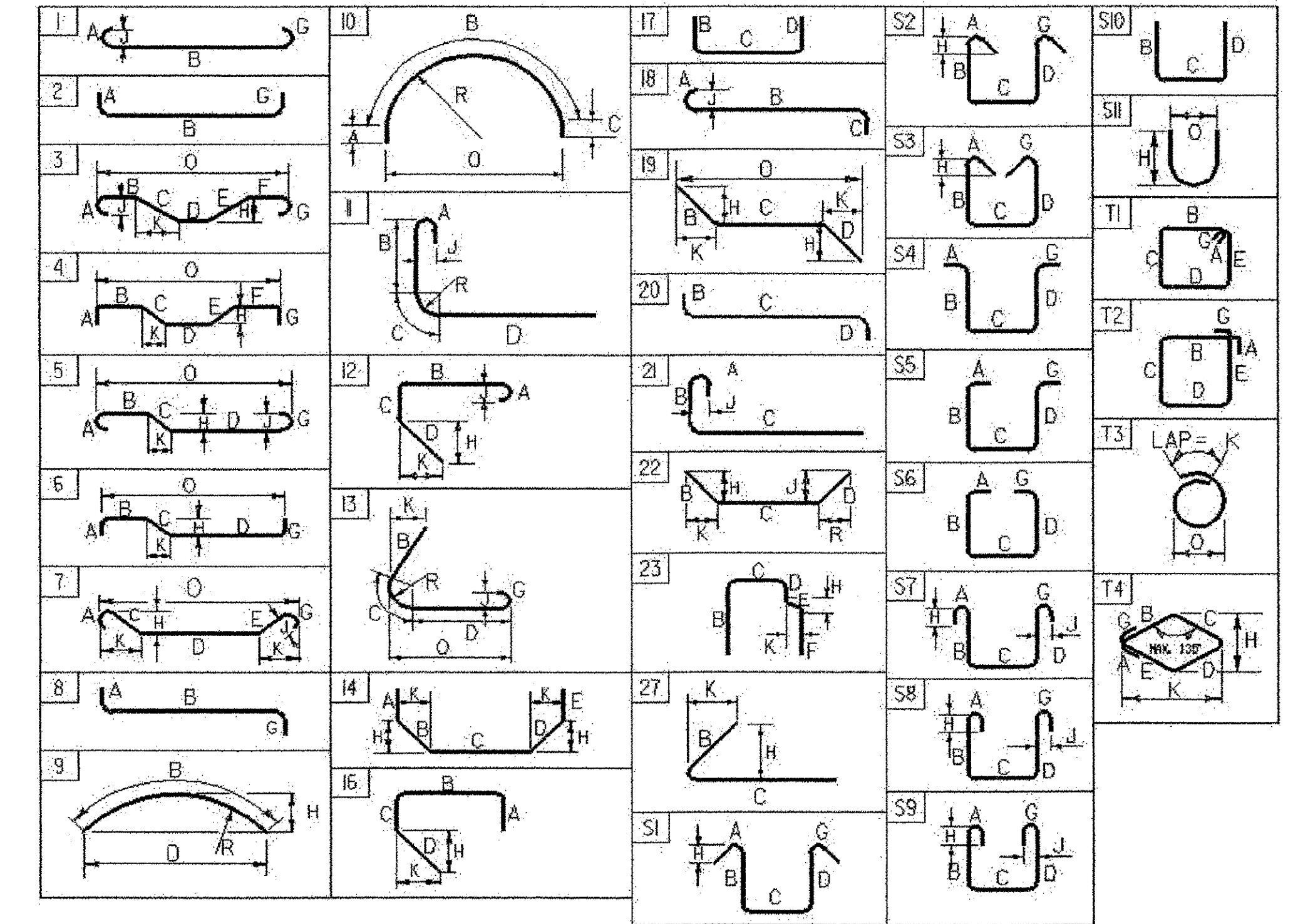


REINFORCING STEEL SCHEDULE

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
DECK																		ABUTMENT NO. 2																	
▲	292	16	10280	ES1601	STR													20	16	8780	2A1601A	STR													
*	▲	248	16	5640	ES1602	STR												20	16	5860	2A1601B	STR													
*	▲	56	16	8960	ES1603	STR												*	▲	77	16	1870	2A1602	STR											
				ES1604	NOT USED													▲	8	16	980	2A1605	STR												
																		▲	8	16	980	2A1606	STR												
																		123	16	1070	2A1603	17		150	770	150									
326	16	550	ES1605	S10			300	250	---									33	16	2090	2A1604	17		660	770	660									
61	16	1550	ES1606	S5		250	310	430	310			250						WINGWALL NO. 3																	
30	16	2390	ES1607	S5		300	750	290	750			300						▲	8	16	2200	3W1601	STR												
29	16	1290	ES1608	16		250	590	170	280					140		240		▲	8	16	4030	3W1602	17		1630	770	1630								
																		2	16	2410	3W1603	19		570	1840	---			240	510	---				
																		WINGWALL NO. 4																	
																		20	16	3060	4W1601	STR													
																		29	16	1870	4W1602	STR													
																		▲	8	16	3080	4W1605	STR												
																		30	16	1070	4W1603	17		150	770	150									
																		10	16	2090	4W1604	17		660	770	660									
																		9	16	3530	4W1606	17		1620	290	1620									
																		20	16	2140	4W1607	19		1070	1070	---			930		540	---			
																		▲	8	16	5200	4W1608	22		660	3880	660			330	330	570	570	---	
																		2	16	3120	4W1609	19		610	2510	---			40		610		---		
																		PIER																	
																		3	16	2980	P1601	T1	140	740	600	740	600								
																		3	16	1000	P1602	S10		150	700	150									
																		9	25	650	P2501	STR													

~ NOTES ~

- 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.
- 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 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

PROJECT NAME: **BROOKLINE-NEWFANE**
 PROJECT NUMBER: **BHO 1442 (25)**
 FILE NAME: 95j278\Structures\j278rss.xls PLOT DATE: 06/25/2003
 PROJECT MANAGER: R. WHITCOMB DRAWN BY: G. ROY
 DESIGNED BY: M. LOZIER CHECKED BY: M. LOZIER
 REINFORCING STEEL SCHEDULE SHEET #1 SHEET 47 OF 78