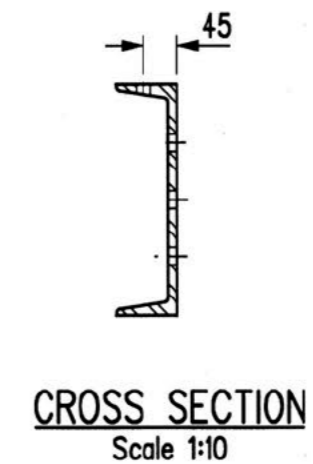
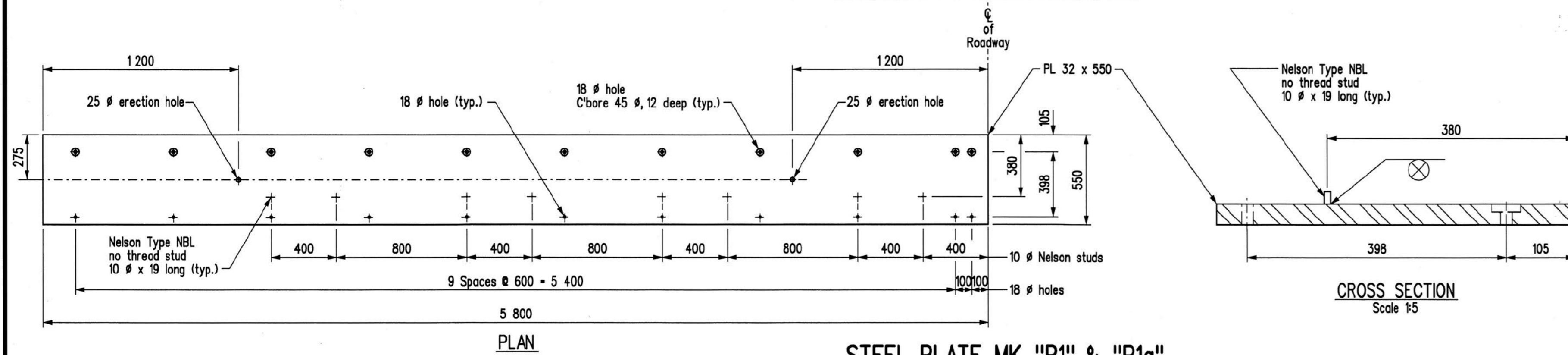


ELEVATION
STEEL CHANNEL MK "P3"



