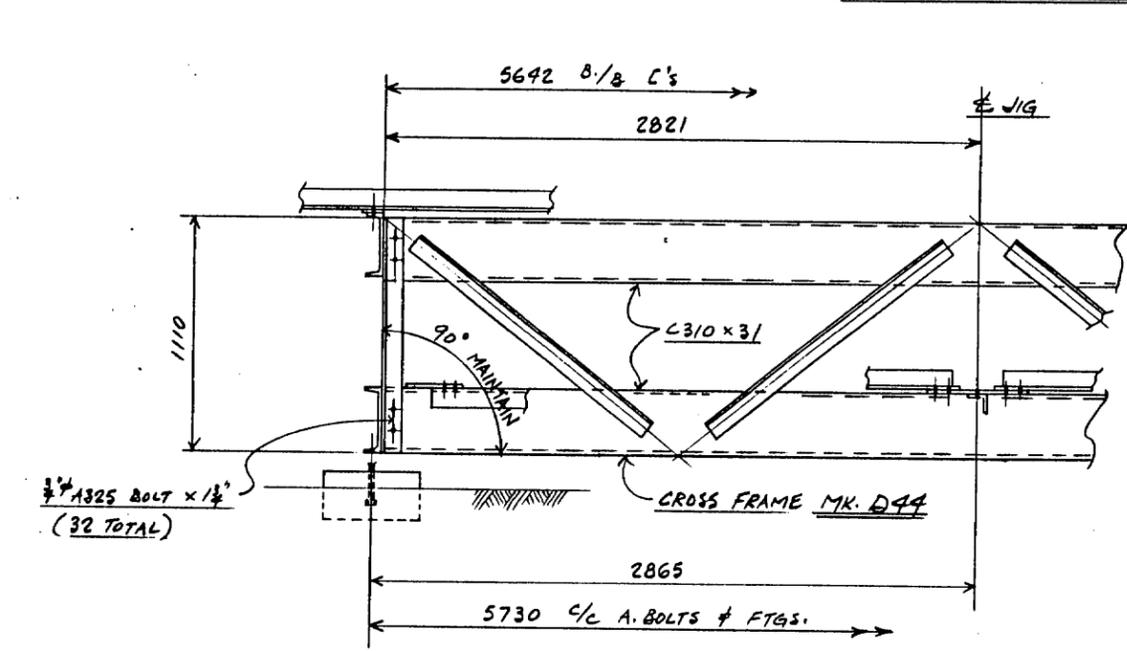
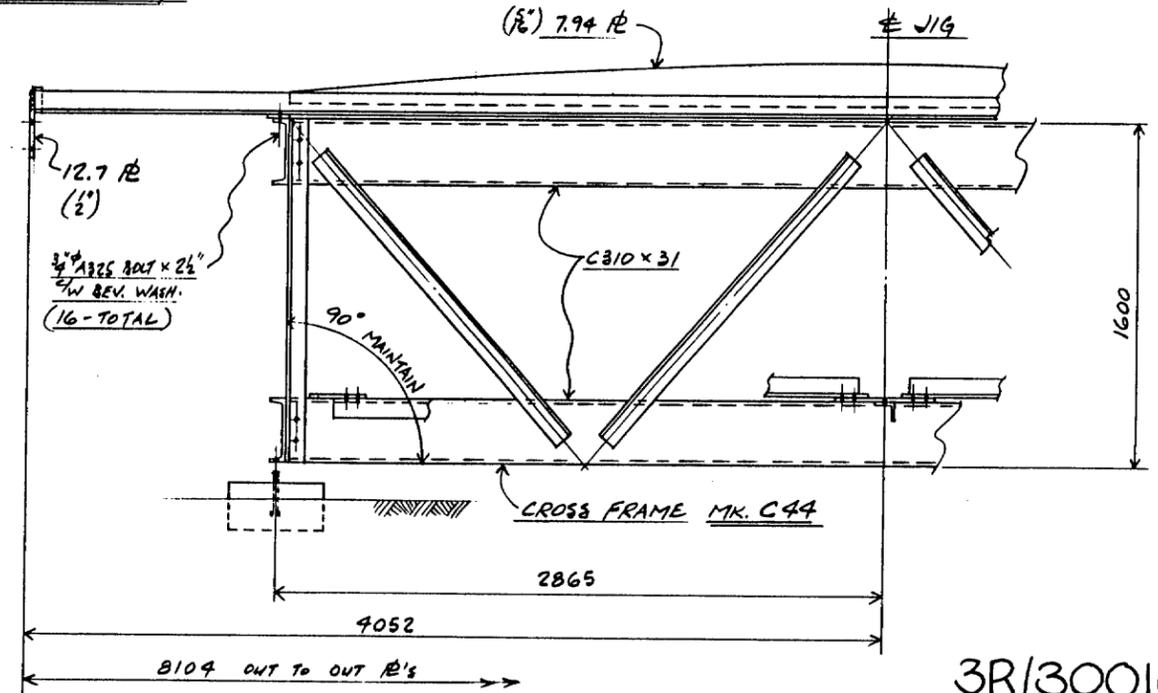


ELEVATION ON SHUTTER FIELD JIG



SECTION 'A-A'



SECTION 'B-B'

- GENERAL NOTES:**
- 1) WORK THIS DWG WITH DWG 446
 - 2) FOR DETAILS SEE DWGS. 44c, 44d, 44f, 44g & 44h.
 - 3) FOR FIELD ASSEMBLY OF SHUTTER SECTIONS SEE DWG. SERIES E11

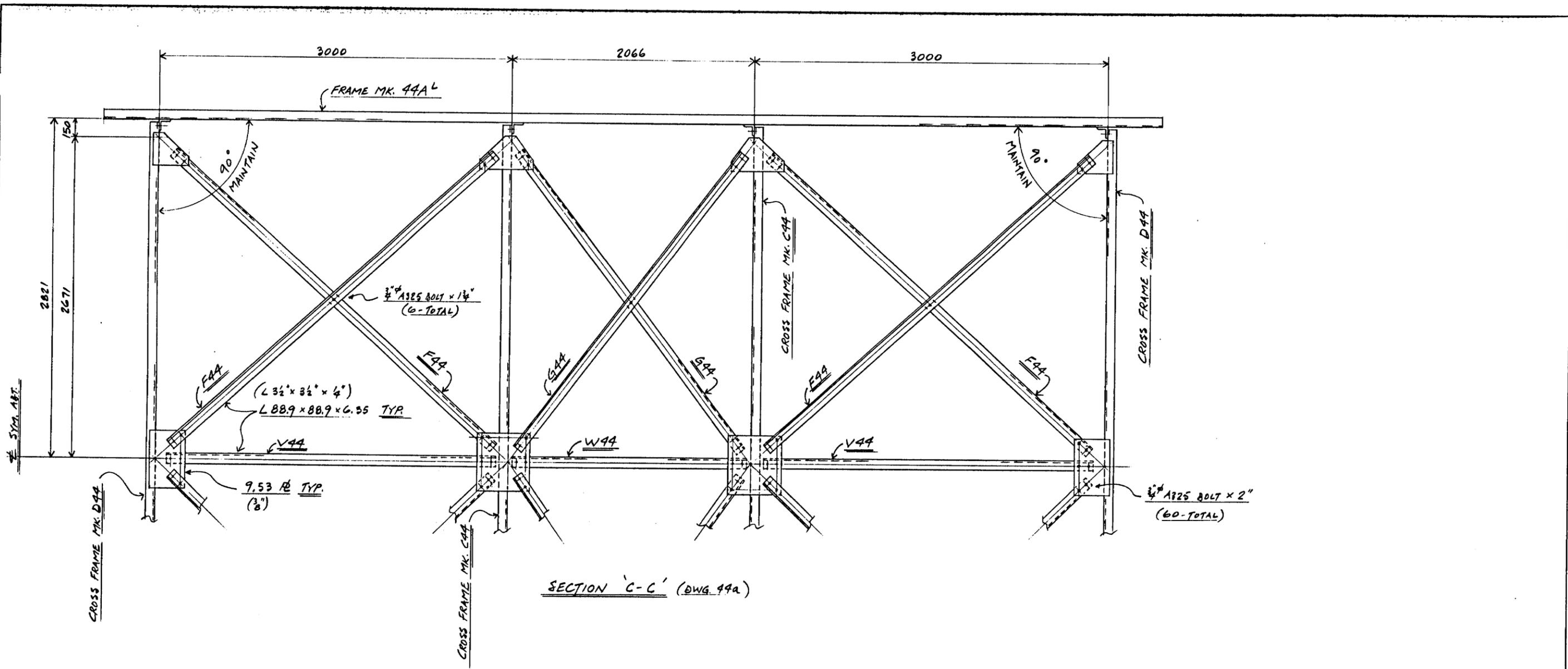
3R/3001005

BRITAIN	MATERIAL		No. BY DATE REVISION	
	SURF. PREP. & PAINT		DETAILS SHUTTER FIELD JIG	
	OPEN HOLES		FOR 4.2" TELESCOPE DOME LA PALMA	
DRAWN G.V.A.	DATE JUNE/84	CHECKED	DATE	DRAWING No. 1420-44a
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT		INS. / S. / O. / M. / T. / P. / BH. / DP. / AS. / PA. / ER.		

p-abcdefghijklmnpstvw

m-abcdefghijklmnpstvw

s-abcdefghijklmnpstvw



SECTION 'C-C' (DWG. 44a)

GENERAL NOTES:

- 1) WORK THIS DWG WITH DWG 44a

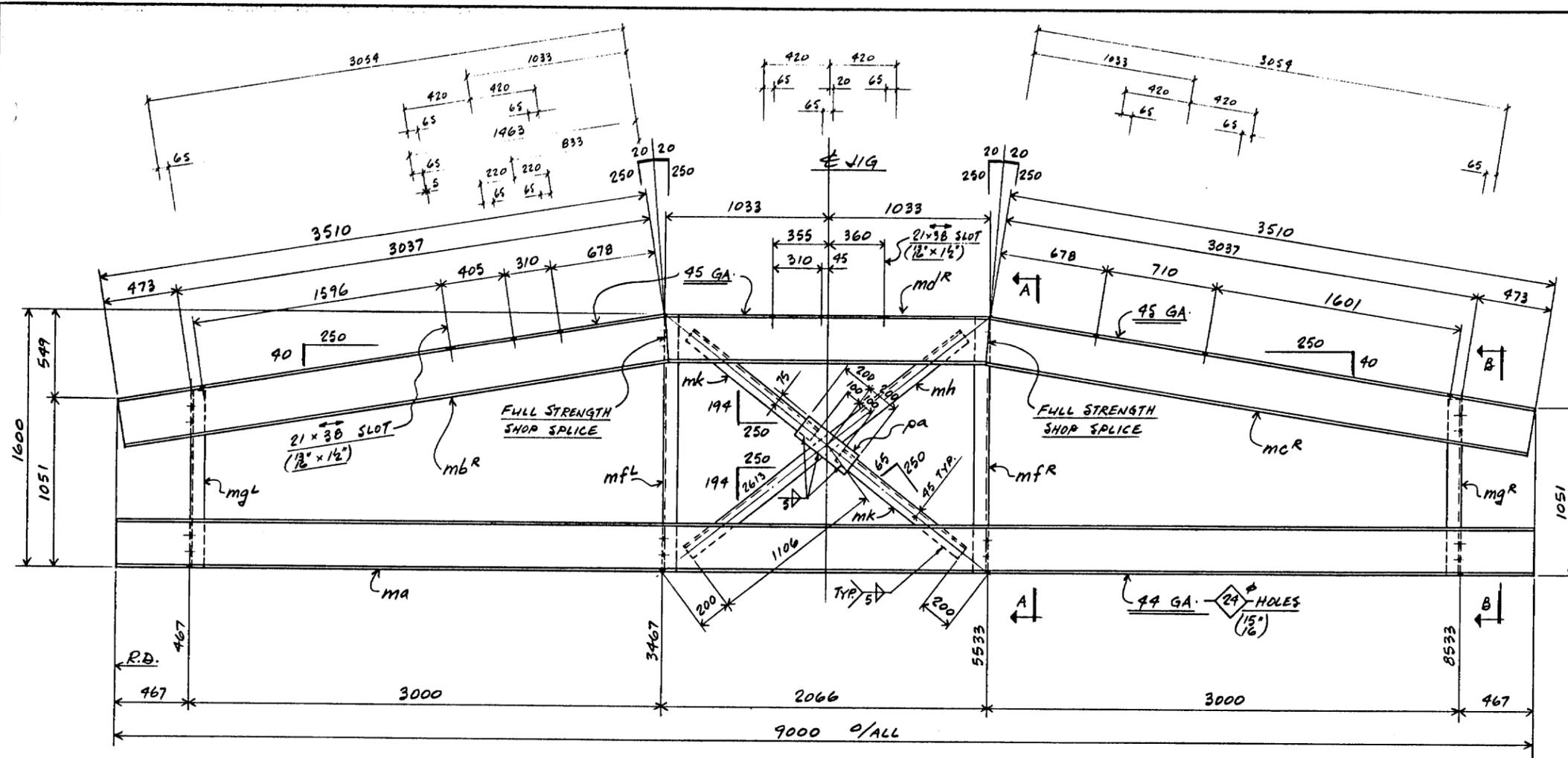
3R/3001006

 BRITAIN	MATERIAL		No. BY DATE REVISION	
	SURF. PREP. & PAINT		DETAILS SHUTTER FIELD JIG	
	OPEN HOLES		FOR 4.2m TELESCOPE DOME	
	DRAWN DATE CHECKED DATE DRAWING No.	G.V.A. JUNE/89		
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT		INS F S O M T P S I L O P A S PA ED		

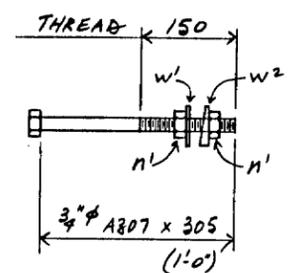
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m-abcdefghijklmnpstvw

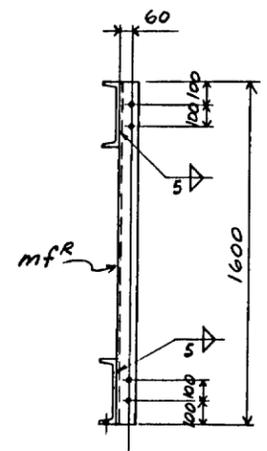
s-abcdefghijklmnpstvw



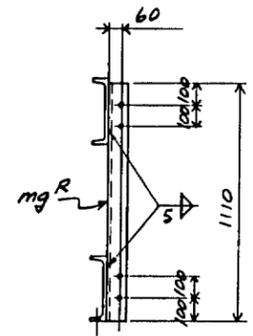
ONE REQ'D. ~ SIDE FRAME ~ MK. A44R (AS SHOWN)
 ONE REQ'D. ~ SIDE FRAME ~ MK. A44L (LEFT OF SHOWN)



B-REQ'D. ~ ANCHOR BOLT ~ MK. B44



SECTION 'A-A'



SECTION 'B-B'

MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

LINE	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	W/WT	LINE	WEIGHT
1										
2						ONE REQ'D. ~ MK. A44R				
3						ONE REQ'D. ~ MK. A44L				
4										
5	MA	2	C	310 x 31	9000 (C12 x 20.7)		44W	11	1	
6	MBR	2			3510		R.C. 1E.	OR A36	2	
7	MC	2			3510				2	
8	MDR	2			2066		R.C. 2E.		3	
9										
10	MFR	4	L	90 x 90 x 6	1600 (L35 x 3 1/2 x 4")				6	
11	MGR	4			1110				7	
12	MH	2			2210				7	
13	MK	4			1006				7	
14										
15	PA	2	R	10 x 150	900					
16										
17										
18										
19						B-REQ'D. ~ MK. B44				
20										
21						B BOLT 3/4\"/>				

GENERAL NOTES:

1) FOR FIELD ASSEMBLY SEE DWG. 44A

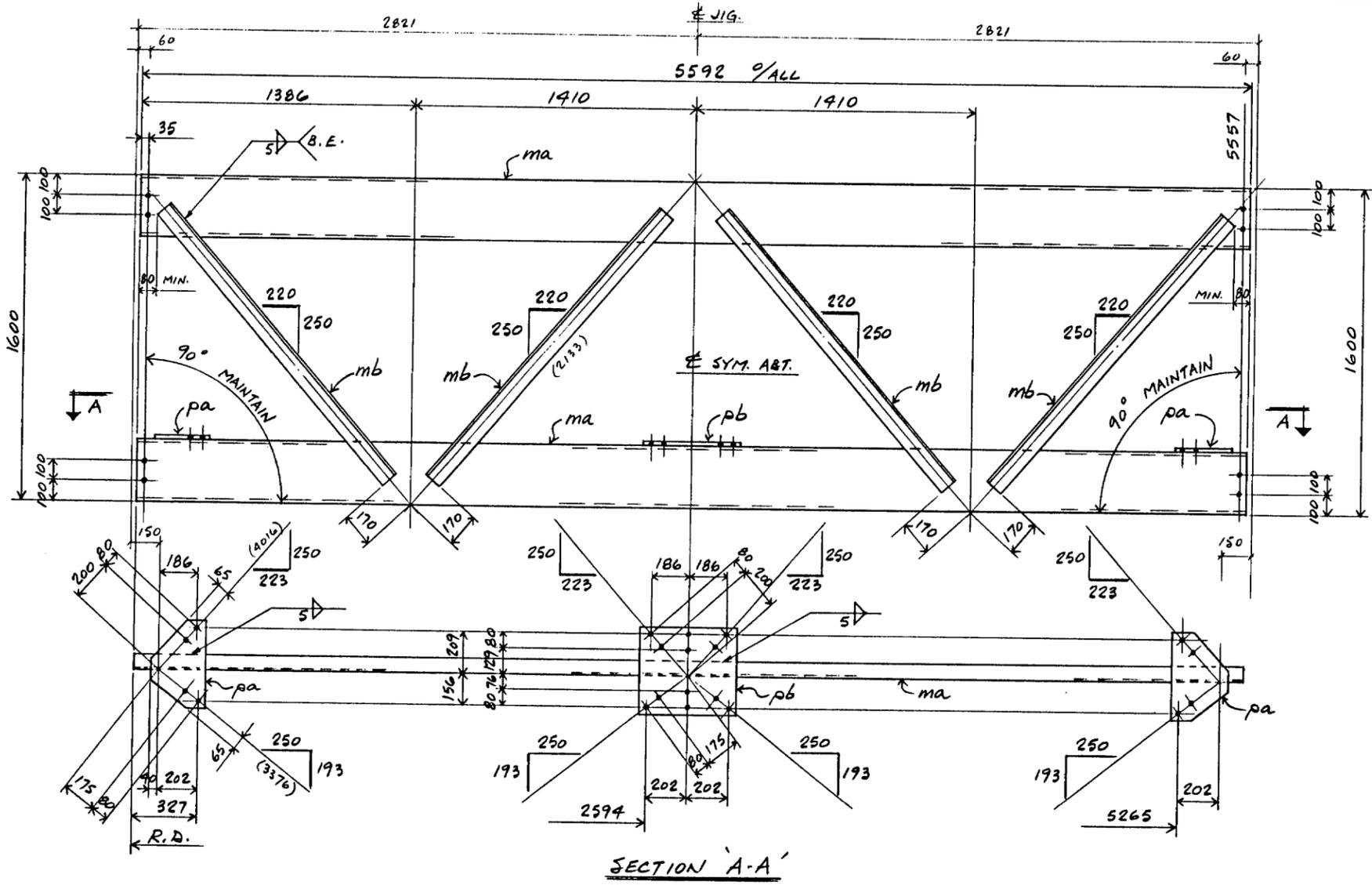
3R/3001007

	MATERIAL	G4021 (44W) OR A36	DETAILS	SHUTTER FIELD VIG
	SURF. PREP.	REMOVE PAINT		SIDE FRAMES
	OPEN HOLES	NO PAINT		FOR 4.2M TELESCOPE DOME
				LA BALMA
DRAWN	DATE	CHECKED	DATE	DRAWING No.
G.V.A.	JUNE/68			1420-44C
BRITAIN STEEL LTD. 401 GALTER AVENUE, NEW WESTMINSTER, B.C.				

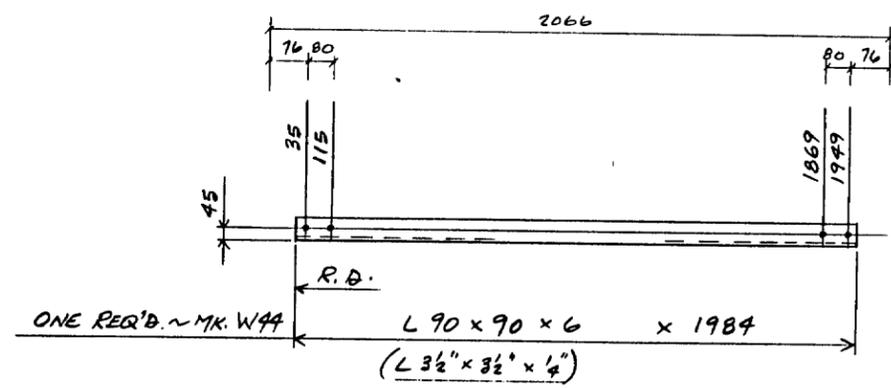
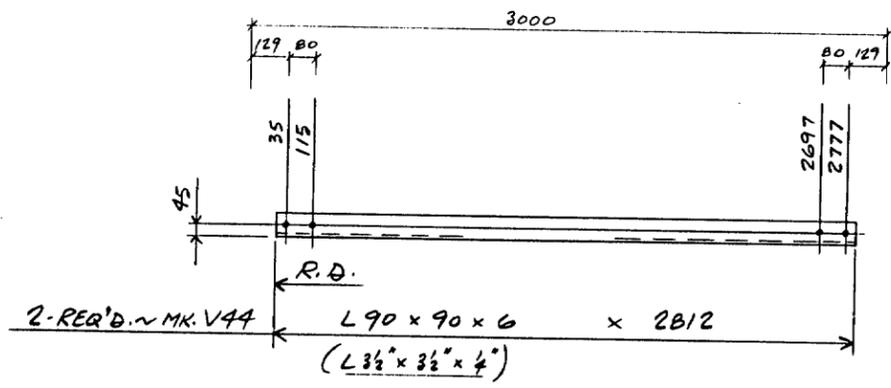
p-abcdefghijklmnpstvw y

m-abcdefghijklmnpstvw y

s-abcdefghijklmnpstvw y



2-REQ'D. ~ CROSS FRAME ~ MK. C44



MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

LINE	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL TYPE	UNIT	WEIGHT
1									
2		2	REQ'D	~ MK. C44					
4	ma	4	C	90 x 31	5592	(C12 x 207) C.S. 2E. 44W	114		
5	mb	8	L	90 x 90 x 6	1750	(L 3 1/2 x 3 1/2 x 1/4)	OR A36	116	
6	pa	4	B	10 x 280	435				
7	pb	2	B	10 x 435	474				
12		2	REQ'D	~ MK. V44					
14		2	L	90 x 90 x 6	2812	(L 3 1/2 x 3 1/2 x 1/4)		118	
18		ONE	REQ'D	~ MK. W44					
20		1	L	90 x 90 x 6	1984	(L 3 1/2 x 3 1/2 x 1/4)		117	

GENERAL NOTES:

1.) FOR FIELD ASSEMBLY SEE DWG 44a & 44b.

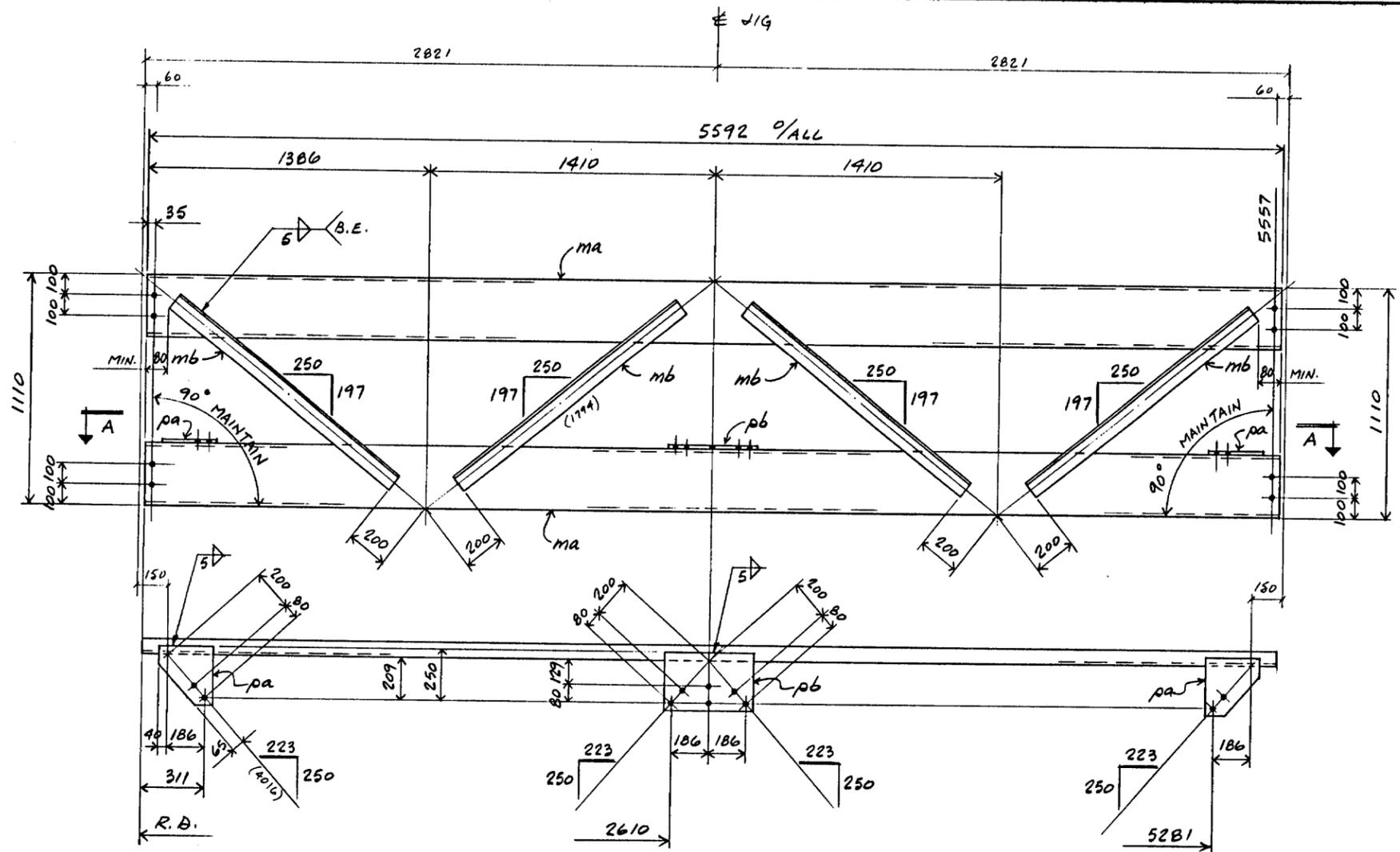
3R/3001008

	MATERIAL	G40 21 (44W) OR A36	DETAILS	SHUTTER FIELD JIG.
	SURF. PREP. & PAINT	REMOVE LOOSE SCALE		CROSS FRAMES & BRACING
	OPEN HOLES	NO PAINT		FOR 9.2 M TELESCOPE DOME
				LA PALMA
DRAWN	DATE	CHECKED	DATE	DRAWING No.
G.V.A.	JUNE/89			1420-44d
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT				

p-abcdefghijklmnpstvw

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s-abcdefghijklmnpstvw



SECTION 'A-A'

2-REQ'D. ~ CROSS FRAME ~ MK. D44

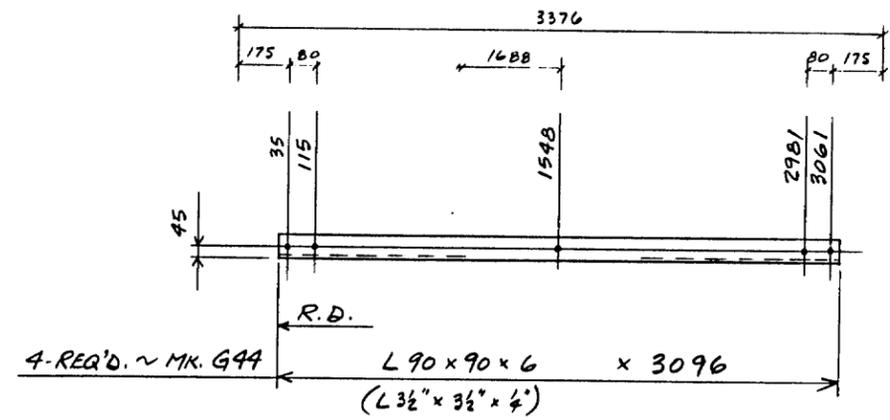
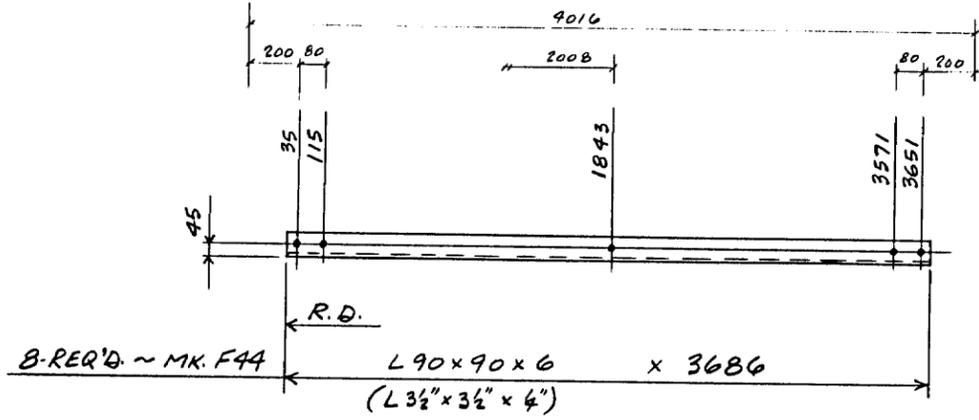
MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

LINE NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	UNIT	WEIGHT
1									
2									
3									
4	ma	4	C	310x31	5592	(C12x20.7) C.S. 2E. 44W		11.4	
5	mb	8	L	90x90x6	1380	(L3 1/2"x3 1/2"x4")	OR A36	11.6	
6	pa	4	R	10x260	285				
7	pb	2	R	10x285	490				
8									
9									
10									
11									
12									
13	B	L		90x90x6	3686	(L3 1/2"x3 1/2"x4")		11.9	
14									
15									
16									
17									
18									
19									
20	4	L		90x90x6	3096	(L3 1/2"x3 1/2"x4")		11.0	
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GENERAL NOTES:

1) FOR FIELD ASSEMBLY SEE DWG. 44a & 44b.



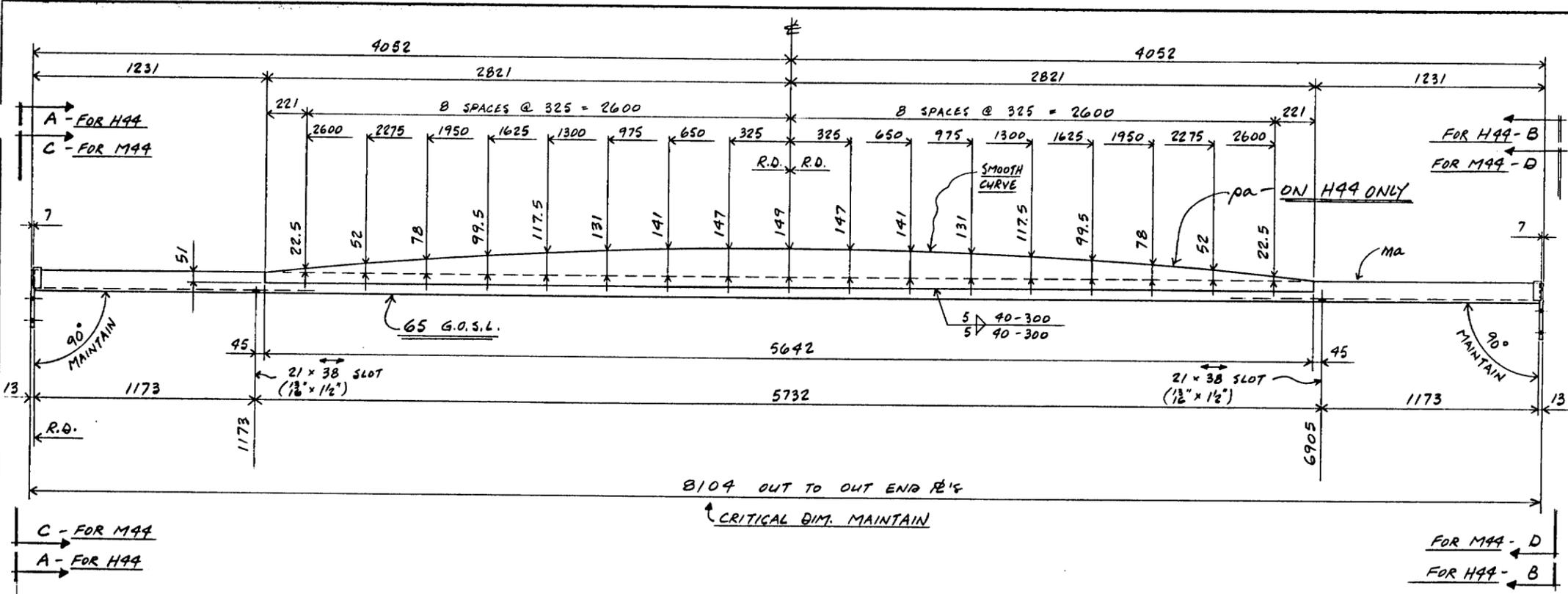
3R/3001009

	MATERIAL	G4021 (44W) OR A36	NO. BY DATE	REVISION
	SURF. PREP.	REMOVE PAINT	DETAILS SHUTTER FIELD JIG CROSS FRAMES & BRACING	
	PAINT	SCALE	FOR 4.2M TELESCOPE DOME LA PALMA	
	OPEN HOLES	1 1/2" (21)		
DRAWN		G.V.A	DATE	CHECKED
DATE		JUNE/84	DATE	
DRAWING NO.		1420-44F		
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT		INS / F / S / O / M / T / P / SH / DP / AS / PA / ER		

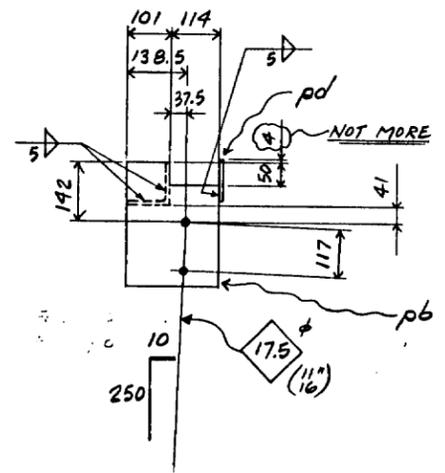
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m-abcdefghijklmnpstvw y

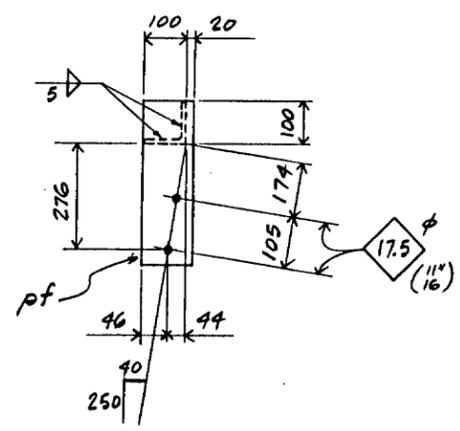
s-abcdefghijklmnpstvw y



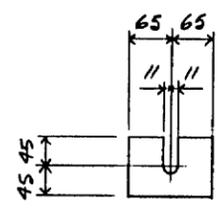
6-REQ'D. ~ CROSS TIE ~ MK. H94
 2-REQ'D. ~ CROSS TIE ~ MK. M94



SECTION 'A-A' (AS SHOWN)
 SECTION 'B-B' (LEFT OF SHOWN)



SECTION 'C-C' (AS SHOWN)
 SECTION 'D-D' (LEFT OF SHOWN)



20 REQ'D. ~ SHIM ~ MK. N94
 16 REQ'D. ~ | ~ MK. P94
 16 REQ'D. ~ | ~ MK. S94

MATERIAL BILL						BRITAIN STEEL LTD.		CONTRACT 1920	
LINE NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	UNIT	WEIGHT
1									
2									
3									
4	ma	6	L	102x102x8	8078	(4x4x8) C.S. 2E	44W	11/12	
5	pa	6	R	200x8 (3/8)	5642	CUT TO PROFILE	A36		
6	pb	12	R	215x13 (1/2)	295				
7	pd	12	R	40x6 (1/4)	95				
8									
9									
10									
11									
12									
13	ma	2							
14	pf	4	R	120x13 (1/2)	410				
15									
16									
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21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31	N94	20	R	90x6.35 (1/4)	130	SHIMS			
32	P94	16		90x3.18 (1/8)	130				
33	S94	16		90x1.59 (1/16)	130				
34									
35									
36									
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GENERAL NOTES:
 1) FOR FIELD ASSEMBLY SEE DWG'S. E11A, E11B, E11C, E11D & E11F.

3R/3001010

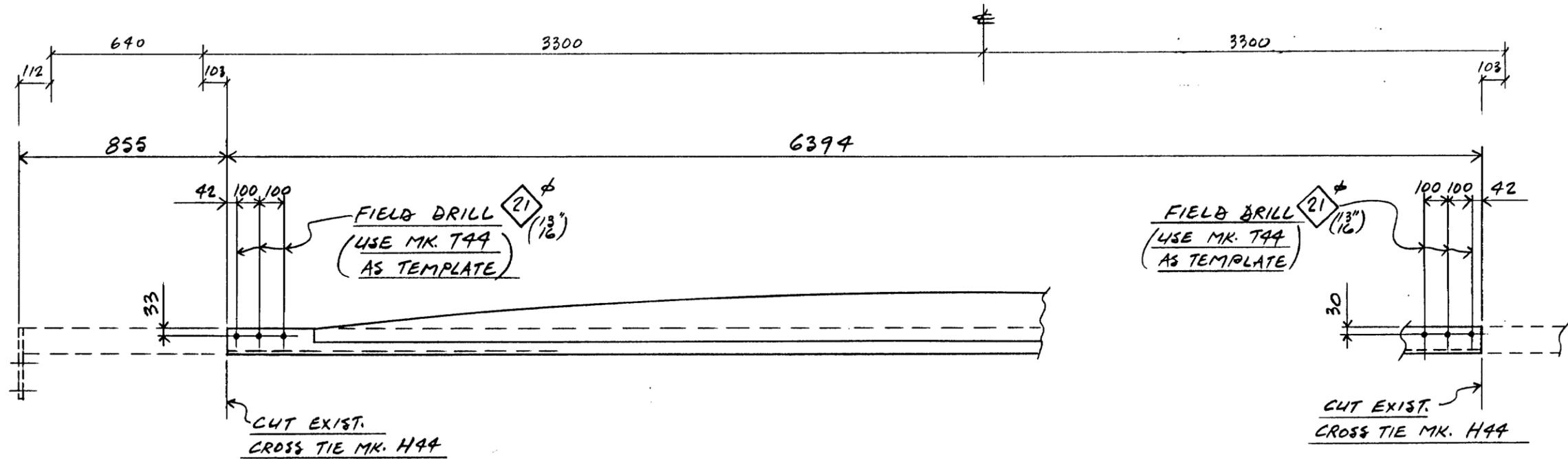
	MATERIAL	G4021 (44W) OR A36	DETAILS	SHUTTER FIELD WIG
	BURF. PREP. & PAINT	REMOVE LOOSE SCALE		CROSS TIES & SHIMS
	OPEN HOLES	NO PAINT		FOR 9.2" TELESCOPE DOME
				LA PALMA
DRAWN	G.V.A	DATE	JUNE/89	DRAWING No.
CHECKED		DATE		1920-449
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT				

p-abcdefghijklmnpstvw

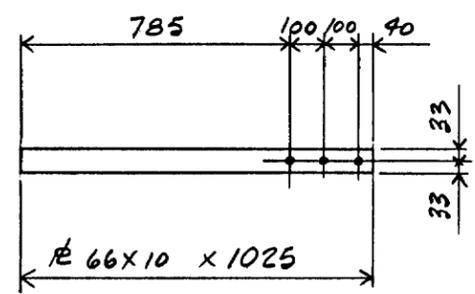
m-abcdefghijklmnpstvw

s-abcdefghijklmnpstvw

INS / P / B / O / M / T / P / SH / DP / AS / PA / ER



FIELD WORK REQ'D. TO 2 CROSS TIES MK. H44 FOR FIELD SPICE #1 & #2.



4 REQ'D. ~ MK. T44

NOTE!

FIELD WORK TO MK. H44 TO BE DONE AFTER SHUTTER SECTIONS HAVE BEEN ASSEMBLED

GENERAL NOTES:

1.) FOR FIELD ASSEMBLY SEE DWG. E11f

3R/3001011

LINE	SHIP No. REQD.	FAB MARK	DESCRIPTION	MAT'L	LENGTH	R.B.	LINE	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS
									SPLICING	ALLOWED	
7											
6											
5											
4											
3											
2	4	T44	Ø 66 x 10 (30")	44W OR A36	1025						
1											

BRITAIN

MATERIAL G40.21 (44W) OR A36

SURF. PREP. & PAINT REMOVE LOOSE SCALE / NO PAINT

OPEN HOLES AS NOTED

DRAWN G.V.A. DATE JUNE/81 CHECKED DATE

DETAILS OF SHUTTER FIELD JIG FIELD WORK & MISC. FOR 4.2^m TELESCOPE DOME LA BALMA

DRAWING No. 1420-44h

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

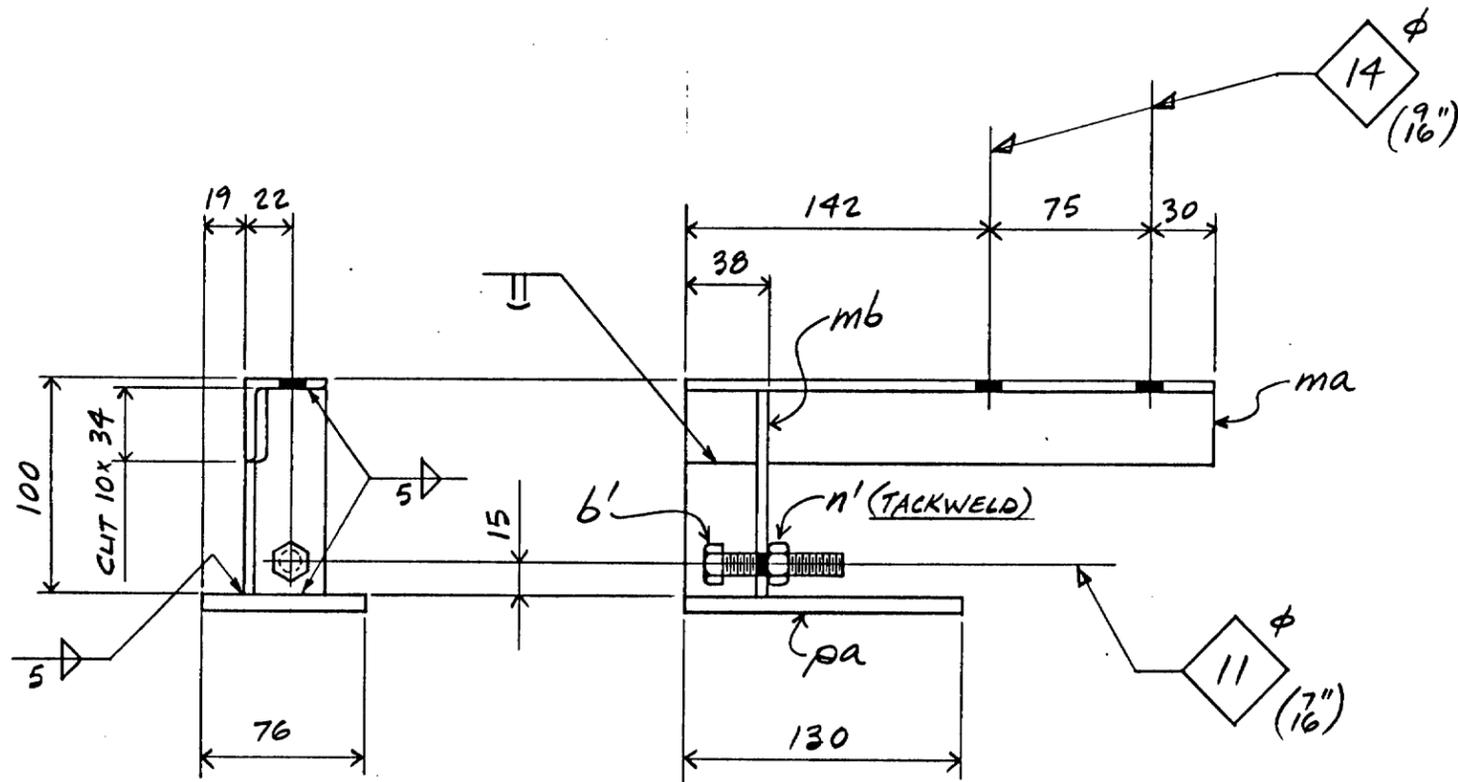
SHOP DEPARTMENT

INS / F / S / O / M / T / P / SH / DP / AS / PA / ER

No. PRINTS

p - a b c d f g h k m n p s t v w y

m - a b c d f g h k m n p s t v w y



48-REQ'D. ~ SUPPORT BRACKET ~ MK. A46

GENERAL NOTES:

1.) FOR FIELD ASSEMBLY SEE DWG. E9a

3R/3001012

LINE	SHIP	FAB	MARK	DESCRIPTION	MAT'L	LENGTH	R.B.	LINE	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS
	No. REQ'D.									SPLICING	ALLOWED	
7	48	n'		3/8" HVY. HEX. NUT								
6	48	b'		3/8" HEX. HD. CAP SCREW		24"			FULL THREAD			
5	48	pa		1/2" 76 x 6.35 (4")	A36	130						
4	48	mb		L 38 x 38 x 4.76	A36	95			L 1 1/2" x 1 1/2" x 3/16"			
3	48	ma		L 38 x 38 x 4.76	A36	247			L 1 1/2" x 1 1/2" x 3/16"			
2												
1				48-REQ'D. ~ MK. A46								



MATERIAL ~~XXXXXXXXXX~~ A36
 SURF. PREP. ~~XXXXXX~~ / SEE MEMO
 PAINT ~~XXXXXX~~
 OPEN HOLES ~~XXXXXX~~ AS NOTED

DETAILS OF SUPPORT BRACKET FOR ENCODER CHAIN
 FOR 4.2M TELESCOPE DOME LA PALMA

DRAWN DATE CHECKED DATE
 G.V.A. MAY/84

DRAWING No. 1420-46a

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

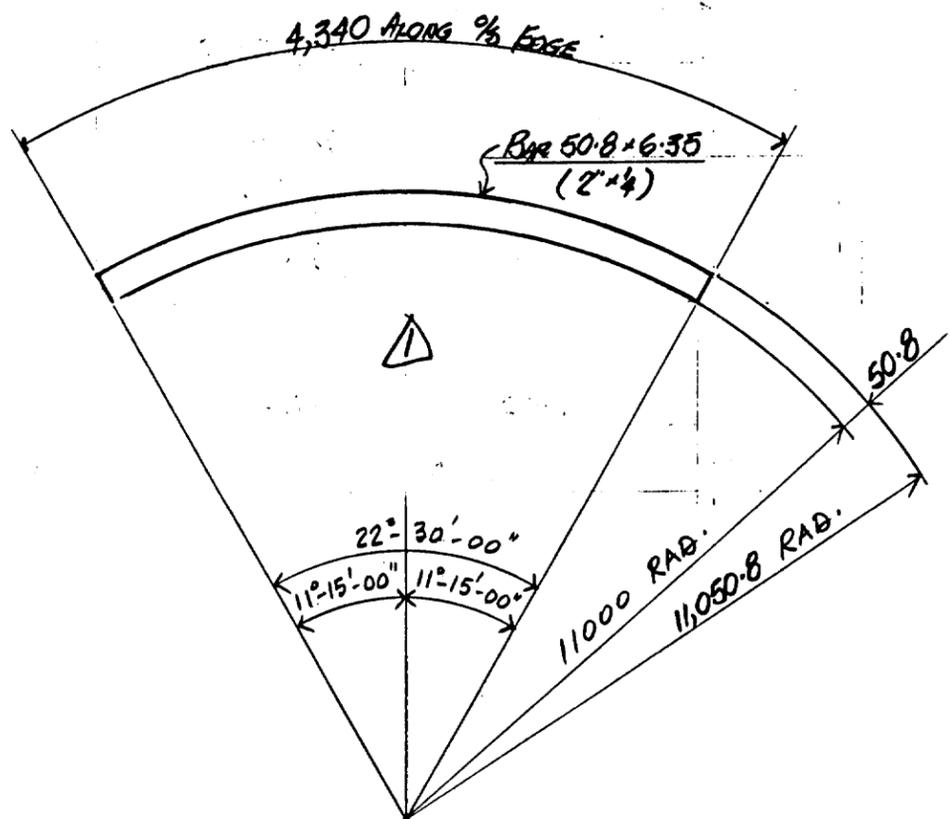
p - a b c d f g h k m n p s t v w y

m - a b c d f g h k m n p s t v w y

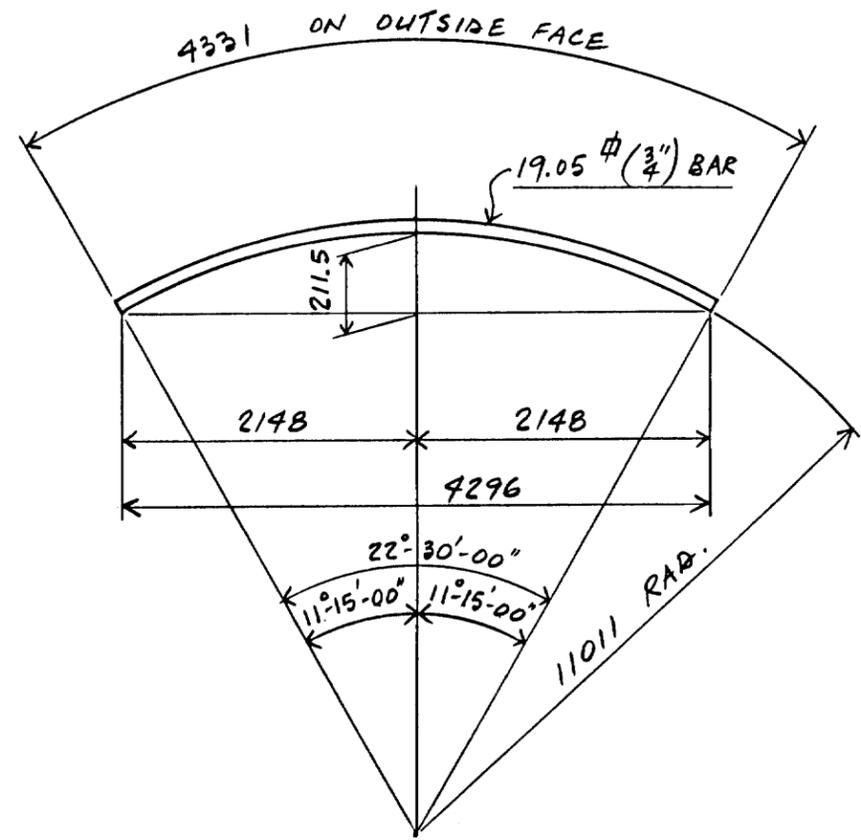
SHOP DEPARTMENT

INS / F / S / O / M / T / P / SH / DP / AS / PA / ER

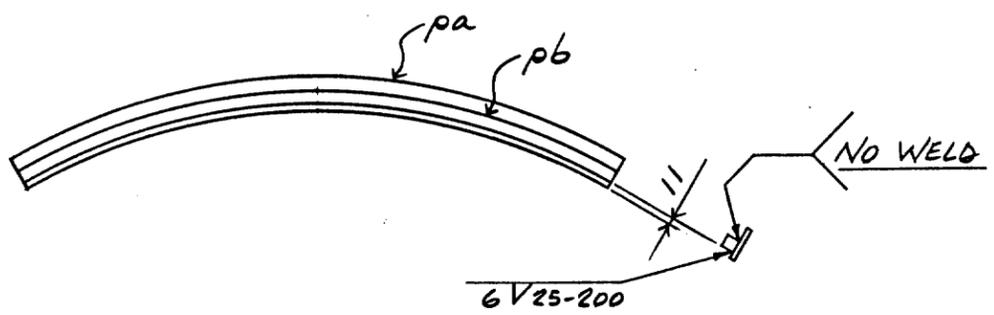
No. PRINTS



16-REQ'D. ~ MOUNTING B ~ pa



16-REQ'D. ~ GUIDE BAR ~ pb



16-REQ'D. ~ ENCODING CHAIN MOUNTING ASSEMBLY ~ MK. B46

GENERAL NOTES:

