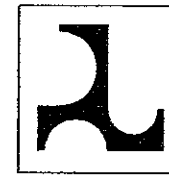




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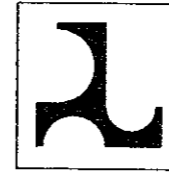
DIRECTORATE GENERAL OF HIGHWAY
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STRUCTURES

KEI KATAHIRA & ENGINEERS INTERNATIONAL



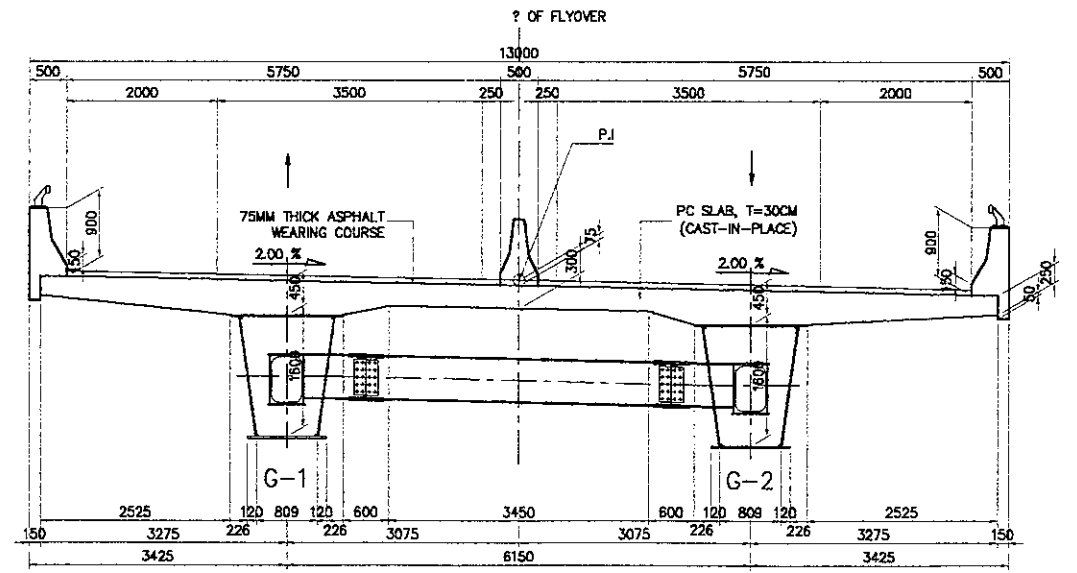
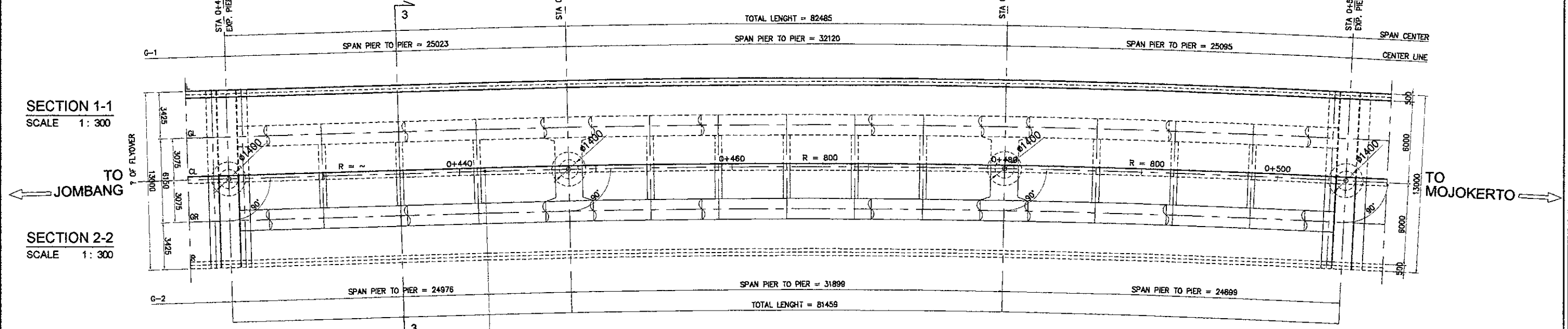
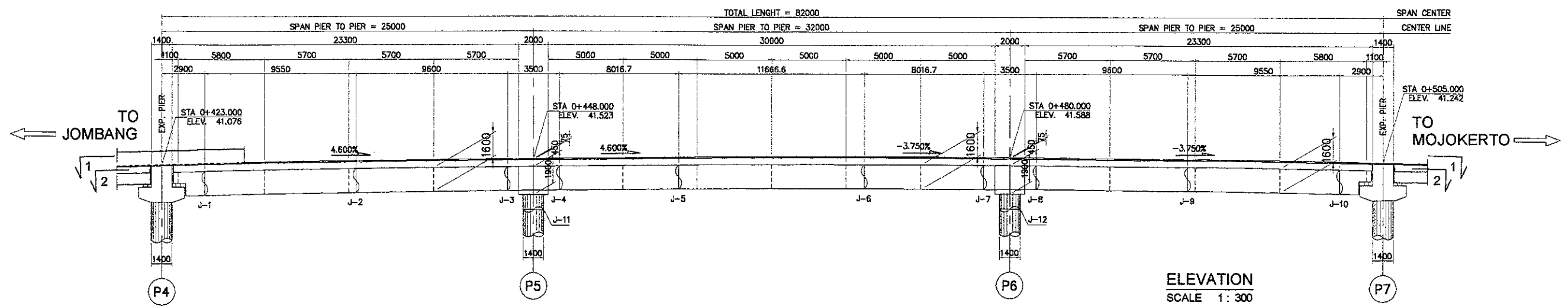
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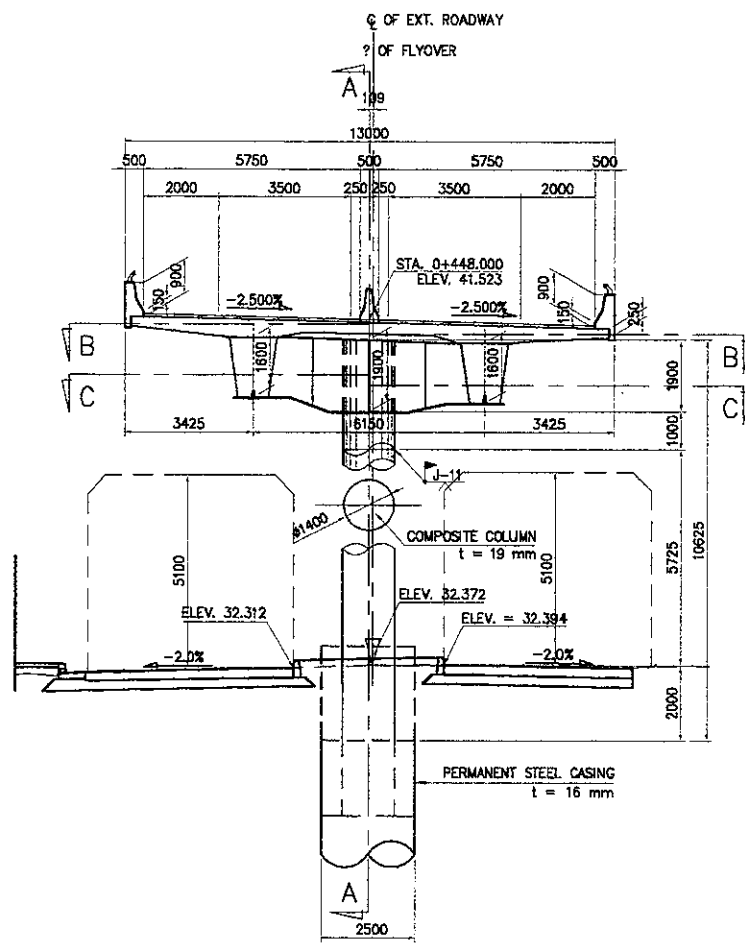
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MINISTRY OF PUBLIC WORKS
REPUBLIC OF INDONESIA

STEEL SUPERSTRUCTURE

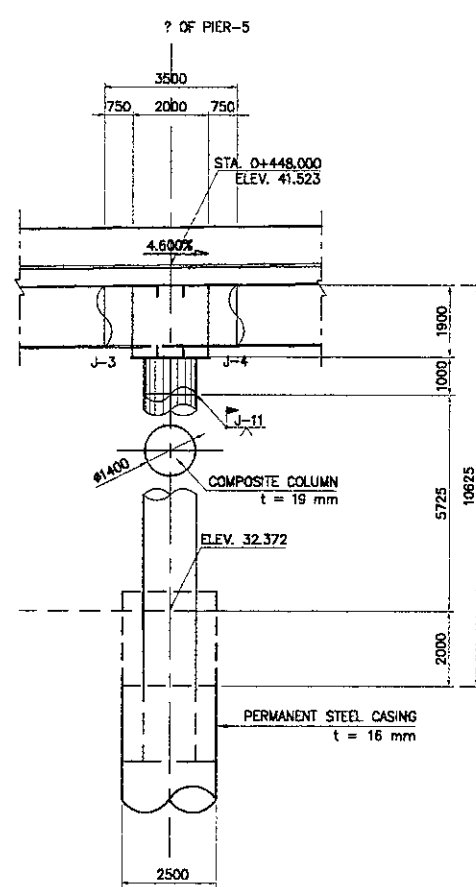
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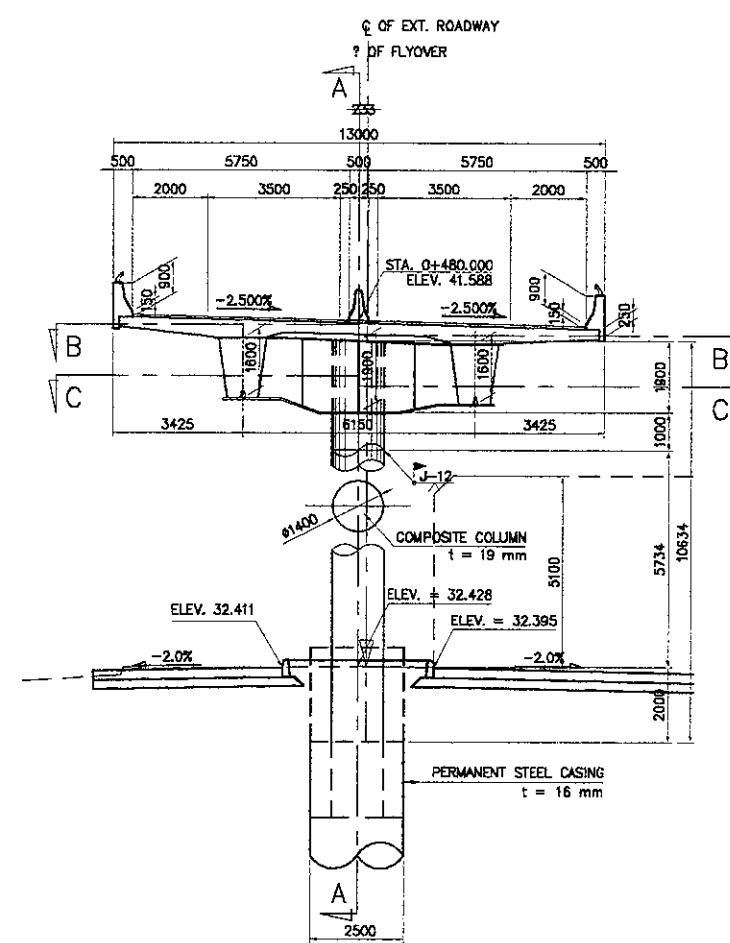
PLAN
 SCALE 1 : 300



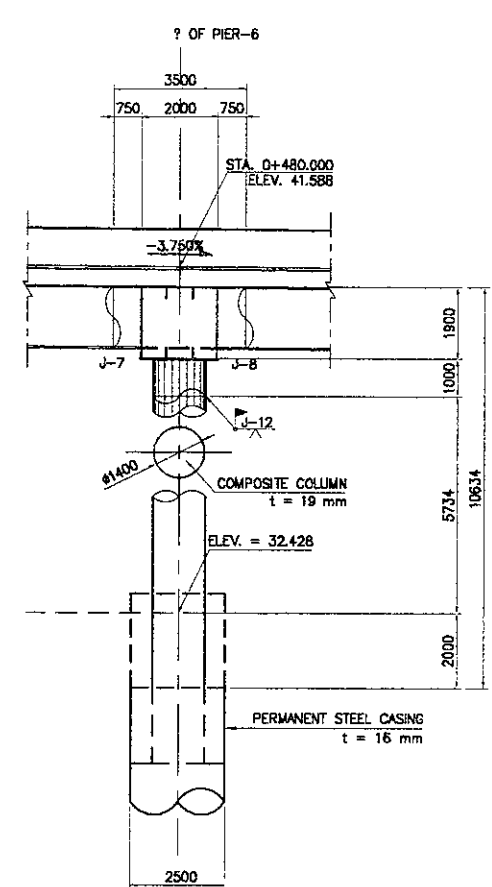
SECTION OF PIER - 5
 SCALE 1: 200



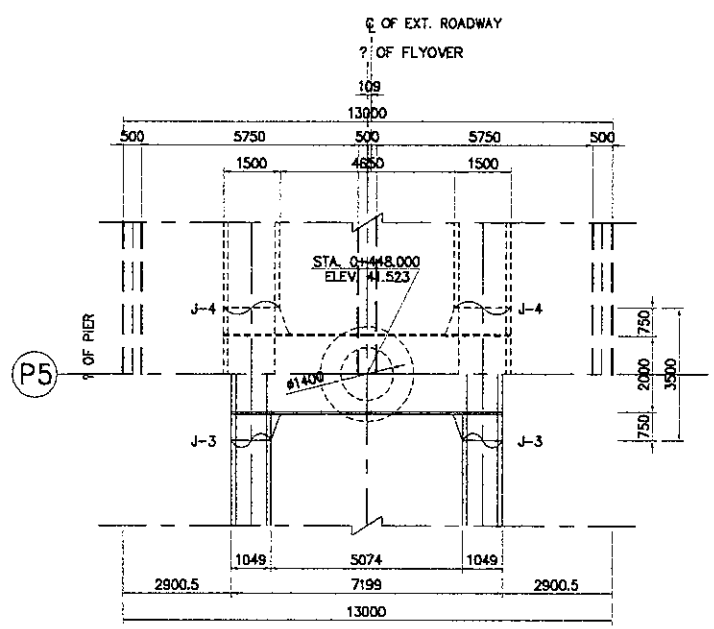
SECTION A-A
 SCALE 1: 200



SECTION OF PIER - 6
 SCALE 1: 200

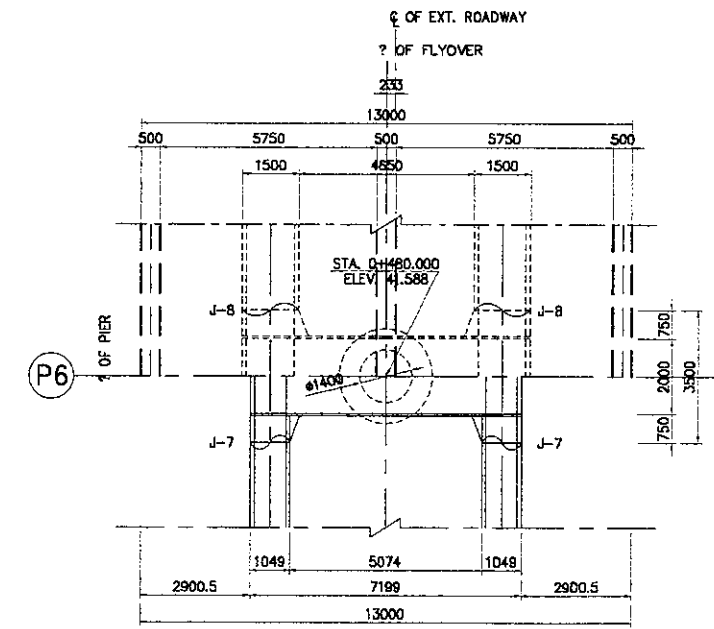


SECTION A-A
 SCALE 1: 200



SECTION B-B
 SCALE 1: 200

SECTION C-C
 SCALE 1: 200



SECTION B-B
 SCALE 1: 200

SECTION C-C
 SCALE 1: 200

MAIN GIRDER

KIND	MATERIAL	PLATE THICKNESS (mm)	P4 - P7 (3 SPAN)				
			MAIN GIRDER (kg)	GROSS BEAM (kg)	TOTAL		
PL	SMA490BW	40	191		191		
		38	183		183		
		35	346		346		
		32	8,974		8,974		
		30		5,749	5,749		
		28	7,840		7,840		
		25	4,899		4,899		
		22	7,100		7,100		
		21	14,235		14,235		
		20	18,237		18,237		
		19	6,013		6,013		
		18	62,029		62,029		
		17	1,036		1,036		
		SMA490BW SUB - TOTAL			131,083	5,749	136,832
		SMA490AW	SMA490AW	16	484		484
				14	3,675		3,675
				13	2,777		2,777
12	2,605				2,605		
10	72				72		
SMA490AW SUB - TOTAL			9,753	655	10,408		
SMA490YB	SMA490YB	24		1,234	1,234		
		22	4,589		4,589		
		18	3,084		3,084		
		17	692		692		
		SMA490YB SUB - TOTAL			8,365	2,260	10,625
SMA490YA	SMA490YA	16	2,357		2,357		
		15	48		48		
		14	560	36	596		
		13	144		144		
		12	2,605		2,605		
		10	648		648		
		9	136	1,467	1,603		
		SMA490YA SUB - TOTAL			6,498	1,503	8,001
		SMA400AW	SMA400AW	24		1,287	1,287
				22	232		232
16	232				232		
14	502				502		
13				2,409	2,409		
12	20			352	372		
11	20				20		
9	896				896		
6	104				104		
SMA400AW SUB - TOTAL				2,006	4,048	6,054	
SMA400A	SMA400A	24		1,903	1,903		
		11	1,860		1,860		
		10		220	220		
		9		2,596	2,596		
		SMA400A SUB - TOTAL			1,860	4,719	6,579
SS400	SS400	12	136		136		
		11	152		152		
		9		54	54		
		6	36		36		
		SS400 SUB - TOTAL			324	54	378
SPA-H		3.2	72		72		
PL TOTAL			159,961	18,988	178,949		
H	SMA400AW	200x300x13x24		8,144	8,144		
SCP	SCP	20A		12	12		
PIPE	STK400	267.4x6.6		260	260		
		101.6x4.2		36	36		
PIPE TOTAL			260	36	296		
RB	SR235	ø13		12	12		
TOTAL 2			160,245	27,168	187,413		
STUD	STUD	ø22x150		634	634		
TCB	S10T	M22		228	228		
		M22	5,252	682	5,934		
TCB TOTAL			5,480	682	6,162		
BN	SS400	M16		12	12		
TOTAL 2			6,126	692	6,818		
GRAND TOTAL			166,371	27,860	194,231		

BOLT NUMBER

KIND	MATERIAL	DIMENSION (mm)	P4 - P7 (3 SPAN)				
			MAIN GIRDER	GROSS BEAM	TOTAL (nos)		
TCB	S10T	M22 x 90	128		128		
		M22 x 85	32		32		
		M22 x 80	208		208		
		M22 x 75	32		32		
		S10T TOTAL			400	400	
		S10TW	S10TW	M22 x 115	560		560
				M22 x 110	400		400
				M22 x 105	1,200		1,200
				M22 x 100	976		976
				M22 x 95	464		464
M22 x 90	384				384		
M22 x 85				704	704		
M22 x 80	4,752			528	5,280		
S10TW TOTAL			9,000	1,232	10,232		
TCB TOTAL			9,400	1,232	10,632		
BN	SS400	M16 x 65		24	24		
		M16 x 55		32	32		
		M16 x 45		48	48		
BN TOTAL			48	56	104		
GRAND TOTAL			9,448	1,288	10,736		

T-TYPE GIRDER P5 AND P6

MATERIAL	PLATE THICKNESS (mm)	WEIGHT (kg)	NOTES
SMA 570W	44.00	6,223.60	
	32.00	6,097.80	
TOTAL		12,321.40	
SMA 490CW	44.00	6,722.80	
	32.00	4,353.60	
SMA 490BW	25.00	9,931.40	
	18.00	4,412.20	
TOTAL		18,697.20	
SM 570	30.00	1,198.40	
	22.00	348.60	
	16.00	240.40	
	TOTAL		1,787.40
SM 490YB	34.00	2,194.20	
	30.00	2,224.80	
	22.00	467.40	
	18.00	1,757.00	
TOTAL		6,643.40	
SM 400A	28.00	1,409.20	
	20.00	3,959.60	
	10.00	73.60	
	9.00	951.40	
	TOTAL		6,393.80
SS 400	9.00	42.80	
PLATE TOTAL		52,608.80	
SKK 400	20.00	2,533.40	w=681kg/m
	20.00	1,362.00	w=681kg/m,w/Inner Rib
SS 400	BN M16	4.00	Galvanized
SUB TOTAL		3,899.40	
GRAND TOTAL		56,508.20	

DECK SLAB, WATERPROOFING AND PAVEMENT

ITEM	UNIT	QUANTITY	NOTE
DECK SLAB	- CONCRETE	m ²	383.86
	- PC. CABLE	kg	3,911.73
	- REINFORCEMENT	kg	43,026.24
WATERPROOFING	m ²	960.25	
PAVEMENT	m ²	-	HIGHWAY PORTION

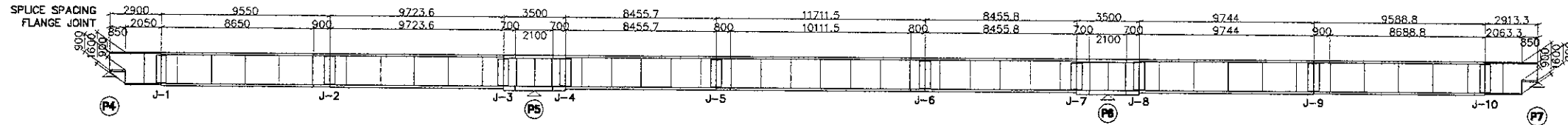
PAINT AREA

ITEM	UNIT	QUANTITY	NOTES
INNER AREA	m ²	1,154.60	
OUTER AREA	m ²	1,061.77	
CONCRETE CONTACT AREA	m ²	11.28	

MEMBER	MAIN GIRDER G1									
JOINT NO.	BLOCK-1	BLOCK-2	BLOCK-3	BLOCK-5	BLOCK-6	BLOCK-7	BLOCK-9	BLOCK-10	BLOCK-11	TOTAL
PER MEMBER	4,211	8,493	9,101	8,469	11,253	8,465	9,140	8,566	4,229	
SET	1	1	1	1	1	1	1	1	1	9
GRAND TOTAL	4,211	8,493	9,101	8,469	11,253	8,465	9,140	8,566	4,229	71,927

MEMBER	JOINT G1										
JOINT NO.	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	TOTAL
PER MEMBER	1,978.5	1,118.5	1,256.5	1,116.0	492.0	492.0	1,116.0	1,256.5	1,117.5	1,950.5	
SET	1	1	1	1	1	1	1	1	1	1	10
GRAND TOTAL	1,978.5	1,118.5	1,256.5	1,116.0	492.0	492.0	1,116.0	1,256.5	1,117.5	1,950.5	11,894.0

MEMBER	CROSS BEAM					
JOINT NO.	FI-1	FI-2	FI-3	FI-4	FI-5	TOTAL
PER MEMBER	1,597	1,589	1,598	1,600	1,600	
SET	1	1	1	5	3	11
GRAND TOTAL	9,848	14,772	14,772	8,000	4,800	52,192

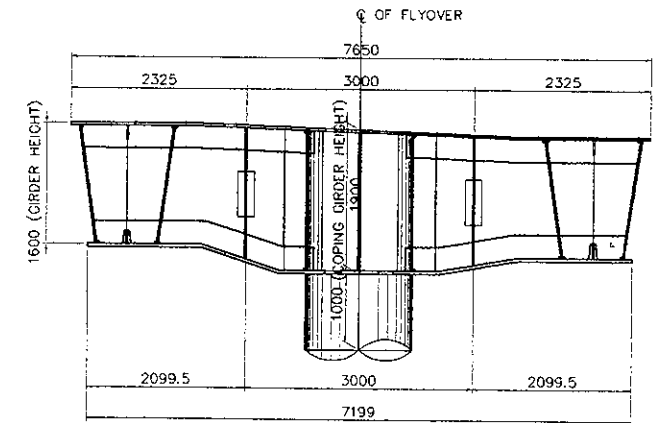


ARRANGEMENT DIAGRAM OF GIRDER G1
 NOT TO SCALE

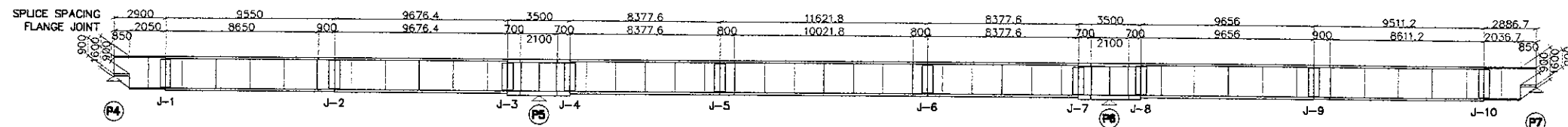
MEMBER	GIRDER P5 AND P6		
PIER	P5	P6	TOTAL
PER MEMBER	28,254.10	28,254.10	
SET	1	1	2
GRAND TOTAL	28,254.10	28,254.10	56,508.20

MEMBER	MAIN GIRDER G2									
JOINT NO.	BLOCK-1	BLOCK-2	BLOCK-3	BLOCK-5	BLOCK-6	BLOCK-7	BLOCK-9	BLOCK-10	BLOCK-11	TOTAL
PER MEMBER	2,572	8,491	9,066	8,391	11,167	8,388	9,059	8,497	2,559	
SET	1	1	1	1	1	1	1	1	1	9
GRAND TOTAL	2,572	8,491	9,066	8,391	11,167	8,388	9,059	8,497	2,559	68,190

MEMBER	JOINT G2										
JOINT NO.	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	TOTAL
PER MEMBER	1,969.5	1,117.5	1,256.5	1,116.0	492.0	492.0	1,116.0	1,256.5	1,117.5	1,950.5	
SET	1	1	1	1	1	1	1	1	1	1	10
GRAND TOTAL	1,969.5	1,117.5	1,256.5	1,116.0	492.0	492.0	1,116.0	1,256.5	1,117.5	1,950.5	11,884.0

