

10-REG'D. ~ WALKWAY @ ~ MK-A31

MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

LINE NO.	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	WEIGHT
1							
2							
3							
4	10	REG'D.	~ MK A31				
5	10	REG'D.	~ MK A31	4734	CUT TO PROFILE A36 1/2"		
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GENERAL NOTES:

1) FOR FIELD ASSEMBLY SEE DWG E5A & E1C

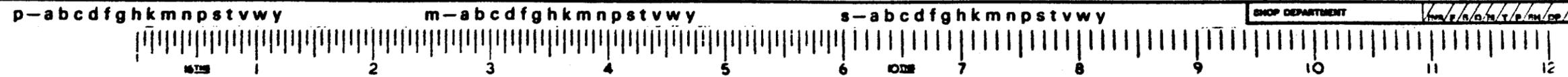
BRITAIN

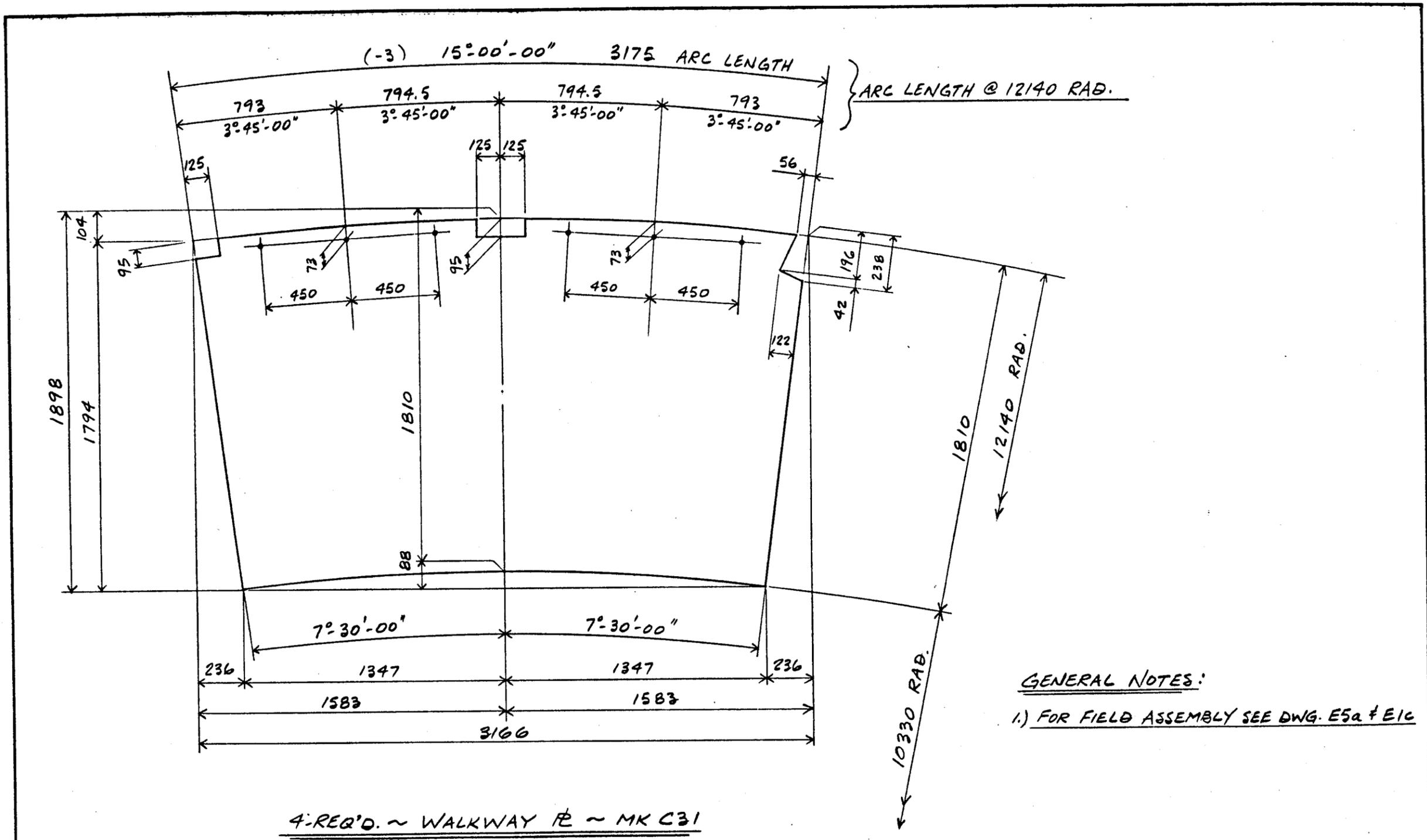
MATERIAL: A36
 SURF. PREP: SEE MEMO
 OPEN HOLES: 11" (Ø)
 FOR 9.2" TELESCOPE DOME LA PALMA

DETAILS: WALKWAY R'S.

DRAWN: G.V.A. Nov/89
 DATE: 1420-31a
 CHECKED: []
 DATE: []

BRITAIN STEEL LTD. 4th SALTER AVENUE, NEWCASTLE, N.C.





4-REQ'D. ~ WALKWAY R ~ MK C31

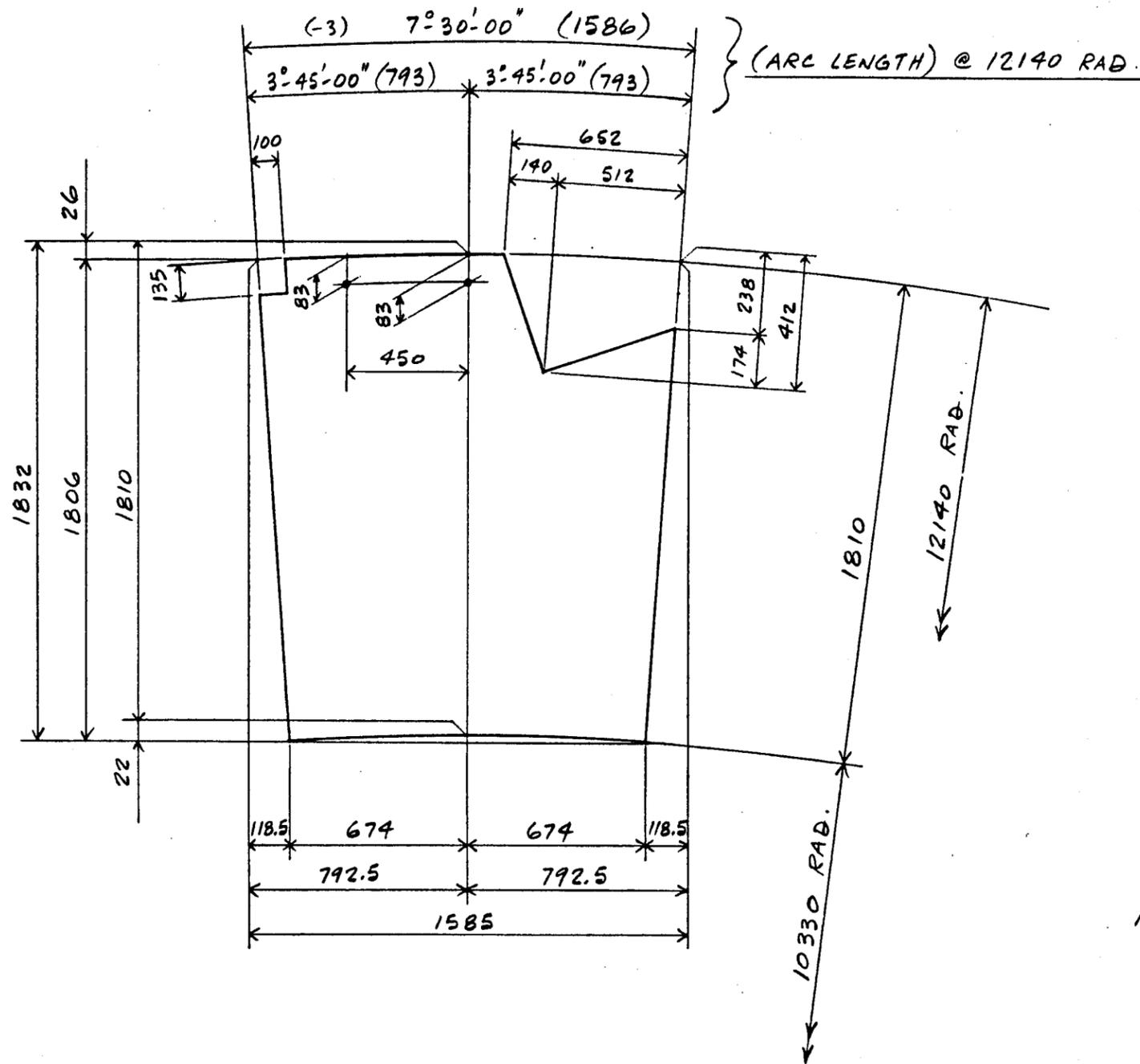
GENERAL NOTES:
 1.) FOR FIELD ASSEMBLY SEE DWG. E5a & E1c

LINE	SHIP No. REQ'D.	FAB	MARK	DESCRIPTION	MAT'L	LENGTH	REMARKS	CUTTING INSTRUCTIONS SPlicing ALLOWED	WEIGHT	DIVISIONS
4				R 1898 x 6.35 (4)	A36	3166	120 CWT TO PROFILE			
4-REQ'D.				~ MK. C31						



MATERIAL	A36	DETAILS OF NASMYTH FLOOR WALKWAY R'S.	
SURF. PREP. & PAINT	SEE MEMO	FOR 4.2 M. TELESCOPE DOME LA PALMA	
OPEN HOLES	11 φ (12 φ)	DRAWING No.	1420-31c
DRAWN G.V.A.	DATE Nov/83	CHECKED	DATE
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.			





GENERAL NOTES:

1.) FOR FIELD ASSEMBLY SEE DWG. ESA & EIC

2-REQ'D. ~ WALKWAY @ ~ MK. D31

LINE	SHIP	FAB	MARK	DESCRIPTION	MAT'L	LENGTH	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS	MATERIAL		REVISION	
7												A36	DETAILS OF NASMYTH FLOOR	
6												SEE MEMO	WALKWAY R'S	
5													FOR 4.2 M TELESCOPE DOME	
4	2			R 1832 x 6.35 (4")	A36	1585	20 CUT TO PROFILE					11" (16")	LA PALMA	
3														
2				2-REQ'D. ~ MK. D31										
1														
											DRAWN: G.V.A. DATE: Nov/83 CHECKED: DATE: DRAWING No. 1420-31d REV.			
											BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.			