1) FOR FIELD ASSEMBLY SEE DWG. E9a

3R/3001013

BR 12/61 Misc REVISIONS

LINE	SHIP No. REQD.	FAB MARK	DESCRIPTION	MAT'L	LENGTH	P.B.	LINE	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS
									SPLICING ALLOWED		
7			(4' x 8')								
8	12	C46	BAR 101.6 x 8.18	A36	6.096			PLAIN MAT'L.			
4	16	pb	BAR 19.05 ϕ (3/4)	A36	4.331			ROLLED			
3	16	pa	BAR 50.8 x 6.35 (2' x 4')	A	4.340			ROLLED			
1			16-REQ'D. ~ MK. B46								



MATERIAL: _____
 SURF. PREP. & PAINT: _____ / SEE MEMO
 OPEN HOLES: _____
 DRAWN: G.V.A. DATE: MAY/84
 CHECKED: _____ DATE: _____

DETAILS OF ENCODING CHAIN MOUNTING ASSEMBLY
 FOR 4.2" TELESCOPE DOME LA PALMA
 DRAWING No. 1420-466
 REV. Δ

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

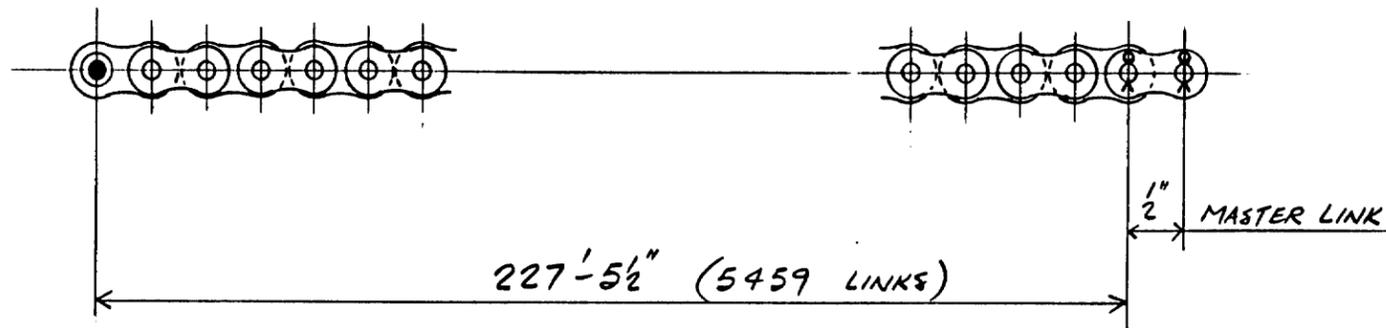
p - a b c d f g h k m n p s t v w y

m - a b c d f g h k m n p s t v w y

SHOP DEPARTMENT

INS / F / S / O / M / T / P / SH / DP / AS / PA / ER

No. PRINTS



ONE REQ'D. ~ ENCODING CHAIN ~ MK. D46

1/2" PITCH STD. ROLLER CHAIN
SINGLE STRAND RIVETED
BROWNING NO. 40 OR EQUIVALENT

GENERAL NOTES:

1.) FOR FIELD ASSEMBLY SEE DWG. E9a

3R/3001014

No.	BY	DATE	REVISION

LINE	SHIP No. REQD.	FAB	MARK	DESCRIPTION	MAT'L	FT. INS. LENGTH		R.B.	LINE	REMARKS	CUTTING INSTRUCTIONS		WEIGHT	DIVISIONS
											SPLICING	ALLOWED		
7														
6														
5				1 MASTER LINK TO SUIT										
4				1 ROLLER CHAIN 1/2" PITCH			227'-5 1/2"			SINGLE STRAND RIVETED				
3										BROWNING NO. 40 OR EQUIVALENT				
2				ONE REQ'D. ~ MK. D46										
1														



MATERIAL	
SURF. PREP. & PAINT	
OPEN HOLES	
DRAWN	G.V.A.
DATE	MAY/84
CHECKED	
DATE	

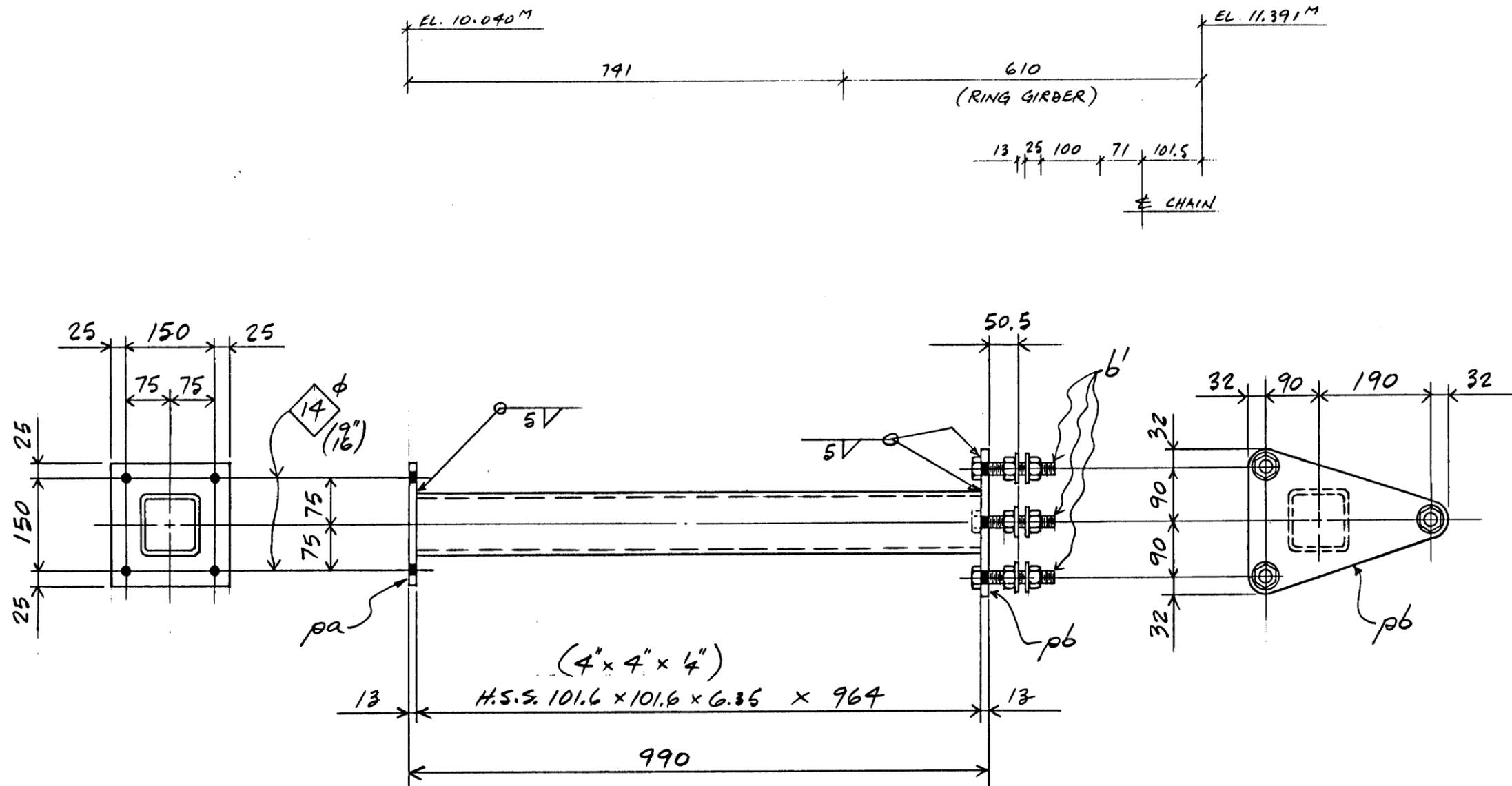
DETAILS OF ENCODING CHAIN
FOR 4.2M TELESCOPE DOME LA PALMA
DRAWING No. 1420-46c

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

p - a b c d f g h k m n p s t v w y

m - a b c d f g h k m n p s t v w y

SHOP DEPARTMENT / INS / F / S / O / M / T / P / SH / DP / AS / PA / ER / No. PRINTS



ONE REQ'D. ~ ENCODER STAND ~ MK. F46

GENERAL NOTES:

1) FOR FIELD ASSEMBLY SEE
DWG E96

3R/3001015

LINE	SHIP	FAB	MARK	DESCRIPTION	MAT'L	LENGTH	R.B.	LINE	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS
	No. REQD.									SPLICING	ALLOWED	
7												
6	3	b1		3/4" A325 BOLT		5"			P/W 2 H.V.X. HEX. NUTS & 2 WASHERS			
5	1	pb		1/2" 294 x 13 (1/2")	44W	344						
4	1	pa		1/2" 200 x 13 (1/2")	44W	200						
3	1			H.S.S. 101.6 x 101.6 x 6.35	50W	964			(4" x 4" x 1/4") G.S.P.E.			
2				ONE REQ'D. ~ MK. F46								
1												



MATERIAL G40.21 (44W) 1/2"
SURF. PREP. & PAINT SEE MEMO
OPEN HOLES 1/2" (21P)
DRAWN G.V.A. DATE MAY/89 CHECKED DATE

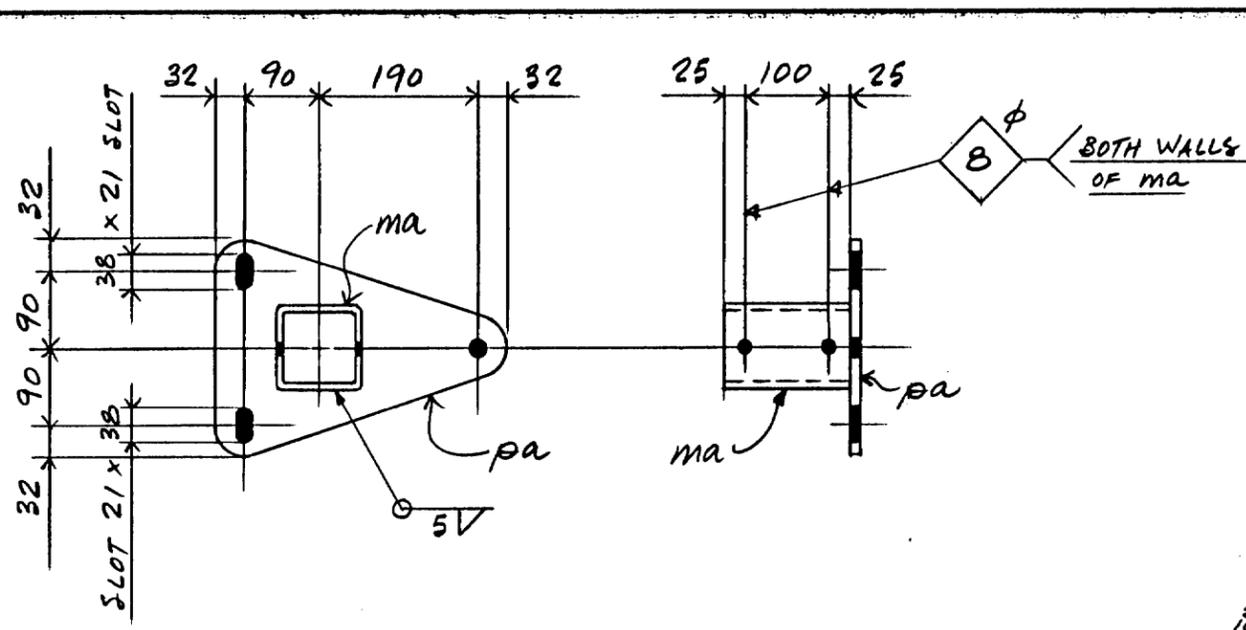
No.	BY	DATE	REVISION
			DETAILS OF ENCODER STAND
			FOR 4.2M TELESCOPE DOME LA PALMA
			DRAWING No. 1420-46d

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

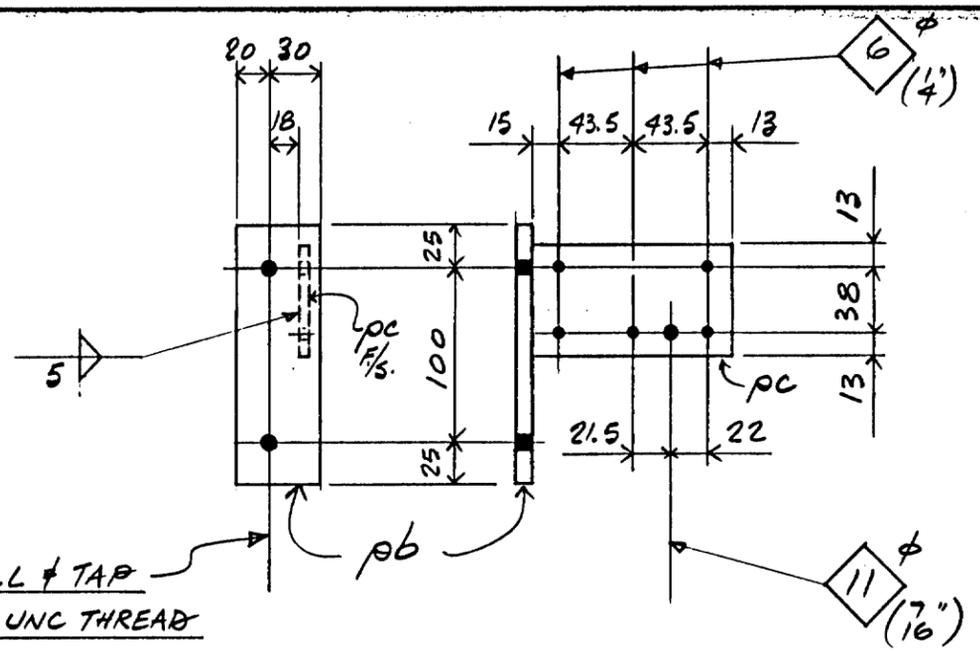
p - a b c d f g h k m n p s t v w y

m - a b c d f g h k m n p s t v w y

SHOP DEPARTMENT INS / F / S / O / M / T / P / SH / DP / AS / PA / ER No. PRINTS

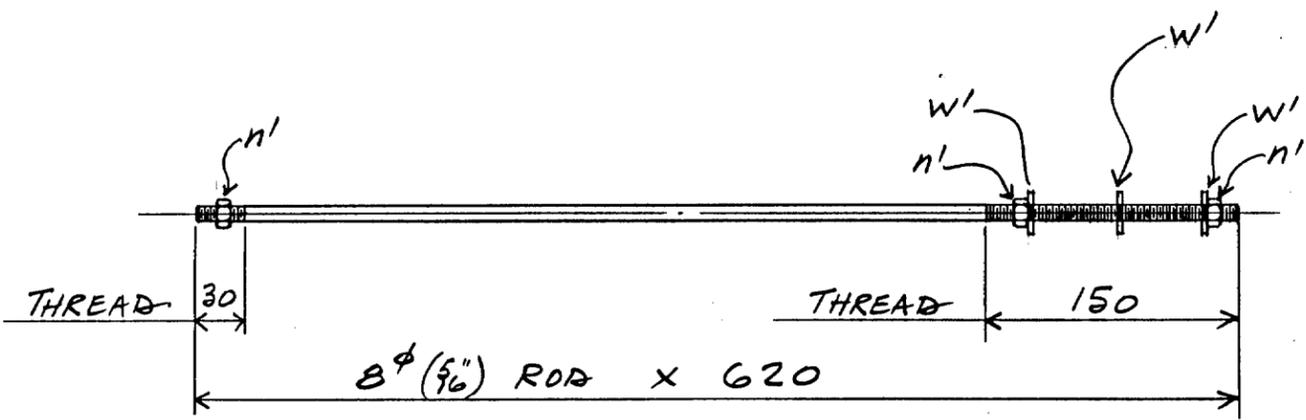


ONE REQ'D. ~ SUSPENSION ARM MOUNT ~ MK. G46



DRILL & TAP
5/16-18 UNC THREAD

ONE REQ'D. ~ ENCODER MOUNTING BRACKET ~ MK. H46



2-REQ'D. ~ SUSPENSION ARMS ~ MK K46

GENERAL NOTES:

1.) FOR FIELD ASSEMBLY SEE DWG E96.

12	6	W1	STD. LOCK WASHER FOR 1/2"								
11	6	N	STD. HEX. NUT FOR 1/2"								
10	2		ROD 8" (3/8")	CRS	620		THRD. 2 ENDS				
9			2-REQ'D. ~ MK. K46								
8											
7	1	PC	R 64 x 4.76 (3/8")	44W	115						
6	1	PB	R 50 x 9.53 (3/8")	44W	150						
5			ONE REQ'D. ~ MK. H46								
4											
3	1	PA	R 244 x 12.7 (1/2")	44W	344						
2	1	MA	H.S. 101.6 x 101.6 x 6.35	50W	150		4" x 4" x 4" (C.S. I.E.)				
1			ONE REQ'D. ~ MK G46								

3R/3001016



MATERIAL G40.21 (44W) 1/2"
SURF. PREP. & PAINT SEE MEMO
OPEN HOLES 1/8" (21P)
DRAWN G.V.A. DATE MAY/84
CHECKED DATE

No. BY DATE REVISION
DETAILS OF ENCODER MOUNTING ITEMS
FOR 4.2 M TELESCOPE DOME LA PALMA
DRAWING No. 1420-46f

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

p - a b c d f g h k m n p s t v w y

m - a b c d f g h k m n p s t v w y

SHOP DEPARTMENT

INS / F / S / O / M / T / P / SH / DP / AS / PA / ER

No. PRINTS

LINE	No. REQ'D.		MARK	DESCRIPTION	MAT'L	LENGTH		R.B.	LINE	REMARKS	SPlicing _____ ALLOWED		WEIGHT
	SHIP	FAB.				FT.	INS.				CUTTING	INSTRUCTIONS	
1													
2													
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9													
10													

3R/3001017

REVISION
 CONTRACT 1420
 DWG. No. 47
 REV.

4.2M TELESCOPE DOME

(FIELD MATERIAL REQ'D. FOR 2nd SHIPMENT)

SHELL PL'S

ONE REQ'D. ~ ϕ 2300 x 6.35 (4") x 11800
ONE REQ'D. ~ ϕ 1550 x 1 1 x 9500

RIBS

2 REQ'D. ~ L 76 x 76 x 6 (L 3" x 3" x 4") x 10650
2 REQ'D. ~ L 127 x 127 x 8 (L 5" x 5" x 5/16") x 10650

WEB & BRACE FRAME

ONE REQ'D. ~ 25 ϕ (1") STD. PIPE x 6000
ONE REQ'D. ~ 32 ϕ (1 1/4") x 22000 LIN.
ONE REQ'D. ~ 38 ϕ (1 1/2") x 6000
ONE REQ'D. ~ 51 ϕ (2") x 1000

STRUTS

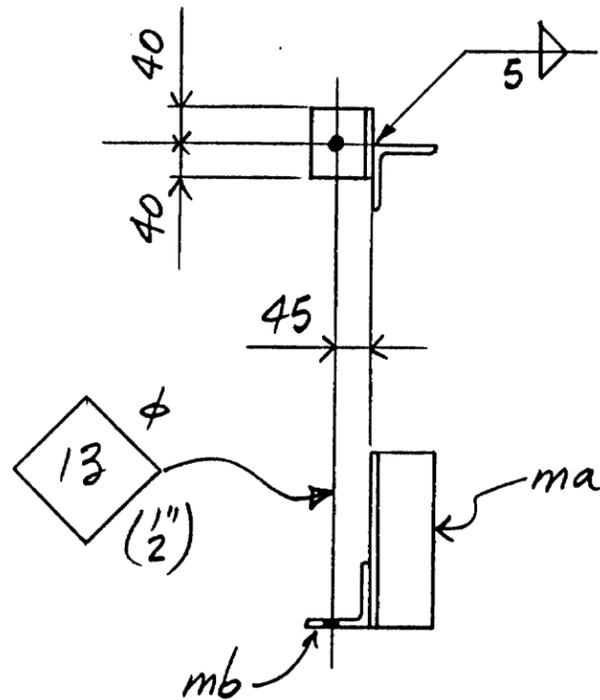
ONE REQ'D. ~ L 102 x 102 x 6 (L 4" x 4" x 1/4") x 15500 LIN.
ONE REQ'D. ~ L 76 x 76 x 5 (L 3" x 3" x 3/16") x 4500
ONE REQ'D. ~ W 150 x 22 (W 6 x 15) x 1500

3-SHEETS OF 4'-0 x 1" x 8'-0 EXTERIOR GRADE PLYWOOD + 5 GAL. OF WOOD PRESERVATIVE

No.	DIV.	1	2	3	4	5	6	7	8	9	10	HOLES	PAINT & PREP
BRITAIN STEEL LTD. B.C.												DATE	CH'KD
NEW WESTMINSTER												DATE	DATE
G.A. MAR. 89													



LINE	No. REQD.		MARK	DESCRIPTION	MAT'L	LENGTH		R.B.	LINE	REMARKS	SPlicing _____ ALLOWED		WEIGHT
	SHIP	FAB.				■	■				CUTTING	INSTRUCTIONS	
1													
2				<u>5-REQ'D ~ MK. A48</u>									
3													
4		5	ma	L76.2 x 76.2 x 6.35	44W		203			(L3 x 3 x 4)			
5		5	mb	L	OR A36		80			L			
6													
7													
8	ONE		B48	L50.8 x 50.8 x 4.76			6096			(20'-0) L2 x 2 x 3/16			
9													
10													



5-REQ'D. ~ BRACKET ~ MK. A48
 (FOR FIELD ASSEMBLY SEE DWG. E5C)

PLAIN MAT'L. (NO PAINT)

ONE REQ'D. ~ L50.8 x 50.8 x 4.76 x 6096 ~ MK. B48

3R/3001018

No. DIV.	1	2	3	4	5	6	7	8	9	10
	MADE DATE G.A. FEB/84									
	CH'KD									
	DATE									
	PAINT & PREP									
	HOLES									
	BRITAIN STEEL LTD. NEW WESTMINSTER B.C.									

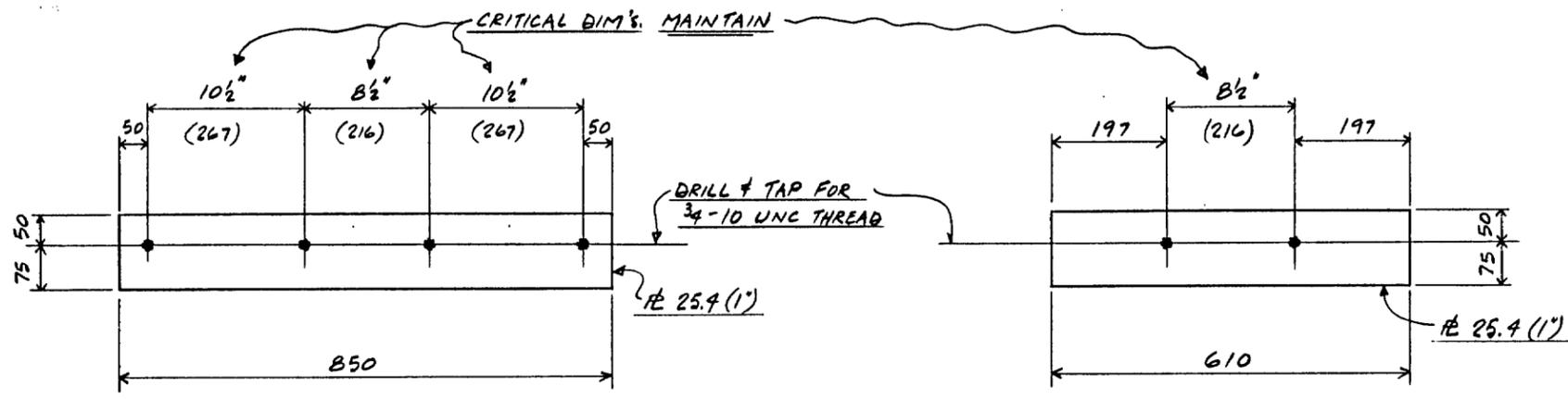
SEE MEMO 1420
 CONTRACT 1420
 DWG. No. 48
 REV. 1



MATERIAL BILL
BRITAIN STEEL LTD.

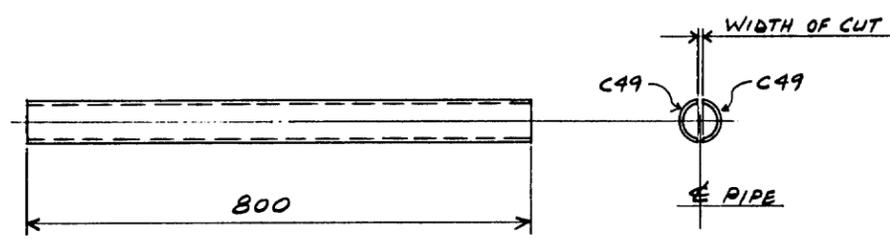
CONTRACT 1420

NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	REV.	WEIGHT
1									
2		2	REQ'D	~ MK. A49					
3									
4		2	REQ'D	125x25.4(1")	850		44W		
5									
6									
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8									
9		2	REQ'D	125x25.4(1")	610		44W		
10									
11									
12									
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14		2	REQ'D	HALF PIPE	800	SPLIT 63.5 STD. PIPE	A33		
15									
16									
17									
18									
19									
20	ha	2	REQ'D	700x635(4")	1000	BEND	A36		
21	pa	8	REQ'D	100x9.53(3/8")	152				
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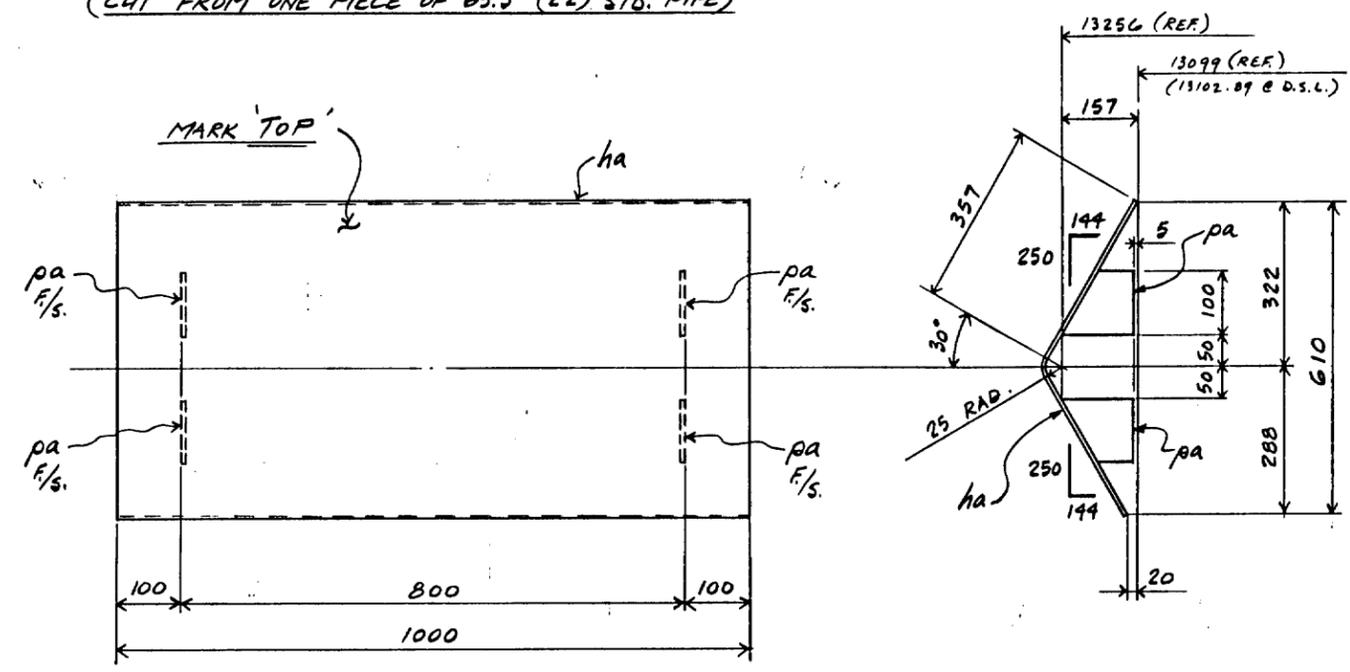


2-REQ'D. ~ MOUNTING PAD ~ MK. A49

2-REQ'D. ~ MOUNTING PAD ~ MK. B49



2-REQ'D. ~ CABLE SOFTENER ~ MK. C49
(CUT FROM ONE PIECE OF 63.5 (2 1/2") STD. PIPE)



2-REQ'D. ~ TROLLEY RAMP ~ MK. D49

GENERAL NOTES:
1) FOR FIELD LOCATION OF ITEMS ON THIS DWG. SEE DWG. E8A.

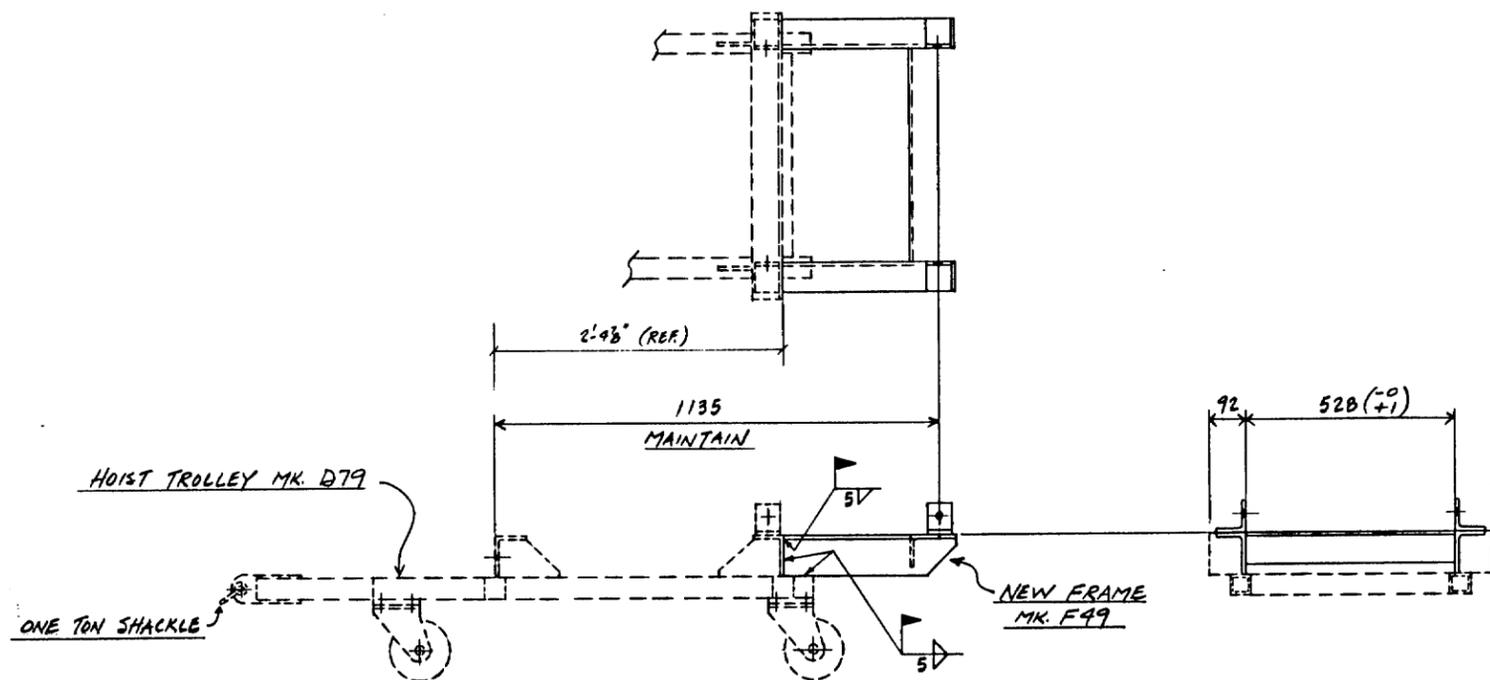
3R/3001019

	MATERIAL G40.21 (44W) w/h		REVISION	
	SURF. PREP. & PAINT		DETAILS MISC. ITEMS FOR SHUTTER HOIST REMOVAL	
	OPEN HOLES AS NOTED		FOR 9.2M TELESCOPE DOME LA PALMA	
DRAWN G.V.A.	DATE MAY/84	CHECKED	DATE	DRAWING No. 1420-49a
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT		INS/ F/S/O/M/T/P/SH/DP/AS/PA/ER		NO. PRINTS

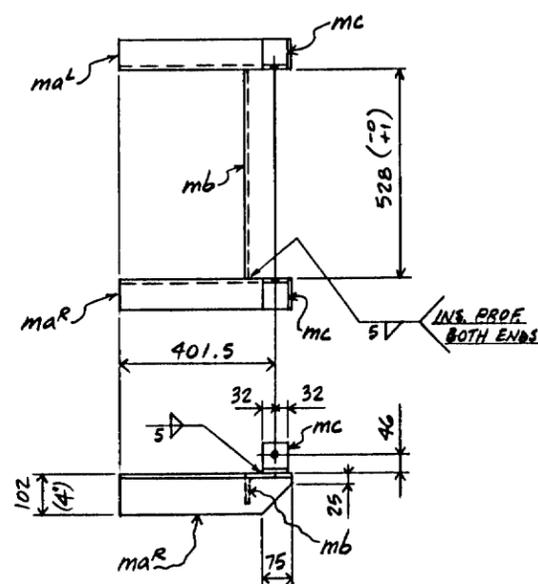
MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

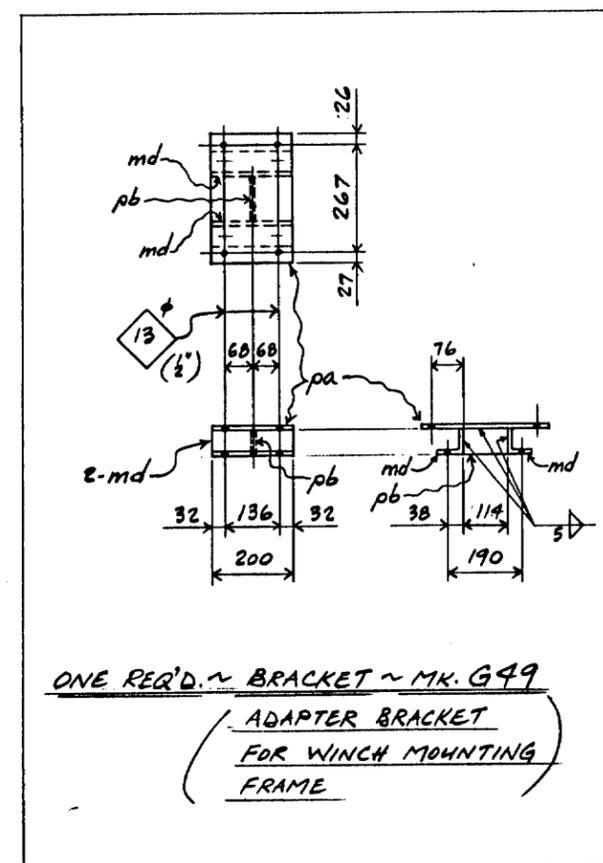
NO	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	W. UNIT	WEIGHT
1									
2									
3									
4	mqc	2	L	102x76x6	440	(L4"x3"x4")	44W		
5	mb	1	L	76x76x6	528	(L3"x3"x4")			
6	mnc	2	L		64				
7									
8									
9									
10									
11									
12	md	2	L	64x64x6	200	(L2½"x2½"x4")	44W		
13	pa	1	PL	200x10(3/8)	320				
14	pb	1	PL	63x1	114				
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FIELD REWORK TO HOIST TROLLEY MK. D79 (FROM I.N.T. DOME CONT. #1279)



ONE REQ'D. ~ FRAME ~ MK. F49



GENERAL NOTES:

- 1) THIS TROLLEY DESIGNED FOR REMOVAL OF COMPLETE HOIST SEE DWG. EBA.
- 2) FOR MODIFICATIONS TO KONE HOIST SEE DWG. SERIES # B.
- 3) FOR FIELD LOCATION OF BRACKET MK. G49 SEE DWG. EBA.

3R/3001020

BRITAIN	MATERIAL	G4021 (44W)	NO. BY DATE	REVISION
	SURF. PREP. & PAINT	SEE MEMO	DETAILS FRAME AND BRACKET FOR HOIST REMOVAL	
	OPEN HOLES	18" dia (21P)	FOR 9.2M TELESCOPE DOME LA PALMA	
DRAWN	DATE	CHECKED	DATE	DRAWING NO.
G.V.A.	MAY/84			1420-498

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, S.C.

p-abcdefghijklmnpstvw

m-abcdefghijklmnpstvw

s-abcdefghijklmnpstvw

SHOP DEPARTMENT / INS / F / S / O / M / T / P / SH / DP / AS / PA / ER / NO PRINTS

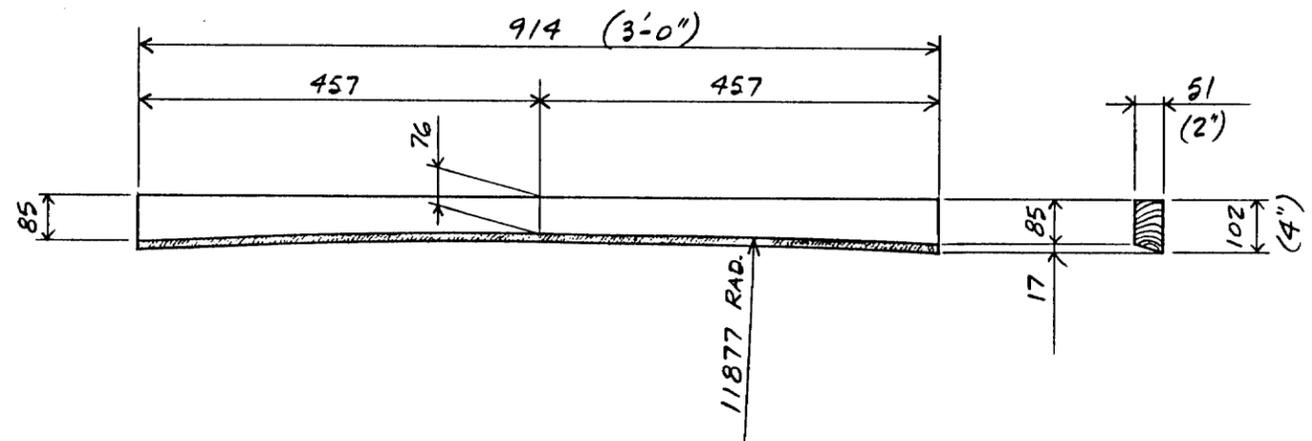
MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

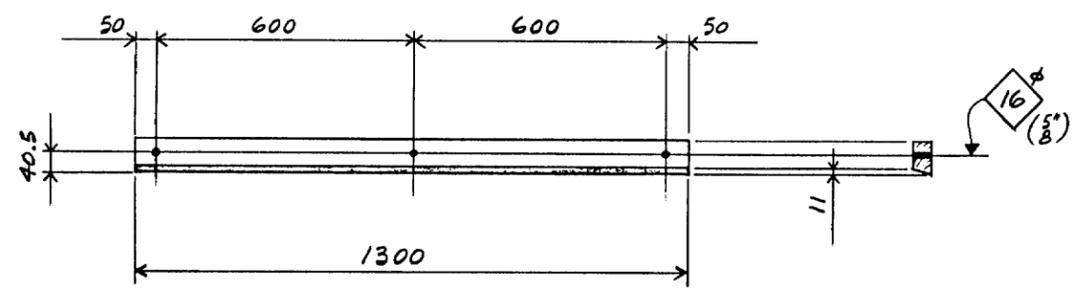
NO	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	W. LINE	WEIGHT
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FIELD MATERIAL

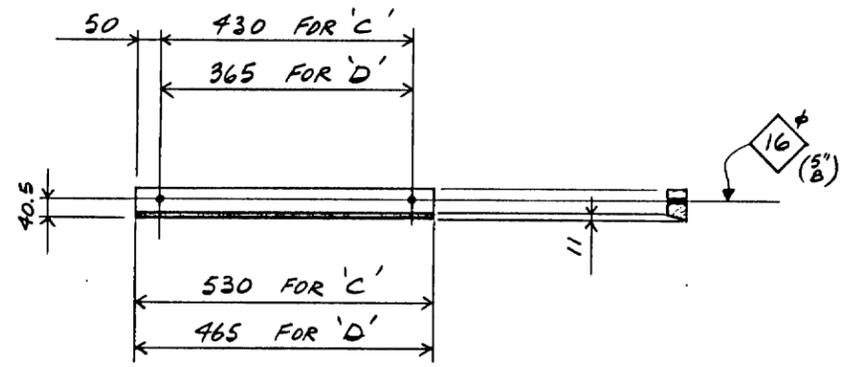
250 - 4" RANGEBIT NAILS x 2 1/4" LG.
 360 - #8 FLAT HD. WOOD SCREW x 25 (1") LG.
 85 - 3/8" A307 BOLT x 2 1/4" LG.



100 REQ'D. ~ WOOD BLOCKING ~ MK. A50 - CUT 2x4 FIR STD. OR BETTER (ROUGH FINISH)
 (FOR MAIN SHELL LINER TO ARCH GIRDER)



22 REQ'D. ~ WOOD BLOCKING ~ MK. B50 - 2x3 FIR STD. OR BETTER (FINISHED)
 (FOR BACK SHELL LINER TO ARCH GIRDER)



2 REQ'D. ~ WOOD BLOCKING ~ MK. C50
2 REQ'D. ~ WOOD BLOCKING ~ MK. D50
 } 2x3 FIR STD. OR BETTER (FINISHED)
 (FOR BACK SHELL LINER TO ARCH GIRDER)

GENERAL NOTES:

- 1.) FOR FIELD ASSEMBLY OF ITEM MK. A50 SEE DWG. E10A
- 2.) FOR FIELD ASSEMBLY OF ITEMS MK. B50, C50 & D50 SEE DWG. E10B
- 3.) ALL WOOD BLOCKING TO BE COATED WITH PRESERVATIVE.

3R/300/021

	MATERIAL	As NOTED	DETAILS	WOOD BLOCKING @ ARCH GIRDER
	SURF. PREP. & PAINT		FOR	4.2m TELESCOPE DOME LA PALMA
	OPEN HOLES	As NOTED		
DRAWN	DATE	CHECKED	DATE	DRAWING No.
G.V.A.	MAY/84			1420-50
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT		INS / F / S / O / M / T / P / SH / DP / AS / PA / ER		

p-abcdefghijklmnpstvw y

m-abcdefghijklmnpstvw y

s-abcdefghijklmnpstvw y

NO PRINTS

CAULKING & ISOLATION MATERIALS
FOR 4.2^M TELESCOPE DOME

480 CARTRIDGES OF MOND 1-PART ACRYLIC TERPOLYMER SEALANT (JS763)
(12 BOXES OF 40) IN WHITE COLOR.

60 CARTRIDGES OF TREMCO BUTYL SEALANT IN ALUMINUM STONE COLOR
(2 BOXES OF 30)

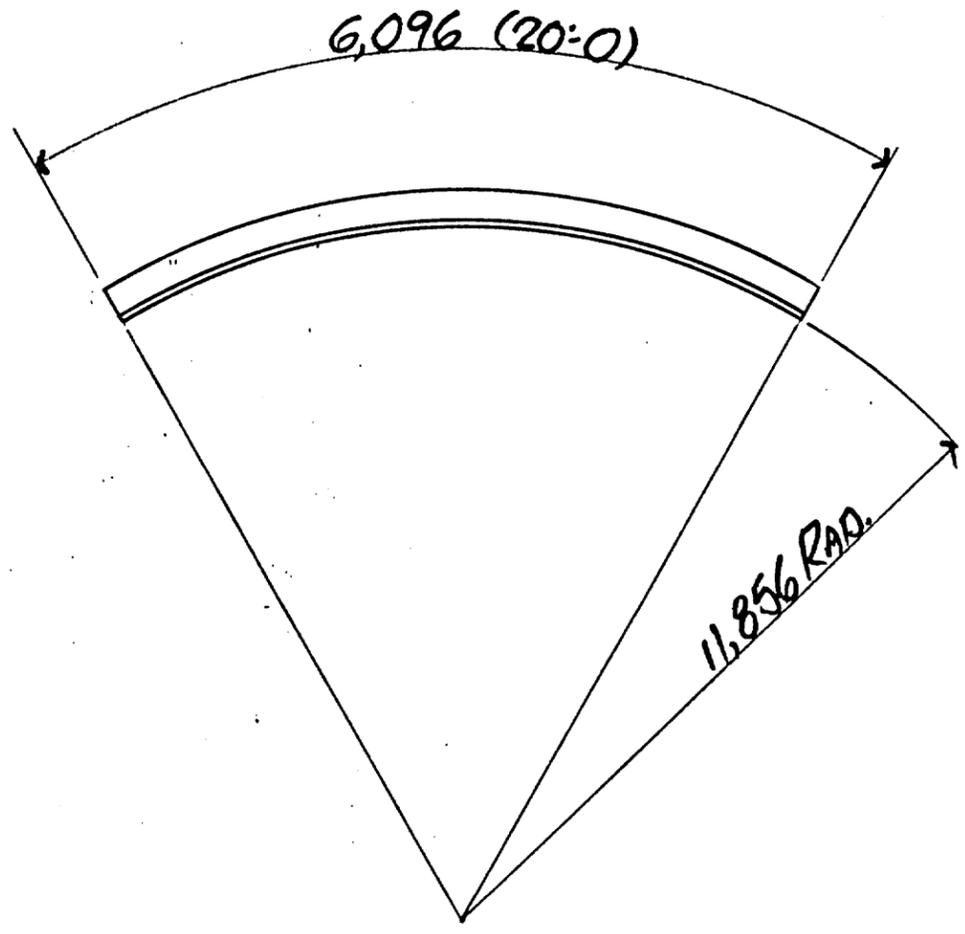
30 GALLONS OF TREMPROOF 850 IN WHITE COLOR.

