ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
				ABUTMENT 1													
1																	
2	4	11	36-2	1A1101	STR												
3	4	11	22-10	1A1102	STR	▲											
4	4	11	24-1	1A1103	STR	▲											
5	73	5	6-6	1A501	STR	✱											
6	16	5	36-2	1A502	STR												
7	75	5	3-9	1A503	STR												
8	84	5	5-6	1A504	STR												
9	14	5	22-10	1A505	STR	▲											
10	14	5	24-1	1A506	STR	▲											
11	31	6	11-1	1A601	17	✱	3-1	8-0	0-0								
12																	
13	20	7	8-0	1A701	17	✱	3-1	4-11	0-0								
14	19	7	10-6	1A702	17		3-1	7-5	0-0								
15	2	7	13-2	1A703	STR												
16	1	7	13-3	1A704	STR												
17	16	8	5-3	1A801	19	✱	0-0	3-0	2-3				1-7⅛		1-7⅛		
18	2	5	7-8	1A507	STR												
19	3	5	11-3	1A508	STR												
20	1	5	12-6	1A509	STR												
21	1	5	11-3	1A510	STR												
22	2	5	12-6	1A511	STR												
23	30	5	32-10	1A512	STR												
24	8	5	8-3	1A513	19		2-3	6-0	0-0				0-10⅛		2-1		
25	8	5	7-5	1A514	19		2-3	5-2	0-0				0-10⅛		2-1		
26																	
27	8	5	9-8	1A515	22		2-3	7-5					2-1		0-10⅛		
28	8	5	7-5	1A516	22		2-3	5-2					2-1		0-10⅛		
29																	
30	33	5	5-9	1A517	17		1-0	3-9	1-0								
31	30	5	9-2	1A518	16	0-7	1-9	2-1	4-9				3-4		3-4		
32																	
33	6	5	5-4	1A519	STR												
34	6	5	4-3	1A520	17		0-9	3-4	0-0								
35	29	5	4-10	1A521	STR												
36	29	5	3-7	1A522	17		0-9	2-10	0-0								
37																	
38	4	5	6-1	1A523	19		2-3	3-10	0-0				0-10⅛		2-1		
39	4	5	5-11	1A524	19		2-3	3-8	0-0				0-10⅛		2-1		
40	4	5	7-7	1A525	22		2-3	5-4					2-1		0-10⅛		
41	4	5	6-0	1A526	22		2-3	3-9					2-1		0-10⅛		
42																	
43	2	5	1-8	1A527	STR												
44	1	5	3-3	1A528	STR												
45																	
46	4	5	6-8	E1A529	17		2-10	1-0	2-10								
47																	
48	1	5	3-3	1A530	STR												
49																	
50				WINGWALL 1													
51																	
52	15	5	13-2	1W501	STR	▲											
53	30	5	15-2	1W502	STR												
54	4	5	16-4	E1W503	STR												
55	16	5	6-8	E1W504	17		2-10	1-0	2-10								
56																	
57																	
58	8	7	13-2	1W701	STR	▲											
59																	
60				WINGWALL 2													
61																	
62																	
63	17	5	13-3	2W501	STR	▲											
64	30	5	16-11	2W502	STR												
65	4	5	18-2	E2W503	STR												
66	18	5	6-8	E2W504	17		2-10	1-0	2-10								
67																	
68	9	7	13-3	2W701	STR	▲											
69																	
70																	
71																	
72																	
73																	
74																	
75																	
76																	
77																	
78																	
79																	
80																	