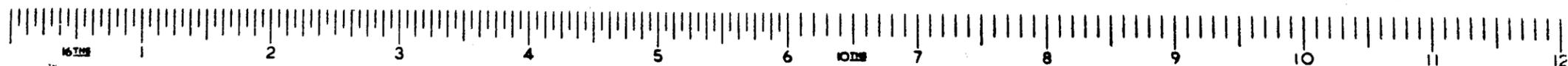
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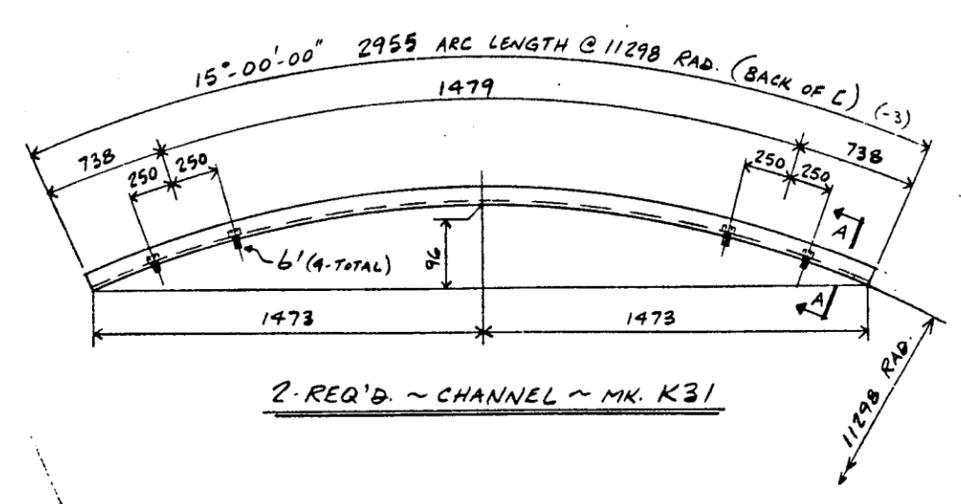
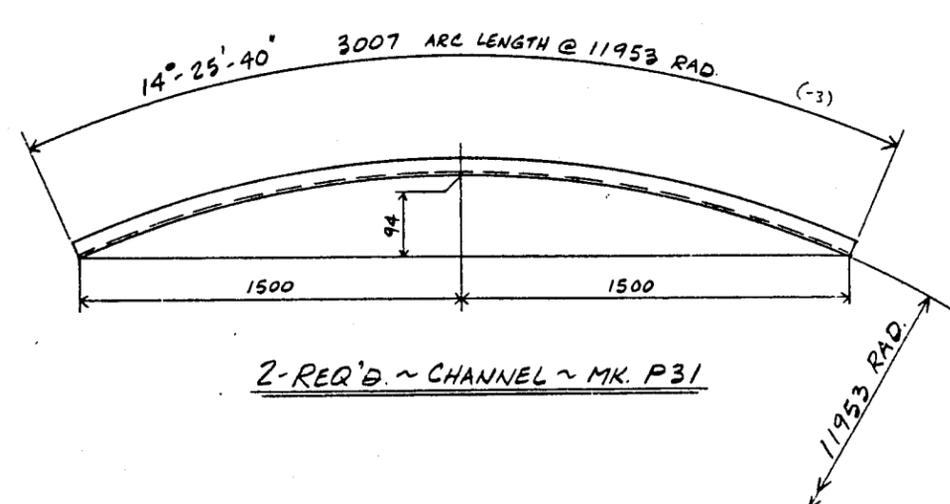
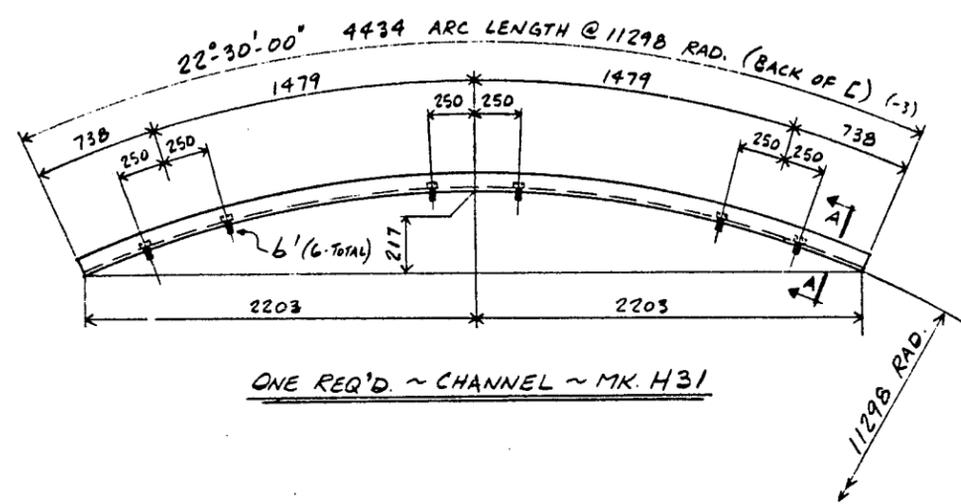
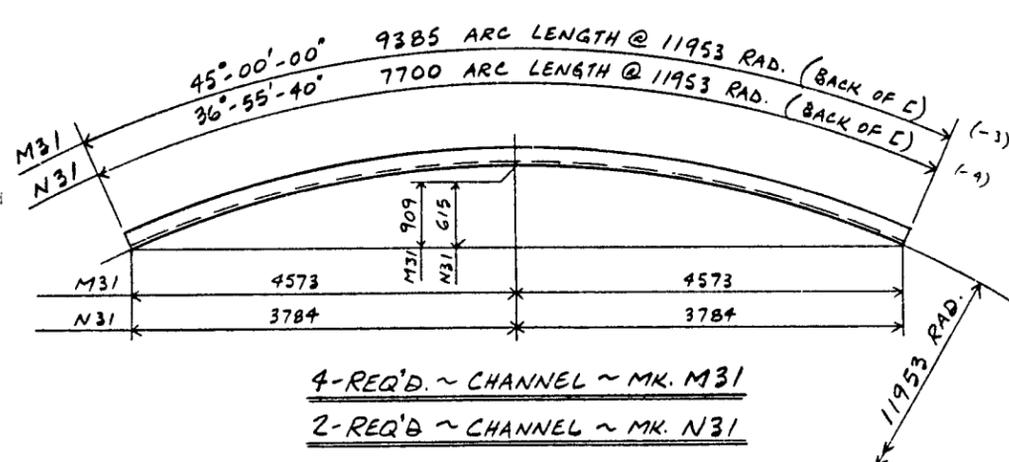
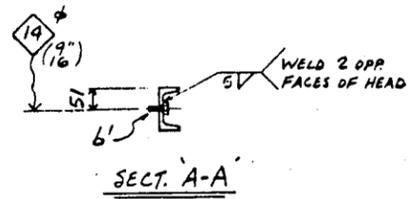
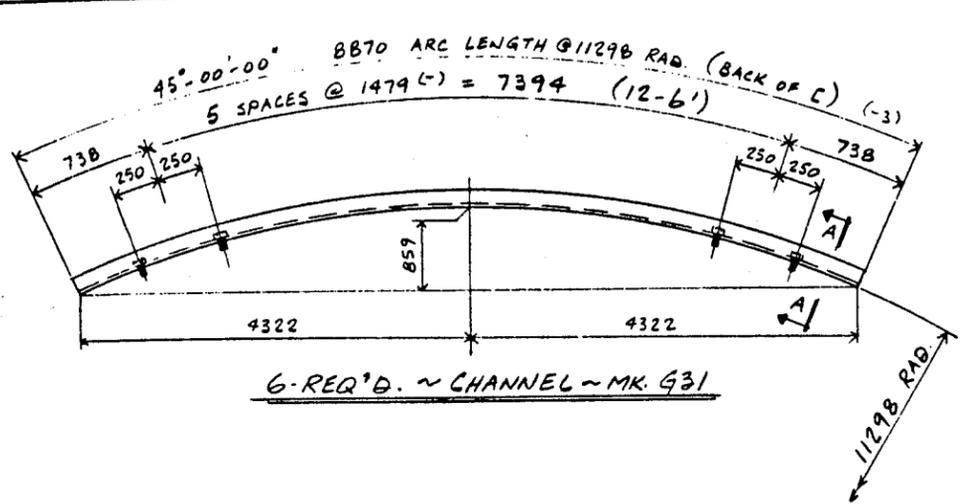
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SHOP DEPARTMENT

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

No. PRINTS

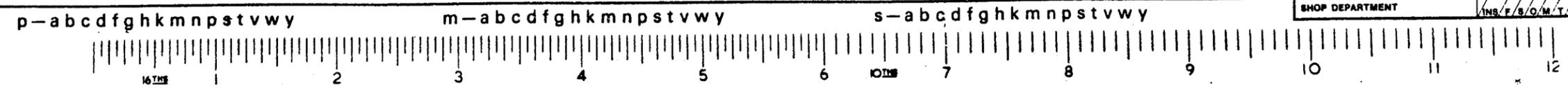




MATERIAL BILL										CONTRACT 1420	
BRITAIN STEEL LTD.											
NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	WGT.			
1											
2											
3											
4	G	6	C	100 x B	8870	ROLLED	44W	119			
5											
6	B	72	BOLT	1/2" 4807	x 32 (14)						
7											
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10											
11											
12	L	1	C	100 x B	4434	ROLLED	44W	119			
13	B	6									
14											
15											
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19											
20	B	2	C	100 x B	2955	ROLLED	44W	119			
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GENERAL NOTES:
 1) FOR FIELD ASSEMBLY SEE DWG. E5a + E1c