ALL PRODUCTS MANUFACTURED BY TREMCO - CONTACT MR. NARRAWAY
@ 438-6545

3R/3001022

No. DIV.	1	2	3	4	5	6	7	8	9	10	HOLES	PAINT & PREP	REVISION	CONTRACT	DWG. No.	REV
														1420	53	
BRITAIN STEEL LTD. NEW WESTMINSTER B.C.												DATE	CH'KD	DATE	MADE	
														Jul 7/84	G.A.	
BRITAIN																

LINE	No. REQD.		MARK	DESCRIPTION	MAT'L	LENGTH		R.B.	LINE	REMARKS	SPLICING _____ ALLOWED		WEIGHT
	SHIP	FAB.				FT.	INS.				CUTTING	INSTRUCTIONS	
1				2 REQ ^d -MK A55									
3	2	2		L50x50x5 (L2x2x16)	A36	6,	096			ROLLED			
4													
5													
6													
7													
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9													
10													

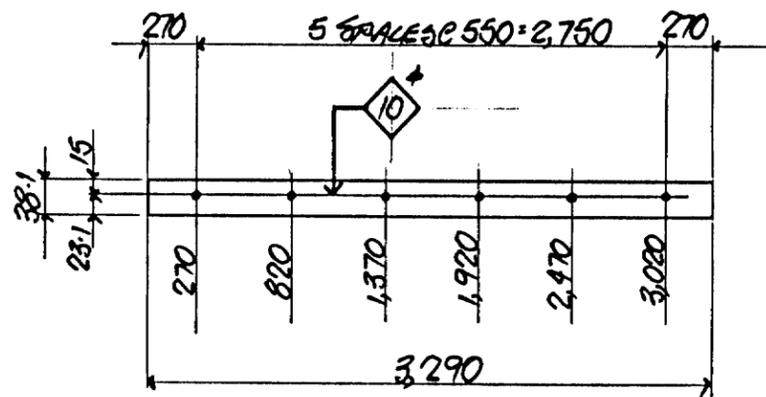


2 REQ^d- CENTRE GUIDE EDGE ANGLE MK A55

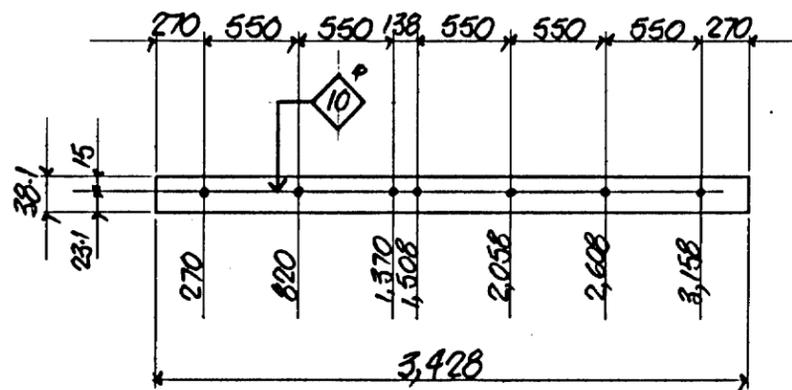
3R/3001023

No.	BY	DATE	REVISION	CONTRACT	DWG. NO.	REV.	
				1420	55		
SEE MEMO							
				PAINT & PREP			
10	9	8	7	6	5	4	3
DATE	CH'KD	DATE	DATE	DATE	DATE	DATE	DATE
		Jul 1/84					
				MADE BY			
				BR			
				BRITAIN STEEL LTD.			
				NEW WESTMINSTER			
				B.C.			
				BRITAIN			

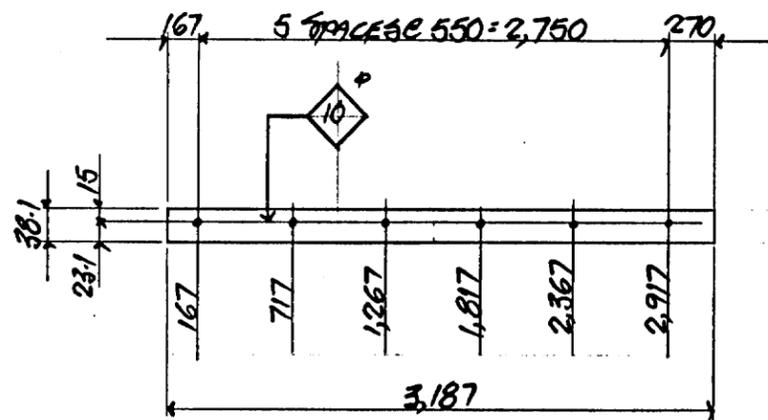




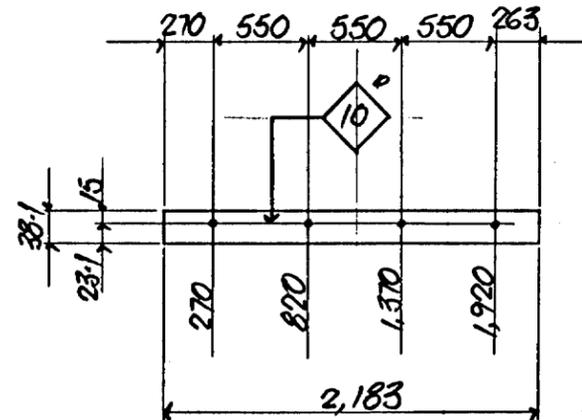
10 REQ^d - CLAMP BAR Mk. A56



2 REQ^d - CLAMP BAR Mk. B56



2 REQ^d - CLAMP BAR Mk. C56



2 REQ^d - CLAMP BAR Mk. D56

GENERAL NOTES

- 1) USE 3/8" DRILL FOR 10° HOLES IF PREFERRED
- 2) FOR "DELOREN" TEARS SEE FIG. 565.

3R/3001024

LINE	SHIP	FAB	MARK	DESCRIPTION	MAT'L	FT.	INS.	R.D.	LINE	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS
	No. REQD.					LENGTH					SPlicing		
											ALLOWED		
100	100			5" MACH BOLTS	A307	-	1"			9/16 NUTS WASHERS BAG FOR EQUIPMENT			
7	10	10	A56	BAR 38.1 x 3.18	A36	3,	290			(12" x 8)			
8													
5	2	2	B56				3,	428					
4													
3	2	2	C56				3,	187					
2													
1	2	2	D56				2,	183					



MATERIAL ~~A36~~ A36
 SURF. PREP. & PAINT ~~STP~~ SEE MEMO
 OPEN HOLES ~~AS NOTED~~ AS NOTED

No.	BY	DATE	REVISION

DETAILS OF ~~TELESCOPE TUBES~~ CLAMP BAR
 FOR 4.2" TELESCOPE DOME LA PALMA

DRAWING No. 1420-56a

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

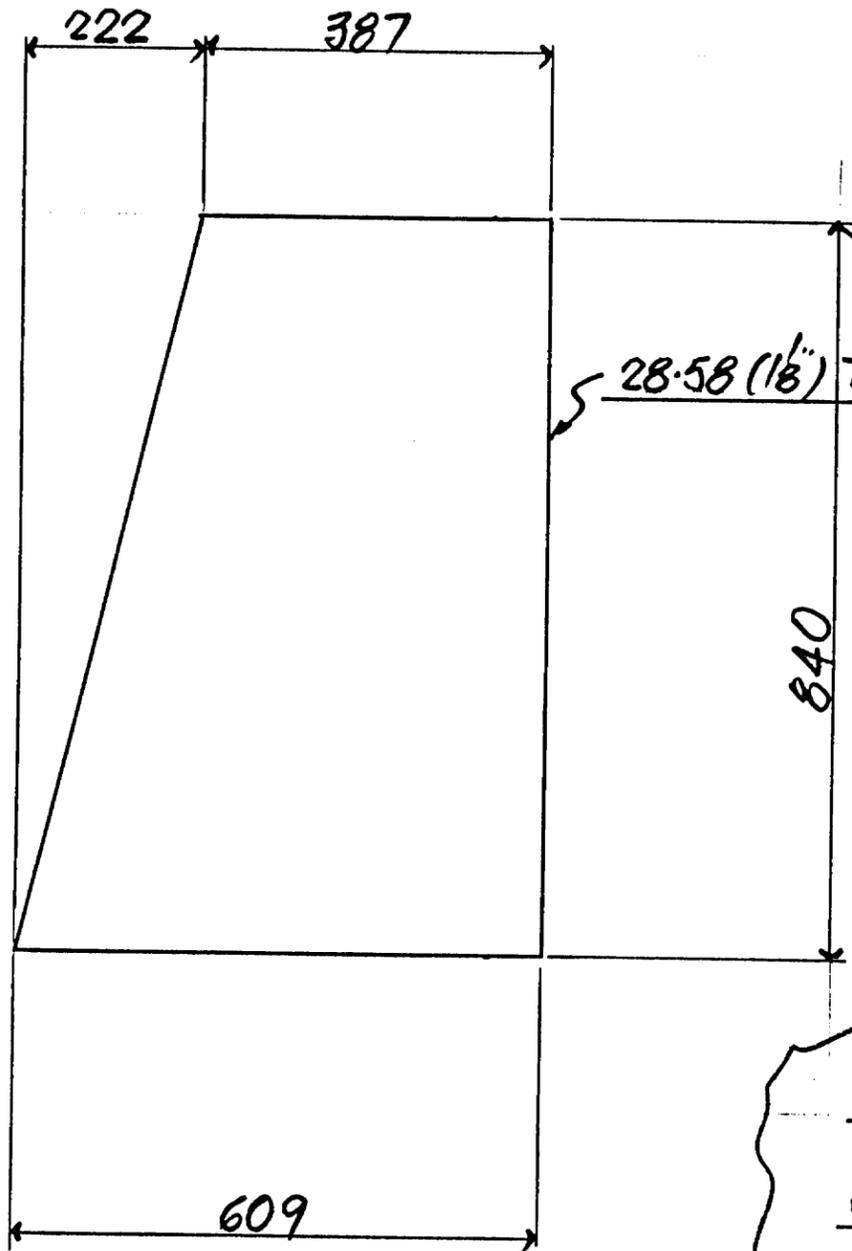
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SHOP DEPARTMENT

INS / F / S / O / M / T / P / SH / DP / AS / PA / ER

No. PRINTS



28.58 (1 1/8") THICK NEOPRENE 40/50 DUROMETER

4-REQD. MK B57
SHUTTER BUMPERS

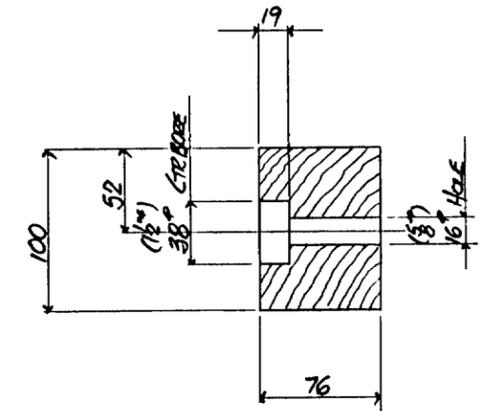
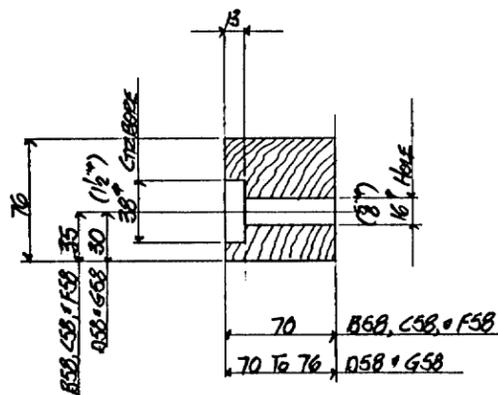
SUPPLIER NOTE:-
ALSO REQUIRE ONE LITER OF SUITABLE ADHESIVE
FOR BONDING THESE ITEMS TO A PAINTED STEEL
SURFACE.

3R/3001026

No. DIV.	1	2	3	4	5	6	7	8	9	10
DATE										
CH'KD										
DATE										
REVISION	CONTRACT 1420									
DWG. No.	576									
REV.	M/F									

BRITAIN STEEL LTD.
NEW WESTMINSTER B.C.

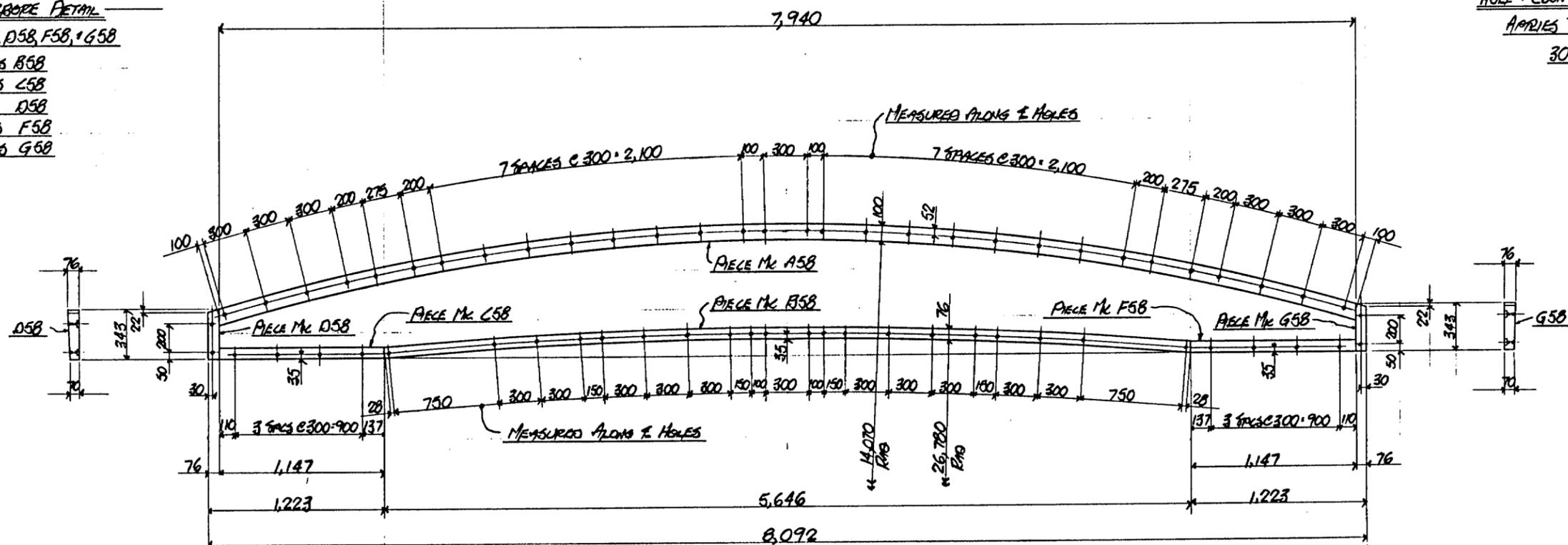
BRITAIN



HOLE & COUNTERBORE DETAIL
 APPLIES B58, C58, D58, F58, & G58

HOLE & COUNTERBORE DETAIL
 APPLIES TO A58 ONLY
 30 HOLES

- 20 RACES B58
- 4 RACES C58
- 2 RACES D58
- 4 RACES F58
- 2 RACES G58



ONE COMPLETE ASS'Y REQ'D AS SHOWN

CONSISTING OF

- ONE PIECE Mk A58
- ONE PIECE Mk B58
- ONE PIECE Mk C58
- ONE PIECE Mk D58
- ONE PIECE Mk F58
- ONE PIECE Mk G58

TO BE CUT FROM STOCK
 & COATED WITH PRESERVATIVE

3R/3001027



MATERIAL	STEEL	DETAILS	TELESCOPE
SURF. PREP.	AS NOTED	FOR	4.2" TELESCOPE DONE LA RUMM
PAINT	AS NOTED	DRAWING No.	1420-58a
OPEN HOLES	AS NOTED		
DRAWN	DATE	CHECKED	DATE
RLK	20/01/81		
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.			

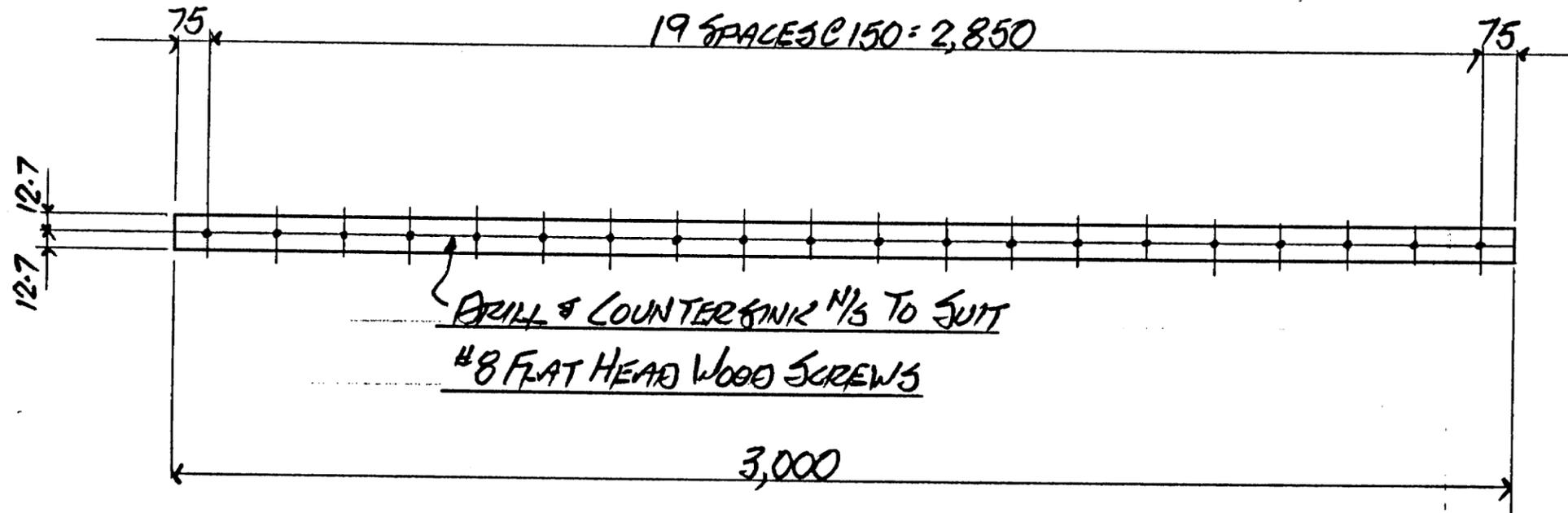
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m-abcdefghijklmnpstvw

s-abcdefghijklmnpstvw

SHOP DEPARTMENT / INS / F / S / O / M / T / P / SH / DP / AS / PA / ER / NO PRINTS

LINE	No. REQD.		MARK	DESCRIPTION	MAT'L	LENGTH		R.B.	LINE	REMARKS	SPLICING _____ ALLOWED		WEIGHT
	SHIP	FAB.				FT.	INS.				CUTTING	INSTRUCTIONS	
1				6 REQD - MK H58									
2													
3		6		BAR 25.4 x 4.76	ALUMINIUM	3,000				(BAR 1 x 1/16) P.O.#			
4													
5													
6													
7													
8													
9													
10													



6 REQD - P SEAL CLAMP BAR MK H58

3R/3001028

NO BY DATE

HOLES 13/16 U/N

PAINT & NO PREP

DATE

CH'KD

DATE

MADE BY

BRITAIN STEEL LTD.

NEW WESTMINSTER B.C.

BRITAIN

CONTRACT 1420

REVISION

DWG. No. 585

REV. 1

STD. SEE MEMO

PREP

DATE

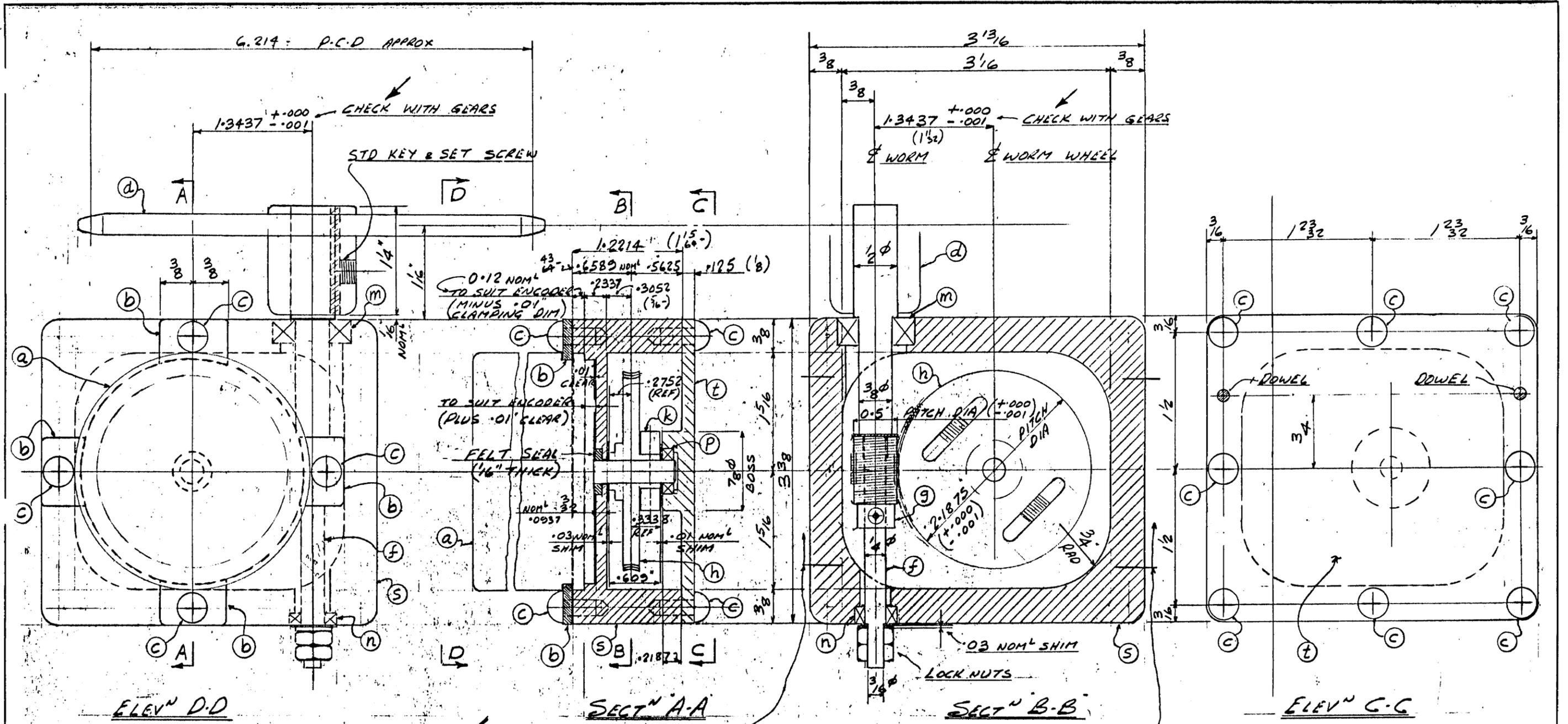
CH'KD

DATE

MADE BY

BRITAIN STEEL LTD.

NEW WESTMINSTER B.C.



ITEM LIST FOR ONE ENCODER

ITEM	QTY	DESCRIPTION
a	1	BALDWIN ENCODER # 5V87BGL
b	4	ENCODER CLAMPS #1/4a Rt
c	12	3/16" x 3/8" PHILLIPS MACH" SCREWS
d	1	39 TOOTH RENOLDS SPROCKET TO SUIT 2" PITCH CHAIN
f	1	WORM SHAFT MAT' 41-40 C.R.S
g	1	WORM-64 PITCH- P.I.C # Q2-3
h	1	ANTI BACKLASH WORM WHEEL P.I.C # Q13-14-C (SPLIT HUB)
k	1	WORM WHEEL CLAMP P.I.C # L4-3
m	1	BEARING - BARDEN # SR6FF
n	1	BEARING - BARDEN # SRW18SSW
p	1	BEARING - BARDEN # SRW16B
s	1	GEAR HOUSING A36 MAT' (MACH)
t	1	GEAR COVER A36 MAT' (MACH)

SEALS & SHIMS NOT INCLUDED IN ITEM LIST

DRILL & TAP TO SUIT MOUNTING METHOD

(PROVIDED BY B.S.LTD) - GENERAL ARR' - ENCODER GEAR REDUCER
THREE REQ^d AS SHOWN

- NOTES:
- 1) LUBRICATION - MIL-G 23827A GREASE (-100° to +250°F) P.I.C # BE-65. (2,192)
 - 2) SHIMS (SHAFT SPACERS) P.I.C SERIES B6 AND B8 TO SUIT.
 - 3) SEE DRG # FOR ENCODER MOUNTING METHOD.
 - 4) GEAR REDUCTION RATIO = 140 to 1 (ANTI BACKLASH)
 - 5) DO NOT USE FORCE OF ANY KIND TO ASSEMBLE RELATED COMPONENTS (h,k,p,ETC) ONTO SHAFT OF ENCODER. PHONE: BOB C 931-5022 FOR CLARIFICATION IF REQ^d.

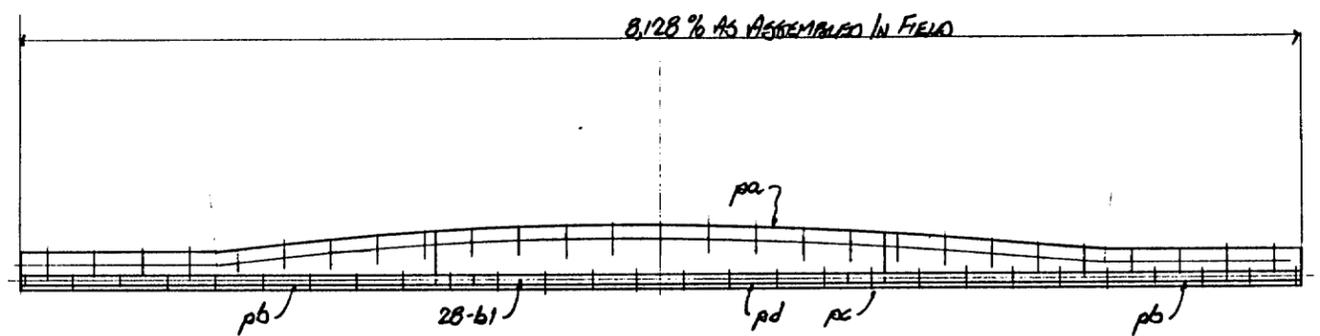
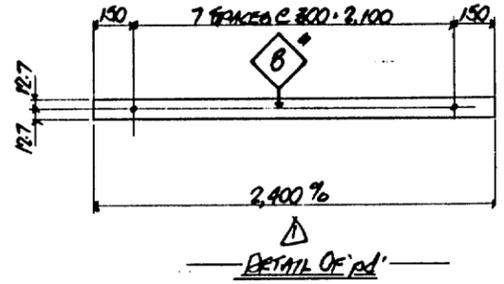
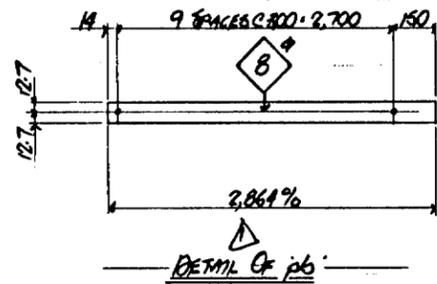
3R/3001030

	MATERIAL	GAD-3444444	DETAILS OF	ENCODER
	SURF. PREP.	STD	SEE MEMO	GEAR REDUCER
	PAINT			FOR 4.2" TELESCOPE DOME
	OPEN HOLER	1/4"		LA PALMA
DRAWN	J.O	DATE	CHECKED	DATE
BRITAIN STEEL LTD. 400 EWHAN AVENUE, NEW WESTMINSTER, B.C.			DRAWING NO.	1420-59
SHOP DEPARTMENT		INS / S / O / M / T / P / SH / DP / AS / PA / ER		

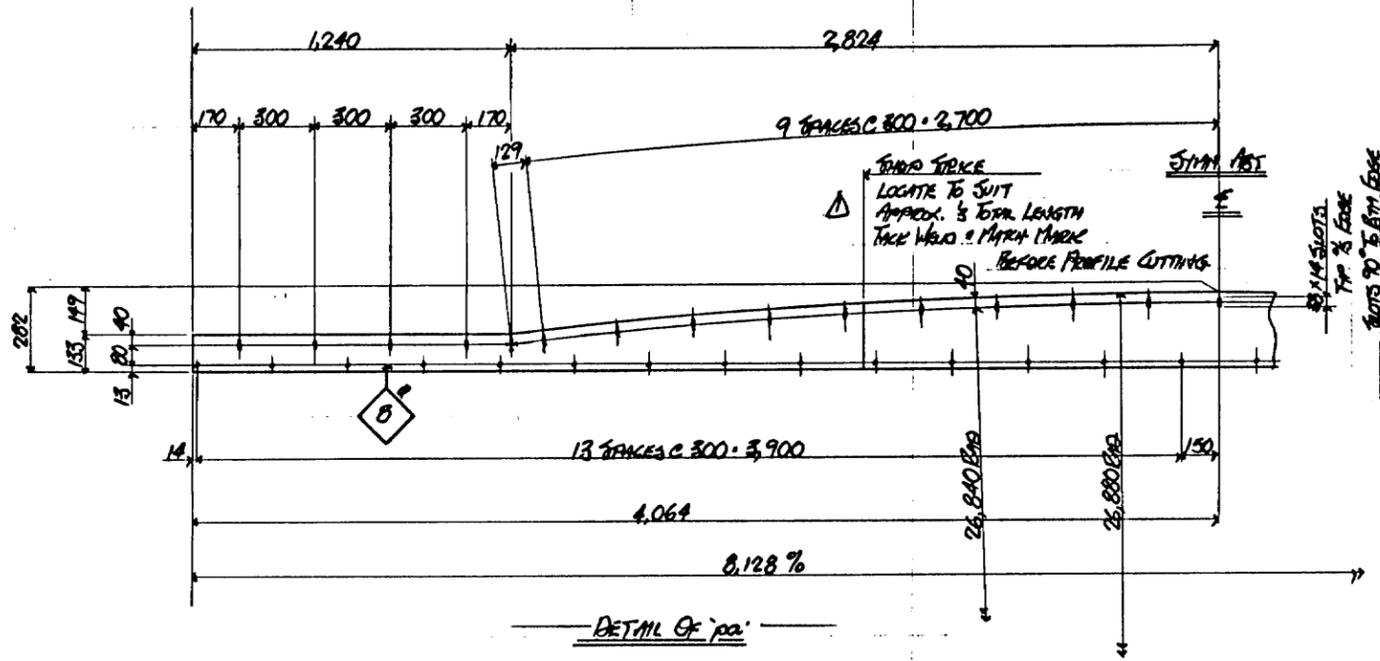
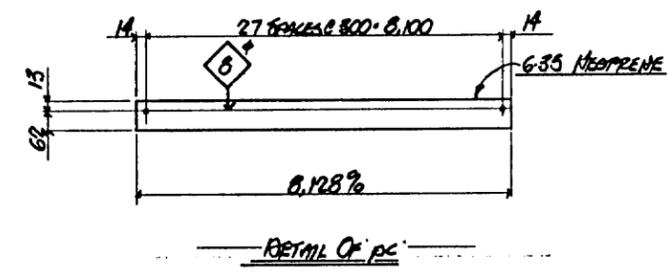
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m-abcdefghijklmnpstwy

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2 REGR. TEAL ASSYS MK AGO
FOR 2° & 2.25° VENT BOX SECTIONS



MATERIAL BILL										BRITAIN STEEL LTD.		CONTRACT 1420	
LINE NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	W	H	WEIGHT			
1				2 REGR. MK AGO									
2	pa	2	R	282 x 6.35	8,128 (4 R)		A36						
3	pb	4	BAR	25.4 x 3.18	2,864 (1.5 R)		I			RO			
4	pc	2	R	75 x 6.35	8,128	4" NEOPRENE 30/40 DUREO				RO			
5	pd	56	BAR	8" HX 1/4"	1	1/4" NUT & WASHER	A307						
6	pe	2	BAR	25.4 x 3.18	2,400 (1.5 R)		A36			RO			

GENERAL NOTES

- 1) USE 7/8" REEL FOR 8" HOLES IF PREFERRED.
- 2) THESE ASSYS REPLACE TEAL CAG & CBG ON BBS 6bg.

3R/3001031

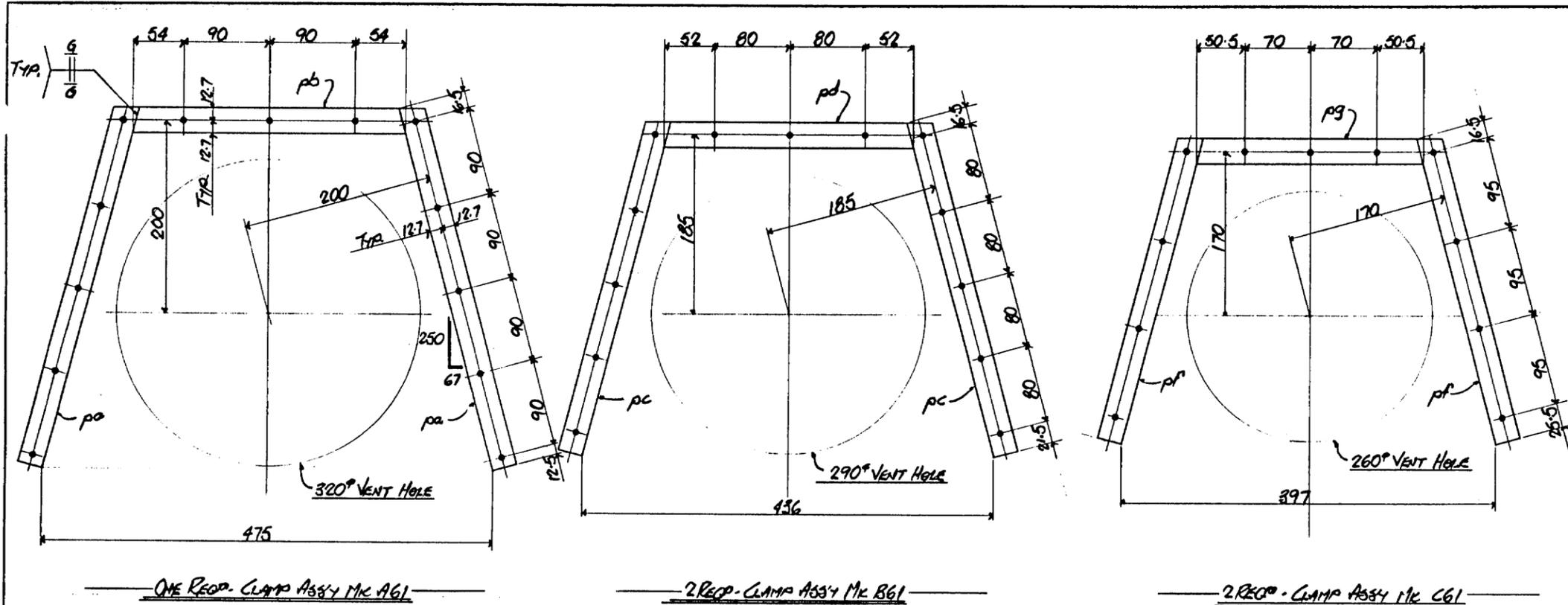
	MATERIAL	A36 1/4"	DETAILS	TO SUIT FIELD
	SURF. PREP. & PAINT	SEE MEMO	BRITAIN TEAL ASSYS	
	OPEN HOLES	AS NOTED	FOR 4.2" TELESCOPE DOWN LA PIANA	
DRAWN	DATE	CHECKED	DATE	DRAWING NO.
FRZ	JAN 75			1420-60
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT				

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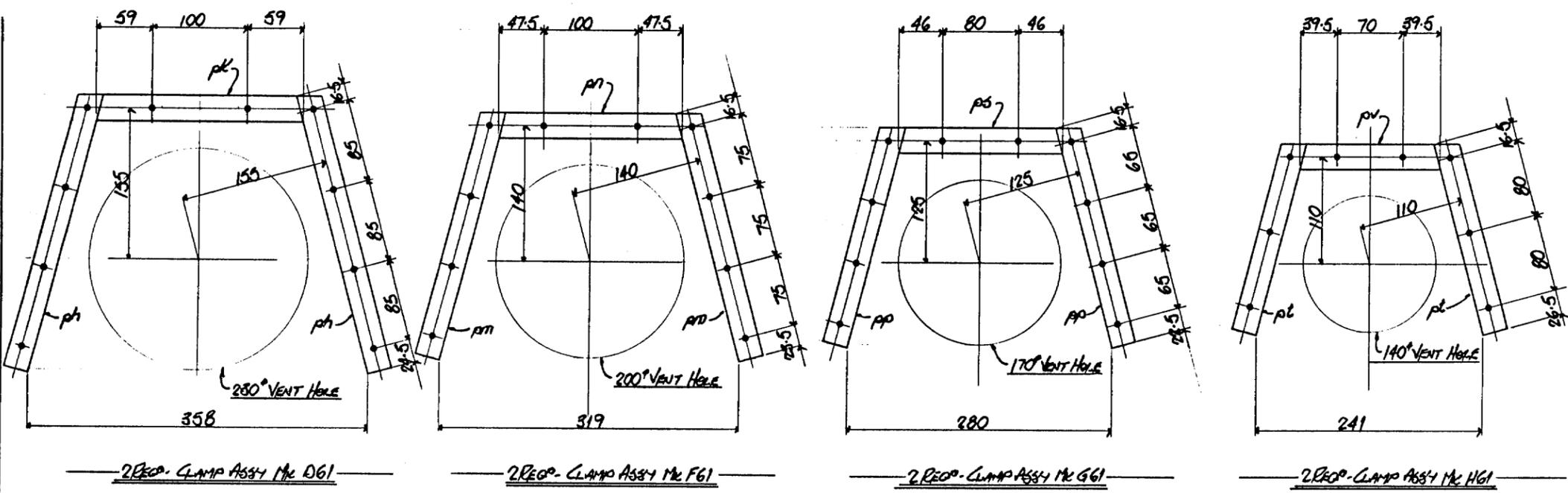
m-abcdefghijklmnpstvw

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INS / F / S / O / M / T / P / SH / DP / AS / PA / ER



MATERIAL BILL										CONTRACT 1420	
BRITAIN STEEL LTD.											
LINE	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	UNIT	WEIGHT		
1						ONE REQ. MK A61					
2											
3	pa	2	BAR	25.4x3.18	389	(1.8')	ALUMINUM		RO.#		
4	pb	ONE S			288				RO.#		
5											
6											
7											
8						2 REQ. MK B61					
9											
10	pc	4	BAR	25.4x3.18	558		ALUMINUM		RO.#		
11	pd	2	L		264				RO.#		
12											
13						2 REQ. MK C61					
14											
15											
16											
17	pe	4	BAR	25.4x3.18	827		ALUMINUM		RO.#		
18	pf	2	L		281				RO.#		
19											
20						2 REQ. MK D61					
21											
22											
23											
24	ph	4	BAR	25.4x3.18	296		ALUMINUM		RO.#		
25	pk	2	L		218				RO.#		
26											
27											
28						2 REQ. MK E61					
29											
30											
31	pn	4	BAR	25.4x3.18	265		ALUMINUM		RO.#		
32	po	2	L		195				RO.#		
33											
34											
35						2 REQ. MK G61					
36											
37											
38	pp	4	BAR	25.4x3.18	234		ALUMINUM		RO.#		
39	ps	2	L		172				RO.#		
40											
41											
42											
43						2 REQ. MK H61					
44											
45	pt	4	BAR	25.4x3.18	203		ALUMINUM		RO.#		
46	pv	2	L		149				RO.#		
47											
48											
49											
50											
51											
52											
53											
54											
55											



3R/3001032

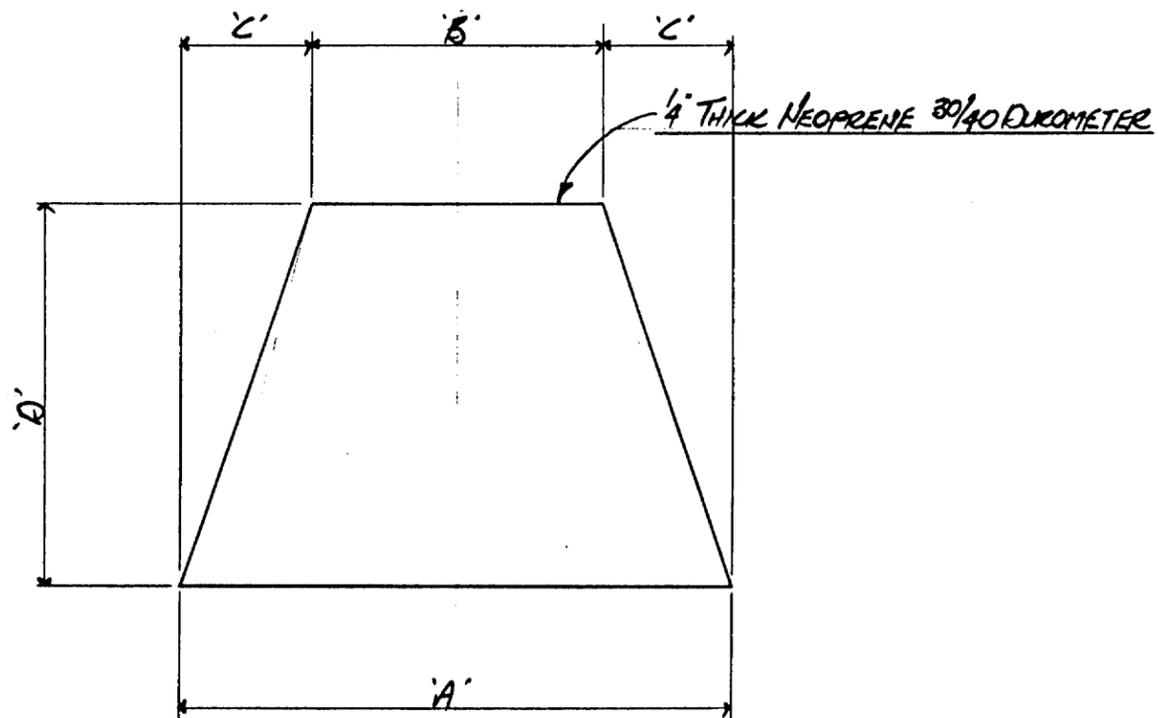
	MATERIAL	ALUMINUM	DETAILS	CLAMP ASSEMBLY
	SURF. PREP. & PAINT	NONE	28" DIA VENT HOLE HOODS	
	OPEN HOLES	3.18" (1/8")	FOR 4.2" TELESCOPE DOWN LA PUMP	
DRAWN	DATE	CHECKED	DATE	DRAWING No.
BR	1/11/85			1420-61a
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT				

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s-abcdefghijklmnopstvw

INS / P / S / O / M / T / P / SH / DP / AS / PA / ER



QTY.	MARK	A'	B'	C'	D'
ONE	K61	640	340	150	440
2	M61	590	320	135	410
2	N61	540	300	120	380
2	P61	490	280	105	350
2	S61	440	260	90	320
2	T61	390	240	75	290
2	V61	340	220	60	260

3R/3001033

LINE	SHIP	FAB	MARK	DESCRIPTION	MAT'L	FT.	INS.	R.B.	LINE	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS	
	No. REQD.					LENGTH					SPLICING	ALLOWED		
7	ONE	ONE	K61	440 x		640								
6	2	2	M61	410 x		590								
5	2	2	N61	380 x		540								
4	2	2	P61	350 x	1/4" THICK	490				NEOPRENE P.O.#				
3	2	2	S61	320 x		440								
2	2	2	T61	290 x		390								
1	2	2	V61	260 x		340								



MATERIAL NEOPRENE
 SURF. PREP. & PAINT NONE
 OPEN HOLES NONE

DETAILS OF NEOPRENE COVERS
TWITTER VENT HOLES
 FOR 4.2M TELESCOPE DOME
LA PALMA

DRAWN FRK DATE JUN/85 CHECKED DATE

DRAWING No. 1420-615

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

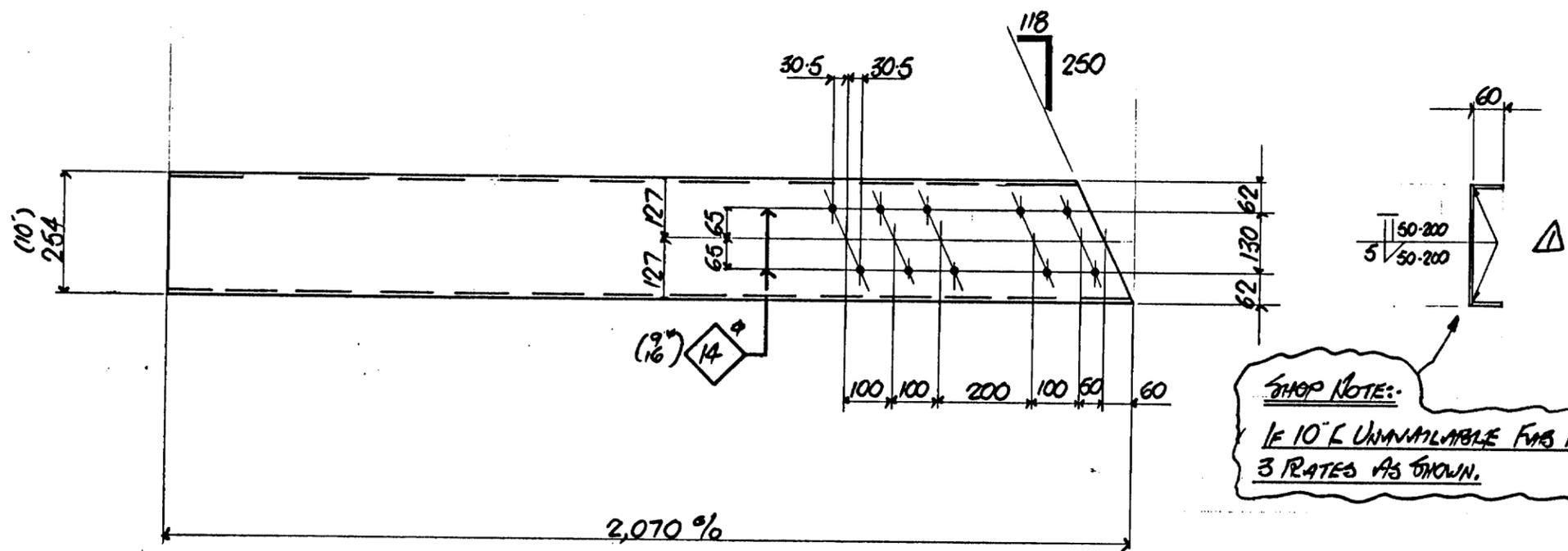
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m - a b c d f g h k m n p s t v w y

SHOP DEPARTMENT

INS / F / S / O / M / T / P / SH / DP / AS / PA / ER

No. PRINTS



SHOP NOTE:
 IF 10" L UNAVAILABLE FAB FROM
 3 PLATES AS SHOWN.

2 REQ^d - SHUTTER ANTI-COLLISION ARM MK AG2

3R/3001034

CHANNEL REVERSED
 REVISION 125/1/85
 REVISION 146/1/85
 REVISION 146/1/85
 REVISION 146/1/85

LINE	SHIP	FAB	MARK	DESCRIPTION	MAT'L	FT.	INS.	R.B.	LINE	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS
	No. REQD.					LENGTH					SPLICING	ALLOWED	
7													
6	4	R		60 x 6.35	ALUM.	2,070				(1/2 R)			
6	2	R		254 x 6.35	ALUM.	2,070							
4													
3													
2													
1	2	2	AG2	C250 x 7.5	ALUM.	2,070				(C10 x 5) P.O.#			



MATERIAL ALUMINUM
 SURF. PREP. & PAINT NONE
 OPEN HOLES AS NOTED

DRAWN BY RBK
 DATE FEB/85
 CHECKED
 DATE

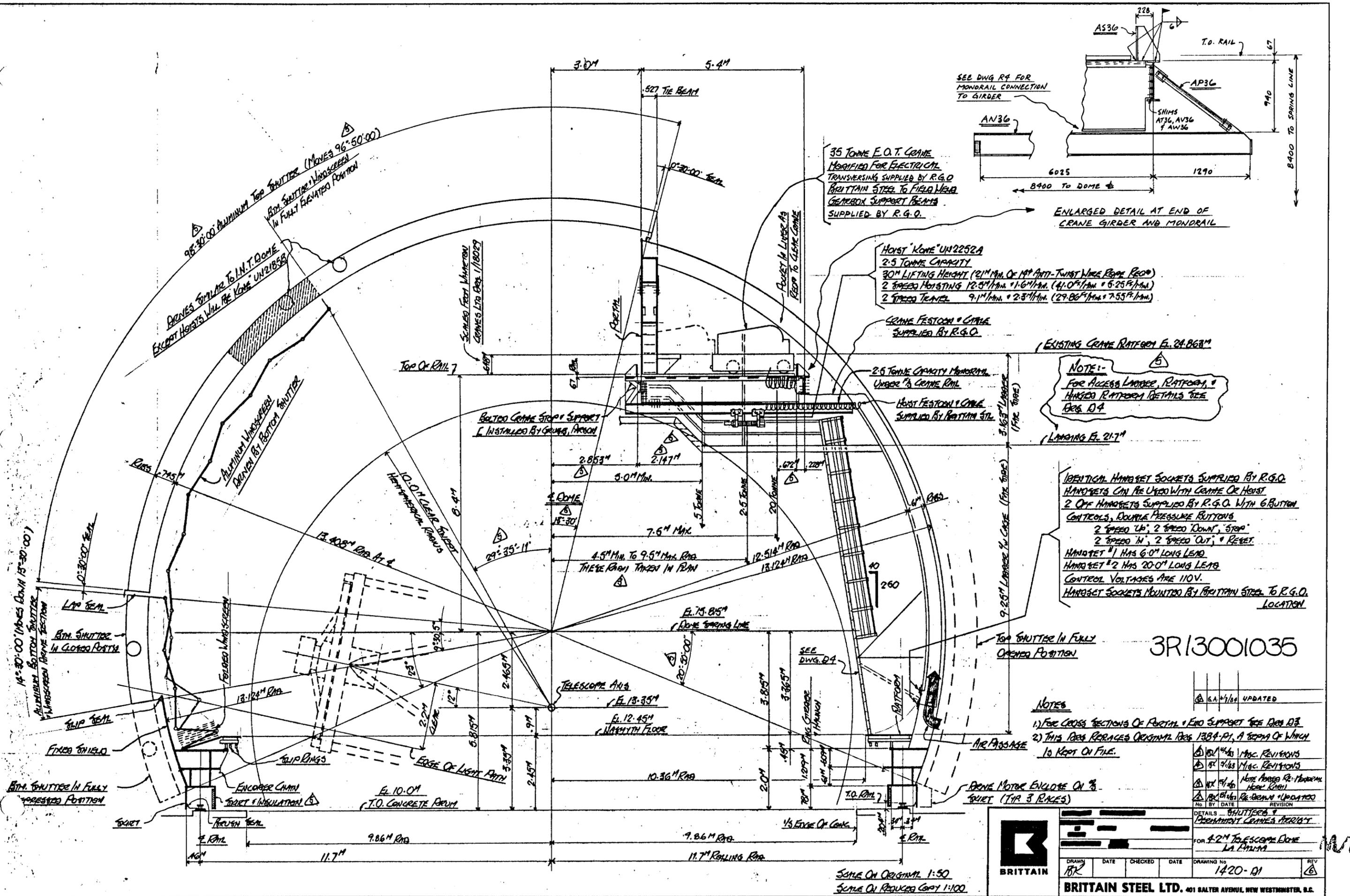
DETAILS OF SHUTTERS
 ANTI-COLLISION ARMS
 FOR 4.2M TELESCOPE DOME
 LA PALMA
 DRAWING No. 1420-62
 REV. 1

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

p - a b c d f g h k m n p s t v w y

m - a b c d f g h k m n p s t v w y

SHOP DEPARTMENT INS / F / S / O / M / T / P / SH / DP / AS / PA / ER No. PRINTS



35 TONNE E.O.T. CRANE
 MODIFIED FOR ELECTRICAL
 TRANSFERRING SUPPLIED BY R.G.O.
 BRITAIN STEEL TO FIELD WELD
 GEARBOX SUPPORT BEAMS
 SUPPLIED BY R.G.O.

