

**STATE OF NEW HAMPSHIRE
INTER-DEPARTMENT COMMUNICATION**


FROM: Matt Urban
Wetlands Program Manager

DATE: January 10, 2018

AT (OFFICE): Department of
Transportation

SUBJECT **Permit Amendment (DES#2017-01302)**
Walpole-Charlestown, 14747

Bureau of
Environment

TO Gino Infascelli, Public Works Permitting Officer
New Hampshire Wetlands Bureau
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095

Forwarded herewith is an amendment request for the Walpole-Charlestown 14747 permit, (NHDES file #2017-01302). The need for this amendment is a result of Right of Way negotiations to include drive access at Sta. 2081+50 LT, the removal of a drainage swale at STA. 2122+00 to 2128+00 to avoid an archaeologically sensitive area, and a reduction of ROW drainage easement areas that went beyond ordinary high water to reduce impacts in the river.

Jacobs Engineering has prepared a memo, impact summary comparison, amended plans, and a revised ARM fund payment calculation summary to further explain this amendment request and to address some of the other questions/concerns that were brought up in regards to this proposed amendment. (See attachments).

Despite finding several opportunities to reduce impacts as noted above, there was still an overall increase of impacts primarily associated with the need to provide drive access with a break in guard rail which resulted in additional slope adjustments and impacts. The overall increase for the entire project is 8,550 sq. ft. (For specific impact changes/comparison see impact summary in the attachments). The Department is proposing to mitigate this additional impact by making a second payment into the ARM Fund in the amount of \$31,252.07. It should be noted that the adjusted slopes will be 4:1 at the driveway and will be covered with vegetation like the rest of the project along the river. It is not intended to be exposed rock.

A copy of Amended plan will be posted and can be accessed on the Departments website via the following link: <http://www.nh.gov/dot/org/projectdevelopment/environment/units/program-management/wetland-applications.htm>

As this project has already met the \$10,000 application fee cap there will not be an additional application fee payment.

It should be noted that it is the Department's intent to pay the original ARM fund payment in the amount of \$1,287,621.45 once constructions funds are approved through the Governor and Council process. At that time we expect to receive the original permit with conditions as shown in the September 19th 2017 approval notice. We anticipate making the second mitigation payment once we know the amendment will be approved, at which time we would expect to receive the amended permit. By making the first mitigation payment and obtaining the original permit prior to the amendment approval it will enable the Department's contractor to start work within the limits of the original plans and permit in case the amendment approval process takes longer than expected.

The lead people to contact for this project are Don Lyford, Bureau of Highway Design (271-2171 or Donald.Lyford@dot.nh.gov) or Matt Urban, Wetlands Program Manager, Bureau of Environment (271-3226 or matt.urban@dot.nh.gov).

If and when this amendment meets with the approval of the Bureau, please send the amended permit directly to Matt Urban, Wetlands Program Manager, Bureau of Environment.

MRU:mru

cc:

BOE Original

Town of Walpole (via certified mail)

Town of Charlestown (via certified mail)

Richard Walling – President of Connecticut River Joint Commissions (via certified mail)

Edna Feighner, NH Division of Historic Resources

Bureau of Construction

Carol Henderson, NH Fish & Game (via electronic notification)

Maria Tur, US Fish & Wildlife (via electronic notification)

Mark Kern, US Environmental Protection Agency (via electronic notification)

Michael Hicks, US Army Corp of Engineers (via electronic notification)

Jonathan Evans, BOE (via electronic notification)

Don Lyford, NHDOT (via electronic notification)

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2 Executive Park Drive
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Subject	Wetland Permit Amendment Summary	Project Name	Walpole-Charlestown 14747 Reconstruction of NH 12
Attention	Ms. Samantha Fifield		
From	Clinton Mercer		
Date	December 28, 2017		
Copy to	Margarete Baldwin (NHDOT); Jonathan Evans (NHDOT); Matt Urban (NHDOT); Matt Lundstedt (CEI)		

The purpose of this memorandum is to respond to comments from Gino Infascelli email on December 11, 2017. The comments are in response to Matt Urban email and Jacobs memo amending the original wetland permit. Below is a detailed response to the email.

- **Comment:** The additional wetland impacts to maintain a driveway access appears to be excessive considering this open water wetland is probably the highest value along the corridor. It appears the additional work in wetlands can be reduced and limited to the areas immediately adjacent to the existing gravel drive.

Response: The original design called for guardrail through this area, which limited the impacts to the adjacent wetland. However, the Parcel Owner, as well as several of the residents, requested that the Department allow for the continuation of the drive. The driveway is designed with maximum slope to limit impacts. To safely accommodate an opening in the guardrail for the drive, two EAGRT end units (and their corresponding platforms), must be installed. The purpose of the platforms is to increase the probability of driver and passenger survivability should a vehicle hit the end unit. The platform gives the vehicle a proper slope to travel on after impact to safely come to a stop. Without the platform, a vehicle may very well overturn, causing great injury to riders. However, given the sensitivity of the impacts, the alternative EAGRT platform (which has a minimized footprint) was used in this area. It isn't as safe as the full platform, however, it is a balance between providing safety and impacting the environment.

- **Comment:** The plans lack the required proposed contours.

Response: Proposed contours have been updated.

- **Comment:** Filling the area with stone also appears to be unnecessary as this is probably the most shallow slope along the corridor.

Response: Constructability is an issue here. The proposed slope will fill up to 5' deep in open water with a turbidity curtain. If embankment-in-place is used on this fill slope, dewatering would be required. Placing stone will reduce the construction duration within wetland and reduce the potential for turbidity issues during construction.

- **Comment:** It would be helpful to know which impact areas changed.
- **Response:** Attached is a chart identifying the original and amended impacts with the resulting change for each area modified.

