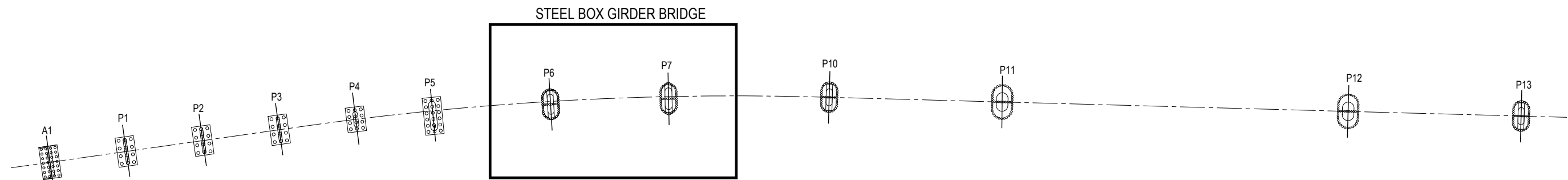
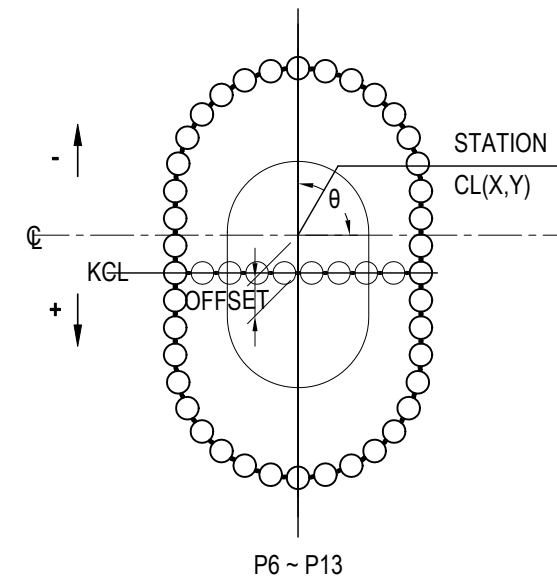
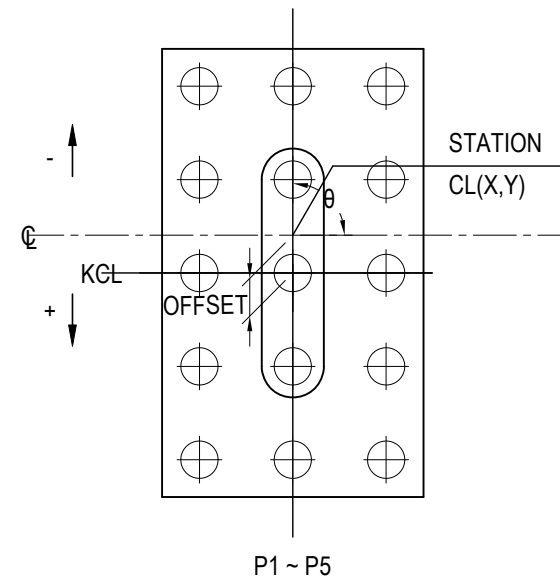


COORDINATES OF SUBSTRUCTURE (P6-P7)

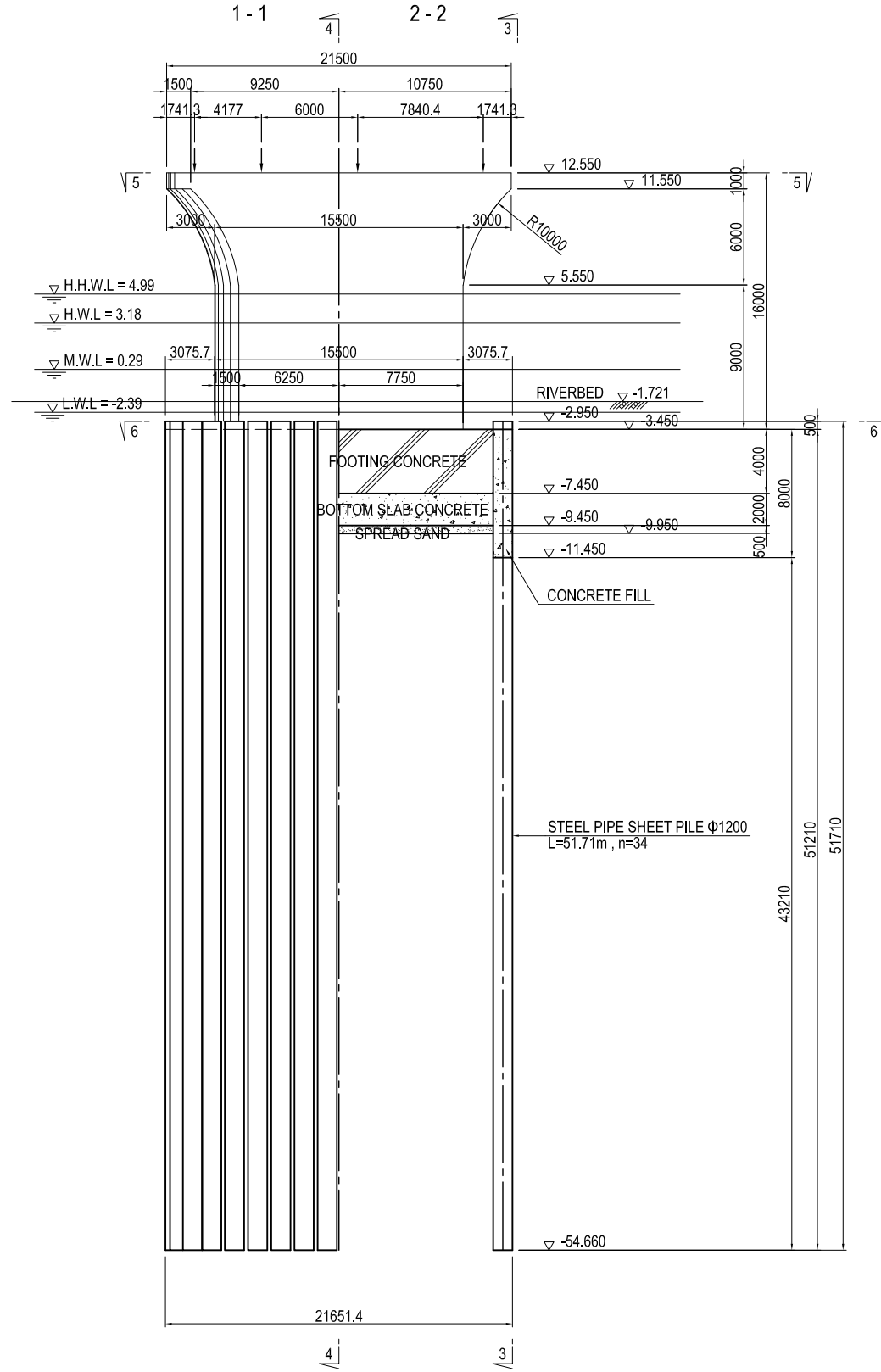
NAME		A1	P1	P2	P3	P4	P5	P6	P7	P10	P11	P12	P13
STATION		0+357.000	0+407.000	0+457.000	0+507.000	0+557.000	0+607.000	0+683.500	0+760.000	0+864.000	0+976.000	1+200.000	1+312.000
CL	X	1857470.9529	1857509.4534	1857547.9538	1857586.4543	1857625.1499	1857664.5904	1857726.3888	1857789.8660	1857878.6819	1857975.6469	1858169.5771	1858266.5422
	Y	205539.2366	205507.3350	205475.4334	205443.5317	205411.8684	205381.1387	205336.0555	205293.3684	205239.2819	205183.2304	205071.1274	205015.0759
AZIMUTH		230d 21' 17.0"	230d 21' 17.0"	230d 21' 17.0"	230d 21' 17.0"	231d 21' 36.9"	232d 47' 33.6"	234d 59' 3.2"	237d 10' 32.8"	239d 58' 10.5"	239d 58' 10.5"	239d 58' 10.5"	239d 58' 10.5"
SKEW ANGLE (θ)		90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"
OFFSET (m)		0.000	0.000	0.000	0.000	0.000	+4.000	+1.832	+0.538	0.000	0.000	0.000	0.000