HOIST 'KONE' UN2252A
 2.5 TONNE CAPACITY
 30M LIFTING HEIGHT (21M MIN. OF 1M ANTI-TWIST WIRE ROPE REQ)
 2 SPEED HOISTING 12.5M/MIN + 1.6M/MIN. (41.0M/MIN + 5.25M/MIN)
 2 SPEED TRAVEL 9.1M/MIN + 2.3M/MIN. (29.86M/MIN + 7.53M/MIN)

CRANE FESTOON & CABLE
 SUPPLIED BY R.G.O.

2.5 TONNE CAPACITY MONORAIL
 UNDER 3/4 CRANE RAIL
 HOIST FESTOON & CABLE
 SUPPLIED BY BRITAIN STEEL

EXISTING CRANE RAIL E.L. 24.86M

NOTE:-
 FOR ACCESS LADDER, PLATFORM, &
 HANGAR PLATFORM DETAILS SEE
 DRG. D4

LIFTING E.L. 21.7M

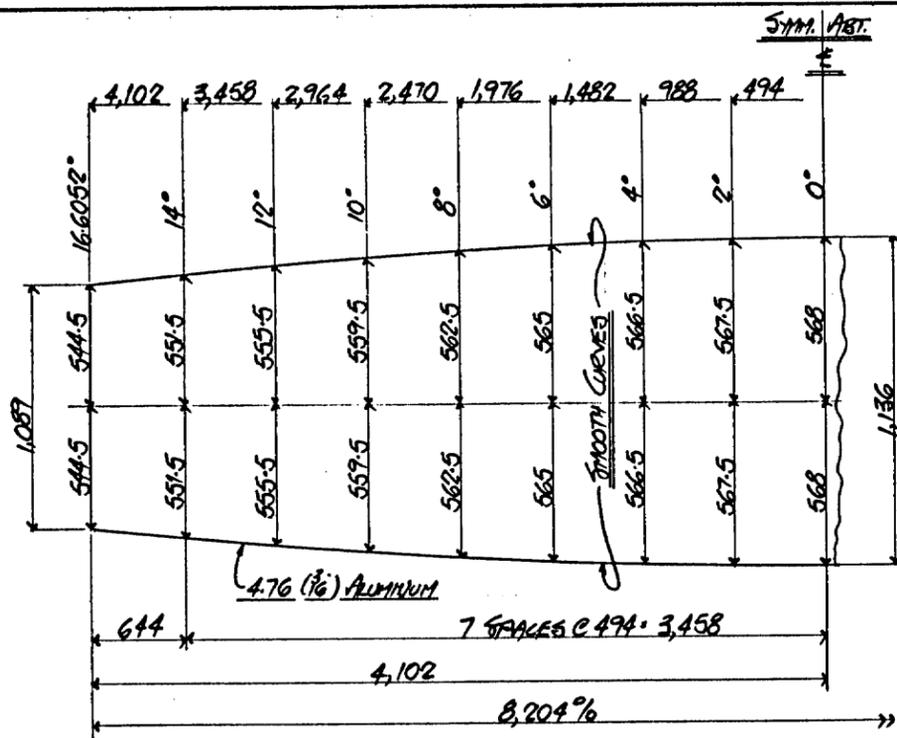
IDENTICAL HANGSET SOCKETS SUPPLIED BY R.G.O.
 HANGSETS CAN BE USED WITH CRANE OR HOIST
 2 OFF HANGSETS SUPPLIED BY R.G.O. WITH 6 BUTTON
 CONTROLS, DOUBLE PRESSURE BUTTONS
 2 SPEED UP, 2 SPEED DOWN, STOP
 2 SPEED IN, 2 SPEED OUT, & RESET
 HANGSET #1 HAS 6.0M LONG LEAD
 HANGSET #2 HAS 20.0M LONG LEAD
 CONTROL VOLTAGES ARE 110V.
 HANGSET SOCKETS MOUNTED BY BRITAIN STEEL TO R.G.O.
 LOCATION

3R/3001035

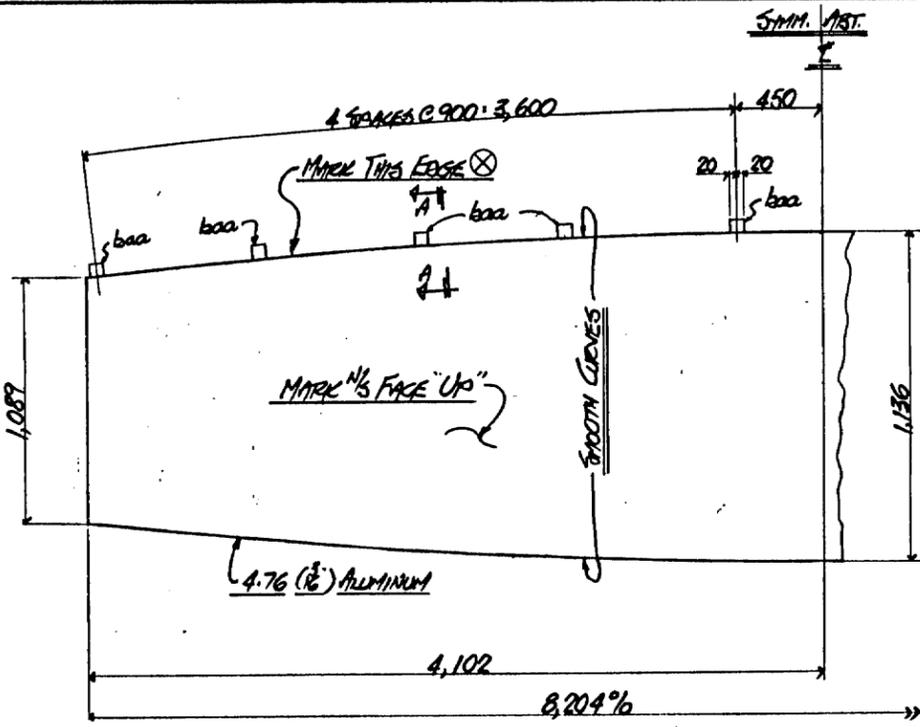
NOTES
 1) FOR CROSS SECTIONS OF PORTAL & END SUPPORT SEE DRG. D3
 2) THIS DRG. REVERSES ORIGINAL DRG. 1384-P1, A COPY OF WHICH
 IS KEPT ON FILE.

DRONE MOTOR ENCLOSE ON 3/4
 GURT (TYP 3 RACES)

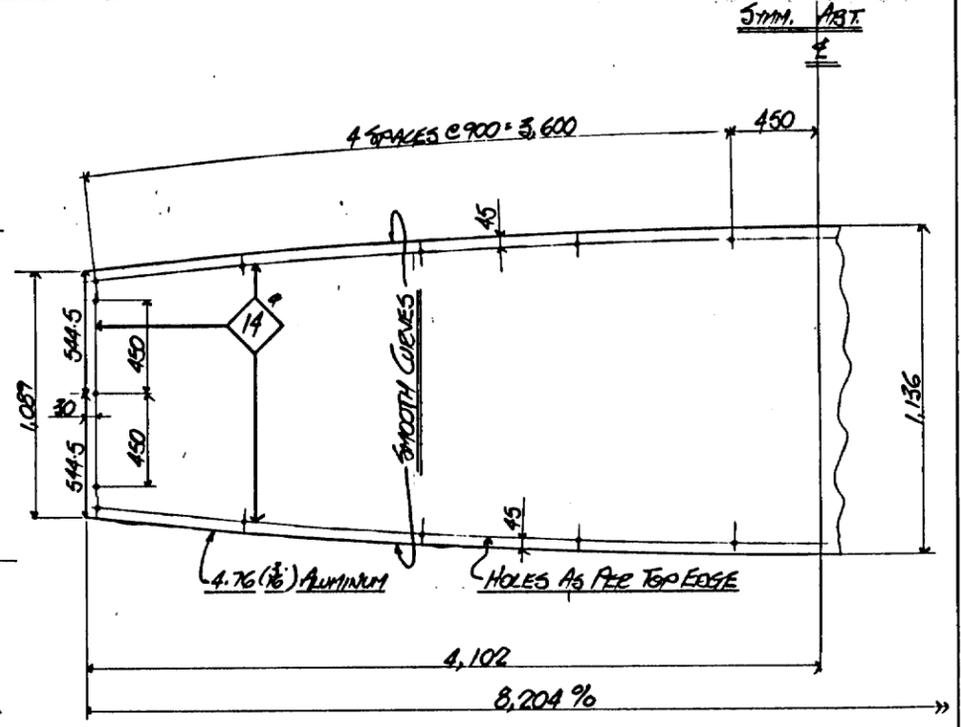
DRAWN		DATE		CHECKED		DATE		DRAWING NO.		REV	
BR								1420-D1		1	
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, S.E.											



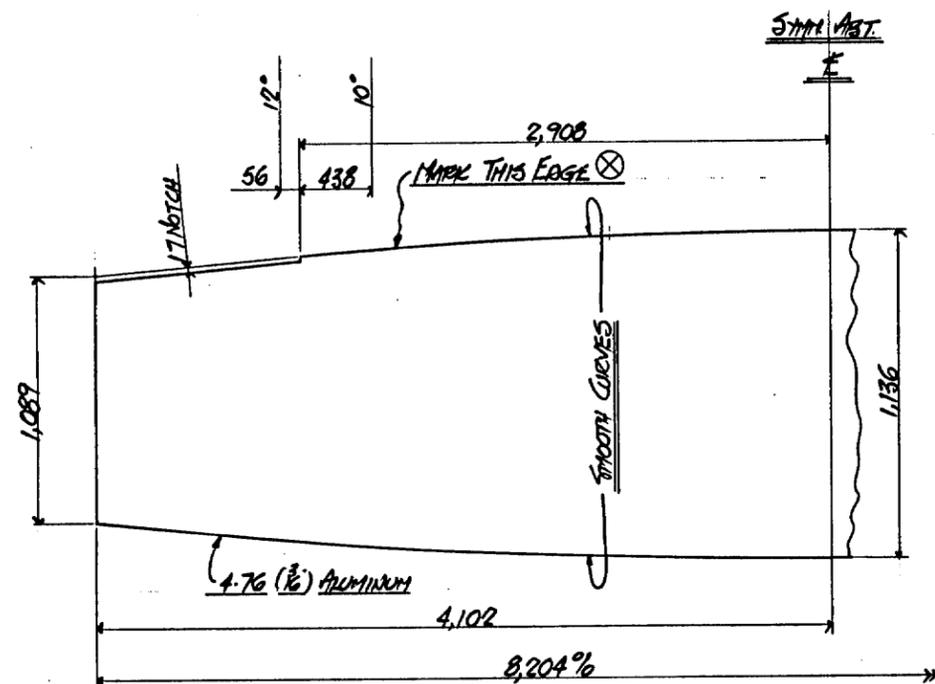
4 REQ^d - OUTER SHELL R MK baa (FOR SHOP UNIT)
 6 REQ^d - OUTER SHELL R MK ba6 (FOR FIELD UNIT) } IDENTICAL EXCEPT FOR MARK
 4.5° BOX SECTION ▲



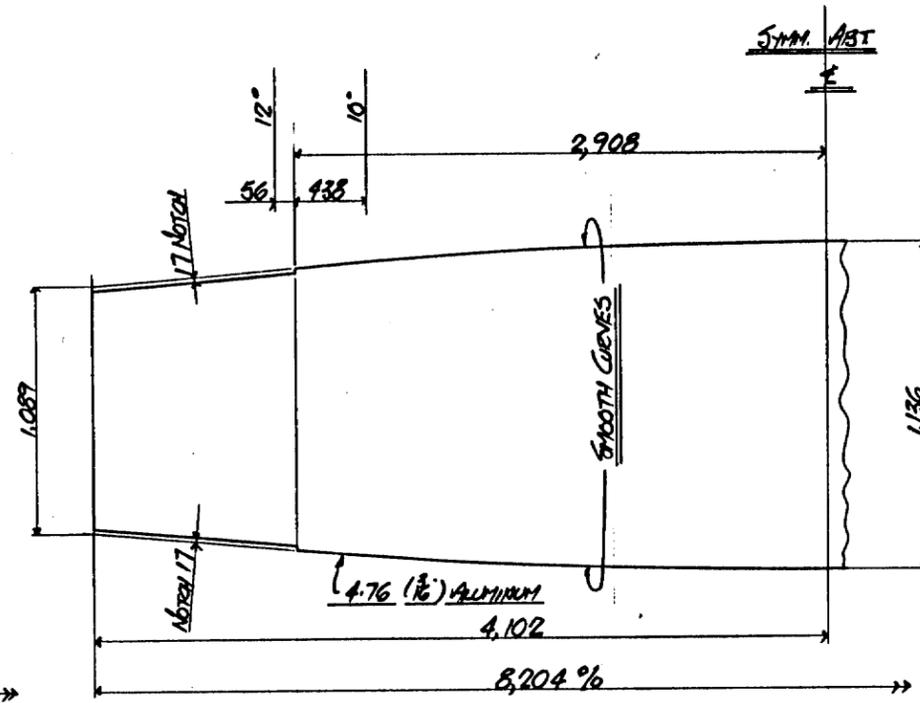
4 REQ^d - OUTER SHELL R MK b6 (FOR SHOP UNIT)
 4.5° BOX SECTION ▲
 ALL DIMENSIONS NOT SHOWN SAME AS ba7



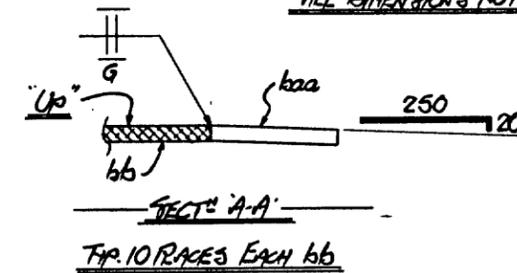
2 REQ^d - OUTER SHELL R MK b66 (FOR FIELD UNIT)
 4.5° BOX SECTION ▲
 ALL DIMENSIONS NOT SHOWN SAME AS ba7



2 REQ^d - OUTER SHELL R MK b66 (FOR FIELD UNIT)
 4.5° BOX SECTION ▲
 ALL DIMENSIONS NOT SHOWN SAME AS ba7



ONE REQ^d - OUTER SHELL R MK b66 (FOR FIELD UNIT)
 4.5° BOX SECTION ▲
 ALL DIMENSIONS NOT SHOWN SAME AS ba7



GENERAL NOTES

- 1) FOR ASSEMBLY & WELDING OF SHOP UNITS SEE DPGS
- 2) FOR ASSEMBLY & WELDING OF FIELD UNITS SEE DPGS
- 3) FOR MATERIAL SEE BILL # 6 X
- 4) USE 1/8" DRILL FOR 14" HOLES IF PREFERRED

3R/3001187



MATERIAL	ALUMINUM	NO	BY	DATE	REVISION
SURF. PREP. & PAINT	NONE	DETAILS			
OPEN HOLES	AS NOTED	BRITAIN - ITEM CUTTING			
FOR 4.2" TELESCOPE DOME		LA PALMA			
DRAWN	DATE	CHECKED	DATE	DRAWING NO.	
BK	11/89			1420-6a	
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.					

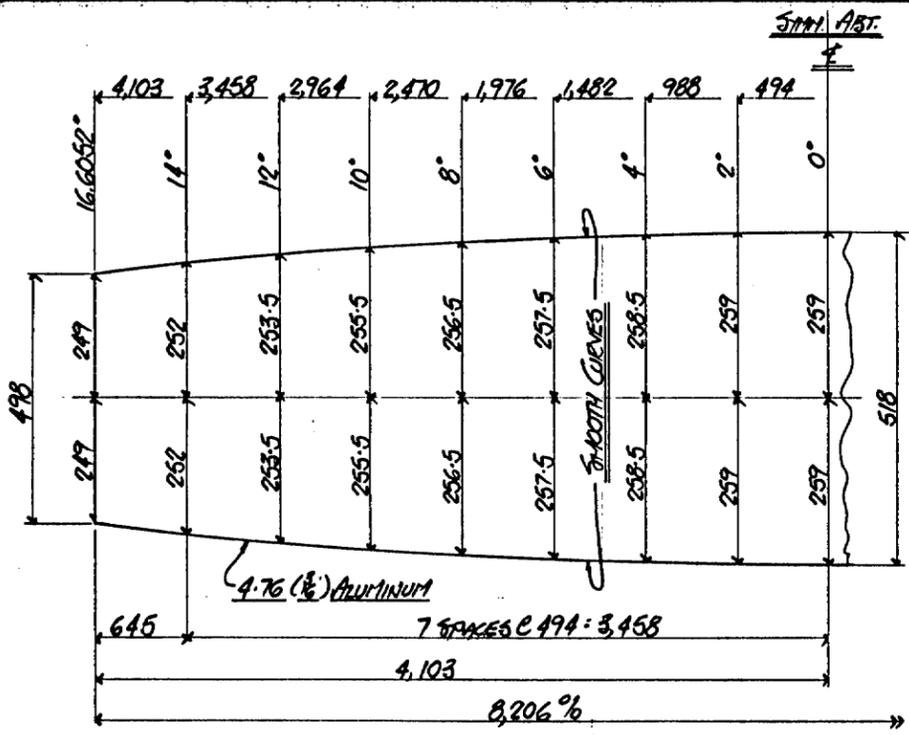
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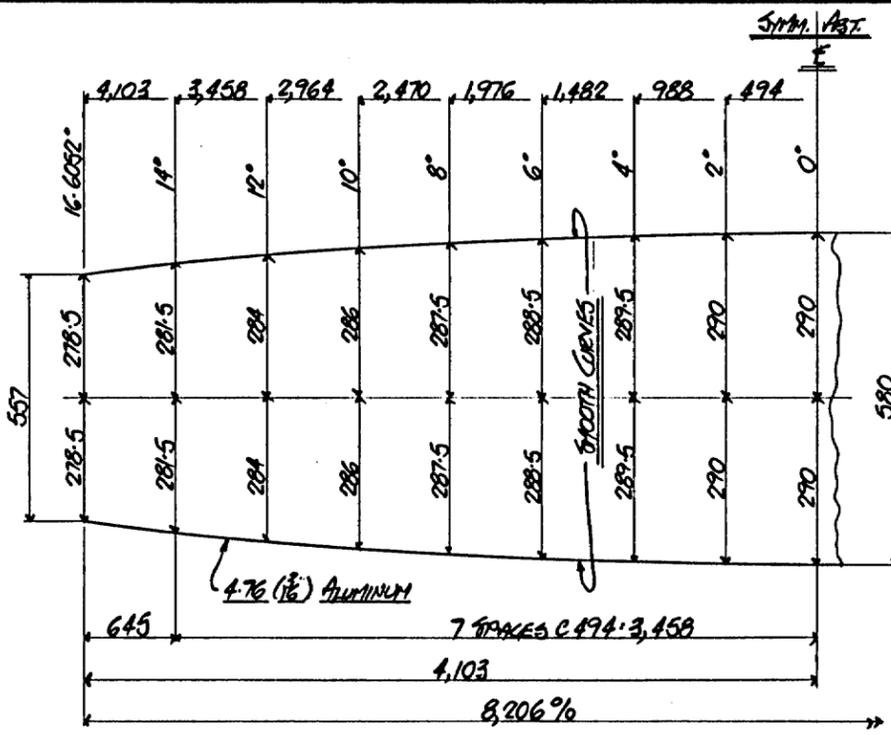
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SHOP DEPARTMENT

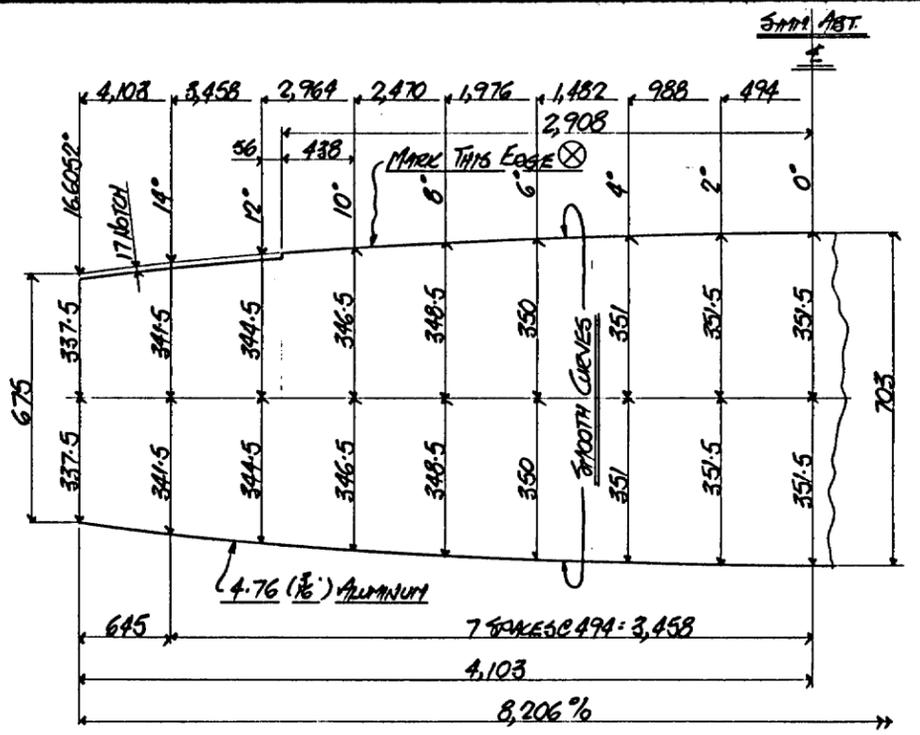
IN / F / S / O / M / T / P / SH / DP / AS / PA / ER



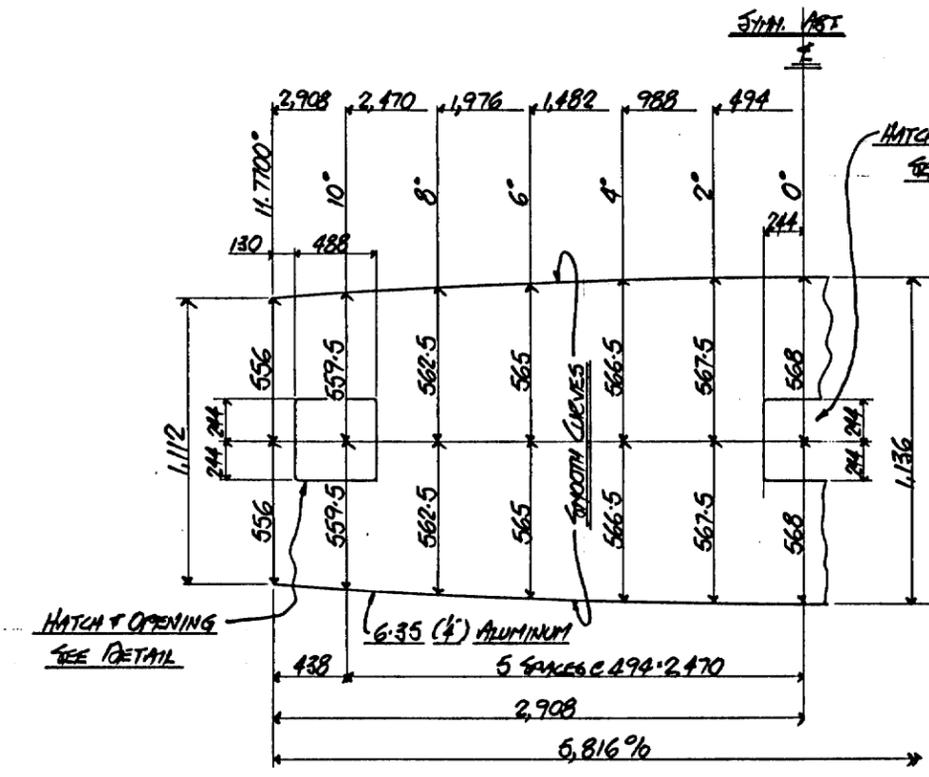
2 REQ^d - OUTER SHELL R.M. b_g (FOR SHOP UNIT)
2° VENT & POWER BOX SECTION



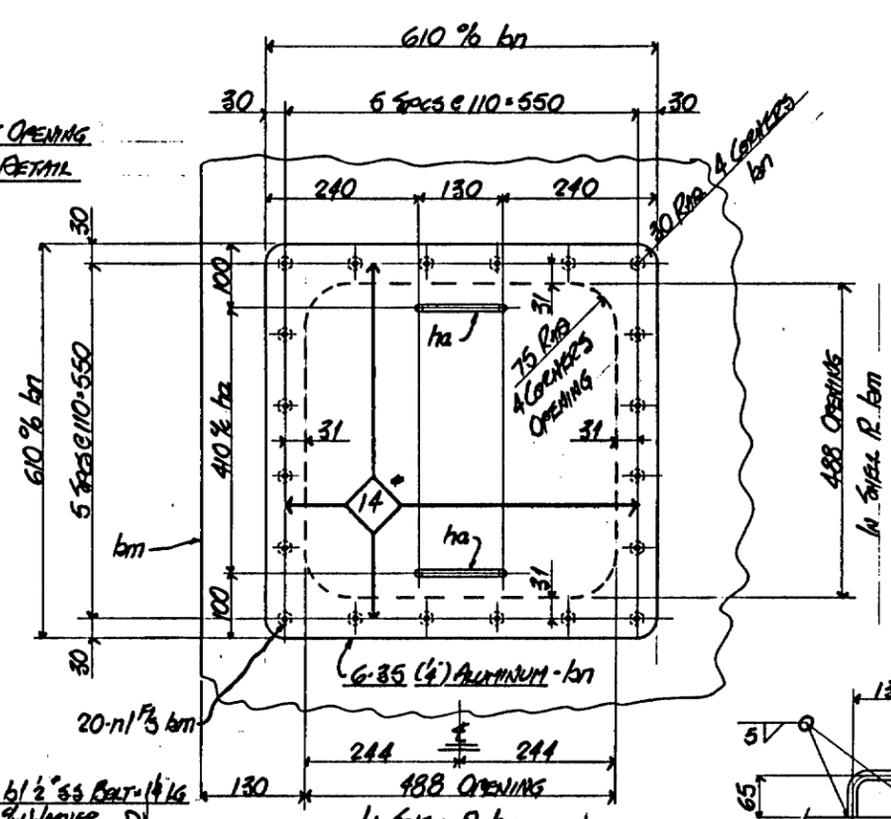
2 REQ^d - OUTER SHELL R.M. b_h (FOR SHOP UNIT)
2.25° VENT & POWER BOX SECTION



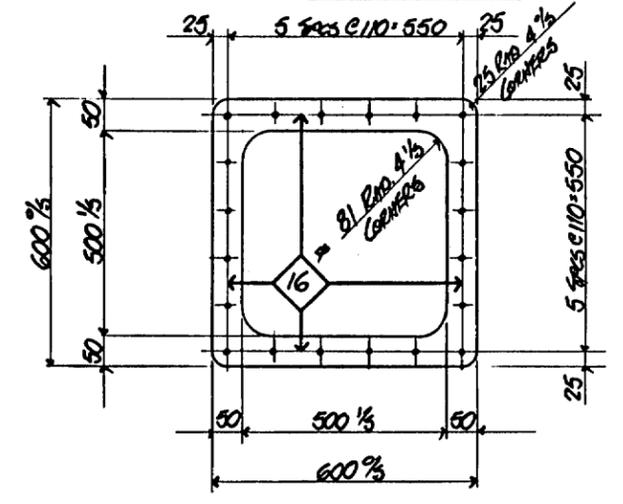
2 REQ^d - OUTER SHELL R.M. b_g (FOR FIELD UNIT)
2.75° BOX SECTION



3 REQ^d - OUTER SHELL R.M. b_h (FOR SHOP UNIT)
4.5° DRIVE BOX SECTION



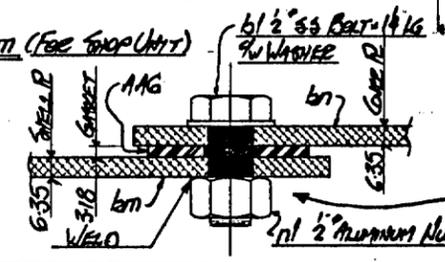
HATCH & OPENING DETAIL



9 REQ^d - HATCH COVER GASKET M.A.A.G.
FIELD FROM 3.18 (b) THICK 50 DURO NEOPRENE

GENERAL NOTES

- 1) FOR ASSEMBLY & WELDING OF SHOP UNITS SEE PDS
- 2) FOR ASSEMBLY & WELDING OF FIELD UNITS SEE PDS
- 3) FOR MATERIALS SEE PDS # 6x
- 4) USE 1/8" DRILL FOR 14 HOLES & 3/8" DRILL FOR 16 HOLES IF PREFERRED.



NOTE: COVER (b_h) & GASKET (M.A.A.G.) TO BE SHIPPED BOLTED IN PLACE AFTER WELDING OF DRIVE SECTION COMPLETED

3R/3001188

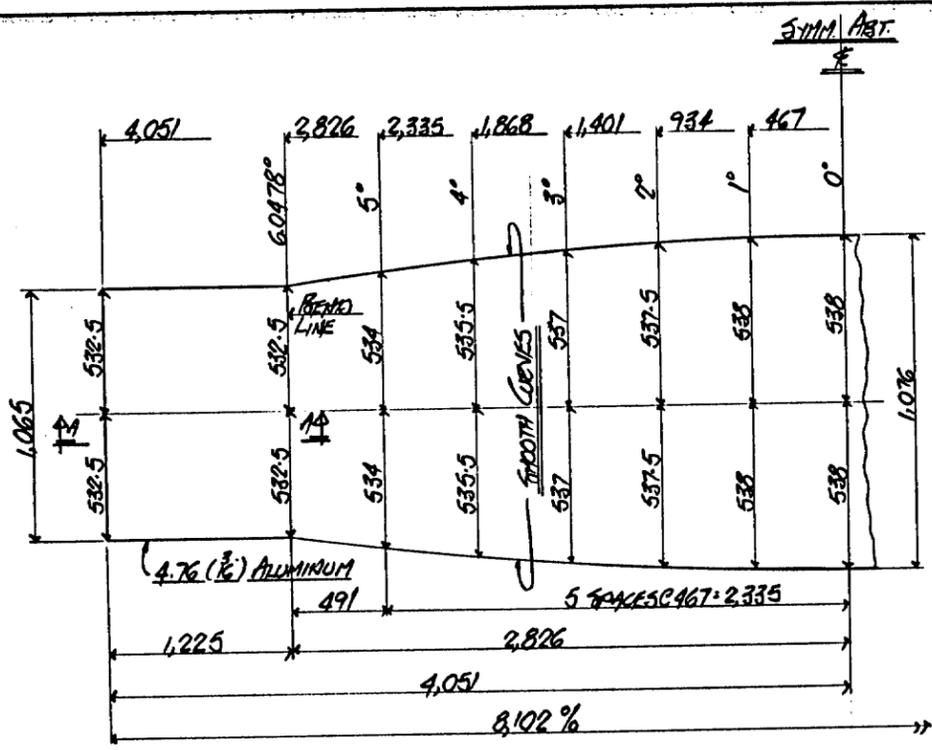
BRITAIN	MATERIAL	ALUMINUM	DETAILS	TRUTHFUL - ITEM CUTTINGS
	SURF. PREP. & PAINT	NONE	FOR 4.2" TELESCOPE DIA. IN FIELD	
OPEN HOLES	AS NOTED	DRAWN	DATE	CHECKED
DATE	18/11/84	DATE		
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.		DRAWING NO. 1420-66		

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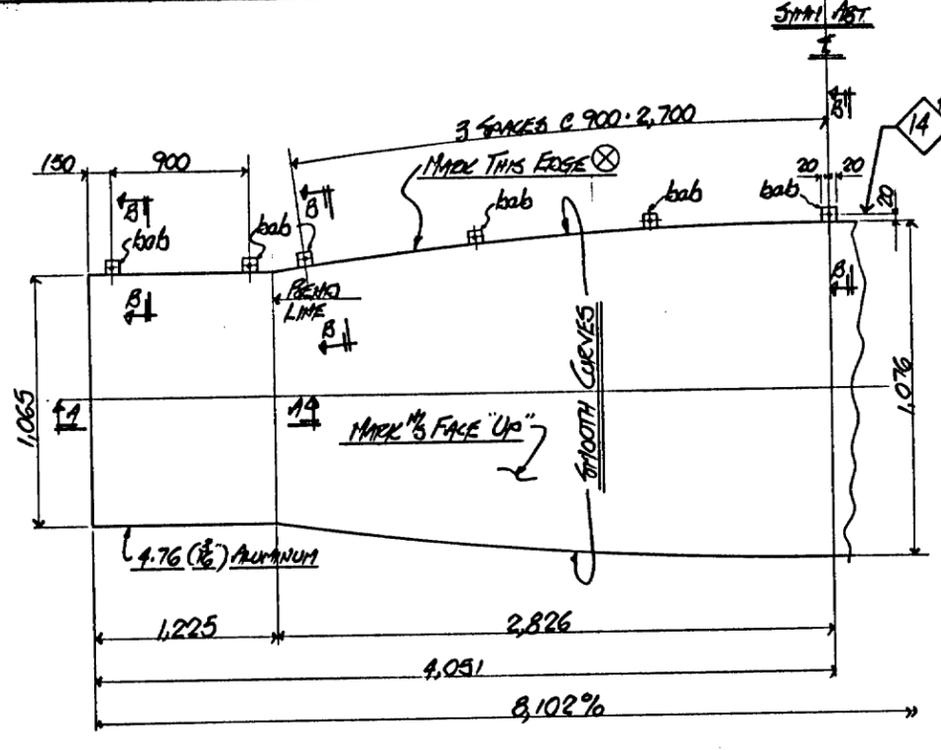
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s-abcdefghijklmnpstvw

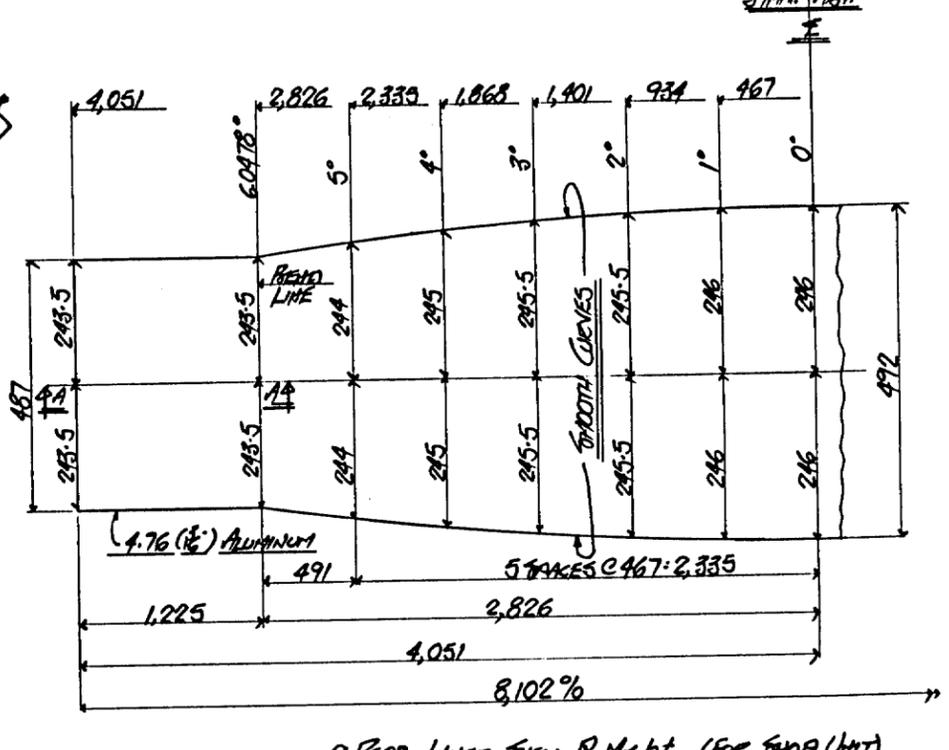
SHOP DEPARTMENT



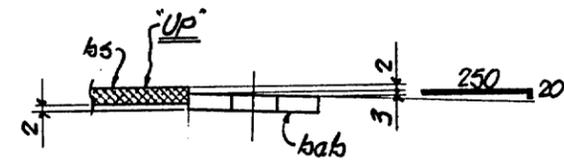
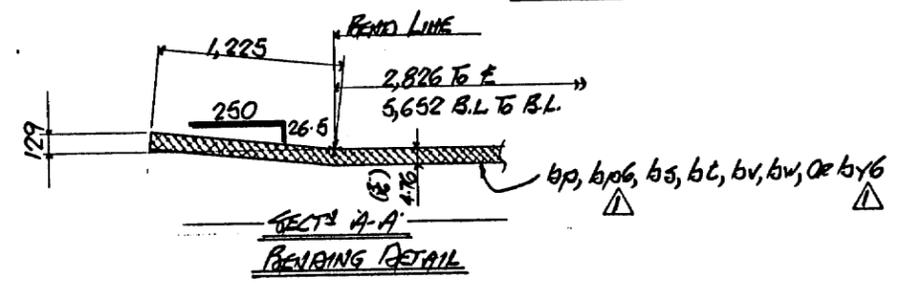
4 REQ- INNER SHELL R MK bp (FOR SHOP UNIT)
 11 REQ- INNER SHELL R MK bp6 (FOR FIELD UNIT) IDENTICAL EXCEPT FOR MARK
 4.5° BOX SECTION



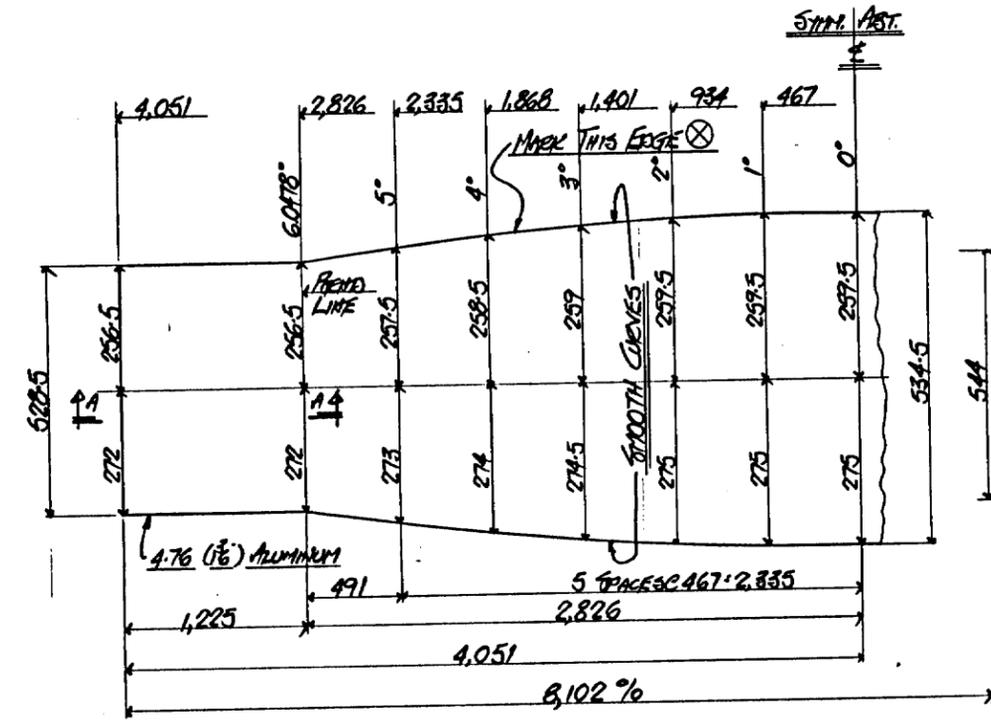
4 REQ- INNER SHELL R MK bs (FOR SHOP UNIT)
 4.5° BOX SECTION
 ALL DIMENSIONS NOT SHOWN SAME AS bp



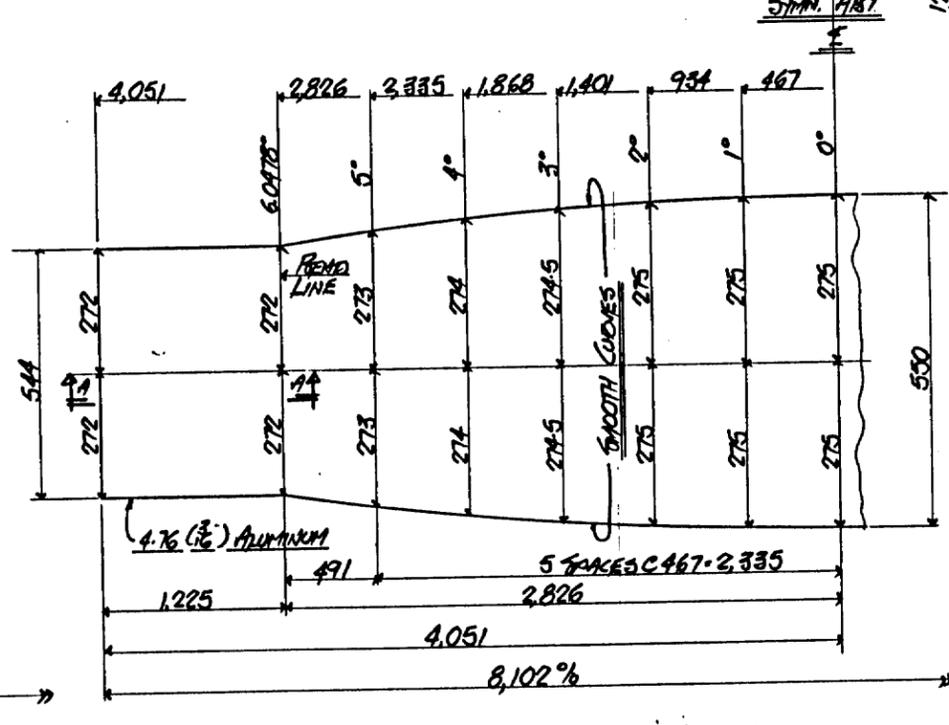
2 REQ- INNER SHELL R MK bt (FOR SHOP UNIT)
 2° VENT OR POWER BOX SECTION



SECT B-B
 TOP 11 RACES EACH bs
 GENERAL NOTES
 1) FOR ASSEMBLY & WELDING OF SHOP UNITS SEE DRS
 2) FOR ASSEMBLY & WELDING OF FIELD UNITS SEE DRS
 3) FOR MATERIAL SEE BILL 6x
 4) USE 3/16" DRILL FOR 14° HOLES IF PREFERRED.



ONE REQ- INNER SHELL R MK bv (FOR SHOP UNIT)
 2.25° POWER BOX SECTION



ONE REQ- INNER SHELL R MK bw (FOR SHOP UNIT)
 2.25° VENT BOX SECTION

3R/3001189

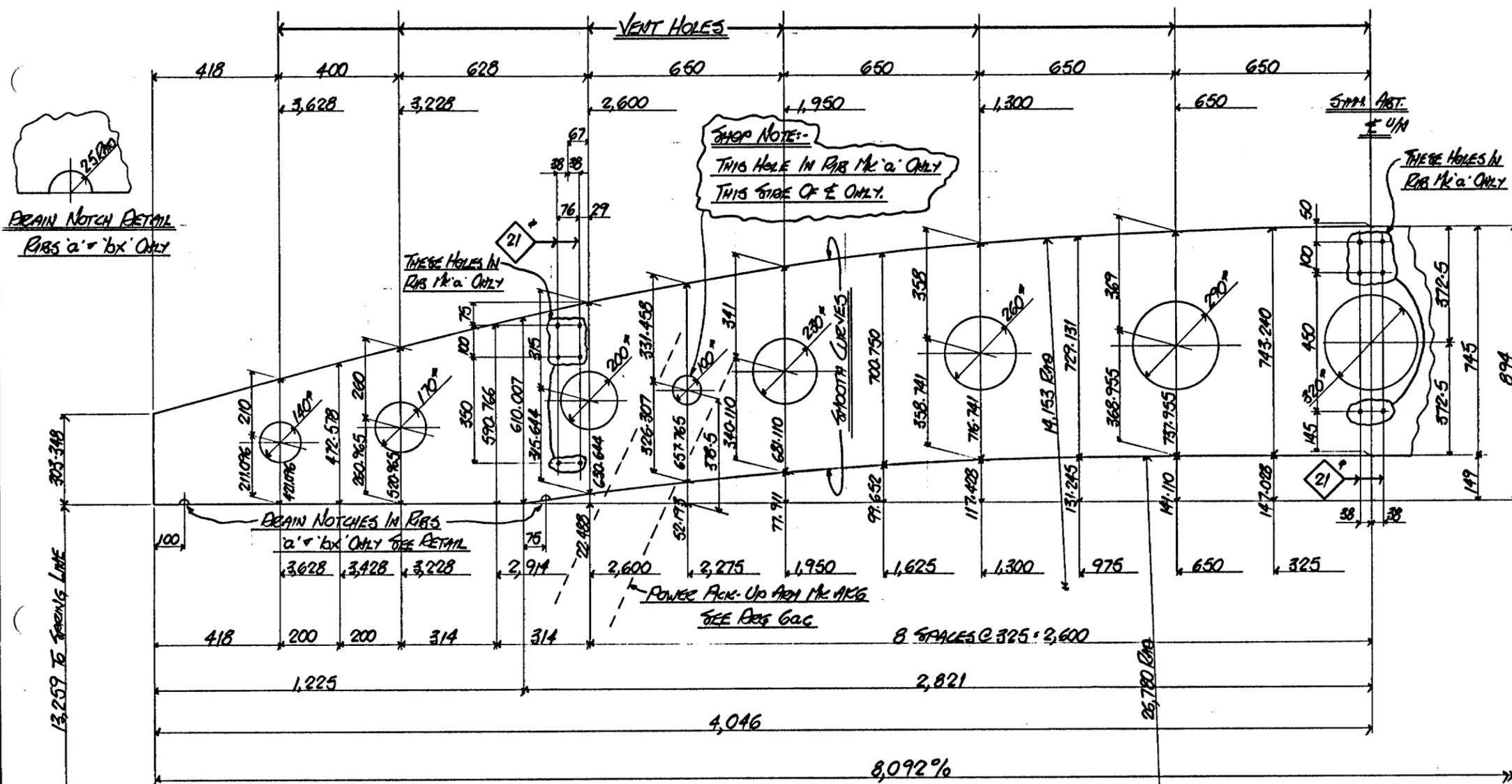
BRITAIN	MATERIAL	ALUMINUM	DETAILS	BRITAIN FROM CUTTING
	SURF. PREP. & PAINT	NONE	FOR	4.2" TELESCOPE DOWN LA PALMA
	OPEN HOLES	AS NOTED	DRAWING NO.	1420-6c
	DRAWN	DATE	CHECKED	DATE
	BR	MAR/84		
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT				

p-abcdefghijklmnpstvw

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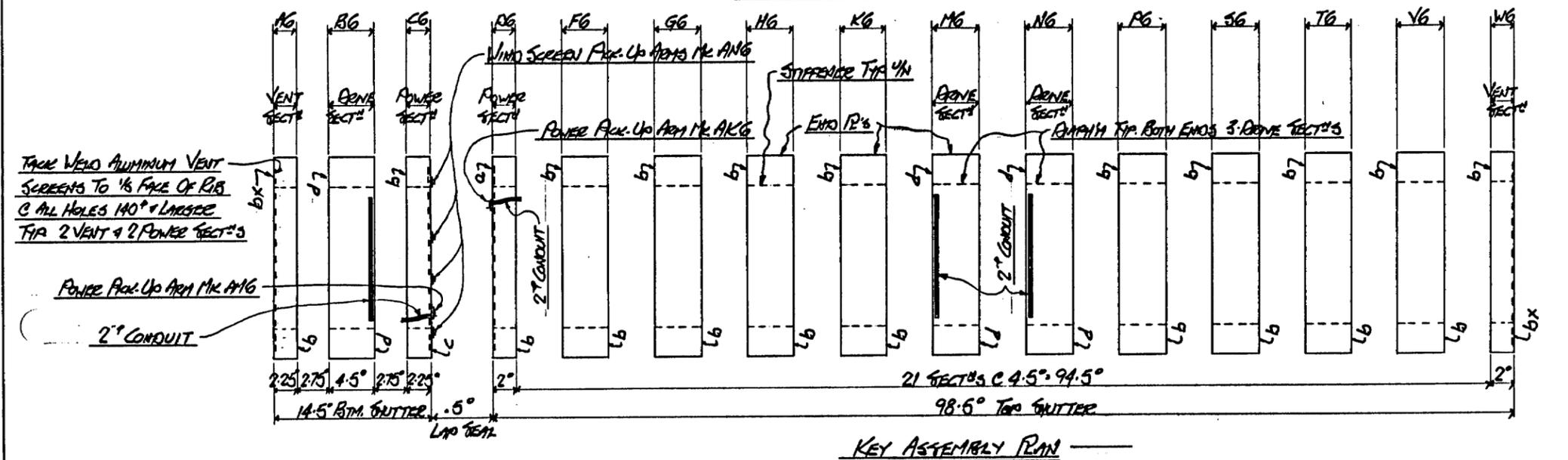
s-abcdefghijklmnpstvw

LINE NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	WEIGHT
1	a'	ONE	R	894-6-35	8,092 (4R)		Aluminum	72
2	b'	20	R	894-6-35	8,092 (4R)		Aluminum	72
3	bx'	2	R	894-6-35	8,092 (4R)		Aluminum	72
4								
5								
6								
7								
8								
9								
10								
11								
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DRAIN NOTCH DETAIL
RIBS a' & bx' ONLY

ONE REQ. RIB MK 'a' (AS SHOWN & NOTED)
20 REQ. RIB MK 'b' (AS SHOWN & NOTED) 2 REQ. RIB MK 'bx' (AS SHOWN & NOTED)



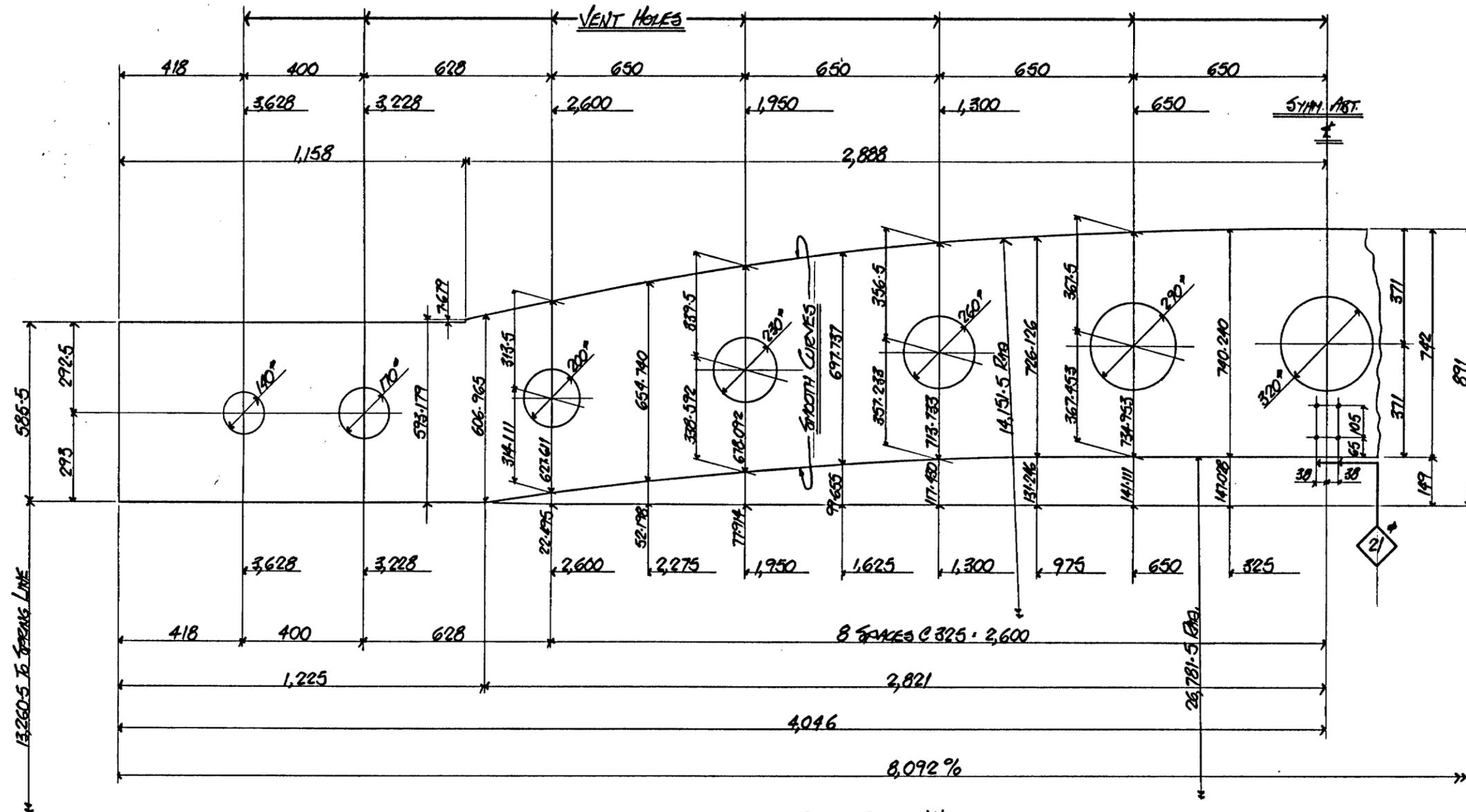
GENERAL NOTES
1) FOR DETAILS OF RIBS 'c' & 'd' SEE PAGES 69 & 61

3R/3001191

BRITAIN	MATERIAL	ALUMINUM	DETAILS	SHUTTERS - RIBS
	SURF. PREP. & PAINT	NONE	FOR	4.7M TELESCOPE DOME LA PALMA
	OPEN HOLES	AS NOTED	DRAWN	DATE
			CHECKED	DATE
			DRAWING No.	1420-6F

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

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6 REQ. RIB Mkd
 For Dome Sect's B6, M6, N6

MATERIAL BILL
 BRITAIN STEEL LTD.