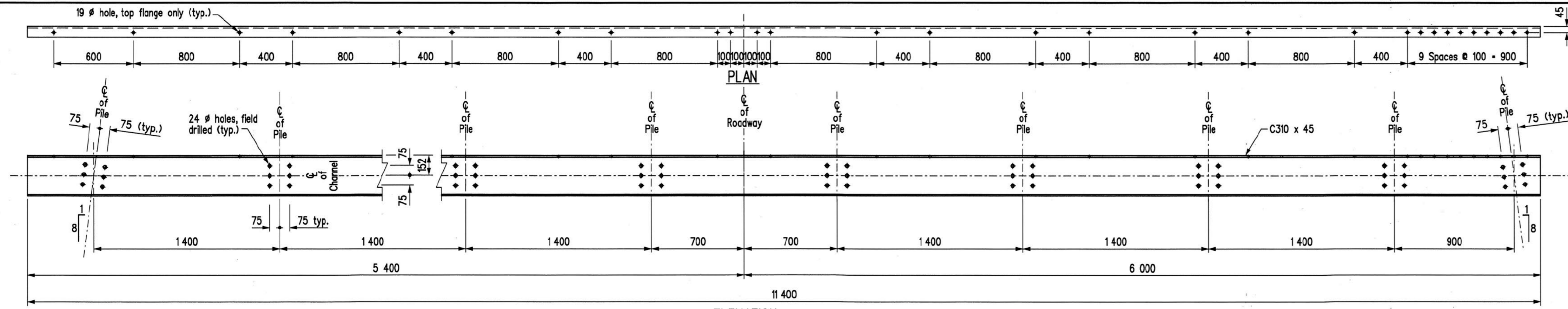
CROSS SECTION
Scale 1:10



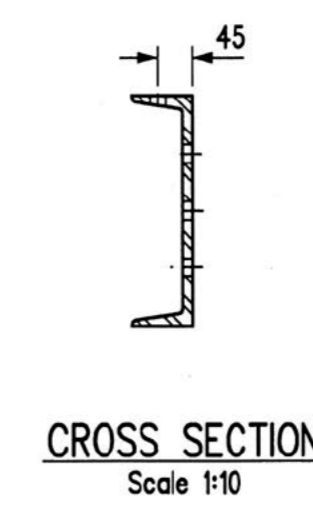
PLAN
STEEL PLATE MK "P1" & "P1a"
Plate Mk. "P1" as shown, Plate Mk. "P1a" opposite hand

CROSS SECTION
Scale 1:5

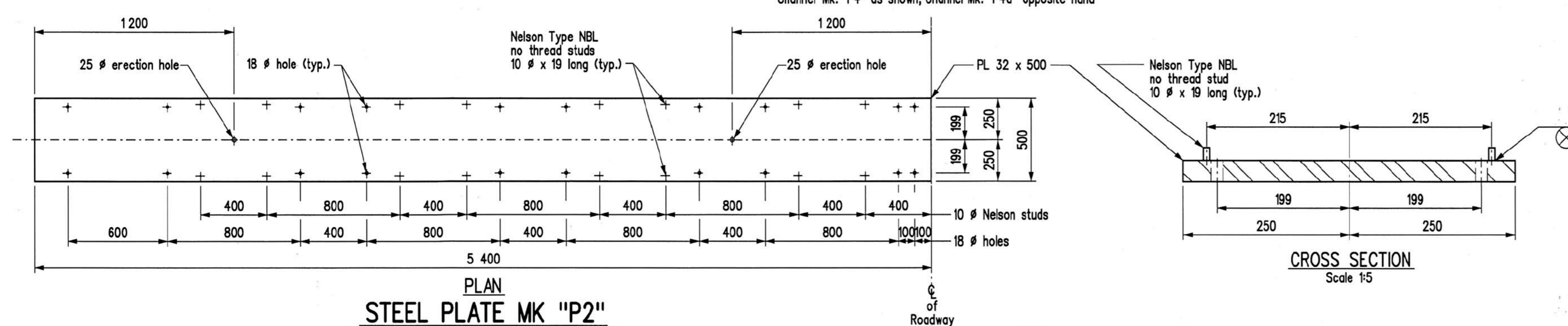
FOR ABUTMENTS



ELEVATION
STEEL CHANNEL MK "P4" & "P4a"
Channel Mk. "P4" as shown, Channel Mk. "P4a" opposite hand

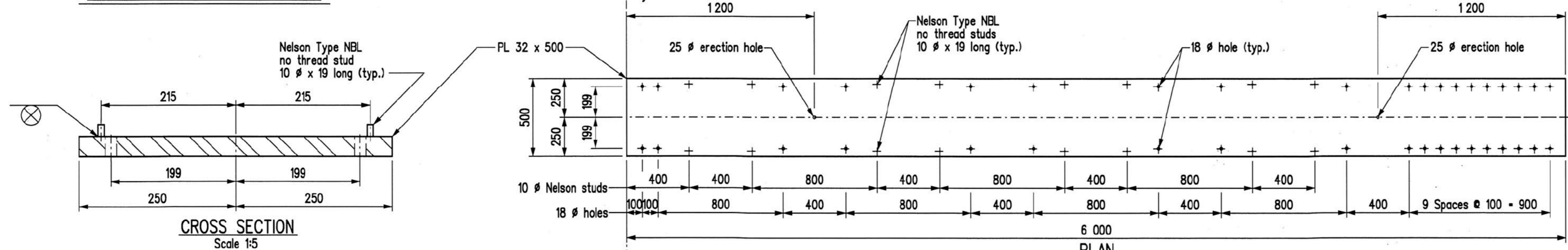


CROSS SECTION
Scale 1:10



PLAN
STEEL PLATE MK "P2"

