STATE OF VERMONT
AGENCY OF TRANSPORTATION

REINFORCING STEEL SCHEDULE

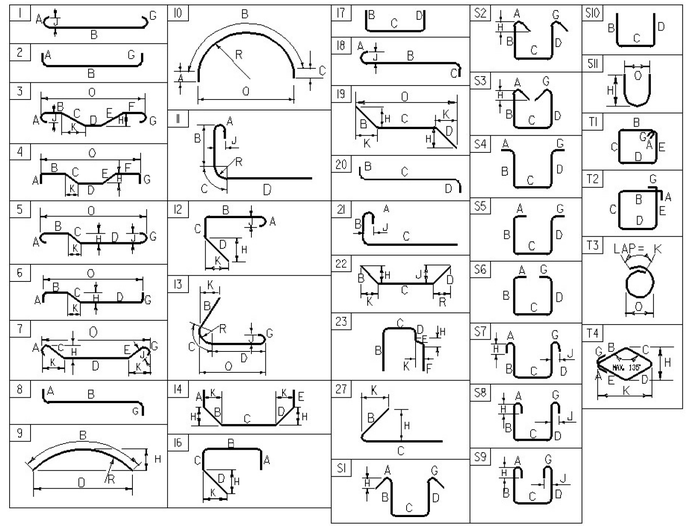
Metric

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
BRIDGE DECK AND RAIL																	
	36	13	11220	ES1302	STR	11220											
△ ▲	8	13	1475	ES1303	STR	1475											
	163	16	11250	ES1601	STR	11250											
	483	16	11220	ES1602	STR	11220											
✳	29	16	2236	ES1605	STR	2236											
✳	164	19	11250	ES1901	STR	11250											
	163	13	3105	ES1301	S5	610	930	110	845			610					
▲	9	13	2220	ES1304	17		1055	110	1055								
	163	13	2680	ES1305	S5	610	705	110	645			610					
	163	16	3685	ES1603	S5	600	315	1855	315			600					
	28	16	2630	ES1604	S5	165	775	165	1525								
	28	16	2305	ES1606	S5	165	450	165	1525								
ABUTMENT #1																	
✳	41	16	2395	1A1602	STR	2395											
	20	16	11724	1A1603	STR	11724											
	8	16	1200	1A1604A	STR	1200											
△	40	16	1600	1EA1606	STR	1600											
	10	16	11026	1EA1607	STR	11026											
	39	22	3000	1A2203	STR	3000											
	16	25	1125	1EA2501	STR	1125											
✳	40	29	3000	1A2901	STR	3000											
	38	16	3260	1A1604	16	660	1050	350	1200				850		850		
	38	16	2425	1EA1605	22		1200	1225					850		850		
	38	16	2450	1EA1608	17		1000	450	1000								
	38	16	1770	1EA1609	17		720	150	900								
✳ ▲	41	22	3535	1A2201	17		2560	975									
	22	22	12035	1A2202	17		11435	600									
WINGWALL #1																	
	9	16	1320	1W1601	STR	1320											
	9	16	3745	1W1602	STR	3745											
✳	15	16	2350	1W1604	STR	2350											
	14	16	1655	1W1605	STR	1655											
	2	16	1810	1W1608	STR	1810											
✳	16	19	2925	1W1901	STR	2925											
✳	16	22	3450	1W2201	STR	3450											
	8	16	1795	1W1603	17		660	475	660								
	7	16	4220	1W1606	22		660	2900	660				300	300	525	525	
	7	16	1320	1W1607	22		660	660					572		330		
	8	22	4770	1W2202	17		4420	350									
WINGWALL #2 AND RAIL																	
✳	7	13	2450	2ER1302	STR	2450											
▲	6	13	1475	2ER1303	STR	1475											
	11	16	1320	2W1601	STR	1320											
✳	12	16	3165	2W1602	STR	3165											
	6	16	3350	2W1604	STR	3350											
	2	16	1480	2W1607	STR	1480											
✳ ▲	15	16	2750	2EW1604	STR	2750											
✳	14	19	1650	2W1901	STR	1650											
✳	15	22	2950	2W2201	STR	2950											
	6	13	2780	2ER1301	17		1335	110	1335								
	6	16	3490	2W1605	22		660	2170	660				467	467	467	467	
	6	16	1320	2W1606	17		660	660									
	11	16	2075	2EW1603	17		800	475	800								
✳	10	19	3820	2ER1901	17		1855	110	1855								
✳	15	22	3550	2W2201	17		2950	600									
	22	22	4190	2W2202	17		3840	350									
✳	21	22	2387	2EW2203	17		1100	187	1100								
APPROACH SLAB #1																	
	21	16	8835	1EAS1601	STR	8835											
✳	42	29	6325	1EAS2901	1	225	6100							230			