CONTRACT 1420

LINE	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	UNIT	WEIGHT
1	D G R			891x8	8,092 (Net)	ALUMINUM			
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
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GENERAL NOTES

- 1) FOR KEY ASSEMBLY PLAN SEE PAGE 6F
- 2) USE 21° HOLES FOR 21° HOLES IF PREFERRED

3R/3001193

	MATERIAL	ALUMINUM	DETAILS	SMOOTH RIBS
	SUPP. PREP. & PAINT	NONE	FOR	4.2" TELESCOPE DOME LA PALMA
	OPEN HOLES	AS NOTED	DRAWING No.	1420-6h
	DRAWN BY	DATE	CHECKED	DATE

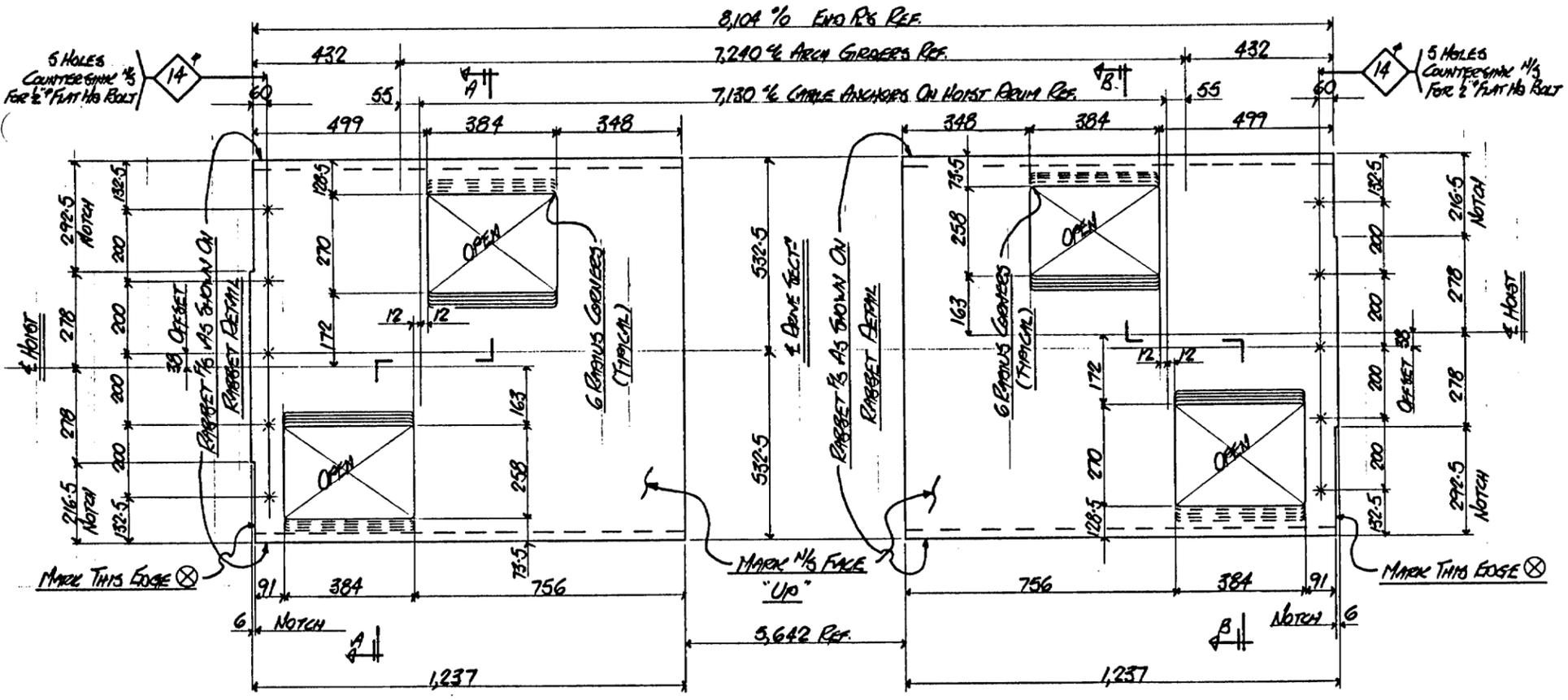
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

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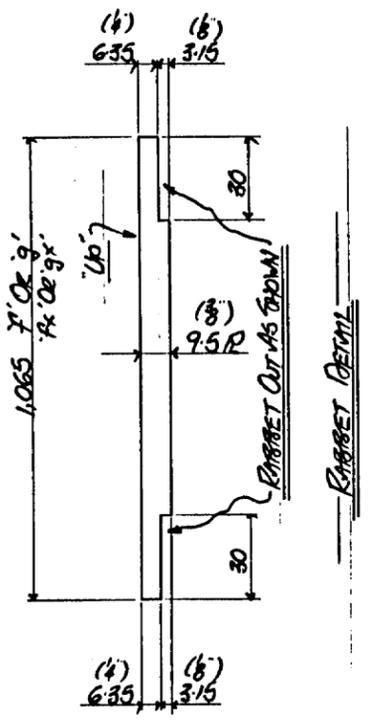
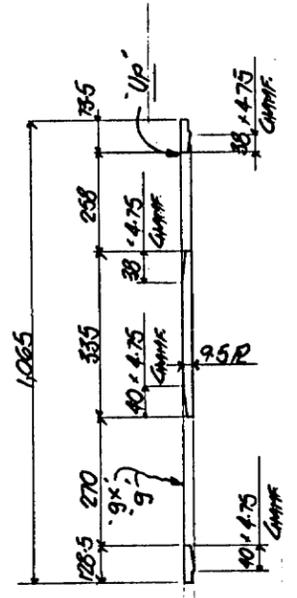
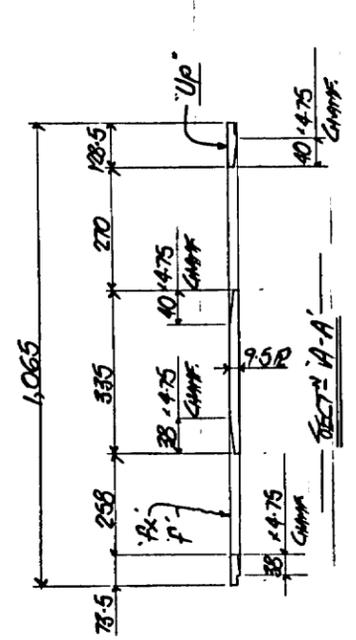
s-abcdefghijklmnpstvw

SHOP DEPARTMENT / INS / F / S / O / M / T / P / SH / DP / AS / PA / ER / NO PRINTS



2 REQ- DRIVE SECT^s REQ R MK 'F' (FOR SHOP UNIT)

2 REQ- DRIVE SECT^s REQ R MK 'g' (FOR SHOP UNIT)



MATERIAL BILL						BRITAIN STEEL LTD.		CONTRACT 1420	
LINE	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL TYPE	UNIT	WEIGHT
1	F'	2	R	1,065-9.5	1,237 (36R)		ALUMINUM	B	2
2	g'	2	R	1,065-9.5	1,237 (36R)		ALUMINUM	B	2
3									
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- GENERAL NOTES**
- 1) USE 1/8" DRILL FOR 1/4" HOLES IF PREFERRED.
 - 2) FOR KEY ASSEMBLY PLAN SEE PAGE 6

3R/3001194

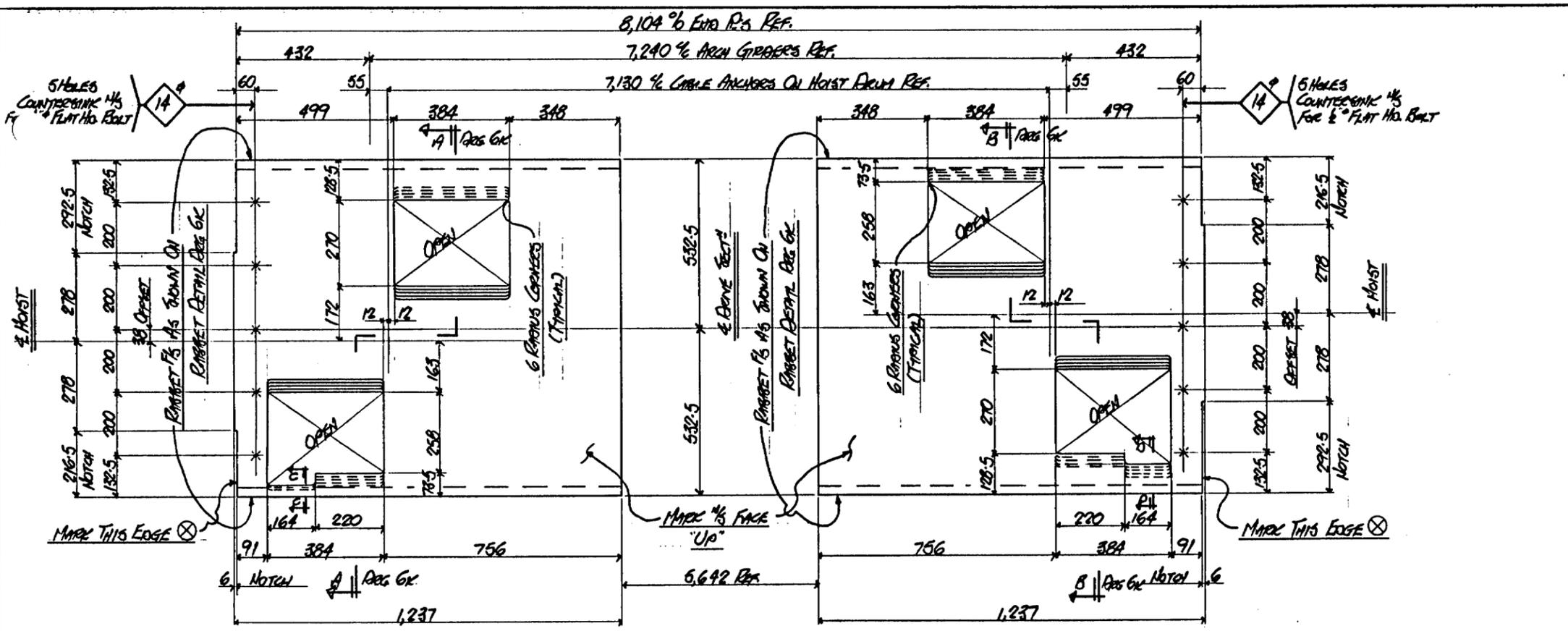
	MATERIAL	ALUMINUM	DETAILS	DRIVERS-DRIVE REQ R'S
	SURF. PREP & PAINT	NONE	FOR	4.2" TELESCOPE DRIVE LA PALMA
	OPEN HOLES	AS NOTED	DRAWING No.	1420-6K
	DRAWN	DATE	CHECKED	DATE
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				

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m-abcdefghijklmnpstvw y

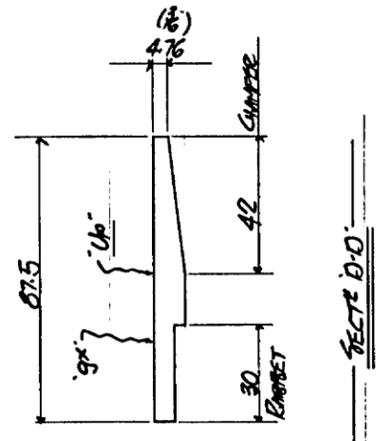
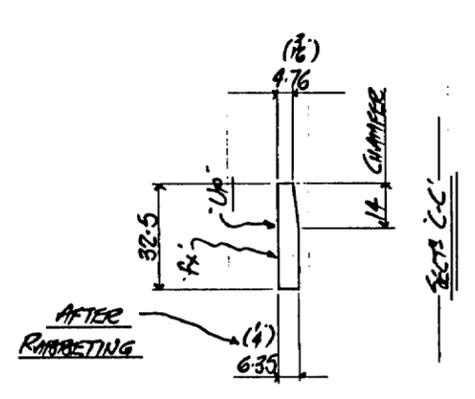
s-abcdefghijklmnpstvw y

SHOP DEPARTMENT / INS / E / S / O / M / T / P / SH / DP / AS / PA / ER / NO PRINTS



ONE REAR-DRIVE SECTⁿ REQ'D REO R2 M² FX (FOR SHOP UNIT)

ONE REAR-DRIVE SECTⁿ REQ'D REO R2 M² GX (FOR SHOP UNIT)



MATERIAL BILL							BRITAIN STEEL LTD.			CONTRACT 1420		
LINE	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	UNIT	WEIGHT			
1	FX	ONE	R2	1,066-9-5	1,237 (3R)		ALUMINUM	8	2			
2												
3	GX	ONE	R2	1,065-9-5	1,237 (3R)		ALUMINUM	8	2			
4												
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GENERAL NOTES

- 1) USE 1/8" DRILL FOR 1/4" HOLES IF PREFERRED.
- 2) FOR KEY ASSEMBLY RUN SEE PAGES 6

3R/3001195

	MATERIAL	ALUMINUM	DETAILS	DRIVERS - DRIVE REO R2'S
	SURF. PREP. & PAINT	NONE	FOR 4.2" TELESCOPE ROPE	LO RUMEN
	OPEN HOLES	AS NOTED		
DRAWN	DATE	CHECKED	DATE	DRAWING No.
BR	1/2/54			1420-6m
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT		INS. / S. / O. / M. / T. / P. / SH. / DP. / AS. / PA. / ER. / NO. PRINTS		

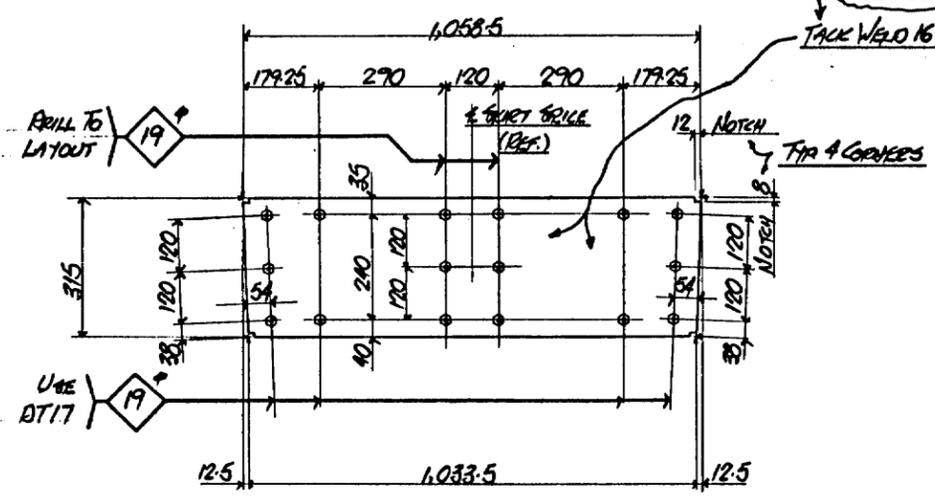
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m-abcdefghijklmnpstvw

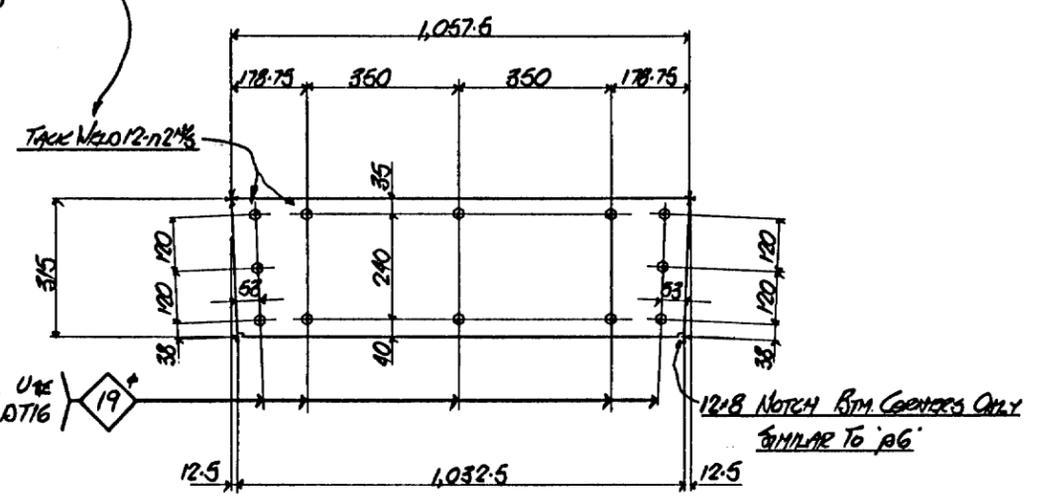
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NOTE: USE ALIGNMENT BOLT FROM REG 611

TACK WELD 16-112%
TIP 4 CORNERS



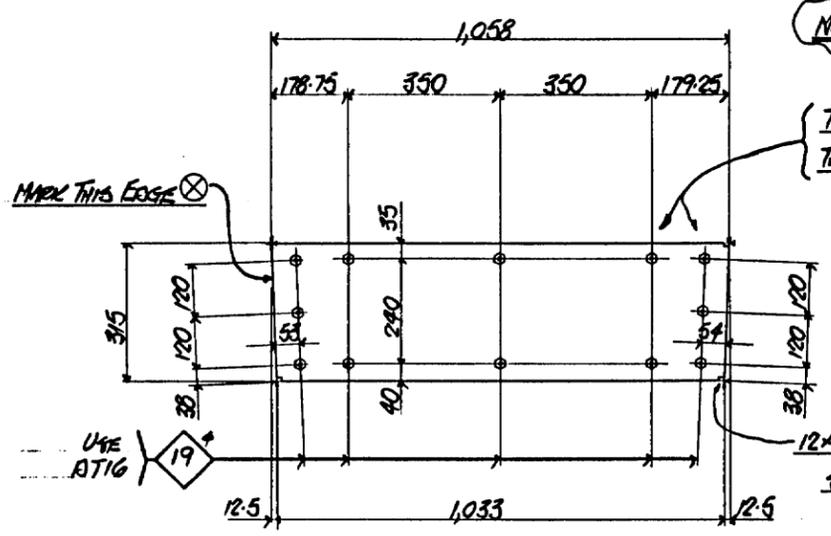
4 REQ. ENO R MK 'p6' (FOR FIELD UNIT)
4.5° BOX SECTION



2 REQ. ENO R MK 's6' (FOR FIELD UNIT)
4.5° BOX SECTION

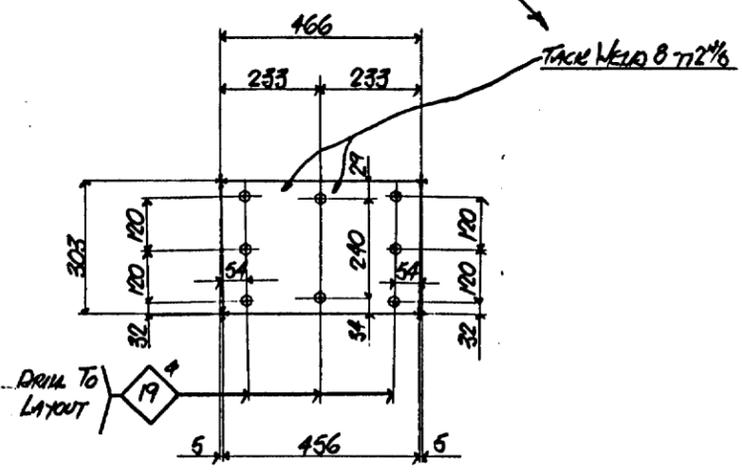
NOTE: USE ALIGNMENT BOLT FROM REG 611

TACK WELD 12-112% FOR 't6'
TACK WELD 12-112% FOR 'v6'



2 REQ. ENO R MK 't6' (FOR FIELD UNIT)
2 REQ. ENO R MK 'v6' (FOR FIELD UNIT)
4.5° BOX SECTION

TACK WELD 8-112%



4 REQ. ENO R MK 'w' (FOR END UNIT)
2° VENT OR POWER BOX SECTION

MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	UNIT	WEIGHT
1			4 REQ. MK 'p6'					
2								
3	4	R	315-12.7	1,058.5 (2R)			ALUMINUM	7.20
4	n2	64	NUT		FOR 3/8" BOLT			
5								
6								
7			2 REQ. MK 's6'					
8								
9	2	R	315-12.7	1,057.5 (2R)			ALUMINUM	7.20
10	n2	24	NUT					
11								
12								
13								
14			2 REQ. MK 't6'					
15								
16								
17	2	R	315-12.7	1,058 (2R)			ALUMINUM	7.20
18	n2	24	NUT					
19								
20								
21			2 REQ. MK 'v6'					
22								
23								
24	2	R	315-12.7	1,058 (2R)			ALUMINUM	7.20
25	n2	24	NUT					
26								
27								
28			4 REQ. MK 'w'					
29								
30								
31	4	R	303-12.7	466			ALUMINUM	7.21
32	n2	32	NUT					
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GENERAL NOTES

- 1) USE 3/8" DRILL FOR 19° HOLES IF PREFERRED
- 2) FOR DETAILS OF DRILLING TEMPERATURES DT16 & DT17 SEE REG 61

3R/3001197

	MATERIAL	ALUMINUM	DETAILS	TELESCOPES - ENO R's
	SURF. PREP. & PAINT	NONE	FOR	4.2" TELESCOPE DONE LA PALMA
	OPEN HOLES	AS NOTED	DRAWING No.	1420-6p
	DRAWN DATE	17/1/84	CHECKED DATE	
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, S.C.				
SHOP DEPARTMENT		INS / P / S / O / M / T / P / SH / DP / AS / PA / ER		

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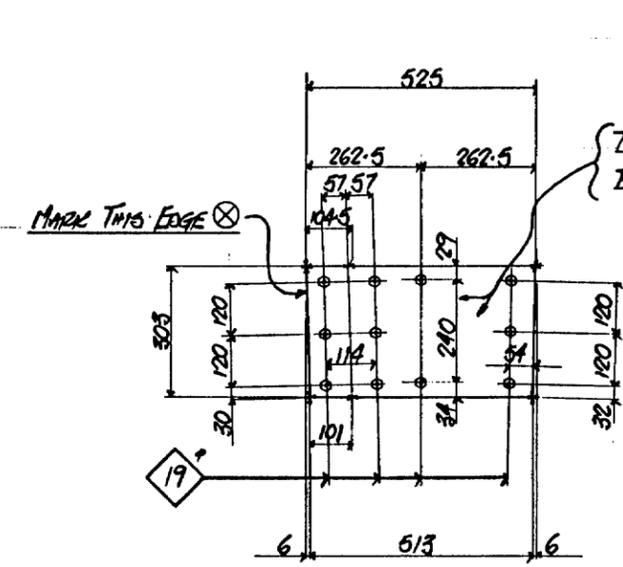
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AVE

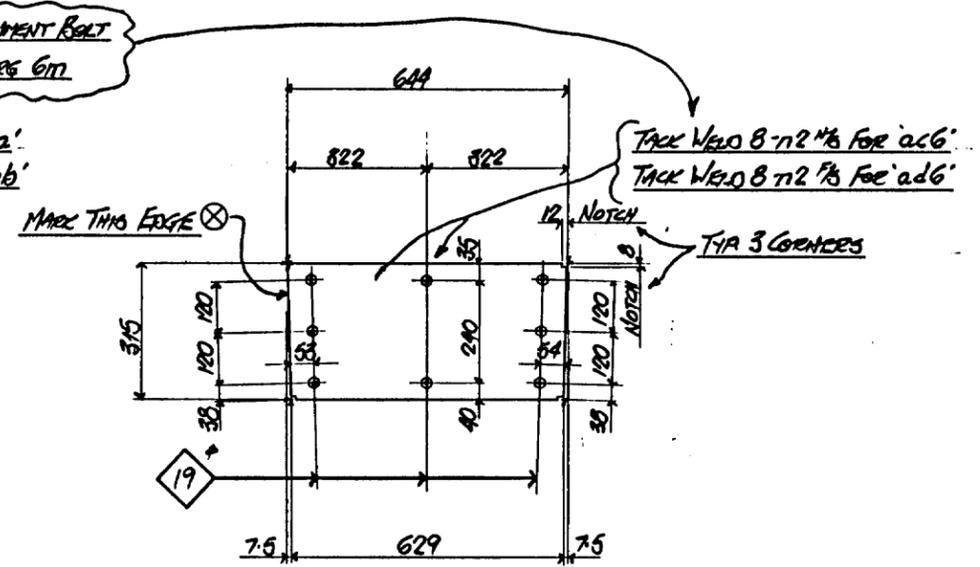
MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

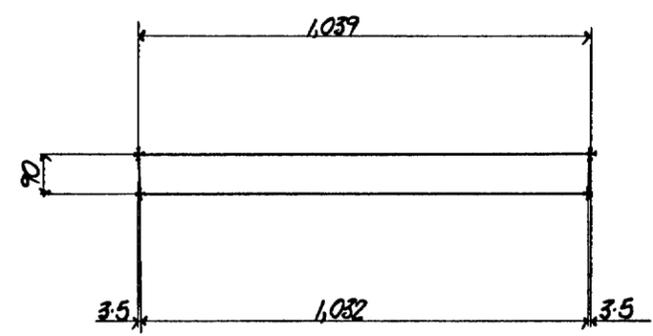
LINE NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	W. UNIT	WEIGHT
1				2 REQ. MK 'aa'					
2									
3	2	R	303x12.7	525 (4R)		ALUMINUM 728			
4	n2	22	NUT	FOR 3" BOLT					
5									
6									
7									
8				2 REQ. MK 'ab'					
9									
10	2	R	303x12.7	525 (4R)		ALUMINUM 728			
11	n2	22	NUT						
12									
13									
14				2 REQ. MK 'acg'					
15									
16									
17	2	R	315x12.7	644 (4R)		ALUMINUM 728			
18	n2	16	NUT						
19									
20									
21				2 REQ. MK 'adg'					
22									
23									
24	2	R	315x12.7	644 (4R)		ALUMINUM 728			
25	n2	16	NUT						
26									
27									
28									
29				22 REQ. MK 'af'					
30									
31	22	R	90x6.35	1039 (4R)		ALUMINUM 727			
32									
33									
34									
35				4 REQ. MK 'ag'					
36									
37	4	R	90x6.35	459 (4R)		ALUMINUM 728			
38									
39									
40									
41				2 REQ. MK 'ah'					
42									
43	2	R	90x6.35	517 (4R)		ALUMINUM 728			
44									
45									
46									
47				22 REQ. MK 'akg'					
48									
49	22	R	96x6.35	1039 (4R)		ALUMINUM 727			
50									
51									
52									
53				4 REQ. MK					
54									
55									
56	4	R	96x6.35	633 (4R)		ALUMINUM 728			



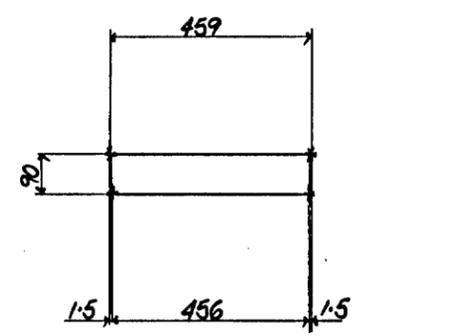
2 REQ. END R MK 'aa' (FOR BRP UNIT)
2 REQ. END R MK 'ab' (FOR BRP UNIT)
2.25° VENT OR POWER BOX SECTION



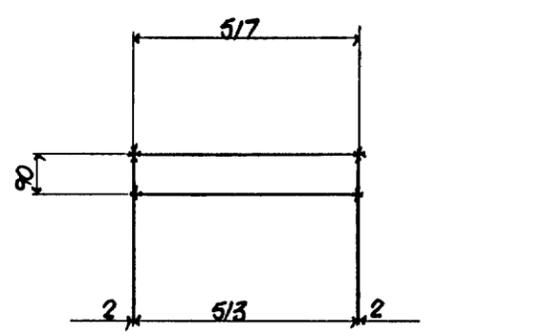
2 REQ. END R MK 'acg' (FOR FIELD UNIT)
2 REQ. END R MK 'adg' (FOR FIELD UNIT)
2.75° BOX SECTION



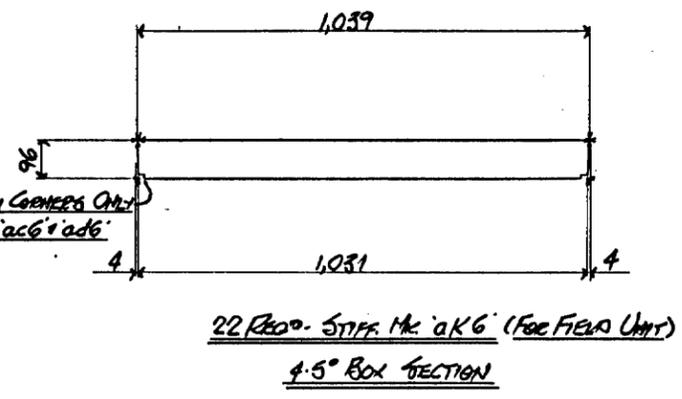
22 REQ. STIFF MK 'af' (FOR BRP UNIT)
4.5° BOX SECTION



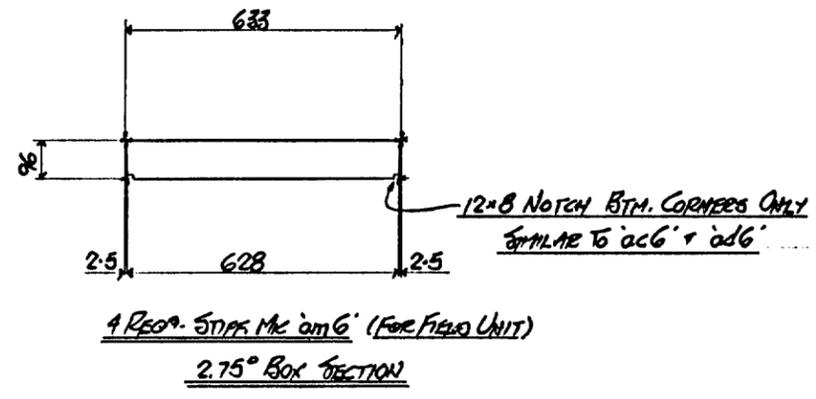
4 REQ. STIFF MK 'ag' (FOR BRP UNIT)
2° VENT OR POWER BOX SECTION



2 REQ. STIFF MK 'ah' (FOR BRP UNIT)
2.25° VENT SECTION



22 REQ. STIFF MK 'akg' (FOR FIELD UNIT)
4.5° BOX SECTION



4 REQ. STIFF MK 'amg' (FOR FIELD UNIT)
2.75° BOX SECTION

GENERAL NOTES
1) USE 3" BOLT FOR 19" HOLES IF PREFERRED.

3R13001198

MATERIAL		ALUMINUM		DETAILS		BRITAIN'S END R & T STIFFS	
SURF. PREP. & PAINT		NONE		FOR		4.2" TELESCOPE DOWN LA PLUME	
OPEN HOLES		AS NOTED		DRAWN		182	
DATE		11/84		CHECKED		DATE	
DRAWING No.		1420-66		BRITAIN		BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.	

SHOP DEPARTMENT

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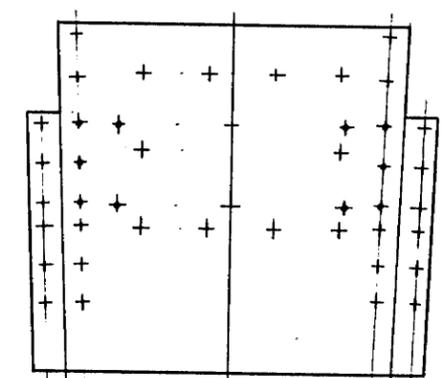
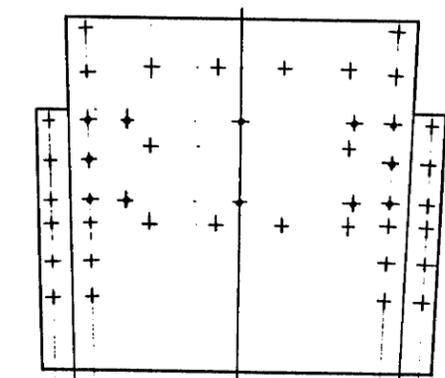
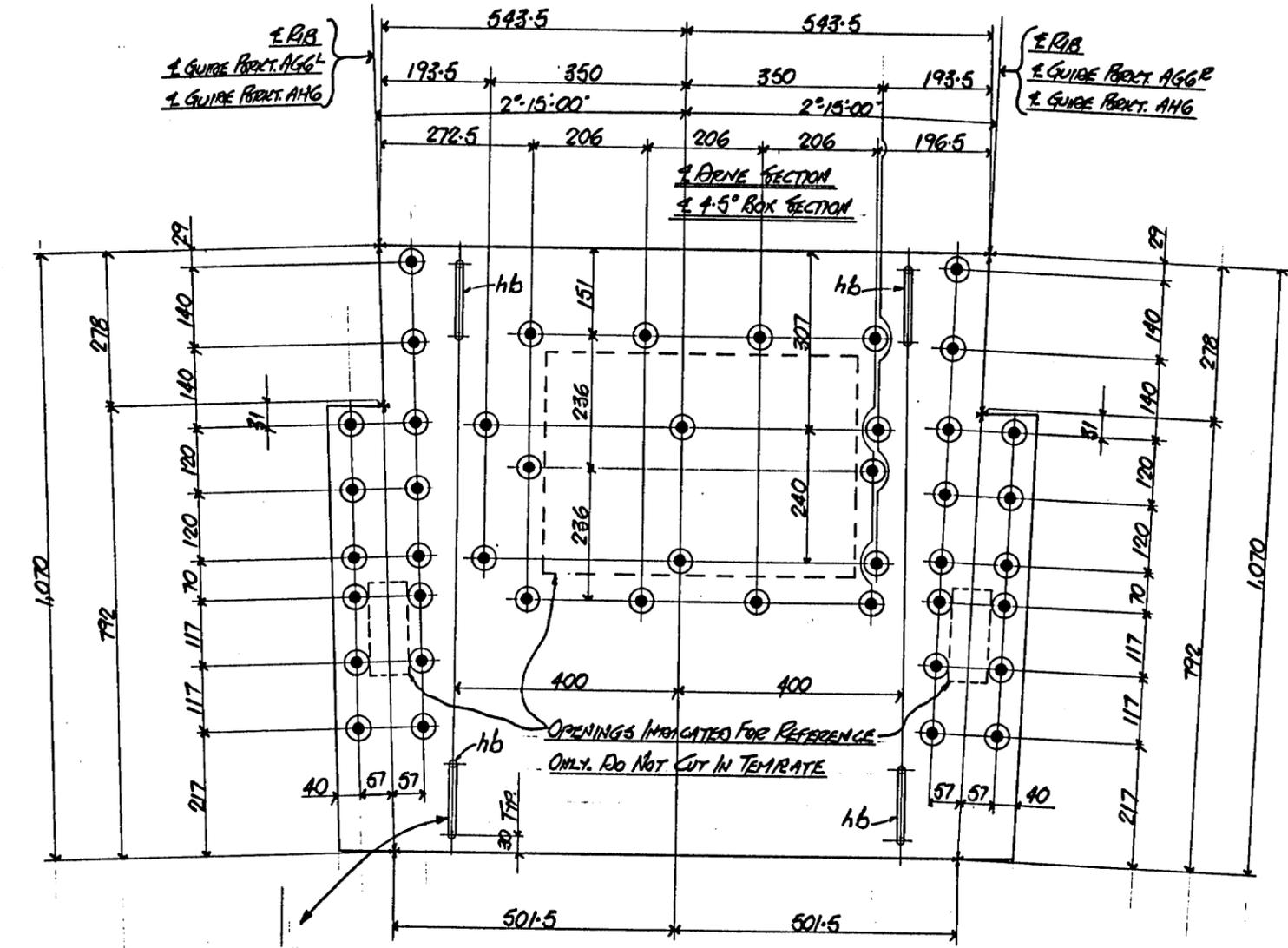
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s-abcdefghijklmnpstvw

MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

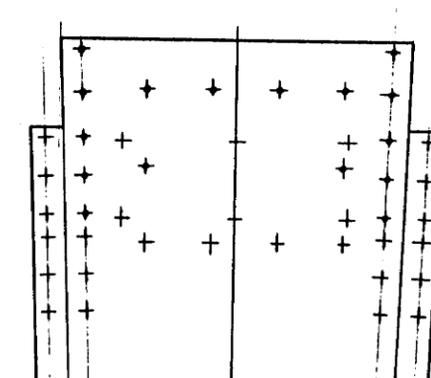
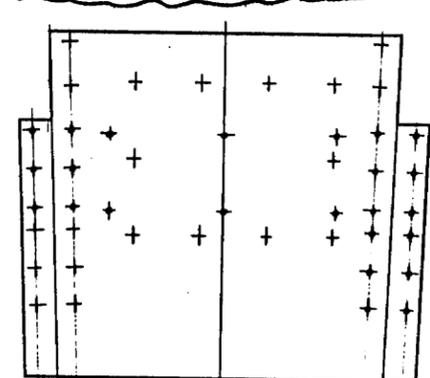
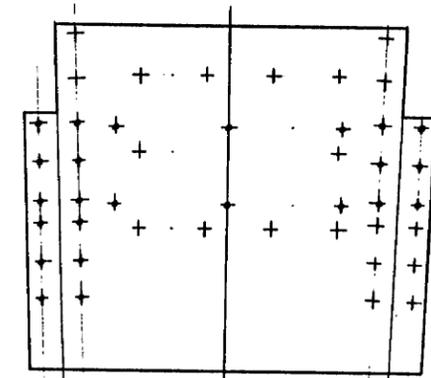
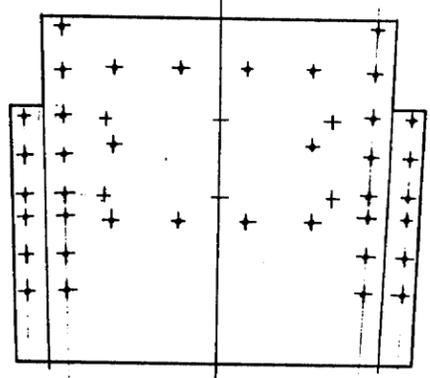
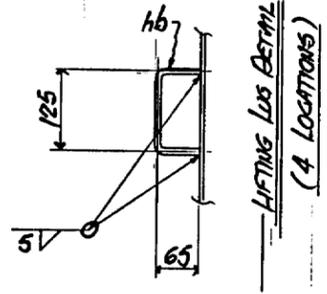
MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	W	L	WEIGHT
1	ONE	R			THICKNESS TO SUIT	A36			
2	4	R	12-7"	255	BUSHINGS	A36			
3	44				HARDENED BUSHINGS FOR 19" (3") HOLES				
4									
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ONE REQ^d - COMBINED DRILLING TEMPERATE
 COMPOSED OF DT12, DT13, DT14, DT15, DT16, & DT17
 R THICKNESS & HOLES TO SUIT 19" (3") HARDENED BUSHINGS

SHOP NOTE:-
 SPECIAL SIZED BUSHINGS. SUBSTITUTION OF 1/8" NOT ALLOWED.

SHOP NOTE:-
 WHEN DRILLING TEMPERATE IS APPLIED AT INTERVALS OF 4'-30", OUTSIDE SET OF HOLES WILL COINCIDE WITH HOLES DRILLED BY PREVIOUS TEMP. APPLICATION.



GENERAL NOTES

- 1) FOR APPLICATION OF DRILLING TEMPERATE TO END R'S, SEE DRAWS G11 & G12
- 2) FOR APPLICATION OF DRILLING TEMPERATE TO SHORT R'S SEE DRAWS G13, G14, G15, & G16

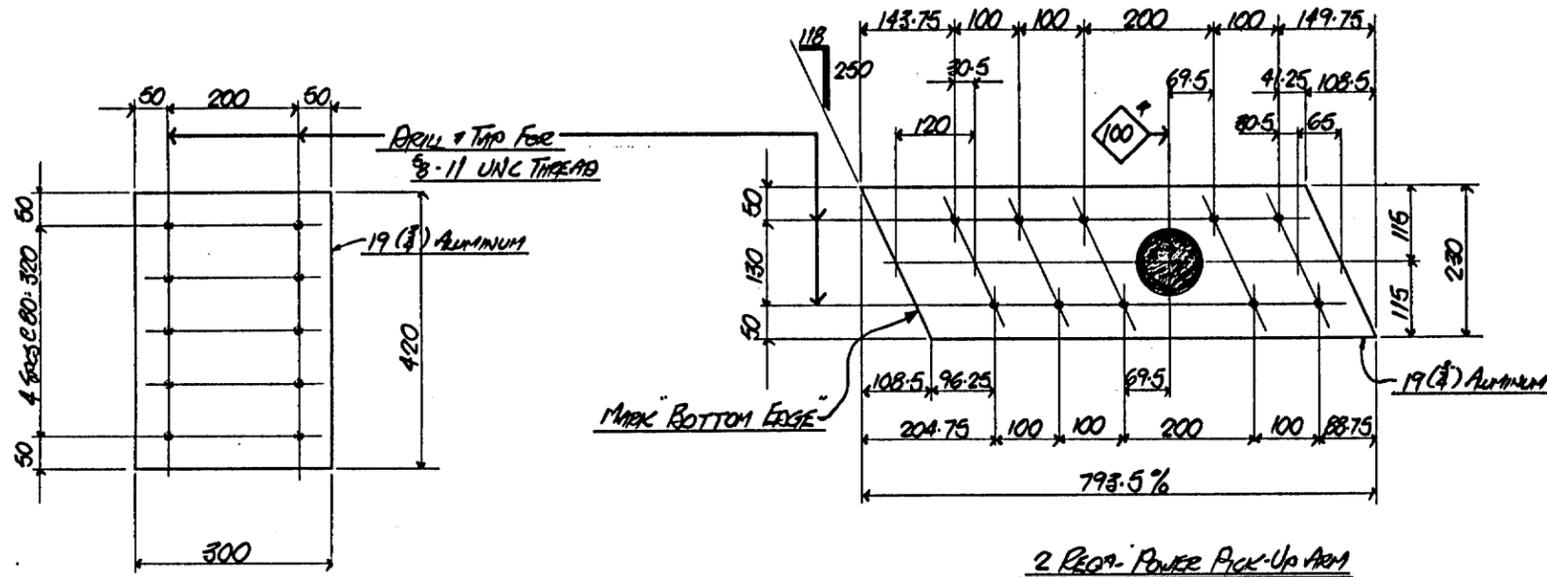
3R13001199

	MATERIAL	G4021 (44W) w/n	NO. BY DATE	REVISION
	SURF. PREP. & PAINT	NONE	DETAILS BRITAIN'S DRILLING TEMPERATE	
	OPEN HOLES	AS REQ ^d	FOR 4-2" TELESCOPE DONE LA PUNYA	
	DRAWN	DATE	CHECKED	DATE
	RL	11/84		
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.			DRAWING NO. 1420-66	
SHOP DEPARTMENT			INS. P/S/O/M/T/P/SH/DP/AS/PA/ER	

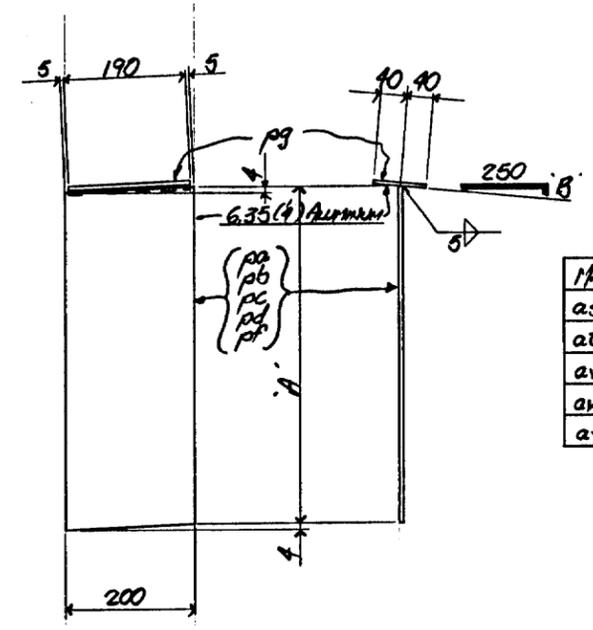
p-abcdefghijklmnpstvw

m-abcdefghijklmnpstvw

s-abcdefghijklmnpstvw



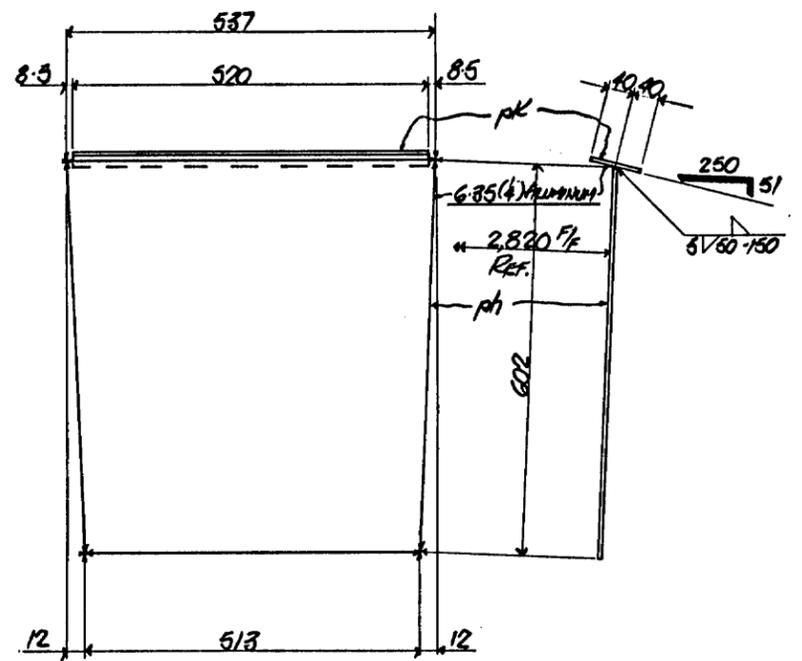
2 REQ. POWER PICK-UP ARM
MOUNTING AND MOUNTING
FOR 2° & 2.25° POWER BOX SECTIONS



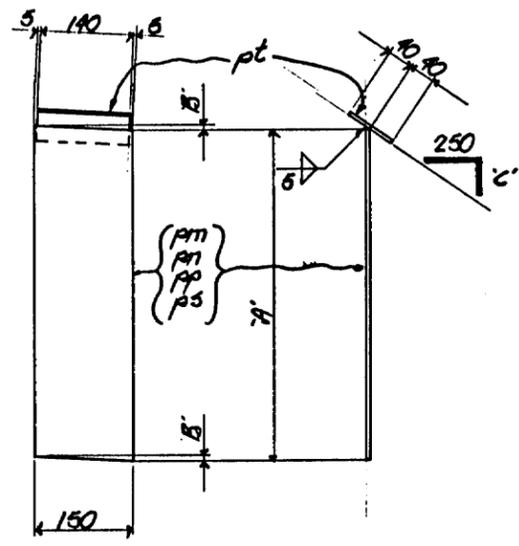
MATERIAL	A'	B'
as E	890	7
at E	879	12
av E	823	25
aw E	790	31
ay E	539	56

2 REQ. MK as E (ONE AS SHOWN, ONE OPPOSITE HAND)
2 REQ. MK at E
2 REQ. MK av E
2 REQ. MK aw E
2 REQ. MK ay E
STIFFS FOR MOUNTING AND MOUNTING
FOR 2.25° POWER BOX SECTION

6 REQ. WIND SCREEN PICK-UP ARM
MOUNTING AND MOUNTING
FOR 2.25° POWER BOX SECTION



2 REQ. EMPHASIS MK 'bag'
FOR 2.25° POWER BOX SECTION



ONE REQ. MK 'bah'
ONE REQ. MK 'bak'
ONE REQ. MK 'bam'
ONE REQ. MK 'ban'
STIFFS FOR MOUNTING AND MOUNTING
FOR 2.25° POWER BOX SECTION
FOR 2° POWER BOX SECTION

MATERIAL	A'	B'	C'
bah	769	3.5	164
bak	750	3.5	171
bam	769	3	164
ban	750	3	171

GENERAL NOTES

- FOR MATERIAL SEE BILL # 6W.
- FOR TAP ASSEMBLY & SHOP WELDING OF ITEMS ON THIS DRAW SEE DRESS G6a & G6b.