CROSS SECTION
Scale 1:5

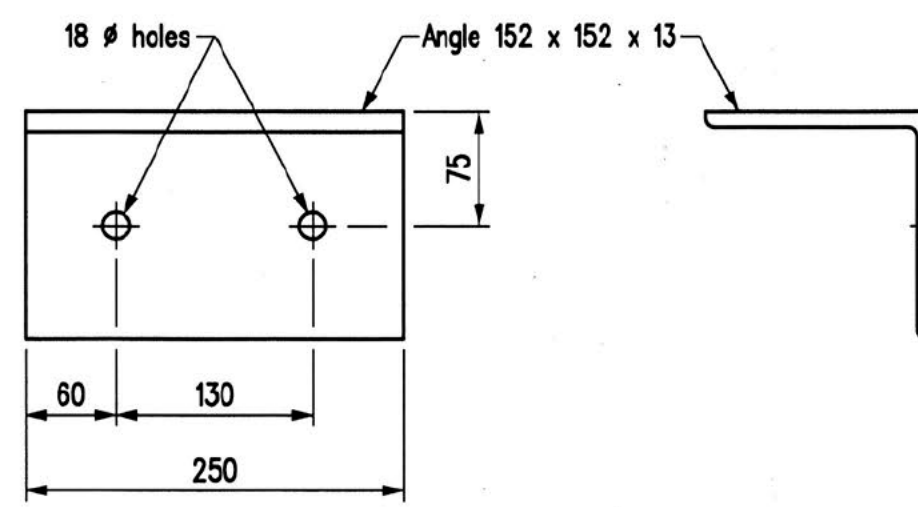


PLAN
STEEL PLATE MK "P2a"

