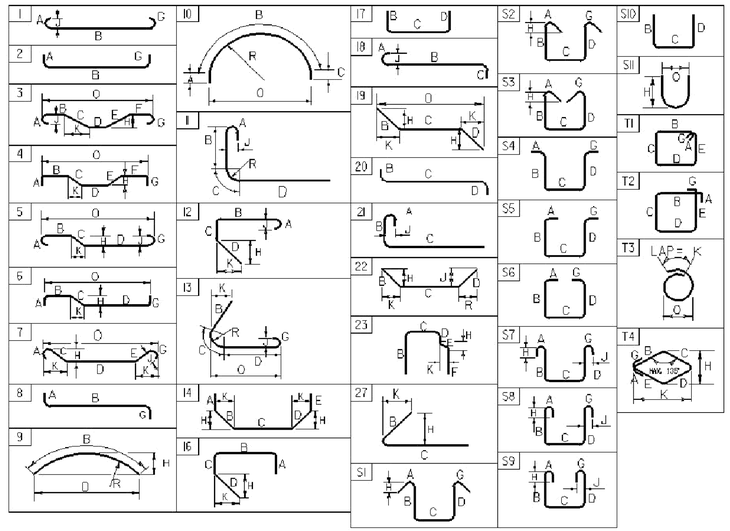
STATE OF VERMONT
AGENCY OF TRANSPORTATION

REINFORCING STEEL SCHEDULE

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
	WINGWALL #8																
▲	6	5	21'- 6"	8W501	STR												
✳	17	5	7'- 0"	8W502	STR												
✳ ▲	9	5	8'- 8"	8W503	STR												
	31	5	6'- 10"	8EW504	B		SEE BAR BENDING DETAILS										
△ ▲	10	6	8'- 8"	8W601	STR												
	ABUTMENT #1																
	3	5	26'- 10"	1A501	STR												
	3	5	22'- 7"	1A502	STR												
	52	5	3'- 5"	1A504	STR												
✳ ▲	53	5	7'- 8"	1A505	STR												
✳ ▲	50	5	7'- 8"	1A506	STR												
	18	5	27'- 3"	1A507	STR												
	18	5	22'- 9"	1A508	STR												
	49	5	8'- 5"	1A510	16	2'- 2"	2'- 1"	1'- 3"	2'- 11"								
	9	5	5'- 11"	1A511	19		3'- 3"	2'- 8"	---				2'- 9"		1'- 9"		
	9	5	12'- 10"	1A512	22		2'- 2"	8'- 6"	2'- 2"				1'- 1"	1'- 1"	1'- 11"	1'- 11"	
	8	5	9'- 3"	1A513	22		2'- 2"	4'- 11"	2'- 2"				1'- 11"	1'- 11"	1'- 0"	1'- 0"	
△	27	8	5'- 9"	1EA801	22		3'- 3"	2'- 6"	---								
	ABUTMENT #2																
	3	5	28'- 0"	2A501	STR												
	3	5	25'- 0"	2A502	STR												
	3	5	13'- 0"	2A503	STR												
	64	5	3'- 5"	2A504	STR												
✳ ▲	65	5	8'- 1"	2A505	STR												
✳ ▲	64	5	8'- 1"	2A506	STR												
	16	5	29'- 0"	2A507	STR												
	16	5	25'- 0"	2A508	STR												
	16	5	13'- 2"	2A509	STR												
	63	5	8'- 5"	2A510	16	2'- 2"	2'- 1"	1'- 3"	2'- 11"								
	8	5	5'- 0"	2A511	19		2'- 9"	2'- 3"	---				1'- 8"	2'- 2"			
	8	5	14'- 10"	2A512	22		2'- 2"	10'- 6"	2'- 2"				0'- 8"	0'- 8"	2'- 1"	2'- 1"	
	8	5	8'- 6"	2A513	22		2'- 2"	4'- 2"	2'- 2"				2'- 0"	2'- 0"	0'- 9"	0'- 9"	
△	34	8	5'- 9"	2EA801	22		3'- 3"	2'- 6"	---								
	ABUTMENT #3																
	3	5	26'- 7"	3A501	STR												
	3	5	22'- 11"	3A502	STR												
	50	5	3'- 5"	3A504	STR												
✳ ▲	51	5	7'- 9"	3A505	STR												
✳ ▲	50	5	7'- 9"	3A506	STR												
	18	5	27'- 2"	3A507	STR												
	18	5	23'- 4"	3A508	STR												
	49	5	8'- 5"	3A510	16	2'- 2"	2'- 1"	1'- 3"	2'- 11"								
	9	5	5'- 1"	3A511	19		2'- 2"	2'- 11"	---				1'- 9"		1'- 3"		
	9	5	13'- 1"	3A512	22		2'- 2"	8'- 9"	2'- 2"				1'- 0"	1'- 0"	1'- 11"	1'- 11"	
	9	5	9'- 3"	3A513	22		2'- 2"	4'- 11"	2'- 2"				1'- 11"	1'- 11"	1'- 0"	1'- 0"	
△	27	8	5'- 9"	3EA801	22		3'- 3"	2'- 6"	---								
	ABUTMENT #4																
	3	5	28'- 2"	4A501	STR												
	3	5	25'- 0"	4A502	STR												
	3	5	12'- 3"	4A503	STR												
	64	5	3'- 5"	4A504	STR												
✳ ▲	65	5	7'- 9"	4A505	STR												
✳ ▲	64	5	7'- 9"	4A506	STR												
	18	5	29'- 2"	4A507	STR												
	18	5	25'- 0"	4A508	STR												
	18	5	12'- 3"	4A509	STR												
	63	5	8'- 5"	4A510	16	2'- 2"	2'- 1"	1'- 3"	2'- 11"								
	9	5	4'- 11"	4A511	19		2'- 2"	2'- 9"	---				1'- 4"		1'- 9"		
	9	5	14'- 9"	4A512	22		2'- 2"	10'- 5"	2'- 2"				0'- 9"	0'- 9"	2'- 1"	2'- 1"	
	9	5	8'- 6"	4A513	22		2'- 2"	4'- 2"	2'- 2"				2'- 0"	2'- 0"	0'- 9"	0'- 9"	
△	34	8	5'- 9"	4EA801	22		3'- 3"	2'- 6"	---								

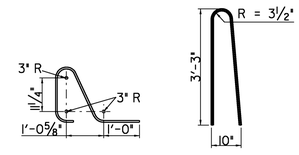
~ NOTES ~

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-SI). 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 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 DENOTES EPOXY COATED REINFORCING STEEL.



ASTM STANDARD REINFORCING BARS

BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTION		
		DIAMETER INCHES	AREA INCHES ^{2}	PERIMETER INCHES
#3	0.376	0.375	0.11	1.178
#4	0.668	0.500	0.20	1.571
#5	1.043	0.625	0.31	1.963
#6	1.502	0.750	0.44	2.356
#7	2.044	0.875	0.60	2.749
#8	2.670	1.000	0.79	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



BAR BENDING DETAILS

PROJECT NAME:	BERLIN
PROJECT NUMBER:	IM 089-1(20)
FILE NAME: s99a270rein.dgn	PLOT DATE: 12/5/2007
PROJECT MANAGER: SHERWARD FARNSWORTH	DRAWN BY: C.MOONEY
DESIGNED BY: G. SPILAK	CHECKED BY: C.WEEBER
REINFORCING STEEL SCHEDULE SHEET #2	SHEET 65 OF 104