3R/3001200

	MATERIAL	ALUMINUM	NO.	BY	DATE	REVISION
	SURF. PREP.	None	DETAILS: FINISHED, PAINTING, BRAS, GIZES & BUSHINGS			
	PAINT	None	FOR 4.2" TELESCOPE DOME LA PALMA			
	OPEN HOLES	AS NOTED	DRAWING NO. 1420-6V			
DRAWN	DATE	CHECKED	DATE	BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.		
BR	1/11/69			SHOP DEPARTMENT		
			VNS / P / S / O / M / T / P / SH / DP / AS / PA / ER			NO. PRINTS

p-abcdefghijklmnpstvw

m-abcdefghijklmnpstvw

s-abcdefghijklmnpstvw

3R/3001201

BRITAIN STEEL LTD.
NEW WESTMINSTER, B.C.

BILL NO. OW

CONT. NO. 1420

BILL OF MATERIAL

W.O. _____

MATERIAL FOR 4.2M TELESCOPE DOME - LA PALMA

DATE May/84

SHUTTERS

ALL MAT'L ALUMINUM

MADE BY BK

CHECKED BY _____

MATERIAL REQUIRED FOR DRAWING No. 6v

SHIPPER'S COLUMN

SHIPPING DIVISION

LINE	NO. PIECES	ASSEMBLING MARKS	SHAPE	SIZE	LENGTH	REMARKS	W. H. D.	W. H. D.	WEIGHT	SHIPPER'S COLUMN			SHIPPING DIVISION
										NO. PIECES	MARK	WEIGHT	
1	6	an	R	300x19	420	(3/2)			85				
2													
3	2	ap	R	230x19	793.5	(3/2)							
4													
5	2	asR											
6	2	pa	R	200x6.35	894	(4/2)			87				
7	2	pa	L	80x6.35	190								
8													
9	2	atR											
10	2	pb	R	200x6.35	883	(4/2)			87				
11	2	pa	L										
12													
13	2	avR											
14	2	pc	R	200x6.35	827	(4/2)			87				
15	2	pa	L										
16													
17	2	awR											
18	2	pd	R	200x6.35	794	(4/2)			87				
19	2	pa	L										
20													
21	2	ayR											
22	2	pf	R	200x6.35	543	(4/2)			87				
23	2	pa	L										
24													
25	2	bag											
26	2	ph	R	537x6.35	602	(4/2)							
27	2	pk	L	80x6.35	520	(4/2)							
28													
29	ONE	boh											
30	ONE	pm	R	150x6.35	772.5	(4/2)			88				
31	ONE	pl	L	80x6.35	140	(4/2)							
32													
33	ONE	kak											
34	ONE	pn	R	150x6.35	753.5	(4/2)			88				
35	ONE	pl	L										
36													
37	ONE	kam											
38	ONE	pp	R	150x6.35	772	(4/2)			88				
39	ONE	pl	L										
40													
41	ONE	kpn											
42	ONE	ps	R	150x6.35	753	(4/2)			88				
43	ONE	pl	L										
44													
45													
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M/R

M/R

1 R^{28/3/81} FIELD MARKS & R.B. # REVISED
 2 R^{28/3/81} LINES 43 & 44 BRITAIN STEEL LTD.
 NEW WESTMINSTER, B.C.

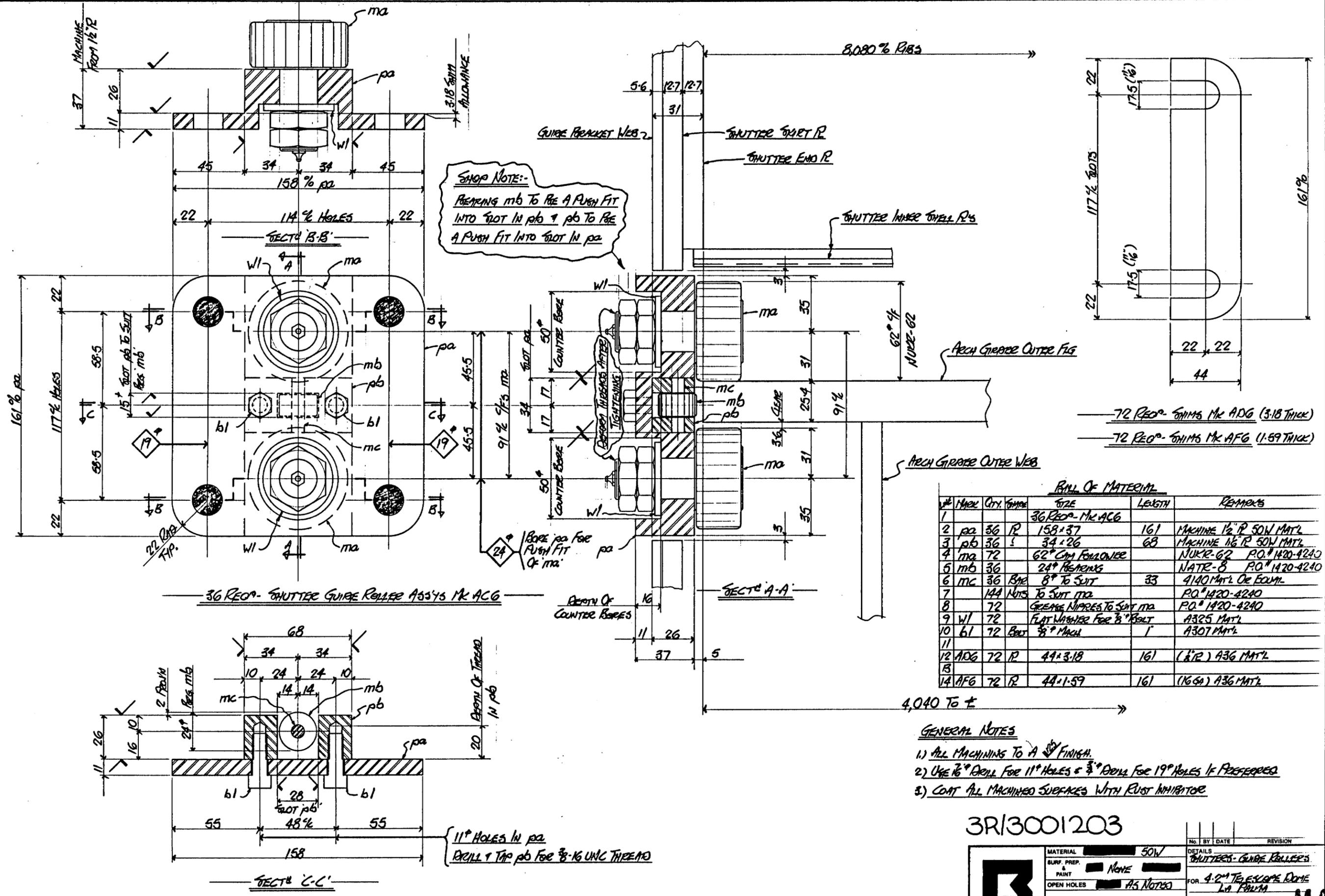
BILL NO. 6x2
 CONT. NO. 1420
 W.O. _____
 DATE MAR 184
 MADE BY BK
 CHECKED BY _____

BILL OF MATERIAL

MATERIAL FOR 4.2" TELESCOPE DOME - LA PALMA
SHUTTERS MATL - ALUMINUM 4/N

MATERIAL REQUIRED FOR DRAWING No. <u>6a, 6b, 6c, 6d</u>										SHIPPER'S COLUMN			SHIPPING DIVISION
LINE	NO. PIECES	ASSEMBLING MARKS	SHAPE	SIZE	LENGTH	REMARKS	R.B. #	LINE #	WEIGHT	NO. PIECES	MARK	WEIGHT	
1	4	ba	R	1,136x4.76	8,204	(3/8" R)		7	5	} <u>ORG 6a</u>			
2													
3	6	ba6	R	1,136x4.76	8,204	(3/8" R)		7	5				
4													
5	4	ba	R	1,136x4.76	8,204	(3/8" R)		7	5				
6	40	baa	L	40x4.76	40	(1/8" R)							
7													
8	2	ba6	R	1,136x4.76	8,204	(3/8" R)		7	5				
9													
10	2	bad	R	1,136x4.76	8,204	(3/8" R)		7	6				
11													
12	ONE	ba6	R	1,136x4.76	8,204	(3/8" R)		7	5				
13													
14	2	ba	R	518x4.76	8,206	(3/8" R)		7	7	} <u>ORG 6b</u>			
15													
16	2	ba	R	580x4.76	8,206	(3/8" R)		7	9				
17													
18	2	ba6	R	703x4.76	8,206	(3/8" R)		7	8				
19													
20	3	bam	R	1,136x6.35	5,816	(1/2" R)		7	4	} <u>ORG 6c</u>			
21													
22	9	ban	R	610x6.35	610	(1/2" R)		8	4				
23	18	baa	B/E	12.7"	260	(1/2") PREND							
24													
25	9	AA6		600x3.18	600	NEOPRENE							
26													
27	180	m1	NUT	FOR 2" BOLT		ALUMINUM							
28	180	b1	BOLT	2" 5.5	14	WASHER							
29													
30	4	ba	R	1,076x4.76	8,102	(3/8" R)		7	11	} <u>ORG 6d</u>			
31													
32	11	ba6	R	1,076x4.76	8,102	(3/8" R)		7	11				
33													
34	4	ba	R	1,076x4.76	8,102	(3/8" R)		7	12				
35	44	baa	L	40x4.76	40	(1/8" R)							
36													
37	2	ba	R	492x4.76	8,102	(3/8" R)		7	13				
38													
39	ONE	ba	R	534.5x4.76	8,102	(3/8" R)		7	15				
40													
41	ONE	ba	R	550x4.76	8,102	(3/8" R)		7	15				
42													
43	ONE	ba6	R	667x4.76	8,102	(3/8" R)		7	14	} <u>ORG 6d</u>			
44	ONE	ba6x	R	667x4.76	8,102	(3/8" R)		7	14				
45	3	baa	R	1,076x6.35	5,652	(1/2" R)		7	10				
46													
47	6	baa	R	1,079x12.7	1,224	(1/2" R)		8	1				
48													
49	6	baa	R	900x6.35	1,061	(1/2" R)		8	3				
50	12	baa	B/E										
51													
52													
53													
54	6	AA6		890x3.18	1,051	NEOPRENE							
55													
56	156	b2	BOLT	2" 5.5	1	WASHER							
57													
58													

M/T



SHOP NOTE:-
 PREPARING mb TO BE A PUSH FIT INTO SLOT IN pa & pb TO BE A PUSH FIT INTO SLOT IN pa

BILL OF MATERIAL

#	MARK	QTY	GRADE	SIZE	LENGTH	REMARKS
1				36 REGR-MK AC6		
2	pa	36	R	158x37	161	MACHINE 1/2" R 50W MAT'L
3	pb	36	S	34x26	68	MACHINE 1/8" R 50W MAT'L
4	ma	72		62° CON FOLLOWER		NUKR-62 P.O.#1420-4240
5	mb	36		24° BEARINGS		NATE-B P.O.#1420-4240
6	mc	36	BK	8° TO SUIT	33	4140 MAT'L OR EQUIV.
7		144	NUTS	TO SUIT MTR		P.O.#1420-4240
8		72		GEAR NUTS TO SUIT MTR		P.O.#1420-4240
9	wl	72		FLAT WASHER FOR 3/8" BOLT		A325 MAT'L
10	bl	72	BOLT	3/8" MACH	1	A307 MAT'L
11						
12	ADG	72	R	44x3.18	161	(1/2" R) A36 MAT'L
13						
14	AFG	72	R	44x1.59	161	(1/8" GA) A36 MAT'L

- GENERAL NOTES**
- ALL MACHININGS TO A FINISH.
 - USE 1/8" DRILL FOR 11" HOLES & 3/8" DRILL FOR 19" HOLES IF PREFERRED
 - COAT ALL MACHINED SURFACES WITH RUST INHIBITOR

3R/3001203

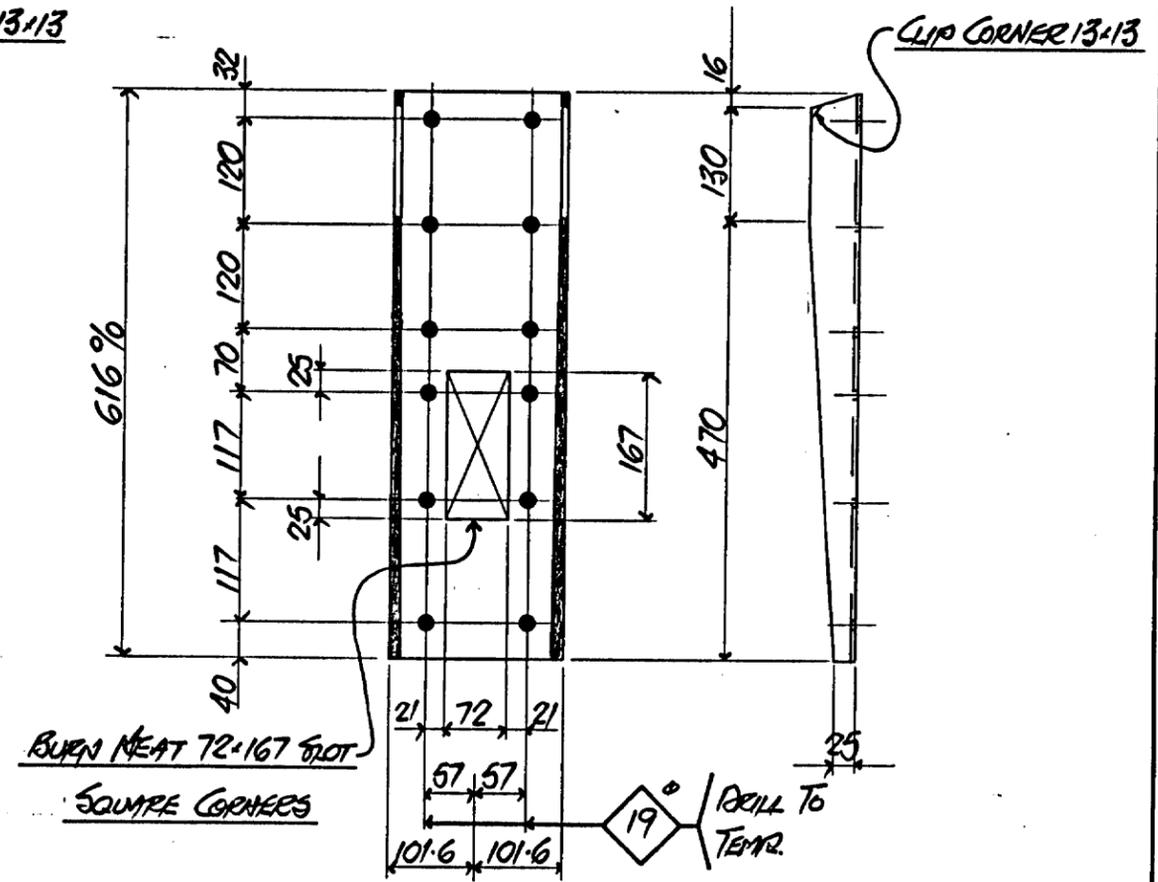
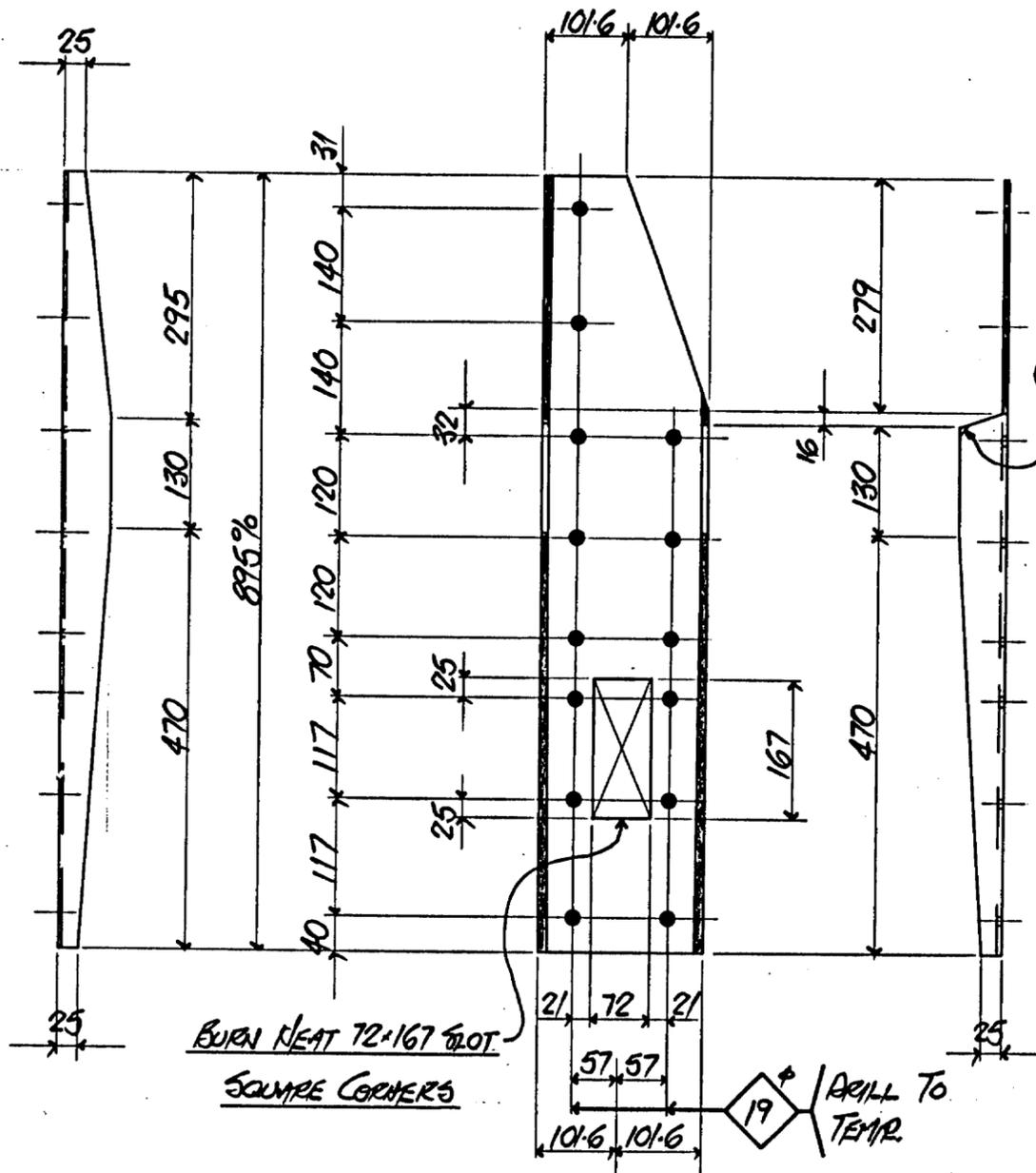
	MATERIAL	50W	DETAILS	SHUTTERS-GUIDE ROLLERS
	SURF. PREP. & PAINT	NONE	FOR	4.2" TELESCOPE DOME L&P FORM
	OPEN HOLES	AS NOTED	DRAWING No.	1420-600
DRAWN	DATE	CHECKED	DATE	
FBK	MAR/84			
BRITAIN STEEL LTD., 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT				

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m-abcdefghijklmnpstvw

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INS / F / S / O / M / T / P / SH / DP / AS / PA / ER



6 REQ^d - SHUTTER GUIDE BRACKET MK AGG^R (AS SHOWN)
 6 REQ^d - SHUTTER GUIDE BRACKET MK AGG^L (OPP. HAND)

24 REQ^d - SHUTTER GUIDE BRACKET MK AH6

3R/3001204

LINE	SHIP	FAB	MARK	DESCRIPTION	MAT'L	FT.	INS.	R.B.	LINE	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS
	No. REQD.					LENGTH					SPLICING	ALLOWED	
7													
6	24	24	AH6	C200x17	44W	616	2 10			(C8x11.5)			
5													
4													
3		12		C200x17	44W	875	2 9			(C8x2 1/2x11.5)			
2	6	6	AGG ^L										
1	6	6	AGG ^R										

MATERIAL	G40.21 (44W) 1/2"		
SURF. PREP. & PAINT	SEE MEMO		
OPEN HOLES	AS NOTED		
DRAWN	DATE	CHECKED	DATE
RBK	MAR/89		

No.	BY	DATE	REVISION

DETAILS OF SHUTTERS - GUIDE BRACKETS
 FOR 4.2M TELESCOPE DOME L9 FILM

DRAWING No. 1420-6ab

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

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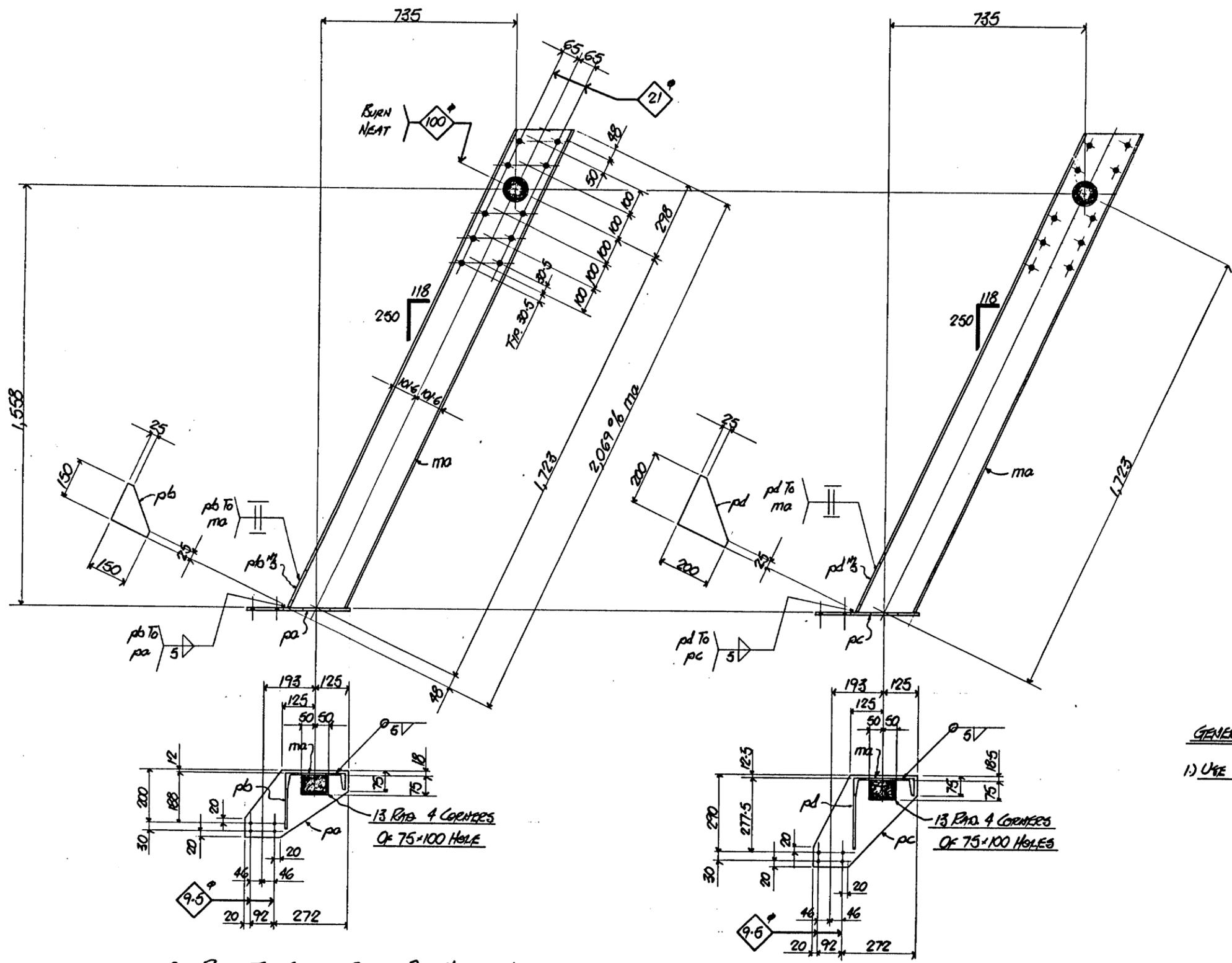
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SHOP DEPARTMENT INS / F / S / O / M / T / P / SH / DP / AS / PA / ER No. PRINTS

MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

LINE NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	UNIT	WEIGHT
1						ONE REQ- M.C. AKG			
2									
3	ma	ONE	C	200*17	2,069	(CB-26-4211-5)	44W	2/11	
4	pa	ONE	P	250*9.5	384	(387P)			
5	pb	ONE	S	150*6.35	150	(4P)			
6									
7									
8									
9						ONE REQ- M.C. AMG			
10									
11	ma	ONE	C	200*17	2,069	(CB-26-4211-5)	44W	2/11	
12	pa	ONE	P	250*9.5	384	(387P)			
13	pb	ONE	S	150*6.35	150	(4P)			
14									
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GENERAL NOTES
1) USE 3/8" DRILL FOR 9.5" HOLES & 1/2" DRILL FOR 21" HOLES IF PREFERRED.

ONE REQ- TOP SHUTTER POWER PICK-UP ARM M.C. AKG

ONE REQ- BTM SHUTTER POWER PICK-UP ARM M.C. AMG

3R/3001205

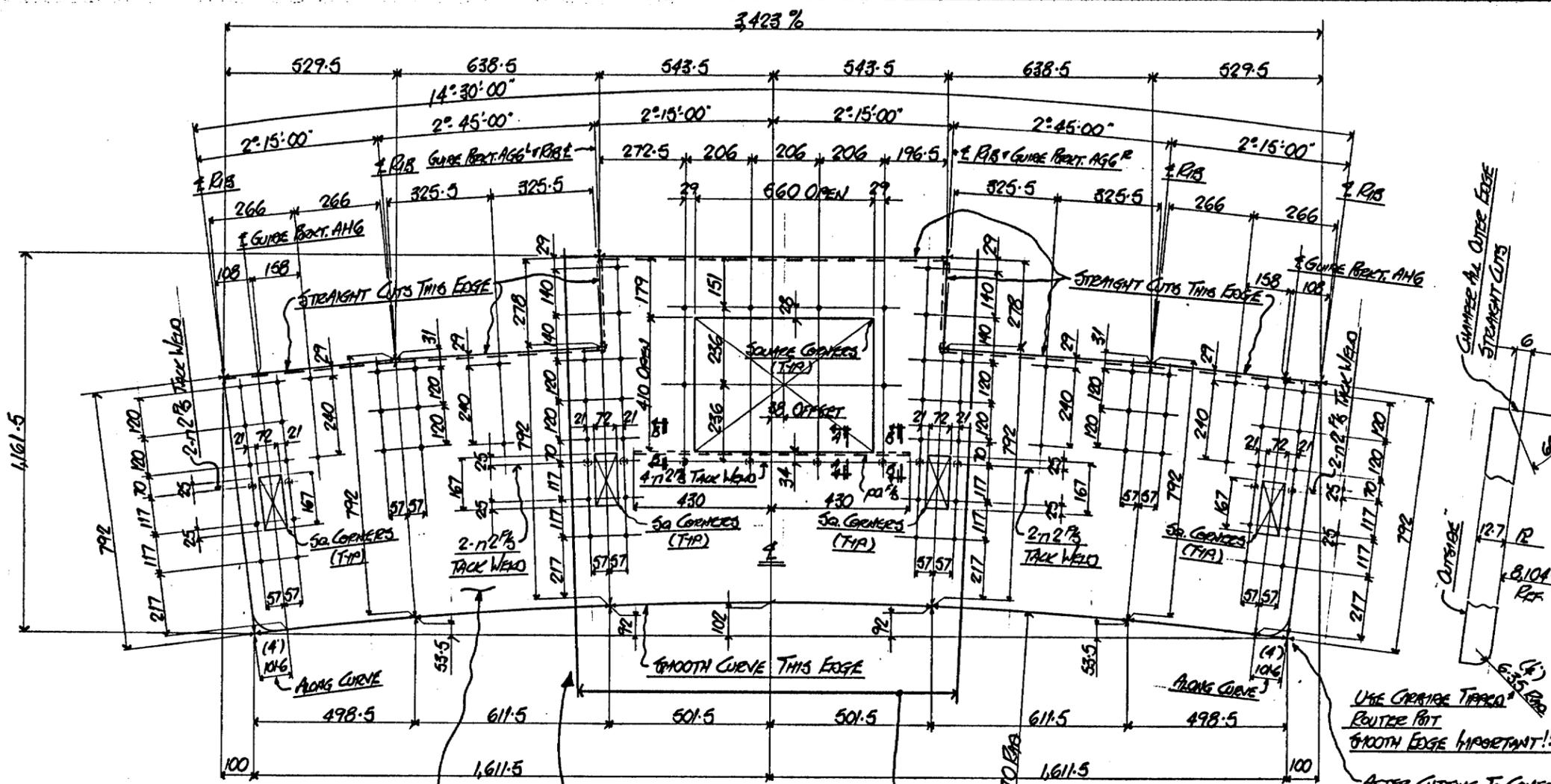
	MATERIAL	G4021 (44W) w/n	DETAILS	SEE MEMO
	SURF. PREP. & PAINT	AS NOTED	FOR	4.2" TELESCOPE DOVE LA PHILAS
	OPEN HOLES	AS NOTED	DRAWN	DATE
	DRAWN	DATE	CHECKED	DATE
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.		DRAWING NO. 1420-60C		

SHOP DEPARTMENT / INS / F / S / O / M / T / P / SH / DP / AS / PA / ER / No PRINTS

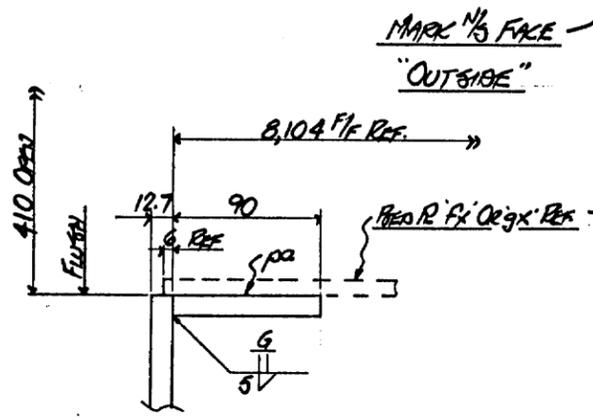
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s-abcdefghijklmnopstvw



MATERIAL BILL										CONTRACT 1420	
BRITAIN STEEL LTD.											
NO	MARK	QTY	SHAPE	SIZE	LENGTH	REMARKS	MATL TYPE	NO	WEIGHT		
1				2REQ-MK ATG							
2											
3		2	IP	1161.5x12.7	3423 (L/R)		ALUMINIUM 716				
4	pa	2	S	90x12.7	860 (L/R)						
5	n2	24	NUT	FOR 8" BOLT							
6											
7											
8											
9				2REQ-MK AVG		SEE PAGES 6&7					
10											
11		2	IP	1684.5x12.7	8375 (L/R)		ALUMINIUM 717				
12	pa	4									
13	n2	40	NUT								
14											
15											
16				2REQ-MK AVG		SEE PAGES 6&7					
17											
18		2	IP	1271.5x12.7	7303 (L/R)		ALUMINIUM 716				
19	n2	16	NUT								
20											
21											
22											
23				2REQ-MK AVG		SEE PAGES 6&7					
24											
25		2	IP	1271.5x12.7	7303 (L/R)		ALUMINIUM 716				
26	n2	16	NUT								
27											
28											
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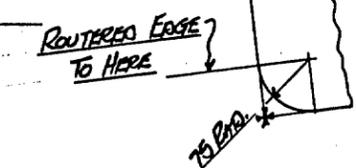
SHOP NOTE:-
 USE ALIGNMENT BOLTS FROM PAGE 6/11
 FOR TACK WELDING ALL NUTS 'N2'

SHOP NOTE:-
 DRILL ALL HOLES IN THIS REGION USING
 DRILLING TEMPLATE DT12. ALL OTHER
 HOLES DRILL TO LAYOUT

USE GRINDING TAPERED
 ROUTER BIT
 SMOOTH EDGE IMPORTANT!!!
 AFTER CUTTING TO CONTOUR,
 TRIM THIS CORNER TO A RADIUS
 AS SHOWN. SEE BOTH CORNER
 DETAILS. TOP BOTH ENDS

SECTION A-A

SECTION B-B



BOTTOM CORNER DETAIL

GENERAL NOTES

- 1) FOR DETAILS OF DRILLING TEMPLATE DT12 SEE PAGE 6/11

3R/3001207

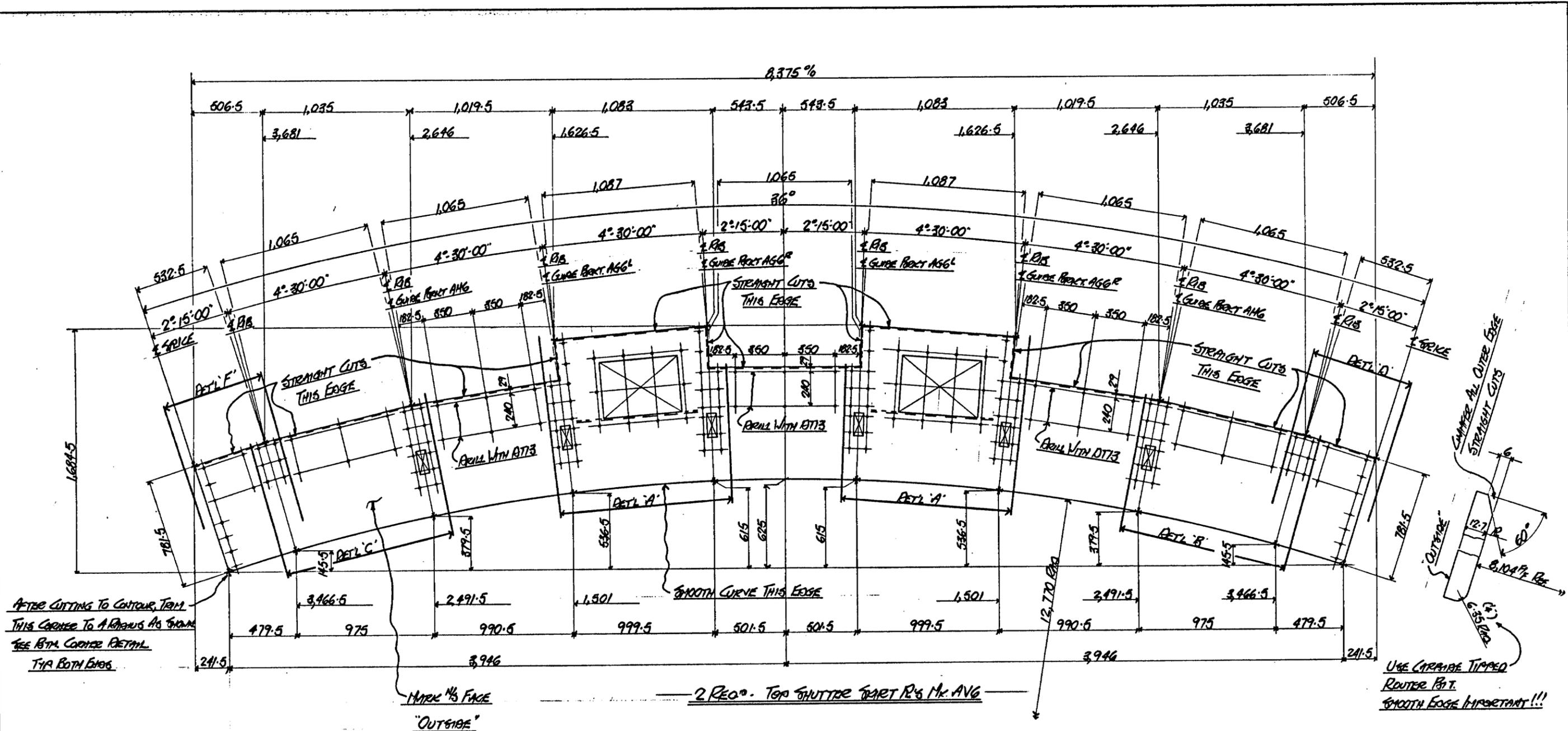
BRITAIN	MATERIAL	ALUMINIUM	DETAILS	BOTH ENDS OF 2REQ-MK ATG
	SURF. PREP & PAINT	NONE	FOR	4.2M TELESCOPE DOME LA MARENA
	OPEN HOLES	19" (3")	DRAWING NO	1420-6a
DRAWN	DATE	CHECKED	DATE	
BJ	11/84			
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT				

p-abcdefghijklmnpstvw

m-abcdefghijklmnpstvw

s-abcdefghijklmnpstvw

INS / F / S / O / M / T / P / SH / DP / AS / PA / ER / NO PRINTS



AFTER CUTTING TO CONTOUR, TRIM THIS CORNER TO A RADIUS AS SHOWN SEE BTM CORNER DETAIL TYP BOTH ENDS

USE CARBIDE TIPPED ROUTER BIT. SMOOTH EDGE IMPORTANT!!!

GENERAL NOTES

- 1) FOR DETAILS A, B, C, D, F SEE PERS GAG.
- 2) FOR DETAILS OF DRILLING TEMPLATE DT13 SEE PERS G6.
- 3) FOR MATERIALS SEE BILL ON PERS G6.



BOTTOM CORNER DETAIL

3R/3001208

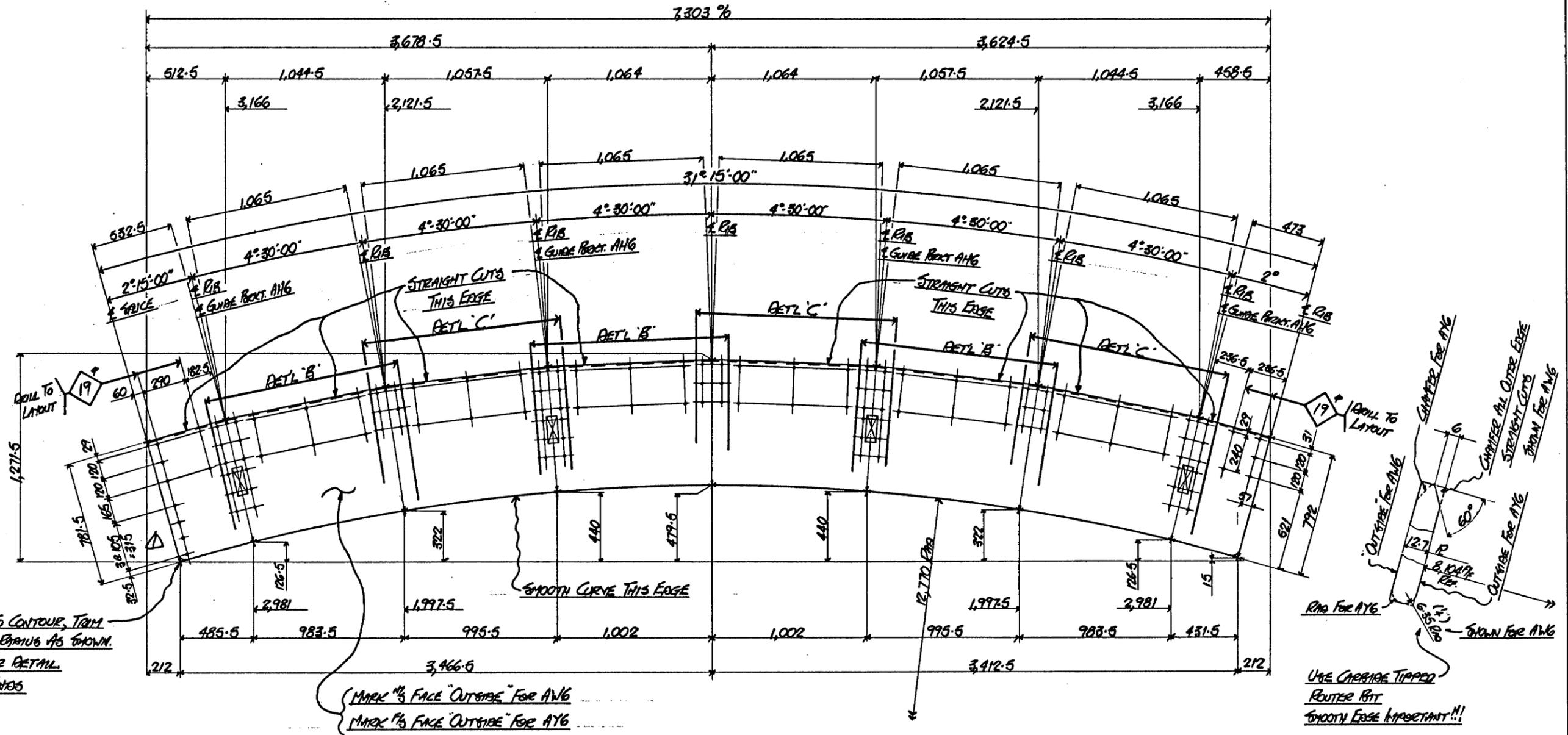
	MATERIAL	ALUMINIUM	DETAILS	TOP SHUTTER PART R'S
	SURF. PREP.	NONE	FOR	4.2" TELESCOPE DRUM LA PAUM
OPEN HOLES	19(8)	DRAWN	DATE	CHECKED
		BK	19/64	
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.			DRAWING No.	1420-609

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m-abcdefghijklmnpstvw

s-abcdefghijklmnpstvw

SHOP DEPARTMENT / VNO / F / S / O / M / T / P / SH / DP / AS / PA / ER / NO. PRINTS



AFTER CUTTING TO CONTOUR, TRIM THIS CORNER TO A FINISH AS SHOWN. SEE BTM. CORNER DETAIL. TIP BOTH ENDS

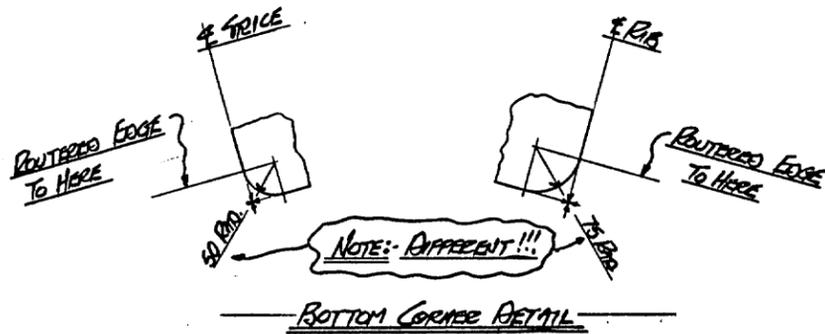
(MARK 1/8\"/>

2 RED⁹- TOP SHUTTER TRIM 12 MK ANG (AS SHOWN)

2 RED⁹- TOP SHUTTER TRIM 12 MK ANG (AS SHOWN & NOTED)

GENERAL NOTES

- 1) FOR DETAILS B & C USE EGGS GAL.
- 2) FOR MATERIAL SEE BILL ON EGGS GAL



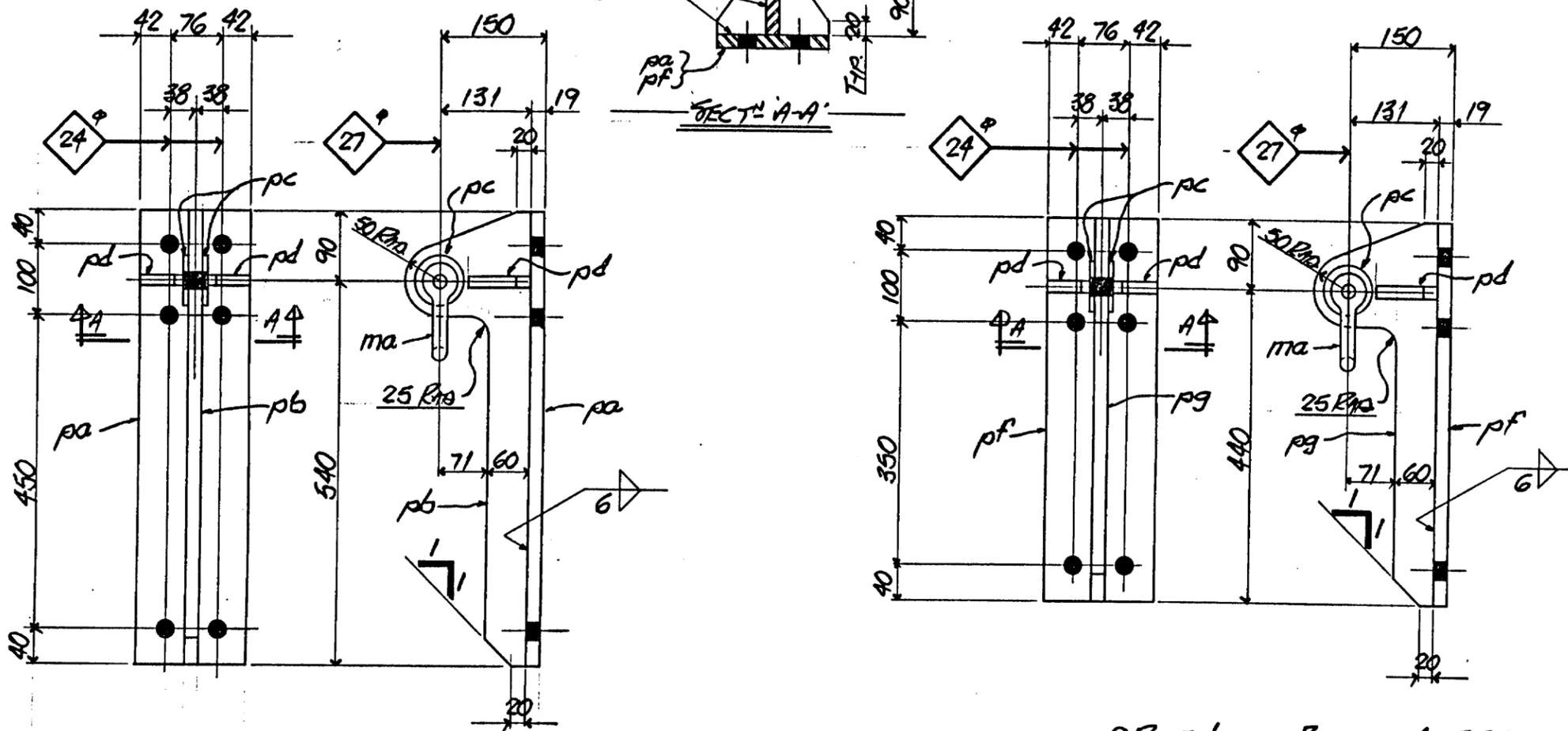
3R13001209

BRITAIN	MATERIAL	ALUMINIUM	DETAILS	NO. BY DATE	REVISION
	SURF. PREP. & PAINT	NONE	TOP SHUTTER TRIM 12 MK		
	OPEN HOLES	19*(3)	FOR 4.2M TELESCOPE DOWN LA PALMA		
	DRAWN	DATE	CHECKED	DATE	DRAWING NO.
	19/1/82			1420-604	
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, E.C.					
SHOP DEPARTMENT		INS / F / S / O / M / T / P / SH / DP / AS / PA / ER			NO. PRINTS

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m-abcdefghijklmnpstvw

s-abcdefghijklmnpstvw



BAG OR B56

ONE REQ. LIFTING BRACKET MK. BAG

13,000 LBS
(5,909 KILOGRAMS)

LOAD TEST BRACKET & SHACKLE
& STAMP FOR 13,000 LB. FULL

SHOP NOTE:-
AFTER RETURN FROM TESTING FACILITY, WIRE
TIE A BAG TO EACH BRACKET CONTAINING
6- $\frac{3}{8}$ " A325 BOLTS + 2 $\frac{1}{2}$ " LG 4/1 FLAT WASHER.
NO NUTS REQ.