Wetland Impact Comparison

Amended Area Labels	Permanent Impacts															Temporary Impacts		
	NHWB (Non-Wetland) (SF)			NHWB & ACOE (Wetland) (SF)			Left Bank (LF)			Channel (LF)			Right Bank (LF)					
	Original	Amended	Difference	Original	Amended	Difference	Original	Amended	Difference	Original	Amended	Difference	Original	Amended	Difference	Original	Amended	Difference
A																9868	9826	-42
B																12478	12452	-26
C	40883	40924	41				1224	1237	13									
D				48396	48415	*19							1239	1239	0			
F - Charlestown	16122	15880	-242				384	384	0									
G - Walpole				72100	71206	*-894				1475	1475	0						
G - Charlestown				7749	7698	*-51				258	258	0						
H - Walpole																14584	14574	-10
L																1318	1342	24
M																1328	1291	-37
N	986	956	-30				87	87	0									
X				9058	9059	1												
Y																1406	1357	-49
AA																4011	4084	73
AB				867	909	42												
AD				2755	3496	741												
AE				1063	6439	5376												
AF																2320	2266	-54
AG																420	305	-115
AH				114	1429	1315												
AI																2134	1574	-560
AJ				637	4159	3522												
AK																1454	1400	-54
AL				1077	1079	2												
AM																4149	4072	-77
AP				53	131	78												
AR																511	475	-36
AS																551	0	-551
AT	87	123	36				13	13	0									
AV																2292	2368	76
AW	2438	2449	11				206	206	0									
AZ																17843	17775	-68
BA				18734	18620	*-114				1724	1724	0						
BH				6444	3917	-2527												
BL																1450	2825	1375
Totals =			-184			8550			13			0			0			-131

* = These areas are permanent wetland impacts with stream impacts and are not included in totals shown here or ARM fund calculation.

Revised ARM fund payment calculation

Total impacts for wetlands and shoreland permits (highlighted items included in ARM fee)									
Wetland Impacts									
	Walpole			Charlestown			Total		
	Original	New	Change	Original	New	Change	Original	New	Change
Permanent non-wetland impacts with stream impacts	104,728	104,769	41	43,594	43,369	-225	148,322	148,138	-184
Permanent wetland impacts with stream impacts (sf):	120,496	119,621	-875	27,183	27,018	-165	147,679	146,639	-1,040
Permanent wetland impacts without stream impacts (sf):	0	0	0	25,122	33,672	8,550	25,122	33,672	8,550
Difference between original and new wetland impacts as shown on impact plans. The reduction of 1040 SF of impact to wetlands with stream impacts reduces the increase of 8550 SF without stream impacts for an overall increase of 7510 SF. However the 1040 SF reduction is not counted in the ARM fund payment resulting in an increased payment based on 8550 SF of additional impact.									7,510
Temporary Impacts (sf):	38,439	38,361	-78	63,097	63,044	-53	101,536	101,405	-131
Total Wetland/Non-wetland Impacts (sf):	263,663	262,751	-912	158,996	167,103	8,107	422,659	429,854	7,195
Total Wetland/Non Wetland impact (ac):	6.05	6.03	-0.02	3.65	3.84	0.19	9.70	9.87	0.17
Stream Impacts									
Permanent impacts to left banks (vegetated riprap)(lf):	2,726	2,739	13	2,477	2,477	0	5,203	5,216	13
Permanent impacts to left banks (lf):	0	0	0	57	57	0	57	57	0
Permanent impacts to right banks (vegetated riprap)(lf):	0	0	0	0	0	0	0	0	0
Permanent impacts to right banks (lf):	0	0	0	78	78	0	78	78	0
Permanent impacts to stream channel (vegetated riprap)(sf):	0	0	0	0	0	0	0	0	0
Permanent impacts to stream channel (lf):	2,714	2,714	0	2,031	2,031	0	4,745	4,745	0
Total Stream impacts (vegetated riprap)(lf):	2,726	2,739	13	2,477	2,477	0	5,203	5,216	13
Total Stream impacts (lf):	2,714	2,714	0	2,166	2,166	0	4,880	4,880	0
Modified ARM Fund Payment									
	Walpole			Charlestown			Total		
	Original	New	Change	Original	New	Change	Original	New	Change
Permanent Wetlands and Non-Wetlands	\$0.00	\$0.00	\$0.00	\$91,826.25	\$123,078.31	\$31,252.06	\$91,826.25	\$123,078.31	\$31,252.06
Permanent Stream Impacts	\$665,038.56	\$665,038.56	\$0.00	\$530,756.64	\$530,756.64	\$0.00	\$1,195,795.20	\$1,195,795.20	\$0.00
Total	\$665,038.56	\$665,038.56	\$0.00	\$622,582.89	\$653,834.95	\$31,252.06	\$1,287,621.45	\$1,318,873.51	\$31,252.06

**DES AQUATIC RESOURCE MITIGATION FUND
WETLAND PAYMENT CALCULATION
INSERT AMOUNTS IN YELLOW CELLS**

1 Convert square feet of impact to acres:		
INSERT SQ FT OF IMPACT	Square feet of impact =	8550.00
		43560.00
	Acres of impact =	0.1963
2 Determine acreage of wetland construction:		
	Forested wetlands:	0.2944
	Tidal wetlands:	0.5888
	All other areas:	0.2944
3 Wetland construction cost:		
	Forested wetlands:	\$25,451.01
	Tidal Wetlands:	\$50,902.02
	All other areas:	\$25,451.01
4 Land acquisition cost (See land value table):		
INSERT LAND VALUE FROM TABLE WHICH APPEARS TO THE LEFT. (Insert the amount do not copy and paste.)	Town land value:	2012
	Forested wetlands:	\$592.38
	Tidal wetlands:	\$1,184.75
	All other areas:	\$592.38
5 Construction + land costs:		
	Forested wetland:	\$26,043.39
	Tidal wetlands:	\$52,086.78
	All other areas:	\$26,043.39
6 DES Administrative cost:		
	Forested wetlands:	\$5,208.68
	Tidal wetlands:	\$10,417.36
	All other areas:	\$5,208.68
***** TOTAL ARM PAYMENT*****		
	Forested wetlands:	\$31,252.07
	Tidal wetlands:	\$62,504.13
	All other areas:	\$31,252.07