FOR INTERMEDIATE PILE BENTS

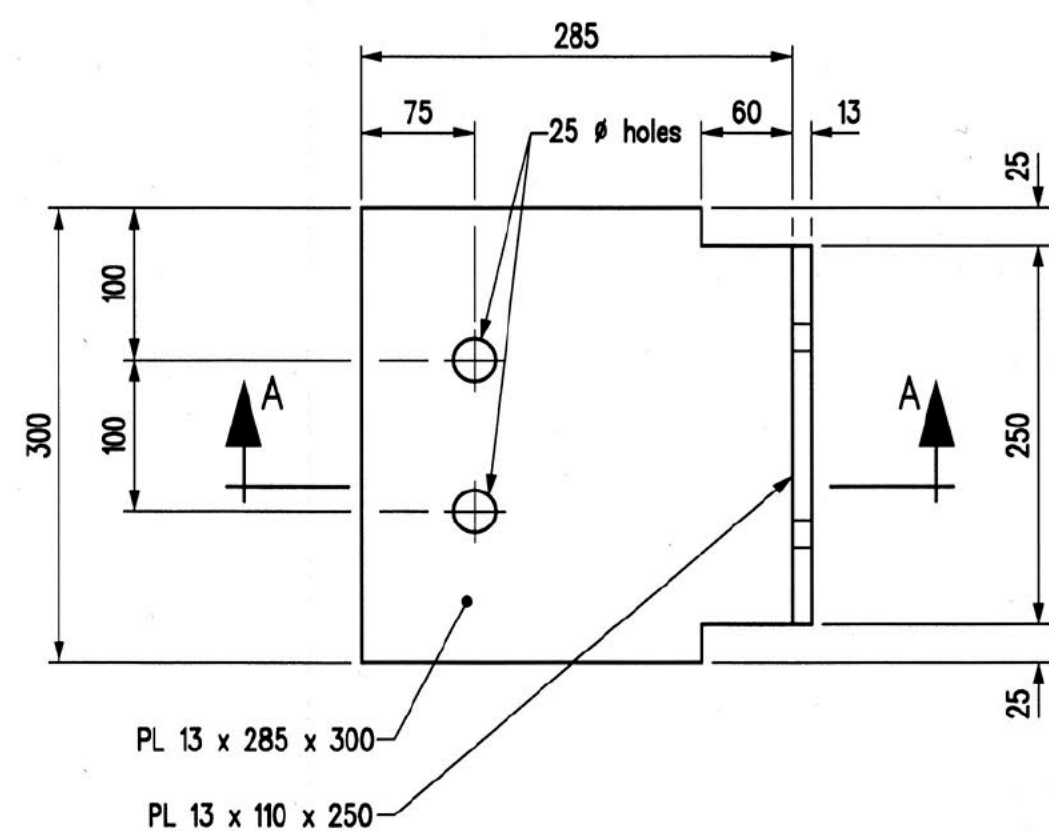
REVISIONS		STEEL PILE CAP DETAILS	
DATE	BY	DESIGN SEAL	RECORD SEAL

Original signed by Andy Pankratz Nov. 2, 2022	APPROVED BY: Original signed by John Logan Dec. 13, 2022 DIRECTOR OF BRIDGES AND HIGHWAY STRUCTURES
	DATE: _____
DESIGN BY: _____ A.H.P. CHECKED: _____ A.H.P.	SCALE: 1:20
DETAILS BY: _____ K.P. CHECKED: _____ A.H.P.	SHEET No. 1 of 2 OF AS SHOWN STD No. PPCC_PR_9.6-12m-18_SC02



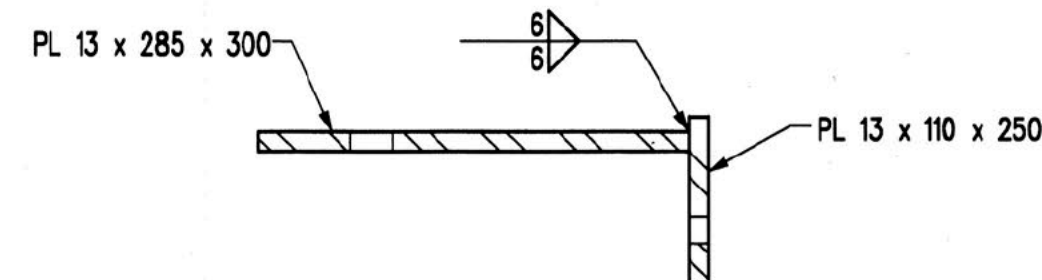
FRONT VIEW END VIEW

ANGLE Mk. "S1"

