

**CULVERT INVENTORY TABLE**

CULVERT NO.	INVERT IN				INVERT OUT				PIPE	COMMENT
	STATION	POSITION	OFFSET FROM HCL	ELEVATION	STATION	POSITION	OFFSET FROM HCL	ELEVATION		
<b>ROXBURY (VT ROUTE 12A)</b>										
1	38+45.2	RT	33.62	872.57	38+29.3	LT	41.10	871.61	24 CPEP	RETAIN
2	42+48.2	RT	18.74	876.23	42+52.9	LT	38.99	874.58	24 CPEP	RETAIN
3	44+51.3	RT	23.15	879.47	44+39.7	LT	35.62	876.71	18 CPEP	RETAIN
4	46+75.8	RT	23.62	882.95	46+72.3	LT	27.15	881.25	18 CPEP	RETAIN
5	48+80.6	RT	31.04	888.96	48+48.2	LT	28.47	884.94	24 CPEP	RETAIN
6	50+10.3	RT	27.76	886.99	50+59.3	LT	27.37	884.65	CONC. BOX	BRIDGE #17
7	53+63.2	RT	31.09	884.13	53+78.5	LT	29.55	881.98	18 CMP	RETAIN
8	58+59.6	RT	26.79	888.76	58+62.4	LT	32.48	887.27	18 CMP	NEW 18"X60'; PIPE-OPTION-CC CPEP
9	63+57.2	RT	24.81	899.72	63+61.2	LT	27.59	899.29	18 CMP	NEW 18"X53'; PIPE-OPTION-CC CPEP
10	69+62.1	RT	27.41	908.06	69+65.9	LT	23.17	907.79	24 CMP	RETAIN
11	74+88.0	RT	70.48	897.21	74+91.1	LT	30.95	896.75	18 CMP	RETAIN
12	84+14.6	RT	31.69	902.15	84+09.4	LT	33.36	901.03	18 CMP	RETAIN
13	92+40.3	RT	26.50	905.60	91+57.5	LT	29.21	904.36	36 CPEP	CLEAN CULVERT (100 LF)
14	108+83.1	RT	46.71	919.55	108+72.2	LT	21.61	919.57	18 CMP	CLEAN CULVERT (69 LF)
15	110+69.6	RT	25.33	922.25	110+72.8	LT	25.27	921.41	18 CMP	CLEAN CULVERT (50 LF)
16	127+07.0	LT	18.34	935.74	126+92.8	RT	28.00	934.27	15 CMP	NEW 18"X52'; PIPE-OPTION-CC CPEP
17	137+57.3	LT	25.77	955.72	137+47.4	RT	28.58	954.17	24 CPEP	RETAIN
18	146+93.6	LT	21.24	973.27	146+72.0	RT	24.61	972.62	30 CMP	RETAIN
19	158+33.3	LT	24.08	979.49	158+33.5	RT	24.47	979.00	18 CMP	CLEAN CULVERT (50 LF)
20	183+84.8	RT	39.15	998.46	184+53.1	LT	44.22	994.45	73" X 66" CMP	RETAIN (BR#23)
21	186+46.9	RT	41.28	996.84	186+75.3	LT	53.52	990.24	36 CMP	CLEAN CULVERT (100 LF)
22	188+24.3	RT	33.13	1016.43	188+04.1	LT	34.53	1008.38	18 CMP	CLEAN CULVERT (71 LF)
23	189+88.4	RT	30.86	1030.50	189+36.0	LT	25.01	1025.63	18 CMP	CLEAN CULVERT (77 LF)
24	196+01.2	RT	24.26	1038.84	196+13.5	LT	27.50	1037.87	18 CMP	NEW 18"X54'; PIPE-OPTION-CC CPEP