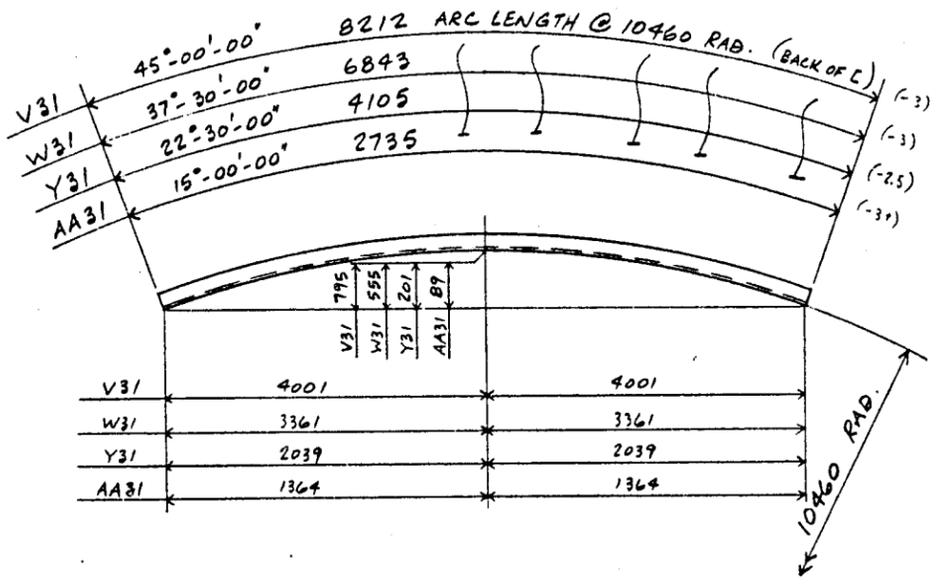
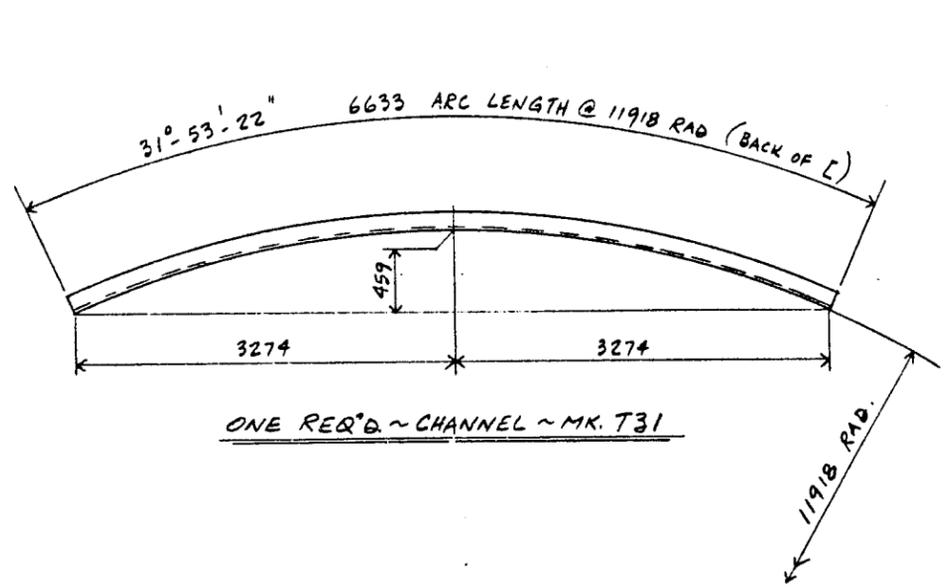
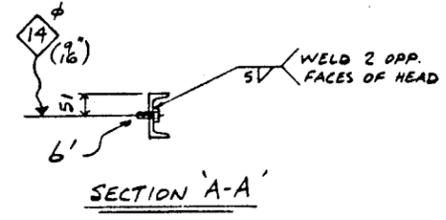
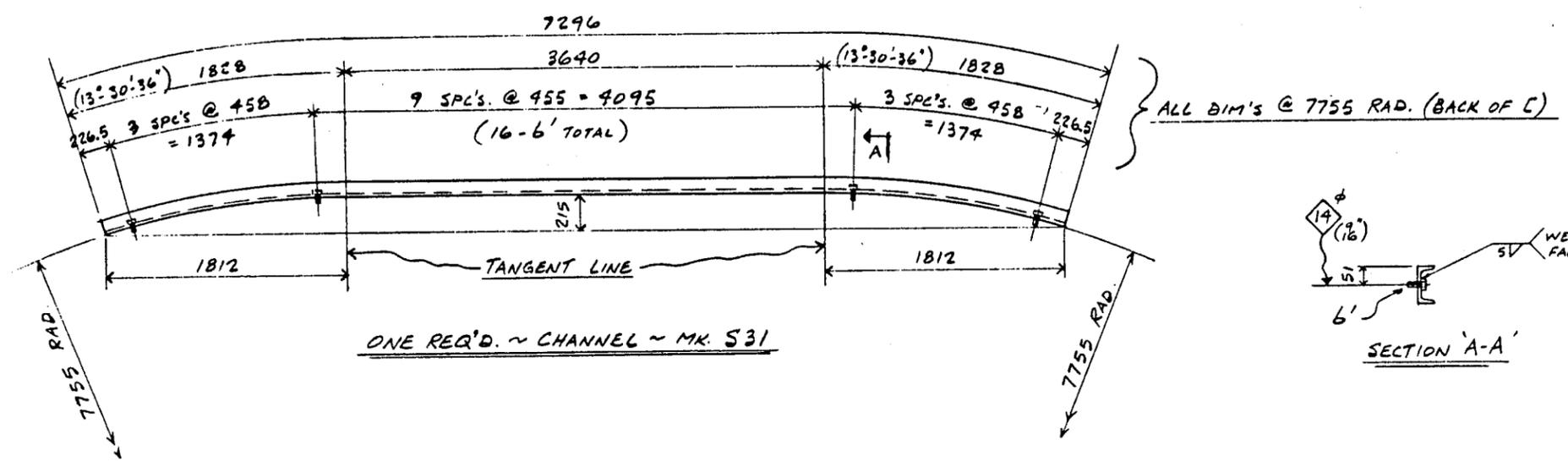
	MATERIAL	G40 21 (44W) L/R	NO.	BY	DATE	REVISION		
	SURF PREP & PAINT	SEE MEMO	DETAILS NASTMYTH FLOOR WALKWAY CHANNELS					
	OPEN HOLES	AS NOTED	FOR 4.2" TELESCOPE DOME LA PALMA					
	DRAWN	G.V.A.	DATE	NOV/83	CHECKED	DATE	DRAWING NO.	1420-319
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.								
SHOP DEPARTMENT								



MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

MARK	QTY	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	WEIGHT
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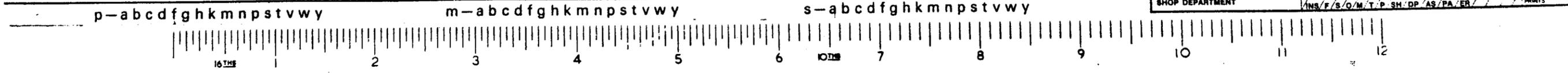


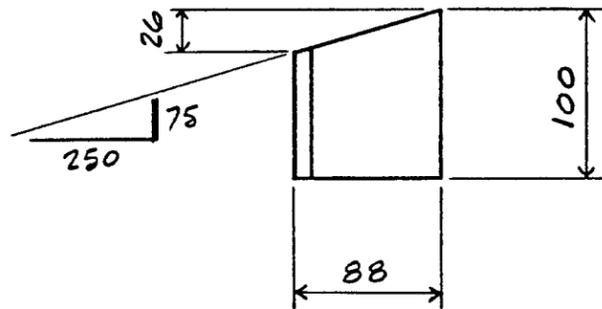
- 6-REQ'D. ~ CHANNEL ~ MK. V31
- ONE REQ'D. ~ (~ MK. W31
- ONE REQ'D. ~ (~ MK. Y31
- 2-REQ'D. ~ I ~ MK. AA31

GENERAL NOTES:

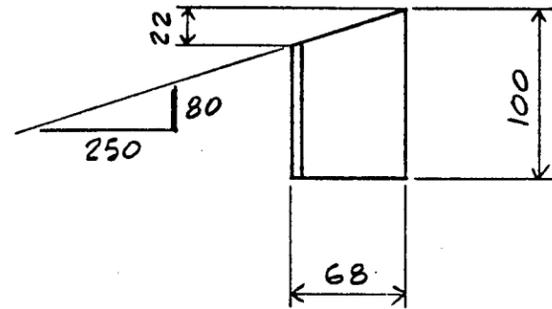
1.) FOR FIELD ASSEMBLY SEE DWG ESA & EIC

	MATERIAL	G40.21 (44W)	SEE MEMO
	SLURF PREP & PAINT		
OPEN HOLES	AS NOTED	DETAILS WALKWAY FLOOR WALKWAY CHANNELS FOR 4.2 M TELESCOPE DOME LA PALMA	
DRAWN	DATE	CHECKED	DATE
G.V.A.	Nov/03		
BRITAIN STEEL LTD.			401 SALTER AVENUE, NEW WESTMINSTER, S.C.

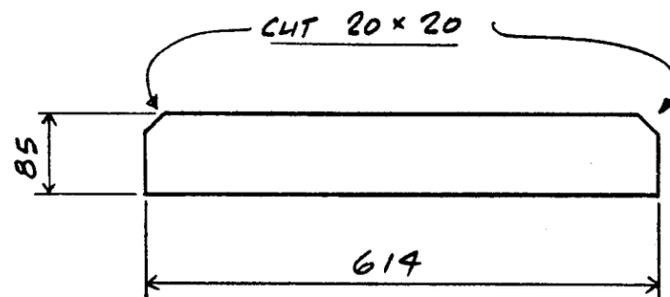




36-REQ'D. ~ WT. BRACKET ~ MK. AK31



2-REQ'D. ~ WT. BRACKET ~ MK. AM31



4-REQ'D. ~ GUSSET PLATE ~ MK. AN31

GENERAL NOTES:

1.) FOR FIELD ASSEMBLY SEE DWG. E5a, E5b & E1c

LINE	SHIP	FAB	MARK	DESCRIPTION	MAT'L	LENGTH	R.B.	LINE	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS
	No. REQ'D.									SPLICING ALLOWED		
10	43	BF31		BAR 38.1 x 6.35	A36	700			PLAIN MAT'L.			
9				(1 1/2" x 1/2")								
8	6	BD31		L101.6 x 101.6 x 6.35	A36	150			PLAIN MAT'L.			
7				(4" x 4" x 1/2")								
6	4	AN31		PL 85 x 12.7 (1/2")	A36	614						
5												
4	2	AM31		WT 152 x 68 x 6	A36	100			CUT W150 x 22			
3									(W6 x 15)			
2	36	AK31		WT 203 x 88 x 7	A36	100			CUT W200 x 46			
1									(WB x 31)			



MATERIAL A36
 SURF. PREP. & PAINT SEE MEMO
 OPEN HOLES

DETAILS OF NASMYTH FLOOR
WALKWAY MISC. MATERIAL
 FOR 4.2 M TELESCOPE DOME
LA PALMA

DRAWN G.V.A. DATE Nov./83 CHECKED DATE

DRAWING No. 1420-31m REV.

