ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	L	M	R	O
1			**ABUTMENT 1**																
2	48	16	7790	1A1601	STR														
3	51	16	3150	1A1602	STR														
4	65	16	3680	1A1603 ▲	17		0	3430	250										
5	61	16	1460	1A1604 ▲	STR														
6	9	16	9260	1A1605	STR														
7	9	16	6900	1A1606	STR														
8	48	16	1775	1A1607 ▲	17		0	1175	600										
9	51	16	2510	1A1608 ▲	STR														
10	12	16	3235	1A1609	16	0	0	2635	600				425		425				3060
11	6	16	2375	1A1610	16	0	0	1775	600				425		425				2200
12	14	16	9300	1A1611	STR														
13	14	16	6950	1A1612	STR														
14	48	16	1675	1A1613	17		600	475	600										
15	48	16	1575	1A1614	S11								700						175
16	28	16	2245	1A1615	16	0	0	1645	600				425		425				2070
17	14	16	1675	1A1616	16	0	0	1075	600				425		425				3590
18	3	16	3610	1A1617	STR														
19	3	16	3320	1A1618	STR														
20	8	16	2995	1A1619 △	17		1260	475	1260										
21	6	16	1815	1A1620	16	0	0	1075	740				525		525				1600
22	6	16	950	1A1621	STR														
23	6	16	2360	1A1622	16	0	0	1270	1090				771		771				2041
24	4	16	2695	1A1623	17		1260	175	1260										
25																			
26	61	19	3150	1A1901	STR														
27																			
28	22	25	900	1EA2501	16	0	0	600	300				210		210				810
29			**ABUTMENT 1 WINGWALL 1**																
30																			
31	46	16	2650	1W1601 △	STR														
32	20	16	5900	1W1602	STR														
33	16	16	4535	1W1603 ▲	17		0	4285	250										
34	14	16	1335	1W1604	STR														
35	14	16	3610	1W1605 ▲	STR														
36	26	16	3900	1W1606 ▲	STR														
37	2	16	4560	1W1607	16	0	0	4310	250				100		230				4540
38	14	16	1675	1W1608	17		600	475	600										
39																			
40			**ABUTMENT 1 WINGWALL 2**																
41																			
42	42	16	2650	2W1601 △	STR														
43	20	16	5310	2W1602	STR														
44	14	16	4240	2W1603 ▲	17		0	3990	250										
45	12	16	1335	2W1604	STR														
46	12	16	3315	2W1605 ▲	STR														
47	24 ~~12~~	16	3300	2W1606 ▲	STR														
48	2	16	3610	2W1607	16	0	0	3360	250				100		250				3590
49	12 ~~14~~	16	1675	2W1608	17		600	475	600										
50																			
51			**ABUTMENT 2**																
52																			
53	52	16	7560	2A1601	STR														
54	49	16	3450	2A1602	STR														
55	59	16	3845	2A1603 ▲	17		0	3595	250										
56	58	16	1335	2A1604 ▲	STR														
57	9	16	6115	2A1605	STR														
58	9	16	8515	2A1606	STR														
59	46	16	2075	2A1607 ▲	17		0	1475	600										
60	50	16	2840	2A1608 ▲	STR														
61	12	16	3585	2A1609	16	0	0	2985	600				425		425				3410
62	6	16	2675	2A1610	16	0	0	2075	600				425		425				2500
63	16	16	7100	2A1611	STR														
64	16	16	9415	2A1612	STR														
65	44	16	1775	2A1613	17		600	575	600										
66	46	16	2375	2A1614 △	17		1050	275	1050										
67	32	16	2315	2A1615	16	0	0	1715	600				425		425				2140
68	16	16	1775	2A1616	16	0	0	1175	600				425		425				
69	3	16	3285	2A1617	STR														
70	3	16	3595	2A1618	STR														
71	8	16	2735	2A1619	17		1080	575	1080										
72	4	16	1675	2A1620	17		600	475	600										
73	2	16	2545	2A1621	16	0	0	1290	1255				887		887				2177
74	4	16	1990	2A1622	16	0	0	900	1090				771		771				1771
75	1	16	2635	2A1623	17		1080	475	1080										
76																			
77																			
78																			
79																			
80																			

