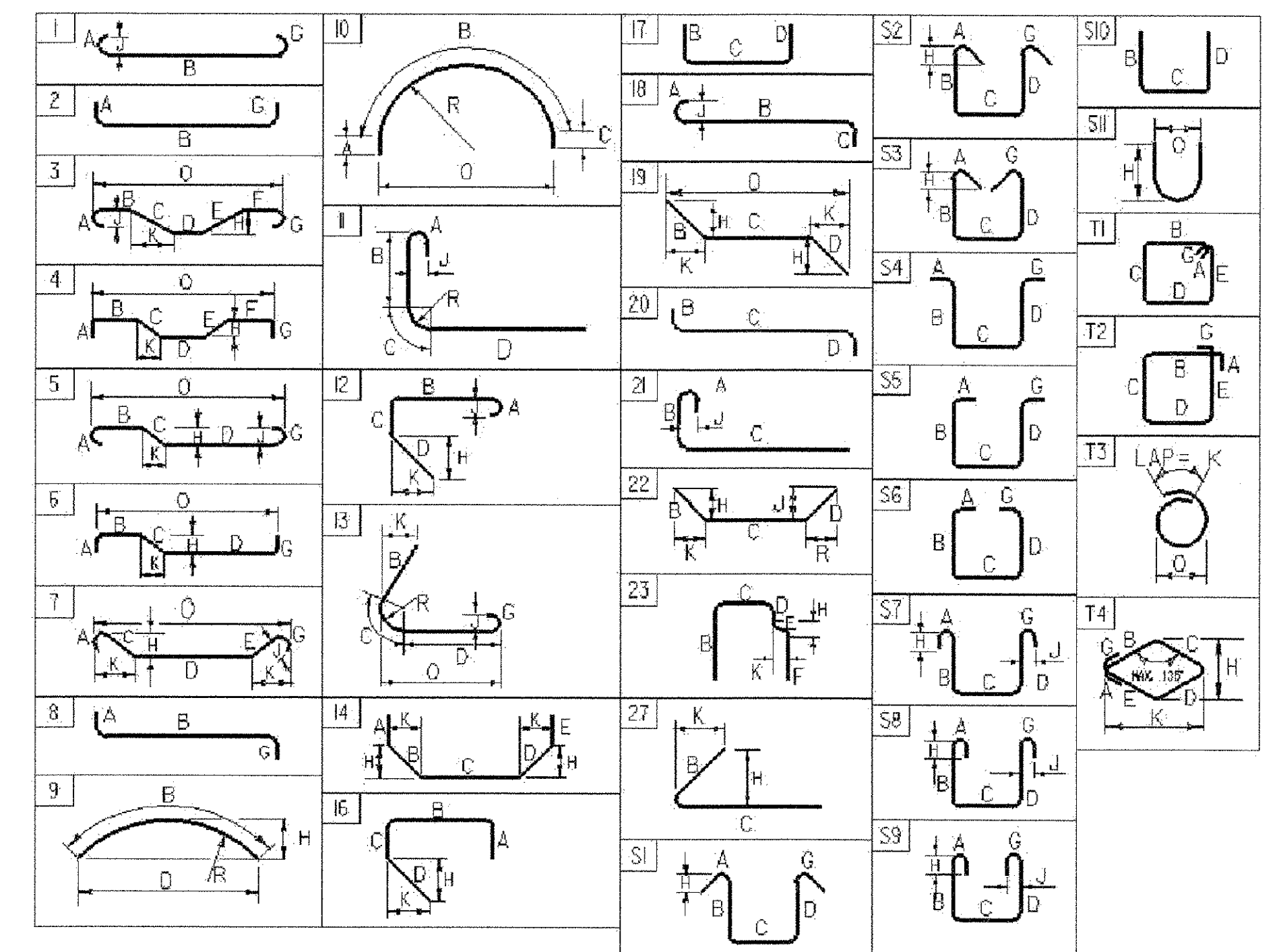


REINFORCING STEEL SCHEDULE

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O	ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
HEADWALLS																																			
*	17	5	29'-10"	EH501	STR																														
	116	5	4'-3"	EH502	S10		1'-9"	0'-9"	1'-9"																										
ABUTMENT NO. 1																																			
*	121	5	7'-6"	1A501	STR																														
	60	5	5'-11"	1A502	S10		2'-2"	1'-7"	2'-2"																										
	60	5	3'-11"	1A503	STR																														
	120	5	7'-6"	1A504	STR																														
▲	32	5	34'-4"	1A505	STR																														
	28	5	34'-4"	1A506	STR																														
*	61	7	9'-10"	1A701	17		5'-3"	4'-7"	---																										
WINGWALL NO. 1																																			
▲	40	5	12'-3"	1W501	STR																														
	20	5	5'-11"	1W502	S10		2'-2"	1'-7"	2'-2"																										
	20	5	3'-11"	1W503	STR																														
	40	5	7'-6"	1W504	STR																														
▲	24	5	17'-11"	1W505	STR																														
	14	5	17'-11"	1W506	STR																														
	2	5	20'-9"	1W507	19		1'-3"	19'-6"	---				0'-9"		1'-5"																				
*	21	6	8'-11"	1W601	17		4'-4"	4'-7"	---																										
WINGWALL NO. 2																																			
▲	40	5	12'-3"	2W501	STR																														
	20	5	5'-11"	2W502	S10		2'-2"	1'-7"	2'-2"																										
	20	5	3'-11"	2W503	STR																														
	40	5	7'-6"	2W504	STR																														
▲	24	5	19'-6"	2W505	STR																														
	14	5	19'-6"	2W506	STR																														
	2	5	20'-9"	2W507	19		1'-3"	19'-6"	---				0'-9"		1'-5"																				
*	21	6	8'-11"	2W601	17		4'-4"	4'-7"	---																										
ABUTMENT NO. 2																																			
	120	5	4'-6"	2A501	STR																														
	60	5	5'-11"	2A502	S10		2'-2"	1'-7"	2'-2"																										
	60	5	3'-11"	2A503	STR																														
	120	5	7'-6"	2A504	STR																														