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

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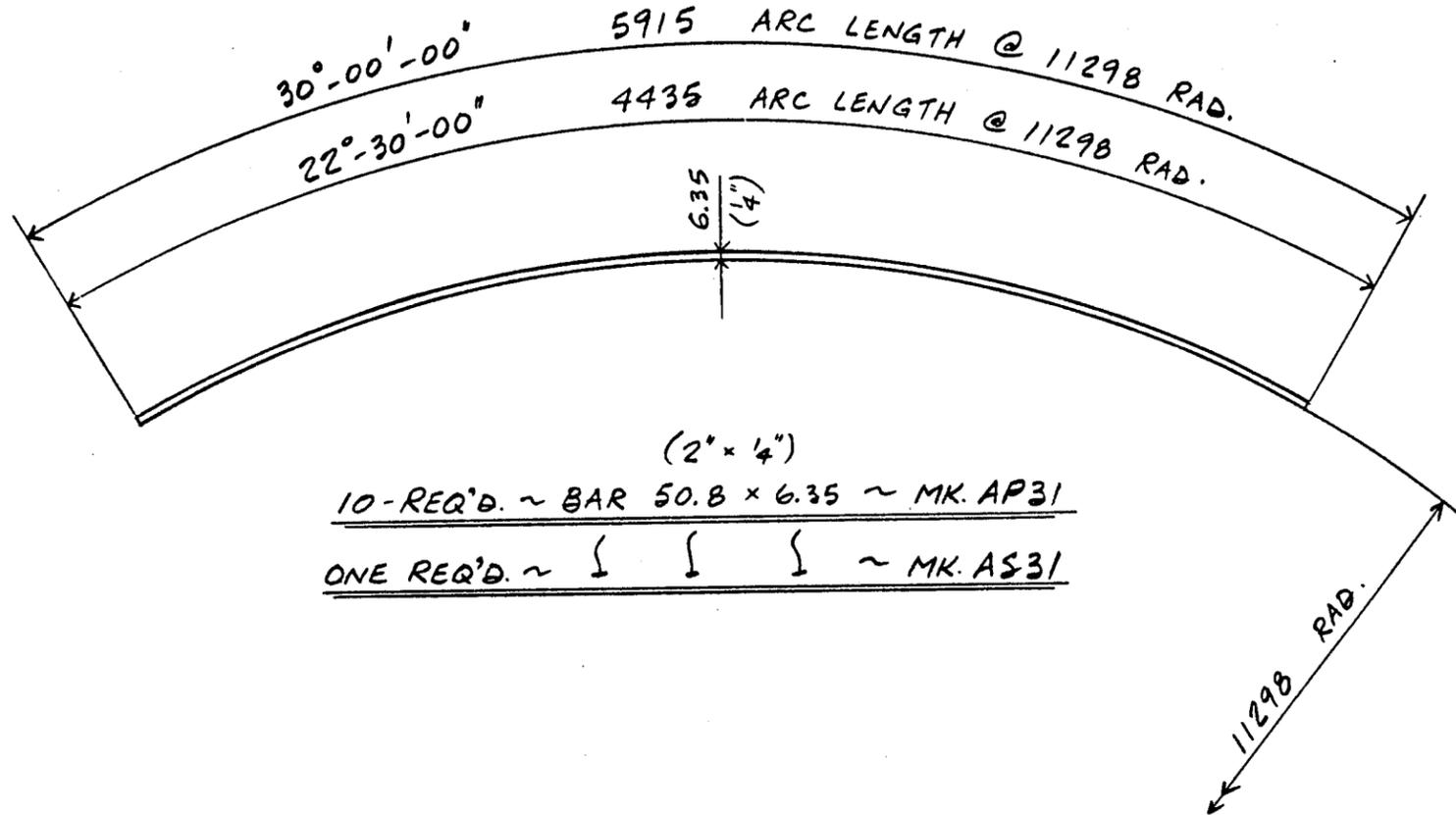
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SHOP DEPARTMENT

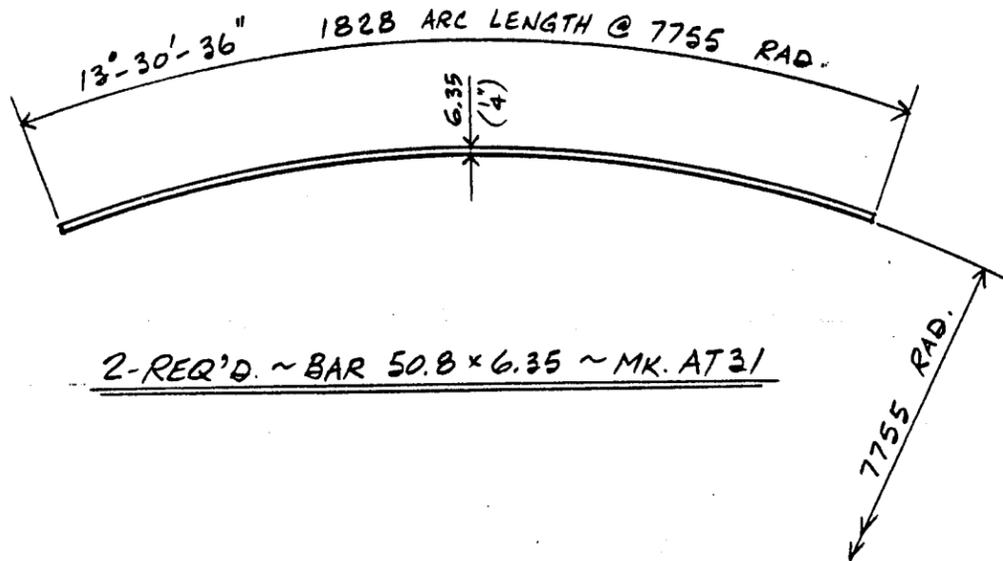
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No. PRINTS





(2" x 4")
 10-REQ'D. ~ BAR 50.8 x 6.35 ~ MK. AP31
 ONE REQ'D. ~ I I I ~ MK. AS31



2-REQ'D. ~ BAR 50.8 x 6.35 ~ MK. AT31

GENERAL NOTES:

1.) FOR FIELD ASSEMBLY SEE DWG. E56 & E10

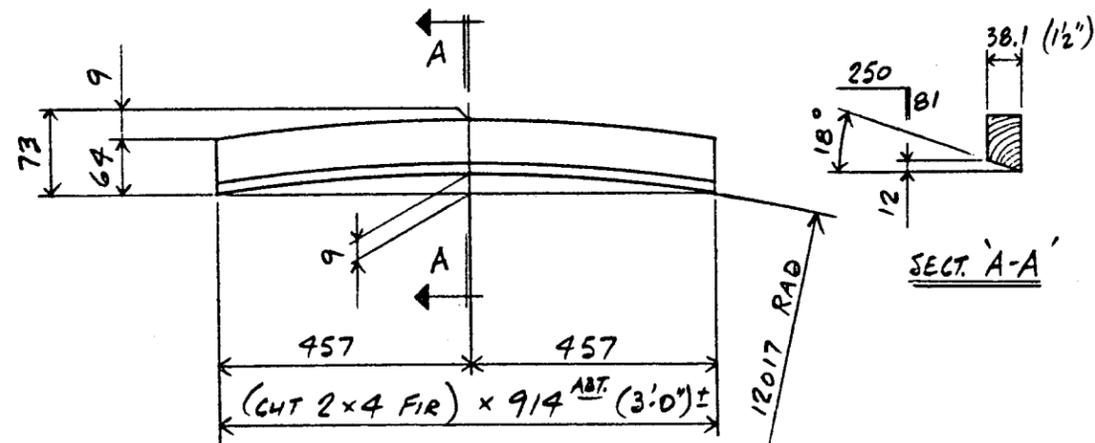
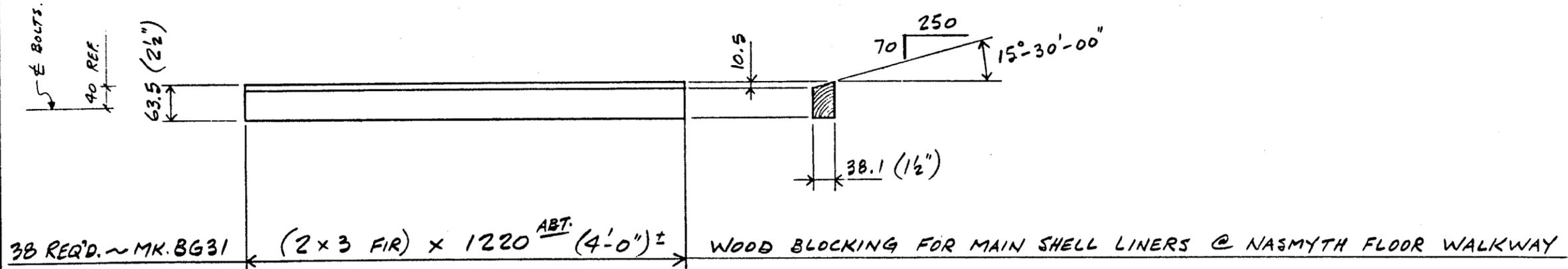
LINE	SHIP No. REQ'D.	FAB	MARK	DESCRIPTION	MAT'L	LENGTH	R.B.	LINE	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS
										SPLICING	ALLOWED	
7	4	AW31		BAR 50.8 x 6.35	A36	609			PLAIN MAT'L.			
8	ONE	AV31	I	I	I	3640			PLAIN MAT'L.			
5												
4	2	AT31		BAR 50.8 x 6.35	A36	1828			ROLLED			
3	ONE	AS31	I	I	I	4435			I			
2	10	AP31		BAR 50.8 x 6.35	A36	5915			ROLLED			
1				(2" x 4")								

	MATERIAL	A36		DETAILS OF TRIM BAR @ BTM.	
	SURF. PREP. & PAINT	SEE MEMO		OF NASMYTH SEAL P.	
	OPEN HOLES			FOR 4.2m TELESCOPE DOME	
			LA PALMA		
DRAWN	DATE	CHECKED	DATE	DRAWING No.	
G.V.A.	Nov/83			1420-311	
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





GENERAL NOTES:

- 1.) USE FIR STD. GRADE OR BETTER.
- 2.) WOOD BLOCKING TO BE COATED WITH PRESERVATIVE.
- 3.) FOR FIELD ASSEMBLY SEE DWG. E5a & E1c.

LINE	SHIP No. REQ'D.	FAB	MARK	DESCRIPTION	MAT'L	FT. LENGTH	INS. LENGTH	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS	MATERIAL		DETAILS OF	
7													AS NOTED		WOOD BLOCKING @
6													SURF. PREP. & PAINT		NASMYTH FLOOR WALKWAY
5													OPEN HOLES		FOR 9.2m TELESCOPE DOME
4													DRAWN		LA PALMA
3													DATE	CHECKED	DATE
2													G.V.A	NOV/63	
1															1420-31p
												BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.			