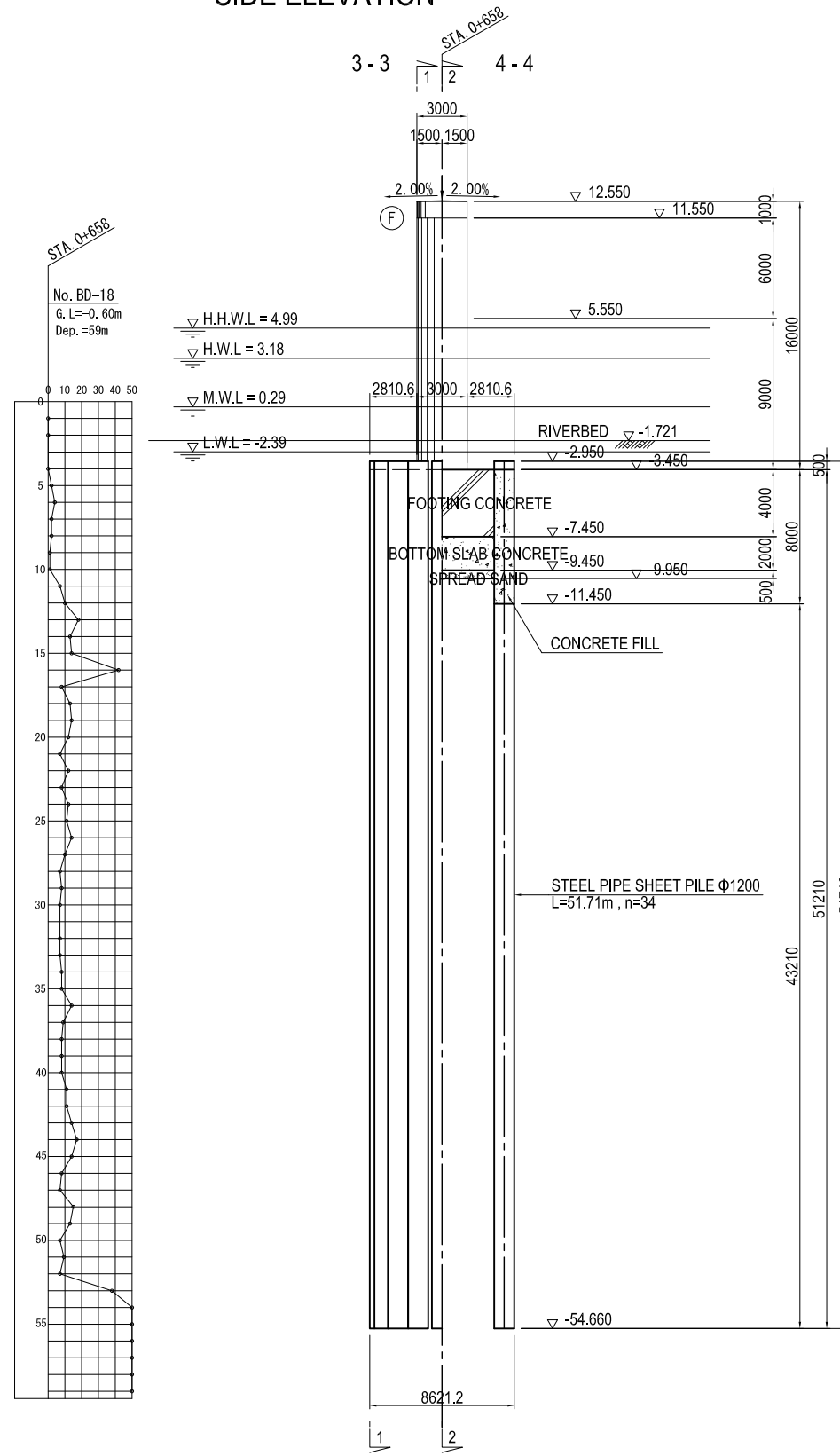
<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 20%;">NAME</th> <th style="width: 20%;">SIGNATURE</th> <th style="width: 20%;">DATE</th> </tr> <tr> <td>PREPARED BY</td> <td>S. IMADA</td> <td>29 Sep. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td>3 Oct. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td>6 Oct. 2017</td> </tr> </table>	NAME	SIGNATURE	DATE	PREPARED BY	S. IMADA	29 Sep. 2017	CHECKED BY	T. HAYAKAWA	3 Oct. 2017	APPROVED BY	Y. SANO	6 Oct. 2017	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 100%;">DRAWING TITLE</th> </tr> <tr> <td style="text-align: center;">COORDINATES OF SUBSTRUCTURE (P6-P7)</td> </tr> </table>	DRAWING TITLE	COORDINATES OF SUBSTRUCTURE (P6-P7)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 100%;">PACKAGE</th> </tr> <tr> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">DWG No.</td> </tr> <tr> <td style="text-align: center;">P1-SB-2000</td> </tr> </table>	PACKAGE	1	DWG No.	P1-SB-2000
NAME	SIGNATURE	DATE																						
PREPARED BY	S. IMADA	29 Sep. 2017																						
CHECKED BY	T. HAYAKAWA	3 Oct. 2017																						
APPROVED BY	Y. SANO	6 Oct. 2017																						
DRAWING TITLE																								
COORDINATES OF SUBSTRUCTURE (P6-P7)																								
PACKAGE																								
1																								
DWG No.																								
P1-SB-2000																								

GENERAL VIEW OF P6 PIER (1) S=1:400

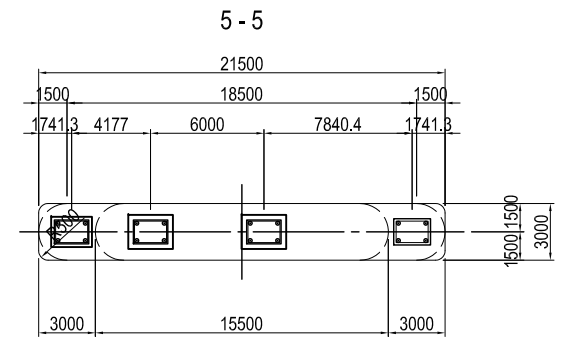
FRONT ELEVATION



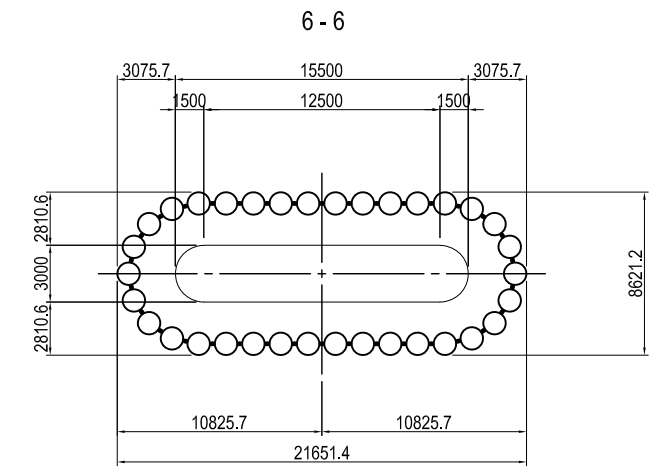
SIDE ELEVATION



PLAN



PLAN



USE MATERIALS

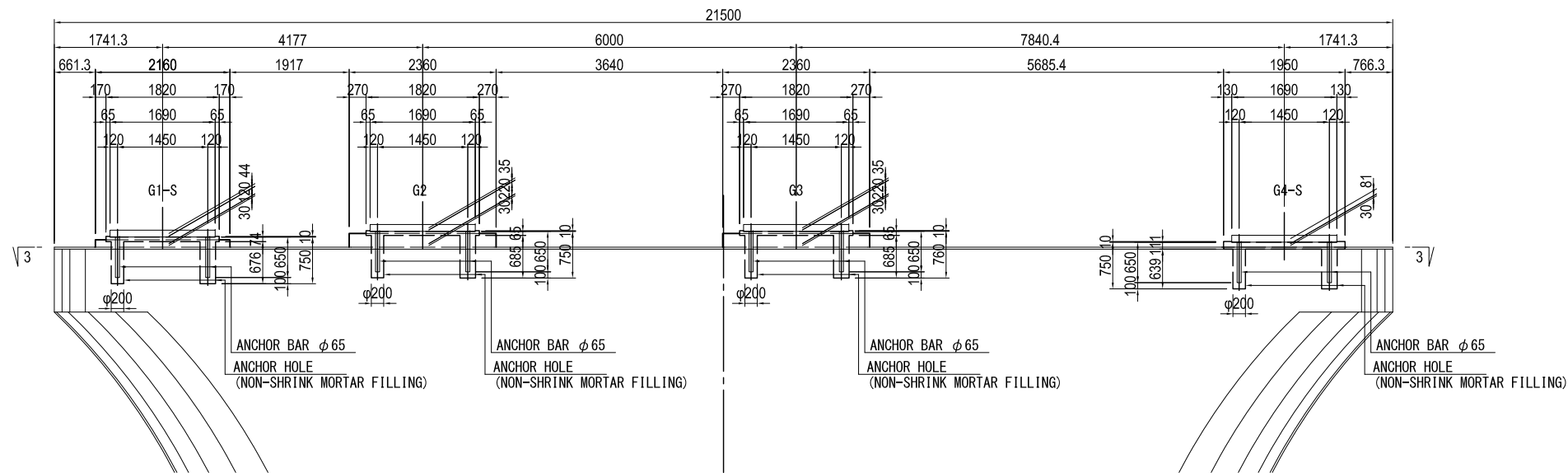
	CONCRETE	BAR
BEAM	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345
COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345
FOOTING	$\sigma_{ck} = 24 \text{ N/mm}^2$	SD345