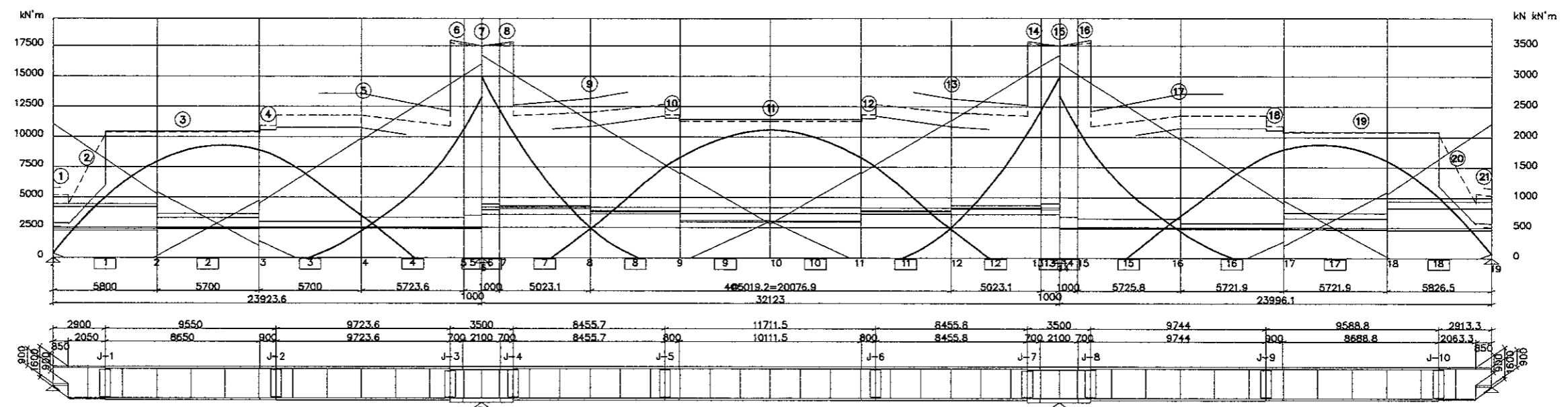


T-TYPE OF GIRDER P5/P6
 NOT TO SCALE



ARRANGEMENT DIAGRAM OF GIRDER G2
 NOT TO SCALE

G-1
 REQUIRED CAPACITY



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																	
SECTION ID	Sec-1	Sec-2	Sec-3	Sec-3	Sec-4	Sec-5	Sec-5	Sec-5	Sec-6	Sec-7	Sec-7	Sec-7	Sec-8	Sec-9	Sec-9	Sec-9	Sec-10	Sec-11	Sec-11	Sec-12	Sec-13																	
U-FLG, W=1500 MM	14	14	20	20	20	32	32	32	21	21	21	21	21	32	32	32	20	20	20	14	14																	
U-FLG QUALITY	SMA 490AW		SMA 490BW		SMA 570BW		SMA 490BW		SMA 490BW		SMA 490BW		SMA 570BW		SMA 490BW		SMA 490BW		SMA 490AW		SMA 490BW																	
U-FLG LOG. RIB	NOS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																
U-FLG WIDTH	180	180	180	180	180	180	180	180	190	190	190	190	190	190	190	190	180	180	180	180	180	180																
U-FLG THICKNESS	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22																
LWEB-PL QUALITY	SM 490YB		SM 490YB		SM 570		SM 490YB		SM 490YB		SM 490YB		SM 570		SM 490YB		SM 490YB		SM 490YB		SM 490YB																	
LWEB-PL WIDTH	913.4	913.4	913.4	1601.7	1595.6	1595.6	1595.6	1595.6	1583.5	1583.5	1583.5	1583.5	1594.6	1594.6	1594.6	1594.6	1583.5	1583.5	1583.5	1583.5	1595.6	1595.6	1601.7	937.1	913.4	913.4												
LWEB-PL THICKNESS	32	32	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	32	32	32	32												
RWEB-PL QUALITY	SMA 490BW		SMA 490BW		SMA 490BW		SMA 490BW		SMA 490BW		SMA 490BW		SMA 490BW		SMA 490BW		SMA 490BW		SMA 490BW		SMA 490BW		SMA 490BW															
RWEB-PL WIDTH	913.4	913.4	913.4	1601.7	1595.6	1595.6	1595.6	1595.6	1583.5	1583.5	1583.5	1583.5	1594.6	1594.6	1594.6	1594.6	1583.5	1583.5	1583.5	1583.5	1595.6	1595.6	1595.6	1601.7	937.1	913.4	913.4											
RWEB-PL THICKNESS	32	32	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	32	32	32	32											
L-FLG LOG. RIB	NOS	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0												
L-FLG WIDTH	0	0	0	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	0	0	0	0	0	0												
L-FLG THICKNESS	0	0	0	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	0	0	0	0	0	0												
L-FLG QUALITY	SM 490YA		SM 570		SM 490YA		SM 570		SM 490YA		SM 570		SM 490YA		SM 570		SM 490YA		SM 570		SM 490YA		SM 570															
L-FLG, W=1049 MM	30	13	19	19	22	44	44	25	22	22	22	22	25	44	44	22	19	19	13	30																		
L-FLG QUALITY	SMA 490BW		SMA 490AW		SMA 490BW		SMA 570W		SMA 490BW		SMA 490BW		SMA 570W		SMA 490BW		SMA 490BW		SMA 490AW		SMA 490BW		SMA 490BW															
U-FLG STRESS	σ	-46	54	-94	-92	-154	-140	-132	-130	155	138	175	207	163	172	-111	-113	-124	-160	-160	-124	-113	-111	172	164	207	177	139	156	-131	-133	-141	-155	-93	-91	-46	54	
U-FLG STRESS	σ _a	179	210	125	110	168	166	166	166	210	255	255	255	255	210	173	173	173	173	173	173	173	173	210	255	255	255	255	210	166	166	166	166	110	126	180	210	
U-FLG STRESS	σ _{a-σ}	133	156	31	18	14	26	34	37	55	117	80	48	92	38	62	60	49	13	13	49	60	62	38	91	48	78	116	54	36	33	25	13	17	35	134	156	
L-FLG STRESS	σ	46	-47	90	110	201	171	161	149	-172	-140	-176	-208	-167	-185	125	134	147	197	197	147	134	125	-185	-167	-208	-177	-141	-173	151	163	172	203	111	87	46	-47	
L-FLG STRESS	σ _a	210	210	210	210	210	210	210	210	245	245	245	245	210	210	210	210	210	210	210	210	210	210	245	245	245	245	210	210	210	210	210	210	210	210	210	210	
L-FLG STRESS	σ _{a-σ}	164	163	120	100	9	39	49	61	38	105	69	37	78	25	85	76	63	13	13	63	76	85	25	78	37	68	104	37	58	47	38	7	99	123	164	163	
WEB SHEAR STRESS	τ	59	26	55	28	22	28	31	31	68	68	72	33	32	74	43	43	41	22	22	41	43	43	74	75	79	28	26	68	31	31	28	25	13	25	27	59	
WEB SHEAR STRESS	τ _a	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	
WEB SHEAR STRESS	COMBINED	0.27	0.08	0.30	0.28	0.89	0.66	0.60	0.52	0.79	0.61	0.87	0.92	0.62	0.93	0.41	0.46	0.53	0.86	0.86	0.53	0.46	0.41	0.93	0.84	1.17	0.67	0.44	0.80	0.61	0.68	0.92	0.27	0.21	0.09	0.28		
SECTION GOVERN		LEFT	LEFT	RIGHT	J-1	MAX.	LEFT	J-2	LEFT	J-3	RIGHT	MAX. L	MAX. R	LEFT	J-4	RIGHT	J-5	RIGHT	MAX.	MAX.	LEFT	J-6	LEFT	J-7	RIGHT	MAX. L	MAX. R	LEFT	J-8	RIGHT	J-9	RIGHT	MAX.	J-10	LEFT	RIGHT	RIGHT	
NET U-FLG STRESS, σ																																						
NET L-FLG STRESS, σ																																						

W = WIDTH
 H = HEIGHT
 TH = THICKNESS
 STRESS IN N/mm²

MAX. = MAXIMUM
 MAX.R = MAXIMUM RIGHT
 MAX.L = MAXIMUM LEFT



JAPAN INTERNATIONAL COOPERATION AGENCY

KEI KATAHIRA & ENGINEERS INTERNATIONAL

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	S. MATSUI	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF HIGHWAYS

APPROVED BY

Ir. HERRY VAZA M.Eng.Sc
NIP. : 110038400

Sign

Date

PROJECT AND LOCATION :

DETAILED DESIGN STUDY OF
NORTH JAVA CORRIDOR FLYOVER PROJECT
PETERONGAN FLYOVER - CONTRACT PACKAGE 3
(PETERONGAN - TANGGULANGIN)
EAST JAVA PROVINCE

SCALE :

1 : 50

FULL SIZE A3

DRAWING TITLE :

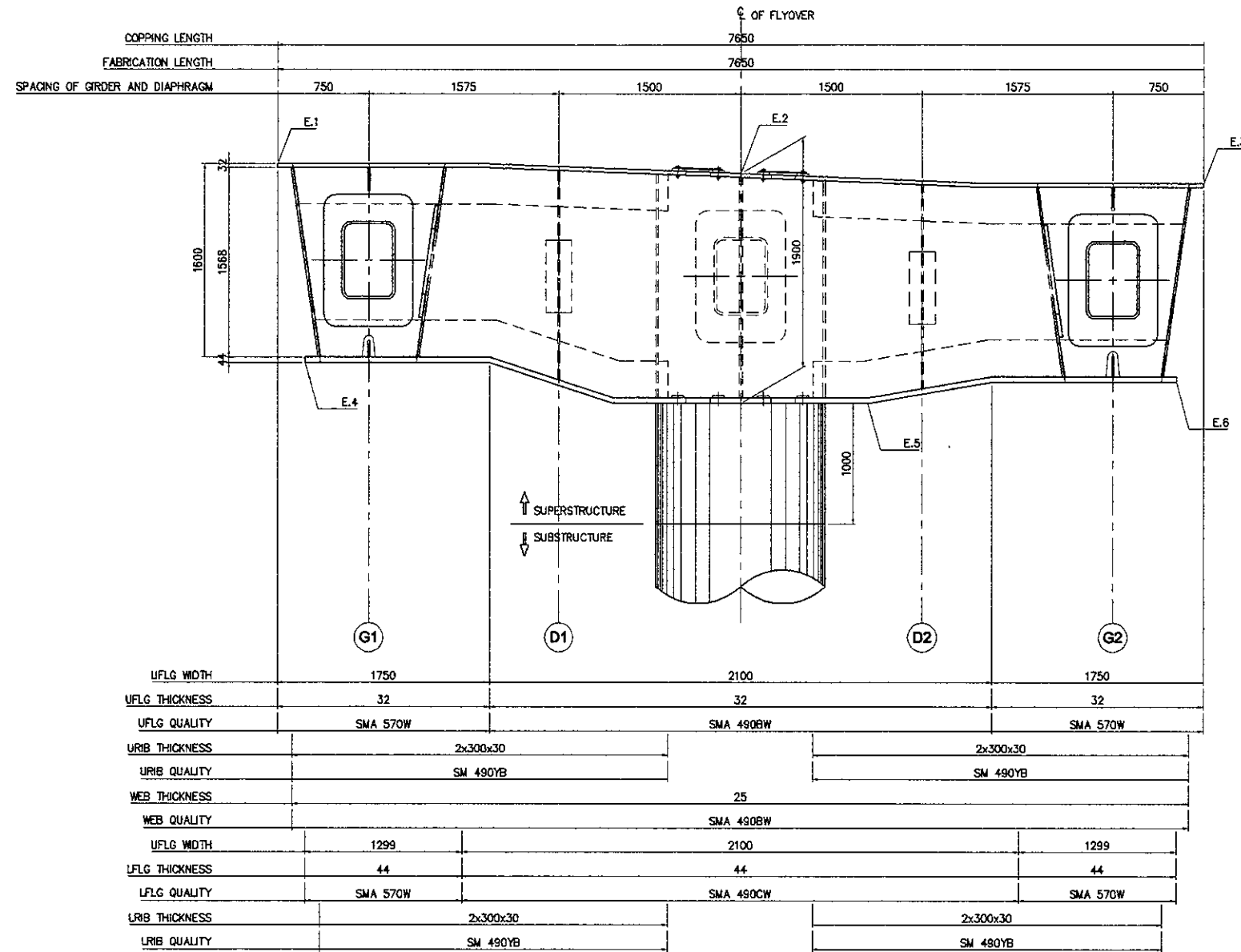
SECTIONAL DIMENSION OF GIRDER
P5 & P6

DRAWING NO :

PST-08

SHEET NO :

08 / 31

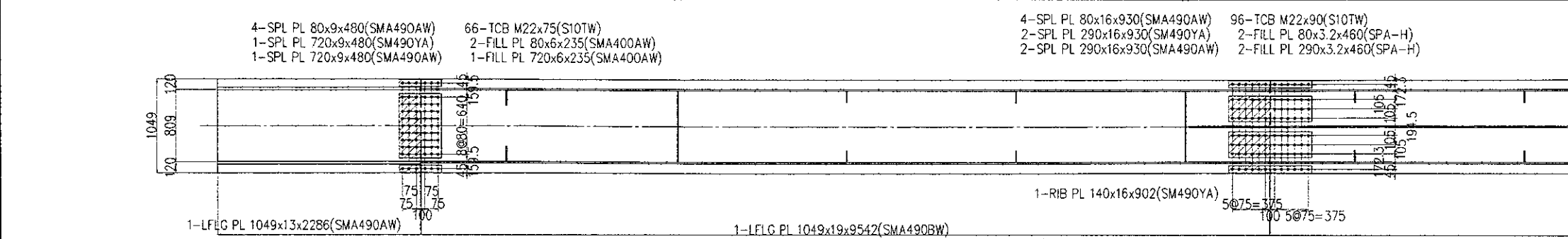
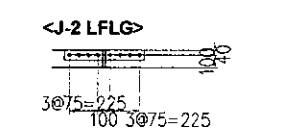
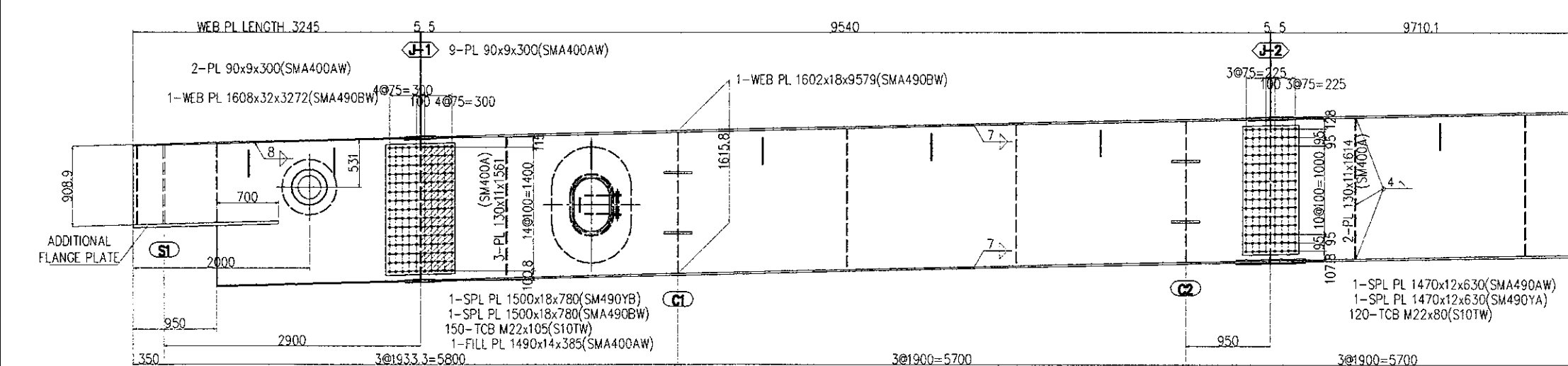
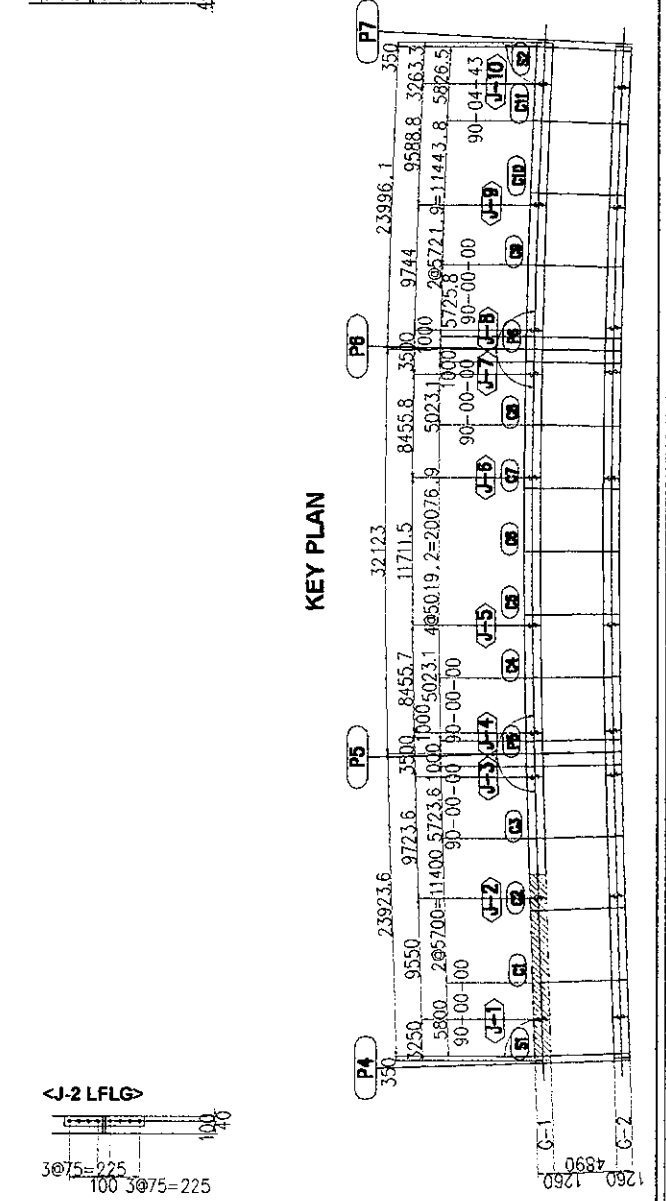
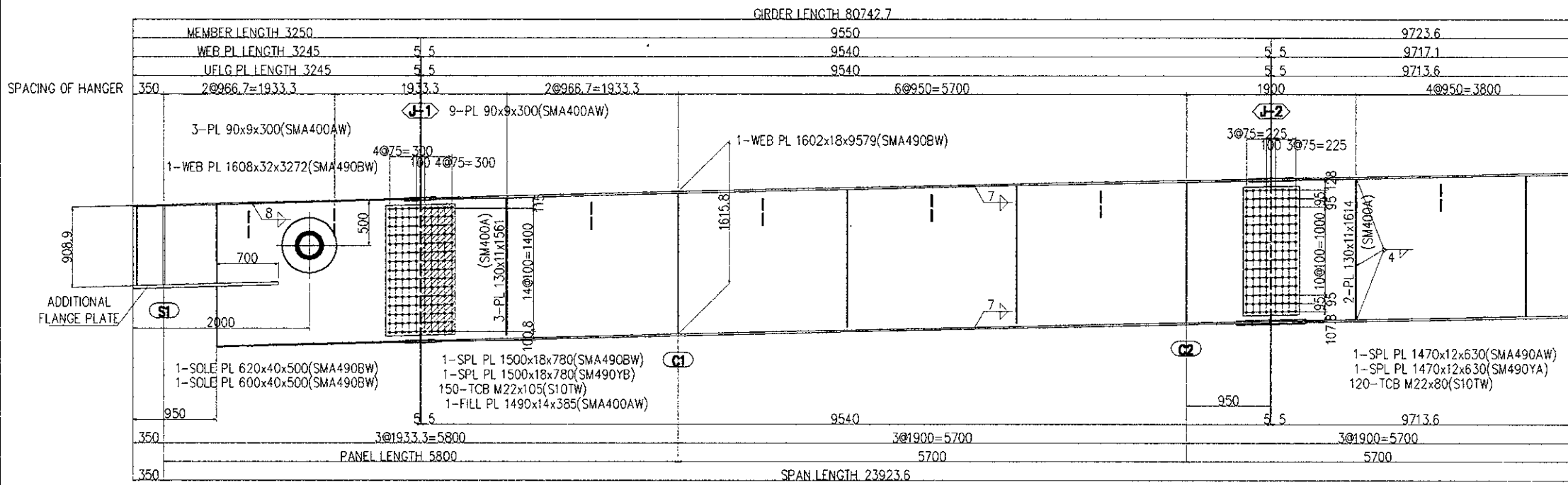
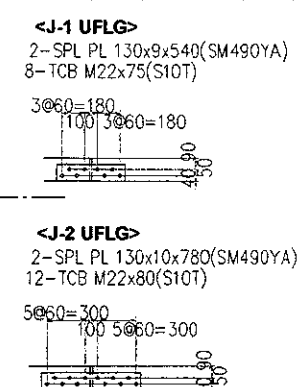
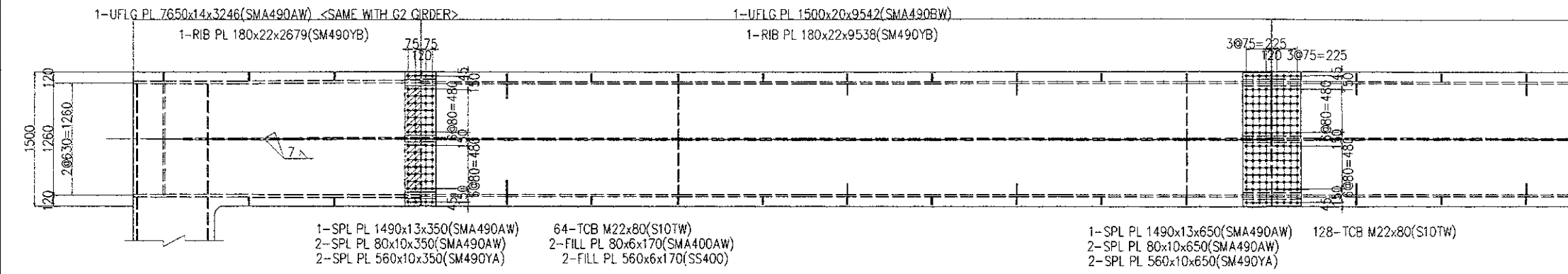


ELEVATION

PIER	E.1	E.2	E.3	E.4	E.5	E.6
P5	41.0750	40.9856	40.9163	39.4310	39.0956	39.2723
P6	41.1400	41.0606	40.9813	39.4960	39.1606	39.3373

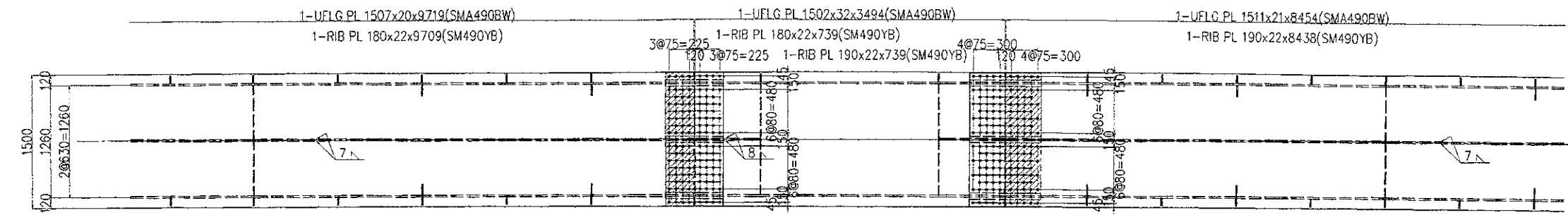
SECTIONAL DIMENSION OF GIRDER P5 & P6

SCALE : 1:50



NOTES :

1. MARK "+" SHALL BE HIGH TENSION TORSION TYPE BOLT
2. ALL SCARE LOOPS SHALL BE 35 RADIUS UNLESS OTHERWISE NOTED
3. SPLICE HOLES IN FLANGE RIB PLATES SHALL BE D=26.50

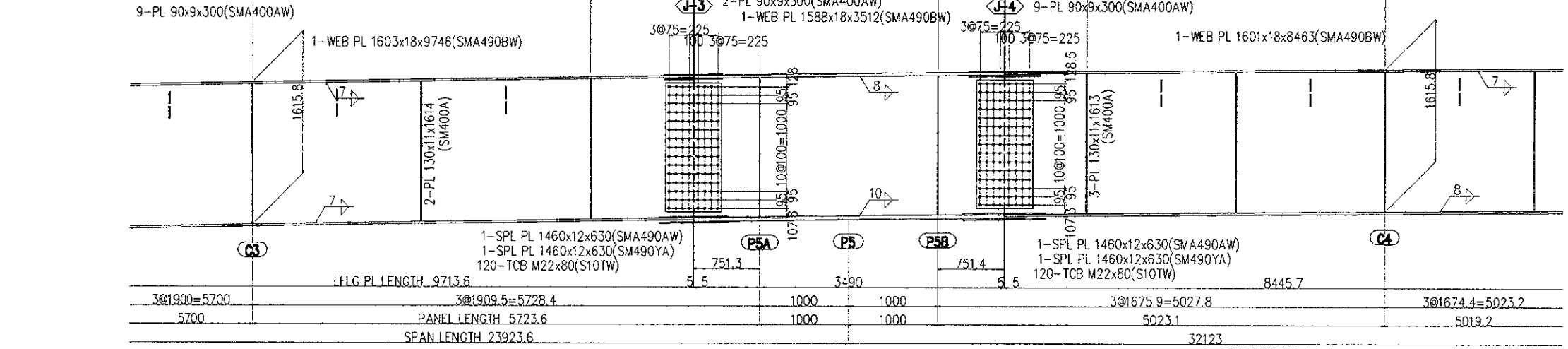


<J-3 UFLG>
 2-SPL PL 130x16x1020(SM490YA)
 16-TCB M22x90(S10T)
 7@60=420 7@60=420

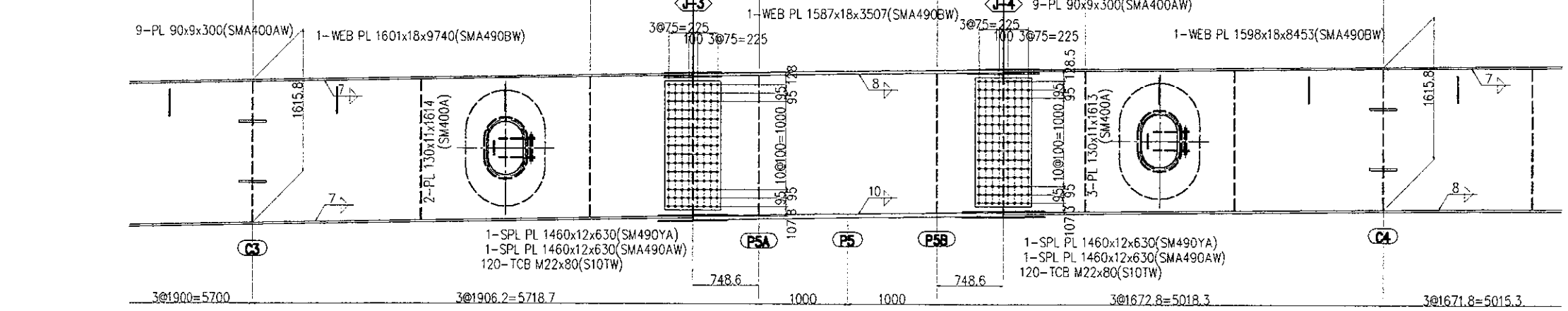
<J-4 UFLG>
 2-SPL PL 140x16x810(SM490YA)
 16-TCB M22x90(S10T)
 7@45=315

1-SPL PL 1490x13x650(SMA490AW) 116-TCB M22x95(S10TW) 1-SPL PL 1490x13x800(SMA490AW) 148-TCB M22x100(S10TW)
 2-SPL PL 80x14x650(SMA490AW) 2-FILL PL 80x12x320(SMA400AW) 2-SPL PL 80x16x800(SMA490AW) 2-FILL PL 80x11x395(SMA400AW)
 2-SPL PL 560x14x650(SMA490YA) 2-FILL PL 560x12x320(SS400) 2-SPL PL 560x16x800(SMA490YA) 2-FILL PL 560x11x395(SS400)

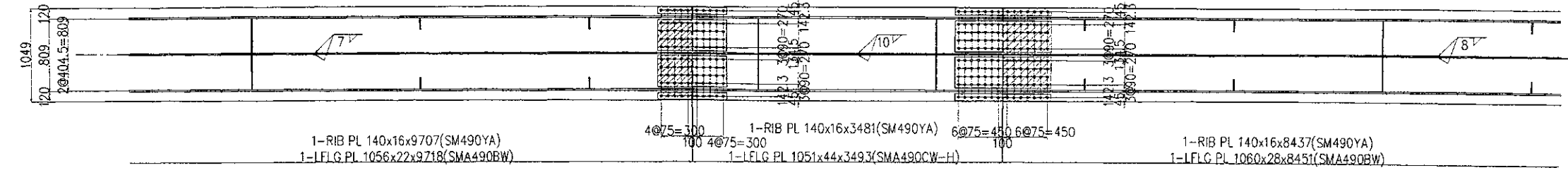
GIRDER LENGTH 80742.7			
MEMBER LENGTH 9723.6	3500	8455.7	
WEB PL LENGTH 9717.1	3492.7	8452.4	
UFLG PL LENGTH 9713.6	3490	8445.7	
SPACING OF HANGER 4@950=3800	4@954.8=3819	1909.5	2000
		1675.9	4@838=3351.9
			4@837.2=3348.8



WEB PL LENGTH 9710.1			
SPACING OF HANGER 4@950=3800	4@953.1=3812.5	1906.2	3487.2
		1672.8	8439.1
			4@836.4=3345.5
			4@835.9=3343.5



4-SPL PL 80x14x780(SMA490AW) 100-TCB M22x110(S10TW) 4-SPL PL 80x17x1080(SMA490BW) 140-TCB M22x115(S10TW)
 2-SPL PL 350x14x780(SM490YA) 2-FILL PL 80x22x385(SMA400AW) 2-SPL PL 350x17x1080(SMA490YB) 2-FILL PL 80x16x535(SMA400AW)
 2-SPL PL 350x14x780(SMA490AW) 2-FILL PL 350x22x385(SMA400AW) 2-SPL PL 350x17x1080(SMA490BW) 2-FILL PL 350x16x535(SMA400AW)

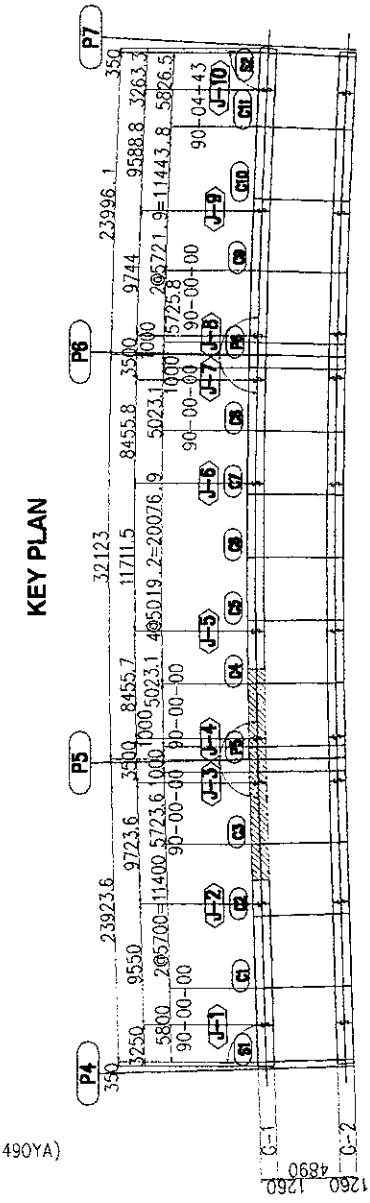


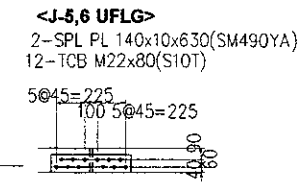
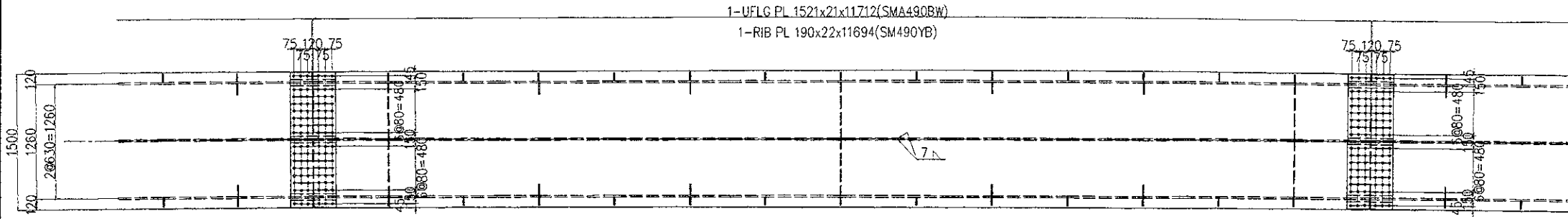
<J-3 IFLG>
 4@75=300 100 4@75=300

