAD			DT	Ditch Turnout Buffer								Lyman	C/D
13	TURBINE PAD SITE			LS	Level Spreader Buffer								Monson	C/D
METR	M.E.T. Road												Plaisted	C
Misc.	Miscellaneous Imp. Area												Telos	C
													Monarda	D
													Dixmont	C
													Dixfield	C
													Colonel	C
													Chesuncook	C
													Elliotsville	B
													Thorndike	C/D
Road ID	Start Station	End Station	BMP ID	HSG	Buffer Slope	Buffer Length (ft)	New Impervious Area (ac)	Required Berm Length (ft)	Export Coefficient	Pre-Treat Export (lbs P/yr)	BMP Treatment Factor	Post-Treat Export (lbs P/yr)	Road Width After Revegetation (ft)	
CR8	500+00	- 504+50	-	-	-	-	0.17		1.75	0.29	1.00	0.29	16	
CR8	504+50	- 511+50	AD-S30	C/D	10.0%	55.00	0.26		1.75	0.45	0.35	0.16	16	
CR8	511+50	- 518+00	LS-S65	C	9.5%	150.00	0.24	43.00	1.75	0.42	0.30	0.13	16	
CR8	518+00	- 520+50	DT-S63A	C	8.3%	120.00	0.09		1.75	0.16	0.30	0.05	16	
CR8	520+50	- 534+50	AD-S32	C/D	5.0%	55.00	0.51		1.75	0.90	0.35	0.31	16	
T18	-	-	AD-S32	C	5.0%	55.00	0.29		1.75	0.51	0.30	0.15		
METR2	20+00	- 24+50	AD-S32	C	5.0%	55.00	0.17		1.75	0.29	0.30	0.09	12	
METR2	24+50	- 26+73	DT-S58	C	6.7%	120.00	0.06		1.75	0.11	0.30	0.03	12	
CR9	600+00	- 602+50	AD-S32	D	5.0%	55.00	0.09		1.75	0.16	0.40	0.06	16	
CR9	602+50	- 607+50	LS-S62	C	4.7%	150.00	0.18	28.00	1.75	0.32	0.30	0.10	16	
T19	-	-	DT-S59	C/D	8.6%	120.00	0.14		1.75	0.25	0.35	0.09		
T19	-	-	DT-S59	C/D	7.7%	120.00	0.14		1.75	0.25	0.35	0.09		
T20	-	-	AD-S31	C	9.6%	55.00	0.29		1.75	0.51	0.30	0.15		
CR10	651+50	- 659+50	LS-N16	C	8.0%	150.00	0.29	45.00	1.75	0.51	0.30	0.15	16	
CR10	659+50	- 676+50	AD-N6	C	5.2%	55.00	0.62		1.75	1.09	0.30	0.33	16	
CR10	676+50	- 678+50	DT-N13	C	8.1%	120.00	0.07		1.75	0.13	0.30	0.04	16	
CR10	678+50	- 681+50	AD-N5	C	8.0%	55.00	0.11		1.75	0.19	0.30	0.06	16	
CR10	681+50	- 687+00	LS-N10	C	8.7%	150.00	0.20	31.00	1.75	0.35	0.30	0.11	16	
CR10	687+00	- 692+00	AD-N4	C	7.0%	80.00	0.18		1.75	0.32	0.30	0.10	16	
CR10	692+00	- 698+00	LS-N9	C	8.0%	150.00	0.22	34.00	1.75	0.39	0.30	0.12	16	
CR10	698+00	- 707+50	AD-N3	C	20.0%	55.00	0.35		1.75	0.61	0.30	0.18	16	
CR10	707+50	- 710+00	LS-N7	C	8.5%	150.00	0.09	14.00	1.75	0.16	0.30	0.05	16	
CR10	710+00	- 723+00	LS-N2	C	9.0%	150.00	0.48	72.00	1.75	0.84	0.30	0.25	16	
T21	-	-	AD-N1	C	10.3%	55.00	0.28		1.75	0.49	0.30	0.15		
T22	-	-	AD-N2	C	15.3%	55.00	0.46		1.75	0.81	0.30	0.24		
T23	-	-	AD-N3	C	20.0%	80.00	0.28		1.75	0.49	0.30	0.15		
T24	-	-	AD-N4	C	7.0%	80.00	0.28		1.75	0.49	0.30	0.15		
T25	-	-	AD-N5	C	8.0%	55.00	0.28		1.75	0.49	0.30	0.15		
T26	-	-	AD-N6	C	5.2%	80.00	0.28		1.75	0.49	0.30	0.15		
T27	-	-	AD-N7	C	73.0%	55.00	0.28		1.75	0.49	0.30	0.15		
T29	-	-	AD-N9	C	17.4%	55.00	0.28		1.75	0.49	0.30	0.15		
T30	-	-	AD-N10	C	9.8%	55.00	0.37		1.75	0.65	0.30	0.19		
METR3	30+00	- 34+03	-	-	-	-	0.11		1.75	0.19	1.00	0.19		
SUBSTATION							2.00		1.25	2.50	0.25	0.63		
CR22	1805+00	- 1812+50	AD-N9	C	17.4%	55.00	0.28		1.75	0.48	0.30	0.14	16	
							Totals			17.26		5.50		

Project Phosphorus Calculations			
Project Phosphorus Budget (PPB)		5.16	lbs/yr
Project Phosphorus Export (PPE)		5.50	lbs/yr
Mitigation credit		0.36	lbs/yr
Project Phosphorus Export (PPE)		5.14	lbs/yr

Bingham Wind Project														
Brighton Plantation, Maine														
Smith (Weeks) Pond Watershed Treatment Calculations														
SOIL GROUPS														
Impervious Area Road ID Descriptions:				BMP ID DESCRIPTIONS								SOIL GROUPS		
CR1	CRANE ROAD			AD	Roadside Buffer								Abram	D
AR1	ACCESS ROAD			DT	Ditch Turnout Buffer								Lyman	C/D
13	TURBINE PAD SITE			LS	Level Spreader Buffer								Monson	C/D
METR	M.E.T. Road												Plaisted	C
Misc.	Miscellaneous Imp. Area												Telos	C
													Monarda	D
													Dixmont	C
													Dixfield	C
													Colonel	C
													Chesuncook	C
													Elliotsville	B
													Thorndike	C/D
Road ID	Start Station	End Station	BMP ID	HSG	Buffer Slope	Buffer Length (ft)	New Impervious Area (ac)	Required Berm Length (ft)	Export Coefficient	Pre-Treat Export (lbs P/yr)	BMP Treatment Factor	Post-Treat Export (lbs P/yr)	Road Width After Revegetation (ft)	
T15	-	-	AD-S20	C	4.0%	55.00	0.23		1.75	0.40	0.30	0.12	24	
							Totals			0.23		0.40	0.12	

Project Phosphorus Calculations			
Project Phosphorus Budget (PPB)		0.21	lbs/yr
Project Phosphorus Export (PPE)		0.12	lbs/yr
Mitigation credit		0.00	lbs/yr
Project Phosphorus Export (PPE)		0.12	lbs/yr