WETLAND NUMBER	WETLAND CLASSIFICATION	LOCATION	AREA						TEMPORARY IMPACTS	COMMENTS
			PERMANENT IMPACTS							
			N.H.W.B. (NON-WETLAND)	N.H.W.B. & A.C.O.E. (WETLAND)	BANK					
SF	SF	LEFT LF	CHANNEL LF	RIGHT LF	SF					
20	Bank	A	Walpole						9826	
1A	R2UB3	B	Walpole						12452	
20	Bank	C	Walpole	40924		1237				
1A	R2UB3	D	Walpole		48415		1239			
2	R4SB3	E	Walpole						183	
21	Bank	F	Walpole	63845		1502				
			Charlestown	15880		384				
1B	R2UB3	G	Walpole		71206		1475			
			Charlestown		7698		258			
1B	R2UB3	H	Walpole						14574	
			Charlestown						2654	
4	R4SB3	I	Walpole						349	
5A	R4SB3	J	Walpole						278	
7A	R4SB3	K	Walpole						699	
21	Bank	L	Charlestown						1342	
21	Bank	M	Charlestown						1291	
21	Bank	N	Charlestown	956		87				
8	R4SB3	O	Charlestown						115	
10B	PFO/PSS1E	P	Charlestown						1455	
10A	R4SB3	Q	Charlestown						579	
10C	PFO/PSS1E	R	Charlestown						280	
12	R4SB3	S	Charlestown						541	
12	R4SB3	T	Charlestown						217	
12	R4SB3	U	Charlestown		215	20	13	41		
1E	PF01E	V	Charlestown						3344	
1E	PF01E	W	Charlestown		111					
1E	PF01E	X	Charlestown		9059					
1E	PF01E	Y	Charlestown						1357	
1C	POW	Z	Charlestown						417	
1C	POW	AA	Charlestown						4084	
1C	POW	AB	Charlestown		909					
1E	PF01E	AC	Charlestown						32	
1C	POW	AD	Charlestown		3496					
1F	PSS1E	AE	Charlestown		6439					
1F	PSS1E	AF	Charlestown						2266	
1G	PSS1E	AG	Charlestown						305	
1G	PSS1E	AH	Charlestown		1429					
1D	POW	AI	Charlestown						1574	
1D	POW	AJ	Charlestown		4159					
1D	POW	AK	Charlestown						1400	
1D	POW	AL	Charlestown		1079					
1I	PSS/PF01E	AM	Charlestown						4072	
1I	PSS/PF01E	AN	Charlestown		41					
1I	PSS/PF01E	AO	Charlestown		1828					
1I	PSS/PF01E	AP	Charlestown		131					
1I	PSS/PF01E	AQ	Charlestown		20					
22	Bank	AR	Charlestown						475	
N/A	N/A	AS	N/A							Not Used
22	Bank	AT	Charlestown	123		13				
1A	R2UB3	AU	Charlestown						378	
22	Bank	AV	Charlestown						2368	
22	Bank	AW	Charlestown	2449		206				
22	Bank	AX	Charlestown						651	
22	Bank	AY	Charlestown	6778		576				
1A	R2UB3	AZ	Charlestown						17775	
1A	R2UB3	BA	Charlestown		18620	1724				
13A	POW	BB	Charlestown						1096	
22	Bank	BC	Charlestown	8052		590				
22	Bank	BD	Charlestown	8791		553				
22	Bank	BE	Charlestown	340		88				
1J	PEM1E	BF	Charlestown						1305	
1J	PEM1E	BG	Charlestown		8					
1K	PF01E	BH	Charlestown		3917					
1K	PF01E	BI	Charlestown						2796	
15A	R2UB3	BJ	Charlestown						165	
15A	R2UB3	BK	Charlestown		485	37	36	37		
1K	PF01E	BL	Charlestown						2825	
15B	PEM1E	BM	Charlestown						138	
15A	R2UB3	BN	Charlestown						305	
15B	PEM1E	BO	Charlestown						188	
17B	PEM1F	BP	Charlestown						3805	
17B	PEM1F	BQ	Charlestown		155					
18A	PEM1E	BR	Charlestown						1372	
17D	POWH	BS	Charlestown						77	
17B	PEM1F	BT	Charlestown		891					

AMENDED DECEMBER 2017

SUMMARY OF CHANGES:

- ROW NEGOTIATIONS: DRIVE ADDED AT STA. 2081+50, LT
- ARCHAEOLOGICALLY SENSITIVE AREA: REMOVED DRAINAGE SWALE FROM STA. 2122+00 TO 2128+00
- ROW: REDUCE DRAINAGE EASEMENTS IN RIVER TO ORDINARY HIGH WATER

THESE PLANS MEET THE REQUIREMENTS OF ENV-WT 404, CRITERIA FOR SHORELINE STABILIZATION

SIGN: _____ DATE: _____

WETLANDS DELINEATED BY WILLIAM KURIER, PHD, CWS

BY: _____ DATE: SUMMER 2016

PLANS PREPARED BY:

JACOBS



COMPREHENSIVE ENVIRONMENTAL INCORPORATED

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1.803.424.8444
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BY: _____ DATE: _____