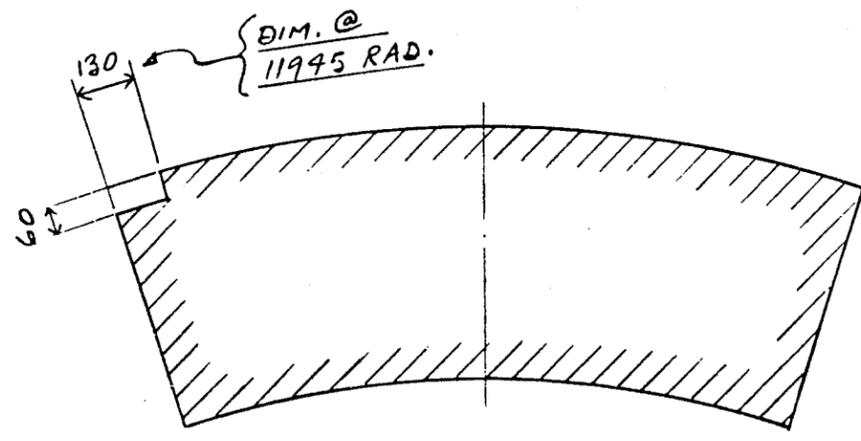
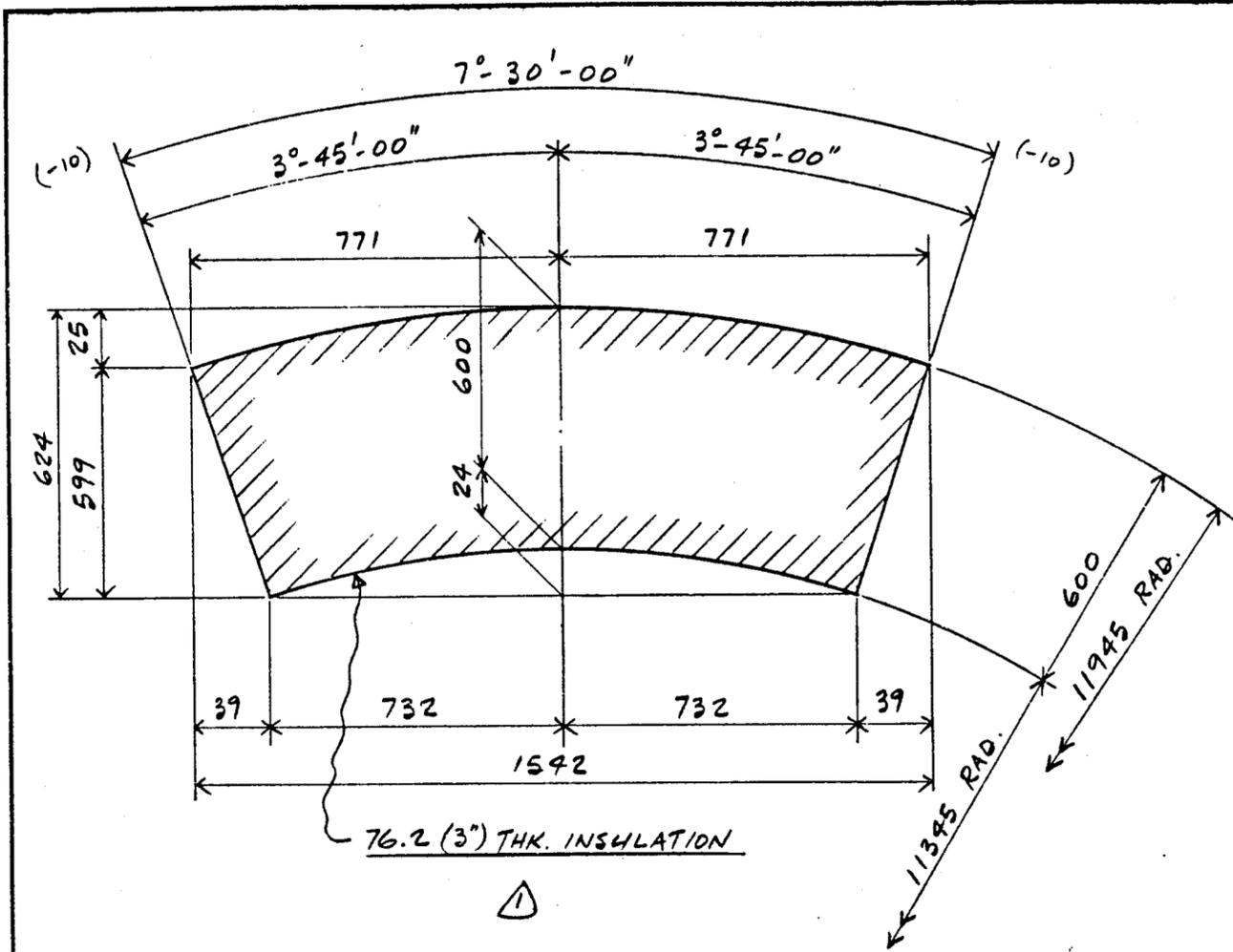
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m - a b c d f g h k m n p s t v w y

SHOP DEPARTMENT

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





4-REQ'D. ~ INSULATION ~ MK. BK31

NOTE!
ABOVE PANEL AS BK31 EXCEPT FOR CUT

34-REQ'D. ~ INSULATION ~ MK. BK31

ALL SURFACES TO BE COVERED WITH SCRIM FOIL.

GENERAL NOTES:

- 1) SEE SPEC'S. FOR INSULATION & SCRIM FOIL TYPE.
- 2) FOR FIELD LOCATION SEE DWG. E5a & E1c
- 3) INSULATION & SCRIM FOIL BY B.S. LTD.
- FOR CUTTING & NESTING OF INSULATION SEE DWG. N1a
- FOR CUTTING OF SCRIM FOIL SEE DWG. SC1

LINE	SHIP No. RECD.	FAB	MARK	DESCRIPTION	MAT'L	LENGTH	R. B.	LINE	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS
										SPLICING	ALLOWED	
4			BK31	INS. 624 x 76.2 THK.		1542			CUT TO PROFILE			
34			BK31	INS. 624 x 76.2 THK. (3")		1542						

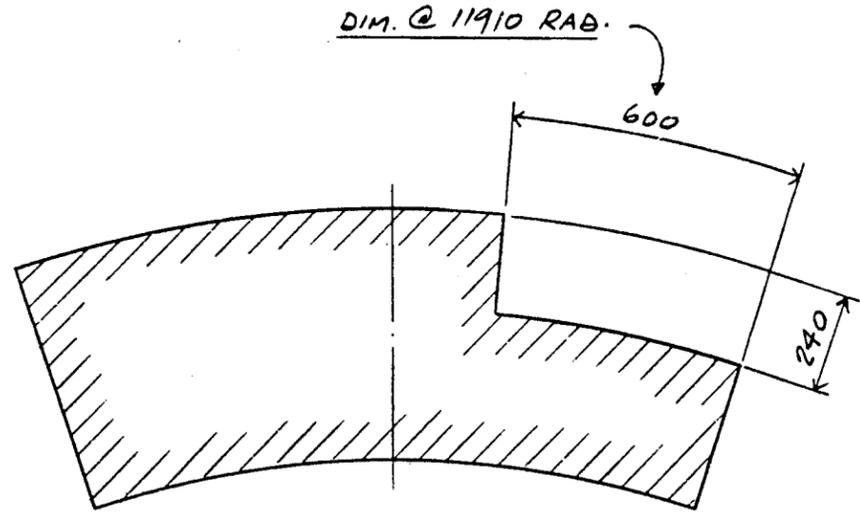
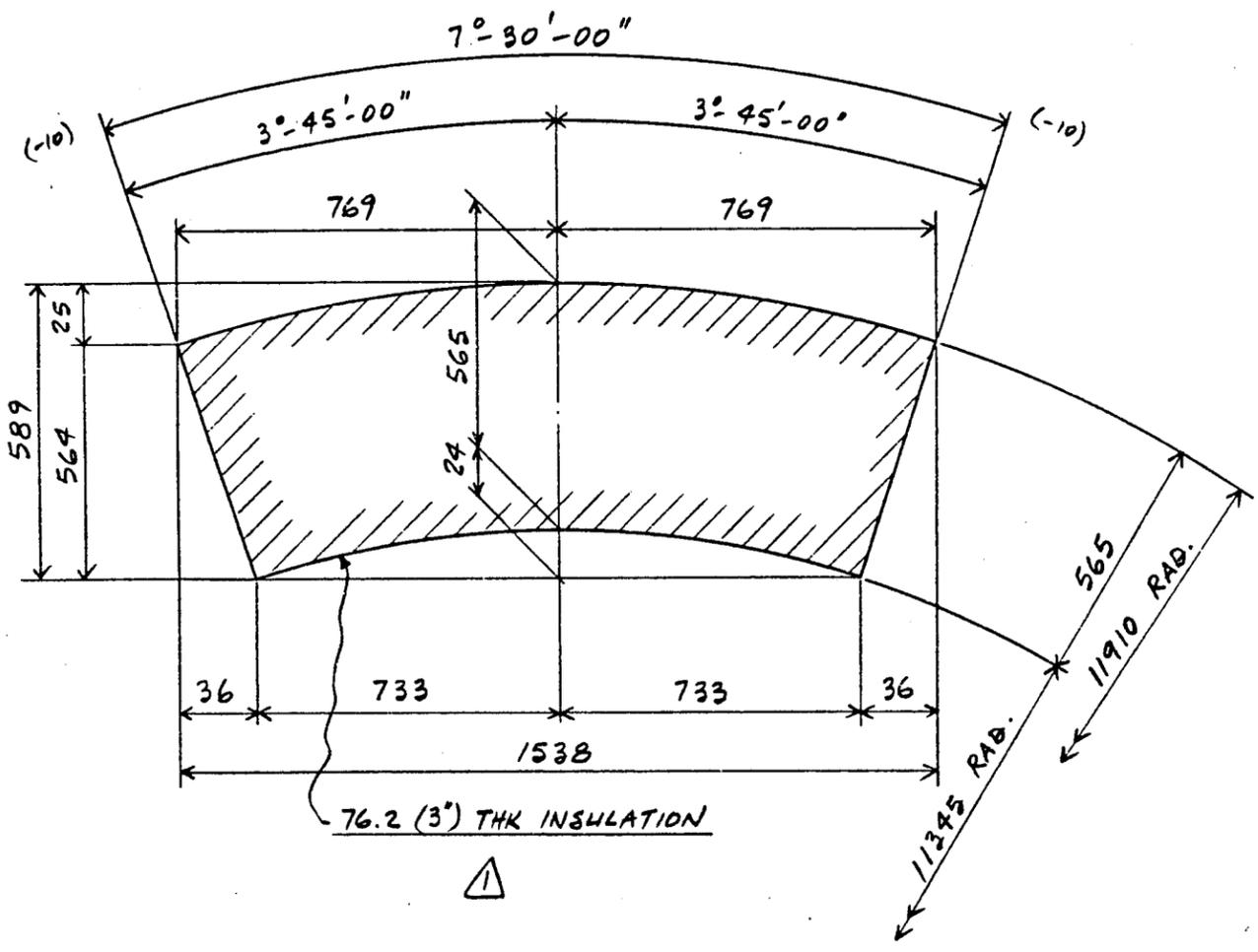


MATERIAL		SEE SPEC'S.		G.A. JUNE 1		NOTE CHANGED	
SURF. PREP. & PAINT				No. BY DATE		REVISION	
OPEN HOLES				DETAILS OF INSULATION @ NASMYTH FLOOR WALKWAY			
DRAWN G.V.A				DATE Nov/83		CHECKED	
DATE				DATE		DRAWING No. 1420-315	
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.							
SHOP 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





3-REQ'D. ~ INSULATION ~ MK. BP31

2-REQ'D. ~ INSULATION ~ MK. BS31

NOTE! - ABOVE PANEL AS BP31 EXCEPT FOR CUT

ALL SURFACES TO BE COVERED WITH SCRIM FOIL.

GENERAL NOTES:-

- 1) SEE SPEC'S. FOR INSULATION & SCRIM FOIL TYPE.
- 2) FOR FIELD LOCATION SEE DWG E5A & E1C.
- 3) INSULATION & SCRIM FOIL BY B. S. LTD.
- FOR CUTTING & NESTING OF INSULATION SEE DWG. N1a
- FOR CUTTING OF SCRIM FOIL SEE DWG SCI

LINE	SHIP No. REQD.	FAB MARK	DESCRIPTION	MAT'L	LENGTH	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS
							SPLICING _____ ALLOWED _____		
7									
6									
5									
4	2	BS31	INS. 589 x 76.2 THK.		1538	CUT TO PROFILE			
3									
2	3	BP31	INS. 589 x 76.2 THK (3")		1538				
1									



MATERIAL		SEE SPEC'S.		DETAILS OF INSULATION @	
SURF. PREP. & PAINT				NASMYTH FLOOR WALKWAY	
OPEN HOLES				FOR 4.2M TELESCOPE DOME	
				LA PALMA	
DRAWN	DATE	CHECKED	DATE	DRAWING No.	REV.
G.V.A.	DEC/83			1420-314	⚠
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.					