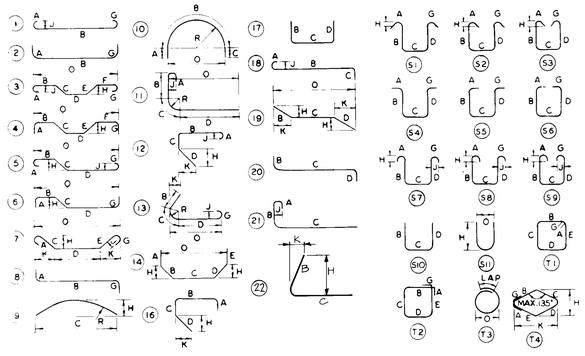
ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
				ABUTMENT 2													
81																	
82	4	11	35-7	2A1101	STR												
83	4	11	16-6	2A1102	STR												
84	4	11	17-9	2A1103	STR												
85	73	5	6-6	2A501	STR	✱											
86	16	5	35-7	2A502	STR												
87	68	5	3-9	2A503	STR												
88	68	5	5-5	2A504	STR												
89	16	5	18-9	2A505	STR	▲											
90	16	5	19-11	2A506	STR	▲											
91	31	6	11-1	2A601	17	✱	3-1	8-0	0-0								
92																	
93	16	7	8-0	2A701	17	✱	3-1	4-11	0-0								
94	15	7	10-6	2A702	17		3-1	7-5	0-0								
95	1	7	12-2	2A703	STR												
96	16	8	5-3	2A801	19	✱	0-0	3-0	2-3				1-7⅛		1-7⅛		
97	37	5	7-9	2A507	STR												
98	2	5	11-3	2A508	STR												
99	1	5	12-4	2A509	STR												
100	1	5	11-3	2A510	STR												
101	1	5	12-3	2A511	STR												
102	31	5	32-4	2A512	STR												
103	9	5	8-3	2A513	19		2-3	6-0	0-0				0-10⅛		2-1		
104	9	5	7-5	2A514	19		2-3	5-2	0-0				0-10⅛		2-1		
105																	
106	9	5	9-8	2A515	22		2-3	7-5					2-1		0-10⅛		
107	9	5	7-5	2A516	22		2-3	5-2					2-1		0-10⅛		
108																	
109	34	5	10-4	2A517	16	1-0	3-9	0-10	4-9				3-4		3-4		
110																	
111	6	5	5-3	2A519	STR												
112	6	5	4-0	2A520	17		0-9	3-3	0-0								
113	28	5	4-9	2A521	STR												
114	28	5	5-5	2A522	17		0-9	4-8	0-0								
115																	
116	4	5	6-1	2A523	19		2-3	3-10	0-0				0-10⅛		2-1		
117	4	5	5-11	2A524	19		2-3	3-8	0-0				0-10⅛		2-1		
118	4	5	7-7	2A525	22		2-3	5-4					2-1		0-10⅛		
119	4	5	6-0	2A526	22		2-3	3-9					2-1		0-10⅛		
120																	
121	2	5	1-8	2A527	STR												
122	1	5	3-3	2A528	STR												
123																	
124	2	5	6-8	E2A529	17		2-10	1-0	2-10								
125																	
126	1	5	3-3	2A530	STR												
127																	
128																	
129				WINGWALL 3													
130																	
131																	
132	13	5	12-2	3W501	STR	▲											
133	28	5	12-7	3W502	STR												
134	4	5	13-9	E3W503	STR												
135	13	5	6-8	E3W504	17		2-10	1-0	2-10								
136																	
137																	
138	7	7	12-2	3W701	STR	▲											
139																	
140				WINGWALL 4													
141																	
142																	
143	12	5	12-2	4W501	STR	▲											
144	28	5	11-1	4W502	STR												
145	4	5	12-2	E4W503	STR												
146	13	5	6-8	E4W504	17		2-10	1-0	2-10								
147																	
148	6	7	12-2	4W701	STR	▲											
149																	
150																	
151																	
152																	
153																	
154																	
155																	
156																	
157																	
158																	
159																	
160																	

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
161																	
162																	
163																	
164																	
165																	
166																	
167																	
168																	
169																	
170																	
171																	
172																	
173																	
174																	
175																	
176																	
177																	
178																	
179																	
180																	

ASTM STANDARD REINFORCING BARS

BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTION		
		DIAMETER INCHES	CROSS SECTIONAL AREA SQ. INCHES	PERIMETER INCHES
#3	.376	.375	.11	1.178
#4	.668	.500	.20	1.571
#5	1.043	.625	.31	1.963
#6	1.502	.750	.44	2.356
#7	2.044	.875	.60	2.749
#8	2.670	1.000	.79	3.142
#9	3.400	1.128	1.00	3.544
#10	4.303	1.270	1.27	3.990
#11	5.313	1.410	1.56	4.430
#14	7.65	1.693	2.25	5.32
#18	13.60	2.257	4.00	7.09

TYPICAL BAR BENDS



SEE "HOOKS" ON PLAN FOR DETAILS

NOTES

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT; AASHTO M 31 (ASTM A 615-81). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND 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.

REV NO	MADE BY	DATE	DESCRIPTION
			[illegible]

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TOWN OF ESSEX	BRIDGE NO. 13
	LOG STA.
HIGHWAY NO. VT. RTE. 289	SURV. STA. RAMP 15+00
VT. RTE. 289 "RAMP D" OVER CVRR	
REINFORCING STEEL SCHEDULE - 1	
DESIGNED BY KEH	DRAWN BY [illegible]
CHECKED BY KJS DATE 10-12-90	BRIDGE DESIGN SUPERVISOR MWO DATE 10-12-90
PROJECT WILLISTON - COLCHESTER	PROJECT NO. PB 033-1 (2)
BRIDGE SHEET NO. BR323 SHEET	188 OF 400

193 OF 465