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
ABUTMENT #2																	
	39	16	1320	2A1603	STR	1320											
✳ ▲	40	16	2935	2A1604	STR	2935											
	8	16	1200	2A1604A	STR	1200											
	28	16	11250	2A1605	STR	11250											
✳	3	16	2425	2EA1613	STR	2425											
	35	16	1600	2EA1608	STR	1600											
	14	16	10200	2EA1609	STR	10200											
✳	40	22	2935	2A2201	STR	2935											
	23	22	11250	2A2202	STR	11250											
	39	22	4350	2A2203	STR	4350											
	11	22	4710	2A2204	STR	4710											
	16	25	1125	2EA2501	STR	1125											
	51	29	4350	2A2902	STR	4350											
	39	16	3360	2A1606	16	660	1150	350	1200				849		849		
	35	16	2425	2EA1607	22		1200	1225					849		849		
	35	16	2800	2EA1610	17		1155	490	1155								
	35	16	2155	2EA1611	17		800	250	1105								
	9	16	2210	2EA1612	17		1030	150	1030								
✳	40	29	3700	2A2901	17		2350	1350									
WINGWALL #3 AND RAIL																	
✳	7	13	2850	3ER1302	STR	2850											
	6	13	1425	3ER1303	STR	1425											
△	13	16	1485	3W1601	STR	1485											
▲	11	16	4915	3W1602	STR	4915											
	22	16	3510	3W1604	STR	3510											
✳	15	16	2850	3EW1604	STR	2850											
✳ ▲	21	25	4175	3W2501	STR	4175											
	8	13	2780	3ER1301	17		1335	110	1335								
	11	16	3490	3W1605	22		660	2170	660				467	467	467	467	
	11	16	1320	3W1606	17		660	660									
	11	16	1770	3EW1603	17		660	450	660								
	8	19	3820	3ER1901	17		1855	110	1855								
✳	21	29	4650	3W2901	17		4050	600									
✳	21	32	3385	3W3201	17		2825	560									
WINGWALL #4 AND RAIL																	
✳	7	13	3750	4ER1302	STR	3750											
	6	13	1475	4ER1303	STR	1475											
△	16	16	1485	4W1601	STR	1485											
▲	14	16	4850	4W1602	STR	4850											
	20	16	4410	4W1604	STR	4410											
✳	17	16	3750	4EW1604	STR	3750											
✳	23	19	1760	4W1901	STR	1760											
✳ ▲	27	25	3810	4W2501	STR	3810											
	12	13	2780	4ER1301	17		1335	110	1335								
	14	16	1770	4EW1603	17		660	450	660								
	10	16	3490	4W1605	22		660	2170	660				467	467	467	467	
	10	16	1320	4W1606	17		660	660									
✳	8	20	3820	4ER1901	17		1855	110	1855								
✳	27	22	2230	4EW2201	17		1025	180	1025								
✳	27	29	4650	4W2901	17		4050	600									
✳	27	32	3385	4W3201	17		2825	560									
APPROACH SLAB #2																	
	21	16	8570	2EAS1601	STR	8570											
	39	29	6325	2EAS2901	1	225	6100							230			

~ NOTES ~

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING 55M SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31M (ASTM A 615M-SI). ALL BARS SHALL BE GRADE 420, 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 DEGREE AND 135 DEGREE HOOKS.
5. "J" DIMENSION ON 180 DEGREE 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 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
8. ▲ DENOTES BARS TO BE CUT IN FIELD.
9. ✳ DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
10. △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
11. E IN BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



ASTM STANDARD REINFORCING BARS

BAR SIZE	NOMINAL MASS (Kg/m)	NOMINAL DIMENSIONS ROUND SECTION		
		DIAMETER (mm)	CROSS SECTIONAL AREA (mm^2)	PERIMETER (mm)
#10	0.560	9.5	71	29.84
#13	0.994	12.7	129	39.90
#16	1.552	15.9	199	49.95
#19	2.235	19.1	284	60.00
#22	3.042	22.2	387	69.74
#25	3.973	25.4	510	79.80
#29	5.060	28.7	645	90.16
#32	6.404	32.3	819	101.47
#36	7.907	35.8	1006	112.47
#43	11.380	43.0	1452	135.09
#57	20.240	57.3	2581	180.01

SEE REDESIGNNED ABUTMENTS SHEET 5 OF 5

PROJECT NAME: **READSBORO**
PROJECT NUMBER: **BRF 0105 (3)**

FILE NAME: **sj088rss 9-28-11.xls**
PROJECT MANAGER: **J. LACROIX**
DESIGNED BY: **W. PELLETIER**
REINFORCING STEEL SCHEDULE SHEET

PLOT DATE: **3/12/2012**
DRAWN BY: **G. ROKES**
CHECKED BY: **N. VAN DEN BER**
SHEET **65** OF **90**