GENERAL VIEW OF P6 PIER (2) S=1:100

DETAIL OF BEARING AND ANCHOR

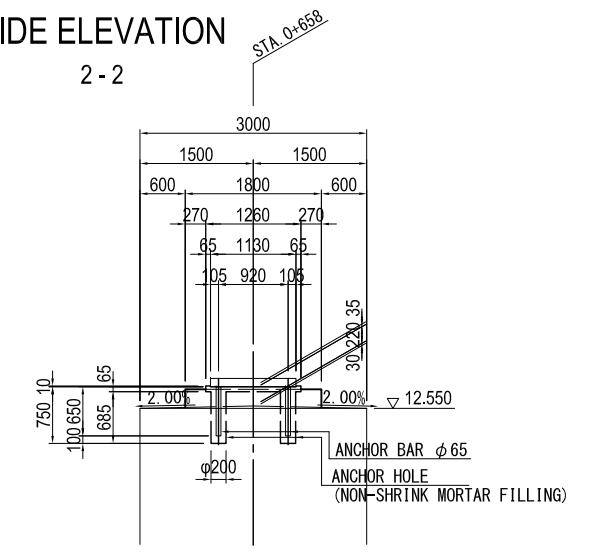
FRONT ELEVATION

1-1



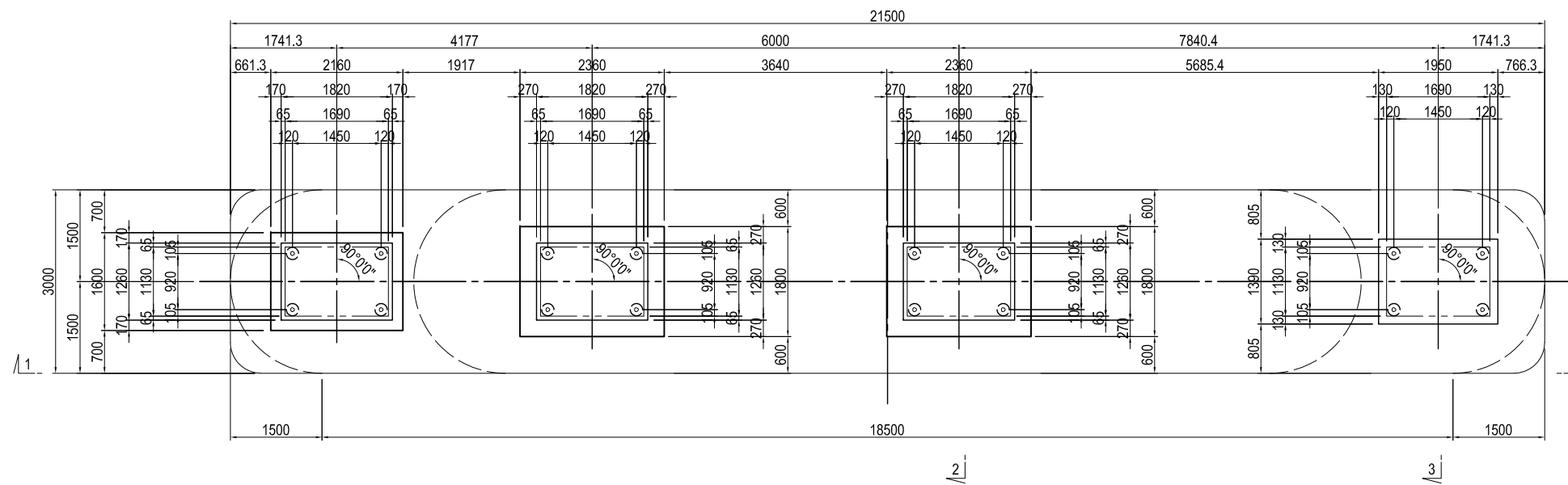
SIDE ELEVATION

2-2



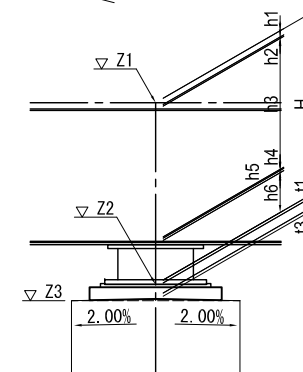
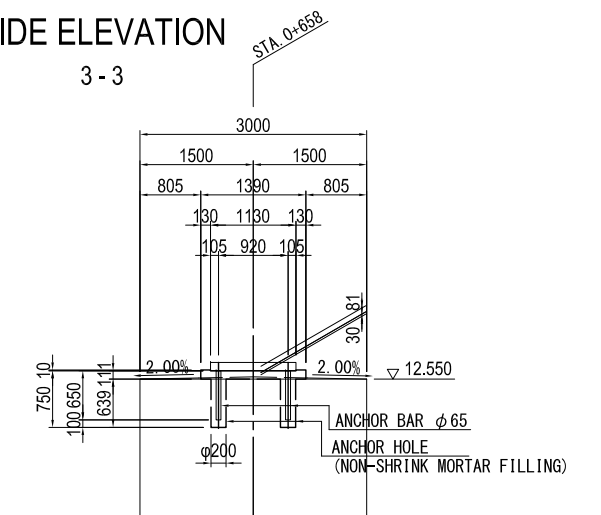
PLAN

3-3



SIDE ELEVATION

3-3



	P6 PIER				
	G1-S	G2	G3	G4-S	
PROPOSED HEIGHT	Z1	16.083	16.167	16.167	16.010
PAVEMENT	h1	0.080	0.080	0.080	0.080
UPPER FLANGE	h2	0.016	0.016	0.016	0.016
GIRDER	h3	2.706	2.700	2.700	2.706
BOTTOM FLANGE	h4	0.015	0.014	0.014	0.025
SOLE PLATE	h5	0.038	0.038	0.038	0.038
BEARING	h6	0.484	0.484	0.484	0.484
SUBTOTAL	H	3.339	3.332	3.332	3.349
ELEVATION OF BEARING BOTTOM	Z2	12.744	12.835	12.835	12.661
MORTAR	t1	0.044	0.035	0.035	0.081
BEARING BASE	t2	0.120	0.220	0.220	0.000
DRAINAGE INCLINE	t3	0.030	0.030	0.030	0.030
ELEVATION OF PIER TOP	Z3	12.550	12.550	12.550	12.550

PROJECT NAME
DETAILED DESIGN ON
BAGO RIVER BRIDGE
CONSTRUCTION PROJECT

FINANCED BY
 JAPAN INTERNATIONAL
COOPERATION AGENCY

COUNTERPART
 REPUBLIC OF THE UNION OF MYANMAR
MINISTRY OF CONSTRUCTION
DEPARTMENT OF BRIDGE

JICA STUDY TEAM
 NIPPON KOEI CO., LTD.
ORIENTAL CONSULTANTS GLOBAL CO., LTD.
METROPOLITAN EXPRESSWAY COMPANY LIMITED
CHODAI CO., LTD.
NIPPON ENGINEERING CONSULTANTS CO., LTD.

	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

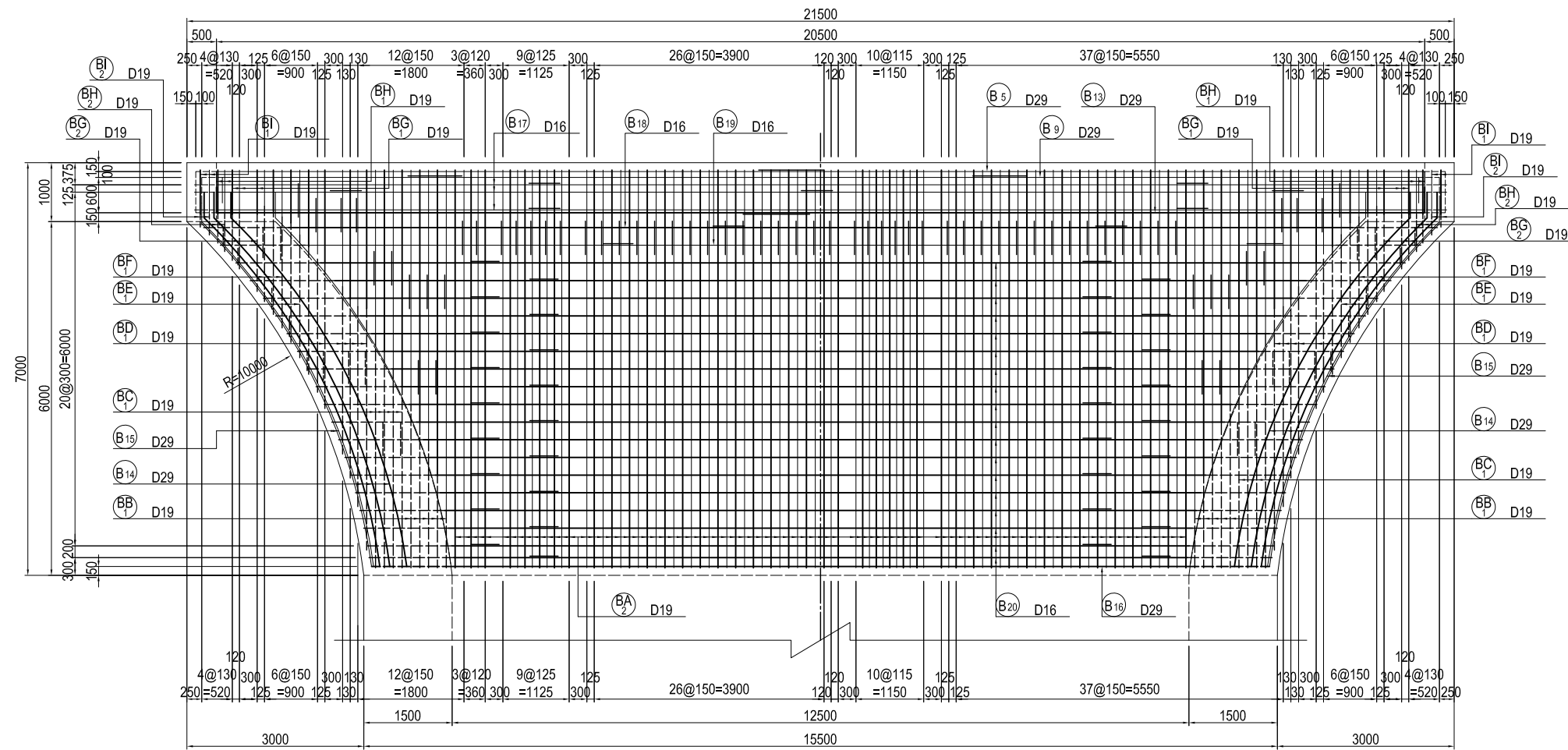
DRAWING TITLE
GENERAL VIEW OF P6 PIER(2)