2 REQ. LIFTING BRACKET MK B56

GENERAL NOTES

- 1.) USE $\frac{15}{16}$ " DRILL FOR 24° HOLES & $\frac{11}{16}$ " DRILL FOR 27° HOLES IF PREFERRED.
- 2.) FOR CUSTOMER'S (GOURA PIRESONS) ASSEMBLY TO TOP SHUTTER END RIB SEE FIG R1

LINE	SHIP	FAB	MARK	DESCRIPTION	MAT'L	FT.	INS.	R.B.	LINE	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS
	No. REQD.					LENGTH					SPLICING	ALLOWED	
2				MA									
2				PG	R 181x19	44W	-	530		(3/R)			
2				PD	R 160x19		-	530		(3/R)			
4				PD									
4				PC									
2				B56									
7													
6				ONE MA	62" ANCHOR SHACKLE					TESTED & STAMPED			
5				2 PD	R 70x12.7	44W	-	90		(2/R)			
4				2 PC	R 70x8 THICK					(2/R)			
3				ONE PB	R 181x19		-	630		(3/R)			
2				ONE PD	R 160x19		-	630		(3/R)			
1				ONE ONE BAG									

3R/3001211

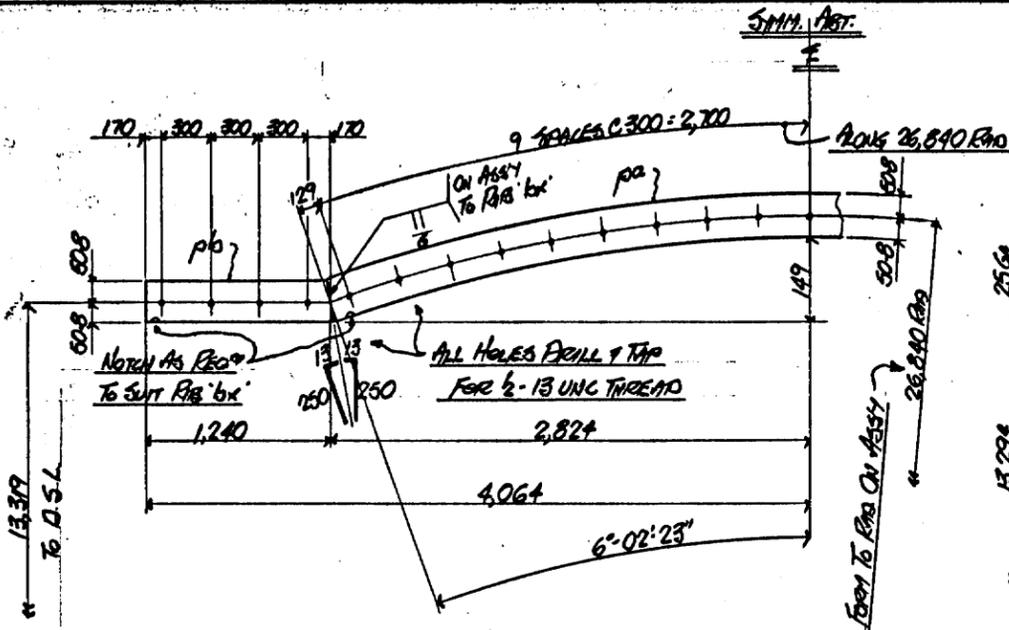


MATERIAL	G40.21 (44W) 4/n	No.	BY	DATE	REVISION
SURF. PREP. & PAINT	SEE MEMO	DETAILS OF LIFTING BRACKETS FOR TEMP'Y STEEL REMOVAL			
OPEN HOLES	AS NOTED	FOR 4.2M TELESCOPE DONE LA PALMA			
DRAWN	DATE	CHECKED	DATE	DRAWING No. 1420-6am	
BRITAIN STEEL LTD.		401 SALTER AVENUE, NEW WESTMINSTER, B.C.			

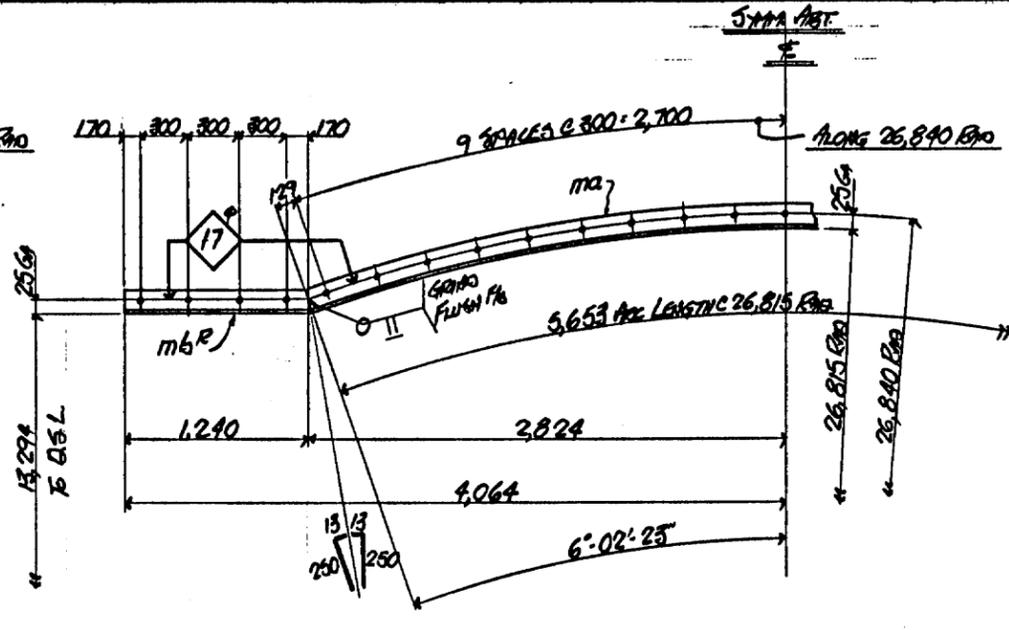
p - a b c d f g h k m n p s t v w y

m - a b c d f g h k m n p s t v w y

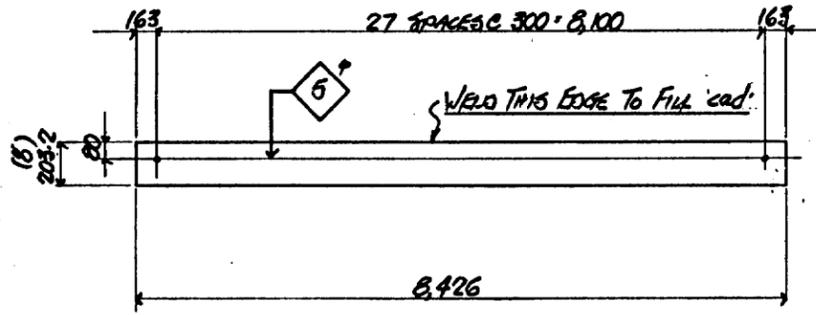
SHOP DEPARTMENT / INS / F / S / O / M / T / P / SH / DP / AS / PA / ER / No. PRINTS



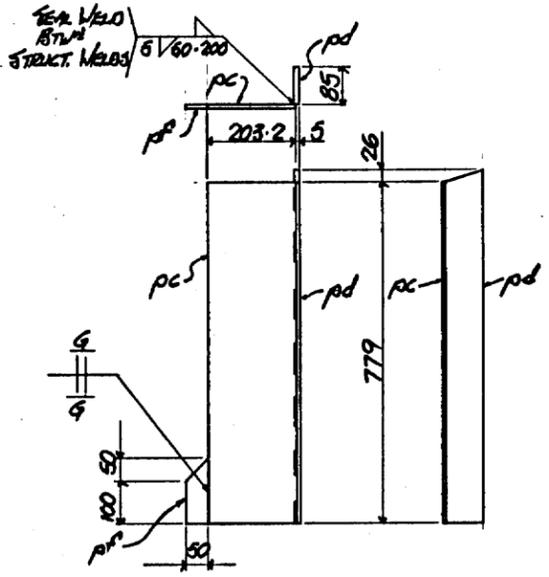
2 REO^o SEAL HOUSERS Mc 'caa'
FOR 2° & 2.25° VENT BOX SECTIONS



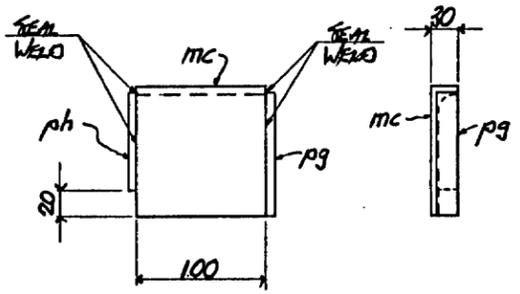
2 REO^o SEAL CLAMPS Mc 'cab'
FOR 2° & 2.25° VENT BOX SECTIONS
SHIP BOLT TO COA AFTER ASSY



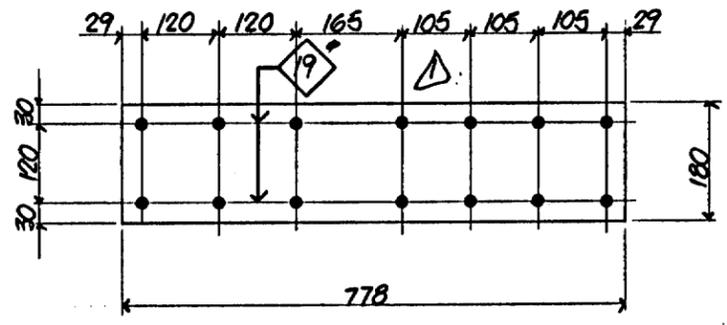
ONE REO^o LAP SEAL R Mc 'cac'
FOR 2° VENT BOX SECTION



ONE REO^o LAP SEAL ASSY Mc 'BCG'^o (AS SHOWN)
ONE REO^o LAP SEAL ASSY Mc 'BCG'^o (OPP. HAND)
FOR 2° VENT BOX SECTION



2 REO^o SEAL ASSY Mc 'BAG'^o (AS SHOWN)
2 REO^o SEAL ASSY Mc 'BAG'^o (OPP. HAND)
FOR 2° OR 2.25° VENT BOX SECTIONS



4 REO^o SEAL TRICE R Mc 'BFG'

MATERIAL BILL										CONTRACT 1420	
BRITAIN STEEL LTD.											
MARK	QTY	SHAPE	SIZE	LENGTH	REMARKS	MATL TYPE	W	L	WEIGHT		
			2 REO ^o Mc 'caa'								
pa	2	R	101.6x12.7	5,663 (4.5)		ALUMINUM					
pb	4	L		1,242.5							
			2 REO ^o Mc 'cab'								
ma	2	L	50x50x5	5,655.5	ROLLED	ALUMINUM					
mb	4	L	50x50x5	1,241	(12x2.16)						
			ONE REO ^o Mc 'cac'								
			ONE BAR 703-2.6x35 8,426 (8.4)			ALUMINUM					
			ONE REO ^o Mc 'cad'			RAIN MATL					
			ONE BAR 50.8x12.7 8,420 (2.2)			ALUMINUM					
			ONE REO ^o Mc 'BCG' ^o								
			ONE REO ^o Mc 'BCG' ^o								
pc	2	R	203.2x6.35	779	(8.4)	ALUMINUM					
pd	2	R	85x6.35	805	(4.2)						
pe	2	L	50x6.35	150	(4.2)						
			2 REO ^o Mc 'BAG' ^o								
			2 REO ^o Mc 'BAG' ^o								
mc	4	L	100x30x5.35	100	(4.2x3.4)	ALUMINUM					
pg	4	R	25x6.35	96	(4.2)						
ph	4	L	25x6.35	76	(4.2)						
			4 REO ^o Mc 'BFG'								
			4 REO ^o Mc 'BFG'								
			306 REO ^o Mc 'dap'			RAIN MATL					
			306 BAR 76x4.76 76			ALUMINUM					
			276 REO ^o Mc 'BAG'			RAIN MATL					
			276 BAR 76x4.76 76			ALUMINUM					

GENERAL NOTES

- 1) USE 1/8" DRILL FOR 5° HOLES, 1/4" DRILL FOR 17° HOLES, 3/8" DRILL FOR 19° HOLES IF PREFERRED.
- 2) FOR SEAL ASSY & TAP WELDING OF ITEMS 'caa', 'cab', 'cac', & 'cad' ON THIS DRAW SEE PAGE 60a.

3R/3001213

	MATERIAL	ALUMINUM	DETAILS	SHUTTERS
	SURF. PREP.	None	SEALS	TRUST FORCE
	PAINT		FOR	4.2M TELESCOPE DOME LA PALMA
	OPEN HOLES	AS NOTED	DRAWING No.	1420-60a
	DATE	CHECKED	DATE	
18/1/81				
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT				
INS / F / S / O / M / T / P / SH / DP / AS / PA / ER				
NO PRINTS				

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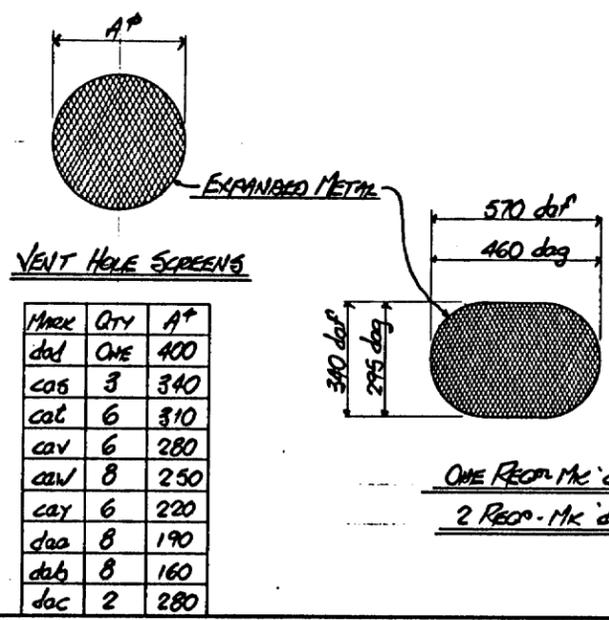
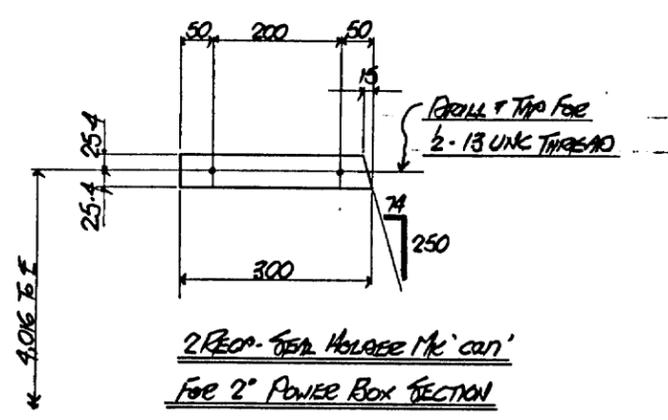
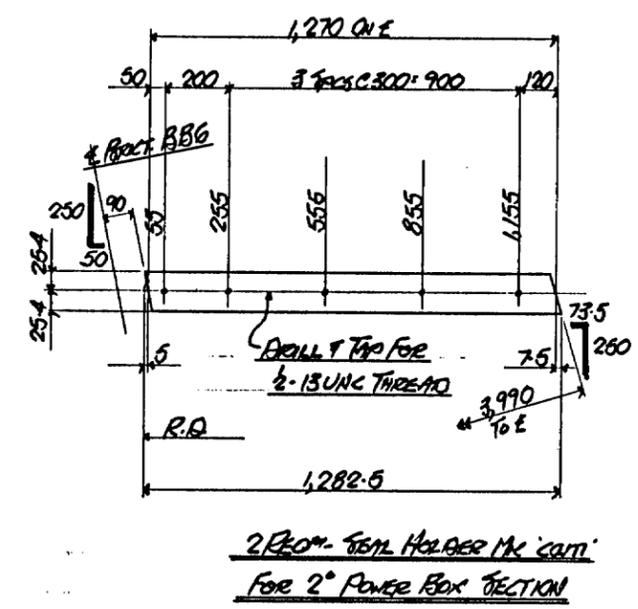
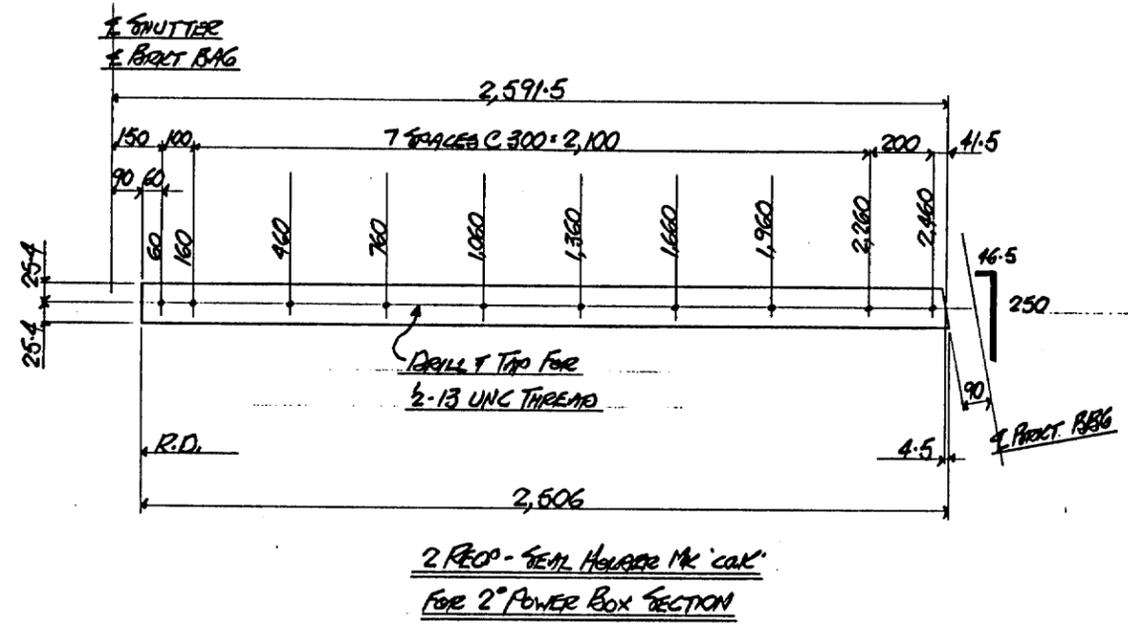
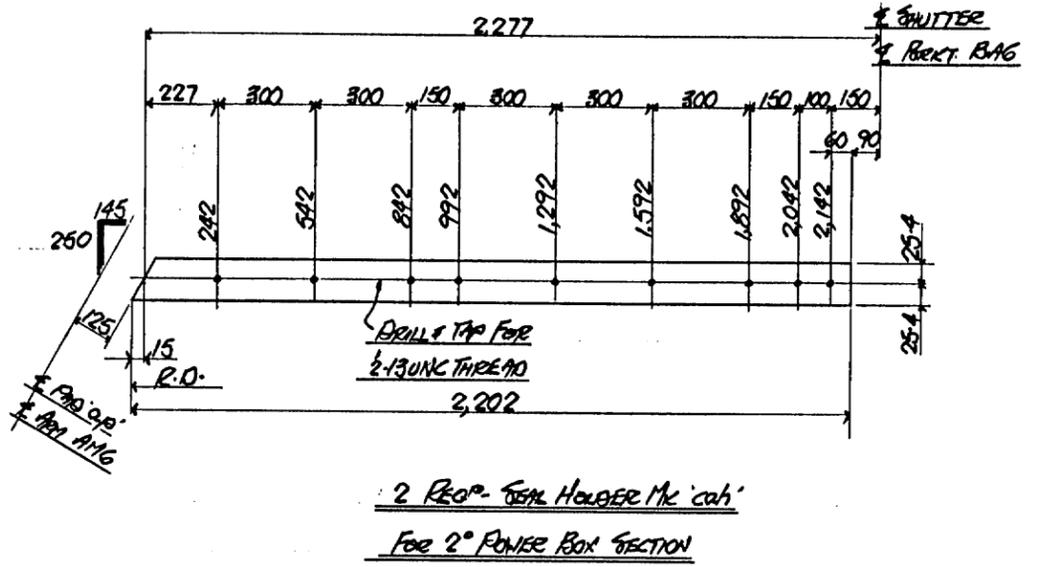
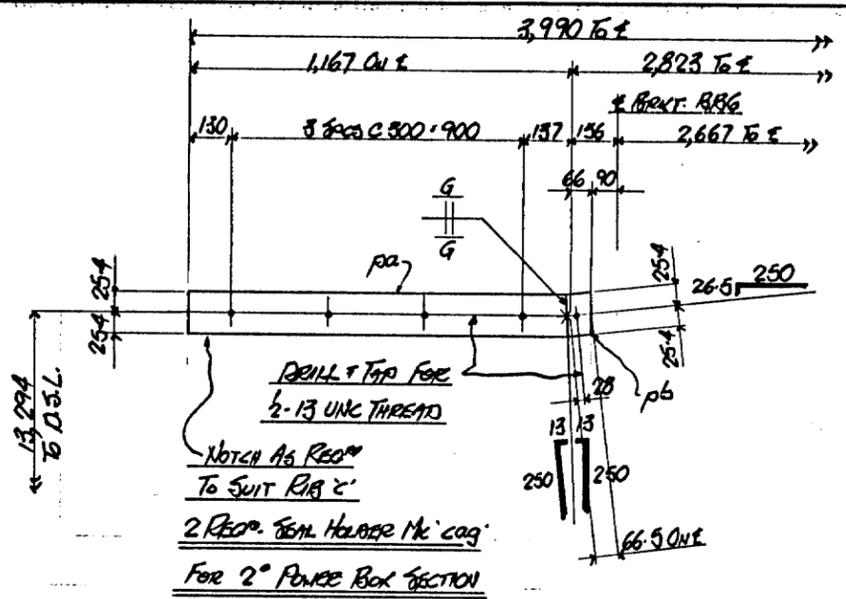
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MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

MARK	QTY	SHAPE	SIZE	LENGTH	REMARKS	MATL TYPE	WEIGHT
1							
2							
3	2	Bar	50.8x12.7	1,168.5 (12.5)		ALUMINUM	
4	2	Bar	50.8x12.7	70.5		ALUMINUM	
5							
6							
7							
8							
9							
10	2	Bar	60.8x12.7	2,202 (12.5)		ALUMINUM	
11							
12							
13							
14							
15							
16	2	Bar	50.8x12.7	2,506 (12.5)		ALUMINUM	
17							
18							
19							
20							
21							
22	2	Bar	50.8x12.7	1,282.5 (12.5)		ALUMINUM	
23							
24							
25							
26							
27							
28	2	Bar	50.8x12.7	300 (12.5)		ALUMINUM	
29							
30							
31							
32							
33							
34	12	L	75x75x6	1,148 (13.3x4)		ALUMINUM	
35							
36							
37							
38							
39							
40	12	L	75x75x6	1,218 (13.3x4)		ALUMINUM	
41							
42							
43	dad	ONE	400"				
44	cas	3	340"				
45	cat	6	310"				
46	can	6	280"				
47	can	8	250"				
48	can	6	220"				
49	can	8	190"				
50	can	8	160"				
51	can	2	280"				
52							
53	dad	ONE	340x570		EXPANDED METAL	ALUMINUM	
54							
55	dag	2	295x460		EXPANDED METAL	ALUMINUM	



GENERAL NOTES

1) FOR SHOP ASSEMBLY & TOLERANCE HOLDING OF ITEMS ON THIS DRAWING SEE CROSS G60 1666

3R/3001214

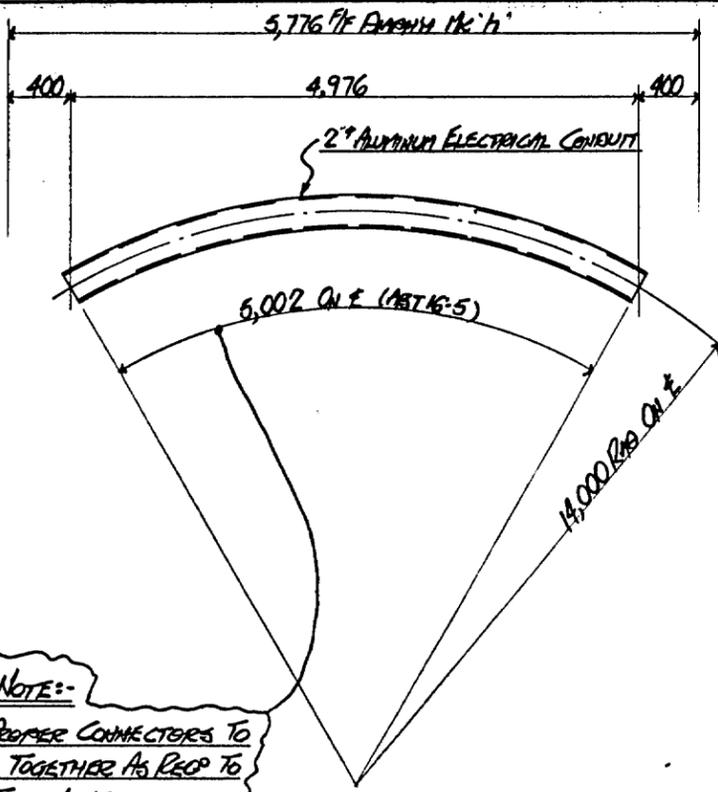
	MATERIAL	ALUMINUM	DETAILS	SHUTTER & SEAL HOLDERS & STIFF'S
	SURF. PREP. & PAINT	NONE	FOR	4.2" TELESCOPE DOWN LA PLATA
OPEN HOLES	AS NOTED	DRAWN	DATE	CHECKED
DATE	14/8	DATE		
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.		DRAWING No. 1420-605		

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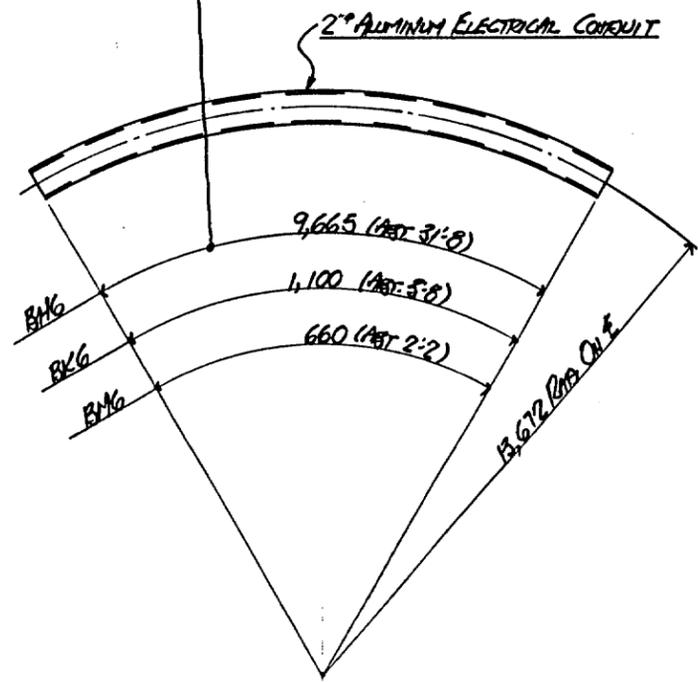
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SHOP DEPARTMENT INS / F / B / Q / M / T / P / SH / DP / AS / PA / ER No PRINTS

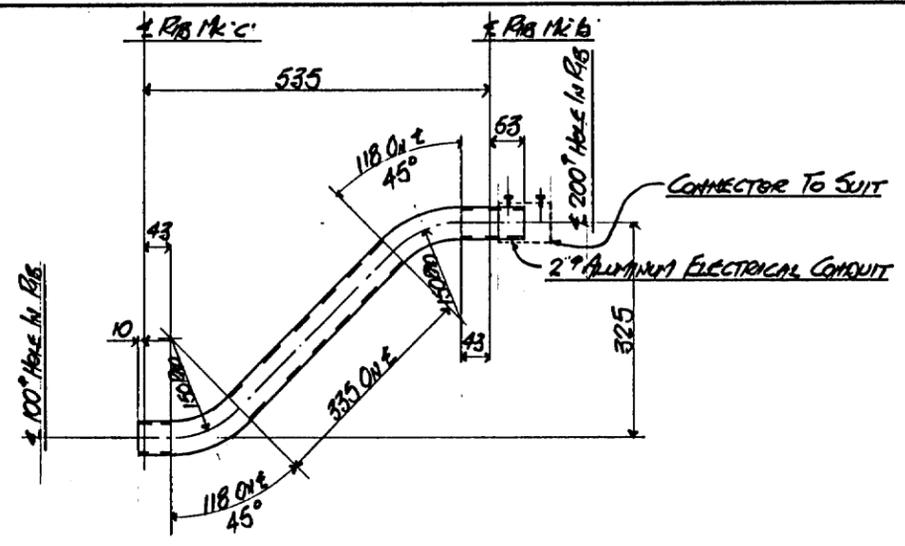


SHOP NOTE:-
USE PROPER CONNECTORS TO
SPICE TOGETHER AS REQD TO
FORM THESE LENGTHS.

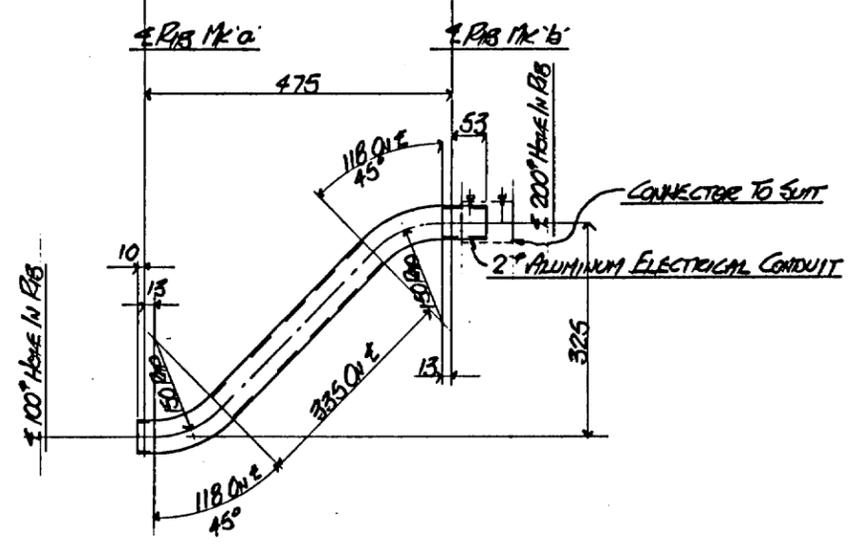
3 REQD. CONDUIT MK 'dah'
FOR 4.5° DRIVE BOX SECTIONS



ONE REQD. CONDUIT MK. BNG
ONE REQD. CONDUIT MK. BKG
ONE REQD. CONDUIT MK. BNG } FOR TOP SHUTTER
FOR BOTTOM SHUTTER



ONE REQD. CONDUIT MK 'dah'
FOR 2.25° POWER SECTION



ONE REQD. CONDUIT MK 'dah'
FOR 2° POWER SECTION

MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

LINE NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	W/BILL	LINE	WEIGHT
1				3 REQD MK 'dah'						
2		3	2" EMT		5,002		ALUMINUM			
3				ONE REQD MK 'dah'						
4		ONE	2" EMT		720		ALUMINUM			
5				ONE REQD MK 'dah'						
6				ONE REQD MK 'dah'						
7		ONE	2" EMT		660		ALUMINUM			
8				ONE REQD MK 'dah'						
9		ONE	2" EMT		9,665		ALUMINUM			
10				ONE REQD MK 'dah'						
11				ONE REQD MK 'dah'						
12				ONE REQD MK 'dah'						
13				ONE REQD MK 'dah'						
14		ONE	2" EMT		1,100		ALUMINUM			
15				ONE REQD MK 'dah'						
16				ONE REQD MK 'dah'						
17				ONE REQD MK 'dah'						
18				ONE REQD MK 'dah'						
19				ONE REQD MK 'dah'						
20				ONE REQD MK 'dah'						
21		ONE	2" EMT		660		ALUMINUM			
22				ONE REQD MK 'dah'						
23				ONE REQD MK 'dah'						
24				ONE REQD MK 'dah'						
25				ONE REQD MK 'dah'						
26		ONE	2" EMT		660		ALUMINUM			
27				ONE REQD MK 'dah'						
28				ONE REQD MK 'dah'						
29				ONE REQD MK 'dah'						
30				ONE REQD MK 'dah'						
31				ONE REQD MK 'dah'						
32				ONE REQD MK 'dah'						
33		ONE	2" EMT		660		ALUMINUM			
34				ONE REQD MK 'dah'						
35				ONE REQD MK 'dah'						
36				ONE REQD MK 'dah'						
37				ONE REQD MK 'dah'						
38				ONE REQD MK 'dah'						
39				ONE REQD MK 'dah'						
40				ONE REQD MK 'dah'						
41				ONE REQD MK 'dah'						
42				ONE REQD MK 'dah'						
43				ONE REQD MK 'dah'						
44				ONE REQD MK 'dah'						
45				ONE REQD MK 'dah'						
46				ONE REQD MK 'dah'						
47				ONE REQD MK 'dah'						
48				ONE REQD MK 'dah'						
49				ONE REQD MK 'dah'						
50				ONE REQD MK 'dah'						
51				ONE REQD MK 'dah'						
52				ONE REQD MK 'dah'						
53				ONE REQD MK 'dah'						
54				ONE REQD MK 'dah'						
55				ONE REQD MK 'dah'						

GENERAL NOTES

- 1) FOR SHOP ASSY & SHOP WELDING OF ITEMS 'dah', 'dah', 'dah' SEE DRS 6ba, 6bb, 6bc, & 6bd.
- 2) FOR FIELD ASSY & FIELD WELDING OF ITEMS BNG, BKG, & BNG SEE DRS

3R/3001215

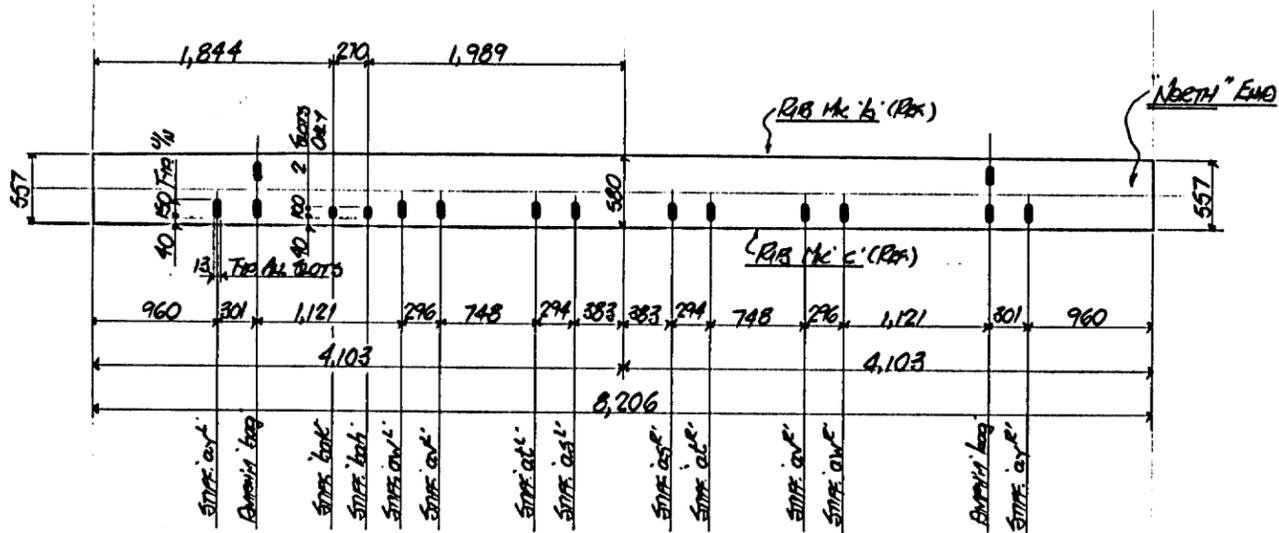
	MATERIAL	ALUMINUM	DETAILS	SHUTTERS - CONDUIT
	SURF. PREP. & PAINT	NONE	FOR	4.2M TELESCOPE DRIVE LA PALMA
	DRAWN	DATE	CHECKED	DATE
	BRITAIN STEEL LTD.	401 SALTER AVENUE, NEW WESTMINSTER, B.C.	DRAWING No.	1420-6at

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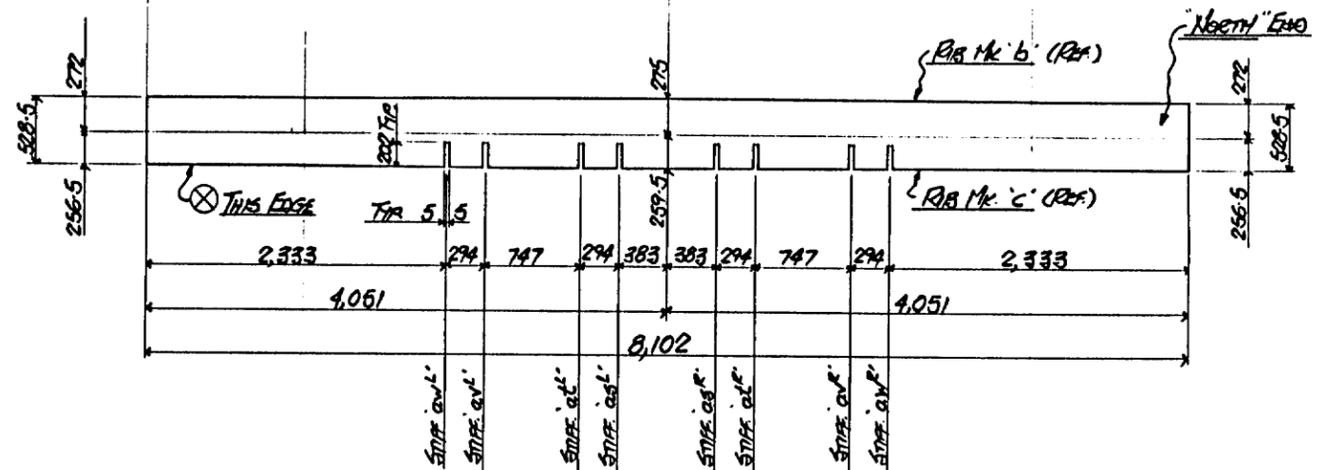
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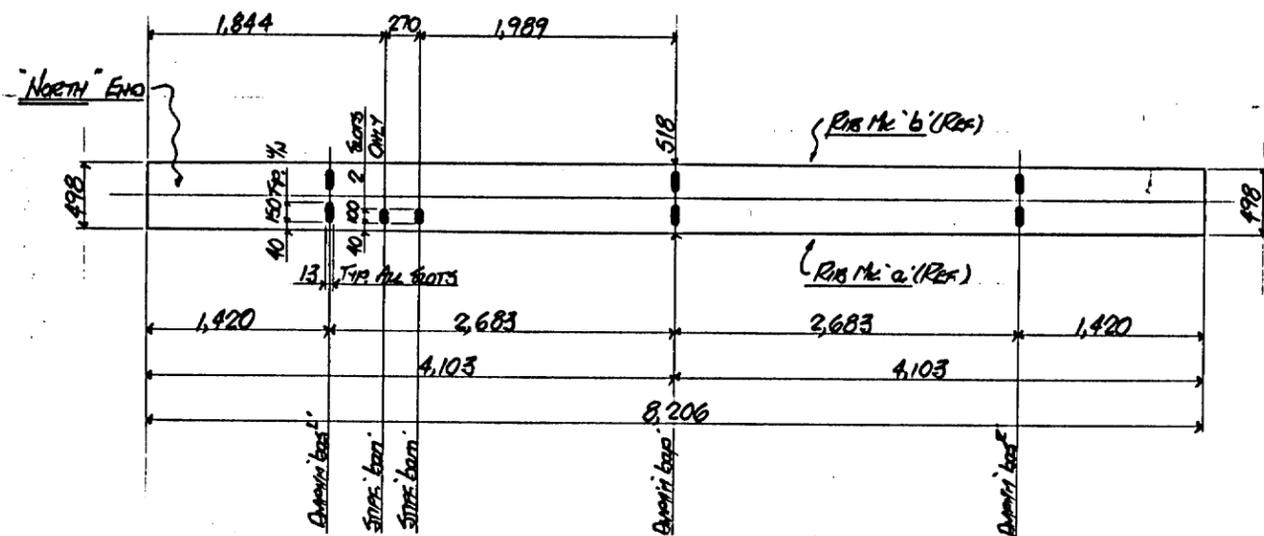
SHOP DEPARTMENT / INS / F / S / O / M / T / P / SH / DP / AS / PA / ER / NO PRINTS



ADDITIONAL WORK TO ONE ONLY OUTER SHELL R MK 'b' FROM DES 6b
 16 SLOTS (14C150LG + 2C100LG) REQ^d FOR RUS WELDING TO STIFF'S
 + DIMEN'S AS SHOWN ON ASSEMBLY DES 6b.b.
 AFTER CUTTING SLOTS R MARK WILL BE 'bix'



ADDITIONAL WORK TO ONE INNER SHELL R MK 'bv' FROM DES 6c
 8 SLOTS REQ^d TO ALLOW STIFF'S TO PASS THRU AS SHOWN
 ON ASSEMBLY DES 6b.b



ADDITIONAL WORK TO ONE ONLY OUTER SHELL R MK 'bg' FROM DES 6b
 8 SLOTS (6C150LG + 2C100LG) REQ^d FOR RUS WELDING TO STIFF'S
 + DIMEN'S AS SHOWN ON ASSEMBLY DES 6b.a.
 AFTER CUTTING SLOTS R MARK WILL BE 'bgx'

GENERAL NOTES

- 1) FOR DETAILS OF ITEMS ON THIS DES SEE DES 6b + 6c.
- 2) FOR SHOP ASSY + SHOP WELDING OF ITEMS ON THIS DES SEE DES 6b.a + 6b.b.
- 3) FOR DETAILS OF STIFF'S + DIMEN'S NOTED ON THIS DES SEE DES 6v + 6w.

