

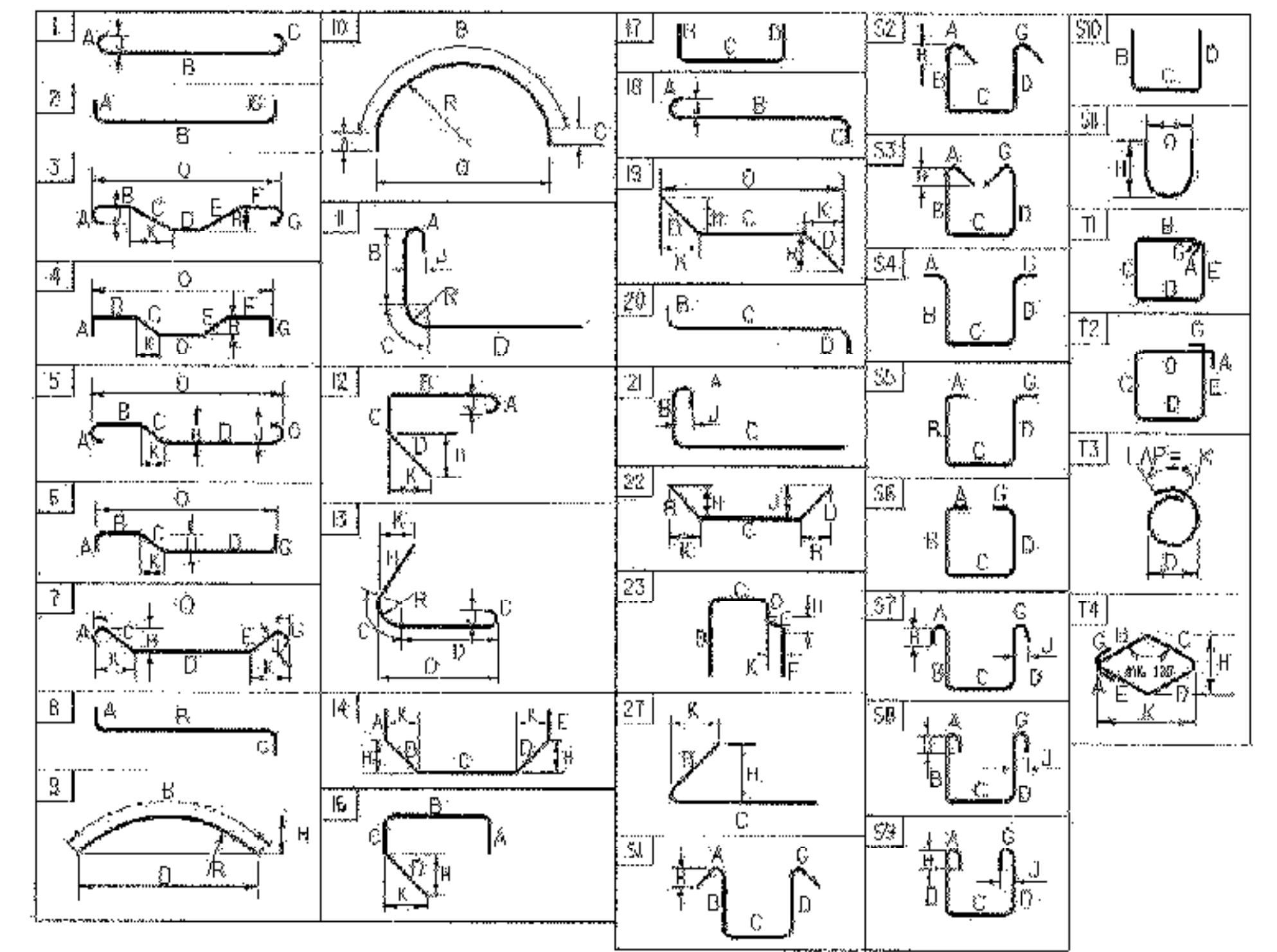
# REINFORCING STEEL SCHEDULE



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
<b>DECK</b>																		<b>ABUTMENT NO. 2</b>																	
* 353	16	7670	ES1601	STR														18	16	8130	2A1601A	STR													
▲ 326	16	10340	ES1602	STR														18	16	6570	2A1601B	STR													
			ES1603	NOT USED														45	16	1430	2A1602	STR													
▲ 28	16	11010	ES1605	STR														23	16	3860	2A1603A	STR													
270	16	1610	ES1604	S5	250	350	410	350				250						16	16	4480	2A1603B	STR													
56	16	3390	ES1606	S5	250	1410	150	1330										* 25	16	1800	2A1604A	STR													
66	16	1560	ES1607	16	300	460	200	600										14	16	2290	2A1604B	STR													
36	25	900	ES2501	19	300	600	---	---										36▲	25	16	8230	2A1605A	STR												
<b>APPROACH SLAB NO. 1</b>																		36▲	25	16	5310	2A1605B	STR												
* 29	16	10080	2EAS1601	STR														▲ 7	16	6100	2A1607	STR													
39	29	6220	2EAS2901	1	380	5840	---	---										▲ 5	16	3910	2A1608	STR													
<b>APPROACH SLAB NO. 2</b>																		▲ 24	16	910	2A1611	STR													
* 23	16	10080	2EAS1601	STR														* ▲ 60	25	3140	2A2502	STR													
39	29	6220	2EAS2901	1	380	5840	---	---										▲ 39	25	2500	2A2503	STR													
<b>ABUTMENT NO. 1</b>																		<b>WINGWALL NO. 3</b>																	
36	16	7690	1A1601	STR														18	16	2290	3W1601	STR													
46	16	1430	1A1602	STR														8	16	1430	3W1602	STR													
▲ 38	16	4100	1A1603	STR														▲ 8	16	6460	3W1603	STR													
* 39	16	1920	1A1604	STR														46▲	39	16	2150	3W1606	STR												
28	16	6110	1A1605A	STR														7	25	3750	3W2502	STR													
28	16	7650	1A1605B	STR														8	25	3440	3W2901	STR													
▲ 8	16	5750	1A1607	STR														7	18	1780	3W1604	S10													
6	16	3560	1A1608	STR														2	18	2150	3W1607	19													
▲ 24	16	1150	1A1609	STR														72▲	60	16	2340	3W1608	19												
* 61	25	3140	1A2502	STR														8	25	3740	3W2501	17													
▲ 49	25	2500	1A2503	STR														* 8	32	3870	3W3201	17													
44	16	1790	1A1605	S10					660	470	660						<b>WINGWALL NO. 4</b>																		
42	25	4990	1A2501	17					3620	1370	---							* 19	16	1820	4W1601	STR													
* 43	29	2810	1A2901	17					2320	480	---							6	16	1430	4W1602	STR													