25	202+39.5	RT	23.40	1027.14	202+52.6	LT	25.62	1026.11	18 CMP	NEW 18"X51'; PIPE-OPTION-CC CPEP
26	204+78.0	RT	24.23	1020.73	204+91.9	LT	24.76	1020.45	18 CMP	RETAIN
27	213+23.9	RT	25.32	999.79	213+31.3	LT	26.58	998.98	36 CPEP	RETAIN
28	219+85.9	RT	23.74	992.63	219+85.4	LT	25.72	993.42	24 CMP	NEW 24" X 50'; PIPE-OPTION-DD CPEP
29	225+21.2	RT	25.98	998.04	225+22.7	LT	24.86	997.62	18 CMP	CLEAN CULVERT (51 LF)
30	263+13.0	RT	14.26	990.36	263+19.1	LT	31.72	989.44	36 CMP	36"X45" CSP EXTENSION & HEADWALL AT INLET
31	267+21.7	RT	18.54	991.54	267+13.5	LT	23.25	990.38	18 CMP	NEW 18"X43' & NEW HEADWALL AT INLET; PIPE-OPTION-CC CPEP
32	287+90.8	LT	33.50	978.67	287+92.4	RT	67.57	977.50	18 CMP	RETAIN
33	301+69.1	LT	20.57	976.26	301+89.5	RT	26.59	975.46	18 CMP	NEW 18"X52'; PIPE-OPTION-CC CPEP
34	311+94.6	RT	24.31	1009.47	311+27.8	LT	23.96	1008.43	18 RCP	RETAIN
35	323+96.8	RT	16.46	975.28	323+94.5	LT	29.04	974.72	18 RCP	CLEAN CULVERT (45 LF)
<b>NORTHFIELD</b>										
36	0+10.9	RT	19.31	971.30	0+11.8	LT	21.90	970.48	18 RCP	CLEAN CULVERT (41 LF)
37	2+32.0	RT	19.49	971.97	2+31.7	LT	21.44	971.04	18 CMP	CLEAN CULVERT (41 LF)
38	4+66.5	RT	19.83	970.61	4+74.5	LT	25.62	970.15	18 RCP	CLEAN CULVERT (46 LF)
39	10+64.5	RT	40.18	927.23	10+71.0	LT	49.91	921.61	15 RCP	RETAIN
40	17+40.1	RT	35.15	915.83	18+94.6	LT	46.72	906.84	36 RCP-STONE	RETAIN
41	23+71.0	LT	27.08	895.89	23+73.3	RT	33.55	891.56	18 CMP-D.I. INLET	RETAIN
42	26+17.9	LT	29.03	892.30	26+19.5	RT	51.77	887.45	18 CMP-D.I. INLET	RETAIN
43	29+79.3	LT	23.03	881.71	29+92.1	RT	24.21	880.92	18 CMP	RETAIN
44	37+33.9	LT	33.21	876.92	37+58.4	RT	32.95	875.59	24 CMP	CLEAN CULVERT (71 LF)
45	45+60.9	LT	33.89	869.10	45+75.8	RT	26.99	868.63	18 CMP	RETAIN
46	50+41.4	LT	25.48	876.26	50+15.5	RT	37.84	871.91	18 CMP	CLEAN CULVERT (69 LF)
47	56+56.4	LT	23.76	868.03	56+62.5	RT	30.47	864.81	18 RCP	CLEAN CULVERT (55 LF)
48	64+39.1	LT	54.77	873.73	64+25.5	RT	23.77	867.59	15 CPEP	CLEAN CULVERT (80 LF)
49	66+76.3	LT	26.46	870.28	66+84.6	RT	27.94	869.50	18 RCP	RETAIN