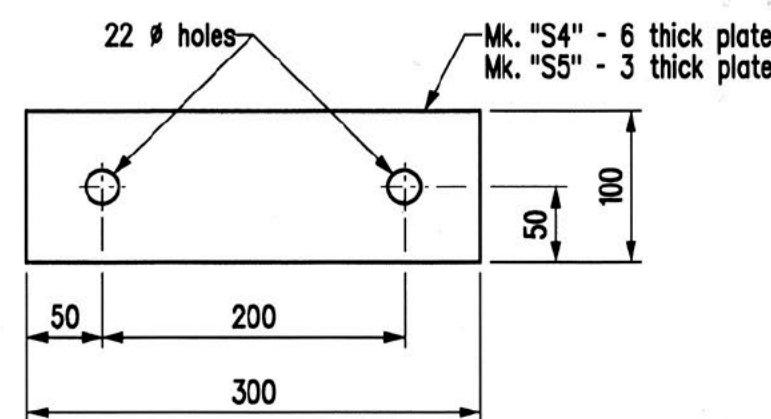


FRONT VIEW END VIEW

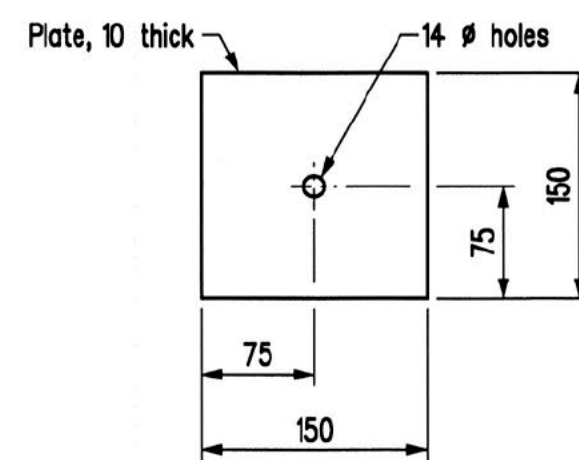
BRACKET Mk. "S2"



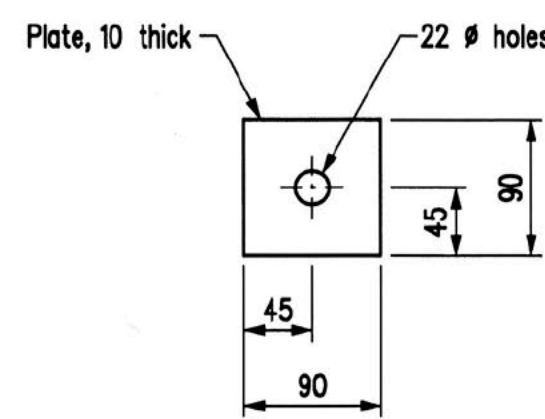
SECTION A-A



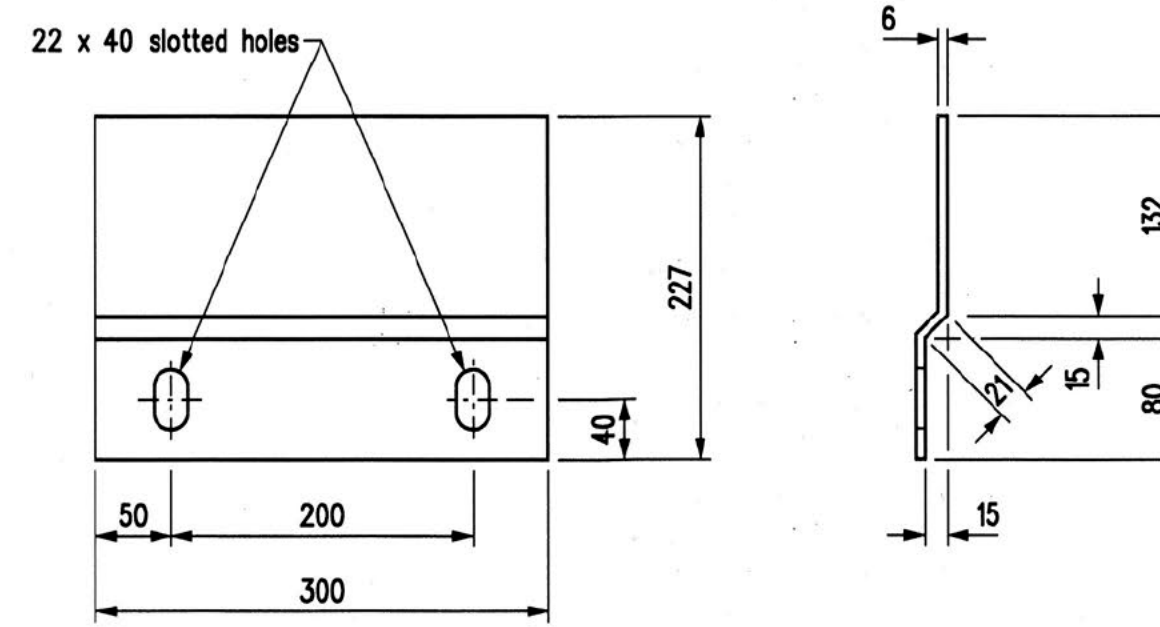
FILLER PLATES Mk. "S4" & "S5"