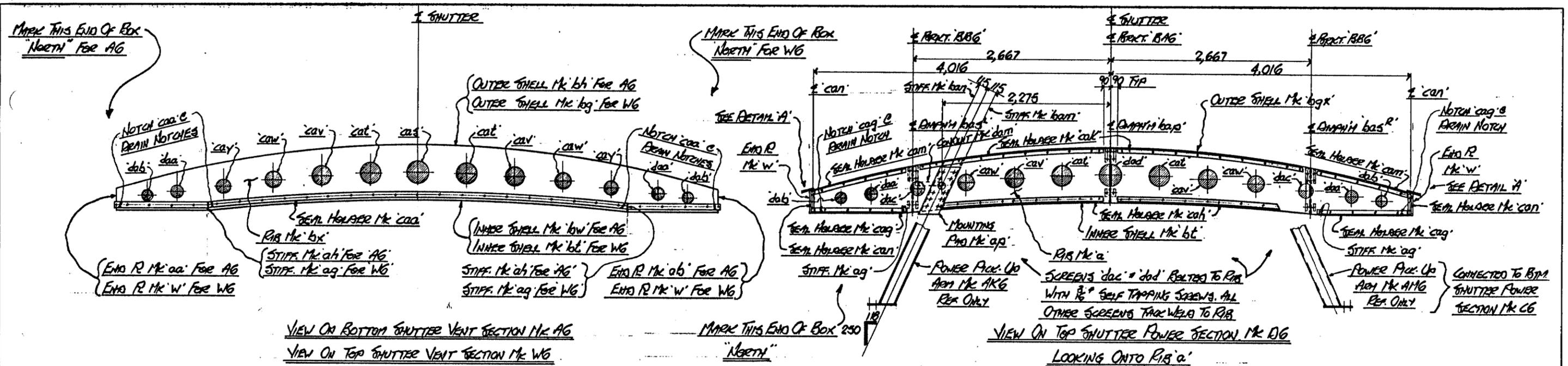
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BRITAIN	MATERIAL	ALUMINIUM	DETAILS	SLOTS - ADDITIONAL WORK
	SURF. PREP. & PAINT	NONE	FOR	4.2" TELESCOPE RING LA PALM
	OPEN HOLES	SLOTS AS SHOWN	DRAWING NO.	1420-60v
	BRITAIN STEEL LTD. 401 BALYER AVENUE, NEW WESTMINSTER, B.C.			
SHOP DEPARTMENT	INS / F / S / O / M / T / P / SH / DP / AS / PA / ER	NO. PRINTS		

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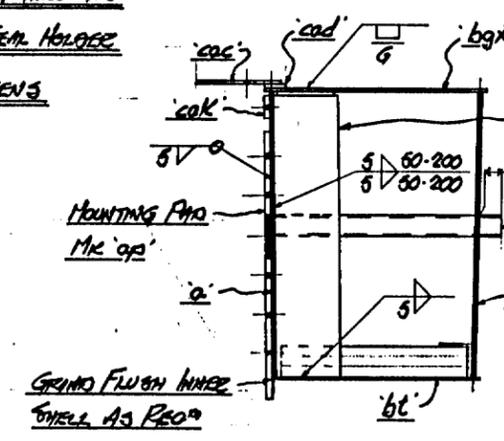
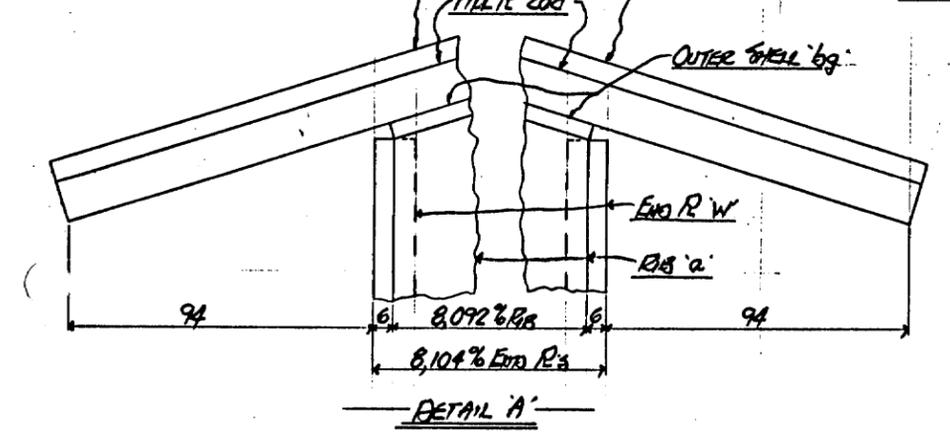
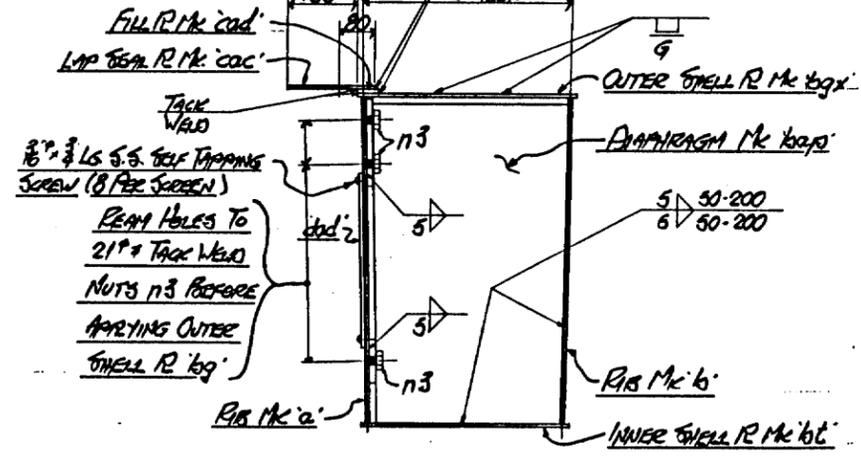
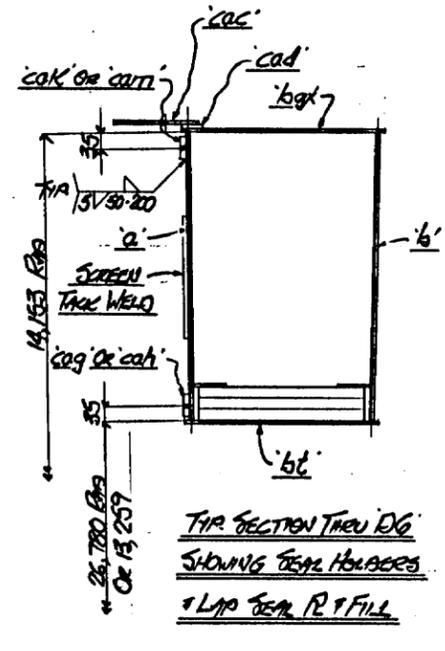
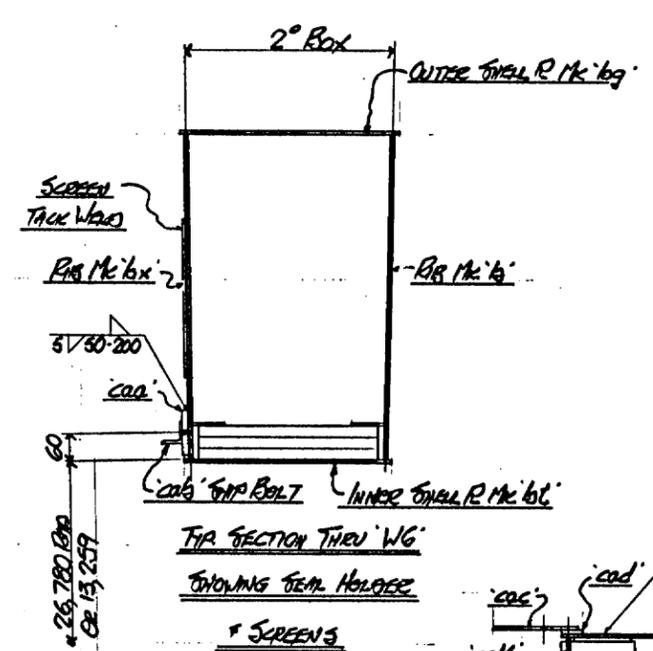
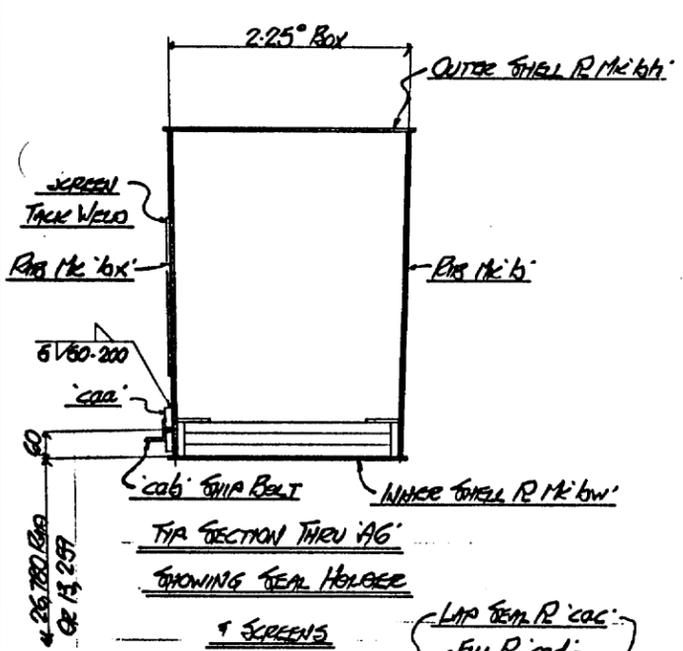


VIEW ON BOTTOM SHUTTER VENT SECTION MK AG
VIEW ON TOP SHUTTER VENT SECTION MK WG

VIEW ON TOP SHUTTER POWER SECTION MK DG
LOOKING ONTO RIB 'a'

LOOKING ONTO RIB 'bx'
SEAL HOUSERS & SCREENS ATTACHED AFTER
REMOVAL OF BOX FROM SHIP JIG

SEAL HOUSERS, MOUNTING PINS & SCREENS ATTACHED
AFTER REMOVAL OF BOX FROM SHIP JIG



SECTION THRU DG AT MOUNTING
PIN WELDING ALSO APPLIES TO
STIFF. BAR

SECTION THRU DG AT E
WELDING, ETC ALSO APPLIES TO
AMPHIBAS 'bas'

GENERAL NOTES

- 1) FOR DETAILS OF ITEMS ON THIS DRAWING SEE PAGES 6b, 6c, 6f, 6g, 6h, 6i, 6j, 6k, 6l, 6m, 6n, 6o, 6p.
- 2) FOR DETAILS OF INSULATION SEE PAGE 35.
- 3) FOR TYPICAL WELDINGS OF RIBS & SHELL R'S SEE PAGES

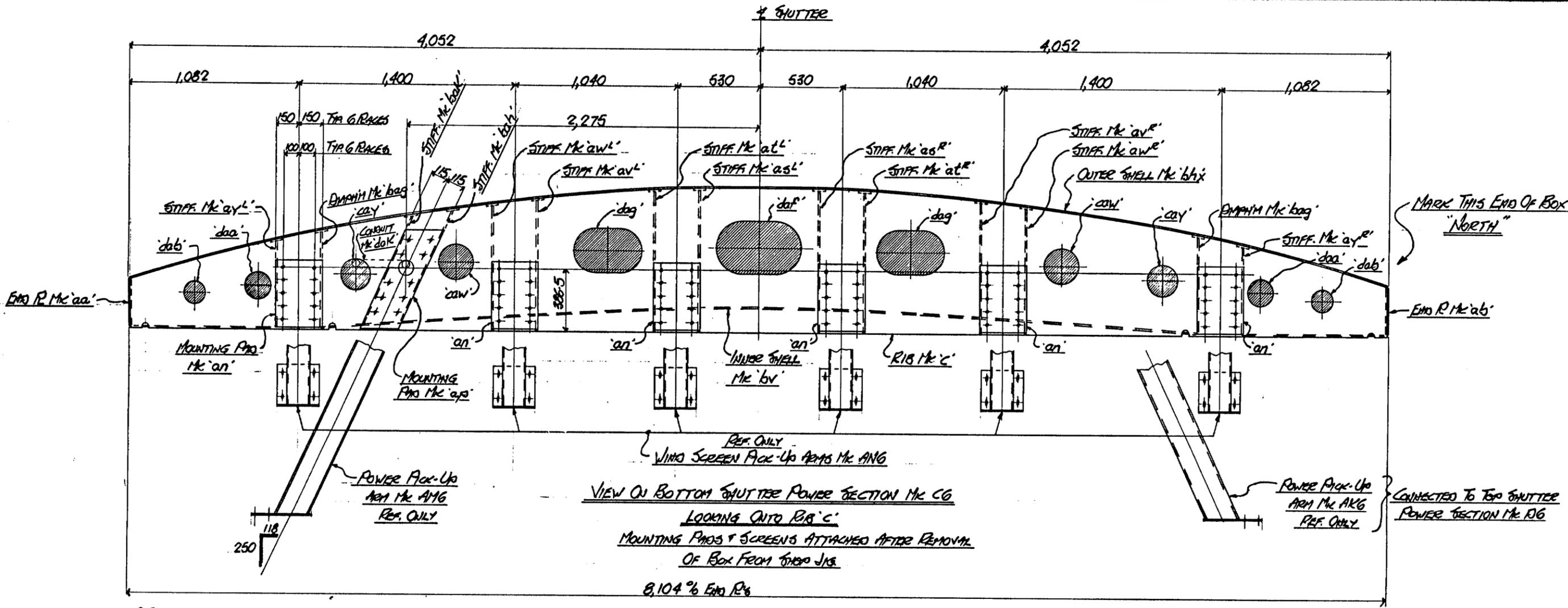
3R/3001217

BRITAIN	MATERIAL	ALUMINIUM	No.	BY	DATE	REVISION
	SURF. PREP. & PAINT	NONE	DETAILS SHUTTERS - ASSEMBLY			
DRAWN		DATE	CHECKED	DATE	DRAWING No. 1420-6ba	
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, S.C.						
SHOP DEPARTMENT		INS / F / S / O / M / T / P / SH / DP / AS / PA / ER			No. PRINTS	

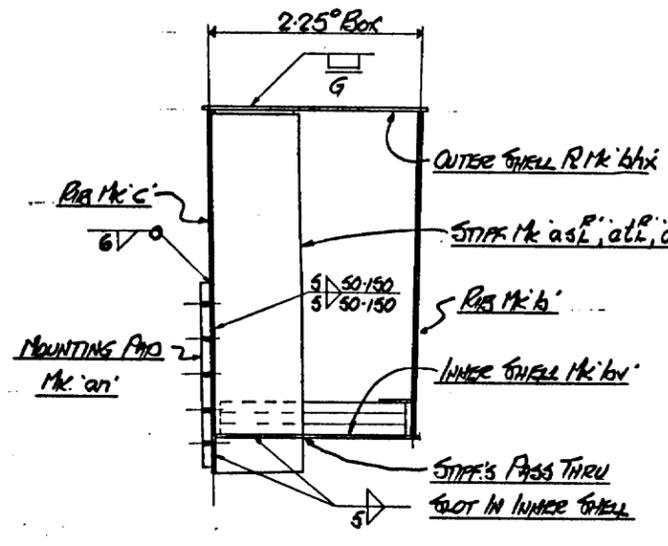
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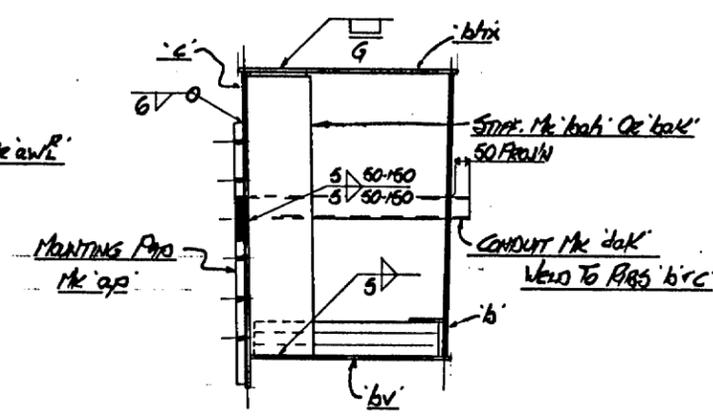
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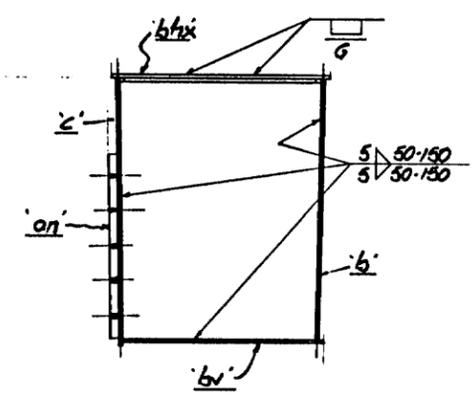
VIEW ON BOTTOM SHUTTER POWER SECTION MK CG
 LOOKING OUTO RB'C
 MOUNTING PADS & SCREENS ATTACHED AFTER REMOVAL
 OF BOX FROM SHUTTER JKS
 8,104 % END R₆



TYP. SECTION THRU BOX C
 4 MOUNTING PADS & 8 STIFF'S



TYP. SECTION THRU BOX C
 ONE MOUNTING PAD & 2 STIFF'S
 WELDING ALSO APPLIES TO
 STIFF'S MK 'ayL'



TYP. SECTION THRU BOX C
 2 MOUNTING PADS & 2 STIFF'S

- GENERAL NOTES
- 1) FOR DETAILS OF ITEMS ON THIS DRAW SEE DESIG. 65, 66, 67, 68, 69, 70, 71
 - 2) FOR DETAILS OF INSULATION SEE DESIG. 35
 - 3) FOR TYPICAL WELDING OF RIBS & SHELL R₆ SEE DESIG.

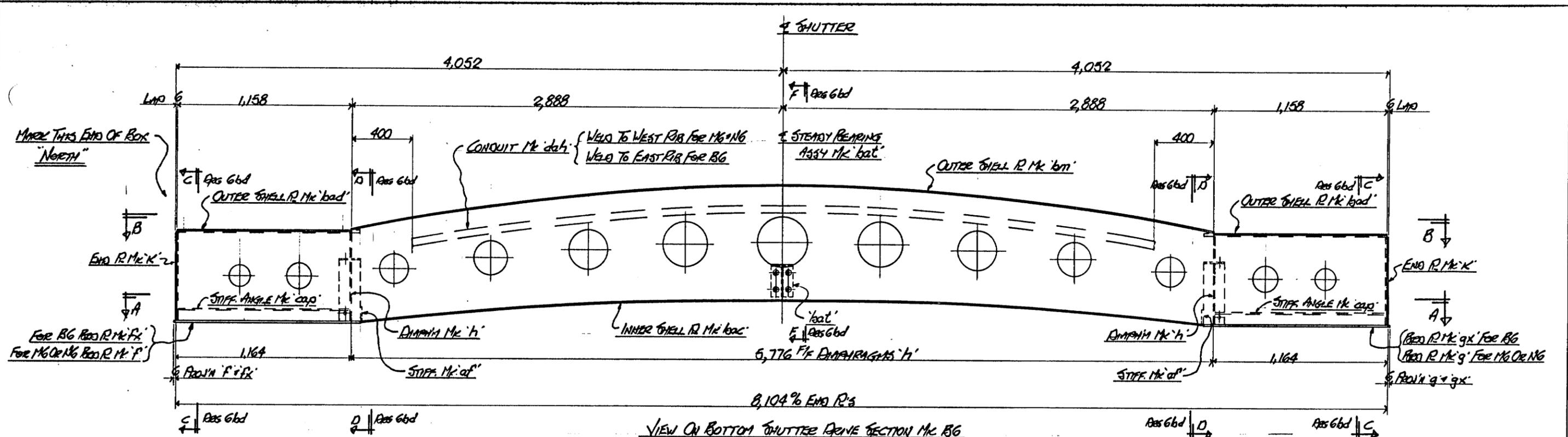
3R/3001218

	MATERIAL	ALUMINIUM	DETAILS	SHUTTERS ASSEMBLY
	SURF. PREP. & PAINT	NONE	FOR	4.2" TELESCOPE CASE LA PALMA MIA
	DRAWN	DATE	CHECKED	DATE
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.		DRAWING No. 1420-646		
SHOP DEPARTMENT		REV. PRINTS		

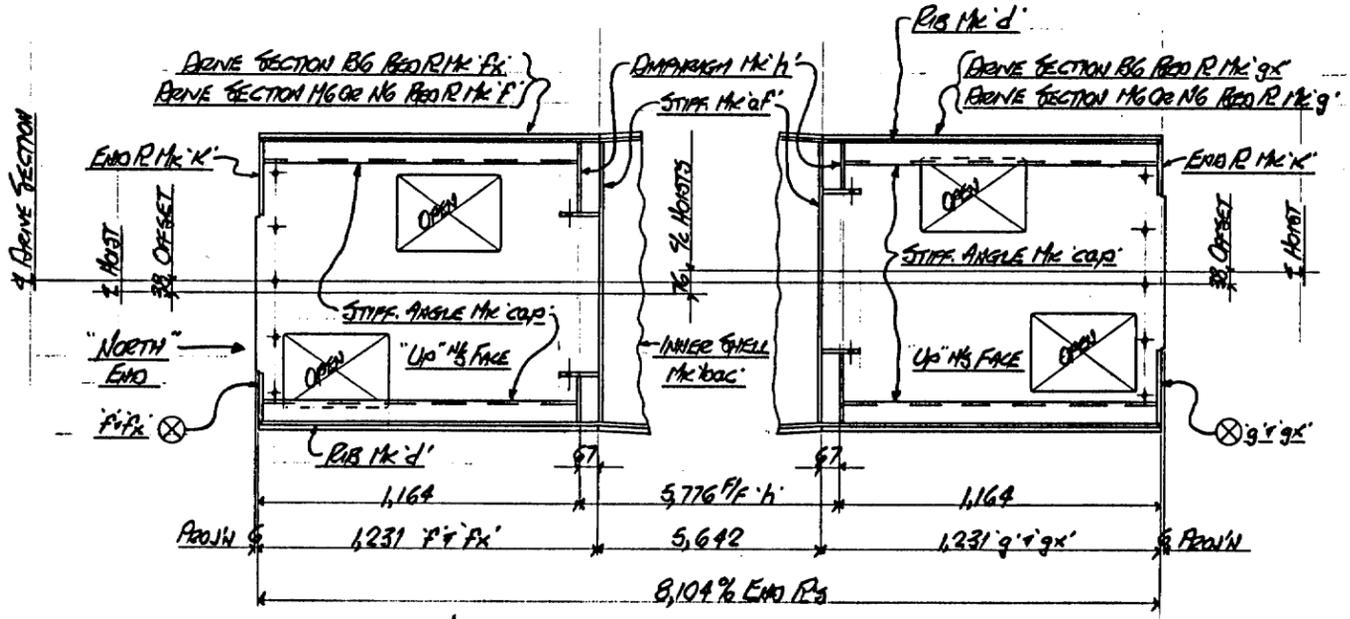
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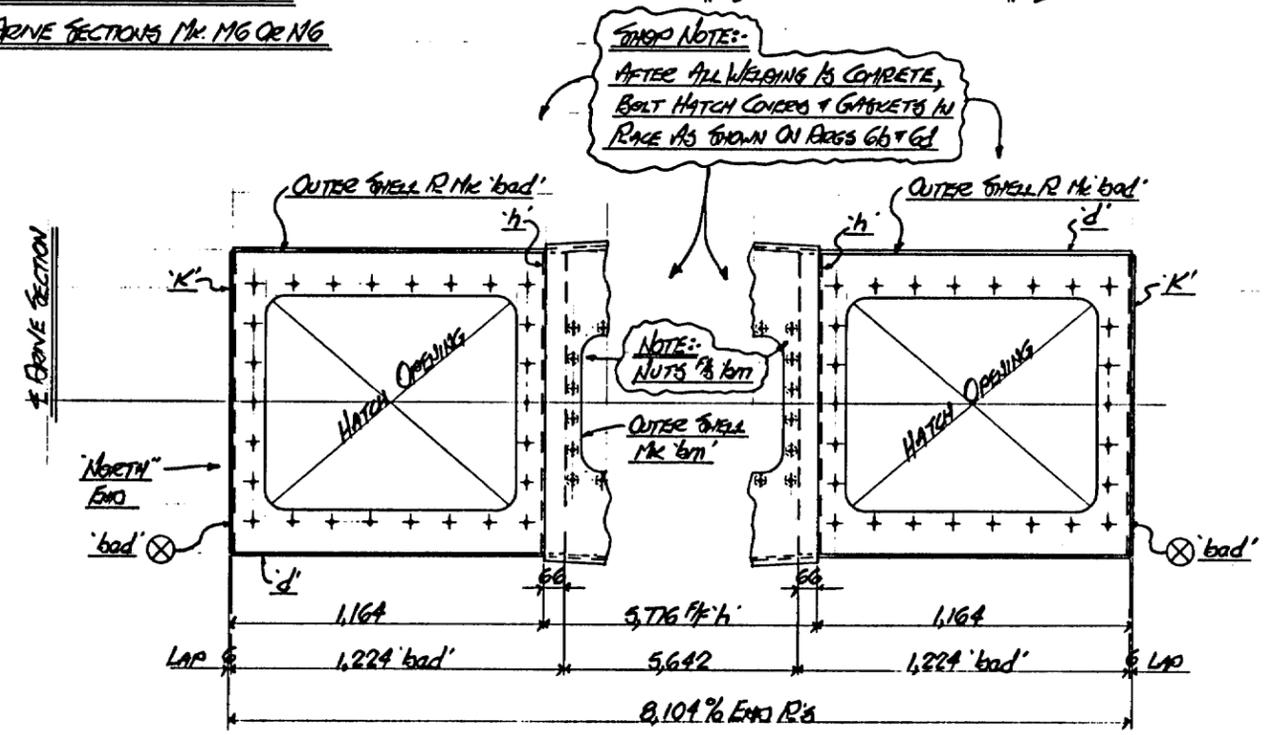
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VIEW ON BOTTOM SHUTTER RIB SECTION M.C. B6
 VIEW ON TOP SHUTTER RIB SECTIONS M.C. M6 OR N6



PARTIAL SECT. A-A
SHOP NOTE:
 CORRECT ORIENTATION OF OPENINGS
 IN RIB R'S VERY IMPORTANT!!!

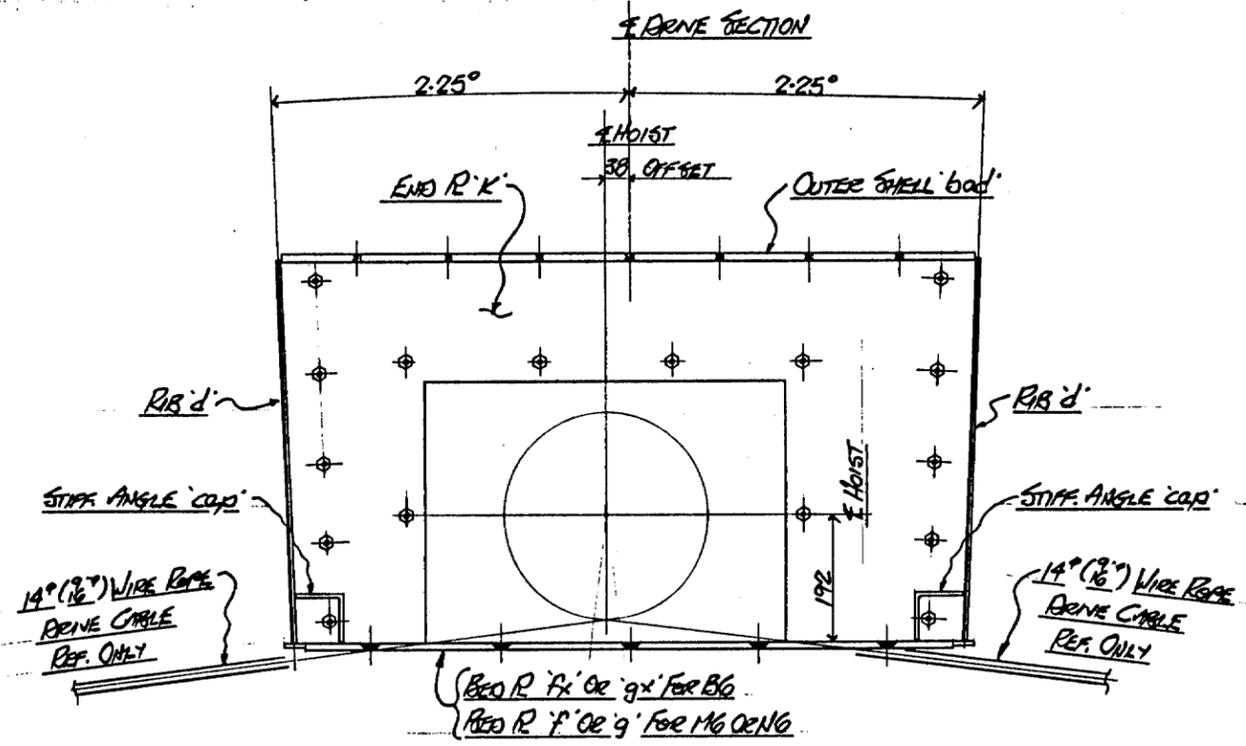


PARTIAL VIEW B-B

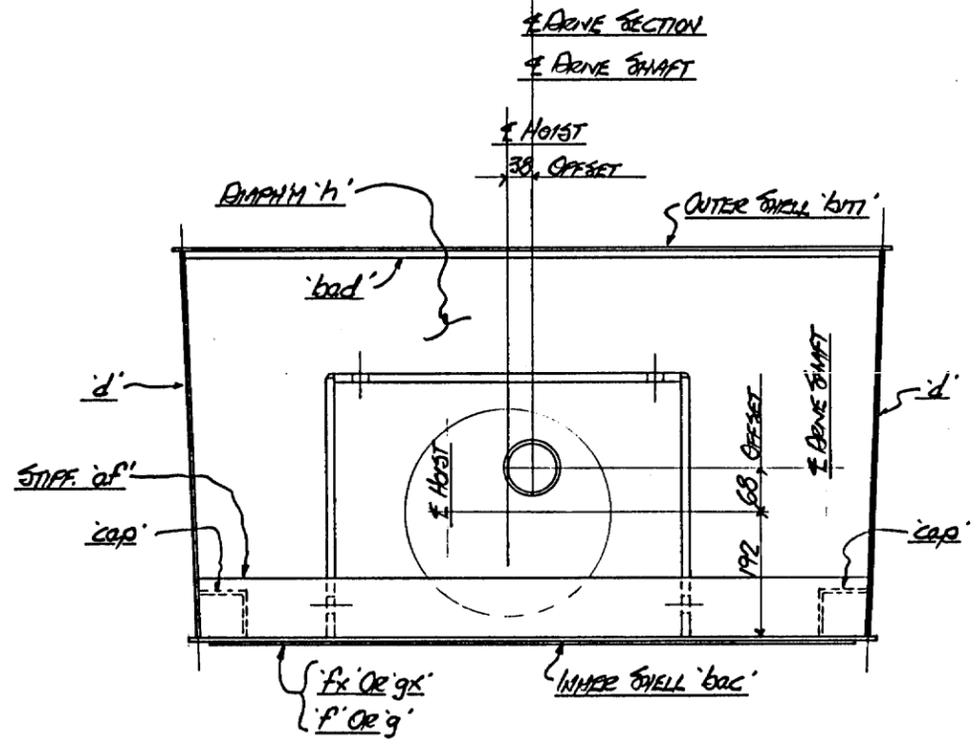
- GENERAL NOTES
- 1) FOR DETAILS OF ITEMS ON THIS DRAWING SEE PAGES 6b, 6d, 6h, 6k, 6m, 6n, 6s, & 6a2.
 - 2) FOR DETAILS OF INSULATION SEE PAGE 85.
 - 3) FOR TYPICAL WELDING OF RIBS & SHELL R'S SEE PAGES

3R/3001219

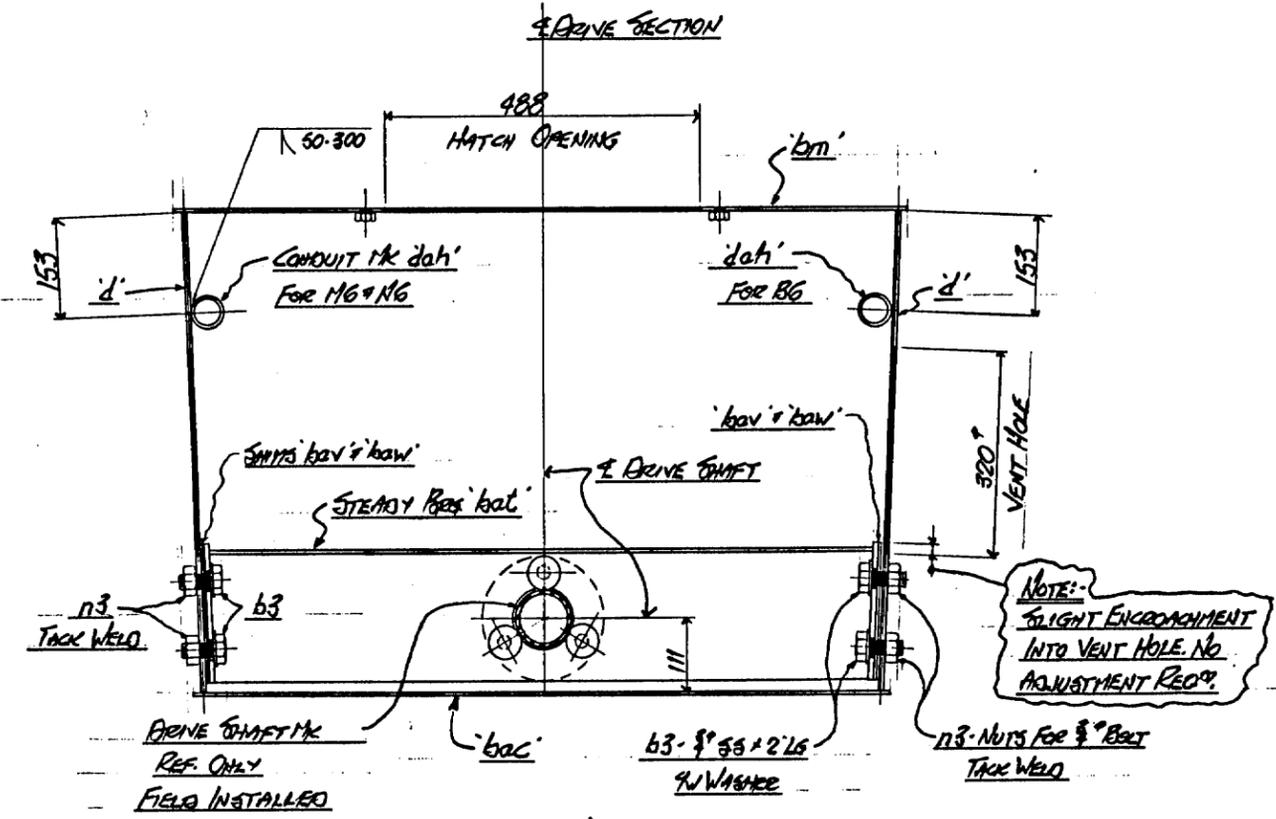
	MATERIAL	ALUMINIUM	NO. BY	DATE	REVISION
	SURF. PREP. & PAINT	NONE	DETAILS SHUTTERS-ASSEMBLY		
DRAWN		DATE	CHECKED	DATE	DRAWING NO.
RK		14/1/82			1420-6bc
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.					
SHOP DEPARTMENT		INS / F / S / G / M / T / P / SH / DP / AS / PA / ER		NO. PRINTS	



SECT. C-C



SECT. D-D



SECT. F-F

GENERAL NOTES

1) FOR LOCATIONS OF DETAILS ON THIS DRAWING SEE PAGE 610.

3R/3001220

	MATERIAL	Autumn '66	No. BY DATE REVISION	
	SURF. PREP & PAINT	None	DETAILS	
	FOR 4.2m TELESCOPE DOME LA PALMA		DRAWING No. 1420-66	
DRAWN	DATE	CHECKED	DATE	
RL	1/1/68			
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT		INS / F / S / O / M / T / P / SH / DP / AS / PA / ER		

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s-abcdefghijklmnpstvw

SMUTTER BOXES PARTS LIST

FOR SHOP UNITS

3R/3001221

MARK.	INNER SHELL	RIBS	STIFF'S	END R'S	INSULATION	INSUL'N TABS	OUTER SHELL	CONDUIT CLIPS
<u>F6</u>	<u>ONE-'bp'</u>	<u>2-'b'</u>	<u>2-'af'</u>	<u>2-'m'</u>	<u>4-'B35'</u> <u>2-'C35'</u>	<u>22-'dap'</u>	<u>ONE-'ba'</u> ▲	
<u>G6</u>	<u>ONE-'bp'</u>	<u>2-'b'</u>	<u>2-'af'</u>	<u>2-'m'</u>	<u>4-'B35'</u> <u>2-'C35'</u>	<u>22-'dap'</u>	<u>ONE-'ba'</u> ▲	
<u>H6</u>	<u>ONE-'bs'</u>	<u>2-'b'</u>	<u>2-'af'</u>	<u>2-'m'</u>	<u>4-'B35'</u> <u>2-'C35'</u>	<u>22-'dap'</u>	<u>ONE-'bb'</u> ▲	
<u>K6</u>	<u>ONE-'bs'</u>	<u>2-'b'</u>	<u>2-'af'</u>	<u>2-'m'</u>	<u>4-'B35'</u> <u>2-'C35'</u>	<u>22-'dap'</u>	<u>ONE-'bb'</u> ▲	
<u>P6</u>	<u>ONE-'bs'</u>	<u>2-'b'</u>	<u>2-'af'</u>	<u>2-'m'</u>	<u>4-'B35'</u> <u>2-'C35'</u>	<u>22-'dap'</u>	<u>ONE-'bb'</u> ▲	
<u>S6</u>	<u>ONE-'bs'</u>	<u>2-'b'</u>	<u>2-'af'</u>	<u>2-'m'</u>	<u>4-'B35'</u> <u>2-'C35'</u>	<u>22-'dap'</u>	<u>ONE-'bb'</u> ▲	
<u>T6</u>	<u>ONE-'bp'</u>	<u>2-'b'</u>	<u>2-'af'</u>	<u>2-'m'</u>	<u>4-'B35'</u> <u>2-'C35'</u>	<u>22-'dap'</u>	<u>ONE-'ba'</u> ▲	
<u>V6</u>	<u>ONE-'bp'</u>	<u>2-'b'</u>	<u>2-'af'</u>	<u>2-'m'</u>	<u>4-'B35'</u> <u>2-'C35'</u>	<u>22-'dap'</u>	<u>ONE-'ba'</u> ▲	

QTY. REVISED OUTER SHELL
 18x 11/16"

REVISION
 No. BY DATE

HOLES
 13Φ U
 16 N

PAINT
 &
 PREP

MADE DATE CH'KD DATE
 10/10/80

CONTRACT DWG. No. REV.
 1420 66P

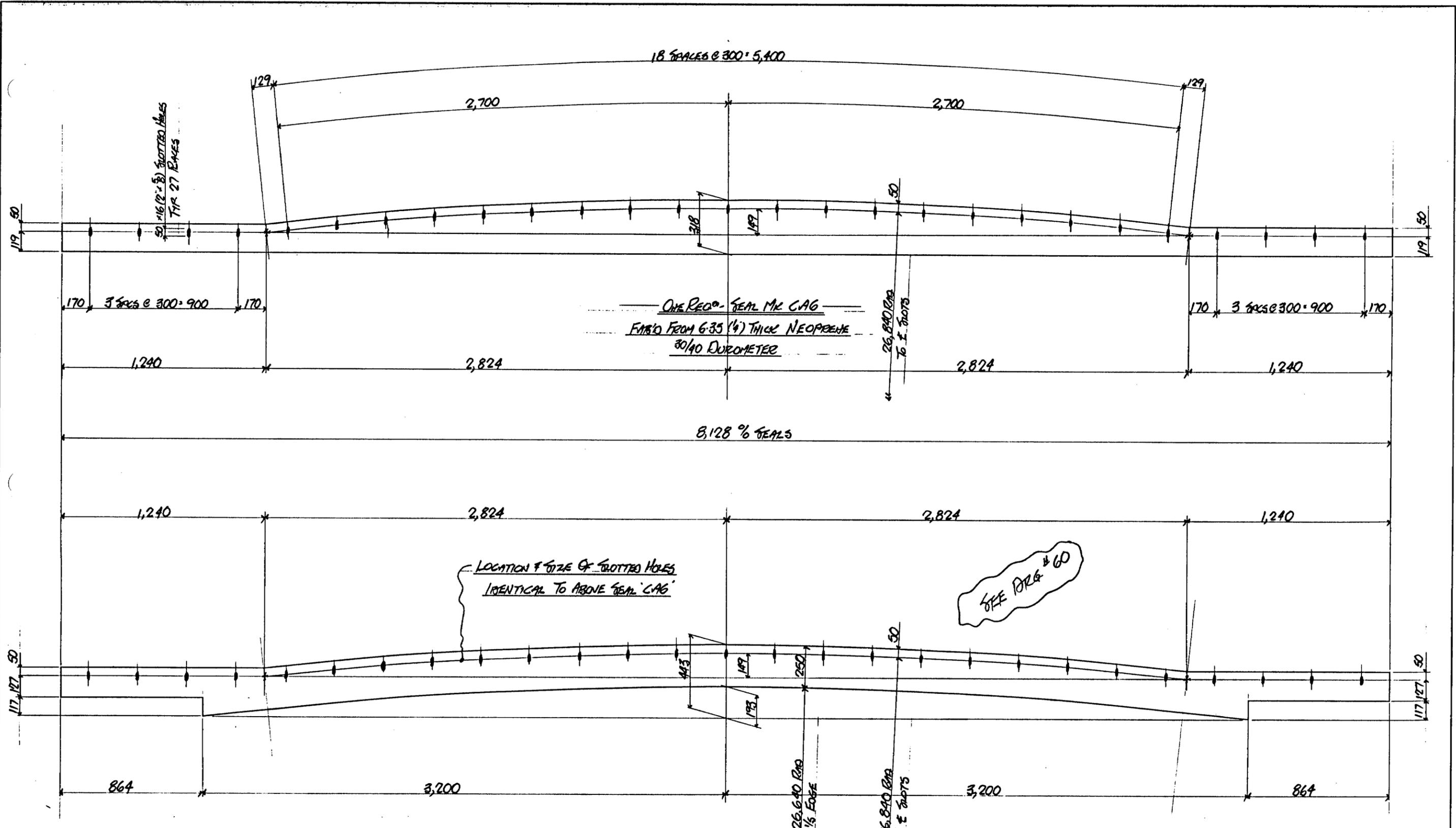
STD. MEMO
 SEE MEMO

BRITAIN STEEL LTD.
 NEW WESTMINSTER B.C.

No. DIV.

BRITAIN





18 SPACES @ 300 = 5,400

50 x 16 (12 x 5) SLOTTED HOLES
FOR 27 RINGS

ONE REGD. SEAL MR. CAG
FABRIC FROM 6.35 (1/4") THICK NEOPRENE
30/40 DUROMETER

8,128 % SEALS

LOCATION & SIZE OF SLOTTED HOLES
IDENTICAL TO ABOVE SEAL CAG

SEE DRG # 60

ONE REGD. SEAL MR. CBG
FABRIC FROM 6.35 (1/4") THICK NEOPRENE
30/40 DUROMETER

3R/3001222

	MATERIAL	NEOPRENE	DETAILS	TELESCOPE SEALS
	SURF. PREP. & PAINT	NONE	FOR	4.2M TELESCOPE DOME LA PALM
	OPEN HOLES	AS NOTED	DRAWING No.	1420-669
	DRAWN BY	DATE	CHECKED	DATE
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, S.C.				
SHOP DEPARTMENT				

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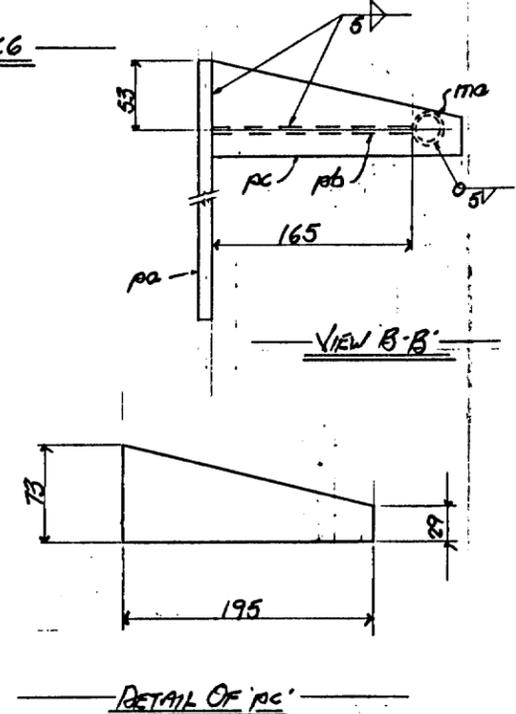
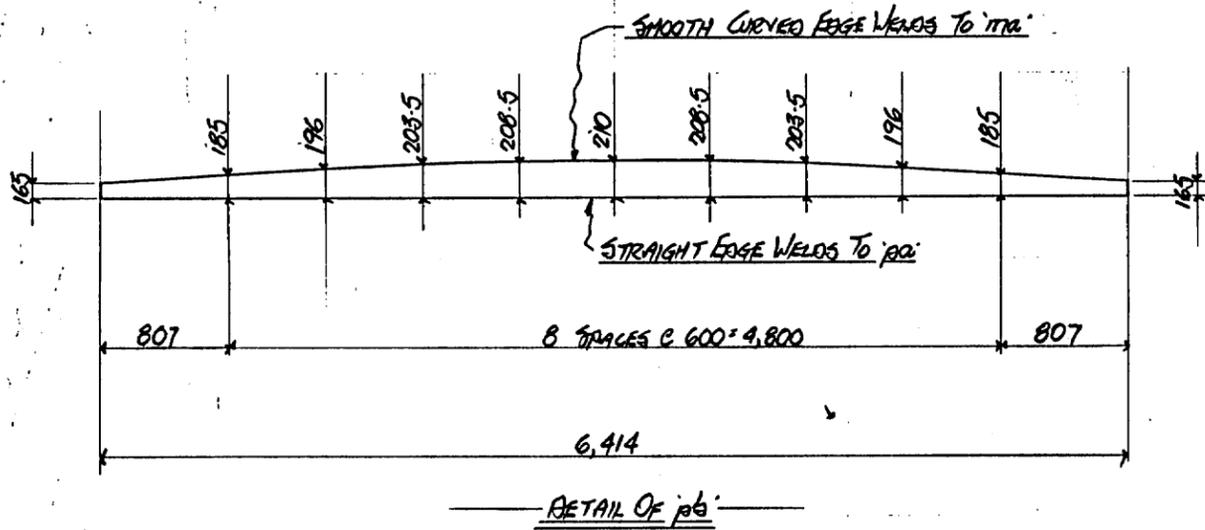
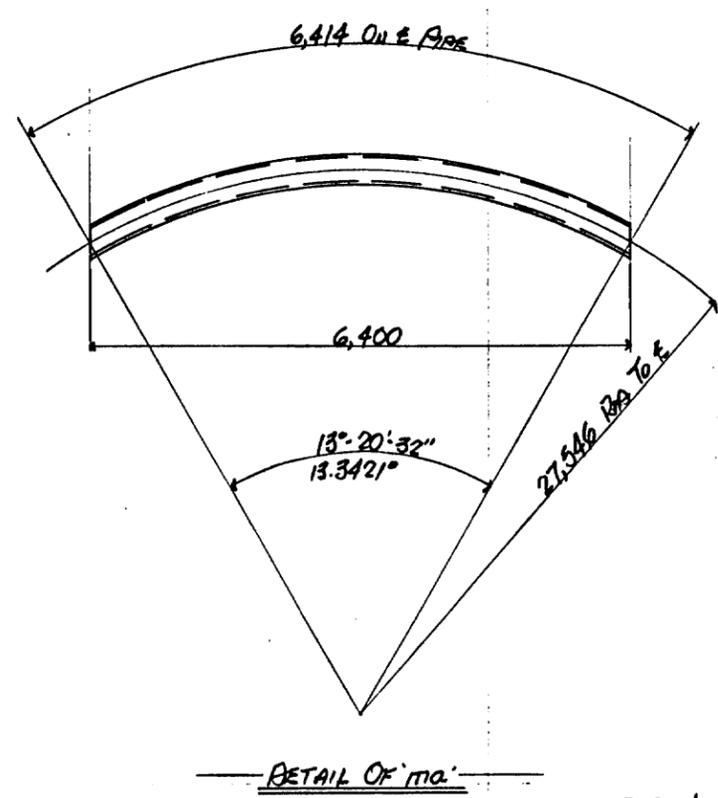
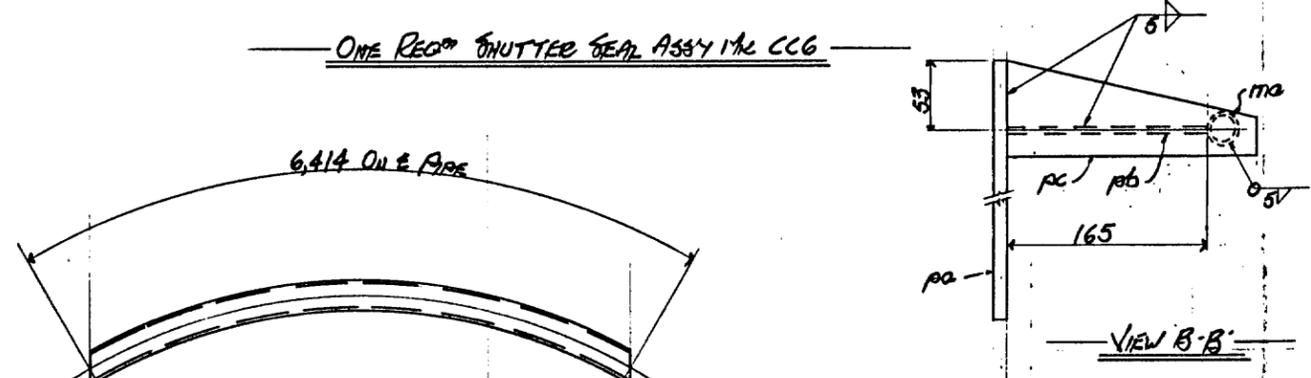
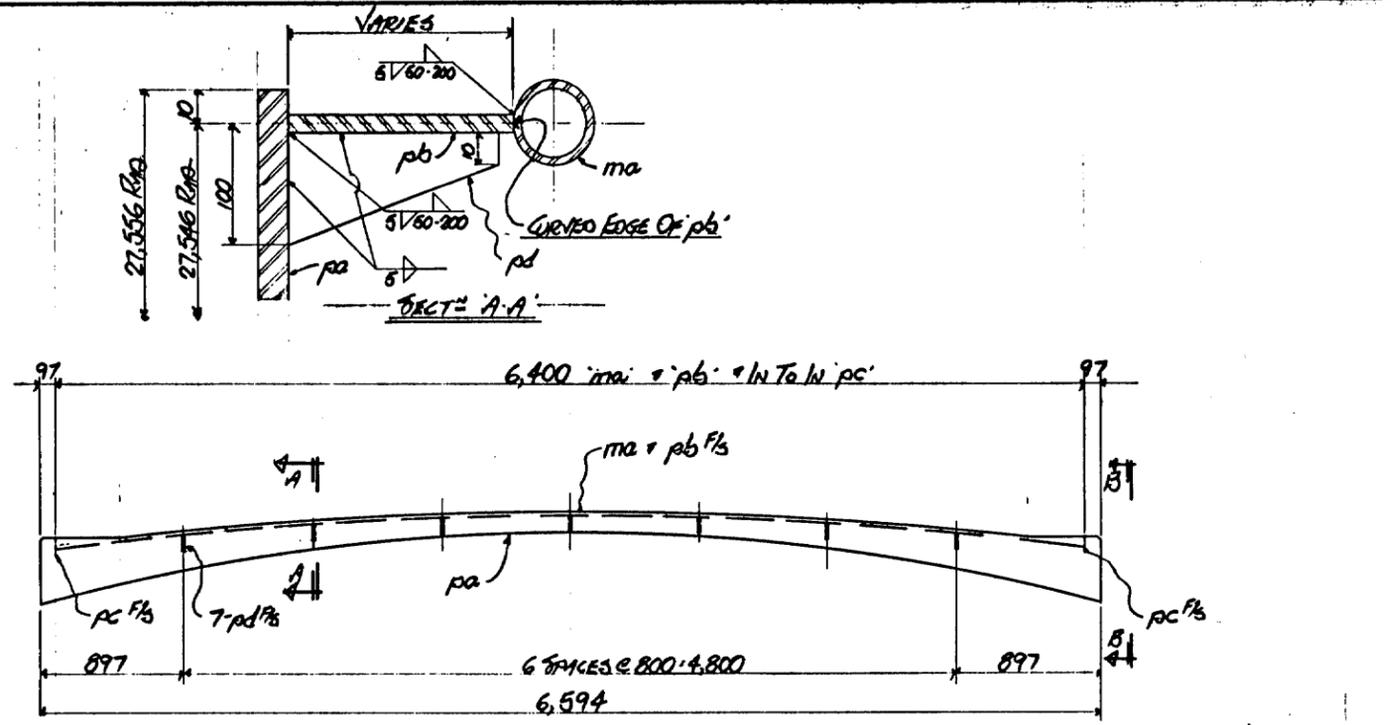
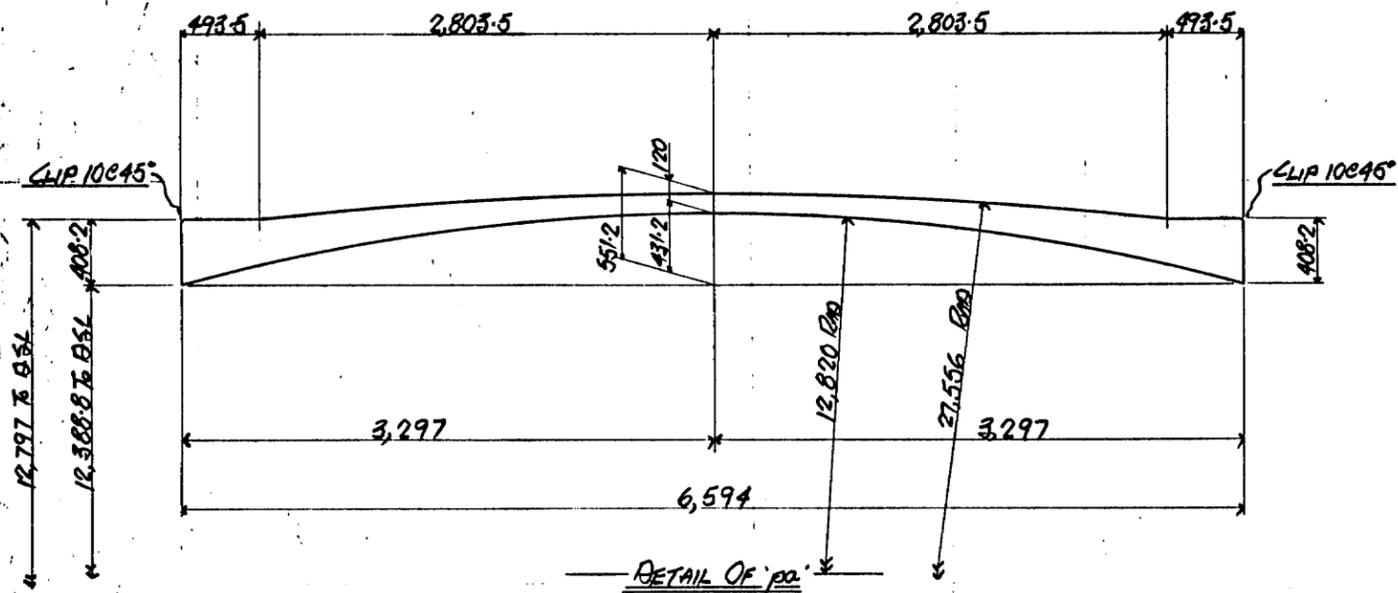
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NO PRINTS

MATERIAL BILL CONTRACT 1420

ITEM	QTY	SIZE	LENGTH	REMARKS	MATL	BILL
ma	ONE	26" x 0.12	6.418	(3" STR) ROLLED	A36	
pc	ONE	55.12 x 9.5	6.594	(32 R)		
pa	ONE	210 x 4.76	6.414	(16 R)		
pb	2	73 x 4.76	195	(16 R)		
pd	7	100 x 4.76	165	(16 R)		



3R/3001223

	MATERIAL	G40.21 (44W) w/n	No. BY DATE REVISION	
	SURF. PREP. & PAINT	SEE MEMO	DETAILS SHUTTER GEAR ASSY	
	DRAWN	DATE	CHECKED	DATE
	BRK	6/20/84		
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.		DRAWING No. 1420-664		REV. Δ
SHOP DEPARTMENT		INS. F/S/O/M/T/P/SH/DP/AS/PA/ER		NO. PRINTS

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