**NOTES:**

- THIS PROJECT INCLUDES CULVERTS AND HEADWALLS THAT MAY REQUIRE EXCAVATION SUPPORT TO MEET SAFETY REGULATIONS. ALL COSTS ASSOCIATED WITH DESIGNING AND FURNISHING EXCAVATION SUPPORT SYSTEMS SHALL BE CONSIDERED INCIDENTAL TO ITEM 204.20 TRENCH EXCAVATION OF EARTH.
- REFER TO SHEETS 416 TO 425 FOR CULVERT CROSS SECTION SHEETS TO ESTIMATE APPROXIMATE EXCAVATION DEPTHS.
- A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR DEEP CULVERTS, GREATER THAN 5 FEET OF EXCAVATION DEPTH, SHALL BE PROVIDED TO THE ENGINEER FOR APPROVAL. ALL WORK, INCLUDING THE SITE SPECIFIC TRAFFIC CONTROL PLAN AND ANY EXCAVATIONS, WHICH REQUIRE A ROAD CLOSURE, SHALL BE INCIDENTAL TO ITEM 641.10 TRAFFIC CONTROL.

**REHAB. DI'S, CB'S or MH'S, CLASS I**  
(ITEM 604.412 & 604.415)

STATION	POSITION	DESCRIPTION
<b>VT ROUTE 12A</b>		
<b>NORTHFIELD</b>		
23+72	LT	CB
26+19	LT	CB
164+15	RT	CB

\*THESE STRUCTURES WERE LEFT AS IS. ELEVATIONS AND CONDITION OF STRUCTURES WERE ADEQUATE.

GOOD AS IS

**CULVERT INVENTORY TABLE**

CULVERT NO.	INVERT IN				INVERT OUT				PIPE	COMMENT
	STATION	POSITION	OFFSET FROM HCL	ELEVATION	STATION	POSITION	OFFSET FROM HCL	ELEVATION		
<b>NORTHFIELD (VT ROUTE 12A)</b>										
50	72+12.1	LT	28.15	874.27	72+13.5	RT	42.68	868.21	15 CMP	RETAIN
51	76+10.6	LT	21.97	867.42	76+22.6	RT	34.35	864.54	18 RCP	RETAIN
52	80+71.3	LT	14.65	844.07	80+78.7	RT	45.04	840.03	15 CPEP	15"X2' CPEP EXTENSION & NEW DI AT INLET
53	83+73.9	LT	18.07	840.77	83+79.8	RT	23.74	840.03	15 RCP	NEW 18"X43'; PIPE-OPTION-EE
54	86+28.6	LT	19.92	841.39	86+29.8	RT	53.37	839.91	18 CMP	CLEAN CULVERT (73 LF)
55	88+28.6	LT	18.54	840.25	88+28.9	RT	19.62	838.39	18 CMP	NEW 18"X39'; PIPE-OPTION-CC CPEP
56	92+31.1	LT	21.06	834.27	92+31.8	RT	28.70	832.47	24 CMP	RETAIN
57	94+09.1	LT	19.69	836.93	94+07.4	RT	22.28	833.71	30 CMP	CLEAN CULVERT (42 LF)
58	100+44.6	LT	16.51	823.11	100+43.7	RT	23.88	822.92	18 CPEP	NEW 18"X34'; NEW DI AT INLET; PIPE-OPTION-CC
59	110+37.9	LT	17.87	818.88	110+38.5	RT	22.61	818.22	18 CPEP	CLEAN CULVERT (41 LF)
60	137+55.7	RT	32.57	783.69	137+55.4	LT	23.48	782.95	36 X 42 CPEP	RETAIN
61	139+80.5	RT	19.98	789.63	139+80.2	LT	26.02	785.46	18 RCP	RETAIN
62	143+53.7	RT	14.25	797.64	143+54.0	LT	31.98	792.78	18 CMP	NEW 18"X60' & HEADWALL AT INLET; PIPE-OPTION-CC CPEP
63	147+53.1	RT	15.71	780.98	147+54.4	LT	24.47	779.83	18 CPEP	18"X3' CPEP EXTENSION
64	149+67.1	RT	17.07	776.77	149+68.7	LT	20.24	773.70	18 CMP	NEW 18"X38' AND HEADWALL AT OUTLET; PIPE-OPTION-CC CPEP
65	151+94.6	RT	18.89	775.60	151+83.3	LT	28.05	770.70	18 CPEP	RETAIN
66	155+12.1	RT	17.98	772.73	155+27.7	LT	29.18	770.83	18 CPEP	RETAIN
67	164+14.4	RT	22.83	771.25	164+35.3	LT	42.91	767.58	18 CPEP	RETAIN
68	165+17.0	RT	47.09	772.11	164+80.2	LT	24.56	769.15	24 CMP	RETAIN
69	177+58.0	RT	17.71	762.08	177+60.2	LT	18.56	761.58	24 CMP	NEW 24"X41'; PIPE-OPTION-DD CPEP
70	183+38.0	RT	26.71	759.80	183+57.5	LT	26.20	754.47	32 X 36 CONC. BOX	RETAIN
71	184+93.2	RT	19.20	759.90	184+90.7	LT	26.56	755.72	18 CMP	RETAIN
72	186+69.7	RT	19.27	758.51	186+67.9	LT	20.31	756.19	15 CMP	RETAIN
73	188+23.6	RT	18.49	753.63	188+22.2	LT	26.02	752.32	18 CMP	CLEAN CULVERT (45 LF) PCDI
74	195+37.0	RT	15.61	760.74	195+00.6	LT	17.13	759.86	15 CMP	NEW 18"X52' AND HEADWALL AT INLET & OUTLET; PIPE-OPTION-CC
75	199+63.9	RT	13.44	764.53	199+59.7	LT	172.00	-	15 CMP	15"X3' CSP EXTENSION AT INLET; REMOVE EXISTING HEADWALL; CLEAN CULVERT (186 LF)
76	205+12.5	RT	27.15	768.07	205+27.5	LT	23.33	766.97	36 CPEP	RETAIN
77	207+46.3	RT	20.88	766.64	207+47.4	LT	25.08	764.20	18 CMP	RETAIN
78	212+24.0	RT	22.63	766.54	212+34.7	LT	24.25	765.62	18 CMP	CLEAN CULVERT (48 LF)