Bingham Wind Project														
Mayfield Township, Maine														
Withee Pond Watershed Treatment Calculations														
SOIL GROUPS														
Impervious Area Road ID Descriptions:				BMP ID DESCRIPTIONS								SOIL GROUPS		
CR1	CRANE ROAD			AD	Roadside Buffer								Abram	D
AR1	ACCESS ROAD			DT	Ditch Turnout Buffer								Lyman	C/D
13	TURBINE PAD SITE			LS	Level Spreader Buffer								Monson	C/D
METR	M.E.T. Road												Plaisted	C
Misc.	Miscellaneous Imp. Area												Telos	C
													Monarda	D
													Dixmont	C
													Dixfield	C
													Colonel	C
													Chesuncook	C
													Elliotsville	B
													Thorndike	C/D
Road ID	Start Station	End Station	BMP ID	HSG	Buffer Slope	Buffer Length (ft)	New Impervious Area (ac)	Required Berm Length (ft)	Export Coefficient	Pre-Treat Export (lbs P/yr)	BMP Treatment Factor	Post-Treat Export (lbs P/yr)	Road Width After Revegetation (ft)	
CR6/T74	430+26	- 435+00	LS-S50	C	4.0%	150.00	0.54	82.00	1.75	0.95	0.30	0.28	24	
							Totals			0.54		0.95	0.28	

Project Phosphorus Calculations			
Project Phosphorus Budget (PPB)		0.38	lbs/yr
Project Phosphorus Export (PPE)		0.28	lbs/yr
Mitigation credit		0.00	lbs/yr
Project Phosphorus Export (PPE)		0.28	lbs/yr

STORMWATER TREATMENT SCHEDULES

DESIGNED: N.T.S. DATE: SEPT 2012

CHECKED: SRB JOB NO. 3048

FILE NAME: 3048-WSHD SCHEDULES

DRAWN: DED SCALE: N.T.S.

SUB: SRB JOB NO. 3048

CHECKED: SRB JOB NO. 3048

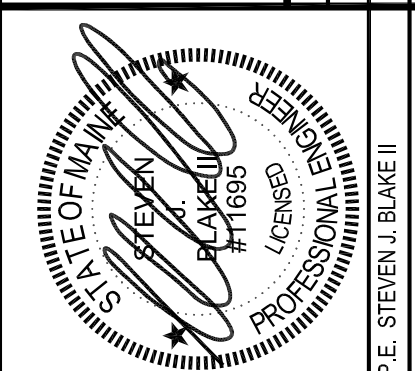
FILE NAME: 3048-WSHD SCHEDULES

PERMIT PLAN SUBMISSION: 04.06.13

ACOE REVISIONS: 03.06.13

PERMIT DRAWINGS SUBMITTED FOR PROJECT TEAM REVIEW: 12.18.12

DATE: 12.18.12



BINGHAM WIND PROJECT

BLUE SKY WEST, LLC

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PROJECT NO. 3048

DATE: 12.18.12

NO. 1

DATE: 12.18.12

NO. 1

PROJECT NO. 3048

DATE: 12.18.12

NO. 1

DATE: 12.18.12

NO. 1

PROJECT NO. 3048

DATE: 12.18.12

NO. 1

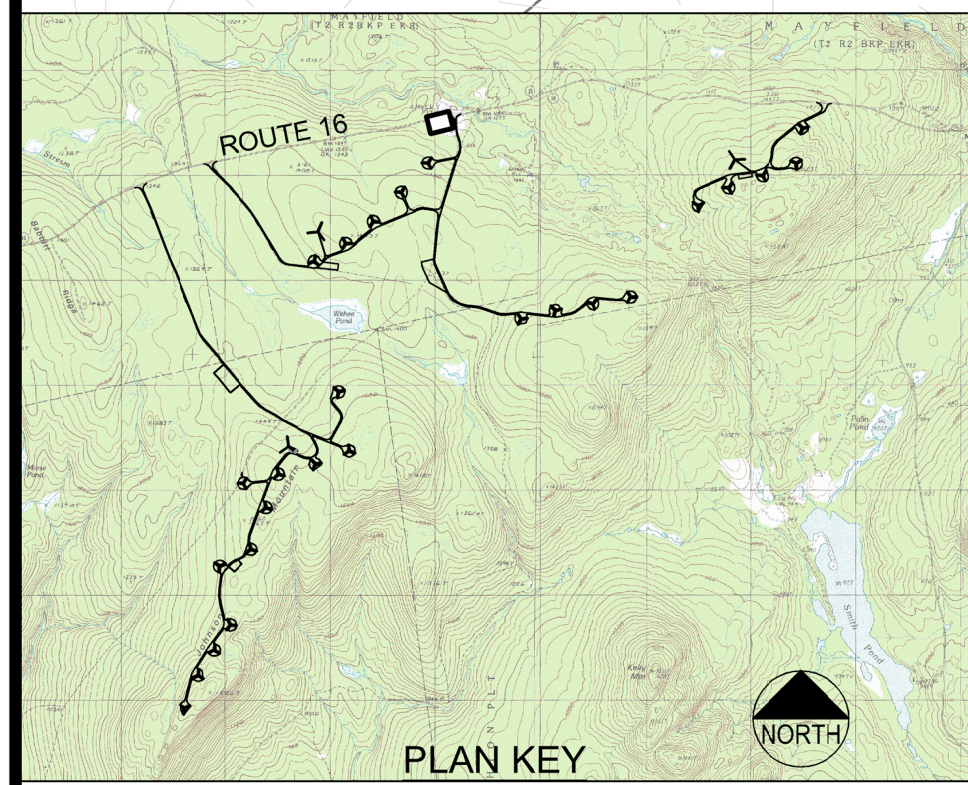
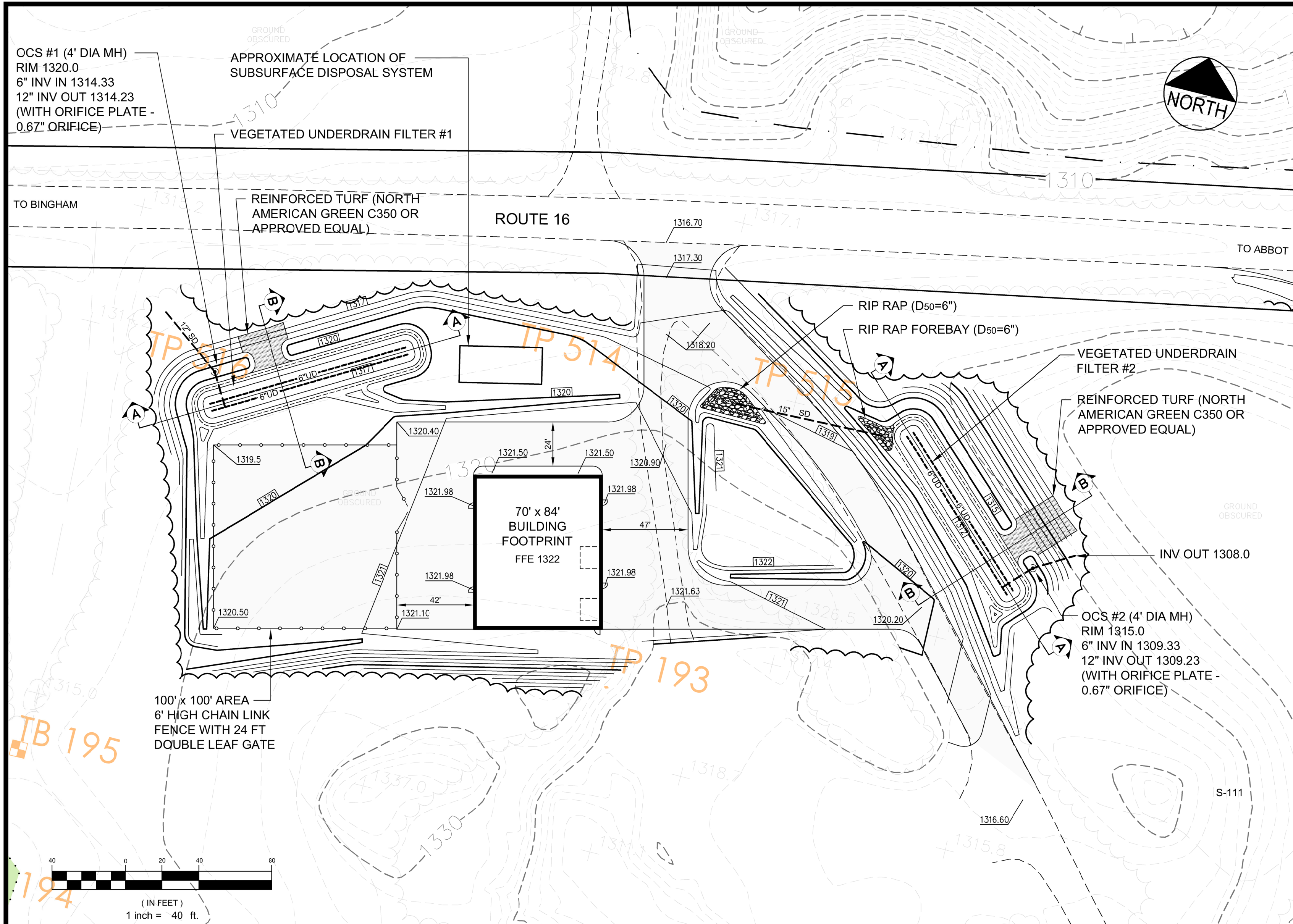
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PRELIMINARY - NOT FOR CONSTRUCTION