<J-4 IFLG>
 4@75=300 100 4@75=300

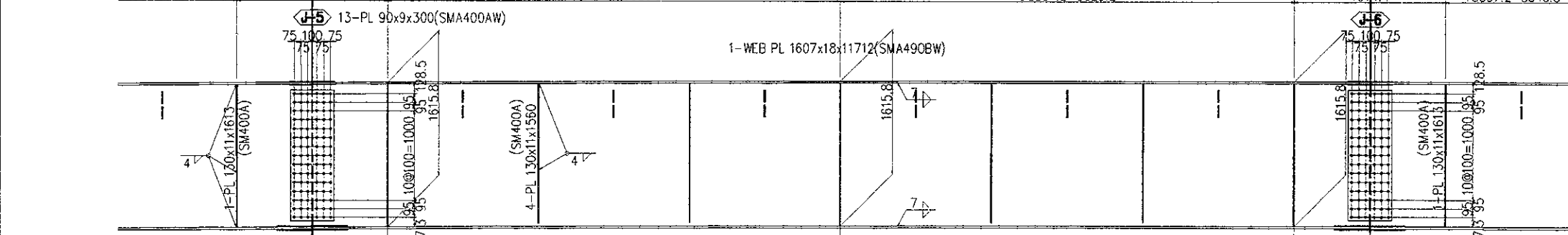
2-SPL PL 80x13x780(SM490YA)
 10-TCB M22x80(S10T)

- NOTES :
- MARK "+" SHALL BE HIGH TENSION TORSION TYPE BOLT
 - ALL SCARE LOOPS SHALL BE 35 RADIUS UNLESS OTHERWISE NOTED
 - SPLICE HOLES IN FLANGE RIB PLATES SHALL BE D=26.50

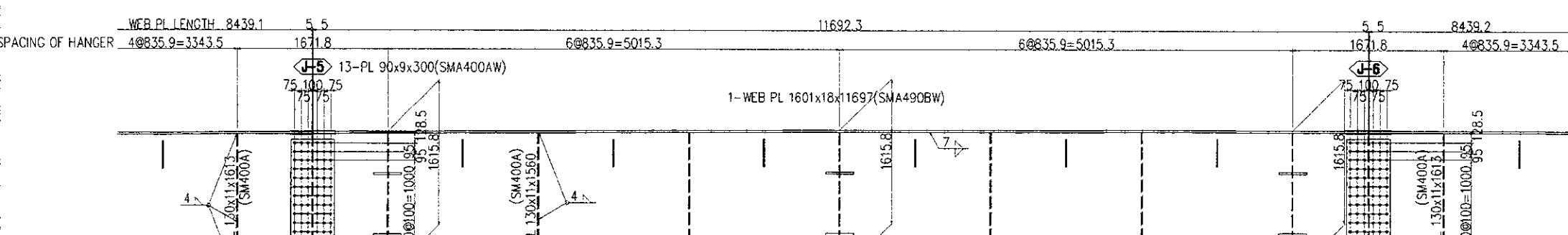




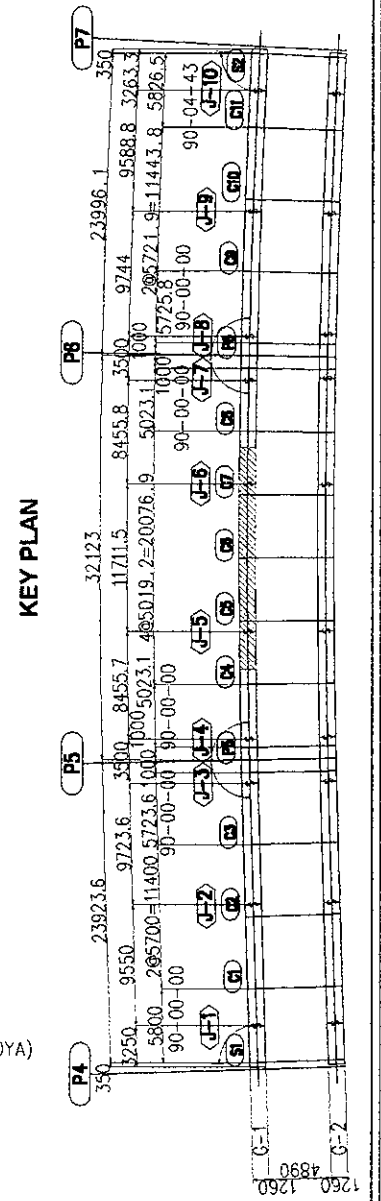
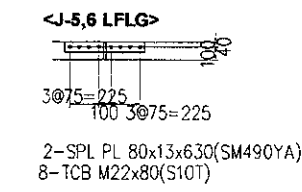
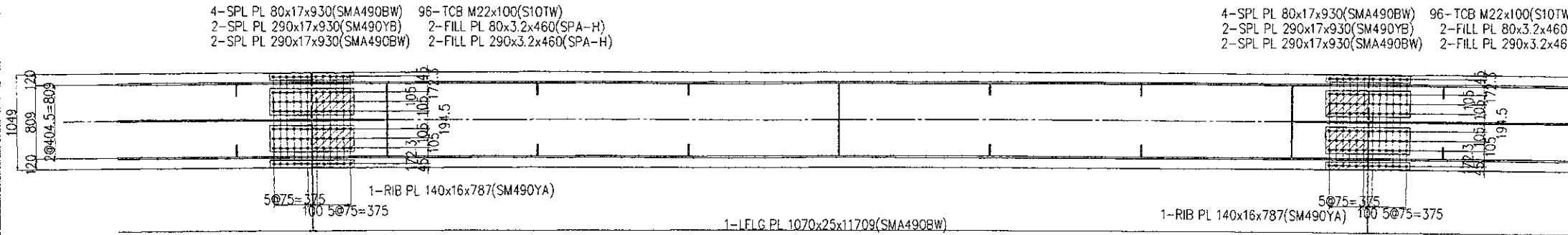
		GIRDER LENGTH 80742.7			
MEMBER LENGTH	8455.7		11711.5		8455.8
WEB PL LENGTH	8452.4	5.5	11710.7	5.5	8452.4
UFLG PL LENGTH	8445.7	5.5	11701.5	5.5	8445.8
SPACING OF HANGER	4@837.2=3348.8	1674.4	6@837.2=5023.2	6@837.2=5023.2	1674.4



		SPAN LENGTH 32123			
WEB PL LENGTH	8439.1	5.5	11692.3	5.5	8439.2
SPACING OF HANGER	4@835.9=3343.5	1671.8	6@835.9=5015.3	6@835.9=5015.3	1671.8

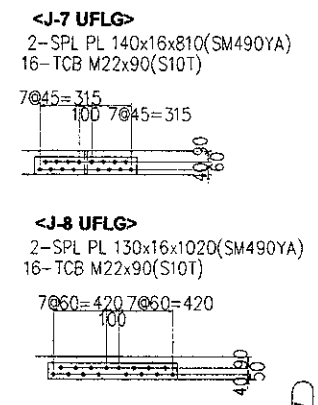
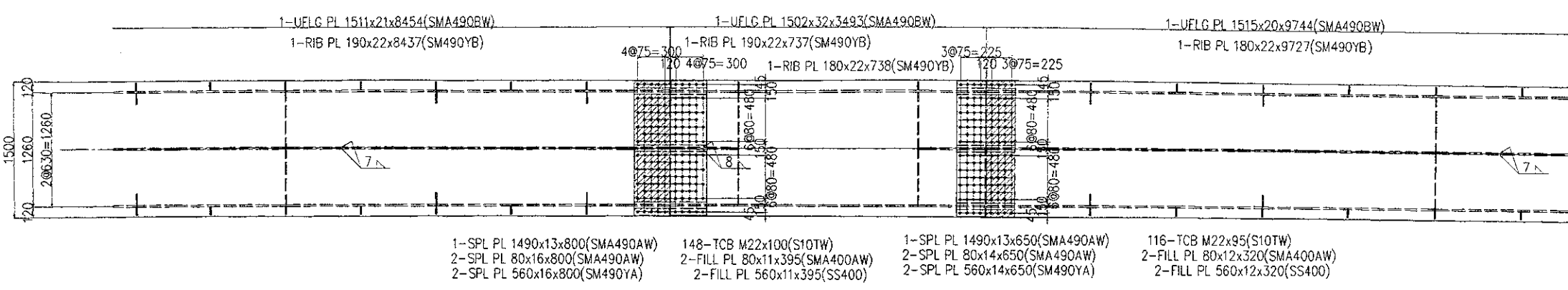


		SPAN LENGTH 32123			
WEB PL LENGTH	8439.1	5.5	11692.3	5.5	8439.2
SPACING OF HANGER	4@835.9=3343.5	1671.8	6@835.9=5015.3	6@835.9=5015.3	1671.8

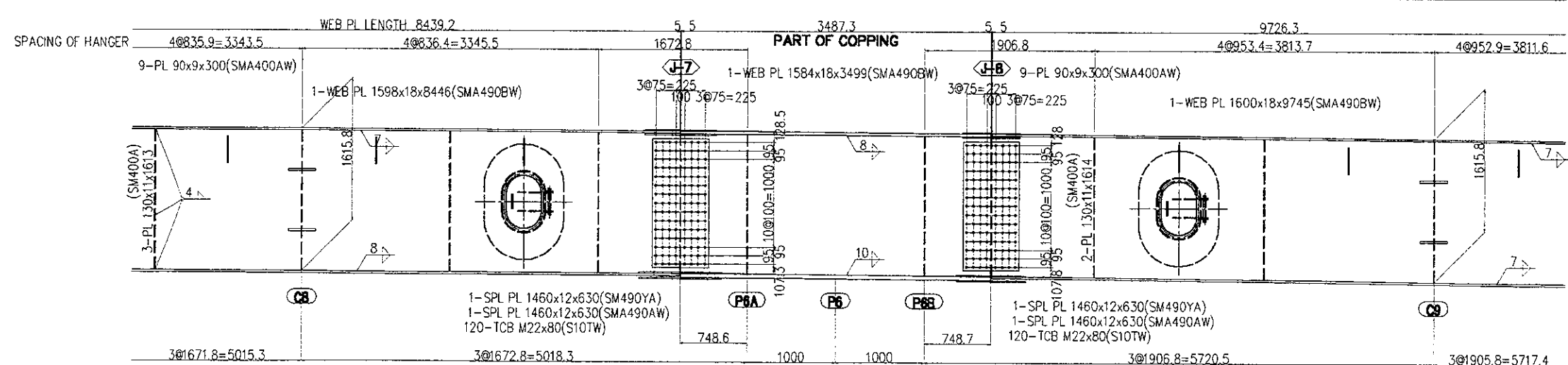
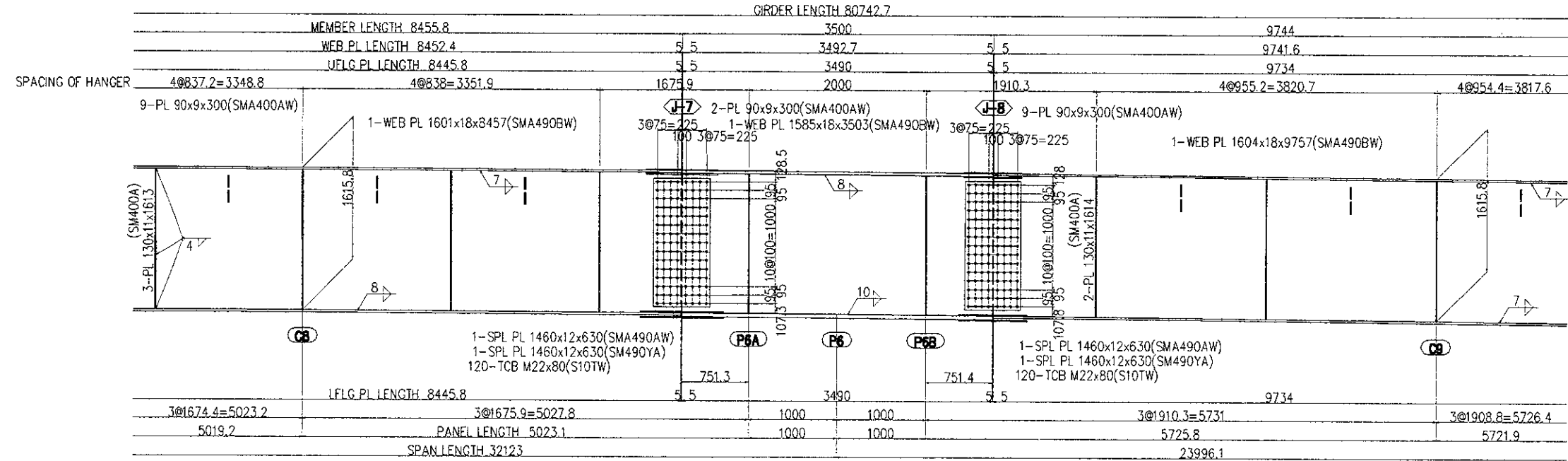


NOTES :

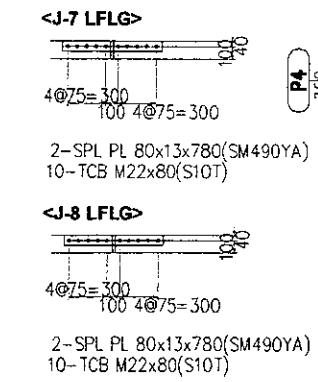
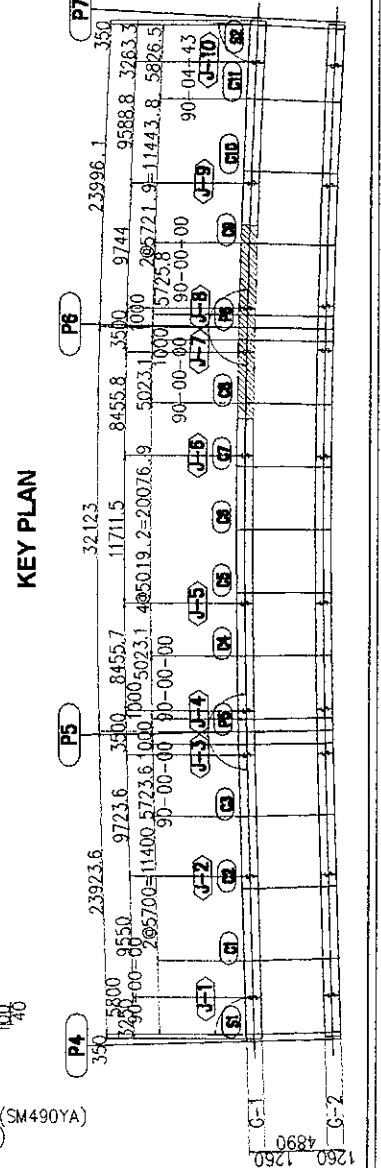
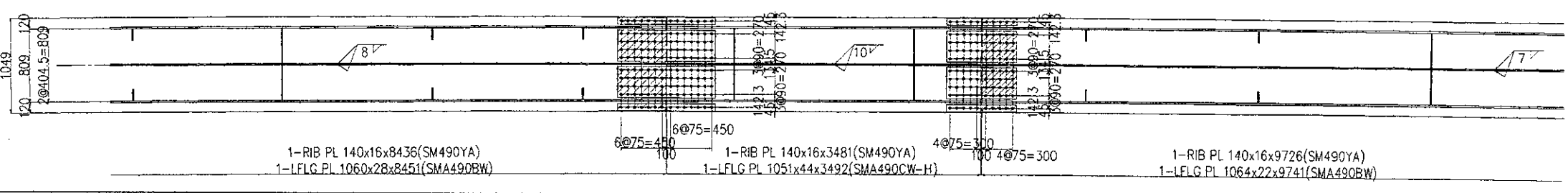
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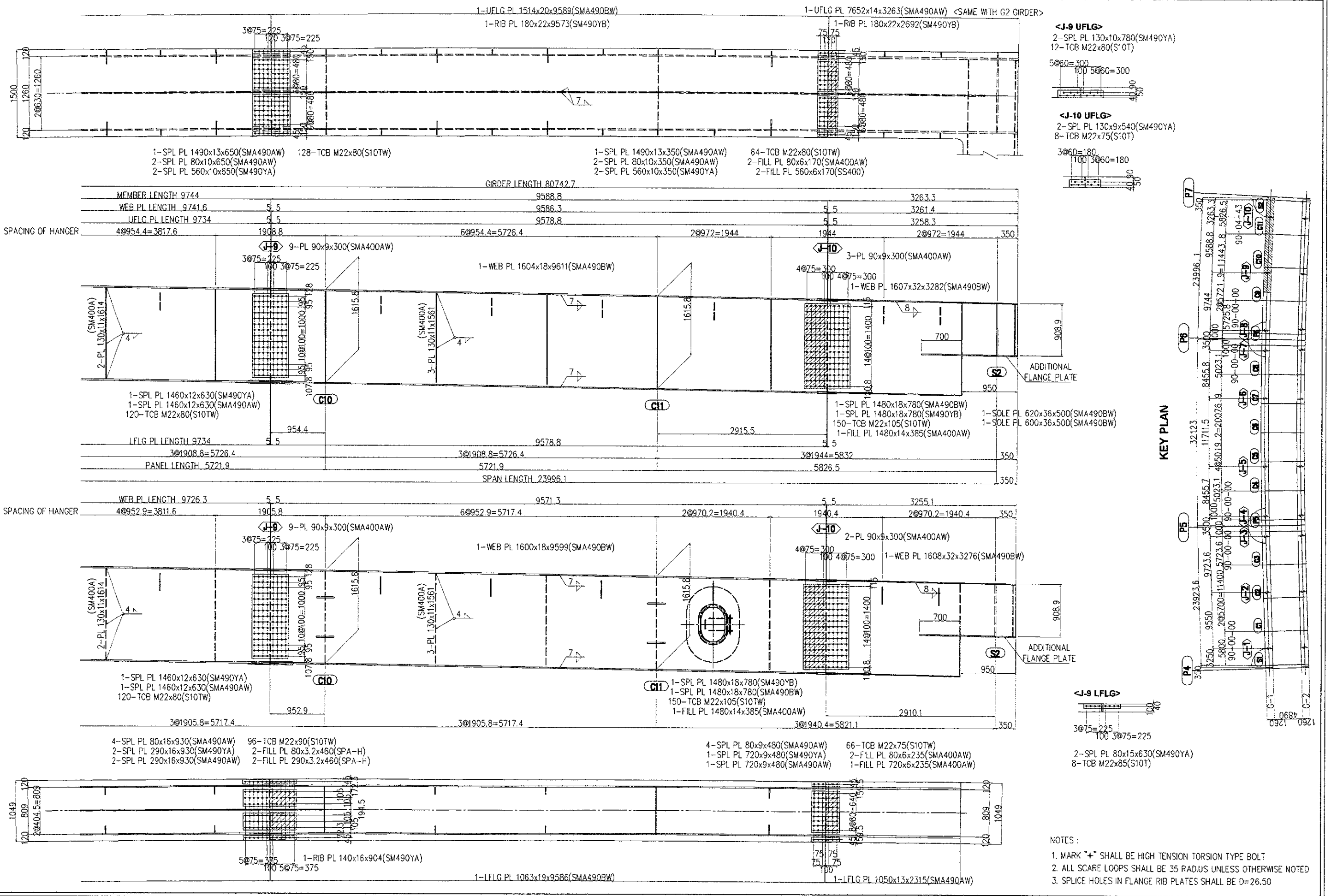
- | | | | |
|--------------------------------|-------------------------------|--------------------------------|-------------------------------|
| 1-SPL PL 1490x13x800(SMA490AW) | 148-TCB M22x100(S10TW) | 1-SPL PL 1490x13x650(SMA490AW) | 116-TCB M22x95(S10TW) |
| 2-SPL PL 80x16x800(SMA490AW) | 2-FILL PL 80x11x395(SMA400AW) | 2-SPL PL 80x14x650(SMA490AW) | 2-FILL PL 80x12x320(SMA400AW) |
| 2-SPL PL 560x16x800(SM490YA) | 2-FILL PL 560x11x395(SS400) | 2-SPL PL 560x14x650(SM490YA) | 2-FILL PL 560x12x320(SS400) |



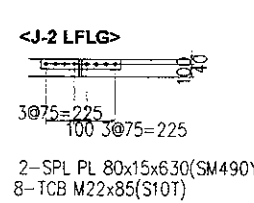
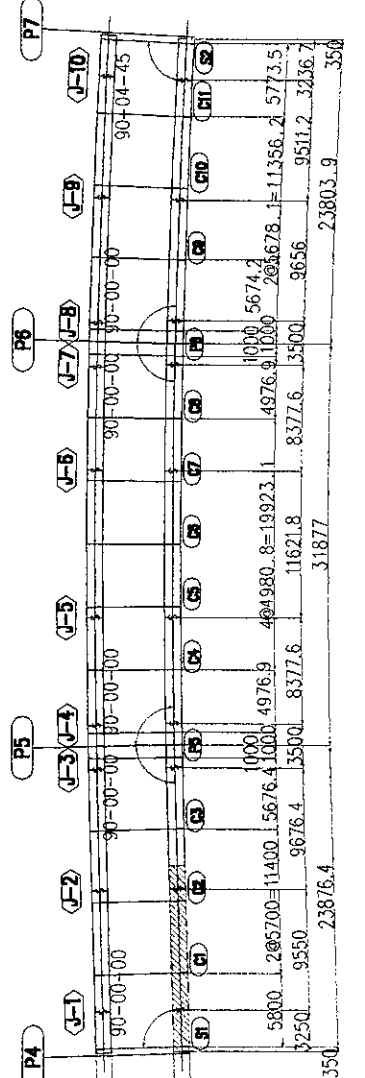
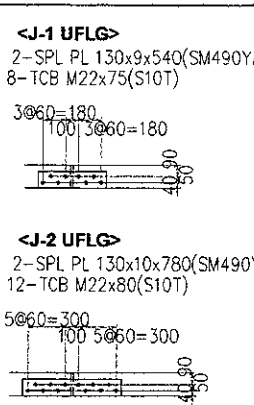
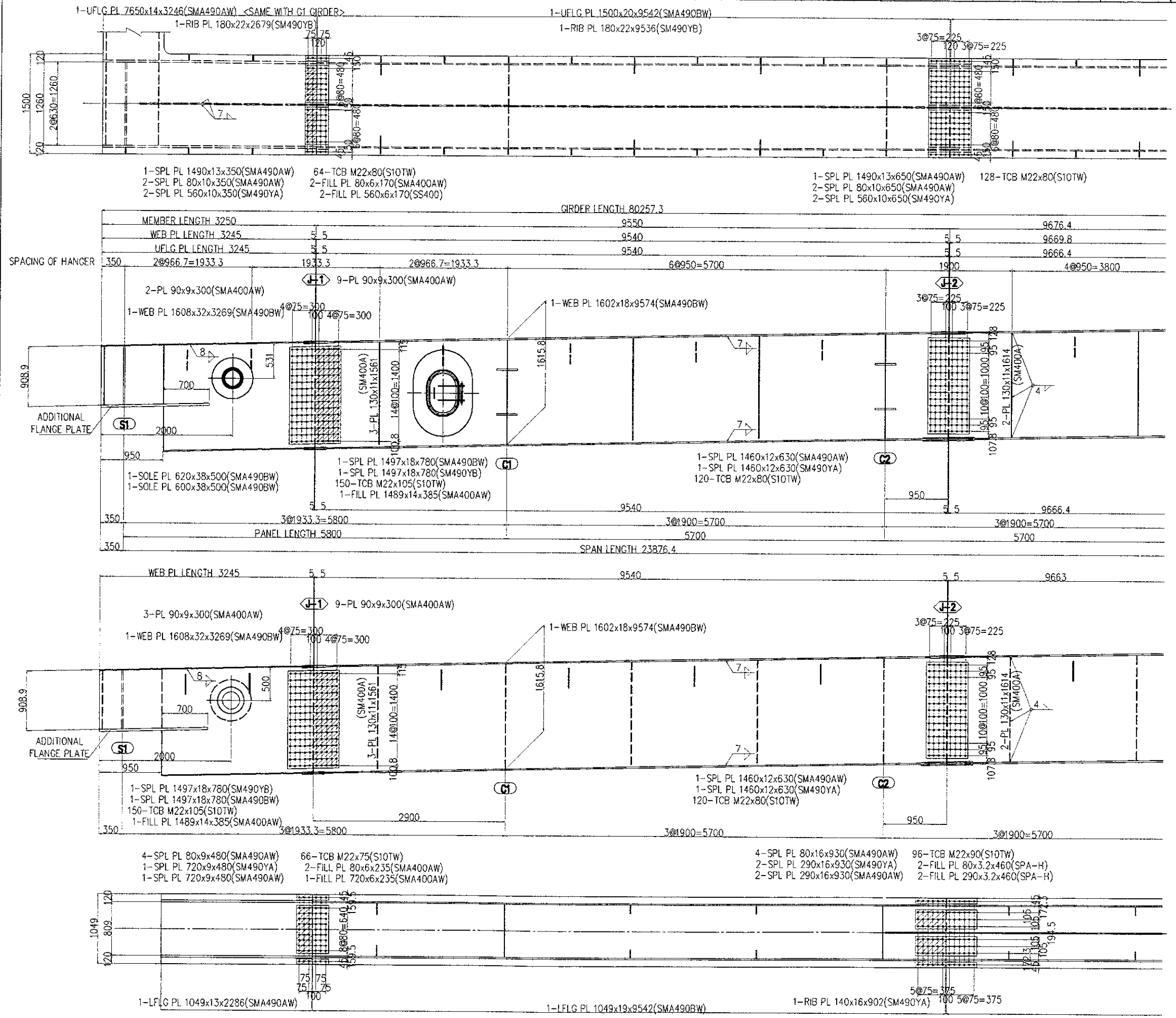
- | | | | |
|--------------------------------|--------------------------------|-------------------------------|--------------------------------|
| 4-SPL PL 80x17x1080(SMA490BW) | 140-TCB M22x115(S10TW) | 4-SPL PL 80x14x780(SMA490AW) | 100-TCB M22x110(S10TW) |
| 2-SPL PL 350x17x1080(SM490YB) | 2-FILL PL 80x16x535(SMA400AW) | 2-SPL PL 350x14x780(SM490YA) | 2-FILL PL 80x22x385(SMA400AW) |
| 2-SPL PL 350x17x1080(SMA490AB) | 2-FILL PL 350x16x535(SMA400AW) | 2-SPL PL 350x14x780(SMA490AW) | 2-FILL PL 350x22x385(SMA400AW) |



NOTES:
 1. MARK "4" SHALL BE HIGH TENSION TORSION TYPE BOLT
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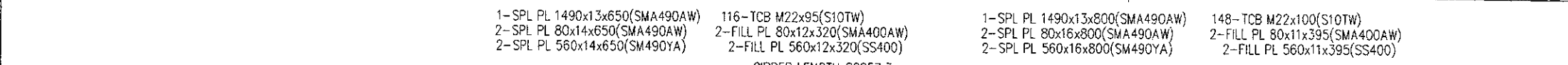
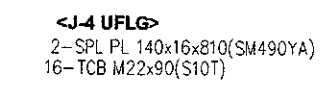
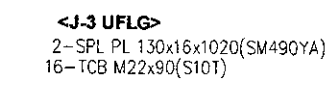
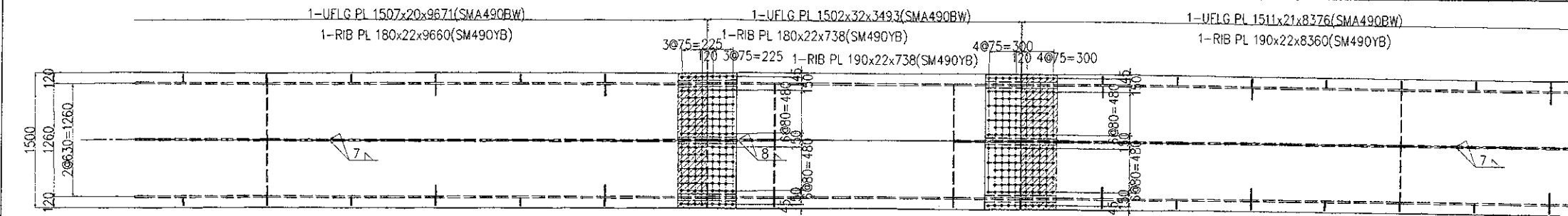


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 - ALL SCARE LOOPS SHALL BE 35 RADIUS UNLESS OTHERWISE NOTED
 - SPLICE HOLES IN FLANGE RIB PLATES SHALL BE D=26.50

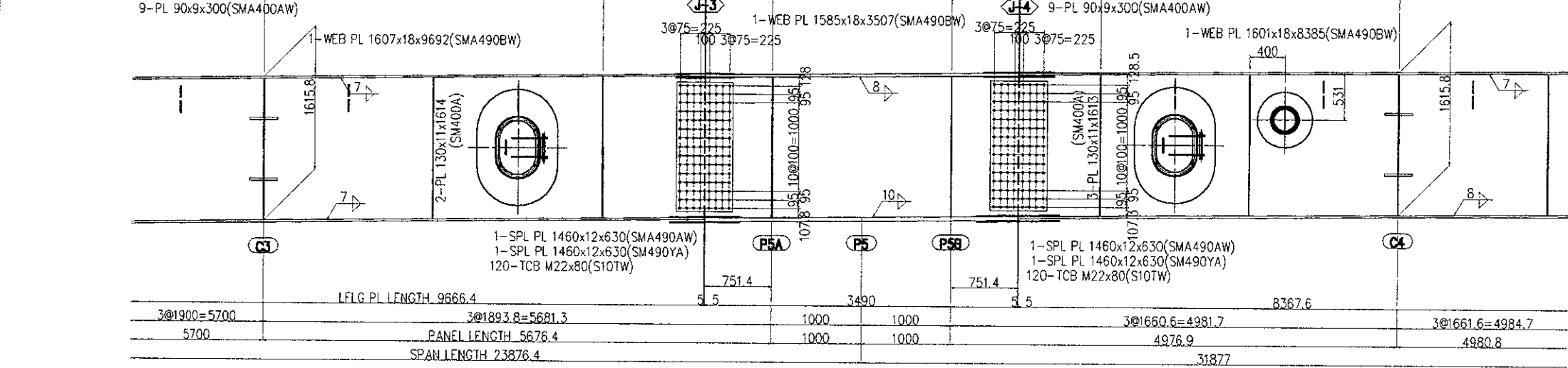


NOTES :