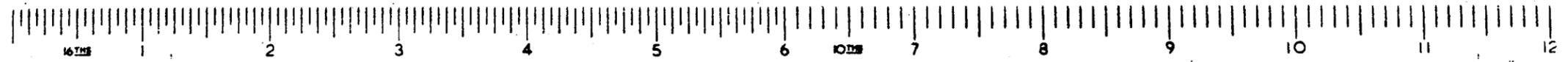
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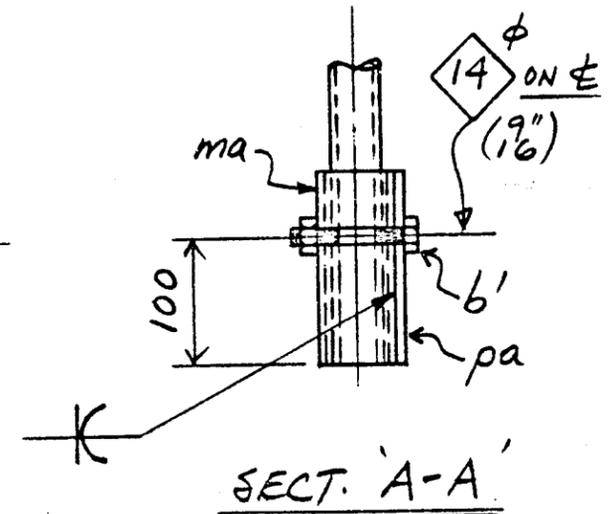
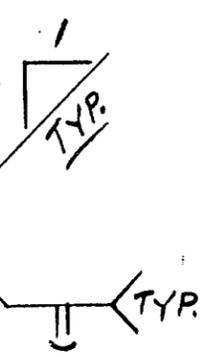
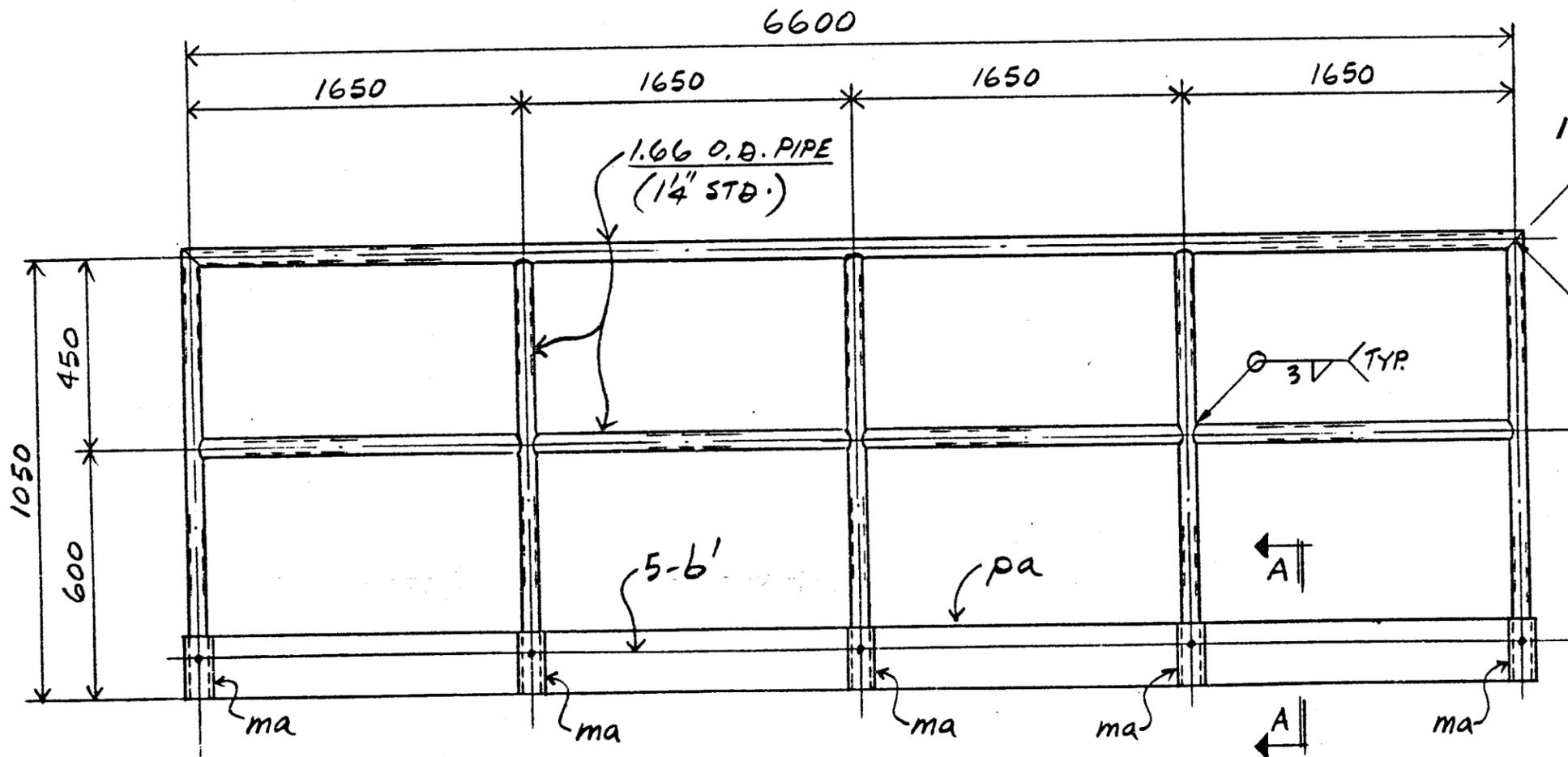
SHOP DEPARTMENT

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

No. PRINTS



LINE	No. REQ'D.		MARK	DESCRIPTION	MAT'L	LENGTH		R.B.	LINE	REMARKS	SPLICING _____ ALLOWED		WEIGHT
	SHIP	FAB.									CUTTING	INSTRUCTIONS	
1				ONE REQ'D. ~ MK. BT31									
2													
3	ONE			PIPE 1.66 O.D. x .140	A53	20	000			LIN. (1 1/4" STD. PIPE)			
4	5	MA		PIPE 2.375 O.D. x .218	L		150			(2" EXTRA STRONG PIPE)			
5	ONE	PA		PIPE 150 x 6.35 (4")	A36	6	640						
6	5	b'		2" A307 BOLT			-32"			C/W HEX NYT			
7													
8													
9													
10													

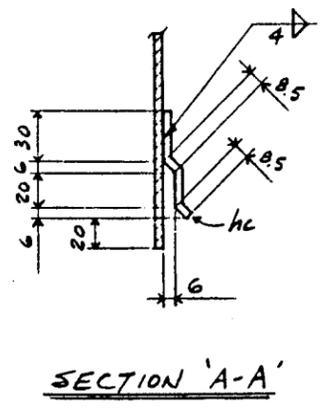
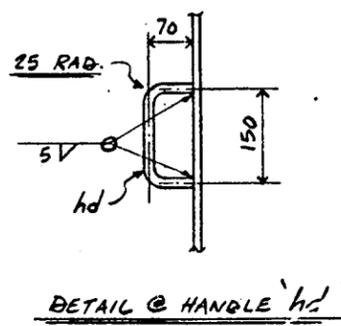
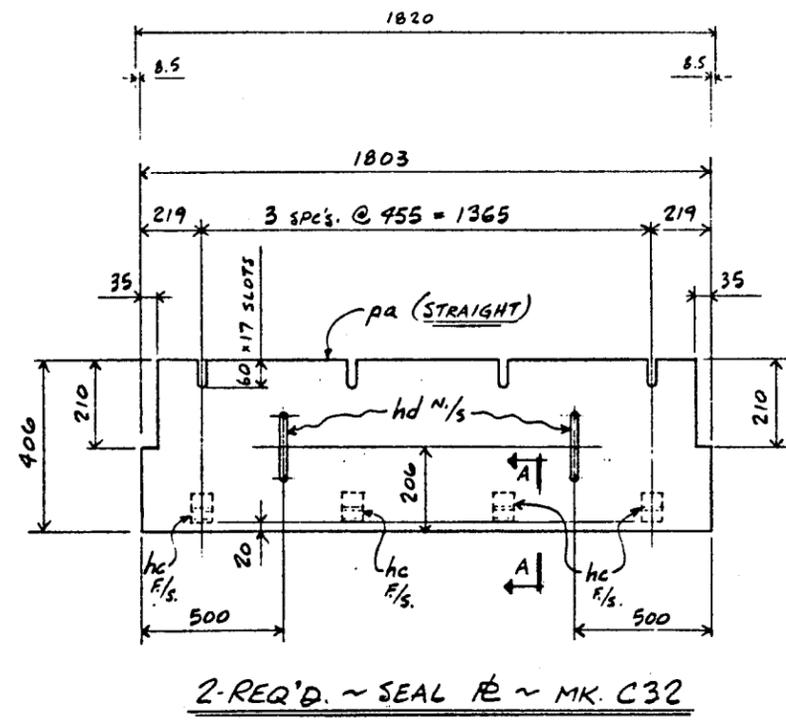
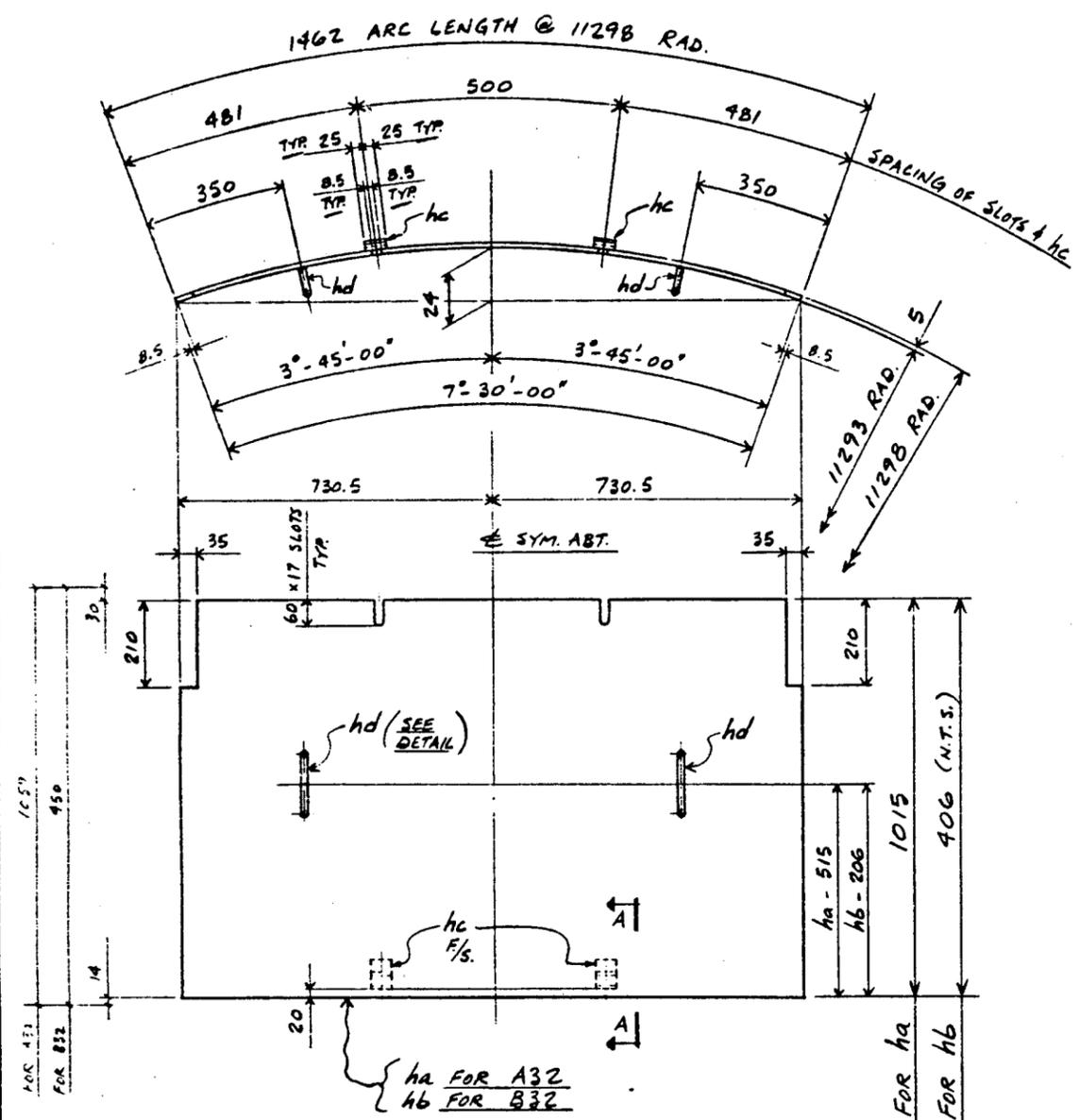