SHEET C-SW2.3

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SPECIFICATIONS PER MAINE DEP VOLUME III - BMPs TECHNICAL DESIGN MANUAL CHAPTER 7.1.3

PIPE BEDDING
 THE UNDERDRAIN MATERIAL CONSISTS OF WELL GRADED, CLEAN, COARSE GRAVEL MEETING THE MEDOT SPECIFICATION 703.22 UNDERDRAIN TYPE B FOR UNDERDRAIN BACKFILL (SEE TABLE 1). THE MATERIAL MUST CONTAIN NO MORE THAN 5% (PREFERABLY 2% OR LESS) FINES PASSING THE #200 SIEVE.

SOIL FILTER MEDIA
 SOIL MEDIA MUST CONSIST OF A SILTY SAND SOIL OR SOIL MIXTURE COMBINED WITH 20% TO 25% BY VOLUME OF A MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH OR OTHER ORGANIC SOURCE APPROVED BY THE DEPARTMENT. THE RESULTING MIXTURE MUST HAVE NO LESS THAN 8% PASSING THE #200 SIEVE. THE SOIL MEDIA SHOULD ONLY BE COMPACTED TO (90% TO 92% STANDARD PROCTOR).

THE SAND TOPSOIL USED IN THE MIXTURE MUST HAVE NO MORE THAN 2% CLAY CONTENT. THE SAND GRADATION PROVIDED IN TABLE 2 IS AN EXAMPLE OF AN APPROPRIATE SAND TO USE IN THE MIXTURE.

SEEDING MIX
 NEW ENGLAND EROSION CONTROL/RESTORATION SEED MIX FOR DRY SITES, BY NEW ENGLAND WETLAND PLANTS, INC.