<b>WINGWALL NO. 1</b>																		▲ 9	16	6100	4W1603	STR													
13	16	3920	1W1601	STR														46▲	42	16	1430	4W1606	STR												
▲ 46	16	1430	1W1602	STR														4	25	3760	4W2502	STR													
16	16	5790	1W1603	STR														* 8	29	3440	4W2901	STR													
11	16	2660	1W1605	STR														4	16	1790	4W1604	S10													
* ▲ 41	16	3510	1W1606	STR														2	16	1490	4W1607	19													
11	25	3750	1W2502	STR														▲ 34	16	1820	4W1608	19													
14	29	3440	1W2901	STR														19	16	3240	4W1609	19													
11	16	1790	1W1604	S10					660	470	660						* 4	25	3740	4W2501	17														
2	16	3710	1W1607	19					580	3130	---						* 5	32	3870	4W3201	17														
▲ 32	16	1820	1W1608	19					910	910	---						<b>WINGWALL NO. 2</b>																		
14	16	4150	1W1609	22					660	2830	660						18	16	6140	2W1601	STR														
* 12	25	3740	1W2501	17					2170	1570	---						▲ 49	16	1430	2W1602	STR														
* 12	32	3870	1W3201	17					3320	550	---						19	16	6310	2W1603	STR														
<b>WINGWALL NO. 2</b>																		15	16	2220	2W1605	STR													
16	16	6140	2W1601	STR														38	16	4570	2W1606	STR													
▲ 49	16	1430	2W1602	STR														15	25	3750	2W2502	STR													
19	16	6310	2W1603	STR														* 19	29	3440	2W2901	STR													
15	16	2220	2W1605	STR														15	16	1790	2W1604	S10													
38	16	4570	2W1606	STR														▲ 31	16	1640	2W1608	19													
15	25	3750	2W2502	STR														13	16	3870	2W1609	22													
* 19	29	3440	2W2901	STR														16	25	3740	2W2501	17													
15	16	1790	2W1604	S10					660	470	660						* 16	32	3870	2W3201	17														
▲ 31	16	1640	2W1608	19					820	820	---						<b>ASTM STANDARD REINFORCING BARS</b>																		
13	16	3870	2W1609	22					660	2950	660																								
16	25	3740	2W2501	17																															
* 16	32	3870	2W3201	17					3320	550	---																								

~ NOTES ~

- UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING 56M SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED RIBBED-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M31M (ASTM A 615M-S). ALL BARS SHALL BE GRADE 420, 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.



BAR SIZE	NOMINAL MASS (kg/m)	NOMINAL DIAMETER (mm)	CROSS SECTIONAL AREA (mm²)	PERMETER (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