PACKAGE
1
DWG No.
P1-SB-2002

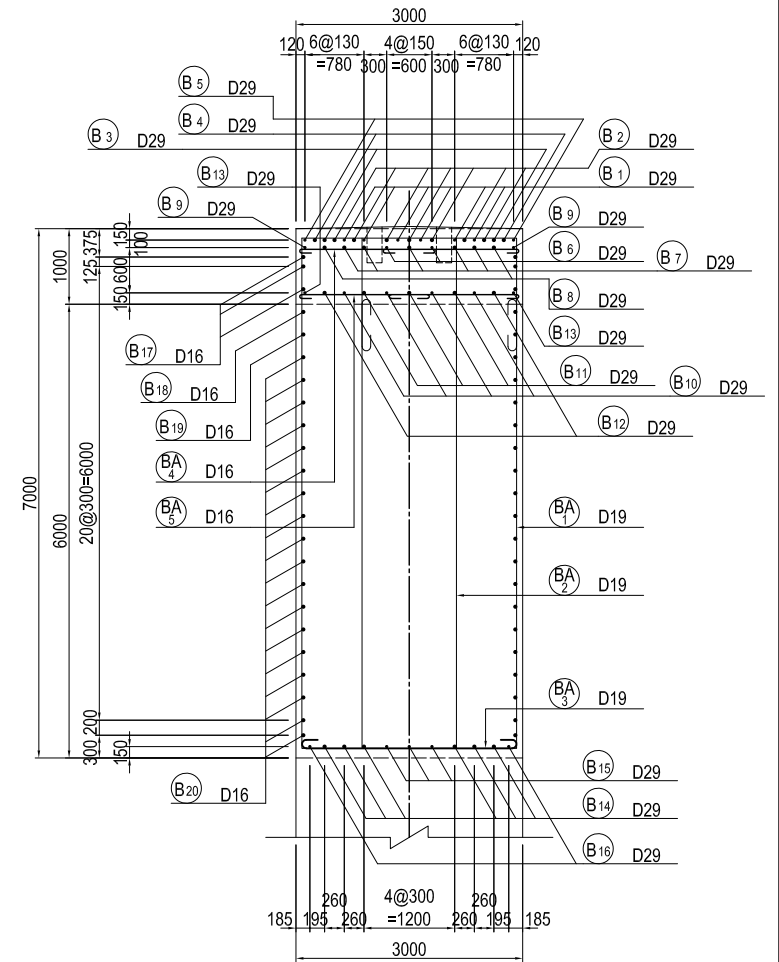
BAR ARRANGEMENT OF P6 PIER (1) S=1:100

BEAM

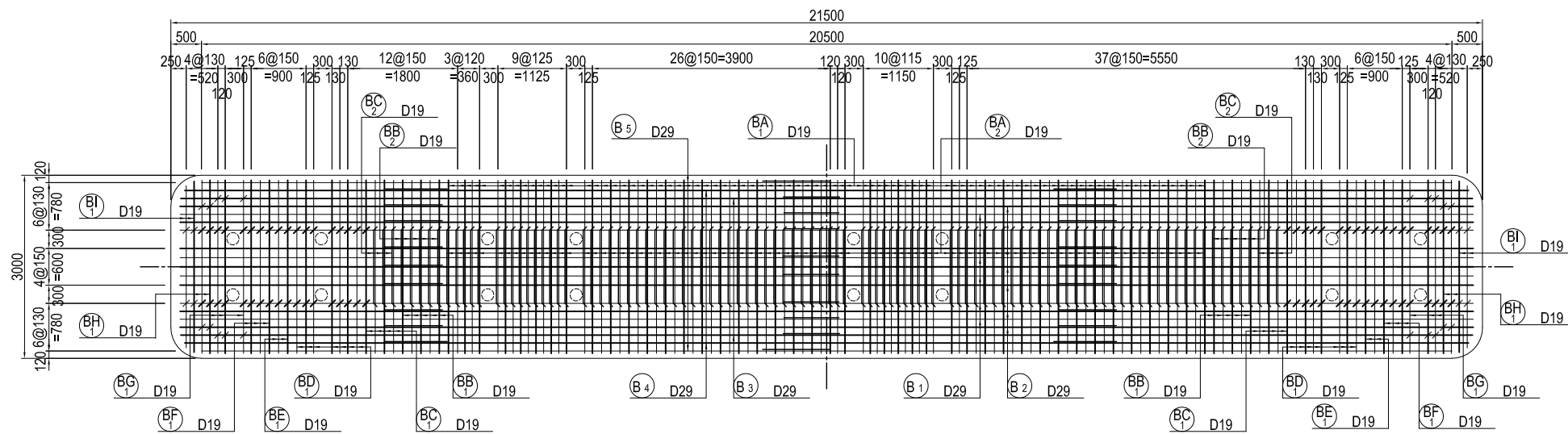
FRONT ELEVATION 1 - 1



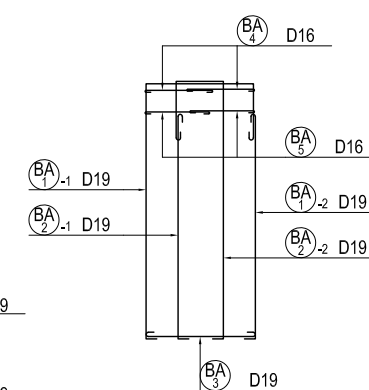
SECTION 3 - 3



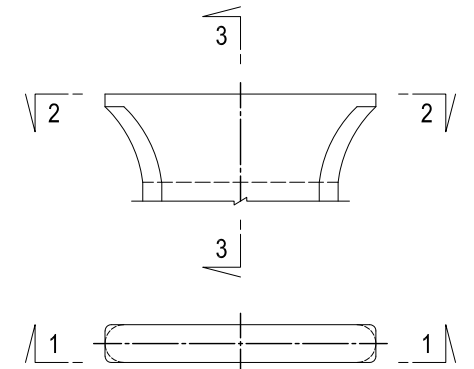
PLAN 2 - 2



ASSEMBLY DRAWING OF STIRRUP



MARKING DIAGRAM

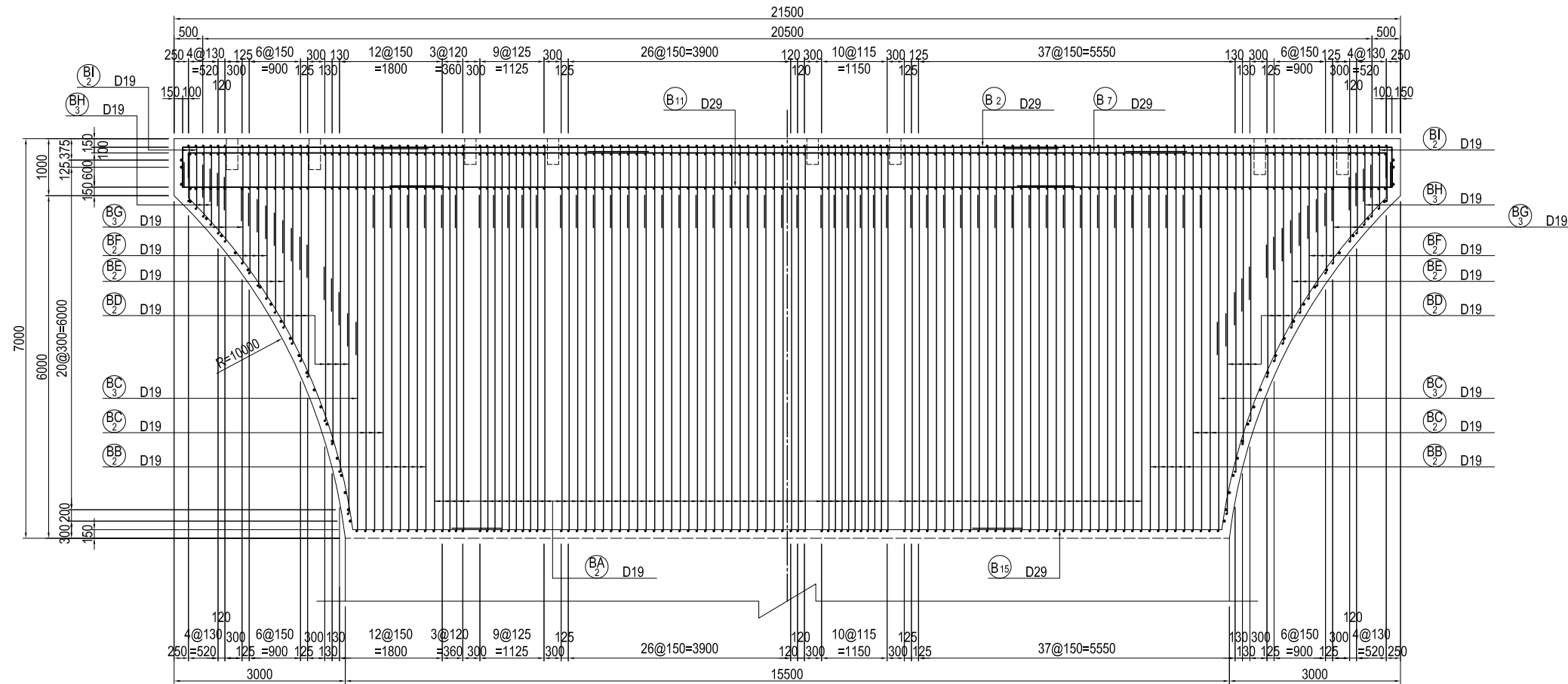


USE MATERIALS

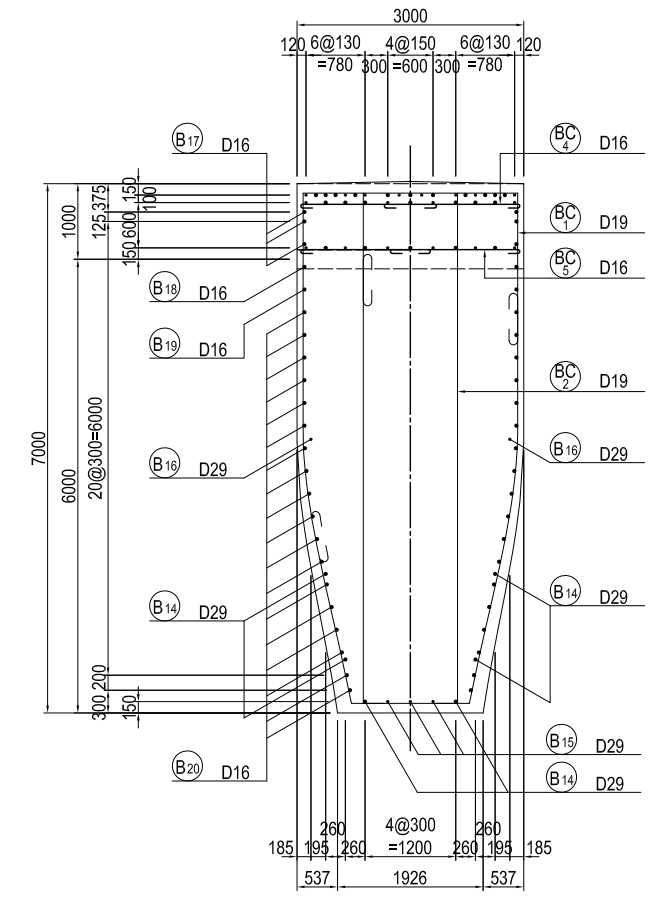
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BEAM • COLUMN	σ _{ck} = 30 N/mm ²	SD345

BAR ARRANGEMENT OF P6 PIER (2) S=1:100 BEAM

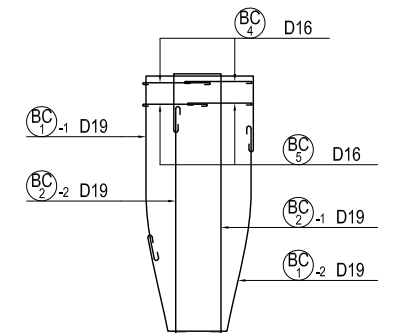
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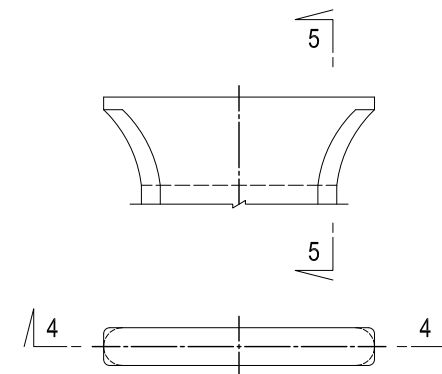
SECTION 5 - 5