ONE REQ'D. ~ REMOVABLE HANDRAIL ~ MK. BT31
 (REQ'D @ SHUTTER SIDE HANNUCH FOR FIELD ASSEMBLY)
 SEE DWG. E5a

NO. BY	DATE	REVISION	CONTRACT	DWG. NO.	REV.
			1420	31V	
SEE MEMO					
HOLES	PAINT	DATE	CH KD	DATE	PREP
MADE	DATE	CH KD	DATE	DATE	PREP
G.A.	FEB. 1944				
BRITAIN STEEL LTD. NEW WESTMINSTER B.C.					



LINE NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	WEIGHT
1								
2								
3								
4	ha	38	R	1015 x 4.76	1462	ROLLED	ALUM 5083	
5	hc	76	R	50 x 4.76	67	BEND	H-32	
6	hd	76	BAR	5	270	BEND		
7								
8								
9								
10								
11								
12	hb	3	R	906 x 4.76	1462	ROLLED	ALUM 5083	
13	hc	6					H-32	
14	hd	6						
15								
16								
17								
18								
19	pa	2	R	906 x 4.76	1803		ALUM 5083	
20	hc	8					H-32	
21	hd	4						
22								
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38-REQ'D. ~ SEAL R ~ MK. A32
3-REQ'D. ~ SEAL R ~ MK. B32

- GENERAL NOTES:
- 1) FOR FIELD ASSEMBLY SEE DWG. E56 & E1C
 - 2) FOR SHOP ATTACHED INSULATION SEE DWG 32C

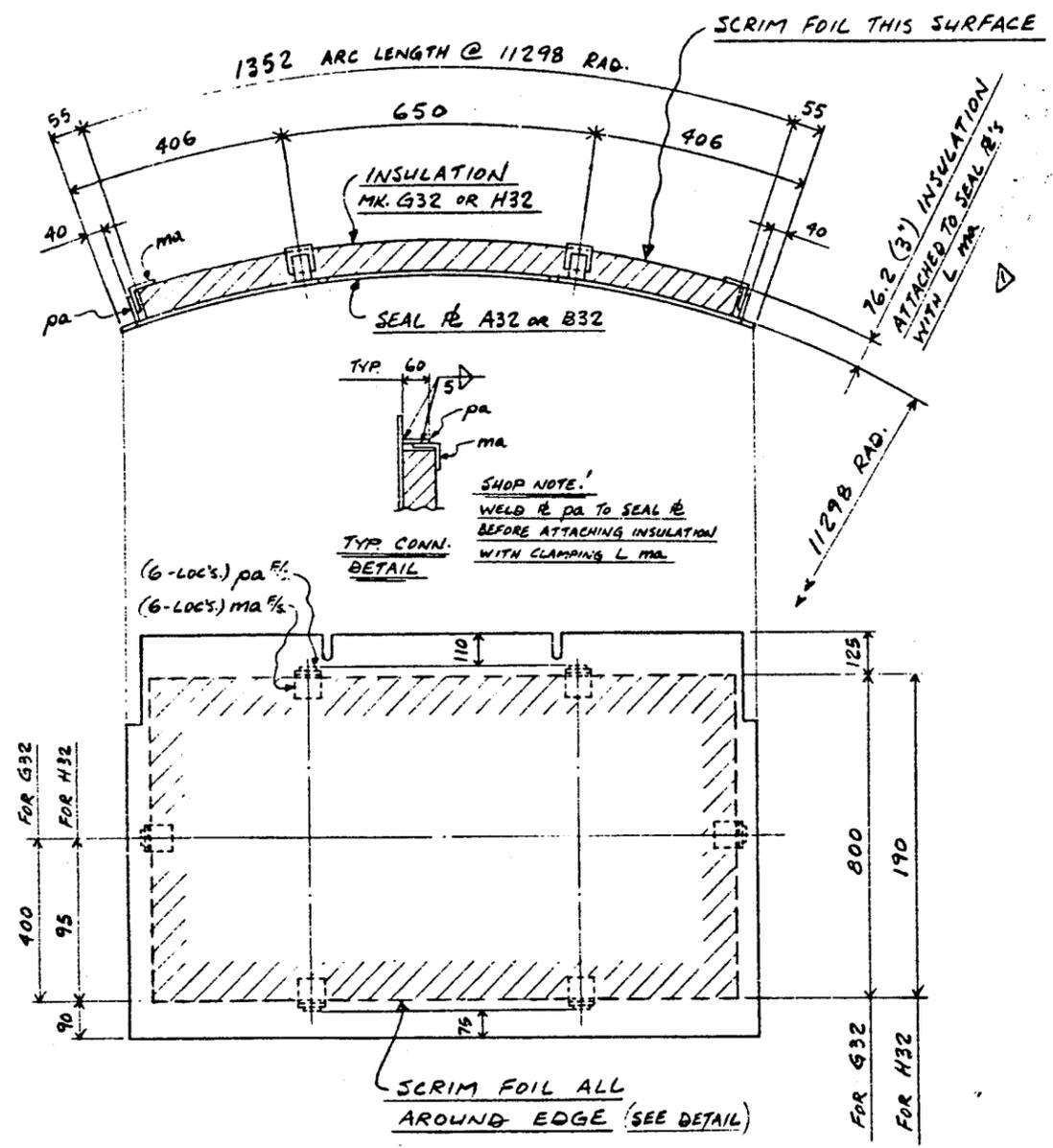
BRITAIN	MATERIAL	AS NOTED	DETAILS	NASCYTH FLOOR WALKWAY SEAL R.E.
	SURF PREP & PAINT	SEE MEMO	FOR	4.2 TELESCOPE DOME LA PALMA
DRAWN	DATE	CHECKED	DATE	DRAWING NO
G.V.A.	Nov/83			1420-32a
BRITAIN STEEL LTD. 481 SALTER AVENUE, NEW WESTMINSTER, B.C.				



MATERIAL BILL
BRITTAIN STEEL LTD.

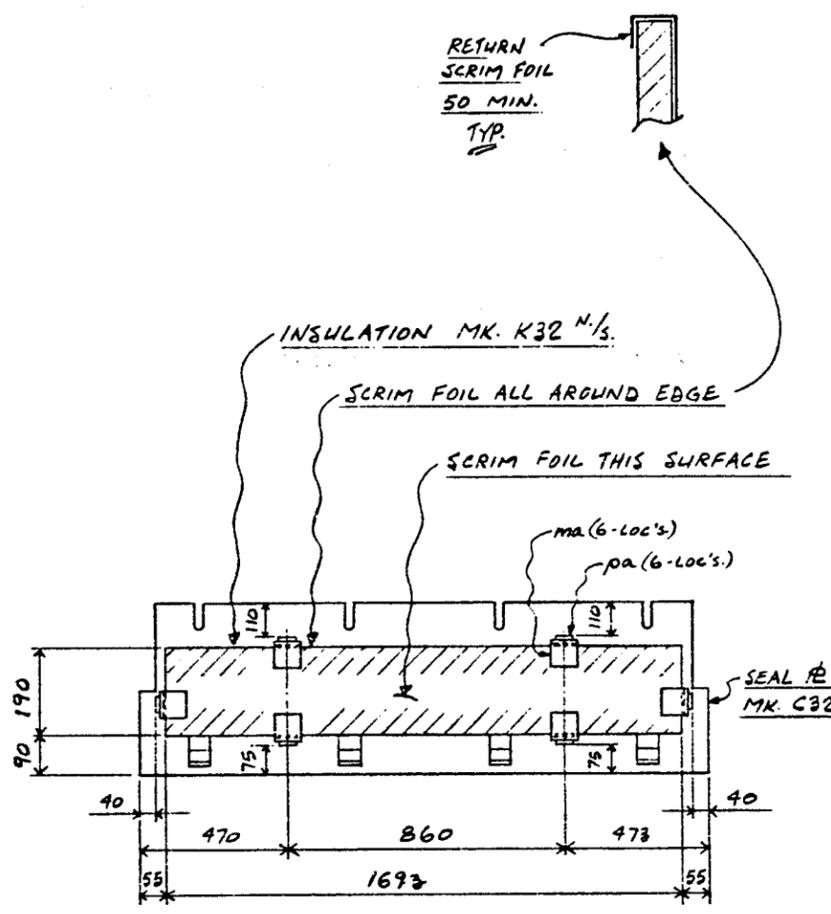
CONTRACT 1420

LINE NO.	MARK	QTY	SHAPE	SIZE	LENGTH	REMARKS	MATL TYPE	UNIT	WEIGHT
1									
2	G32	38	INSUL.	800 x 76.2	1352				
3						(3')			SEE SPEC'S.
4	MA 228	L		62.5 x 62.5 x 170	60	L 22 x 22 x 3/16 ALUM 5061 T6			
5	PA 228	R		38 x 476	60	ALUM 5083 H-32			
6				(1/2" x 1/2")					
7									
8	H32	3	INSUL.	190 x 76.2	1352				SEE SPEC'S.
9	MA 18								
10	PA 18								
11									
12	K32	2	INSUL.	190 x 76.2	1693				SEE SPEC'S.
13	MA 12								
14	PA 12								
15									
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DETAIL I'
SHOWING 76.2 (3") INSULATION MK. G32 (38-REQ'D)
SHOP ATTACHED TO SEAL R. MK. A32

ALSO SHOWING 76.2 (3") INSULATION MK. H32 (3-REQ'D)
SHOP ATTACHED TO SEAL R. MK. B32



DETAIL 2'
SHOWING 76.2 (3") INSULATION MK. K32 (2-REQ'D)
SHOP ATTACHED TO SEAL R. MK. C32

- GENERAL NOTES:**
- 1) SEE DWG. 32a FOR SEAL R'S. A32, B32 & C32.
 - 2) SEE SPEC'S. FOR INSULATION & SCRIM FOIL TYPE.
 - 3) INSULATION & SCRIM FOIL INSTALLED BY B.S. LTD.
-FOR CUTTING & NESTING OF INSULATION SEE DWG. N1a
-FOR CUTTING OF SCRIM FOIL SEE DWG. SC1

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

SHOP DEPARTMENT

INS. F. S. O. M. T. P. SH. DP. AS. PA. BR.