AMENDED
DEC 2017

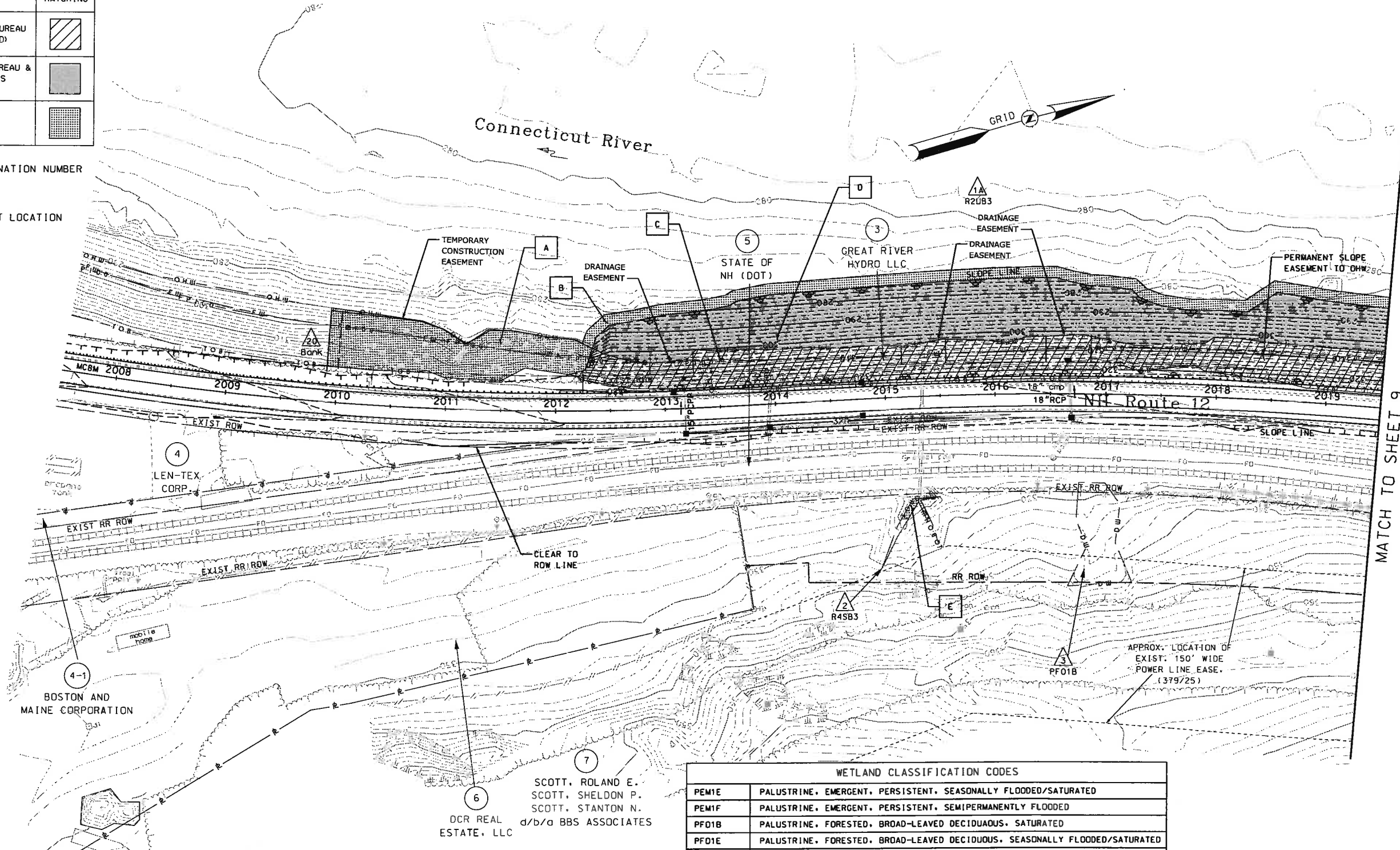
TOTAL IMPACTS FOR WETLANDS AND SHORELAND PERMITS				
WETLAND IMPACTS				
	WALPOLE	CHARLESTOWN	TOTAL	
PERMANENT NON-WETLAND IMPACTS:	148138 SF	104769	43369	148138
PERMANENT WETLAND IMPACTS:	180311 SF	119621	60690	180311
TEMPORARY IMPACTS:	101405 SF	38361	63044	101405
TOTAL IMPACTS:	429854 SF	282751	167103	429854
	9.87 AC.	6.03	3.84	9.87
STREAM IMPACTS				
PERMANENT IMPACTS TO LEFT BANKS:	5273 LF	2739	2534	5273
PERMANENT IMPACTS TO RIGHT BANKS:	78 LF	0	78	78
PERMANENT IMPACTS TO CHANNEL:	4745 LF	2714	2031	4745
TOTAL STREAM IMPACTS:	10096 LF	5453	4643	10096

STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN			
WETLAND IMPACT SUMMARY			
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
14747ES	14747	7	29

LEGEND

TYPE OF WETLAND IMPACT	SHADING/HATCHING
NEW HAMPSHIRE WETLANDS BUREAU (PERMANENT NON-WETLAND)	
NEW HAMPSHIRE WETLANDS BUREAU & ARMY CORP OF ENGINEERS (PERMANENT WETLAND)	
TEMPORARY IMPACTS	

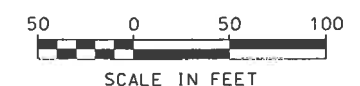
- WETLAND DESIGNATION NUMBER
- WETLAND IMPACT LOCATION



REVISIONS AFTER PROPOSAL	DESCRIPTION	STATION	DATE

MATCH TO SHEET 9

WETLAND CLASSIFICATION CODES	
PEM1E	PALUSTRINE, EMERGENT, PERSISTENT, SEASONALLY FLOODED/SATURATED
PEM1F	PALUSTRINE, EMERGENT, PERSISTENT, SEMIPERMANENTLY FLOODED
PF01B	PALUSTRINE, FORESTED, BROAD-LEAVED DECIDUOUS, SATURATED
PF01E	PALUSTRINE, FORESTED, BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED/SATURATED
PF0/PSS1E	PALUSTRINE, FORESTED/PALUSTRINE, SCRUB-SHRUB, BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED/SATURATED
POW	PALUSTRINE, OPEN WATER/UNKNOWN BOTTOM
POWH	PALUSTRINE, OPEN WATER/UNKNOWN BOTTOM, PERMANENTLY FLOODED
PSS1E	PALUSTRINE, SCRUB-SHRUB, BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED/SATURATED
PSS/PEM1E	PALUSTRINE, SCRUB-SHRUB/PALUSTRINE EMERGENT, PERSISTENT, SEASONALLY FLOODED/SATURATED
PSS/PF01E	PALUSTRINE, SCRUB-SHRUB/PALUSTRINE, FORESTED, BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED/SATURATED
R2UB3	RIVERINE, LOWER PERENNIAL, UNCONSOLIDATED BOTTOM, MUD
R3UB1	RIVERINE, UPPER PERENNIAL, UNCONSOLIDATED BOTTOM, ALGAL
R4SB3	RIVERINE, INTERMITTENT, STREAMBED, COBBLE GRAVEL
BANK	BANK



STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN

WETLAND IMPACT PLAN

MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
WET02	14747wetplans	14747	8	29

PLANS PREPARED BY:

JACOBS **COMPREHENSIVE ENVIRONMENTAL INCORPORATED**

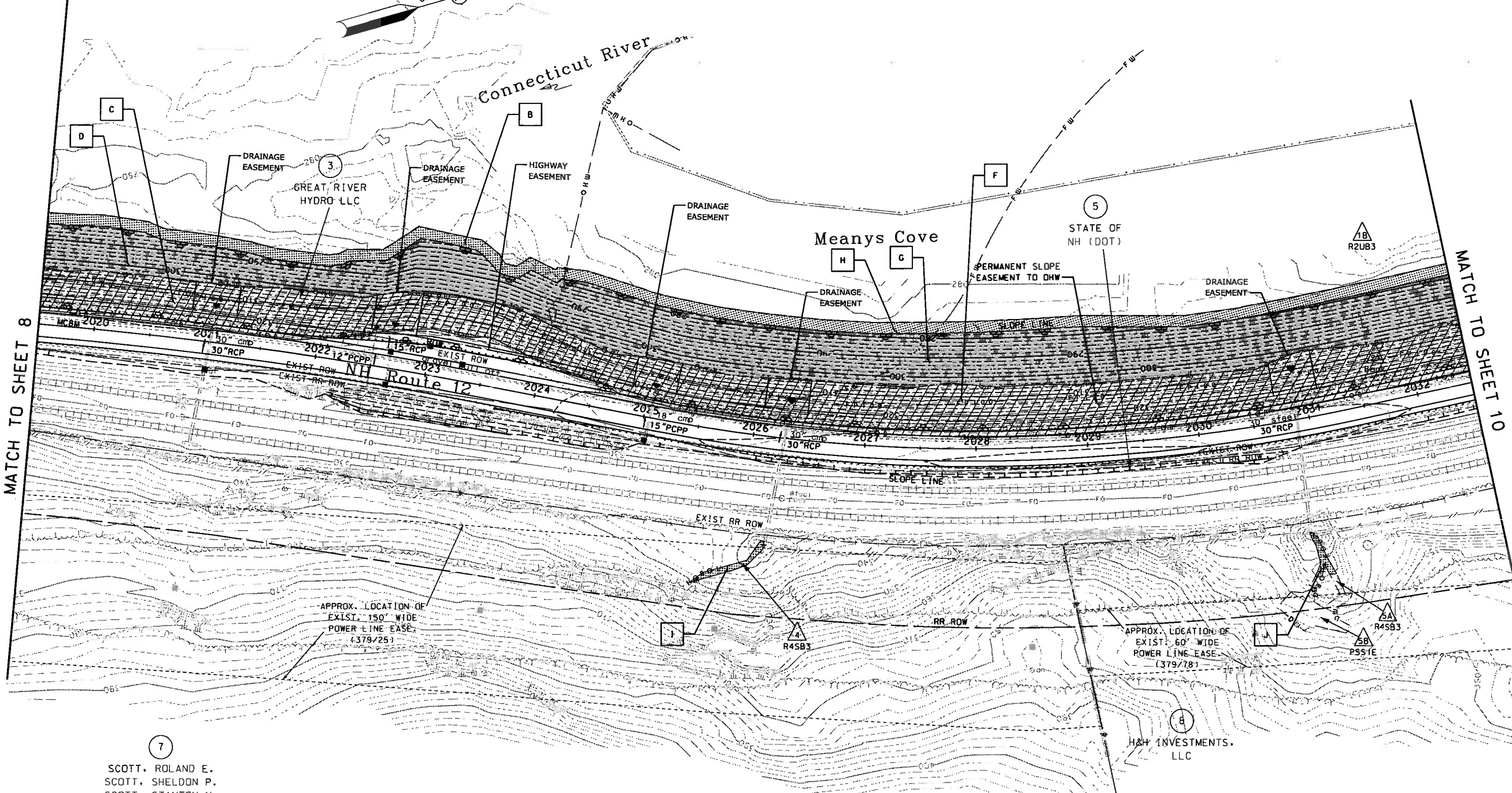
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BY: _____ DATE: _____

AMENDED
DEC 2017


FILED IN: 17-000000	DATE	DATE	DATE	DATE	DATE	DATE
	12/21/2017	12/21/2017	12/21/2017	12/21/2017	12/21/2017	12/21/2017
SOR PROCESSED	S. GUNN					
NEW DESIGN	A. SEAMAN					
SHEET CHECKED	C. MERCER					
AS BUILT DETAILS						



7
 SCOTT, ROLAND E.
 SCOTT, SHELDON P.
 SCOTT, STANTON N.
 d/b/a BBS ASSOCIATES

**AMENDED
 DEC 2017**

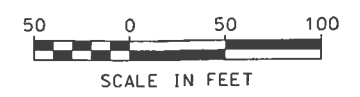
PLANS PREPARED BY:

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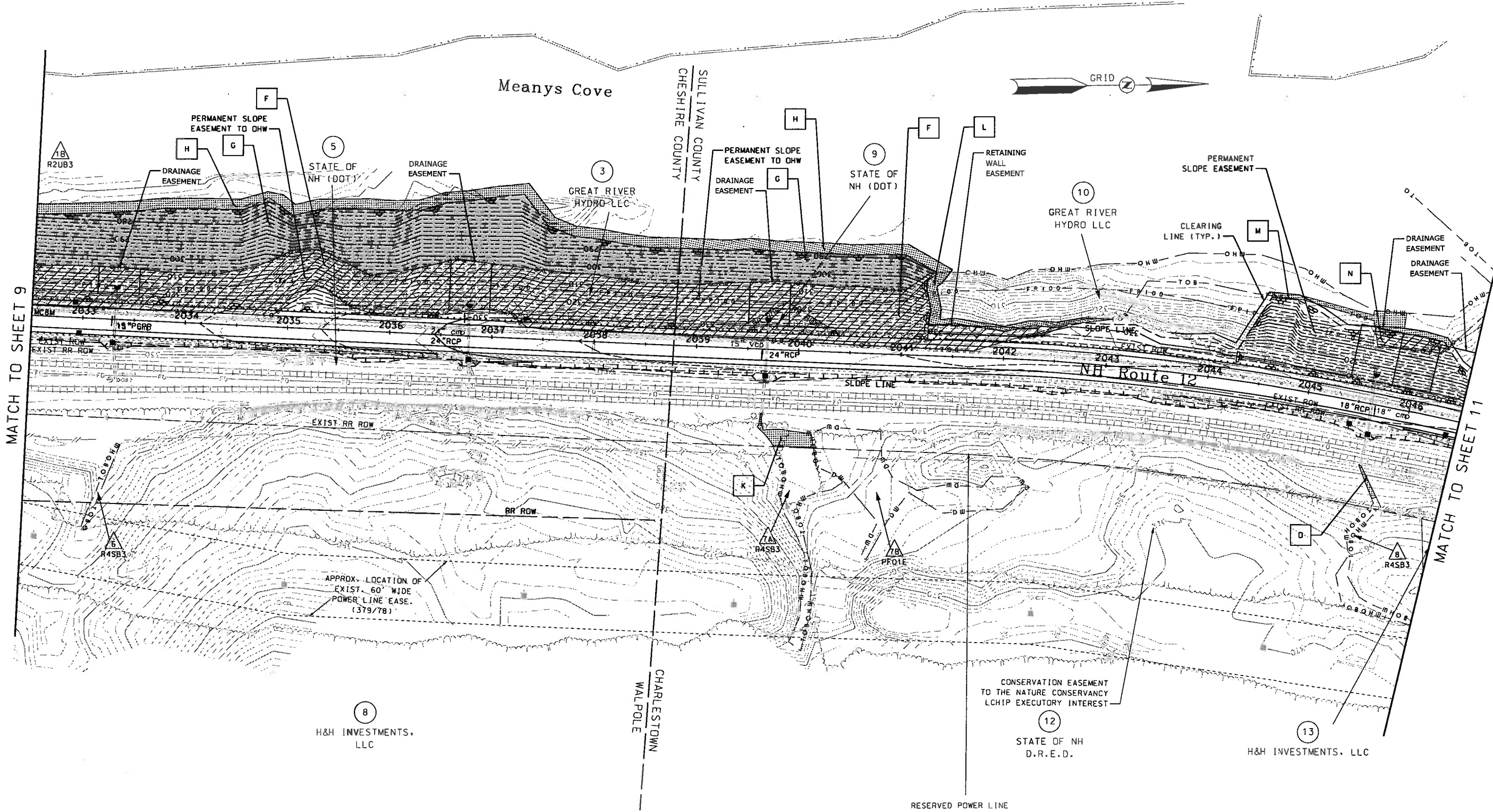
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STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
WETLAND IMPACT PLAN				
MODEL	DCN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
WET03	14747wetplans	14747	9	29