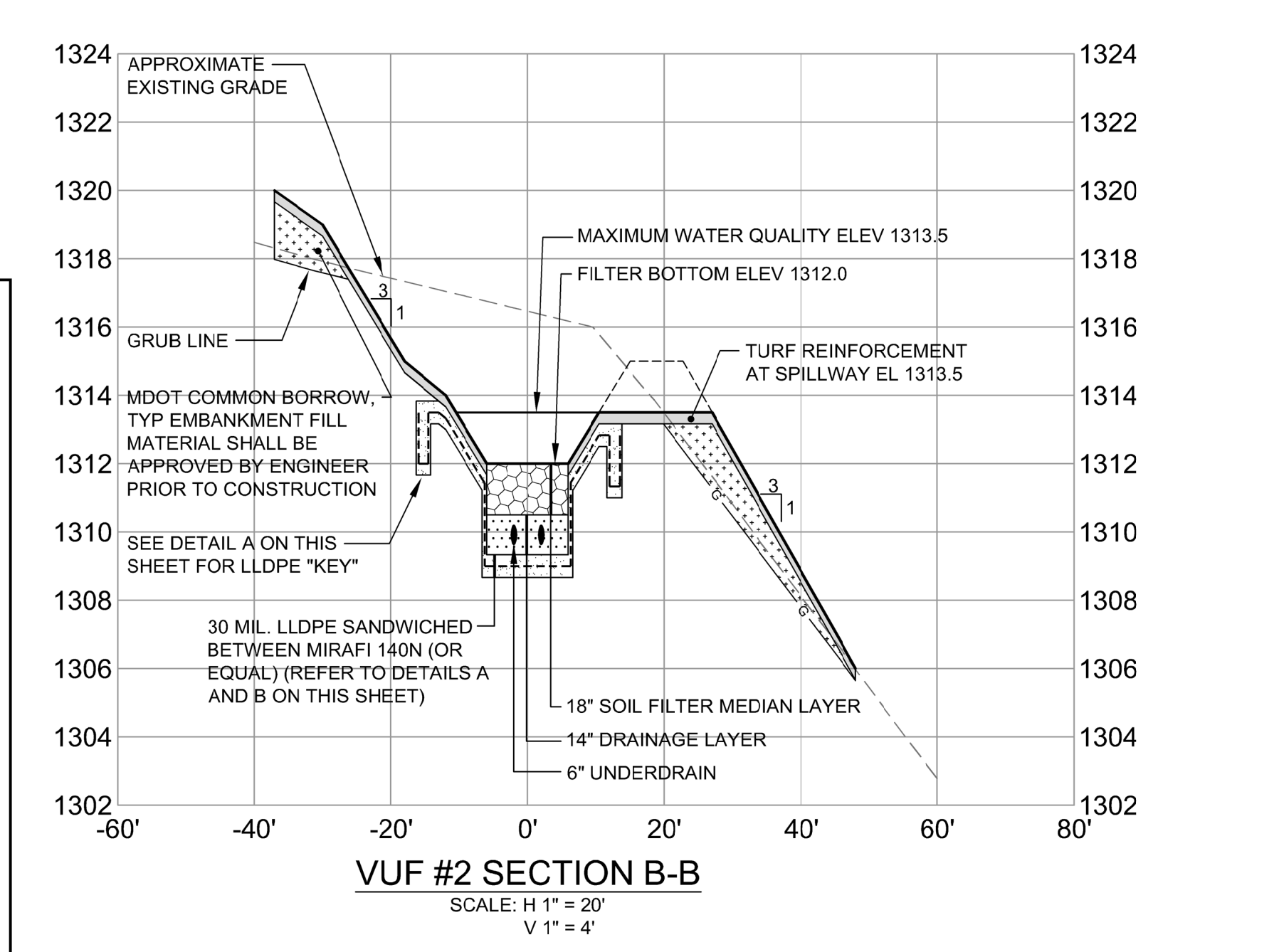
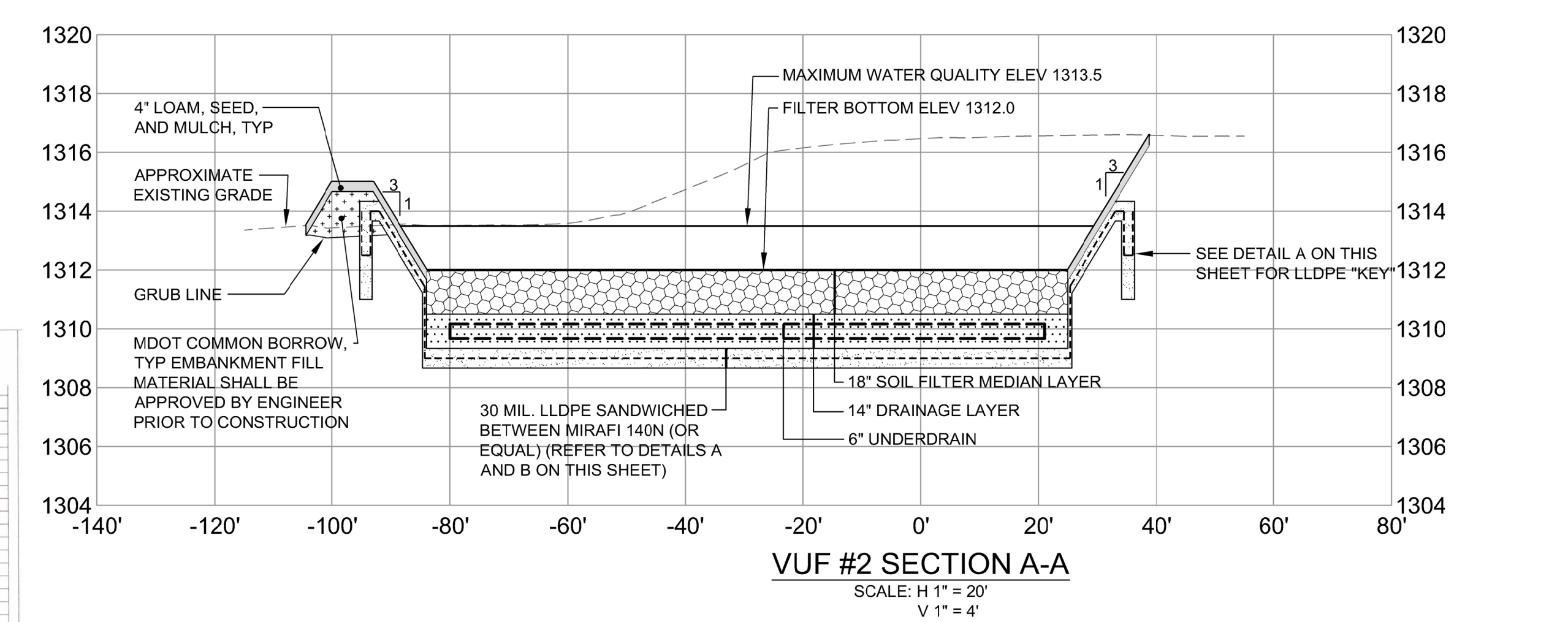
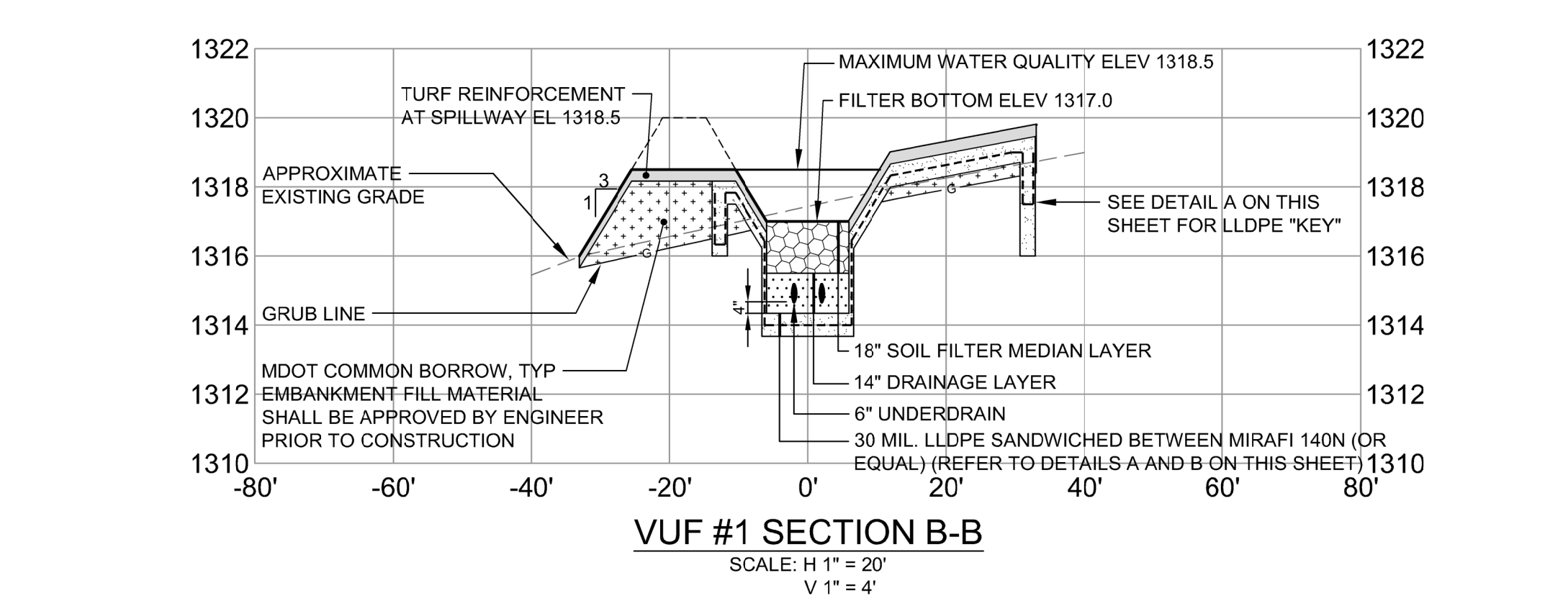
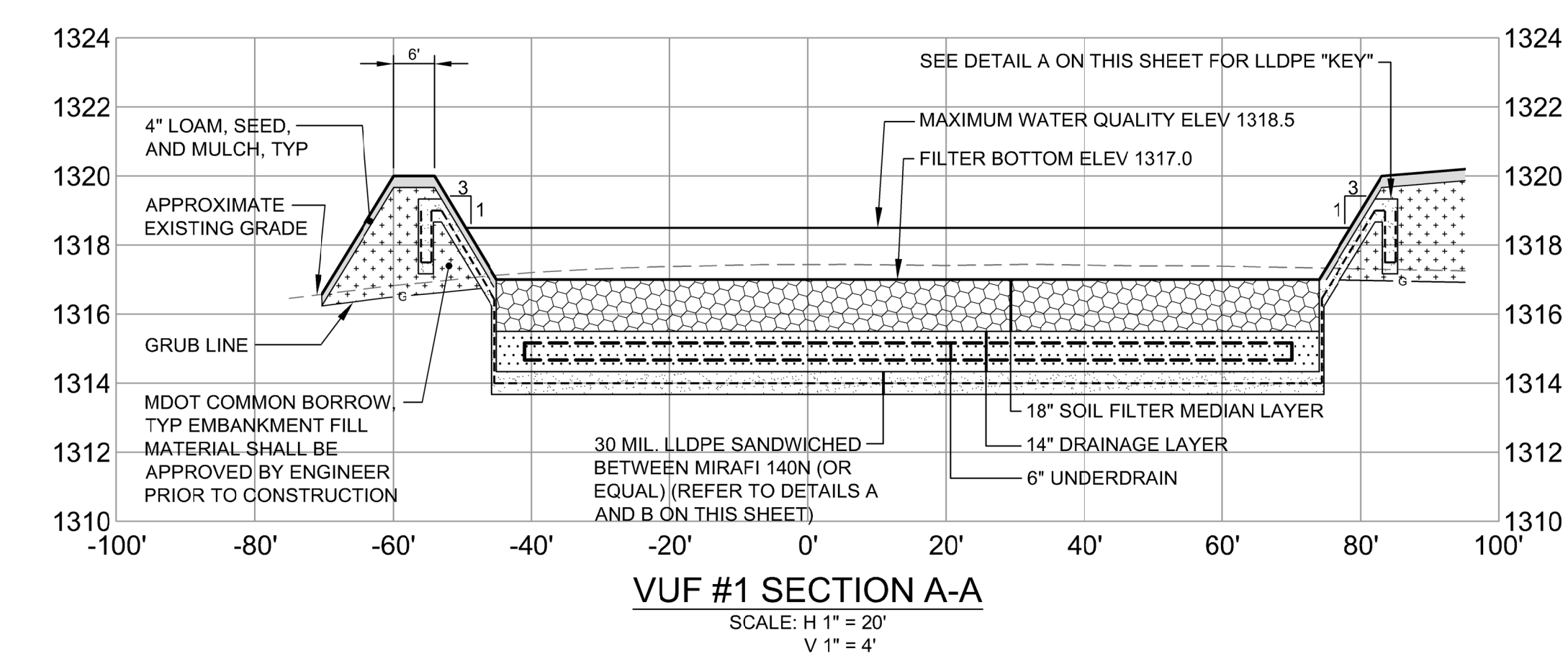