ASSEMBLY DRAWING OF STIRRUP



MARKING DIAGRAM



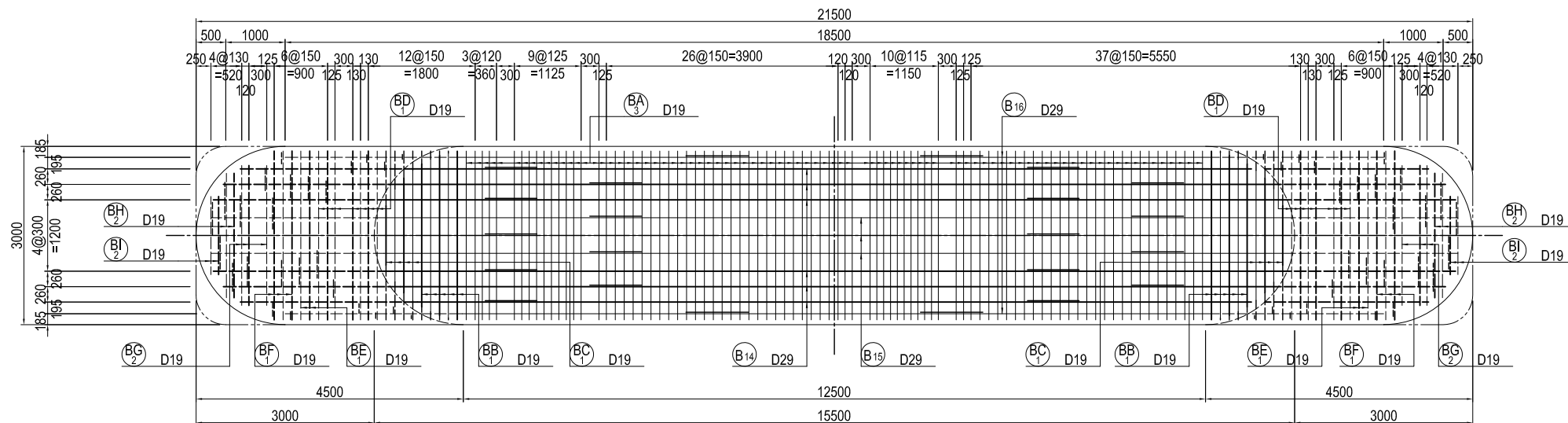
USE MATERIALS

	CONCRETE	BAR
BEAM • COLUMN	σck = 30 N/mm ²	SD345

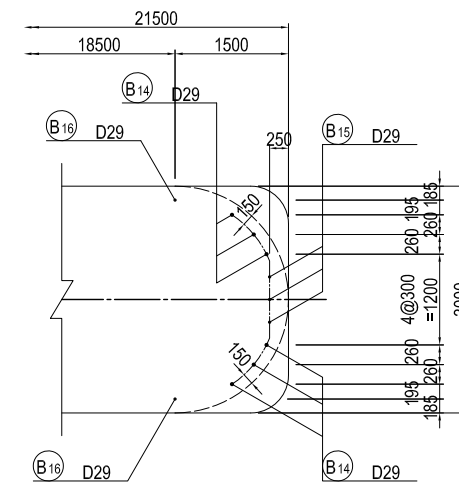
BAR ARRANGEMENT OF P6 PIER (3) S=1:100

BEAM

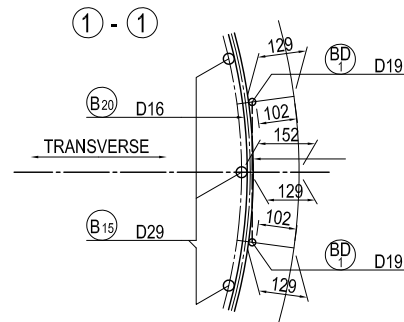
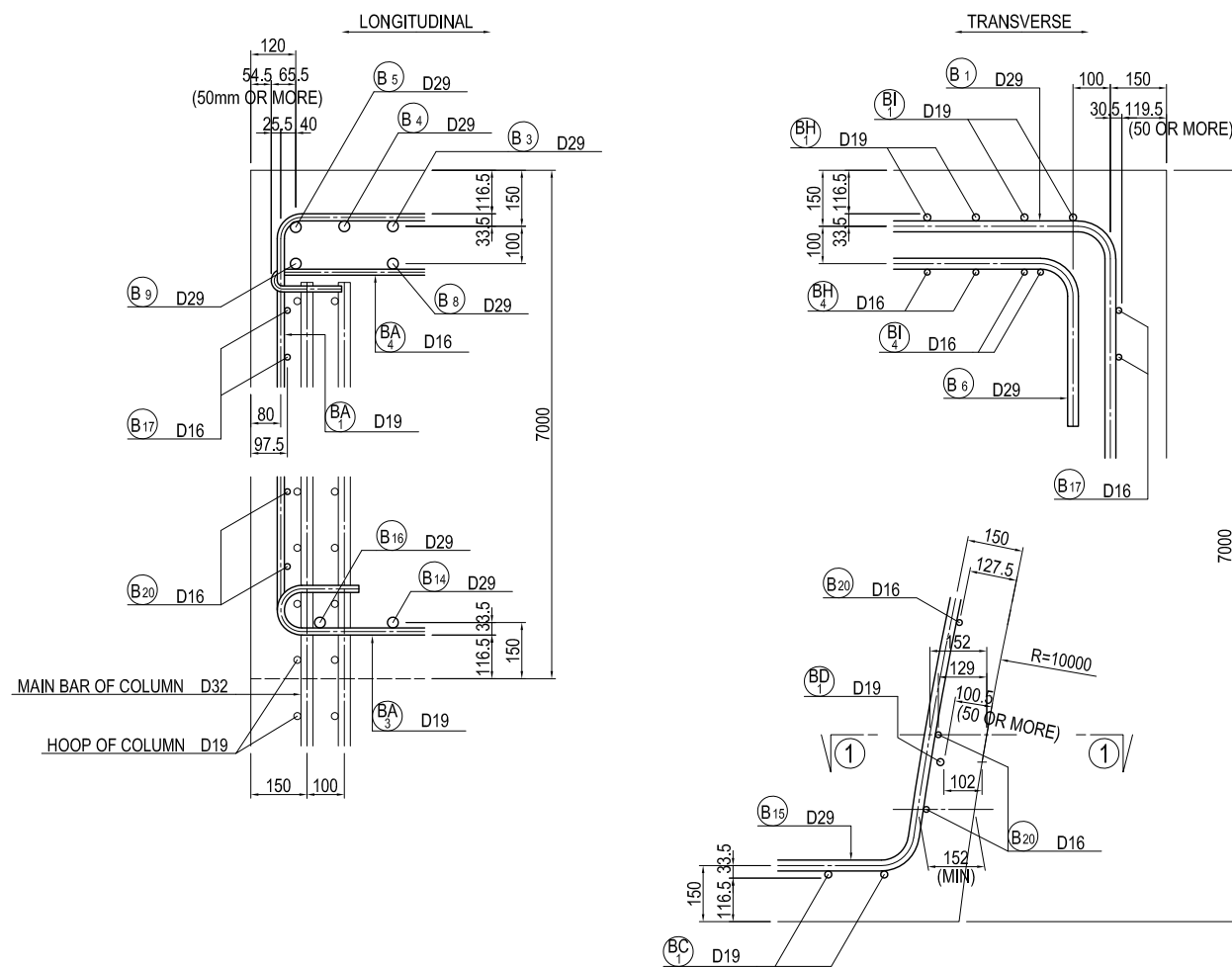
PLAN 6-6



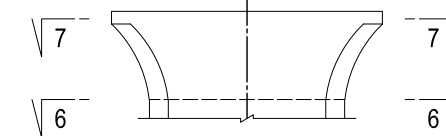
PLAN 7-7



DETAIL OF BEAM S=1:20



MARKING DIAGRAM



USE MATERIALS

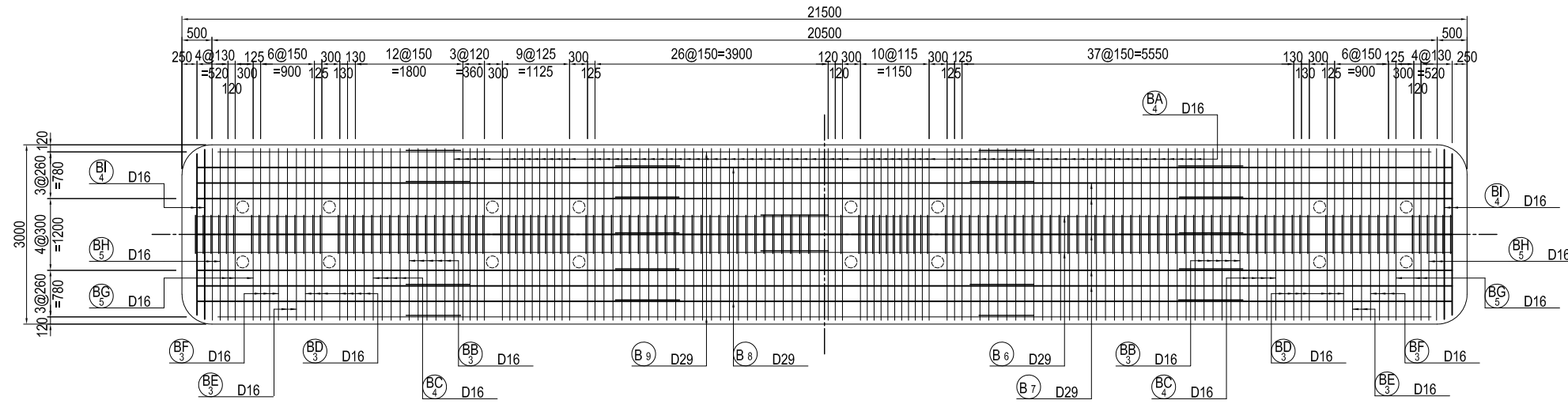
	CONCRETE	BAR
BEAM-COLUMN	σck = 30 N/mm ²	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE		PACKAGE
							BAR ARRANGEMENT OF P6 PIER (3)		
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY CHECKED BY APPROVED BY	S. IMADA T. HAYAKAWA Y. SANO	27 Nov.2017 28 Nov.2017 29 Nov.2017	DRAWING TITLE		1 DWG No. P1-SB-2005

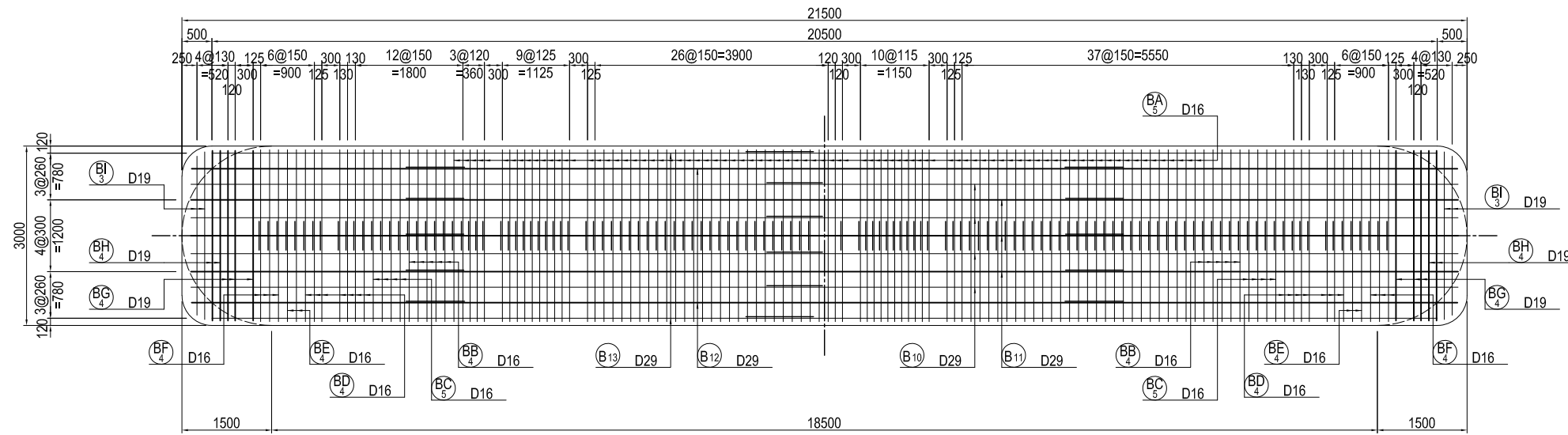
BAR ARRANGEMENT OF P6 PIER (4) S=1:100

BEAM

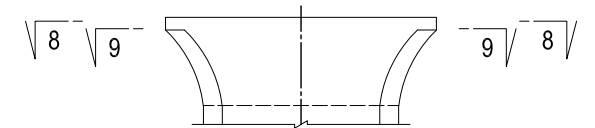
PLAN 8 - 8



PLAN 9 - 9



MARKING DIAGRAM



USE MATERIALS

	CONCRETE	BAR
BEAM • COLUMN	σ _{ck} = 30 N/mm ²	SD345

<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 15%;">NAME</th> <th style="width: 15%;">SIGNATURE</th> <th style="width: 15%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>S. IMADA</td> <td></td> <td>27 Nov.2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td></td> <td>28 Nov.2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td></td> <td>29 Nov.2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	S. IMADA		27 Nov.2017	CHECKED BY	T. HAYAKAWA		28 Nov.2017	APPROVED BY	Y. SANO		29 Nov.2017	<small>DRAWING TITLE</small> BAR ARRANGEMENT OF P6 PIER (4)	<small>PACKAGE</small> 1 DWG No. P1-SB-2006
	NAME	SIGNATURE	DATE																			
PREPARED BY	S. IMADA		27 Nov.2017																			
CHECKED BY	T. HAYAKAWA		28 Nov.2017																			
APPROVED BY	Y. SANO		29 Nov.2017																			