WASHER Mk. "A1"

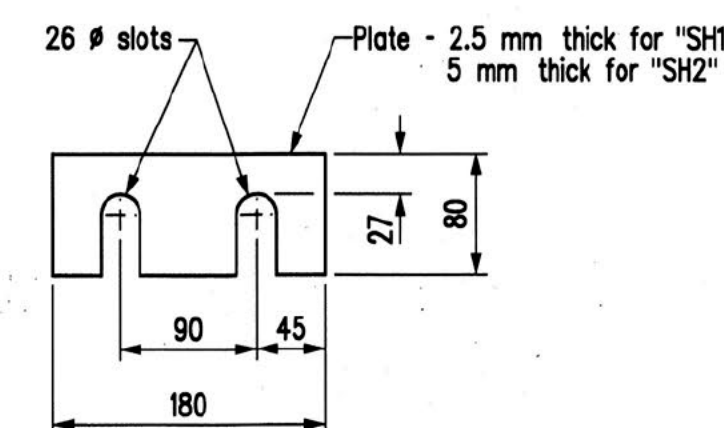


WASHER Mk. "A2"



FRONT VIEW END VIEW

PLATE Mk. "S3"



SHIM PLATES Mk. "SH1" & "SH2"

BILL OF MISCELLANEOUS METAL 9 600 ROADWAY WIDTH - 2 SPAN - 0 DEGREE SKEW										
MARK No.	No.	DESCRIPTION	CORROSION PROTECTION	SIZE	LENGTH	REMARKS	COMPONENT MASS	MASS PER UNIT	TOTAL MASS	
P1	2	Steel plate	Hot dip galvanized						1602.85	
		Each unit to be fabricated from :								
		1 - Steel plate		PL 32x550	5 800	See detail for Abutment	801.328	801.328		
		8 - Nelson Type NBL, no thread studs		10 dia.	19		0.012	0.096		
									801.424	
P1a	2	Steel plate	Hot dip galvanized						1602.85	
		Each unit to be fabricated from :								
		1 - Steel plate		PL 32x550	5 800	See detail for Abutment	801.328	801.328		
		8 - Nelson Type NBL, no thread studs		10 dia.	19		0.012	0.096		
									801.424	
P2	1	Steel plate	Hot dip galvanized						678.43	
		Each unit to be fabricated from :								
		1 - Steel plate		PL 32x500	5 400	See detail for Intermediate Bent	678.240	678.240		
		16 - Nelson Type NBL, no thread studs		10 dia.	19		0.012	0.192		
									678.432	
P2a	1	Steel plate	Hot dip galvanized						753.79	
		Each unit to be fabricated from :								
		1 - Steel plate		PL 32x500	6 000	See detail for Intermediate Bent	753.600	753.600		
		16 - Nelson Type NBL, no thread studs		10 dia.	19		0.012	0.192		
									753.792	
P3	4	Steel channel	Hot dip galvanized	C310x45	11 600	See detail for Abutment	518.520	2074.08		
P4	1	Steel channel	Hot dip galvanized	C310x45	11 400	See detail for Intermediate Bent	509.580	509.58		
P4a	1	Steel channel	Hot dip galvanized	C310x45	11 400	See detail for Intermediate Bent	509.580	509.58		
R30	102	A325 bolt assembly	Hot dip galvanized	16 dia.	89	Steel plate to channels	0.245	24.99		
R32	44	A325 bolt assembly	Hot dip galvanized	16 dia.	78	Steel plate to channels C'core holes	0.225	9.90		
R35	252	A325 bolt assembly	Hot dip galvanized	22 dia.	64	Channels to piles	0.461	116.17		
R36	48	A325 bolt assembly	Hot dip galvanized	16 dia.	64	Angles Mk. "S1" to piles & bracket Mk. "S2" to cap	0.205	9.84		
S1	20	Angle	Hot dip galvanized	L 152x152x13	280	As detailed	7.250	145.00		
S2	4	Bracket	Hot dip galvanized	As detailed		As detailed	11.228	44.90		
S3	16	Plate	Hot dip galvanized	PL 5x200		As detailed	3.223	51.57		
S4	32	Filler plate	Hot dip galvanized	PL 5x100	300	As detailed	1.413	45.22		
S5	16	Filler plate	Hot dip galvanized	PL 3x100	300	As detailed	0.707	11.31		
A1	16	Structural plate washer	Hot dip galvanized	PL 10x150	150	As detailed - One to threaded rod Mk. "TR2"	1.766	28.26		