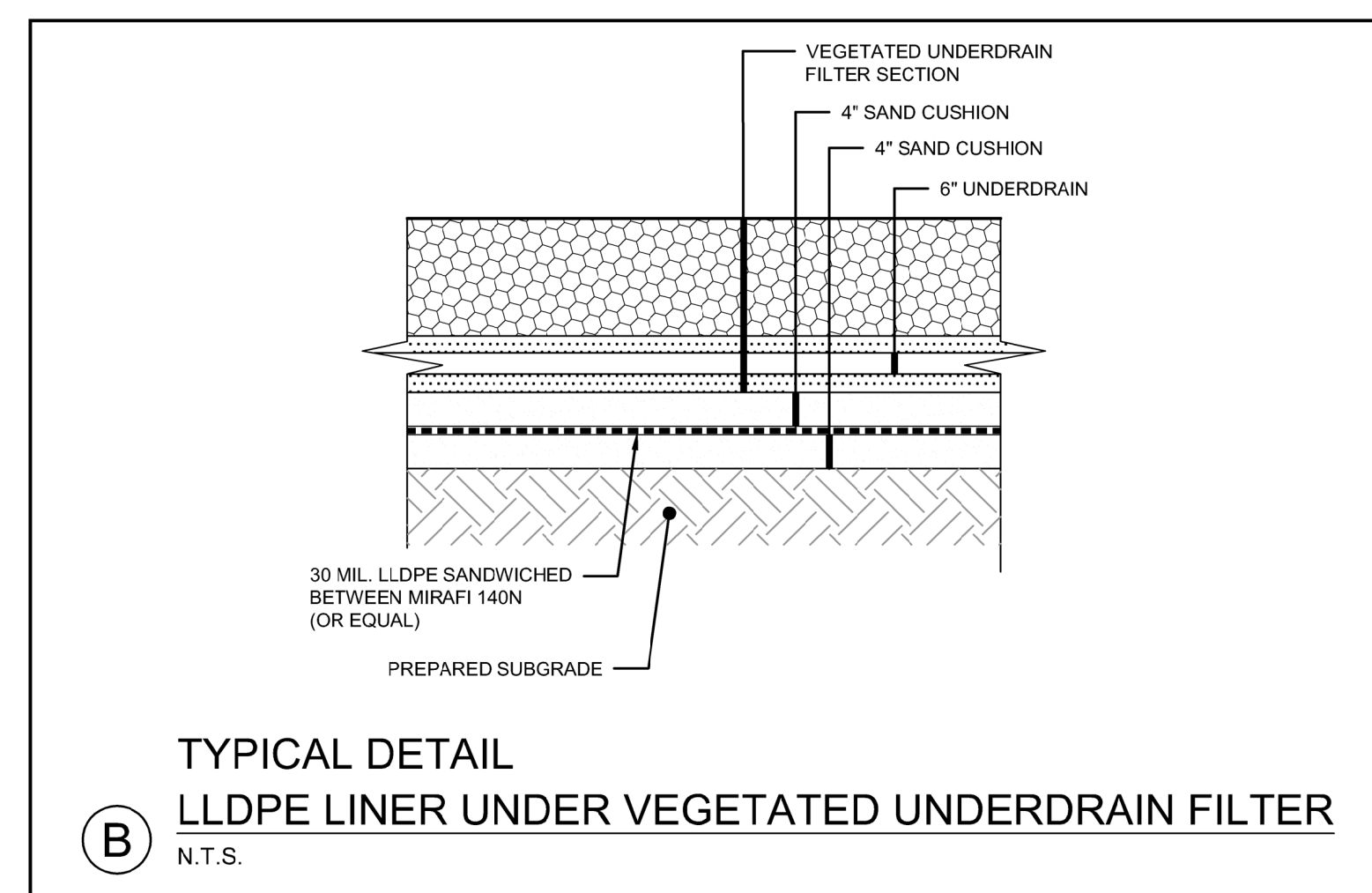
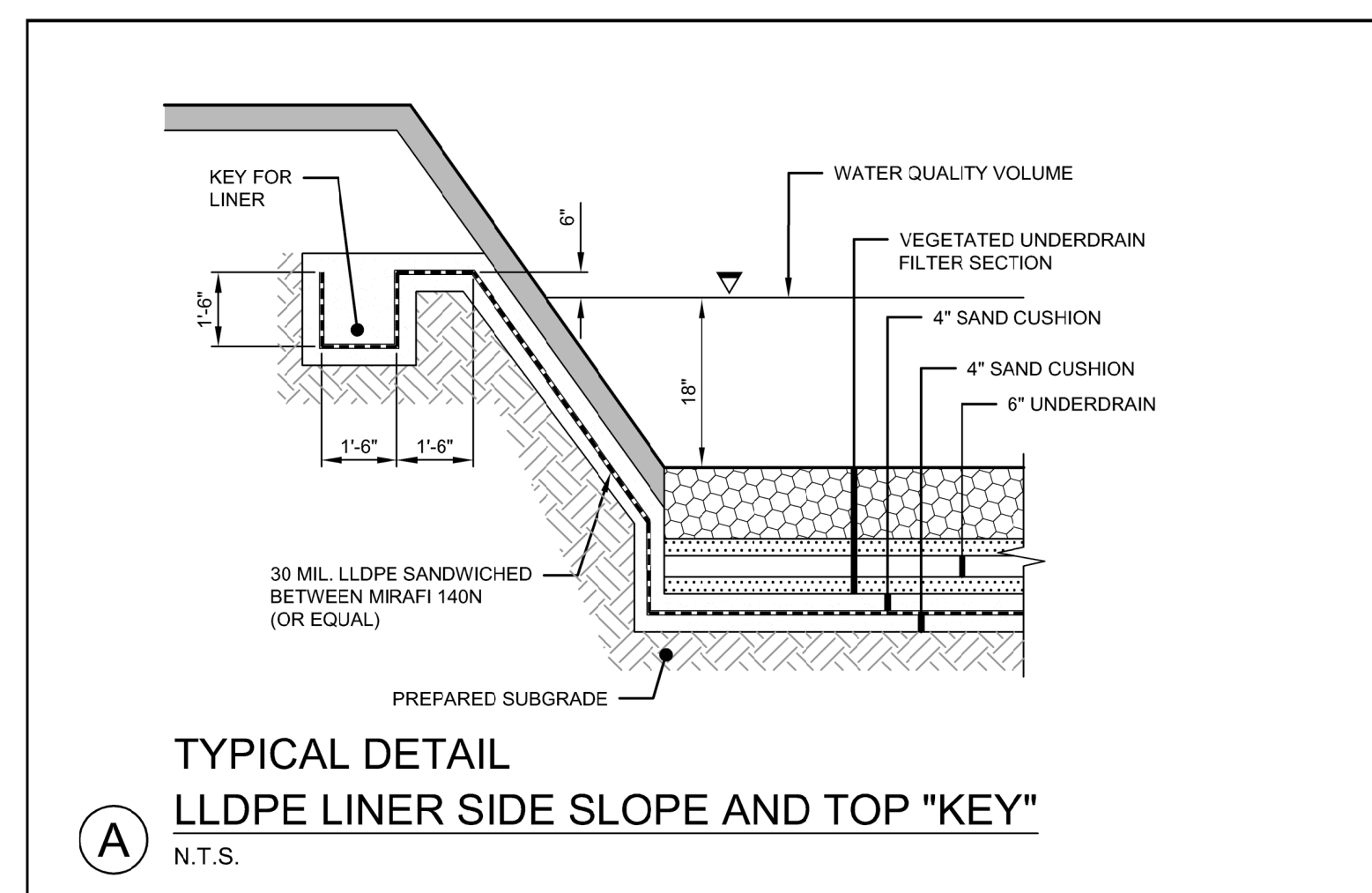
SOIL DESCRIPTION AND CLASSIFICATION			
Texture	Consistency	Color	Mottling
SANDY	LOAM	DARK BROWN (10YR 2/3)	
LOAM	FRIABLE	BROWN (7.5YR 4/4)	
LOAMY SAND	FRIABLE	BROWN (7.5YR 4/4)	
FINE SAND		DARK OLIVE (5Y 4/3)	
		BROWN (7.5Y 5/3)	
		DARK OLIVE (5Y 4/3)	
		BROWN (7.5Y 5/3)	