SDR PROCESSED	S. GUNN	DATE	12/21/2017
NEW DESIGN	A. SEAMAN	DATE	12/21/2017
SHEET CHECKED	C. MERCER	DATE	12/21/2017
AS BUILT DETAILS		DATE	

**AMENDED
DEC 2017**



PLANS PREPARED BY:

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BY: _____ DATE: _____

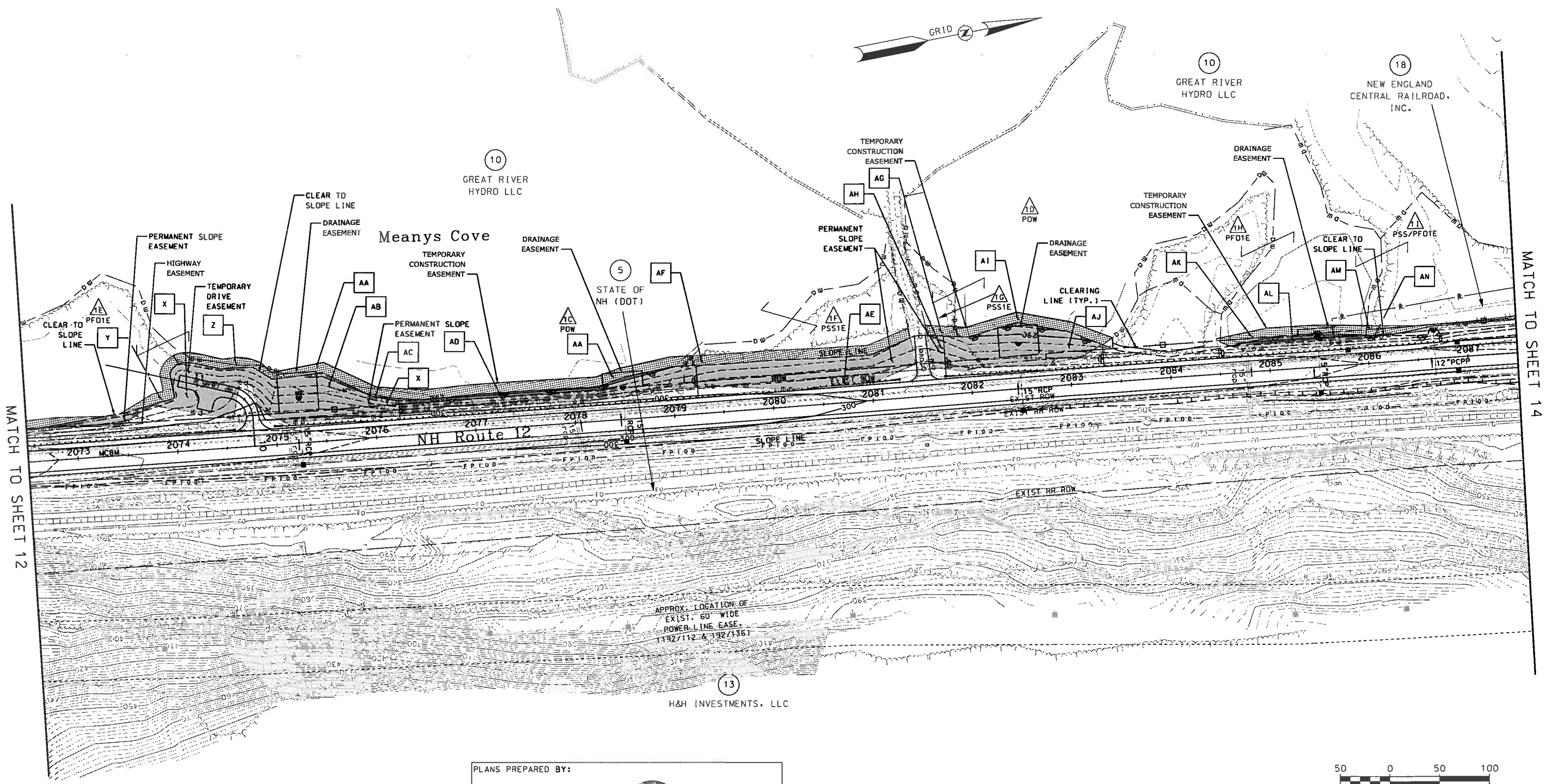


STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN

WETLAND IMPACT PLAN

MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
WET04	14747wetplans	14747	10	29

SDR PROCESSED	S. GUNN	DATE	12/21/2017
NEW DESIGN	A. SEAMAN	DATE	12/21/2017
SHEET CHECKED	C. MERCER	DATE	12/21/2017
AS BUILT DETAILS		DATE	



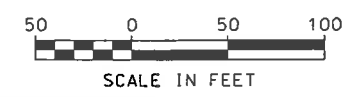
**AMENDED
DEC 2017**

PLANS PREPARED BY:

JACOBS
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CEI COMPREHENSIVE ENVIRONMENTAL INCORPORATED
21 DEPOT STREET
MERRIMACK, NH 03054
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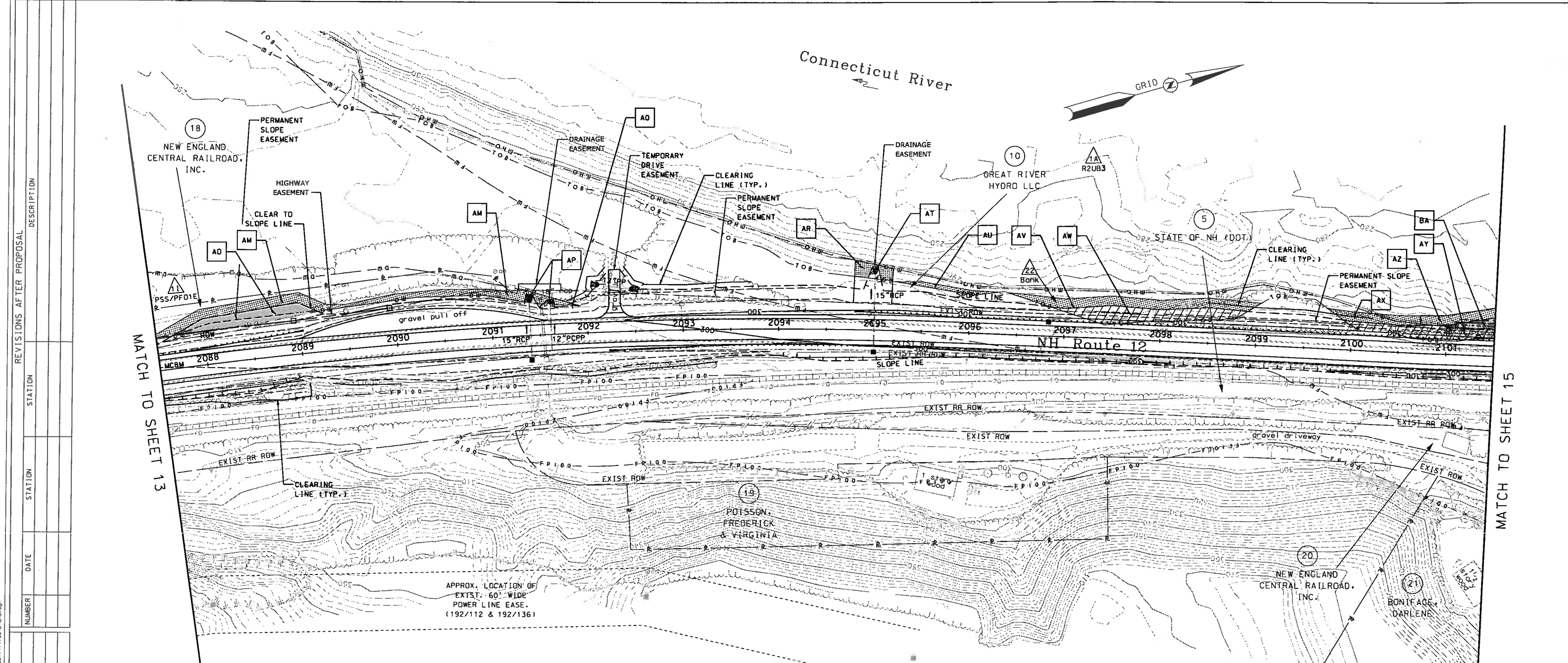
BY: _____ DATE: _____



STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN

WETLAND IMPACT PLAN

MODEL	DCN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
WET07	14747wetplans	14747	13	29



REVISIONS AFTER PROPOSAL	STATION	DATE	DESCRIPTION

NUMBER	DATE	DESCRIPTION


AS BUILT DETAILS	DATE

**AMENDED
DEC 2017**

13
H&H INVESTMENTS, LLC

APPROX. LOCATION OF
EXIST. 60' WIDE
POWER LINE EASE.
(192/112 & 192/136)

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BY: _____ DATE: _____



STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN

WETLAND IMPACT PLAN

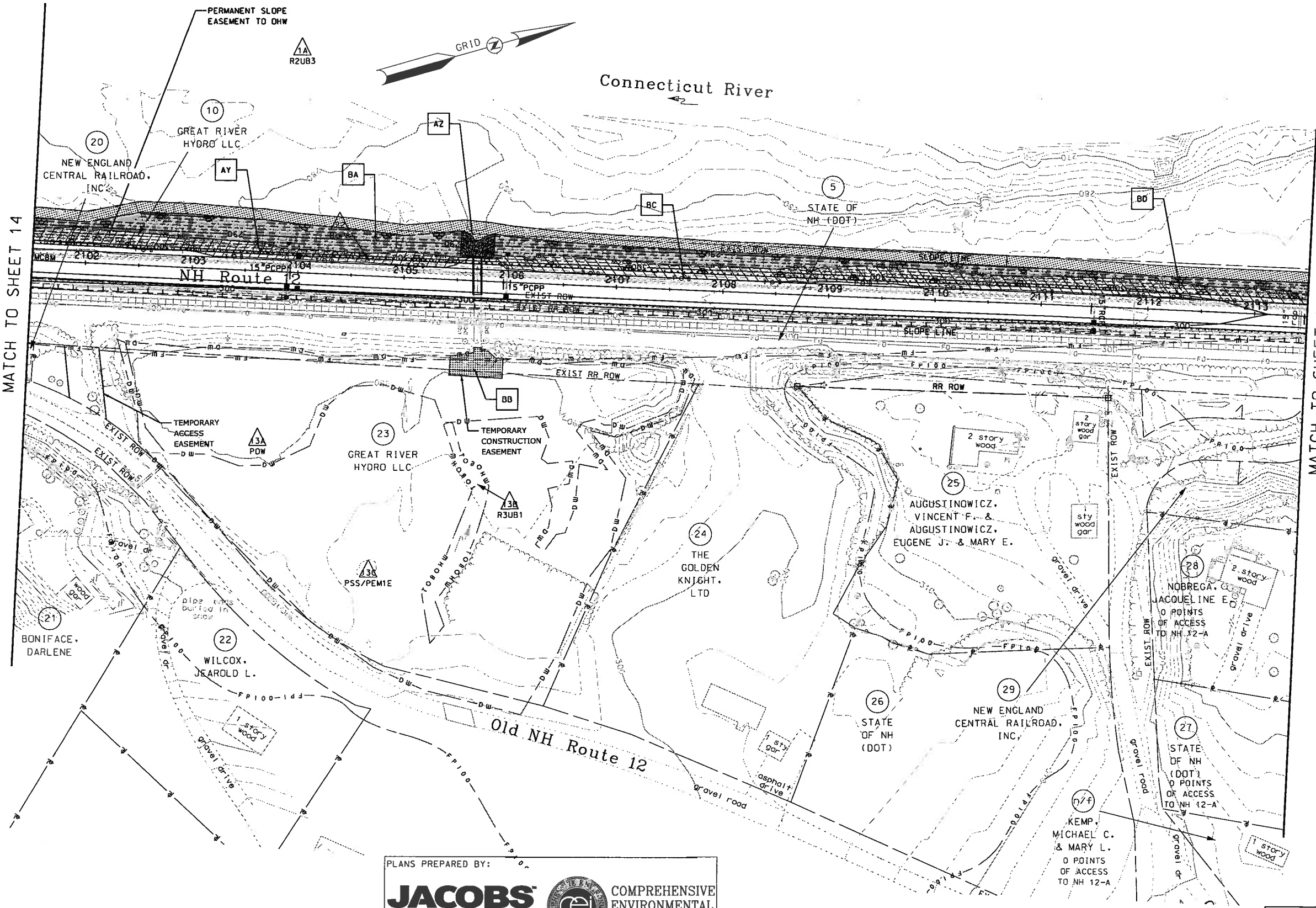
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
WET08	14747wetplans	14747	14	29