BAR ARRANGEMENT OF P6 PIER (5) S=1:100

BEAM

BAR ARRANGEMENT OF BEARING BASE

< G1-S >

SECTION

< G2 , G3 >

SECTION

< G4-S >

SECTION

A - A

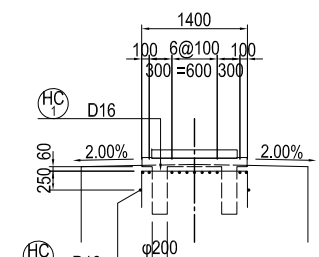
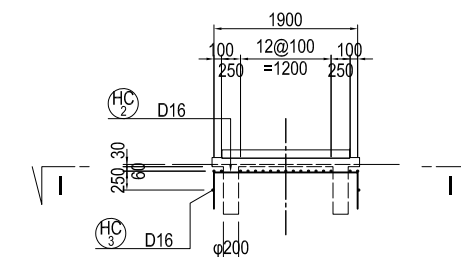
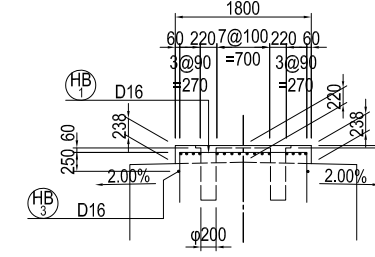
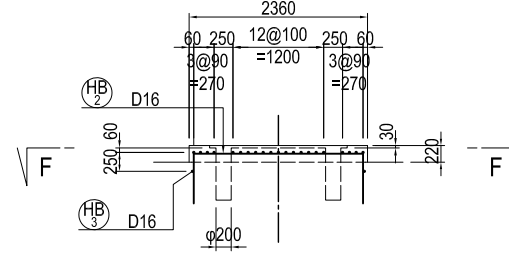
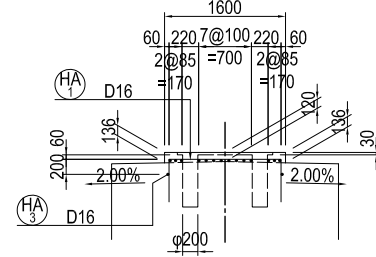
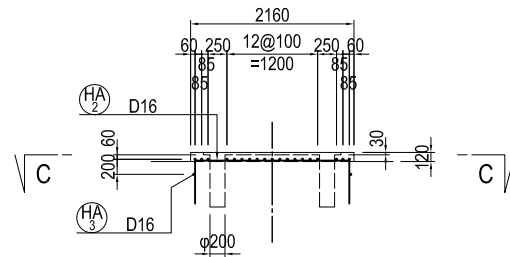
B - B

D - D

E - E

G - G

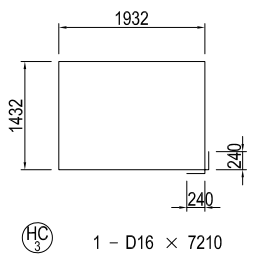
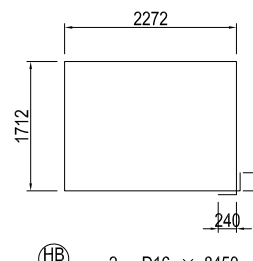
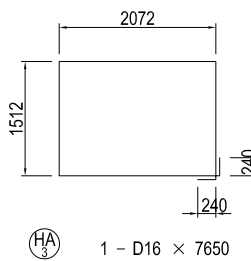
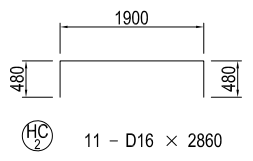
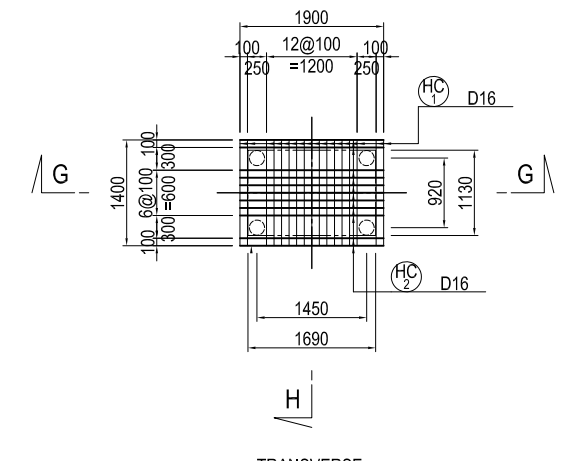
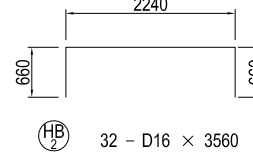
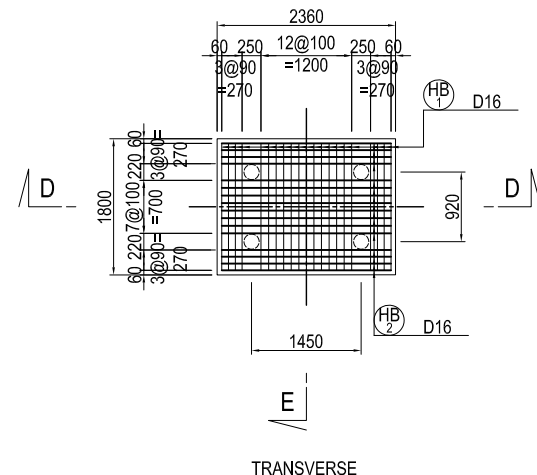
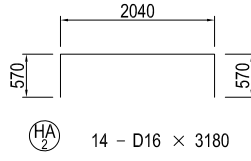
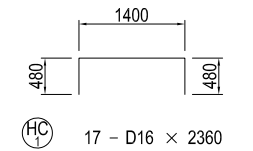
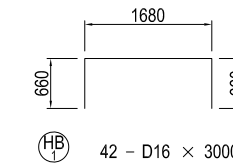
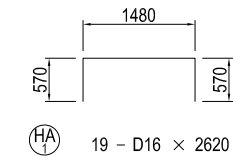
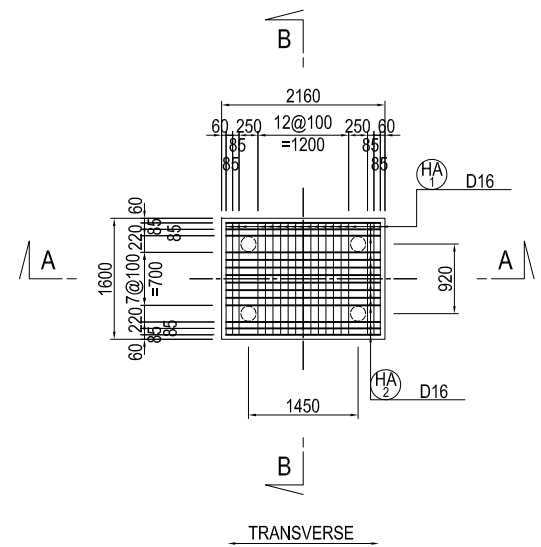
H - H