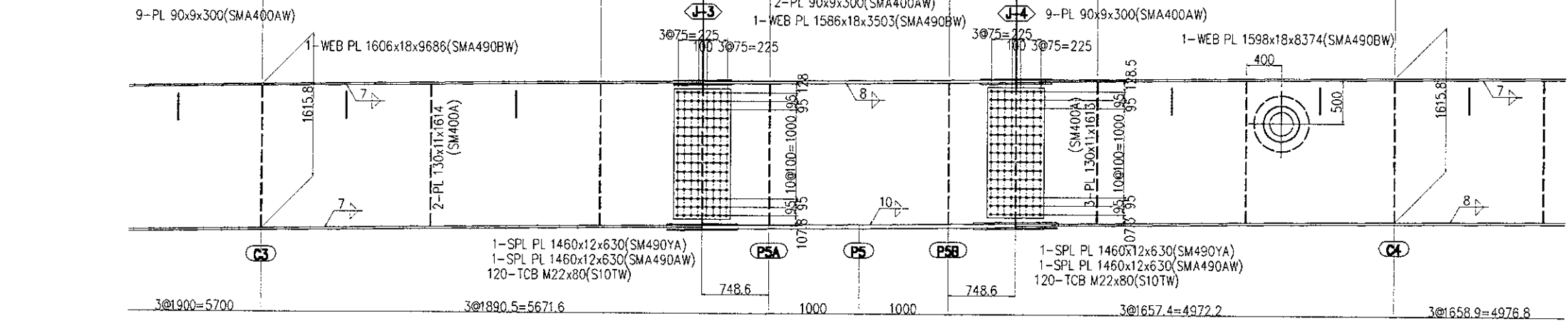
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- SPLICE HOLES IN FLANGE RIB PLATES SHALL BE D=26.50



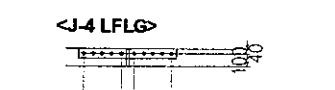
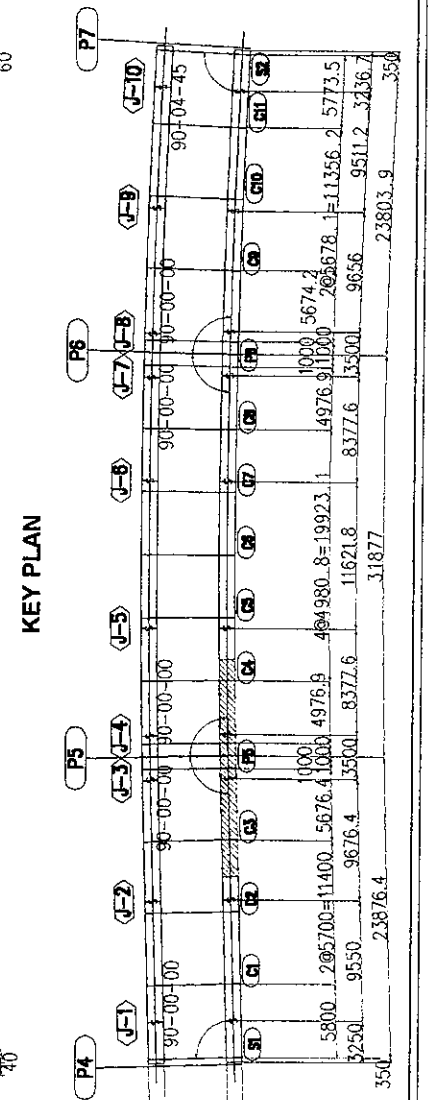
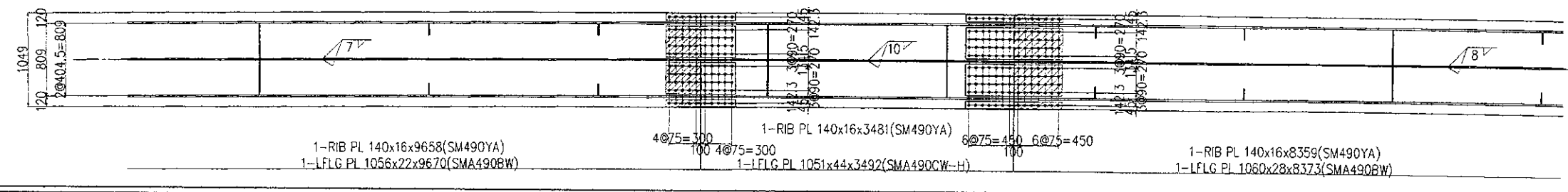
MEMBER LENGTH	9676.4	3500	8377.6
WEB PL LENGTH	9669.8	3492.8	8374.2
UFLG PL LENGTH	9666.4	3490	8367.6
SPACING OF HANGER	4@950=3800	4@946.9=3787.5	4@830.3=3321.1



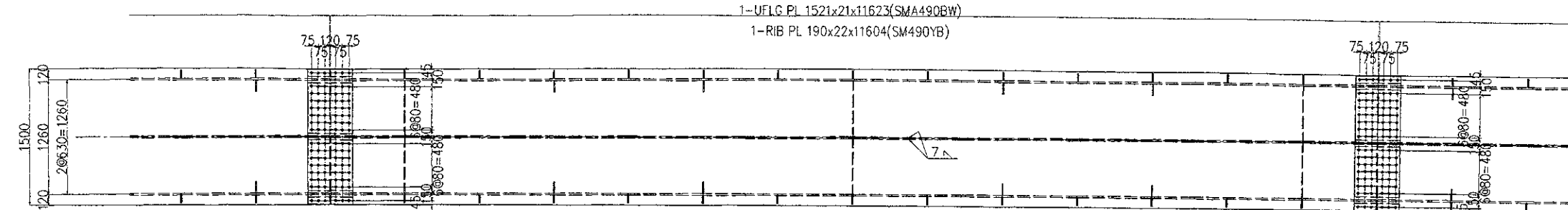
MEMBER LENGTH	9663	3487.2	8361
WEB PL LENGTH	9663	3487.2	8361
UFLG PL LENGTH	9663	3487.2	8361
SPACING OF HANGER	4@950=3800	4@945.3=3781	4@829.5=3317.9



MEMBER LENGTH	9663	3487.2	8361
WEB PL LENGTH	9663	3487.2	8361
UFLG PL LENGTH	9663	3487.2	8361
SPACING OF HANGER	4@950=3800	4@945.3=3781	4@829.5=3317.9

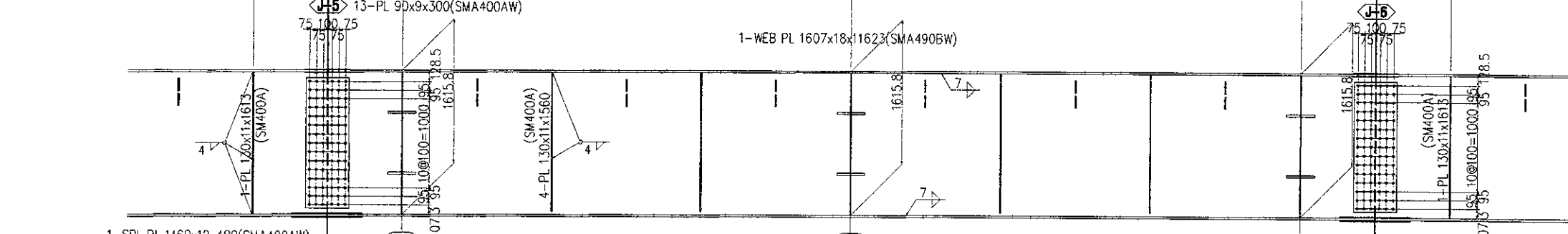


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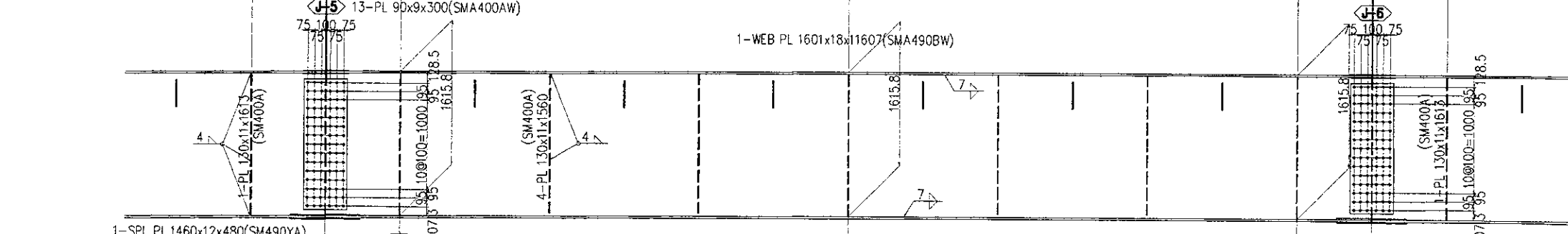
1-SPL PL 1490x13x500(SMA490AW) 96-TCB M22x80(S10TW)
 2-SPL PL 80x10x500(SMA490AW)
 2-SPL PL 560x10x500(SM490YA)
 GIRDER LENGTH 80257.3
 MEMBER LENGTH 8377.6
 WEB PL LENGTH 8374.2
 UFLG PL LENGTH 8367.6
 SPACING OF HANGER 4@830.8=3323.1

1661.6	6@830.8=4984.7	6@830.8=4984.7	1661.6
830.8	3@1661.6=4984.7	3@1661.6=4984.7	830.8
4980.8	4980.8	4980.8	4980.8



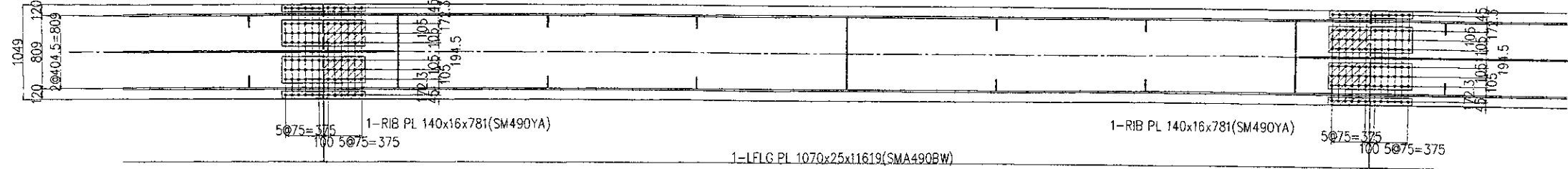
1-SPL PL 1460x12x480(SMA490AW)
 1-SPL PL 1460x12x480(SM490YA)
 90-TCB M22x80(S10TW)
 UFLG PL LENGTH 8367.6
 3@1661.6=4984.7
 PANEL LENGTH 4980.8
 SPACING OF HANGER 4@829.5=3317.9

1658.9	6@829.5=4976.8	6@829.5=4976.8	1658.9
829.5	3@1658.9=4976.8	3@1658.9=4976.8	829.5
4976.8	4976.8	4976.8	4976.8

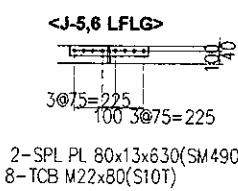
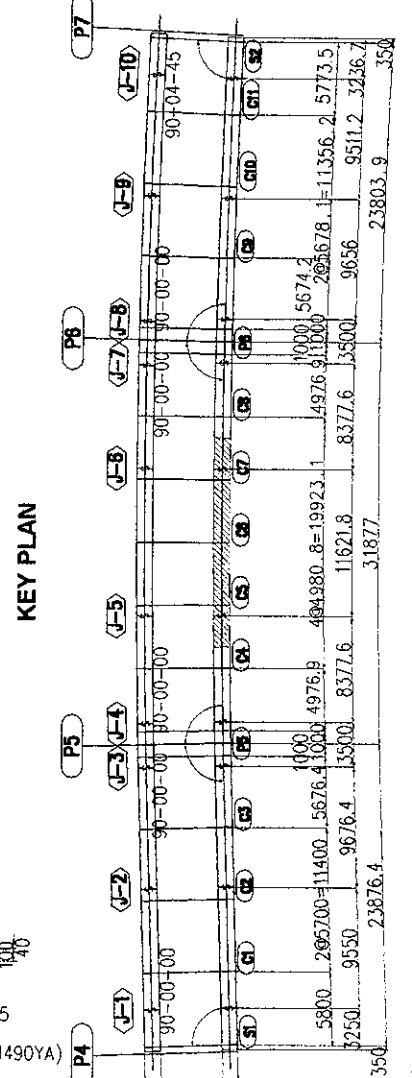
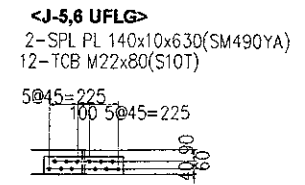


1-SPL PL 1460x12x480(SM490YA)
 1-SPL PL 1460x12x480(SMA490AW)
 90-TCB M22x80(S10TW)
 3@1658.9=4976.8
 SPACING OF HANGER 4@829.5=3317.9

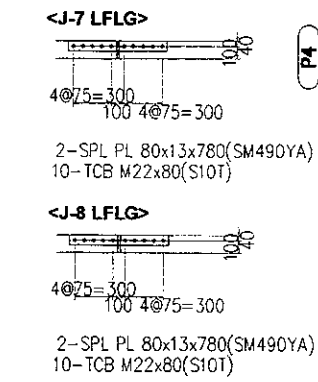
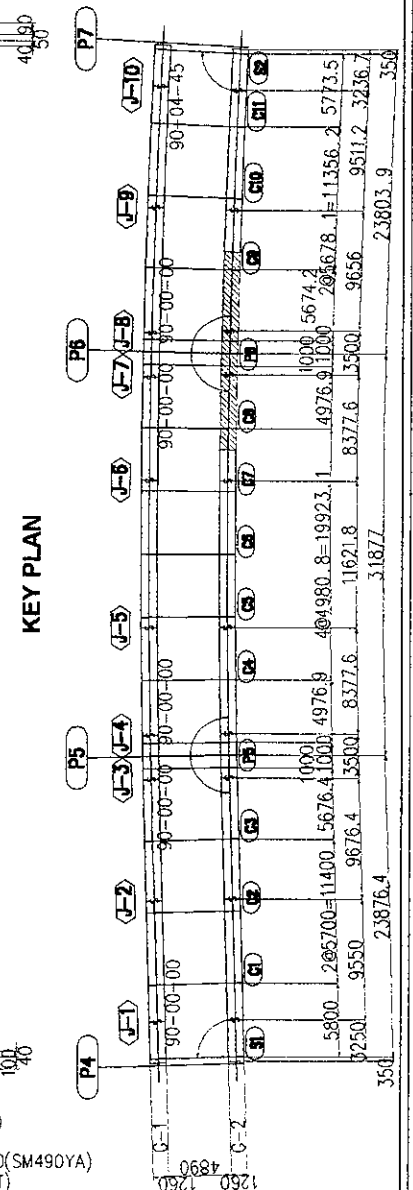
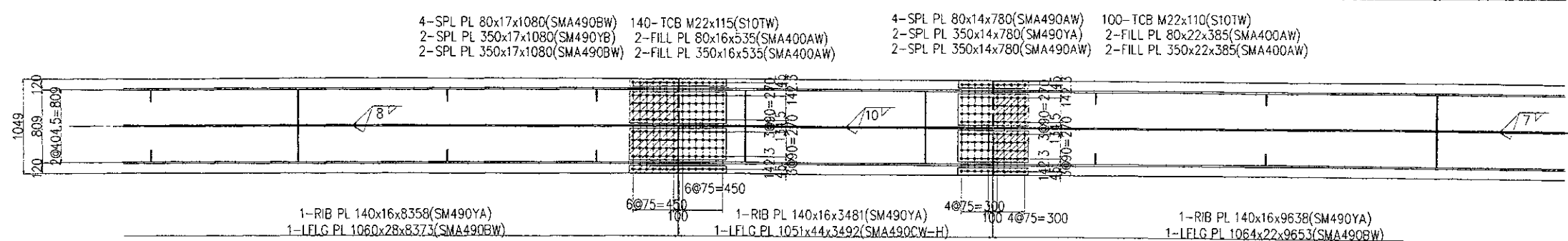
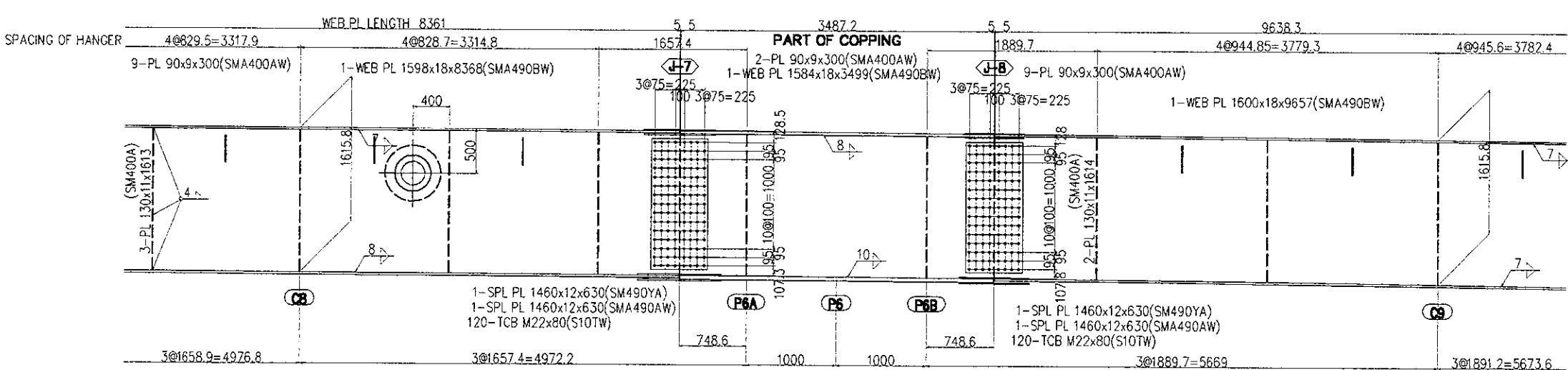
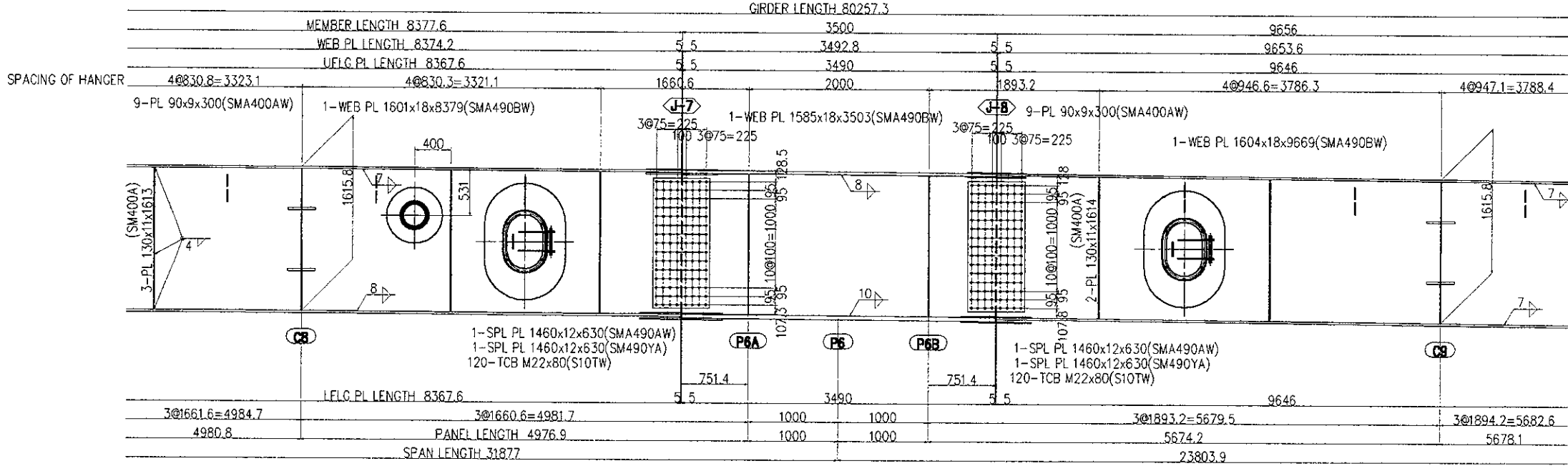
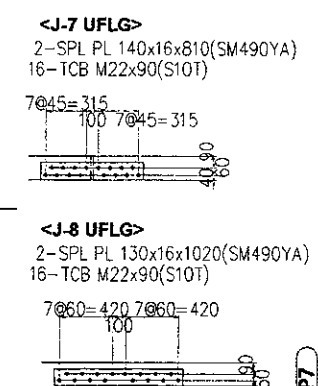
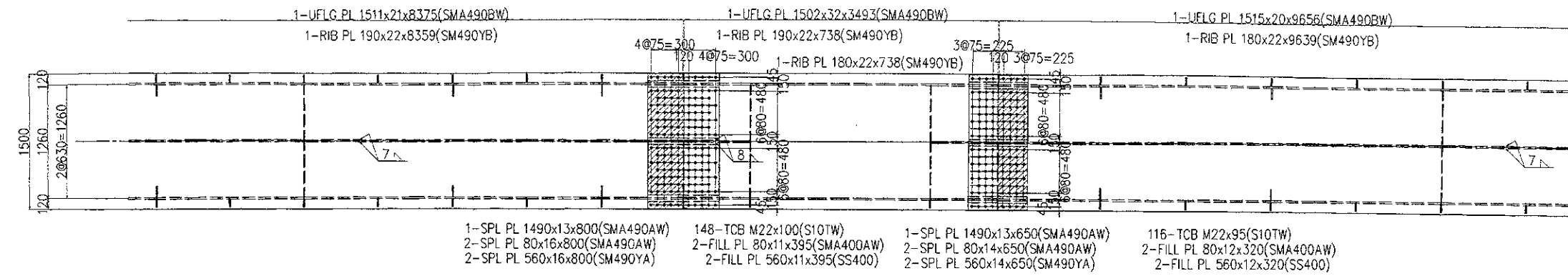
1658.9	6@829.5=4976.8	6@829.5=4976.8	1658.9
829.5	3@1658.9=4976.8	3@1658.9=4976.8	829.5
4976.8	4976.8	4976.8	4976.8



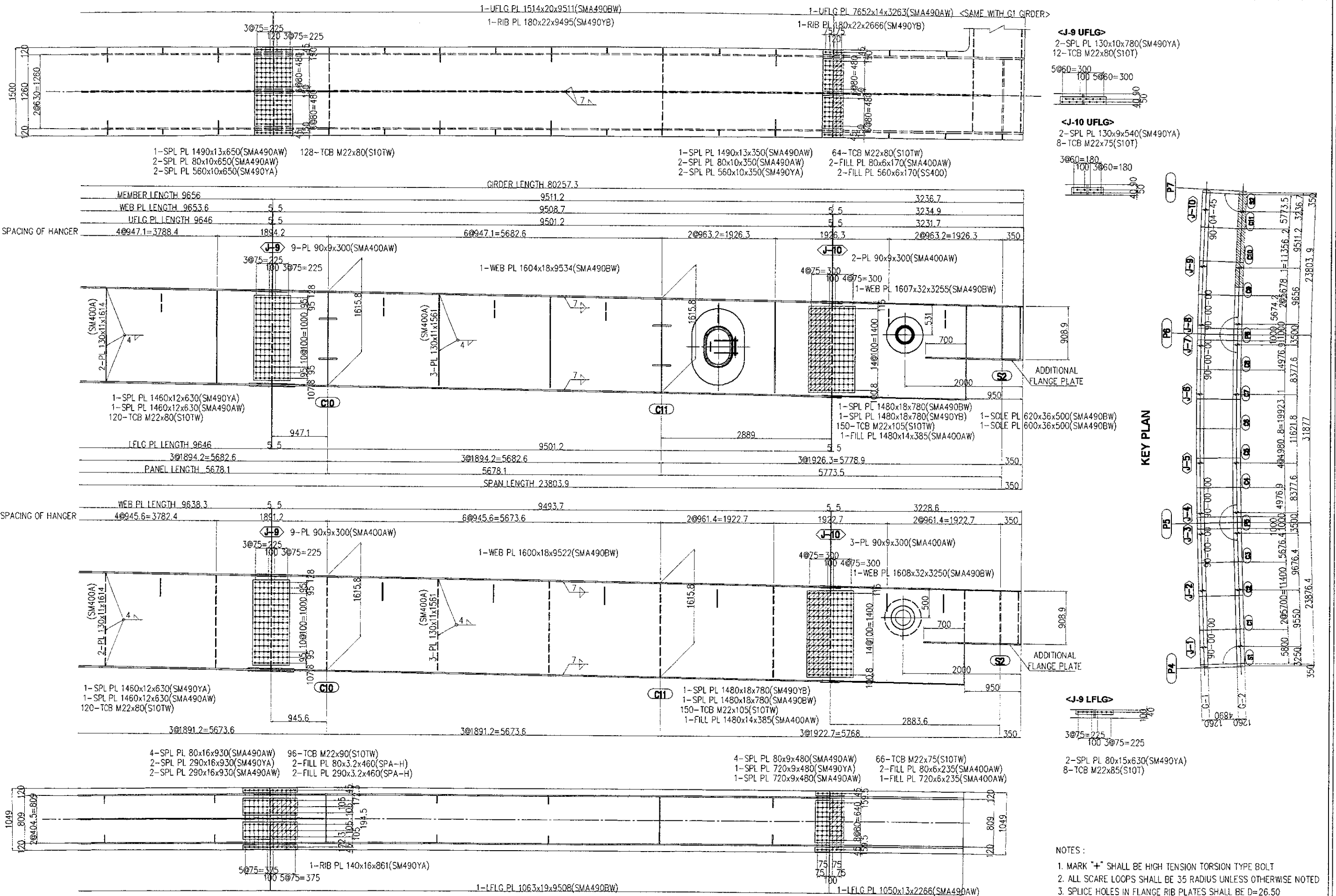
4-SPL PL 80x17x930(SMA490BW) 96-TCB M22x100(S10TW)
 2-SPL PL 290x17x930(SM490YB) 2-FILL PL 80x3.2x460(SPA-H)
 2-SPL PL 290x17x930(SMA490BW) 2-FILL PL 290x3.2x460(SPA-H)
 1-RIB PL 140x16x781(SM490YA)
 1-LFLG PL 1070x25x11619(SMA490BW)



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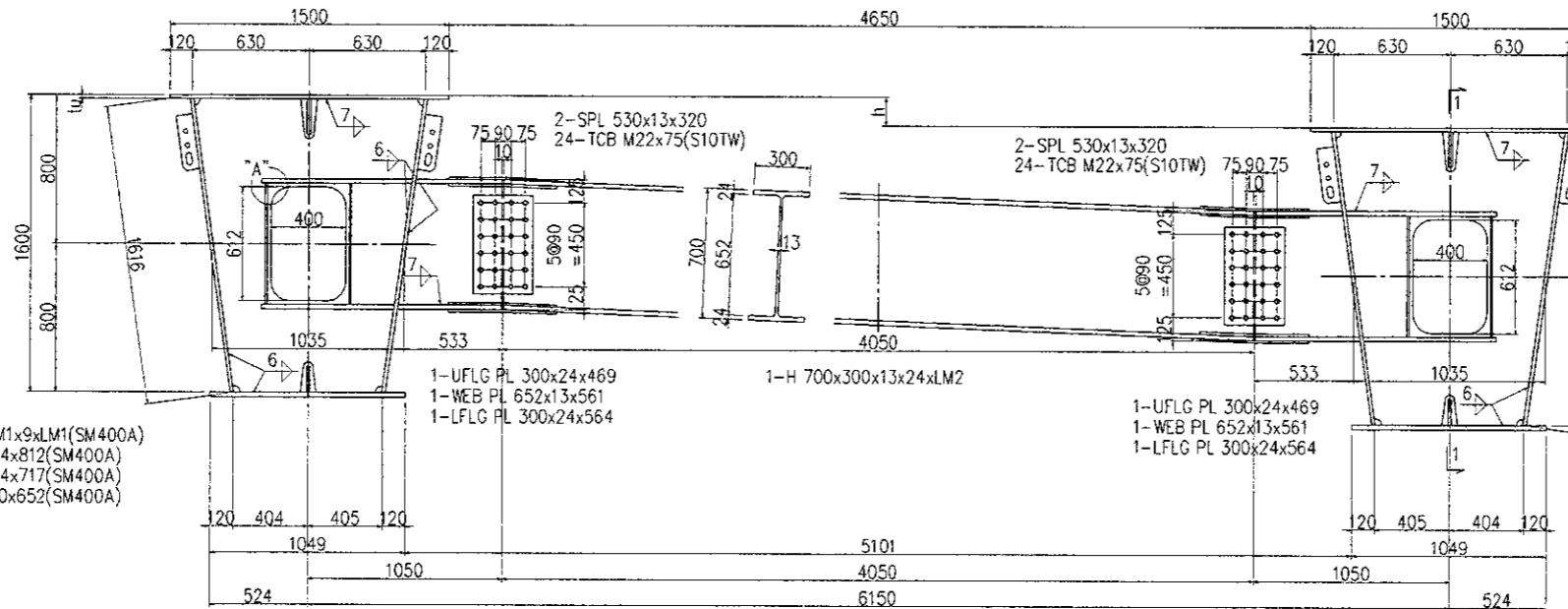
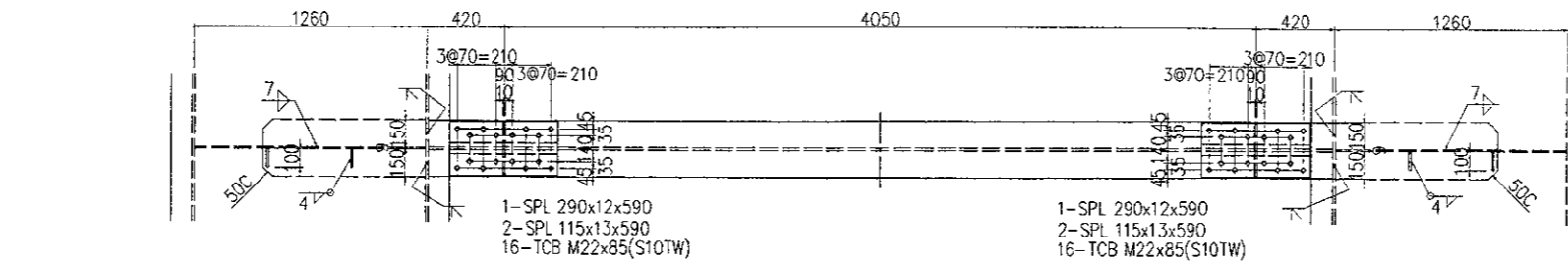
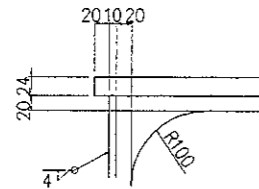
NOTES:
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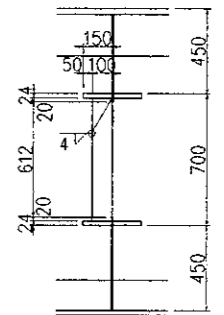
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DETAIL "A"