NO. PARTS

GA W/MP STATE CHANGED BY DATE REVISION

DETAILS SHOP ATTACHED INSULATION AT ANIMYTH FLOOR SEAL R'S.

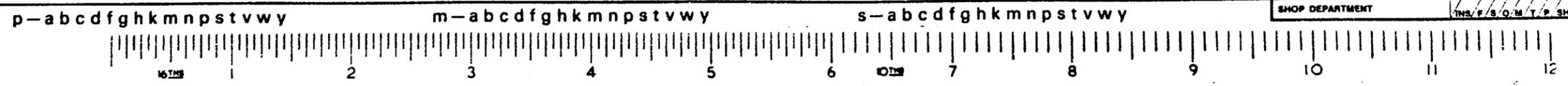
FOR 9.2 M TELESCOPE DOME LA PALMA

DRAWING NO. 1420-32C

REV. A

DRAWN G.V.A. DATE Nov/82

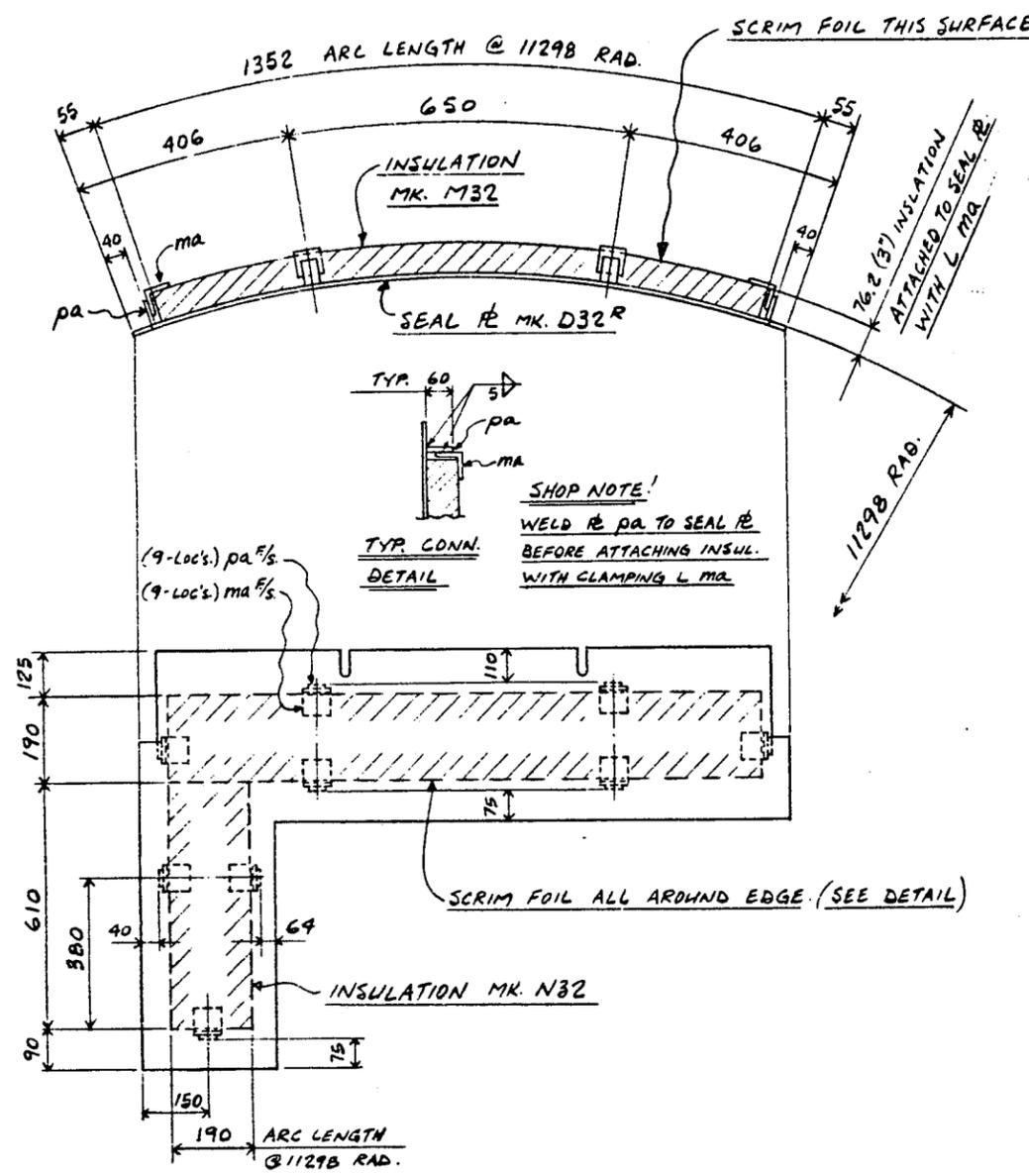
CHECKED DATE



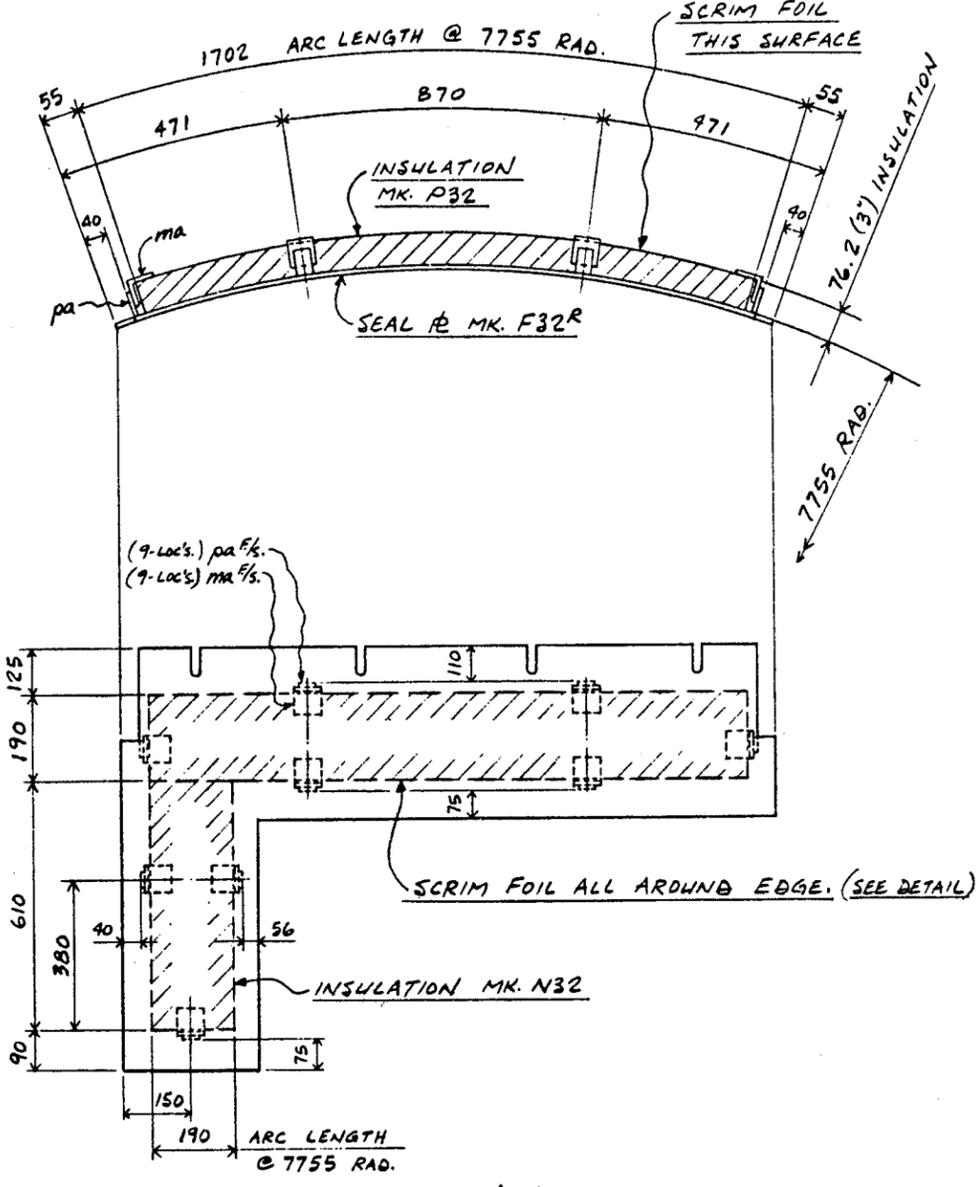
MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

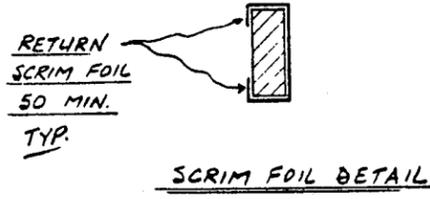
NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	WEIGHT
1								
2	M32	2	INSUL.	190x76.2	1352		SEE SPEC'S	
3	N32	2	L	190x1	610		SEE SPEC'S	
4	MA	18	L	635x9.76	60	(2x2x1/2") ALUM. GALV. T6		
5	PA	18	R	38x9.76	60	ALUM. GALV. T6		
6						(1/4" x 3/8")		
7								
8								
9	P32	2	INSUL.	190x76.2	1702		SEE SPEC'S	
10	N32	2	L				SEE SPEC'S	
11	MA	18	L					
12	PA	18	R					
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SHOWING 76.2 (3") INSULATION MK. M32 & N32 (2-REQ'D.)
SHOP ATTACHED TO SEAL R MK. D32R



SHOWING 76.2 (3") INSULATION MK. P32 & N32 (2-REQ'D.)
SHOP ATTACHED TO SEAL R MK. F32R



GENERAL NOTES:

- 1) SEE DWG. 326 FOR SEAL R'S. D32R & F32R
- 2) SEE SPEC'S. FOR INSULATION & SCRIM FOIL TYPE.
- 3) INSULATION & SCRIM FOIL INSTALLED BY B.S. LTD.
-FOR CUTTING & NESTING OF INSULATION SEE DWG. N12
-FOR CUTTING OF SCRIM FOIL SEE DWG. SC1

BRITAIN

MATERIAL SURF. PREP. & PAINT OPEN HOLES

DETAILS SHOP ATTACHED INSULATION AT NASMYTH FLOOR SEAL R'S FOR 4.2 M TELESCOPE DOME LA PALMA

DRAWN G.V.A. DATE Nov/82 CHECKED DATE DRAWING NO. 1420-32d

BRITAIN STEEL LTD. 481 SALTER AVENUE, NEW WESTMINSTER, L.C.