A2	8	Structural plate washer	Hot dip galvanized	PL 10x90	90	As detailed - One to bolt Mk. "R34"	0.838	5.09		
TR1	32	Threaded rods c/w two hex. nuts	Hot dip galvanized	16 dia.	400	Glider to steel cap plate	0.940	30.08		
TR3	32	Threaded rods c/w two hex. nuts	Hot dip galvanized	16 dia.	300	Steel plates Mk. "S3" to precast panels	0.960	21.12		
146		Hardened bevel washer	Hot dip galvanized	for 16 dia. bolts		One to bolts Mk. "R30" & "R32"	0.110	16.08		
18		Standard flat washer	Stainless Steel	for 13 dia. rod		One to threaded rod Mk. "TR2"	0.210	0.16		
98		Standard flat washer	Hot dip galvanized	for 19 dia. rod		One to "TR1", two to "TR3"	0.320	1.92		
18		Structural lock washer	Stainless Steel	for 13 dia. rod		One to threaded rod Mk. "TR2"	0.210	0.16		
64		Structural lock washer	Hot dip galvanized	for 19 dia. rod		One to "TR1" & "TR3"	0.320	1.28		
262		F436 Hardened washer	Hot dip galvanized	for 22 dia. bolts		One to bolt Mk. "R35"	0.332	8.06		
48		F436 Hardened washer	Hot dip galvanized	for 16 dia. bolts		One to bolt Mk. "R36"	0.214	0.67		
R1	112	A325 bolt assembly	Hot dip galvanized	22 dia.	76	R.C. glider connection	0.499	55.89		
W1	112	Structural flat washer	Hot dip galvanized	for 22 dia. bolts		One to bolt Mk. "R1"	0.050	5.60		
		112	Pair Nord-Lock lock washers	for 22 dia. bolts		One pair to bolt Mk. "R1"	0.020	2.24		
SH1	58	Shim plate	Hot dip galvanized	PL 2.5x80	180	As detailed - use as required	0.231	12.94		
SH2	58	Shim plate	Hot dip galvanized	PL 5x80	180	As detailed - use as required	0.463	25.93		
							TOTAL MASS (kg) = 8405.51			

NOTES:
 1. All material noted in the above Bill shall be hot dip galvanized after fabrication in accordance with ASTM A123, A153 & A143 for a minimum net retention of 610 g/m² unless otherwise stated in the specified material ASTM standards. The fabricator and galvanizer shall safeguard against embrittlement using recommended practices from applicable standards.
 2. Seal all welds prior to galvanizing.
 3. Apply Galvaloy to all field welds and areas where galvanizing has been damaged.
 4. All bolts and threaded rod in the above Bill shall be Imperial thread.

REVISIONS		STEEL PILE CAP DETAILS	
DATE	BY	DESCRIPTION	
DESIGN SEAL	RECORD SEAL		
Original signed by Andy Pankratz Nov. 2, 2022			
		APPROVED BY: Original signed by John Logan Dec. 13, 2022 DIRECTOR OF BRIDGES AND HIGHWAY STRUCTURES	DATE:
DESIGN	CHECKED:	BY: A.H.P.	SCALE: 1:5
DETAILS	CHECKED:	BY: K.P.	SHEET No. 2 of 2
		CHECKED: A.H.P.	of as shown STD No. PPCC-PR-9.6-12m_IB-SC02