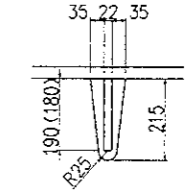
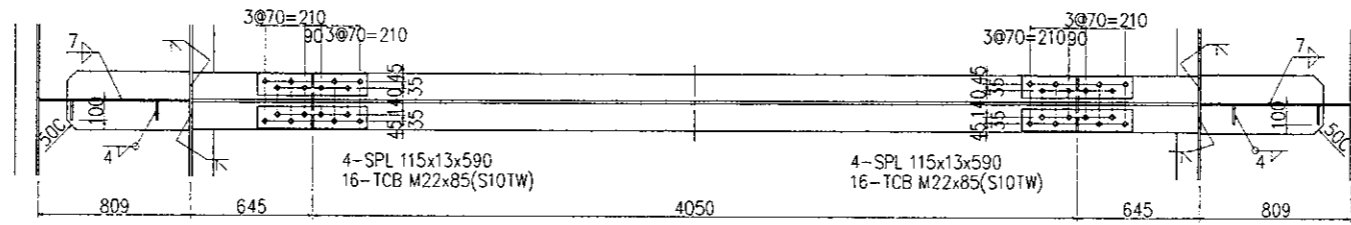
SECTION 1-1



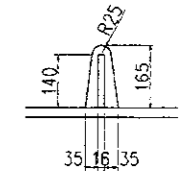
- 1-DIA PL BM1x9xLM1(SM400A)
- 2-PL 150x24x812(SM400A)
- 2-PL 150x24x717(SM400A)
- 2-PL 100x10x652(SM400A)

- 1-DIA PL BM1x9xLM1(SM400A)
- 2-PL 150x24x812(SM400A)
- 2-PL 150x24x717(SM400A)
- 2-PL 100x10x652(SM400A)

	FI-1	FI-2	FI-3	FI-4	FI-5
	C1	C2	C3	C4-C8	C9-C11
tu	20	20	20	21	20
BM1	1580	1580	1580	1579	1580
LM1	1245	1245	1245	1244	1245
LM2	4055	4059	4062	4070	4070
h	65	83	100	118	154
NO.	1	1	1	5	3

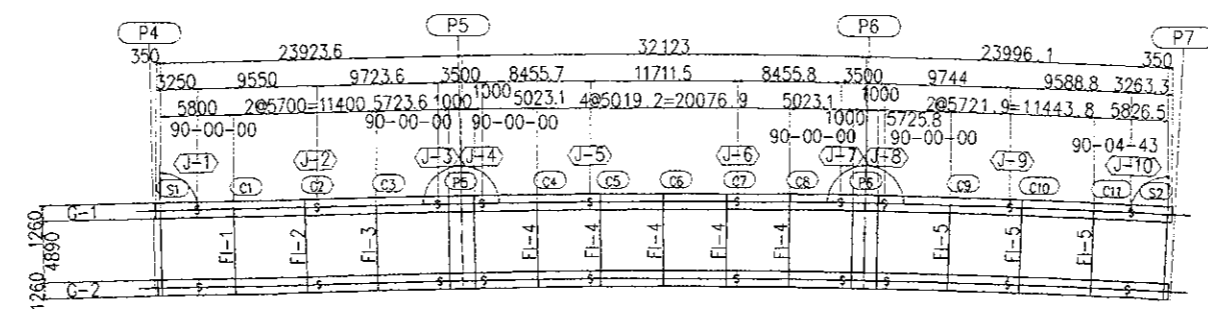


UPPER L.RIB



LOWER L.RIB

SCARE LOOPS FOR RIB PLATE
 SCALE: 1:20



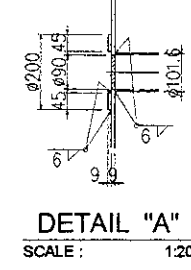
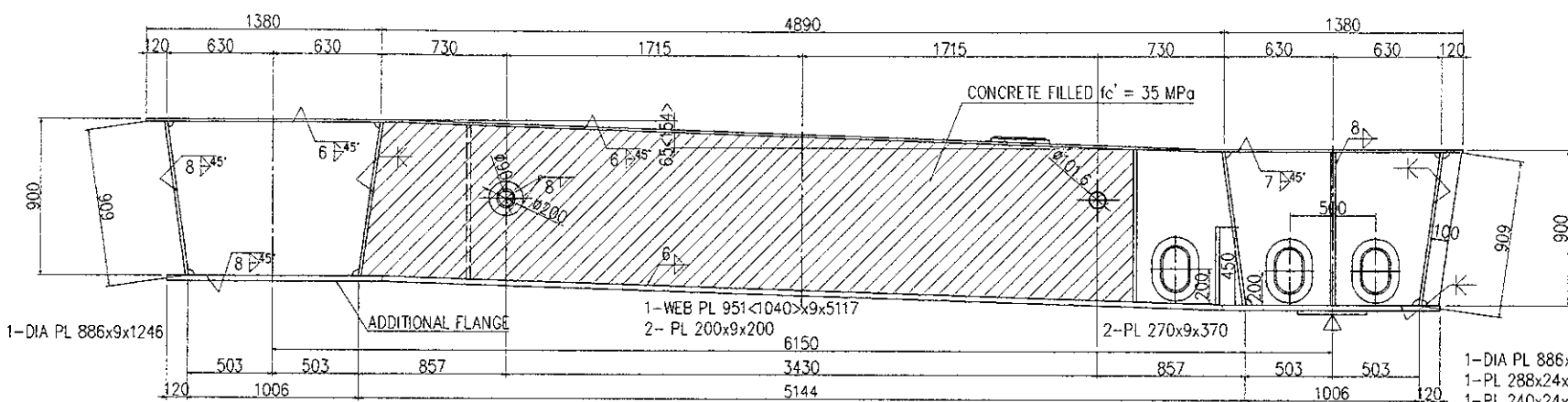
KEY PLAN
 SCALE: 1:400

- NOTE :
1. ALL STEEL GRADE SHALL BE SMA400AW UNLESS OTHERWISE NOTED
 2. MARK "+" SHAW HIGH TENSION TORSION TYPE BOLT M22 (S10TW)
 3. ALL SCARE LOOPS SHALL BE 35 RADIUS UNLESS OTHERWISE NOTED

ELEVATION

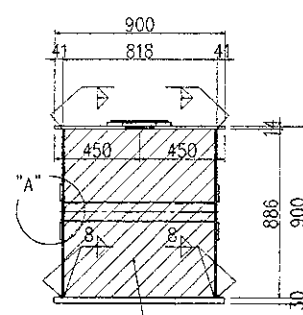
SECTION 1-1

SECTION 2-2

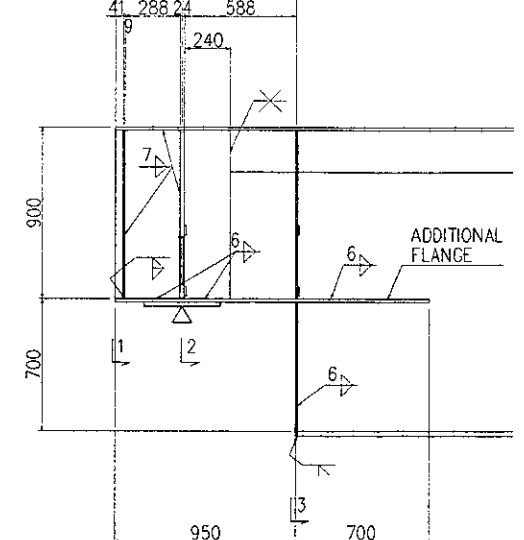


DETAIL "A"
 SCALE : 1:20

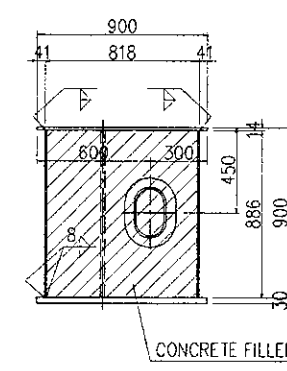
SECTION 4-4



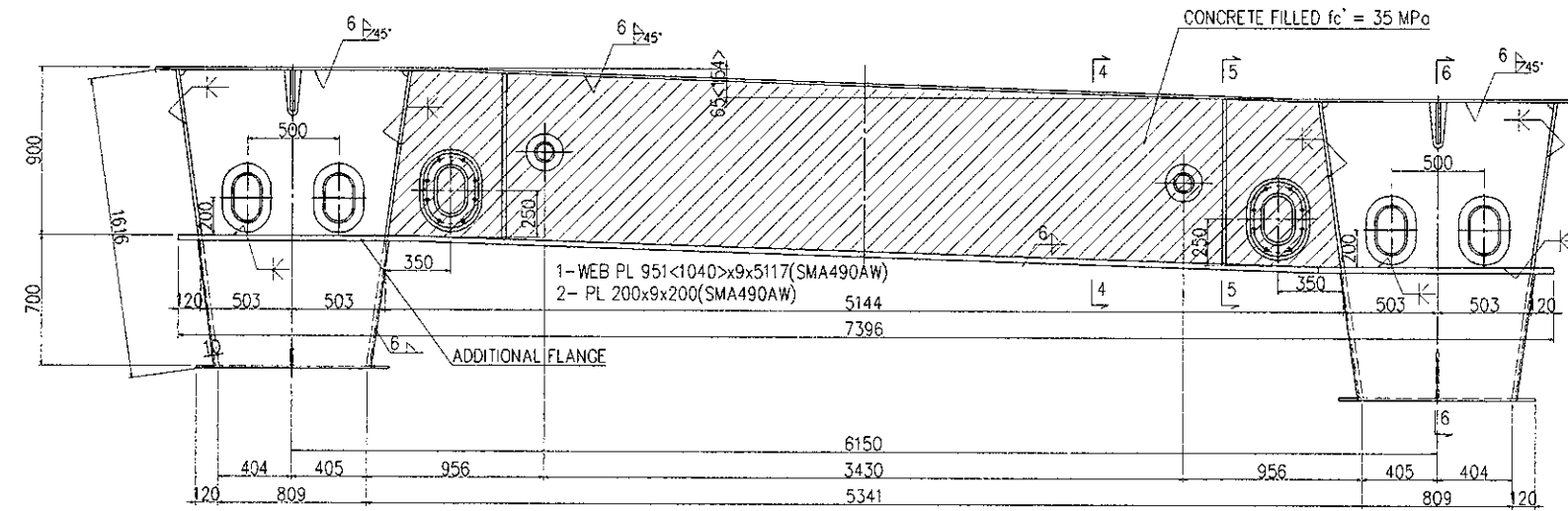
SECTION 6-6



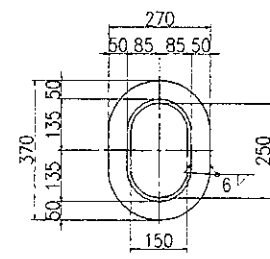
SECTION 5-5



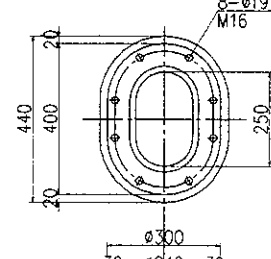
SECTION 3-3



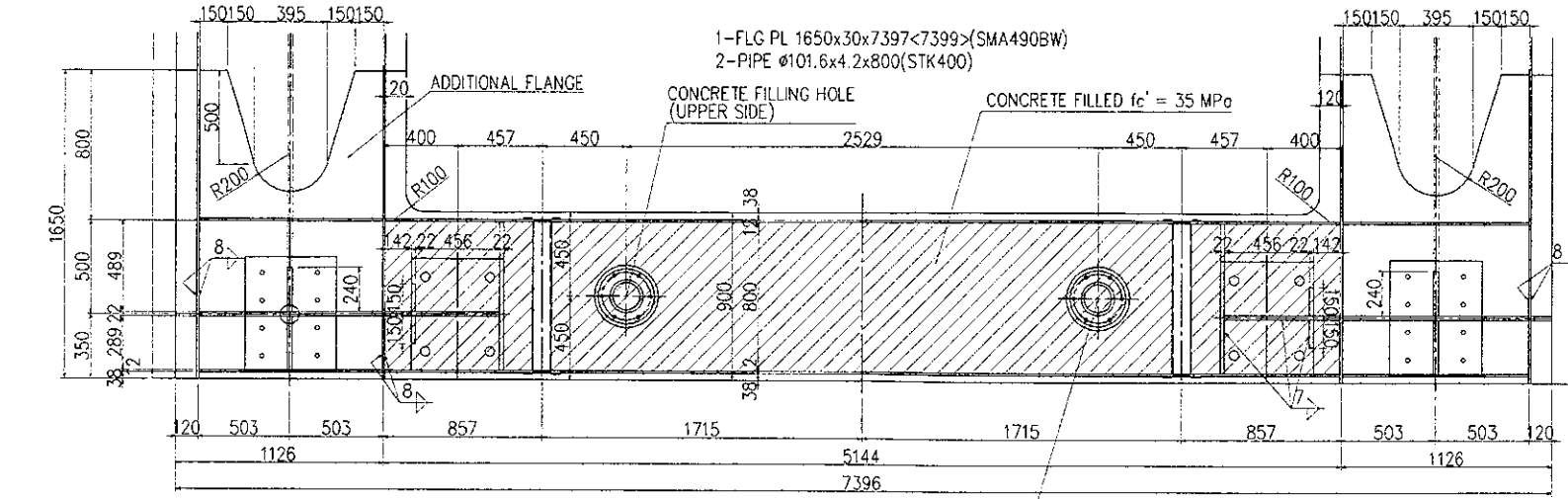
AT DIAPHRAGM



AT CROSS BEAM



P L A N



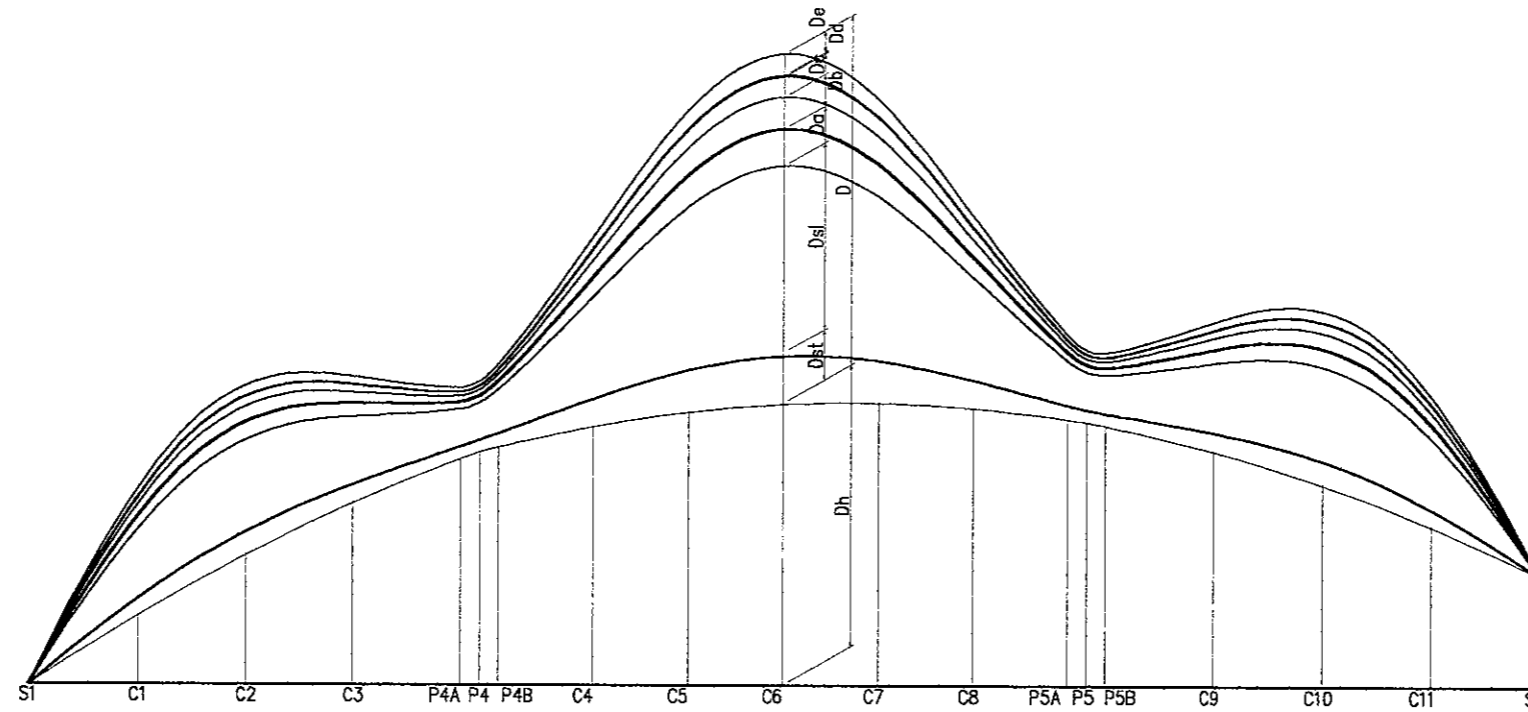
DETAIL OF MAN HOLE

SCALE : 1:20

CONCRETE FILLING HOLE

SCALE : 1:20

NOTE :
 1. ALL STEEL GRADE SHALL BE SM490YA UNLESS OTHERWISE NOTED
 2. ALL SCARE LOOPS SHALL BE 35 RADIUS UNLESS OTHERWISE NOTED



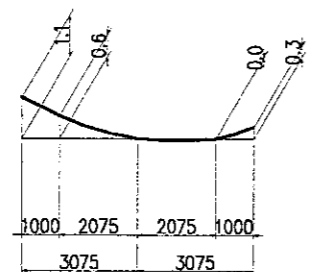
		S1	C1	C2	C3	P4A	P4	P4B	C4	C5	C6	C7	C8	P5A	P5	P5B	C9	C10	C11	S2
		GIRDER G1	Dh	0.0	149.0	277.2	387.3	479.4	493.7	504.3	549.2	580.2	597.3	600.5	589.7	565.0	558.4	551.3	499.8	430.3
	Dst	0.0	2.1	2.7	1.9	1.2	1.2	1.3	2.8	4.5	5.2	4.5	2.8	1.3	1.2	1.2	1.9	2.7	2.2	0.0
	Dsl	0.0	8.9	10.9	7.1	3.7	3.9	4.4	10.6	17.9	21.0	18.0	10.7	4.5	4.0	3.8	7.3	11.2	9.1	0.0
	Da	0.0	1.7	2.1	1.4	0.7	0.7	0.8	2.1	3.5	4.1	3.5	2.1	0.9	0.8	0.7	1.4	2.2	1.8	0.0
	Db	0.0	1.5	1.9	1.2	0.6	0.6	0.7	1.8	3.0	3.5	3.0	1.8	0.7	0.6	0.6	1.2	1.9	1.5	0.0
	Dc	0.0	0.9	1.2	0.8	0.4	0.4	0.5	1.1	1.9	2.2	1.9	1.1	0.5	0.4	0.4	0.8	1.2	1.0	0.0
	Dd	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0
	De	0.0	1.0	1.2	0.8	0.4	0.4	0.5	1.2	2.0	2.4	2.0	1.2	0.5	0.4	0.4	0.8	1.3	1.0	0.0
	D	0.0	16.3	20.1	13.2	7.0	7.3	8.2	19.7	33.0	38.6	33.0	19.8	8.4	7.5	7.2	13.5	20.5	16.6	0.0

		S1	C1	C2	C3	P4B	P4	P4A	C4	C5	C6	C7	C8	P5B	P5	P5A	C9	C10	C11	S2
		GIRDER G2	Dh	0.0	131.2	241.9	334.5	396.7	404.8	415.5	460.4	491.4	508.4	511.6	500.8	476.2	469.6	462.4	411.0	341.4
	Dst	0.0	2.1	2.7	1.9	1.1	1.2	1.3	2.7	4.3	5.0	4.3	2.7	1.3	1.2	1.1	1.8	2.6	2.1	0.0
	Dsl	0.0	8.6	10.5	6.6	3.1	3.3	3.7	9.7	16.6	19.5	16.6	9.6	3.7	3.2	3.0	6.4	10.3	8.5	0.0
	Da	0.0	1.7	2.1	1.3	0.6	0.7	0.7	1.9	3.3	3.8	3.3	1.9	0.7	0.6	0.6	1.3	2.0	1.7	0.0
	Db	0.0	1.5	1.8	1.2	0.6	0.6	0.7	1.7	2.9	3.4	2.9	1.7	0.7	0.6	0.6	1.1	1.8	1.5	0.0
	Dc	0.0	0.9	1.1	0.7	0.3	0.3	0.4	1.0	1.8	2.1	1.8	1.0	0.4	0.3	0.3	0.7	1.1	0.9	0.0
	Dd	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0
	De	0.0	1.0	1.2	0.8	0.4	0.4	0.5	1.1	1.9	2.3	1.9	1.1	0.4	0.4	0.4	0.8	1.2	1.0	0.0
	D	0.0	16.0	19.5	12.4	6.2	6.5	7.4	18.3	31.0	36.2	30.9	18.2	7.2	6.3	6.0	12.2	19.1	15.6	0.0

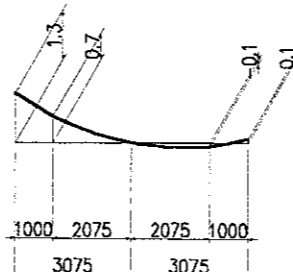
DEAD LOAD CAMBER DIAGRAM OF GIRDER
 NOT TO SCALE

- Dh : DEFLECTION DUE TO VERTICAL ALIGNMENT
- Dst : DEFLECTION DUE TO STEEL WEIGHT
- Dsl : DEFLECTION DUE TO DECK SLAB
- Da : DEFLECTION DUE TO RAILLING AND MEDIAN
- Db : DEFLECTION DUE TO PAVEMENT
- Dc : DEFLECTION DUE TO OUTER GUTTER AND MEDIAN
- Dd : DEFLECTION DUE TO FALLING FENCE FOR RAILLING
- De : DEFLECTION DUE TO FUTURE OVERLAY
- D : TOTAL DEFLECTION