TABLE 1 MEDOT SPECIFICATIONS FOR UNDERDRAINS (MEDOT 703.22)

SIEVE SIZE	% BY WEIGHT
1"	90-100
1/2"	75-100
#4	50-100
#20	15-80
#50	0-15
#200	0-5

TABLE 2 MEDOT SPECIFICATIONS FOR AGGREGATE (MEDOT #703.01)

SIEVE SIZE	% BY WEIGHT
3/8"	100
#4	95-100
#8	80-100
#16	50-85
#30	25-60
#60	10-30
#100	2-10
#200	0-5



PRELIMINARY - NOT FOR CONSTRUCTION

O & M BUILDING SITE PLAN AND WATER QUALITY PLAN

BINGHAM WIND PROJECT

BLUE SKY WEST, LLC

DeLuca-Hoffman Associates, Inc.
 778 MAIN STREET, SUITE 8
 SOUTH PORTLAND, ME 04106
 207.775.1121
 www.delucahoffman.com

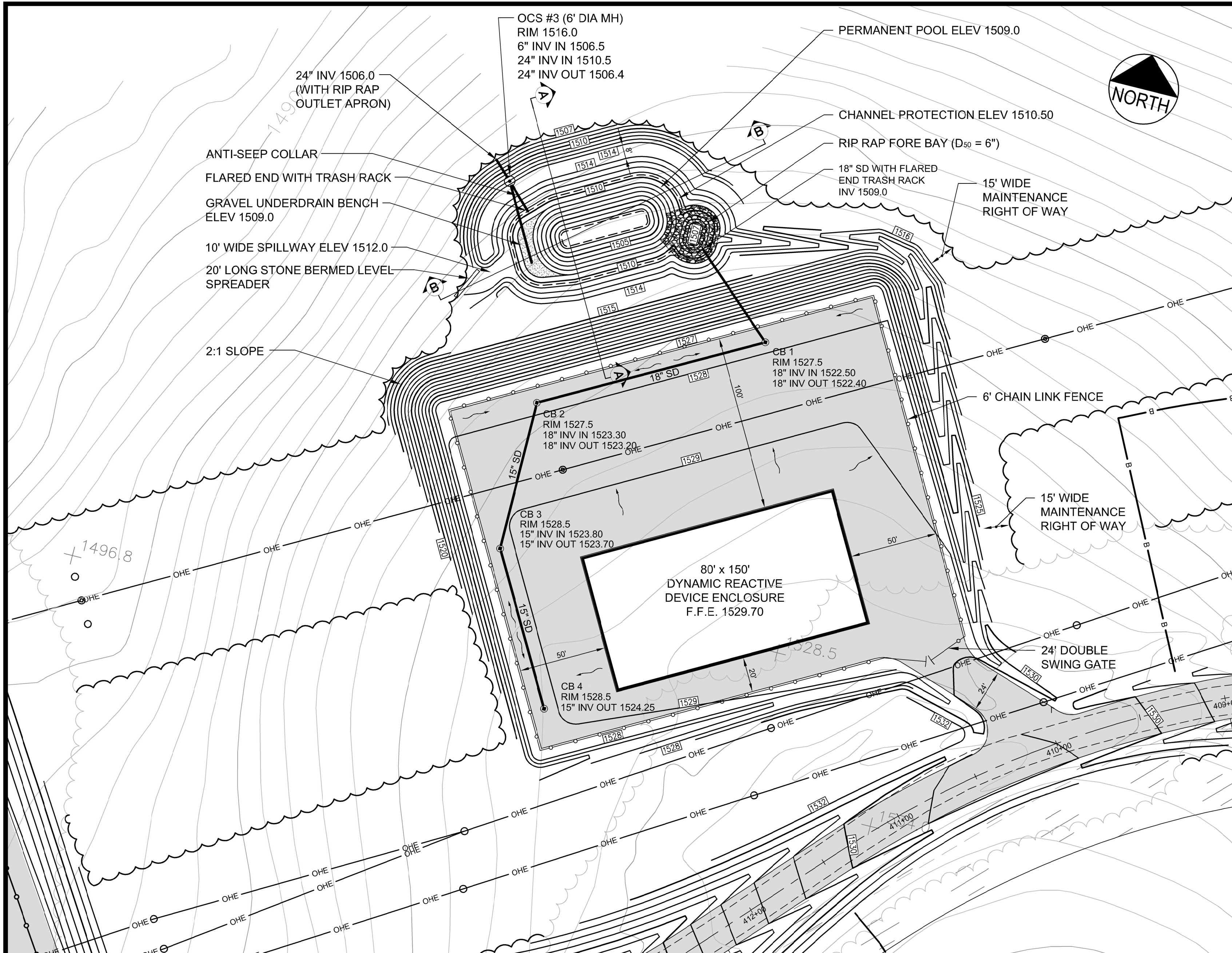
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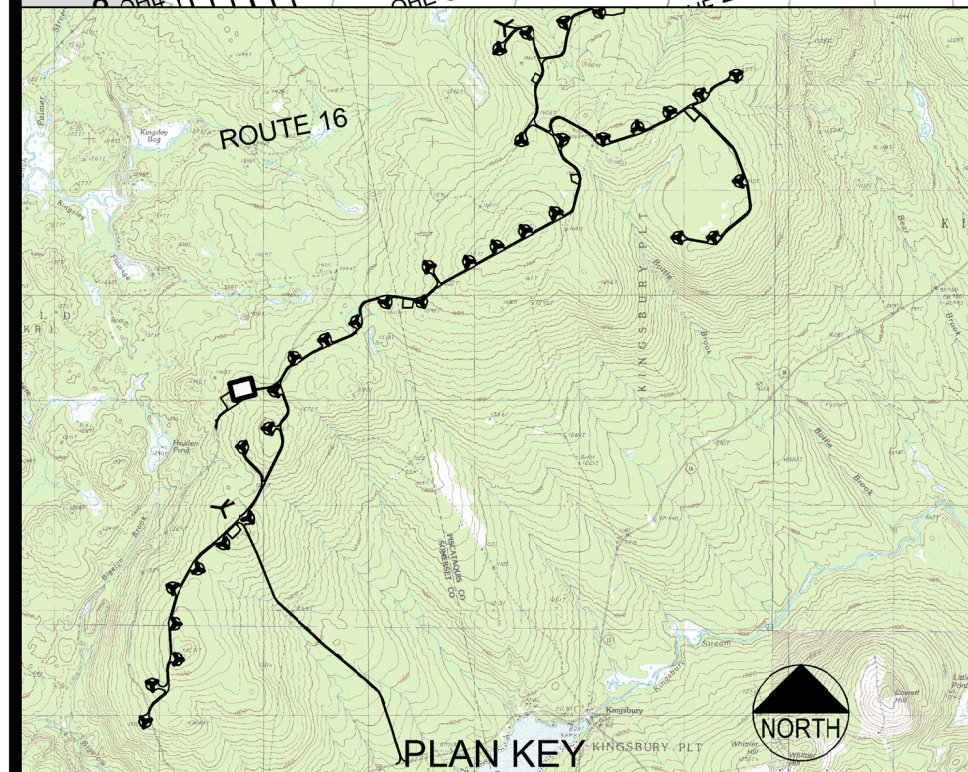
NO.	DATE	DESCRIPTION
1	12.19.12	PERMIT DRAWINGS SUBMITTED FOR PROJECT TEAM REVIEW
2	03.06.13	ACADE REVISIONS
3	04.09.13	PERMIT PLAN SUBMISSION

DRAWN: 1"=40'
 DESIGNED: SEPT 2012
 CHECKED: SRB
 SOUTH O.M. BLDG.
 FILE NAME: SOUTH O.M. BLDG.
 JOB NO. 3048

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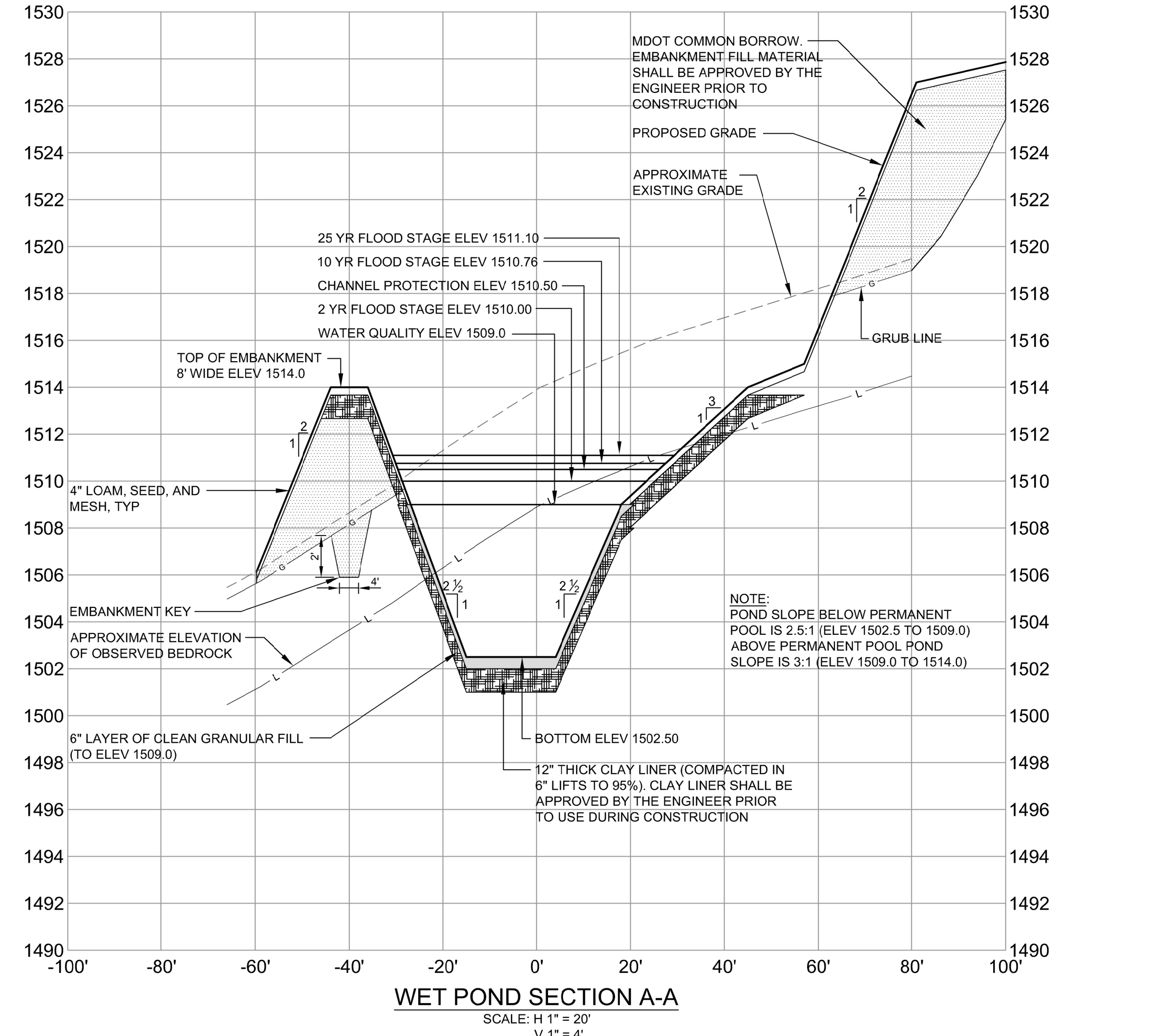