▲	20	5	34'-4"	2A505	STR																														
	28	5	34'-4"	2A506	STR																														
*	61	7	9'-10"	2A701	17		5'-3"	4'-7"	---																										
WINGWALL NO. 3																																			
▲	32	5	9'-3"	3W501	STR																														
	16	5	5'-11"	3W502	S10		2'-2"	1'-7"	2'-2"																										
	16	5	3'-11"	3W503	STR																														
	32	5	7'-6"	3W504	STR																														
▲	18	5	13'-10"	3W505	STR																														
*	15	5	13'-10"	3W506	STR																														
	2	5	16'-1"	3W507	19		1'-3"	14'-10"	---				0'-9"		1'-5"																				
*	17	6	8'-11"	3W601	17		4'-4"	4'-7"	---																										
WINGWALL NO. 4																																			
▲	28	5	9'-3"	4W501	STR																														
	14	5	5'-11"	4W502	S10		2'-2"	1'-7"	2'-2"																										
	14	5	3'-11"	4W503	STR																														
	28	5	7'-6"	4W504	STR																														
▲	18	5	13'-6"	4W505	STR																														
	14	5	13'-6"	4W506	STR																														
	2	5	13'-8"	4W507	19		0'-8"	13'-0"	---				0'-9"		1'-5"																				
*	15	6	8'-11"	4W601	17		4'-4"	4'-7"	---																										

~ NOTES ~

- 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 M31 (ASTM A615-S). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
- 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".
- BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
- ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
- "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
- "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
- WHERE SLOPE DIFFERS FROM 45 DEGREES, 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.
- E IN BAR MARK PREFIX 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

PROJECT NAME: **SPRINGFIELD**
PROJECT NUMBER: **ST CULV (5)**
FILE NAME: \04c178\Structures\04c178rss.xls PLOT DATE: 4/23/2007
PROJECT MANAGER: R. R. Whitcomb DRAWN BY: D. Peterson
DESIGNED BY: D. Peterson CHECKED BY: W. Lammer
REINFORCING STEEL SCHEDULE SHEET #1 SHEET 38 OF 52