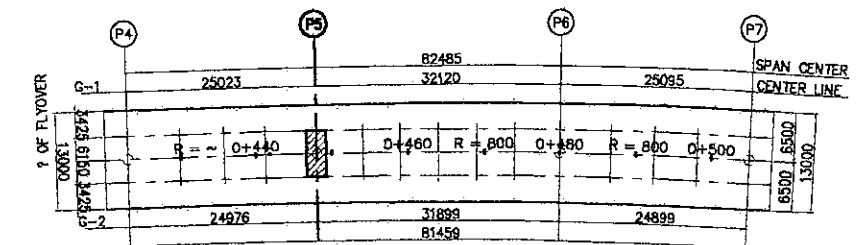
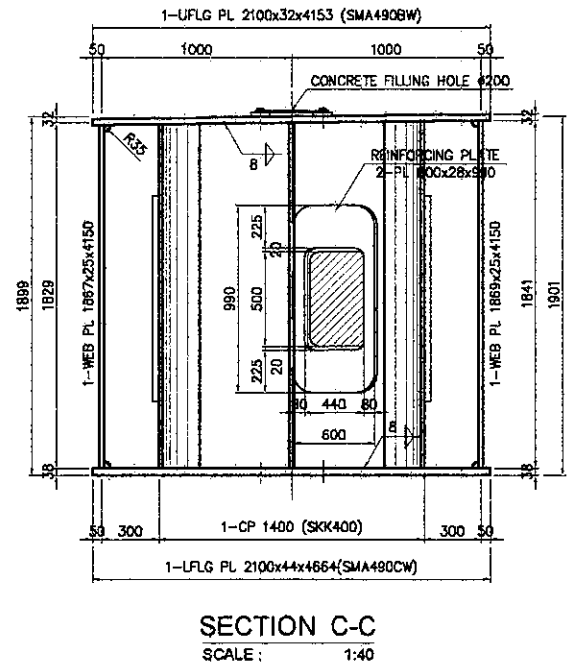
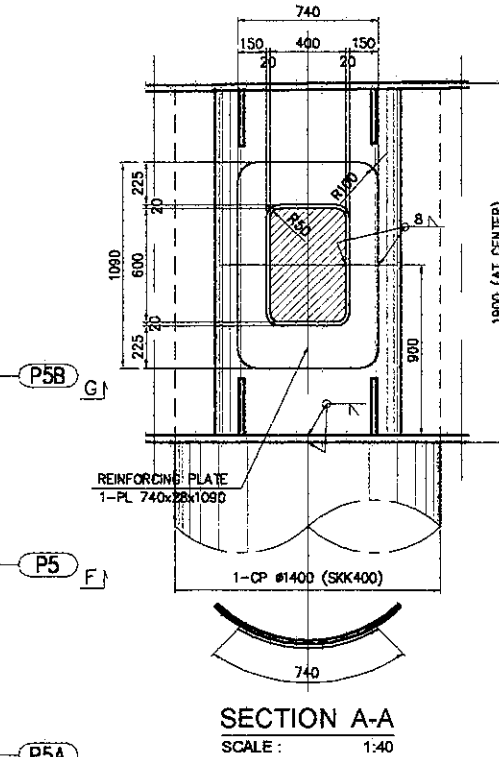
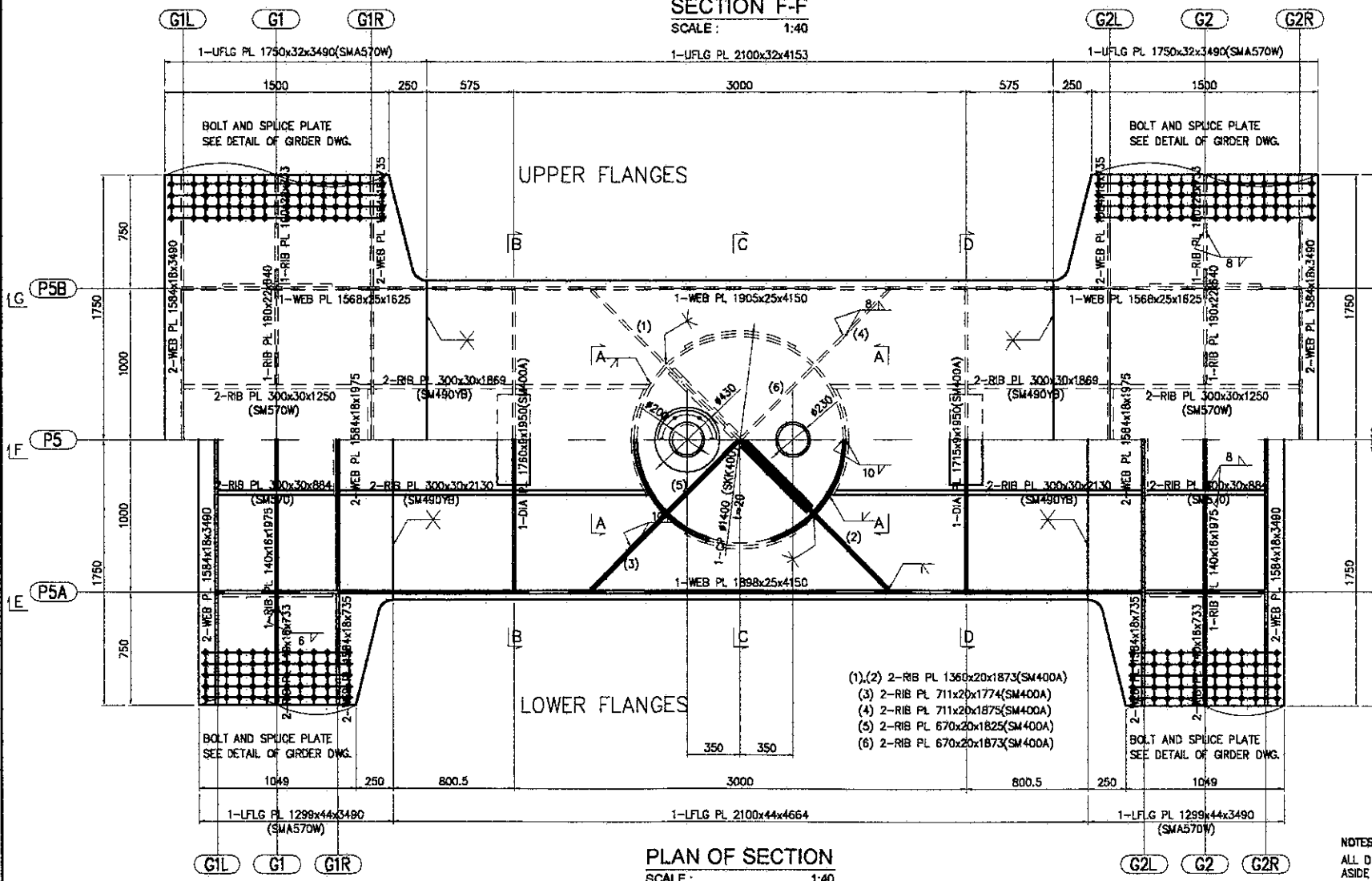
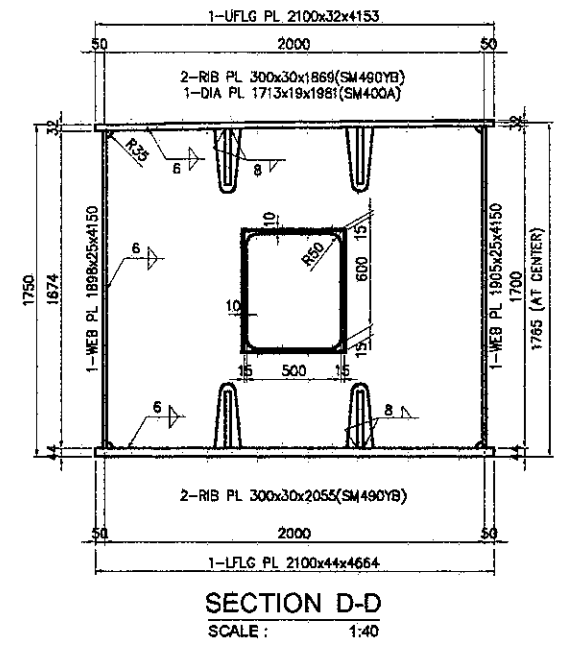
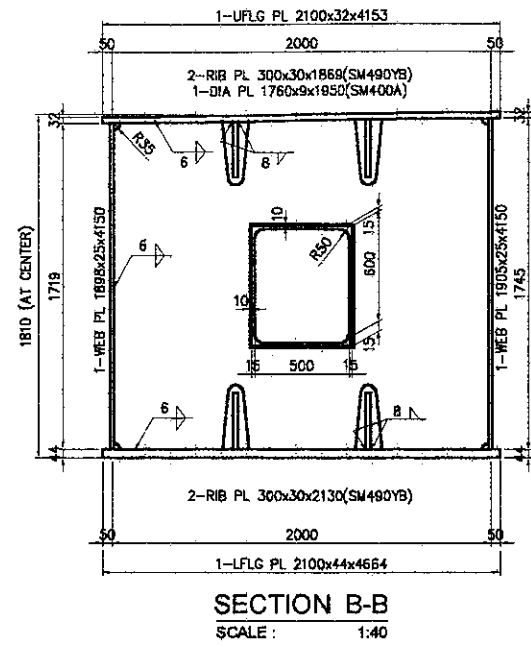
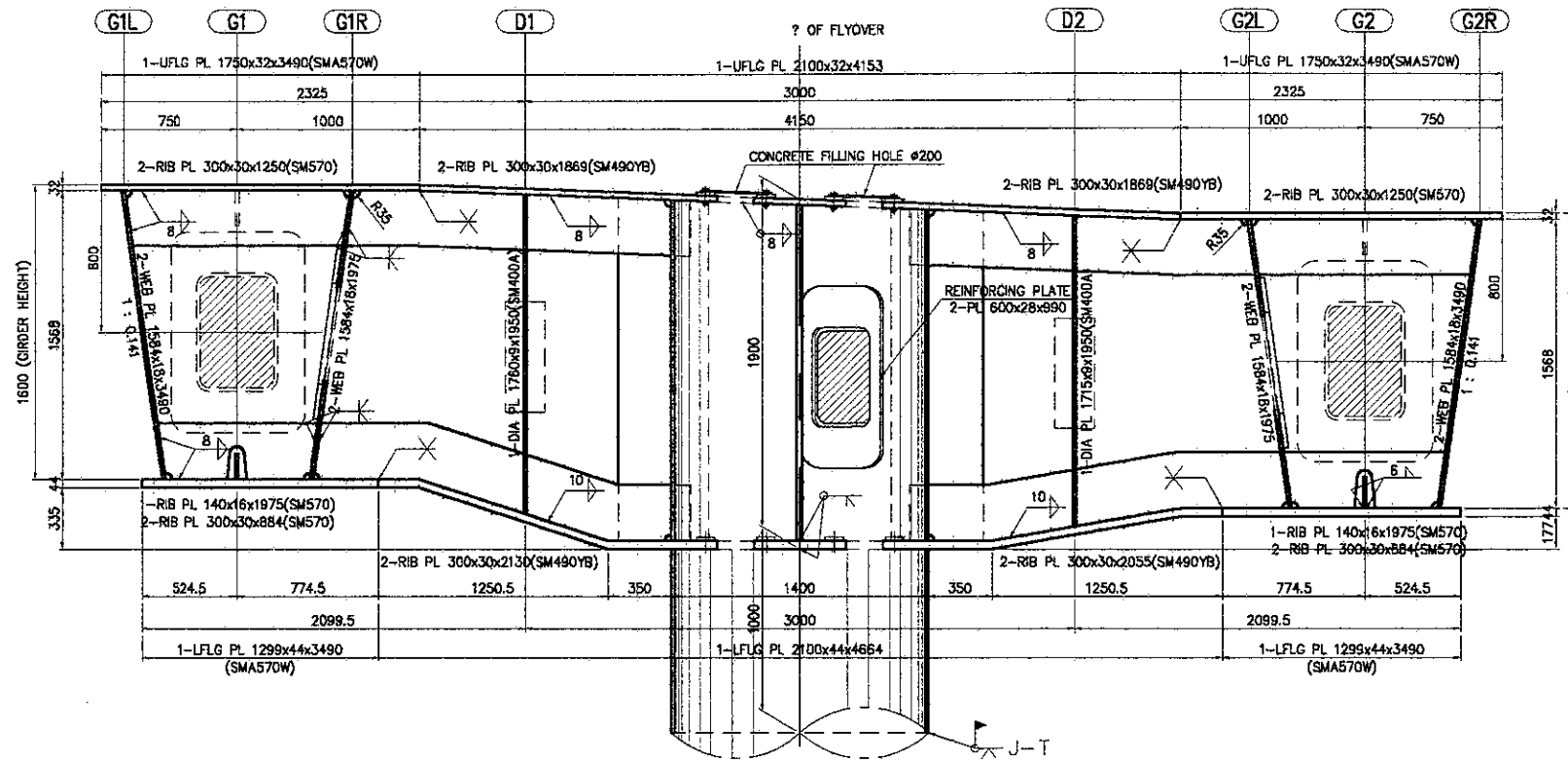
NOTES :
 ALL UNIT IN MILLIMETERS



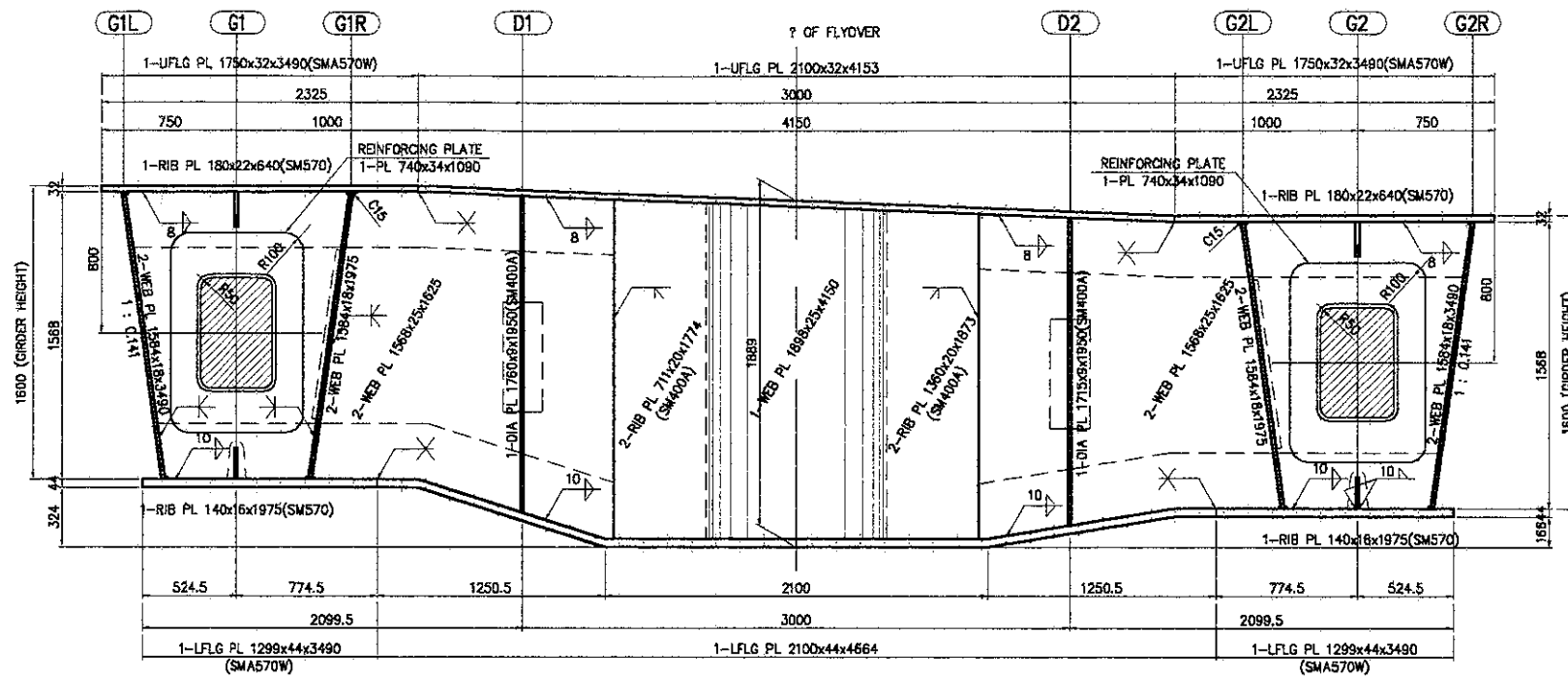
DEAD LOAD CAMBER DIAGRAM OF GIRDER OF P5
 NOT TO SCALE



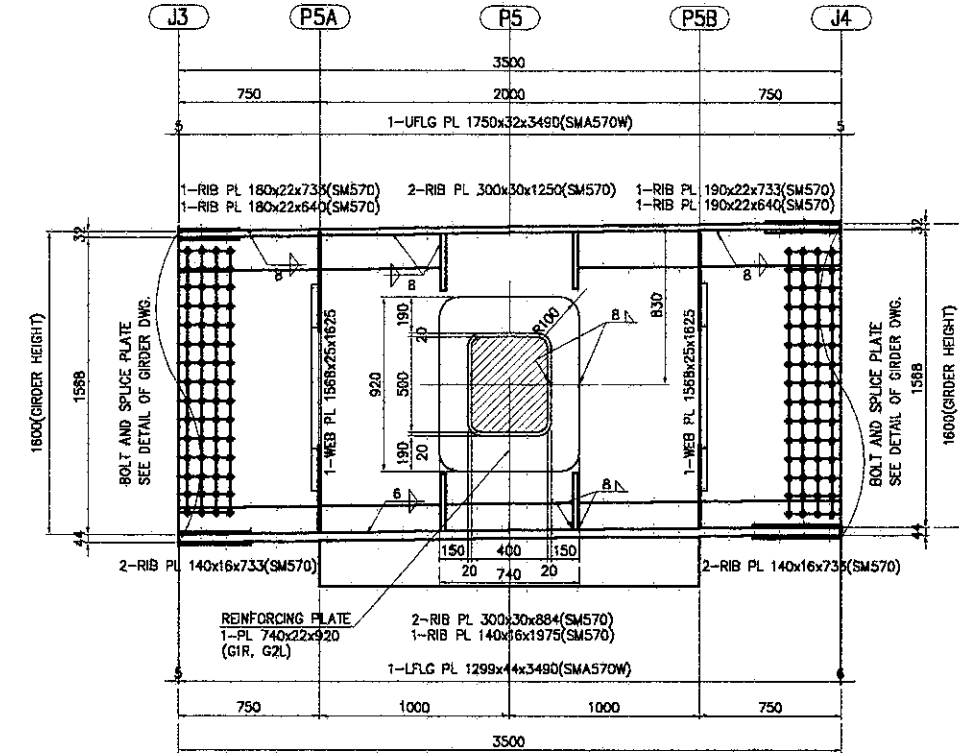
DEAD LOAD CAMBER DIAGRAM OF GIRDER OF P6
 NOT TO SCALE



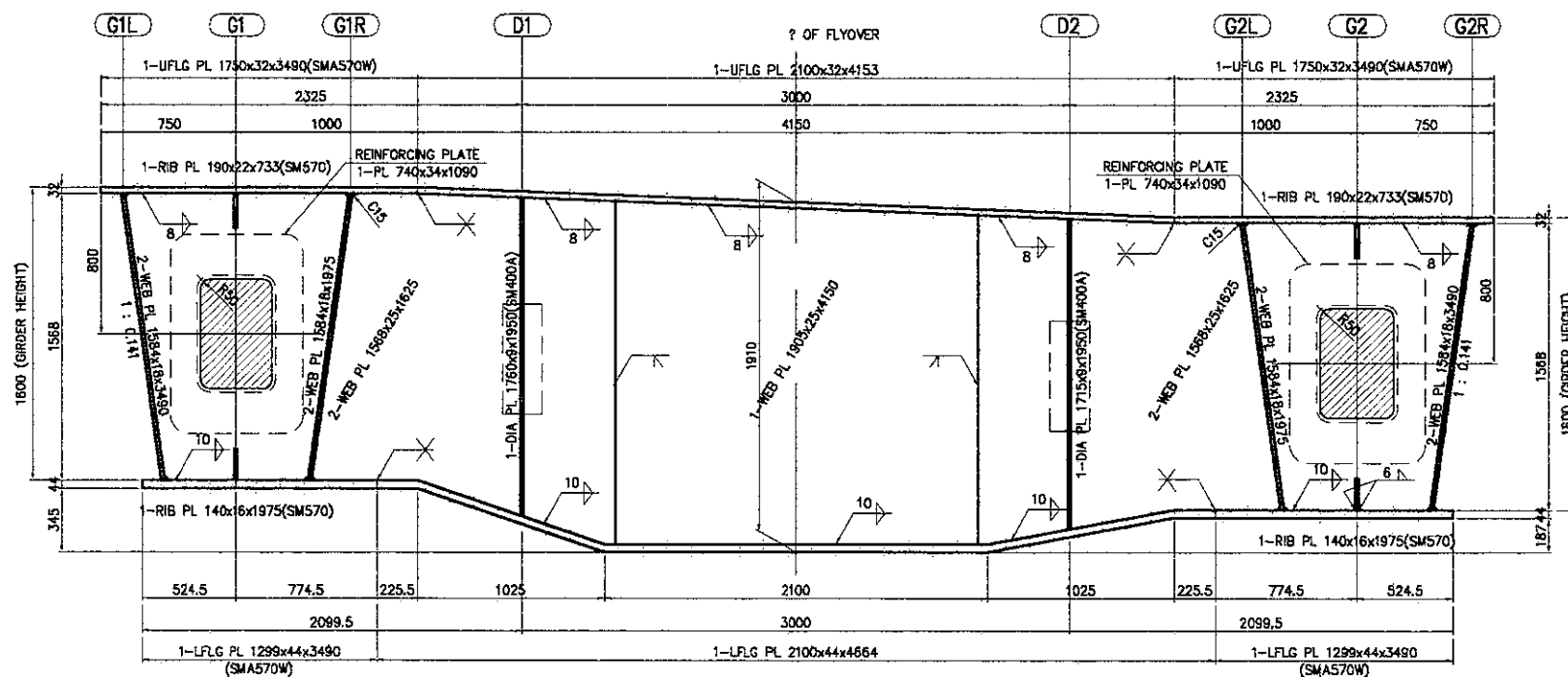
NOTES :
 ALL DIMENSIONS QUALITY OF STEEL REQUIRE OF SMA490W
 ASIDE FROM DIFFERENCE



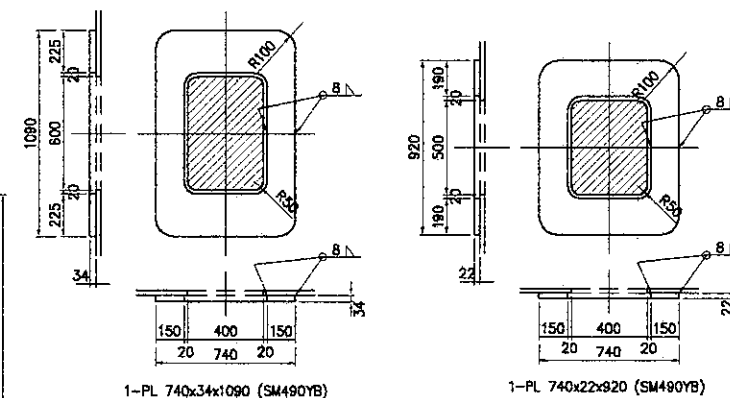
SECTION E-E
 SCALE : 1:40



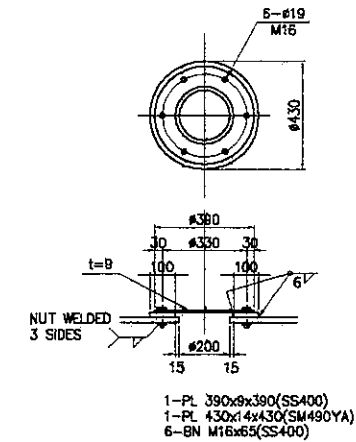
SECTION G1 (G2)
 SCALE : 1:40



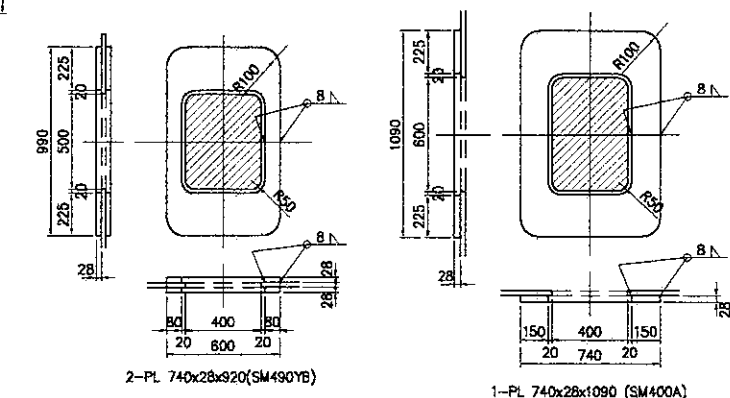
SECTION G-G
 SCALE : 1:40



MAN HOLE OF GIRDER
 SCALE : 1:40



CONCRETE FILLING HOLE OF COLUMN
 SCALE : 1:30

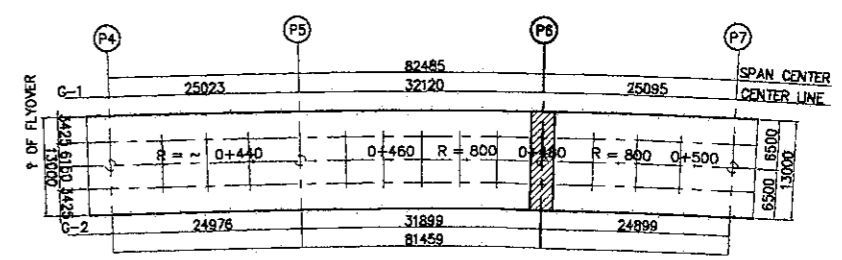
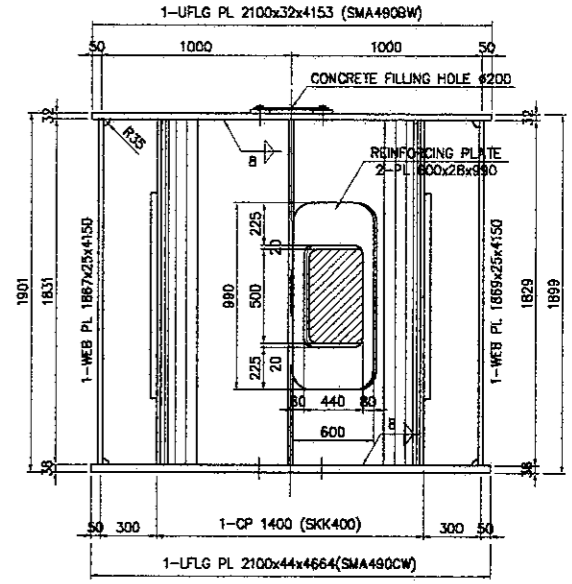
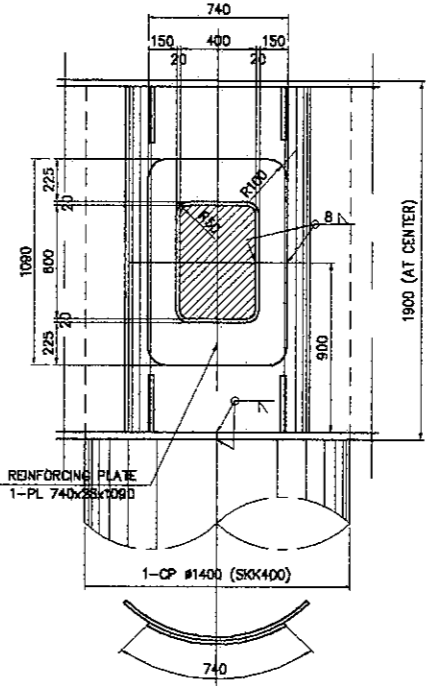
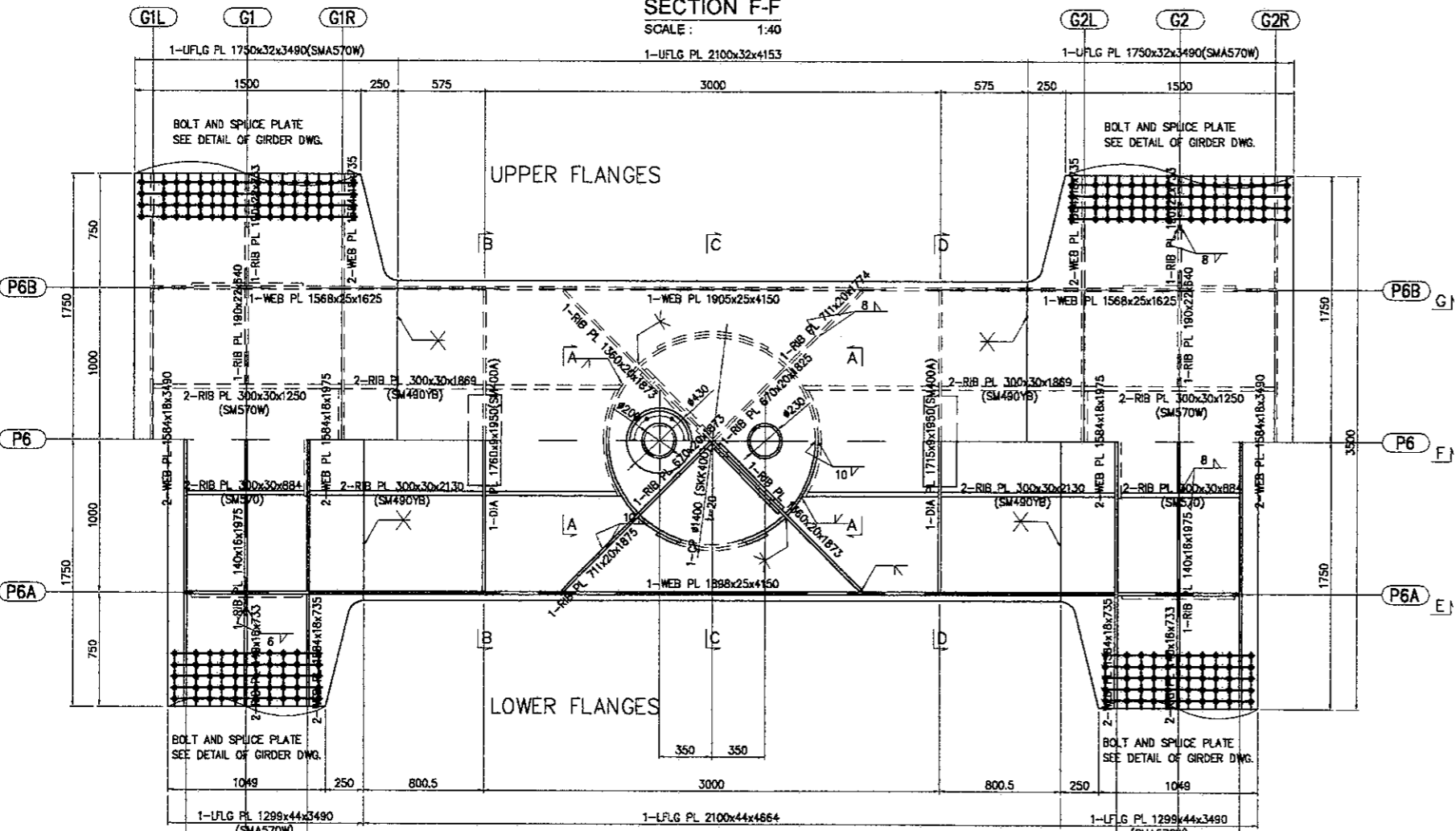
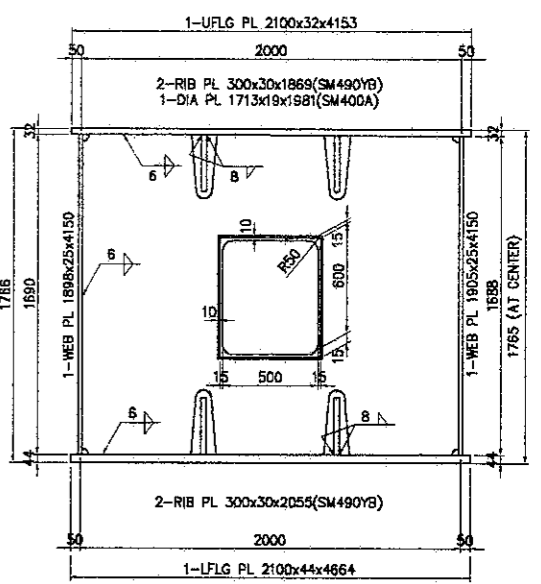
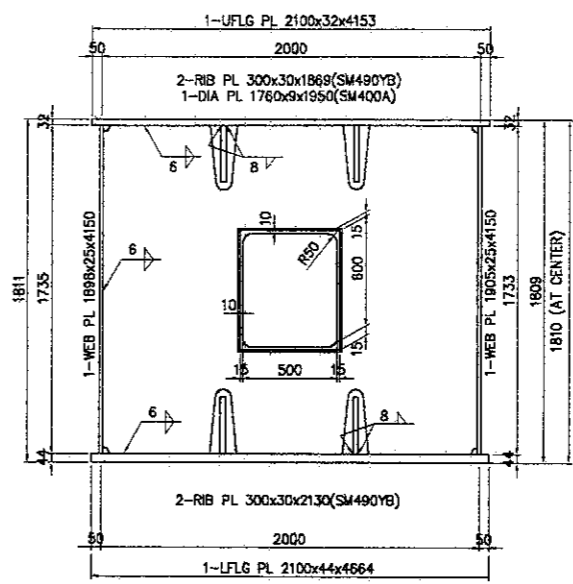
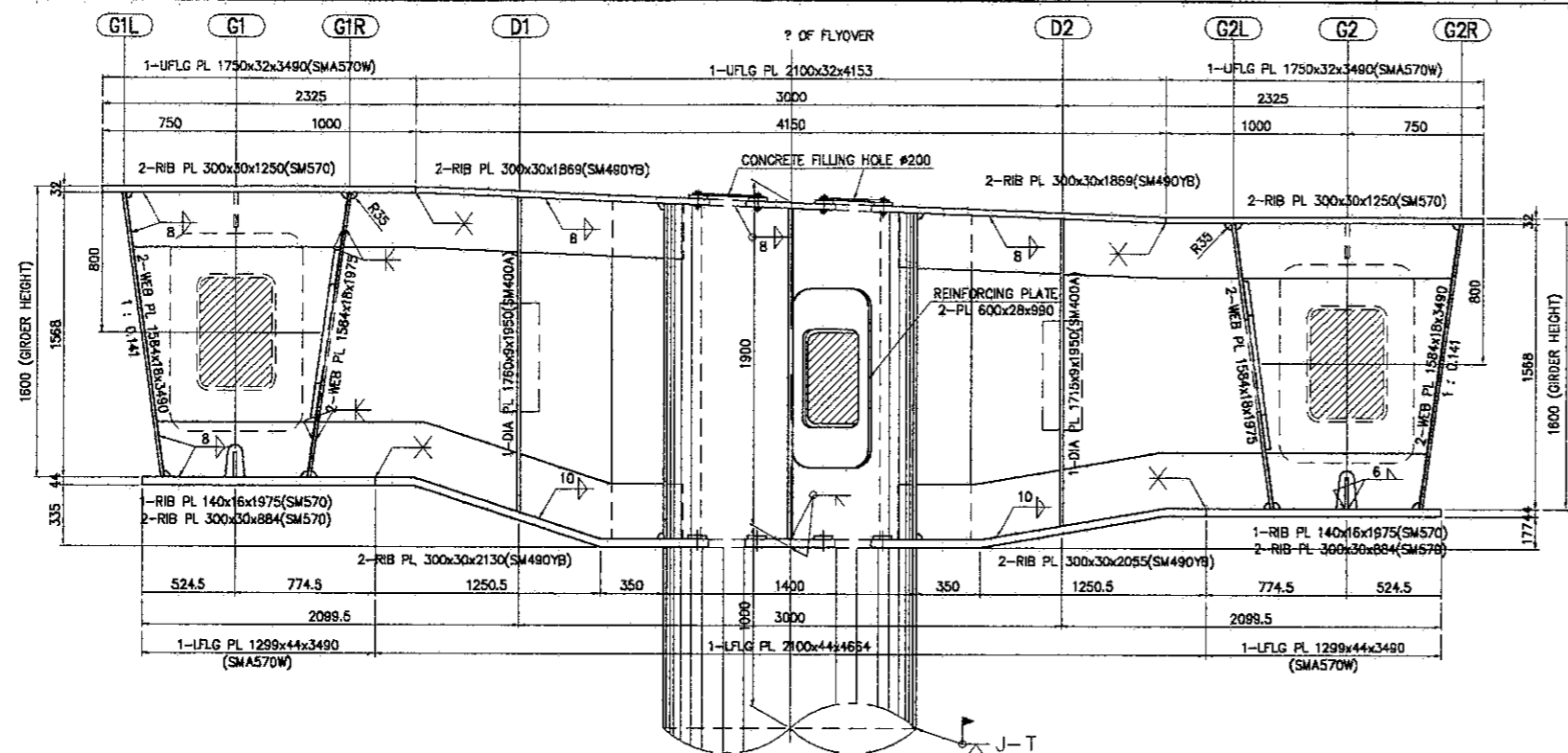