DRD PAD AND WET POND PLAN
SCALE: 1" = 40'

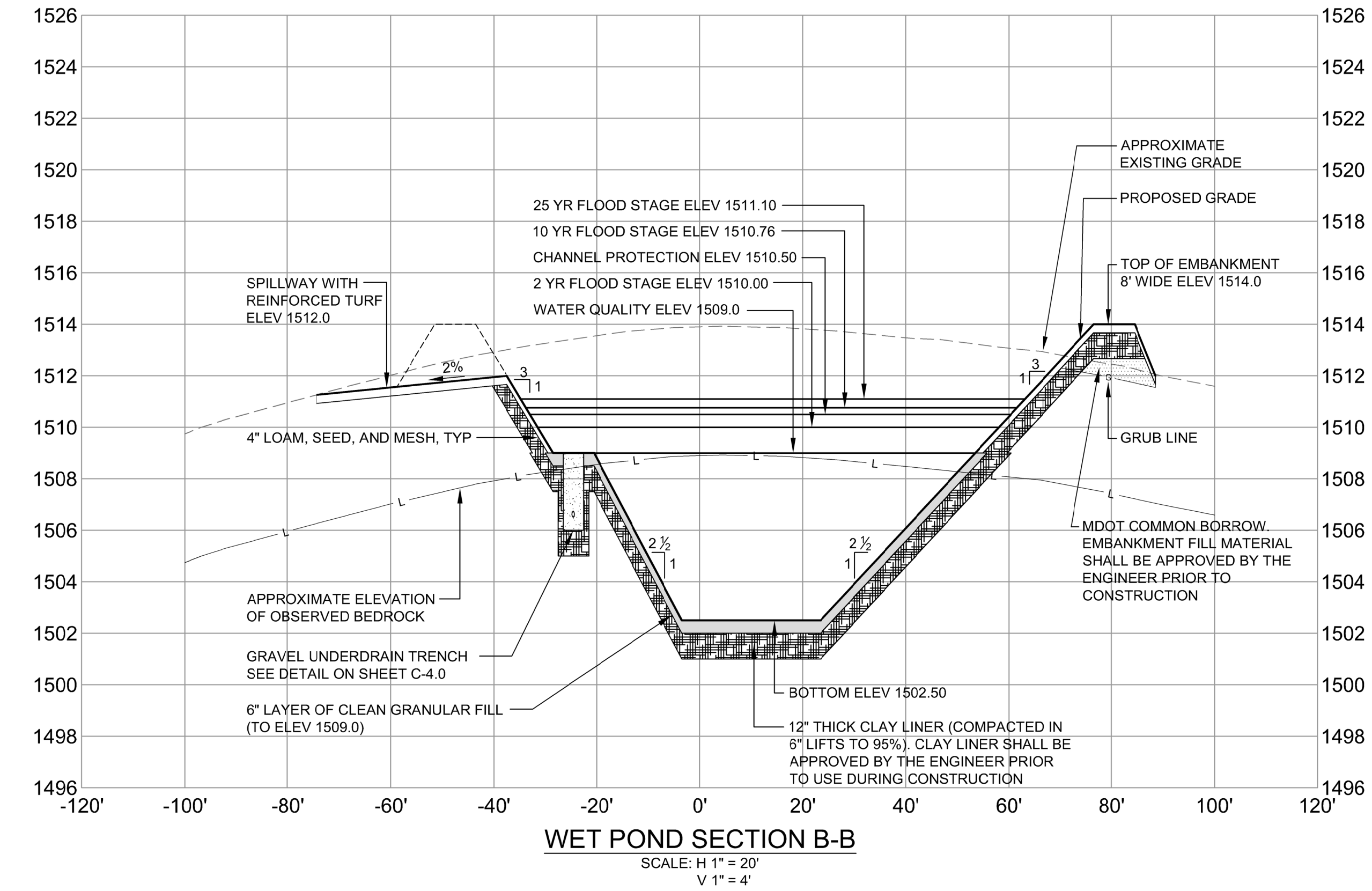


NOTES:

- ELEVATIONS FOR SEASONAL GROUNDWATER AND BEDROCK ASSUMED. ASSUMPTIONS WERE BASED ON TEST PITS PERFORMED BY S.W. COLE ON 10.31.12 REFER TO TEST PITS 2-7. PRIOR TO CONSTRUCTION, CONTRACTOR WILL BE REQUIRED TO VERIFY ACTUAL DEPTH TO BEDROCK AND SEASONAL GROUNDWATER AND PROVIDE THIS DATA TO THE ENGINEER.
- ALL EMBANKMENT FILLS SHALL BE FREE OF FROZEN SOILS, ROCKS OVER 6", SOD, BRUSH, STUMPS, TREE ROOTS, WOOD OR OTHER PERISHABLE MATERIALS. EMBANKMENTS SHALL BE COMPACTED TO AT LEAST 90%.
- THE CONTRACTOR SHALL PROVIDE THE OWNER'S REP (A LICENSED ENGINEER) WITH AT LEAST 48 HOURS NOTICE PRIOR TO CRITICAL CONSTRUCTION ACTIVITIES RELATED TO THE WET POND CONSTRUCTION. THE ENGINEER SHALL PROVIDE INSPECTION AND MONITORING DURING THE FOLLOWING PHASES OF CONSTRUCTION:
 - EXCAVATION TO SUBGRADE
 - EMBANKMENT CONSTRUCTION
 - INSTALLATION OF LINER
 - INSTALLATION OF GRAVEL BENCH
 - INSTALLATION OF OUTLET CONTROL STRUCTURE
 - STABILIZATION OF SPILLWAY



WET POND SECTION A-A
SCALE: H 1" = 20'
V 1" = 4'



WET POND SECTION B-B
SCALE: H 1" = 20'
V 1" = 4'

PRELIMINARY - NOT FOR CONSTRUCTION

DRAWN: 04.09.13	3	04.09.13	PERMIT PLAN SUBMISSION
			NO.
DESIGNED: 03.06.13	2	03.06.13	ACOE REVISIONS
CHECKED: SRB	1	12.19.12	PERMIT DRAWINGS SUBMITTED FOR PROJECT TEAM REVIEW
FILE NAME: NORTH DRD PAD			DESCRIPTION
DRD PAD AND WET POND PLAN			
BINGHAM WIND PROJECT BLUE SKY WEST, LLC DeLuca-Hoffman Associates, Inc. 778 MAIN STREET, SUITE 8 SOUTH PORTLAND, ME 04106 207.775.1121 www.delucahoffman.com			
SHEET			
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