**PIPE OPTIONS:**

OPTION CC 601.0216 18" CAAP .075 (2-2/3 X 1/2) OR 601.0416 18" PCCSP 0.79 (2-2/3 X 1/2) OR 601.0915 18" CPEP  
 OPTION DD 601.0226 24" CAAP 0.75 (2-2/3 X 1/2) OR 601.0426 24" PCCSP 0.79 (2-2/3 X 1/2) OR 601.0920 24" CPEP  
 OPTION EE 601.0816 18" RCP CLASS IV OR 601.2615 18" CPEP(SL)

**QUANTITY SUMMARY**

OPTION/ITEM NO.	CULVERT NO.	SUBTOTAL (UNIT)
204.21	28,30,31,33,62,63,74,75	26.5 (CY)
OPTION CC	8,9,16,24,25,31,33,55,58,62,64,74	582 (LF)
OPTION DD	28,69	91 (LF)
OPTION EE	53 (43LF)	
	SBGR END TREATMENTS THROUGH DITCHLINE (140LF)	183 (LF)
601.0011	75 (EXTENSION)	10 (LF)
601.0046	30 (EXTENSION)	10 (LF)
601.0910	52 (EXTENSION)	10 (LF)
601.2615	63 (EXTENSION)	10 (LF)
601.995	14,15,19,22,23,29,35,36,37,38,44,46,47,48,54,59,73,75,78	1209 (LF)
601.996	13,21,57	242 (LF)

**NOTES:**

FOR PIPES 30, 52, 63 & 75 THE CULVERT INVENTORY TABLE DEFINES THE REQUIRED PIPE EXTENSION LENGTHS TO EXISTING CULVERTS. A QUANTITY OF 10 LF WAS ESTIMATED FOR EACH TO ALLOW CONNECTION TO EXISTING CULVERT UNDER ROADWAY AS REQUIRED.



PROJECT NAME: ROXBURY-NORTHFIELD  
 PROJECT NUMBER: ER STP 0187(13)

FILE NAME: z13cl84typ.dgn PLOT DATE: 6/13/2016  
 PROJECT LEADER: M. FOISY DRAWN BY: G. BARRETT  
 DESIGNED BY: G. BARRETT CHECKED BY: G. EDWARDS  
**CULVERT & STRUCTURE INVENTORY** SHEET 30 OF 476