MAN HOLE OF PIER
 SCALE : 1:40

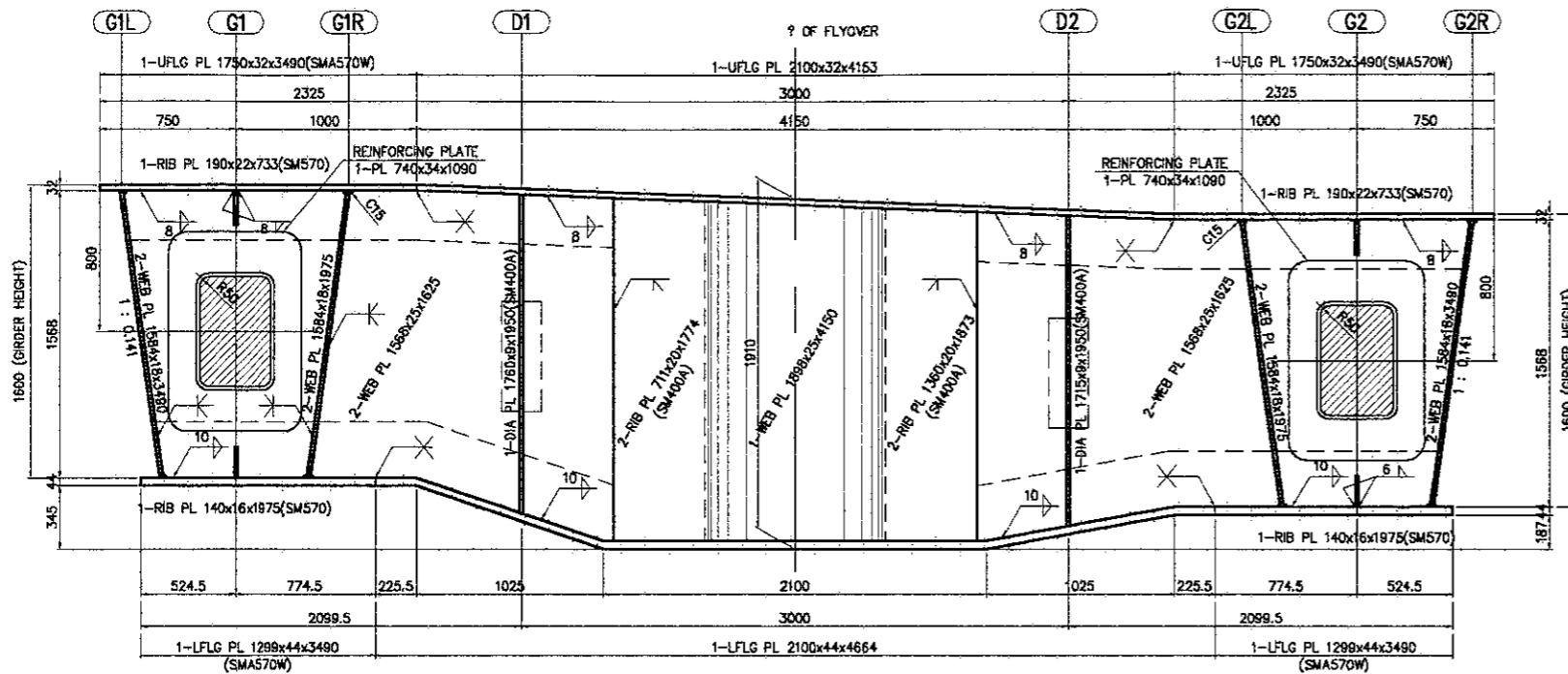
NOTES :
 ALL DIMENSIONS QUALITY OF STEEL REQUIRE OF SMA490W
 ASIDE FROM DIFFERENCE

COORDINATES AND ELEVATIONS

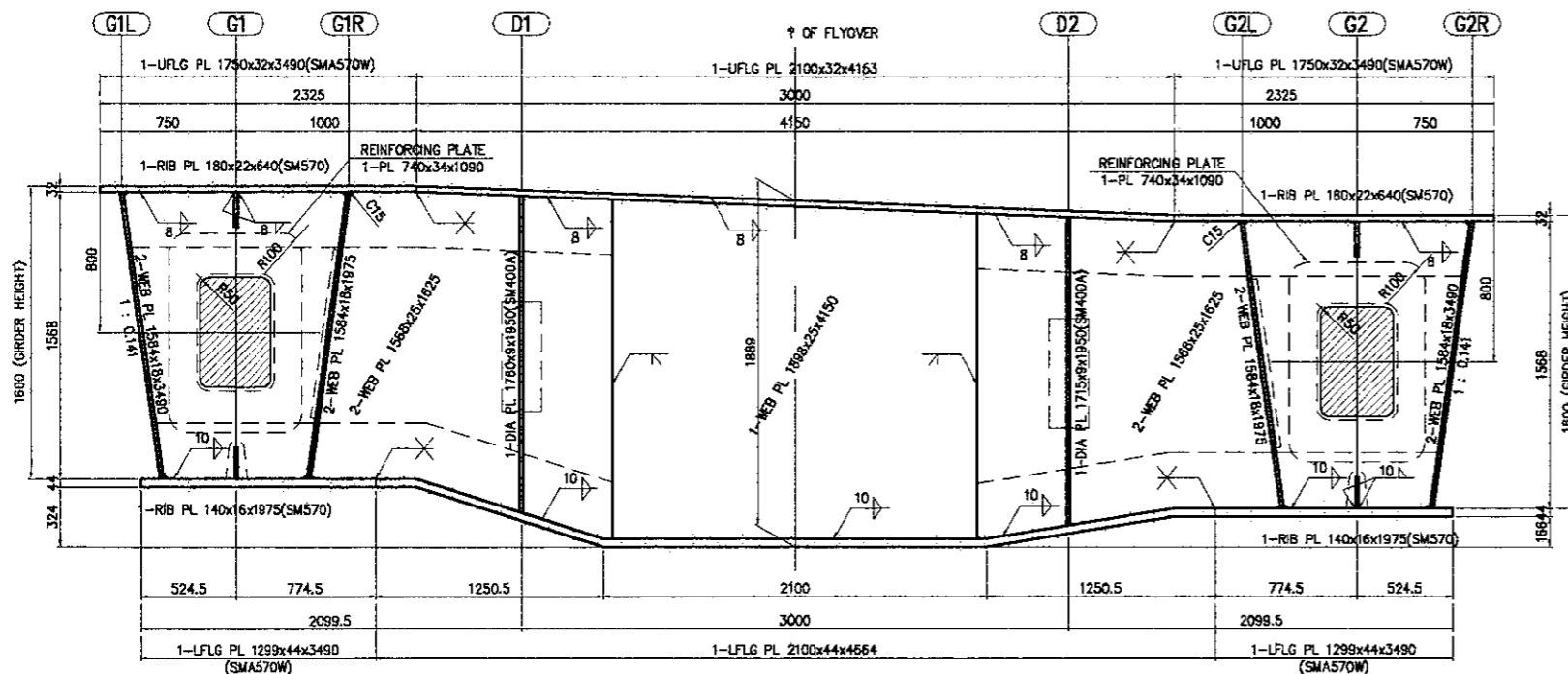
	P5A	P5	P5B
GIL X	9166251.9035	9166251.4474	9166250.9902
GIL Y	641361.0721	641361.9620	641362.8513
GIL Z	41.0609	41.0752	41.0858
G1 X	9166251.3430	9166250.8889	9166250.4297
G1 Y	641360.7843	641361.6743	641362.5636
G1 Z	41.0609	41.0752	41.0858
G1R X	9166250.7826	9166250.3284	9166248.8692
G1R Y	641360.4966	641361.3866	641362.2759
G1R Z	41.0609	41.0752	41.0858
CL X	9166248.8074	9166248.1513	9166247.6841
CL Y	641358.3801	641360.2700	641361.1593
CL Z	40.9871	40.9983	41.0089
G2L X	9166246.4323	9166245.9761	9166245.5189
G2L Y	641358.2638	641359.1534	641360.0428
G2L Z	40.9133	40.9214	40.9321
G2 X	9166245.8718	9166245.4157	9166244.9584
G2 Y	641357.9758	641358.8657	641359.7551
G2 Z	40.9133	40.9214	40.9321
G2R X	9166245.3113	9166244.8552	9166244.3980
G2R Y	641357.6881	641358.5780	641359.4674
G2R Z	40.9133	40.9214	40.9321



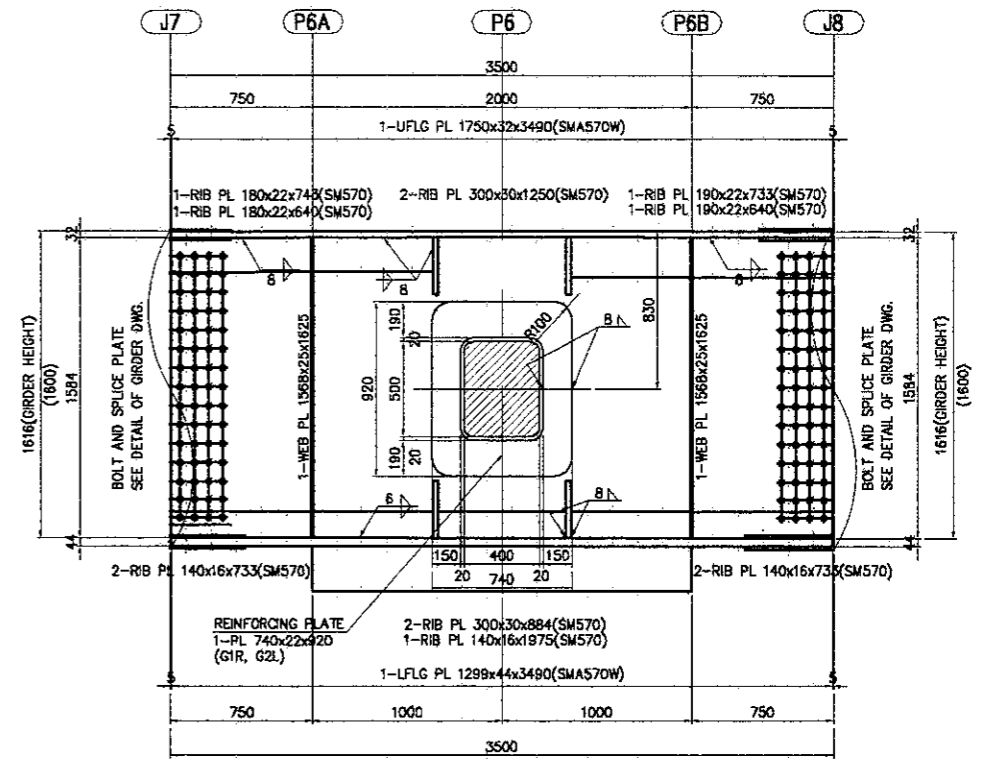
NOTES :
 ALL DIMENSIONS QUALITY OF STEEL REQUIRE OF SM490W
 ASIDE FROM DIFFERENCE



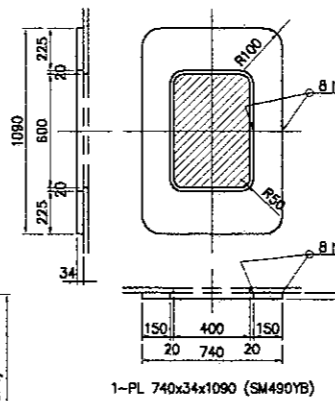
SECTION E-E
 SCALE: 1:40



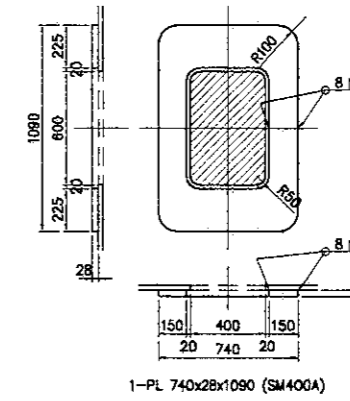
SECTION G-G
 SCALE: 1:40



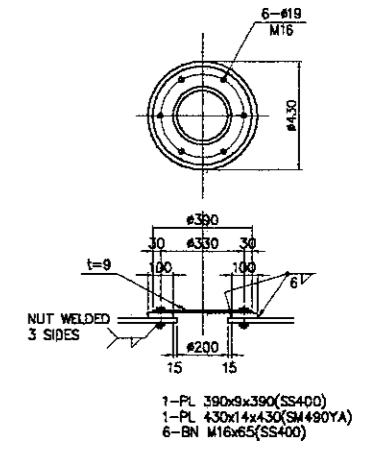
SECTION G1 (G2)
 SCALE: 1:40



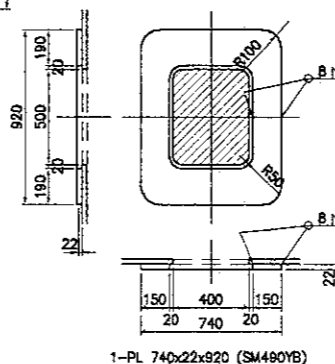
MAN HOLE OF GIRDER
 SCALE: 1:40



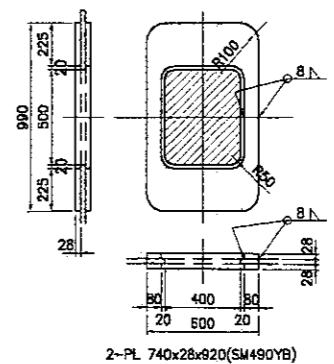
MAN HOLE OF GIRDER
 SCALE: 1:40



CONCRETE FILLING HOLE OF COLUMN
 SCALE: 1:30



MAN HOLE OF PIER
 SCALE: 1:40



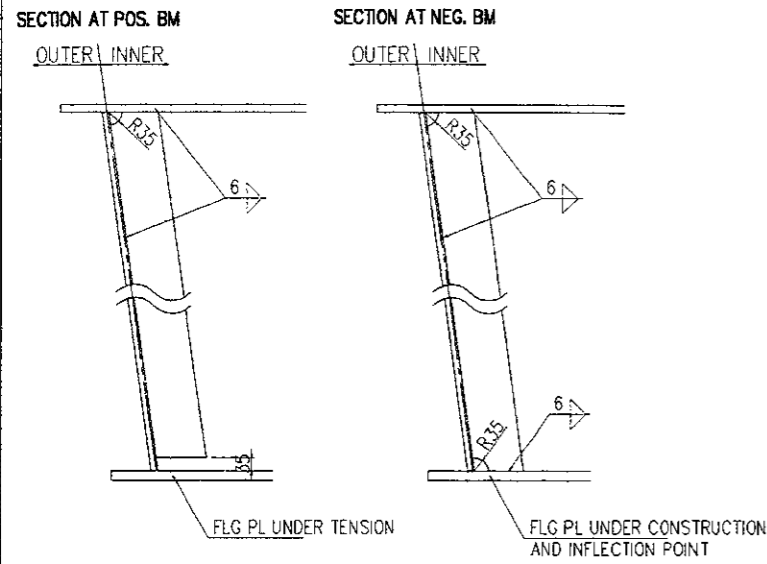
MAN HOLE OF PIER
 SCALE: 1:40

NOTES :
 ALL DIMENSIONS QUALITY OF STEEL REQUIRE OF SM490W
 ASIDE FROM DIFFERENCE

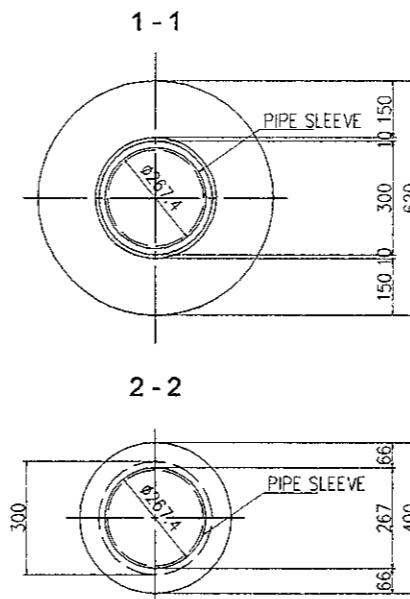
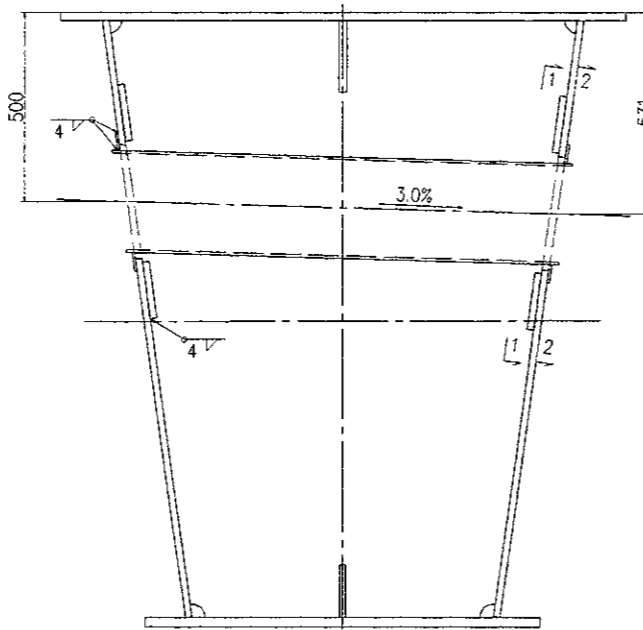
COORDINATES AND ELEVATIONS

	P6A	P6	P6B
G1L X	9166236.6895	9166236.1981	9166235.7057
G1L Y	641389.3899	641390.2609	641391.1313
G1L Z	41.1465	41.1399	41.1328
G1 X	9166236.1410	9166235.6496	9166235.1572
G1 Y	641389.0800	641389.9510	641390.8214
G1 Z	41.1465	41.1399	41.1328
G1R X	9166235.5824	9166235.1011	9166234.6087
G1R Y	641388.7702	641388.6411	641389.5115
G1R Z	41.1465	41.1399	41.1328
D1 X	9166233.4637	9166232.9723	9166232.4799
D1 Y	641387.5675	641388.4385	641389.3088
D1 Z	41.0696	41.0630	41.0559
D2 X	9166231.3348	9166230.8436	9166230.3511
D2 Y	641386.3648	641387.2358	641388.1062
D2 Z	40.9928	40.9862	40.9790
G2L X	9166230.7864	9166230.2951	9166229.8026
G2L Y	641386.0550	641386.9259	641387.7963
G2L Z	40.9928	40.9862	40.9790
G2 X	9166230.2579	9166229.7465	9166229.2541
G2 Y	641385.7451	641386.6160	641387.4854
G2 Z	40.9928	40.9862	40.9790

DETAIL OF VERTICAL WEB STIFFENER



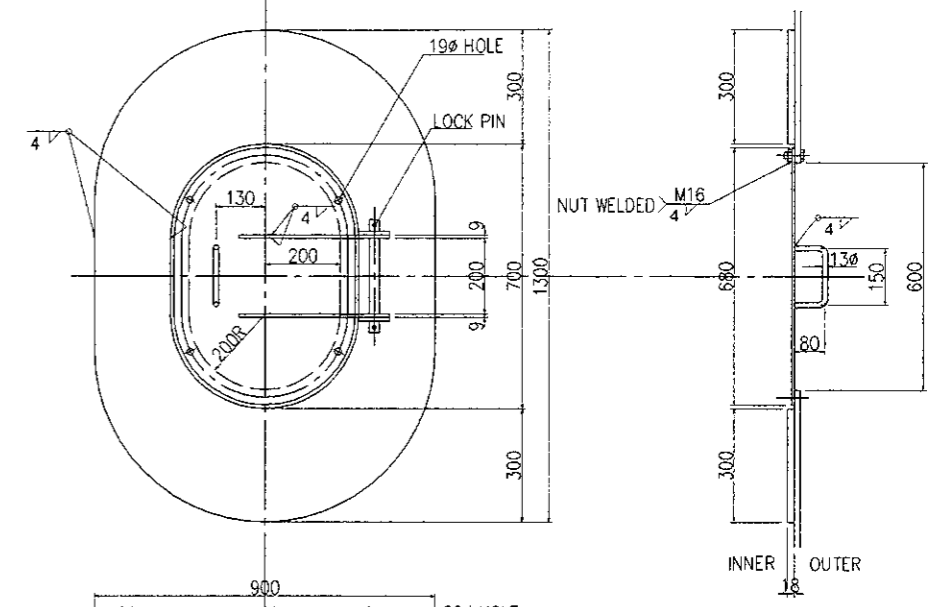
DETAIL OF WEB HOLE FOR DRAIN PIPE



2-PL 620x18x620(SM490YB)
 2-PL 400x6x400(SMA400AW)
 1-PIPE Ø267.4x6.6x1225(STK400)

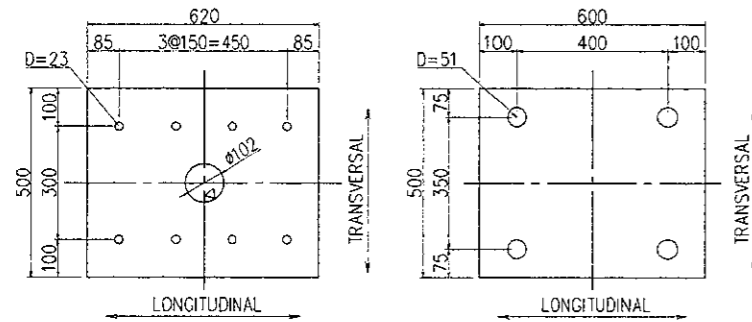
DETAIL OF DRAIN PIPE CROSSING
 SCALE : 1:20

DETAIL OF MAN HOLE



1-PL 1300x18x900(SM490YB)
 1-PL 480x9x680(SMA400AW)
 2-PL 140x9x400(SMA400AW)
 2-PL 80x9x100(SMA400AW)
 1-RB 130x310(SR235)
 4-BN M16x45(SS400)
 1-PIPE 20Ax280(SGP)
 (2-ROCK PIN)

DETAIL OF SOLE PLATE



1-SOLE PL 500x18x620

BEARING SOLE PLATE THICKNESS

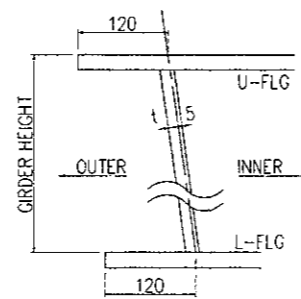
	S1(P4)		S2(P7)	
	G1	G2	G1	G2
t1	22.0	22.0	33.7	33.7
t2	30	29	28	28
t3	38.0	36.0	22.3	22.3
tw	40	38	36	36

1-SOLE PL 500x18x600

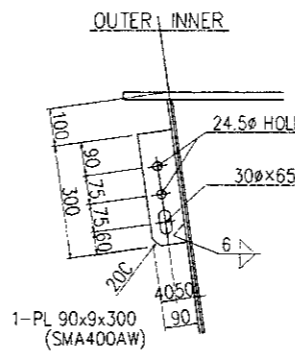
STOPPER SOLE PLATE THICKNESS

	S1(P3)		S2(P6)	
	G1	G2	G1	G2
t1	22.3	22.2	33.6	33.6
t2	30	29	28	28
t3	37.7	35.8	25.2	25.2
tw	40	38	36	36

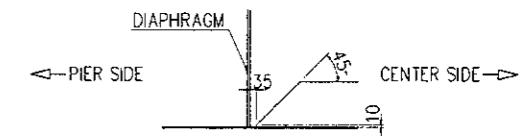
DIMENSION OF GIRDER



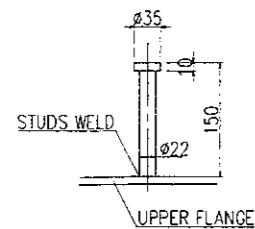
DETAIL OF HANGER



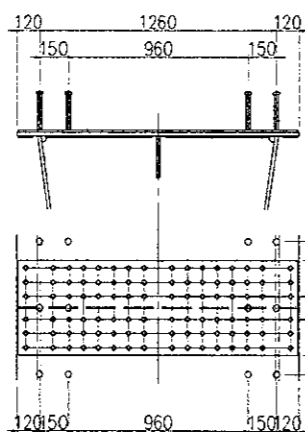
DETAIL OF LOG RIB



DETAIL OF STUDS (CONNECTION TO U-FLG)
 SCALE : 1:10

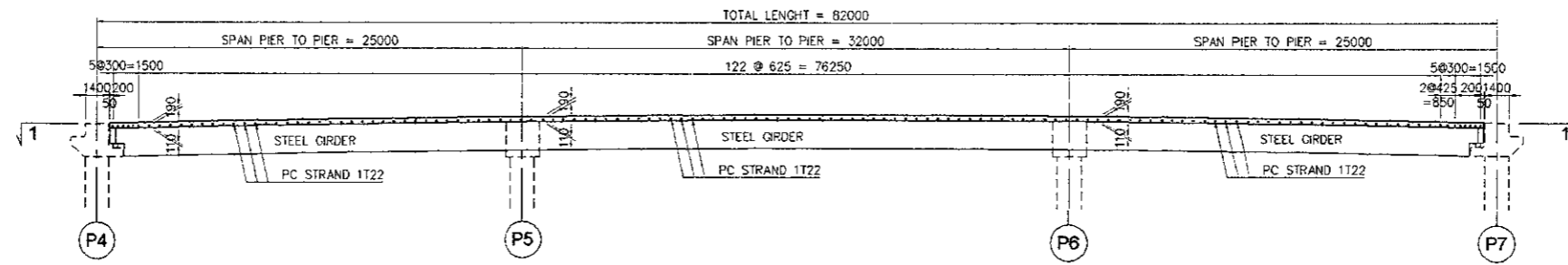


STUDS SHALL BE WELDED TO UPPER SPLICE PLATE

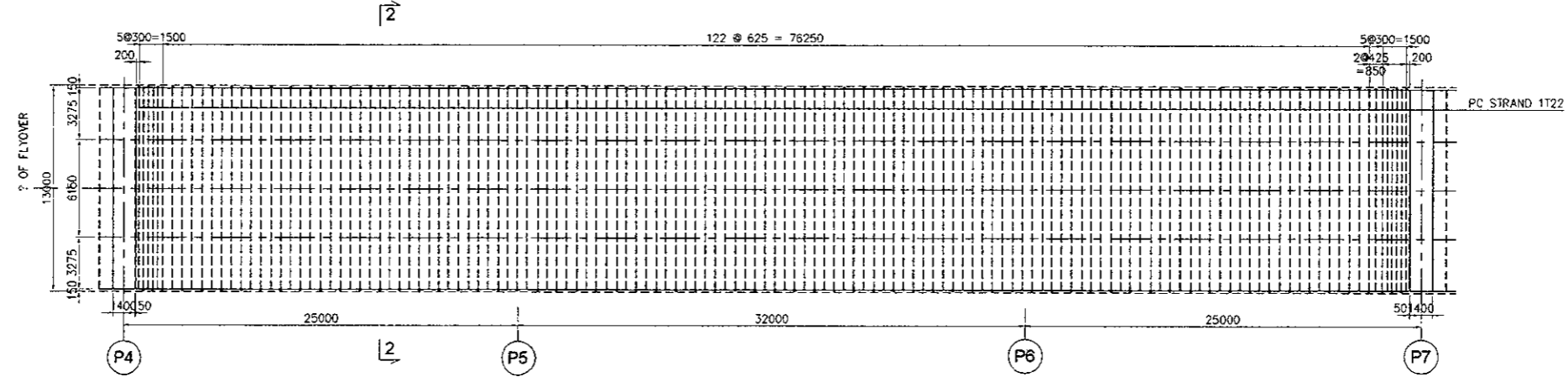


SPAN LENGTH	350	23924	32123	23996	350															
MEMBER LENGTH	3250	9550	9724	3500	8456	11712	8456	3500	9744	9589	3263									
STUDS SPACING	250	550	15@600	424	15@600	7@350	13@600	356	18@600=10800	356	13@600	7@350	15@600	444	15@600	563	250			
	7@300	550	=9000	500	=9000	525	525	=7800	300	456	300	525	525	=9000	300	=9000	589	7@300		
	=2100																			
	(P4)	(J-1)	(J-2)	(J-3)	(J-4)	(J-5)	(J-6)	(J-7)	(J-8)	(J-9)	(J-10)	(P7)								
	40NOS	64NOS	68NOS	36NOS	60NOS	76NOS	60NOS	36NOS	68NOS	64NOS	40NOS									
	G-1																			
	40NOS	64NOS	68NOS	36NOS	60NOS	76NOS	60NOS	36NOS	68NOS	64NOS	40NOS									
	G-2																			
	40NOS	64NOS	68NOS	36NOS	60NOS	76NOS	60NOS	36NOS	68NOS	64NOS	40NOS									
	7@300	15@600	15@600	525	525	400	378	400	12@600	7@350	15@600	300	15@600	511	2100	537	250			
STUDS SPACING	250	550	=9000	376	300	=9000	=2450	=7200	400	411	18@600=10800	411	400	=7200	=2450	=9000	356	=9000	511	2100
MEMBER LENGTH	3250	9550	9676	3500	8378	11622	8378	3500	9656	9511	3237									
SPAN LENGTH	350	23876	31877	23804	350															