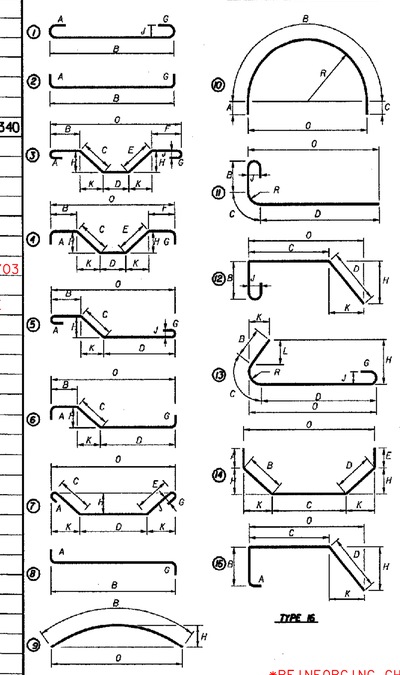
ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	L	M	R	O
81			**ABUTMENT 2 (CONT.)**																
82																			
83	2	16	5550	2A1624	STR														
84	2	16	7950	2A1625	STR														
85	2	16	1945	2A1626	16	0	0	1290	655				464		464				1754
86																			
87	61	19	3450	2A1901 △	STR														
88																			
89	24	25	900	2EA2501 △	16	0	0	600	300				210		210				810
90																			
91																			
92																			
93			**ABUTMENT 2 WINGWALL 3**																
94																			
95	44	16	2650	3W1601 △	STR														
96	20	16	5980	3W1602	STR														
97	15	16	4520	3W1603 ▲	17		0	4270	250										
98	13	16	1335	3W1604	STR														
99	12	16	3595	3W1605 ▲	STR														
100	24 ~~13~~	16	3550	3W1606 ▲	STR														
101	2	16	3715	3W1607	16	0	0	3465	250				235		75				3540
102	13	16	1675	3W1608	17		600	475	600										
103																			
104			**ABUTMENT 2 WINGWALL 4**																
105																			
106	40	16	2650	4W1601 △	STR														
107	20	16	5380	4W1602	STR														
108	13	16	4350	4W1603 ▲	17		0	4100	250										
109	11	16	1335	4W1604	STR														
110	11	16	3420	4W1605 ▲	STR														
111	22 ~~11~~	16	2950	4W1606 ▲	STR														
112	2	16	3495	4W1607	16	0	0	3245	250				230		95				3340
113	11	16	1675	4W1608	17		600	475	600										
114																			
115																			
116			**DECK SLAB**																
117	420																		
118	~~140~~	16	16 530	ES1601	STR														
119	448	16	~~1840~~	ES1602	S5	250	445	450	445	1765		250	AS PER LETTER DATED 6/17/03						
120	47	16	~~1750~~	ES1603	S5	250	280	820	150	1845		250	FROM CLOUGH, HARBOUR AND						
121	47	16	~~1640~~	ES1604	S5	250	280	710	150	1590		250	ASSOC. TO RON LEMAIRE, RE						
122	16	16	2420	ES1605	STR														
123																			
124	243	19	~~10360~~	ES1901	STR	10320				AS PER LETTER DATED 5/8/03									
125	243	19	~~4360~~	ES1902	STR	4320				FROM CLOUGH, HARBOUR AND									
126	241	19	~~5940~~	ES1903	STR	5820				ASSOC. TO RON LEMAIRE, RE									
127	241	19	~~8825~~	ES1904	STR	8820													
128																			
129																			
130			**GRADE BEAM**																
131				1EGB1601															
132	28	16	3850	~~1GB1601~~	STR	CHANGED FROM BLACK BAR (ITEM 507.15) TO EPOXY COATED													
133	28	16	3850	~~1GB1602~~	T2	75	475	1375	475	1375		75	(ITEM 507.17) AS PER RON						
134				1EGB1602									LEMAIRE, RE						
135																			
136																			
137			**APPROACH SLAB 1**																
138																			
139	40	16	6675	1EAS1601	STR														
140																			
141	55	29	6230	1EAS2901 △	1	385	5845					0		300					
142																			
143																			
144			**APPROACH SLAB 2**																
145																			
146	40	16	6675	2EAS1601	STR														
147																			
148	53	29	6230	2EAS2901	1	385	5845					0		300					
149																			
150			**ABUTMENT 1 COPING**																
151																			
152	114	13	1000	1EC1301	17		500	200	300										
153	76	13	2900	1EC1302	STR														
154																			
155			**ABUTMENT 2 COPING**																
157	114	13	1000	2EC1301	17		500	200	300										
158	76	13	2900	2EC1302	STR														
159																			
160																			

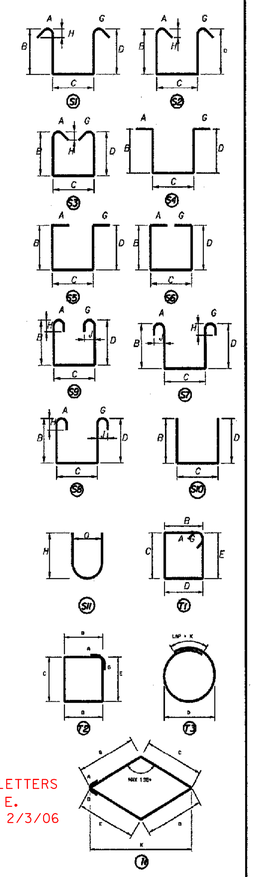
Metric

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING #57M SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M31M (ASTM A615-S1). ALL BARS SHALL BE GRADE 420, UNLESS OTHERWISE NOTED.
2. FOR TYPICAL BAR BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS, HOOKS AND OTHER STANDARD PRACTICE SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180° AND 135° HOOKS.
5. "J" DIMENSION ON 180° HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45° DIMENSIONS "H" AND "K" MUST BE SHOWN.

▲ - DENOTES BARS TO BE CUT IN FIELD.
* - DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
△ - DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.

TYPICAL BAR BENDS





*REINFORCING CHANGES AS PER CHA LETTERS DATED 6/17/03 & 5/8/03 OR A.O.B.E.
JFW 2/3/06

ASTM STANDARD METRIC REINFORCING BARS			
BAR SIZE DESIGNATION	NOMINAL DIMENSIONS		
	MASS (kg/m)	DIAMETER (mm)	AREA (mm²)
*10M	0.560	9.5	71
*13M	0.994	12.7	129
*16M	1.552	15.9	199
*19M	2.235	19.1	284
*22M	3.042	22.2	387
*25M	3.973	25.4	510
*29M	5.060	28.7	645
*32M	6.404	32.3	819
*36M	7.907	35.8	1006
*43M	11.38	43.0	1452
*57M	20.24	57.3	2581

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR500 / Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 14+900
VT. RTE. 9 OVER AIRPORT BROOK EAST	
REINFORCING STEEL SCHEDULE	
Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By R. PERKINS Date 11/01	Bridge Design Supervisor M. OLSTAD Date 11/01
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1)
I.G.C. Info.	
Bridge Sheet No. BR531	Sheet 261 OF 473

FILE NAME =u:\3573\15\br-500\barlist1.PLT
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USER =6264