MATCH TO SHEET 15

MATCH TO SHEET 13

MATCH TO SHEET 14


MATCH TO SHEET 16



REVISIONS AFTER PROPOSAL	STATION	DATE	NUMBER	DESCRIPTION

**AMENDED
DEC 2017**

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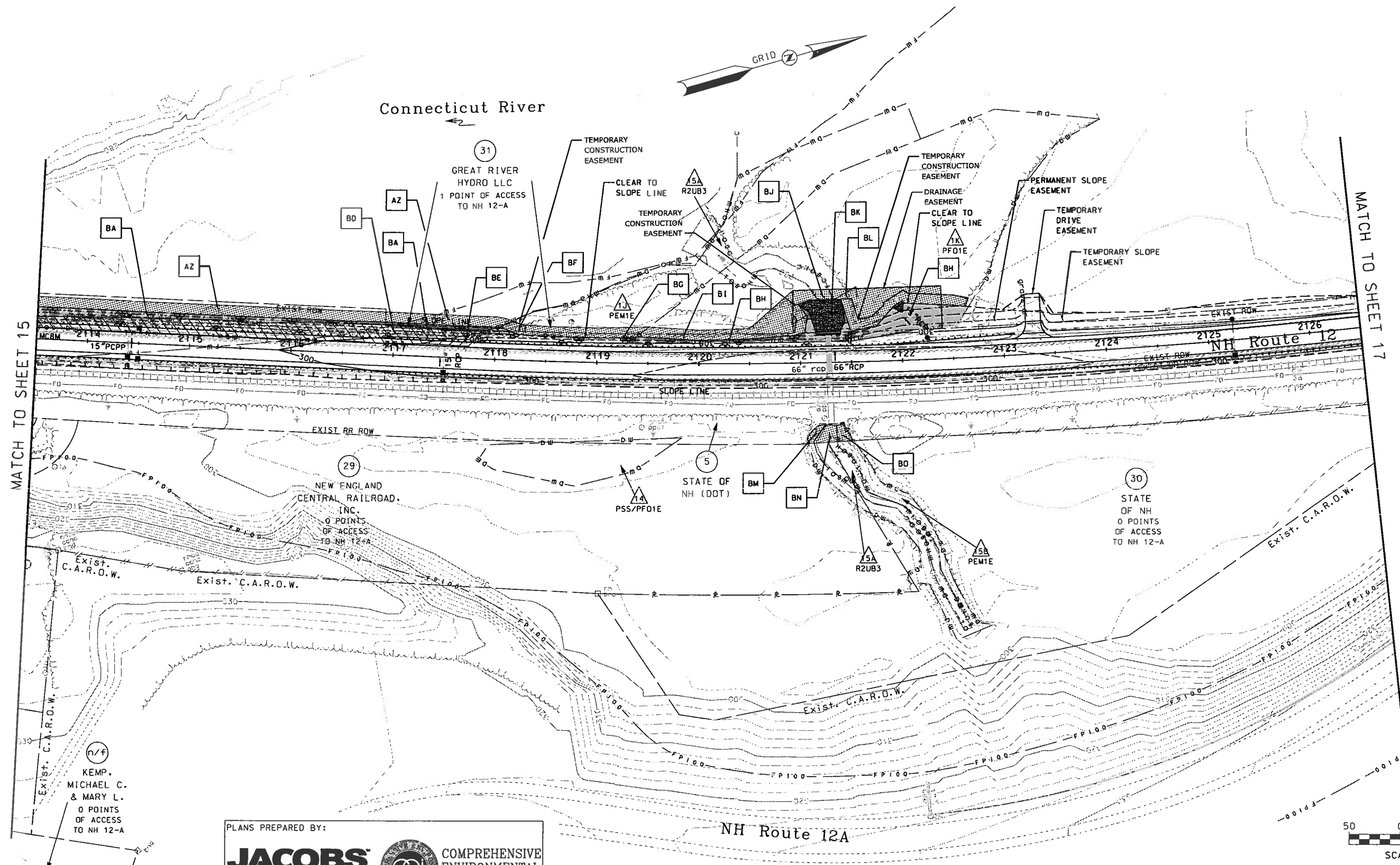


STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN

WETLAND IMPACT PLAN

MODEL	DCN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
WET09	14747wetplans	14747	15	29

SDR PROCESSED	S. CUNN	DATE	12/21/2017
NEW DESIGN	A. SEAMAN	DATE	12/21/2017
SHEET CHECKED	C. MERCER	DATE	12/21/2017
AS BUILT DETAILS		DATE	



PLANS PREPARED BY:

JACOBS

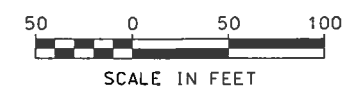
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STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN

WETLAND IMPACT PLAN

MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
WET10	14747wetplans	14747	16	29