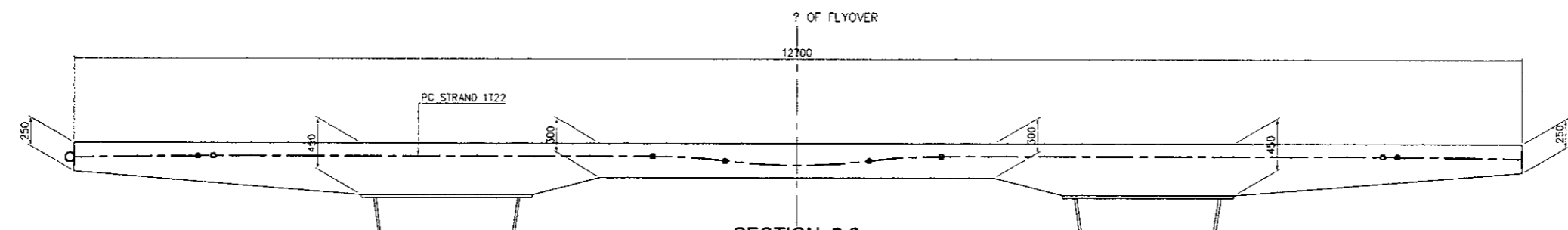
STUDS SPACING
 SCALE : 1:400



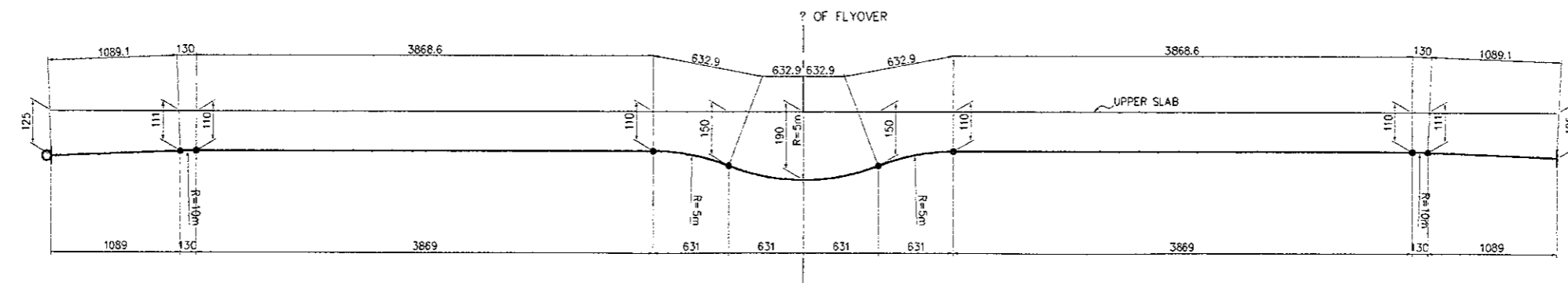
SIDE ELEVATION
 SCALE : 1:400



SECTION 1-1
 SCALE : 1:400



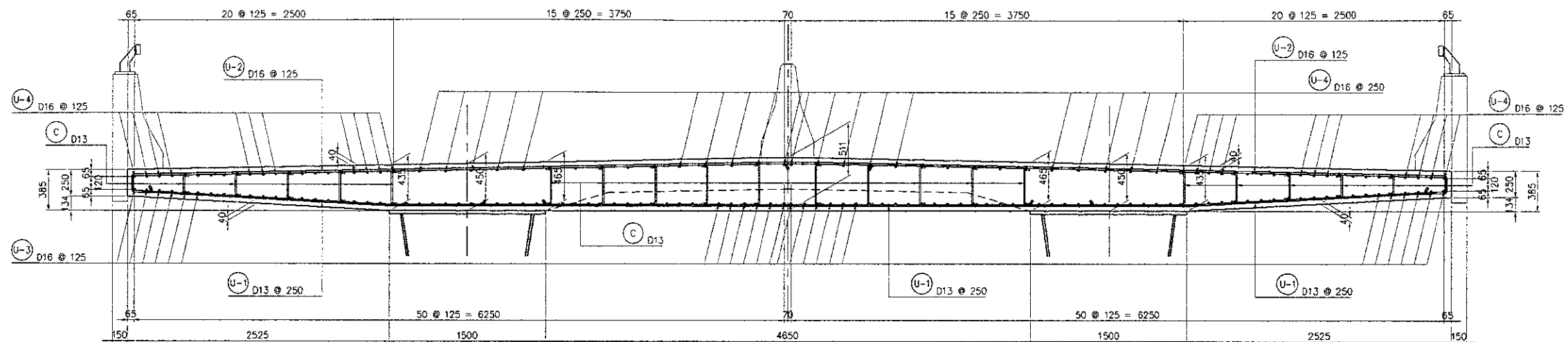
SECTION 2-2
 SCALE : 1:50



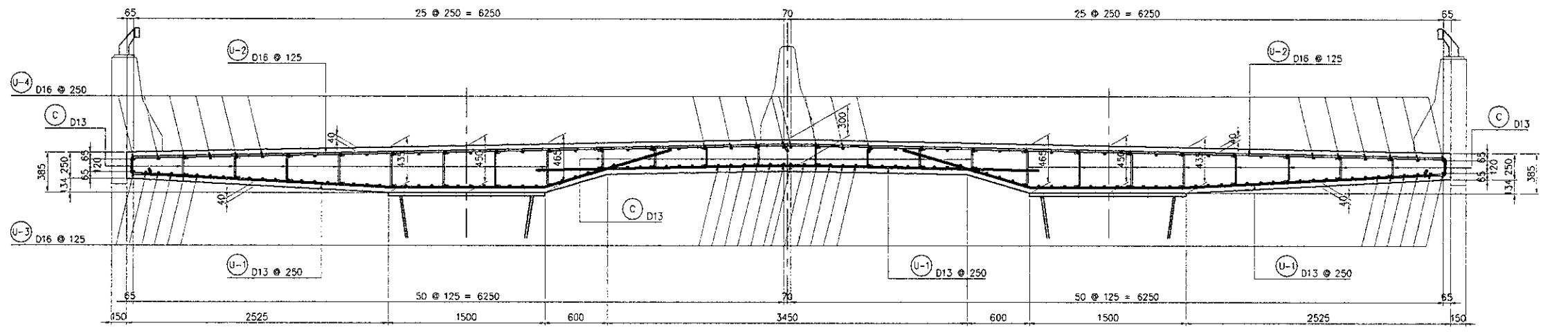
PC CABLE PROFILE
 SCALE : 1:50

TABLE OF DECK SLAB PC CABLES 1T22 (Ø21.8 mm)

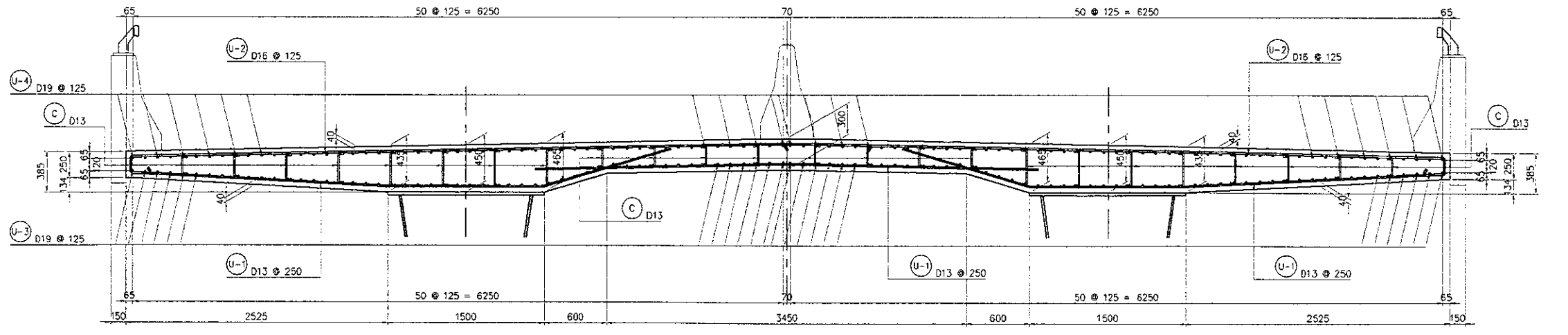
Length (m)	NOS	Unit Weight (kg/m)	Weight / 1 nos (kg)	Weight (kg)	Remarks
12.710	135	2.462	31.55	4,258.74	STRESSING ANCHORAGE ONE SIDE STAGERED
TOTAL LENGTH (L) = 1,715.85 m					
TOTAL WEIGHT (W) = 4,258.74 kg					



TYPICAL CROSS SECTION REINFORCEMENT AT EXP. JOINT
 SCALE : 1:50



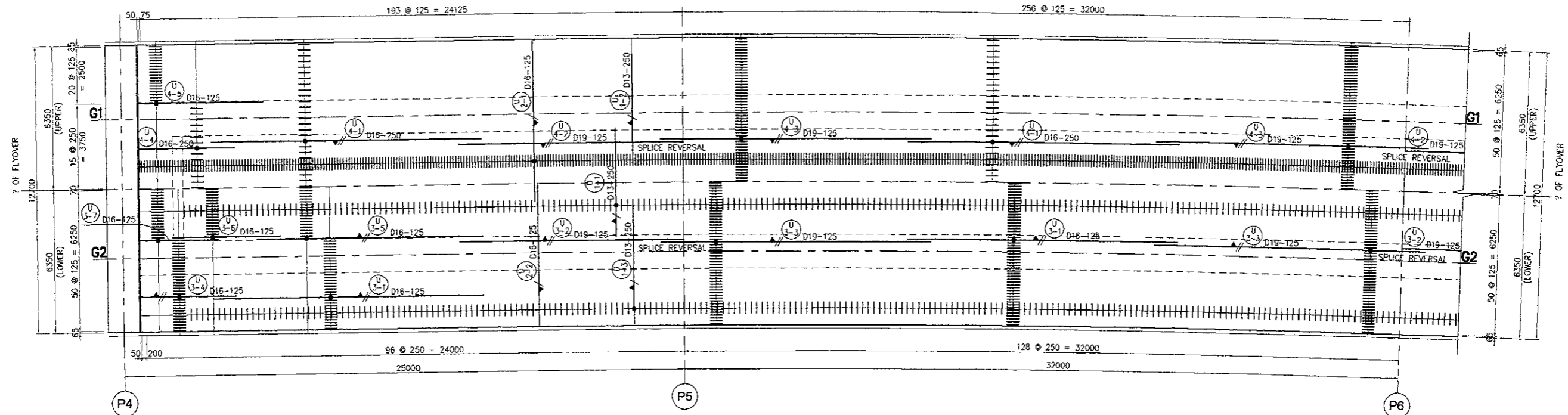
TYPICAL CROSS SECTION REINFORCEMENT AT MIDSPAN
 SCALE : 1:50



TYPICAL CROSS SECTION REINFORCEMENT AT PIER
 SCALE : 1:50

TRANSVERSAL REBAR, LOWER	: U-1
TRANSVERSAL REBAR, UPPER	: U-2
LONGITUDINAL REBAR, LOWER	: U-3
LONGITUDINAL REBAR, UPPER	: U-4
ERECTION REBAR	: C
REBAR CLEAR COVER	: 40 mm, ALL

- NOTES :
- ALL DIMENSION ARE IN MILLIMETER UNLESS NOTED OTHERWISE
 - CONCRETE . f_c' = 35 MPa
 - REBARS, BSTD 40, f_y = 400 MPa
 - THE CONTRACTOR SHALL BE RESPONSIBLE TO CARRY OUT THE FOLLOWING BEFORE CONSTRUCTION :
 - VERIFICATION OF ALL ELEVATIONS AND DIMENSIONS, USING ACTUAL FIELD SURVEY
 - PREPARATION AND SUBMISSION OF SHOP DRAWINGS FOR ALL BRIDGE COMPONENTS FOR THE ENGINEERS APPROVAL



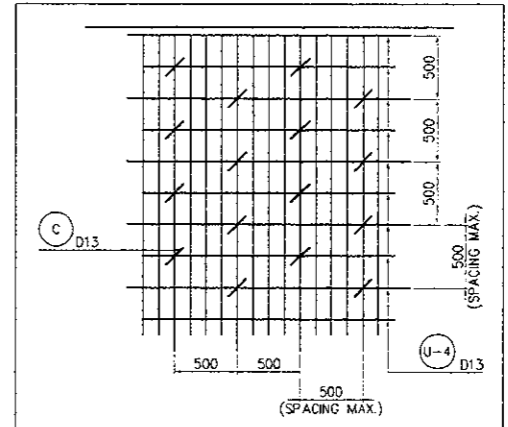
DECK SLAB REINFORCEMENT ARRANGEMENT P4 - P6
 SCALE : 1:200

DECK POURING SEQUENCE :
 TO CONTROL THE EFFECTS OF CONCRETE SHRINKAGE THE DECK IS TO BE POURED IN SECTIONS NOT EXCEEDING 30 METRES IN LENGTH WITH A MINIMUM SEVEN (7) DAY DELAY BETWEEN ADJOINING POURS. A STAGGERED SEQUENCE OF POURS MAY BE USED.

REBARS NOTATION :

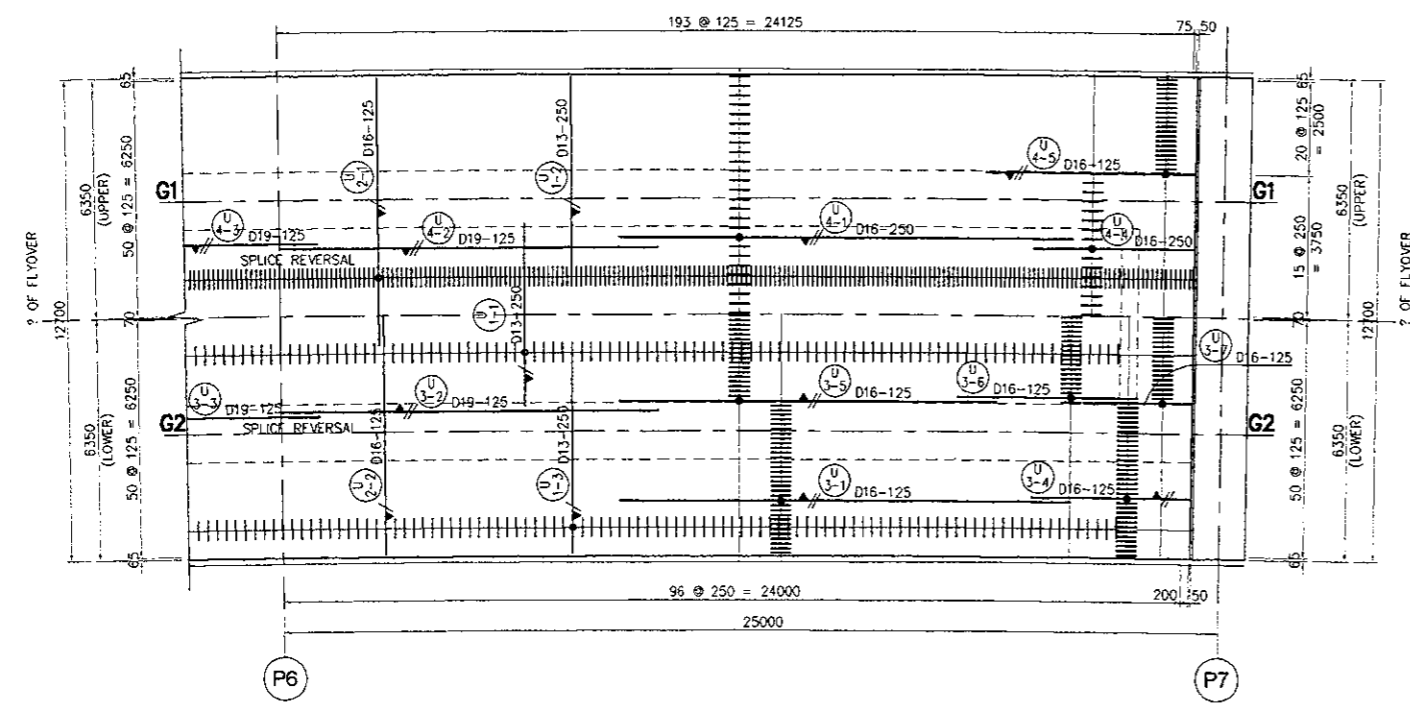
- ↖ DENOTES TOP REBARS 1st LAYER
- ↗ DENOTES TOP REBARS 2nd LAYER
- ↙ DENOTES BOTTOM REBARS 1st LAYER
- ↘ DENOTES BOTTOM REBARS 2nd LAYER

ERECTION BAR SPACING (3 NOS/Sq.m)

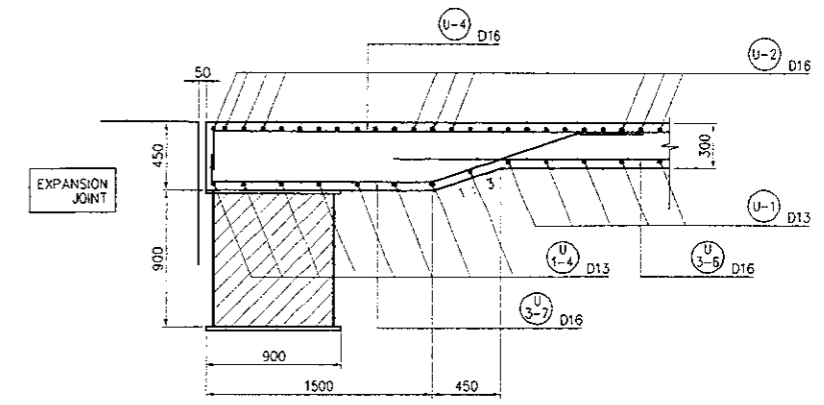


CLEAR COVERS :

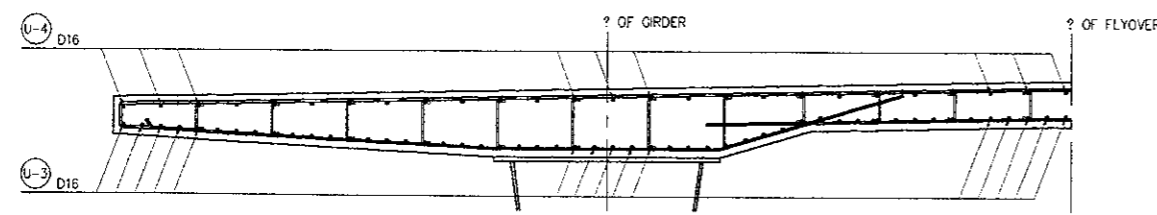
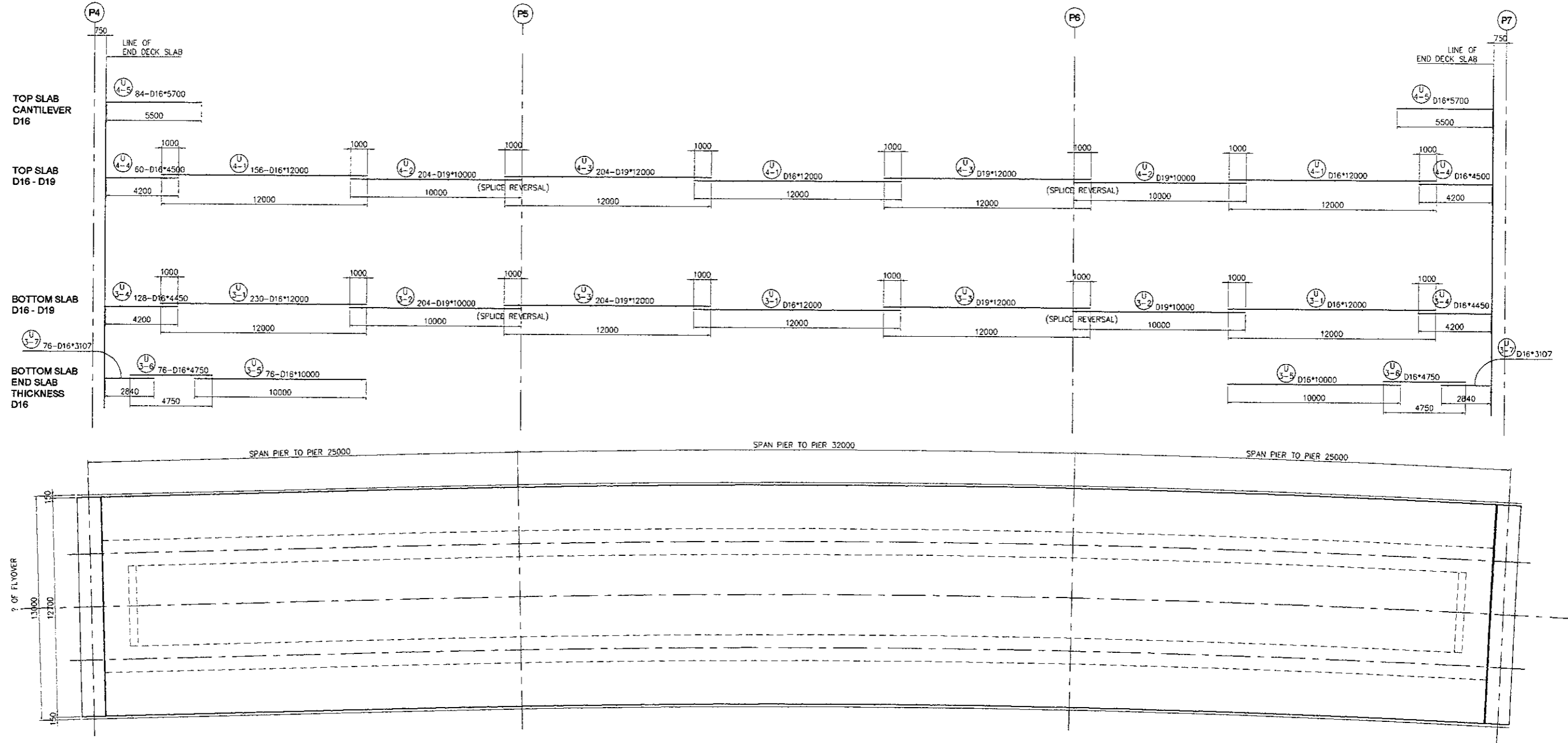
TOP : 40 MM
 BOTTOM : 40 MM
 SIDE : 40 MM



DECK SLAB REINFORCEMENT ARRANGEMENT P6 - P7
 SCALE : 1:200



SECTION AT END SLAB THICKNESS
 SCALE : 1:50

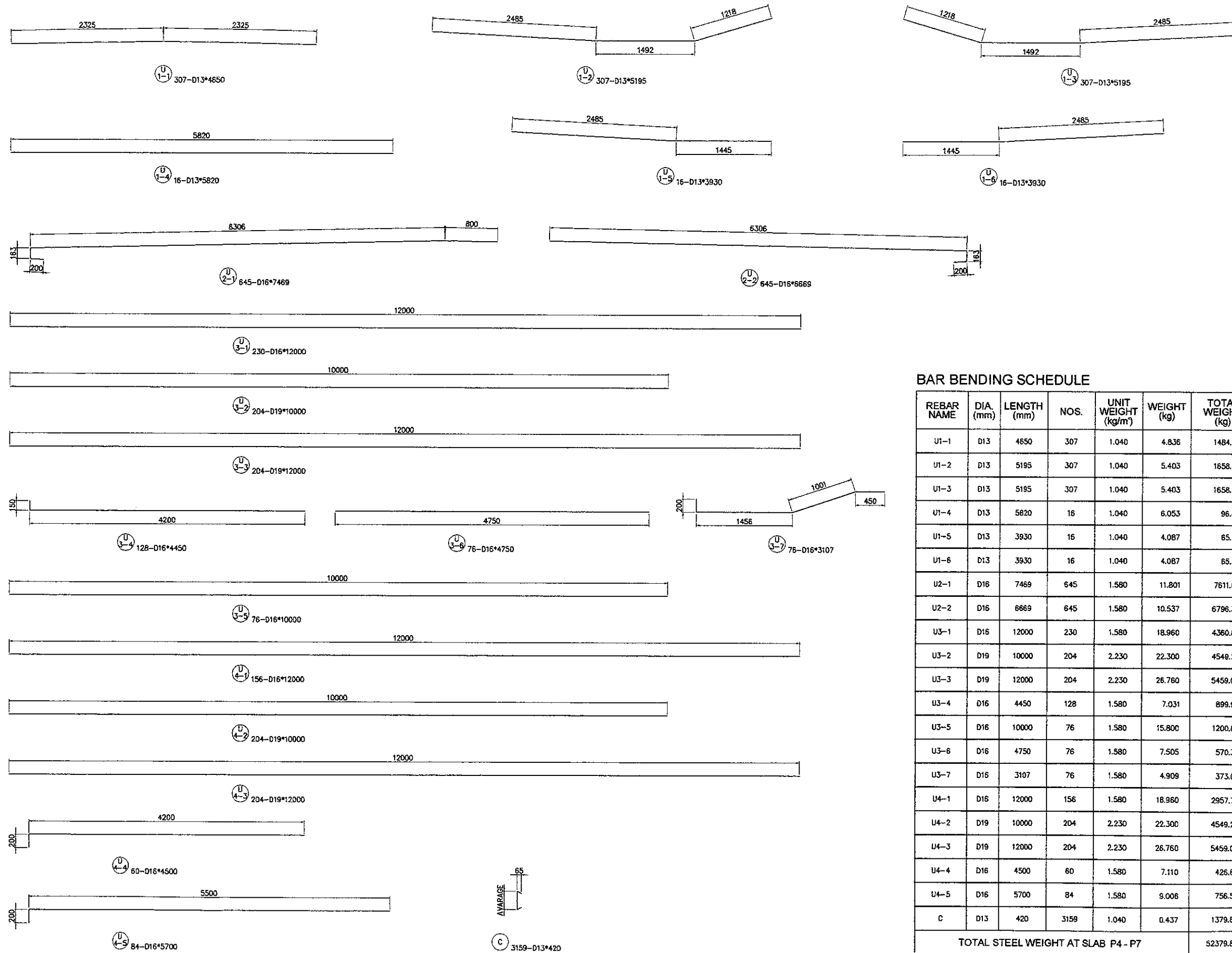


SPLICE LENGTH

TRANVERSAL	D13	600
	D16	800
LONGITUDINAL	D16 to D19	1000

STANDARD HOOKS

BENDING ANGLE OF REBARS	FIGURE	DIAMETER OF REBARS	DIAMETER OF BEND OF REBARS OUT TO OUT	STRAIGHT EXTENSION LENGTH
90°		D10 TO 16 GENERAL	6 db	6 db
		D10 TO 16 STIRRUP AND TIES	4 db	6 db
		D32	6 db	12 db
135°		D10 to D25	8 db	6 db



BAR BENDING SCHEDULE

REBAR NAME	DIA. (mm)	LENGTH (mm)	NOS.	UNIT WEIGHT (kg/m)	WEIGHT (kg)	TOTAL WEIGHT (kg)	DIAGRAM	REMARKS
U1-1	D13	4650	307	1.040	4.836	1484.65		
U1-2	D13	5195	307	1.040	5.403	1658.72		
U1-3	D13	5195	307	1.040	5.403	1658.72		
U1-4	D13	5820	16	1.040	6.053	96.85		
U1-5	D13	3930	16	1.040	4.087	65.39		
U1-6	D13	3930	16	1.040	4.087	65.39		
U2-1	D16	7469	645	1.580	11.801	7611.65		
U2-2	D16	6669	645	1.580	10.537	6796.37		
U3-1	D16	12000	230	1.580	18.960	4360.80		
U3-2	D19	10000	204	2.230	22.300	4549.20		
U3-3	D19	12000	204	2.230	26.760	5459.04		
U3-4	D16	4450	128	1.580	7.031	899.97		
U3-5	D16	10000	76	1.580	15.800	1200.80		
U3-6	D16	4750	76	1.580	7.505	570.38		
U3-7	D16	3107	76	1.580	4.909	373.08		
U4-1	D16	12000	156	1.580	18.960	2957.76		
U4-2	D19	10000	204	2.230	22.300	4549.20		
U4-3	D19	12000	204	2.230	26.760	5459.04		
U4-4	D16	4500	60	1.580	7.110	426.60		
U4-5	D16	5700	84	1.580	9.006	756.50		
C	D13	420	3159	1.040	0.437	1379.85		AVERAGE LENGTH
TOTAL STEEL WEIGHT AT SLAB P4 - P7						52379.87		