PLAN
C - C

PLAN
F - F

PLAN
I - I



USE MATERIALS

	CONCRETE	BAR
BEAM • COLUMN	σ _{ck} = 30 N/mm ²	SD345

PROJECT NAME
DETAILED DESIGN ON
BAGO RIVER BRIDGE
CONSTRUCTION PROJECT

FINANCED BY
 JAPAN INTERNATIONAL
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COUNTERPART
 REPUBLIC OF THE UNION OF MYANMAR
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JICA STUDY TEAM
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METROPOLITAN EXPRESSWAY COMPANY LIMITED
CHODAI CO., LTD.
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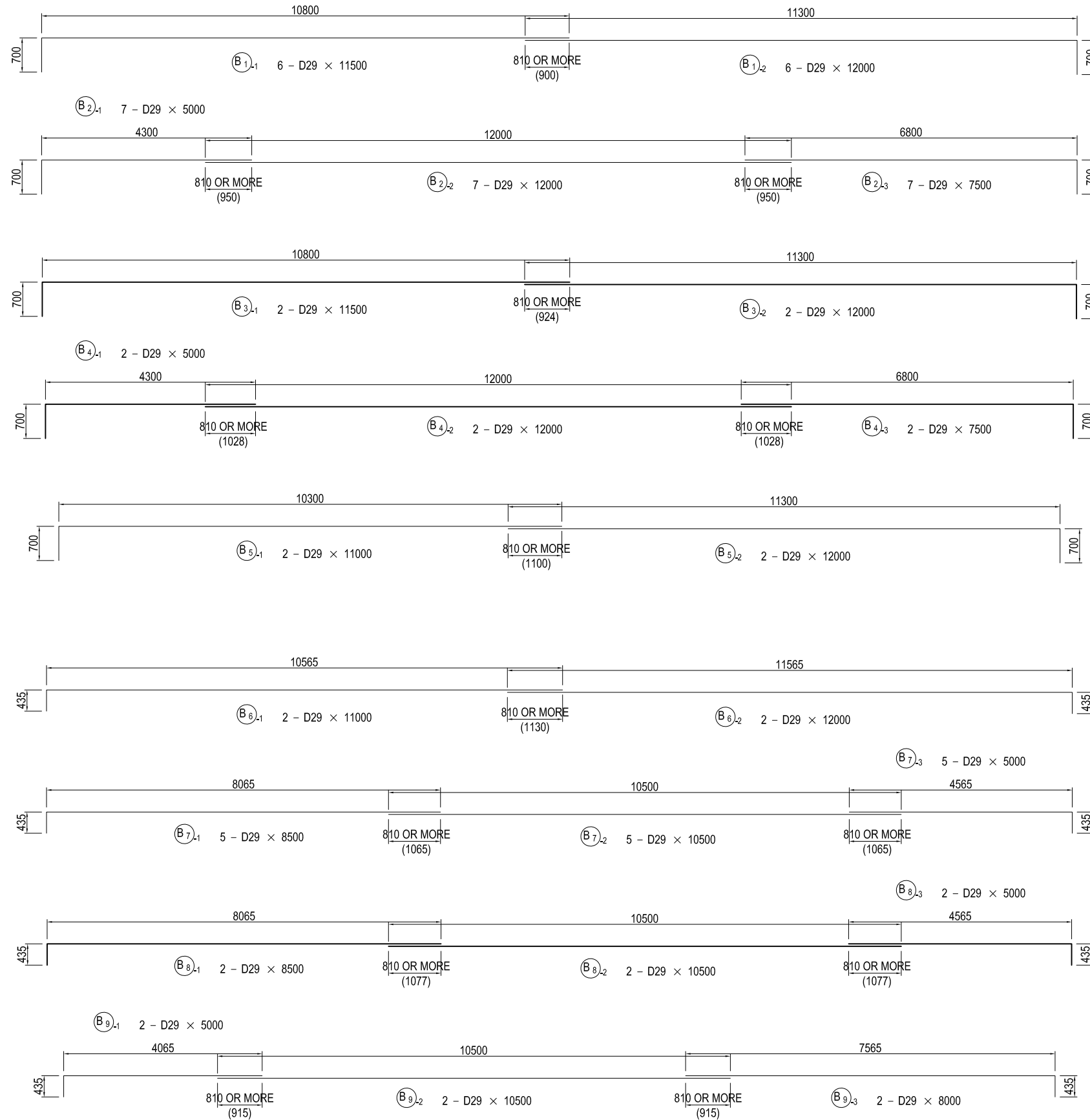
	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

DRAWING TITLE
BAR ARRANGEMENT OF P6 PIER (5)

PACKAGE
1
DWG No.
P1-SB-2007

BAR ARRANGEMENT OF P6 PIER (6) BEAM

S=1:100



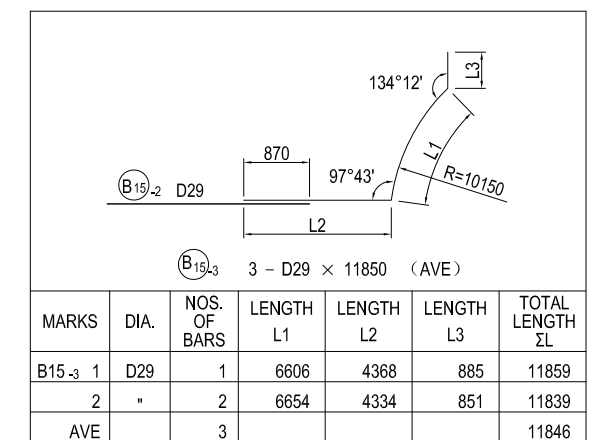
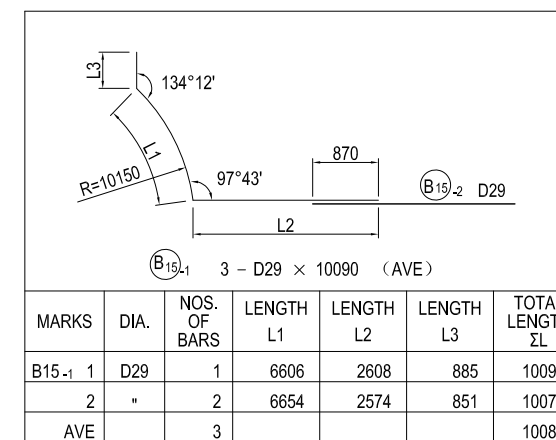
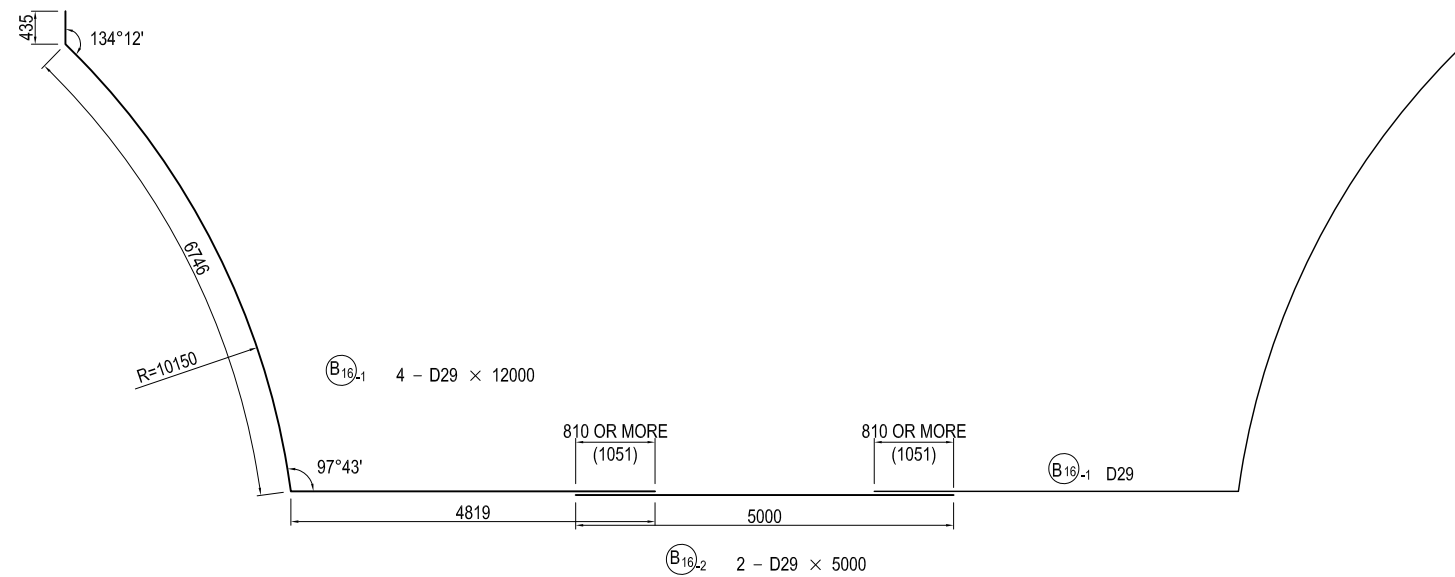
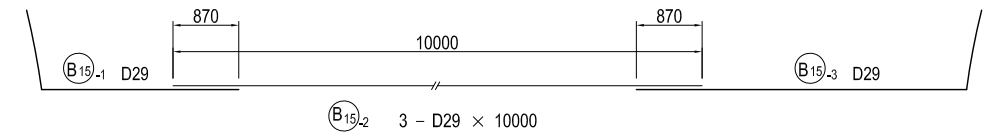
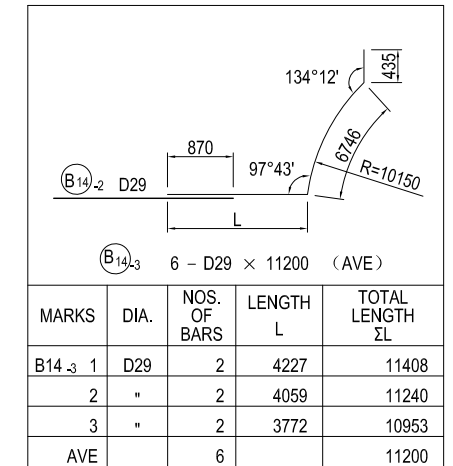
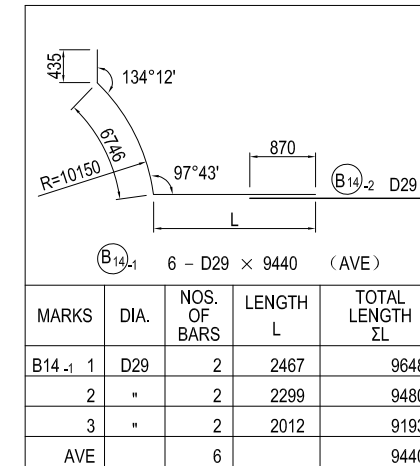
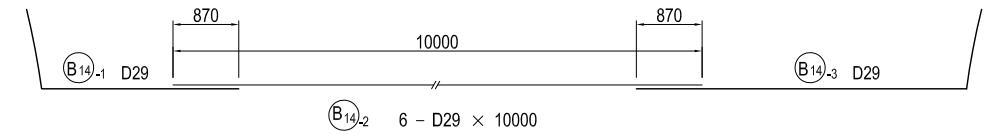
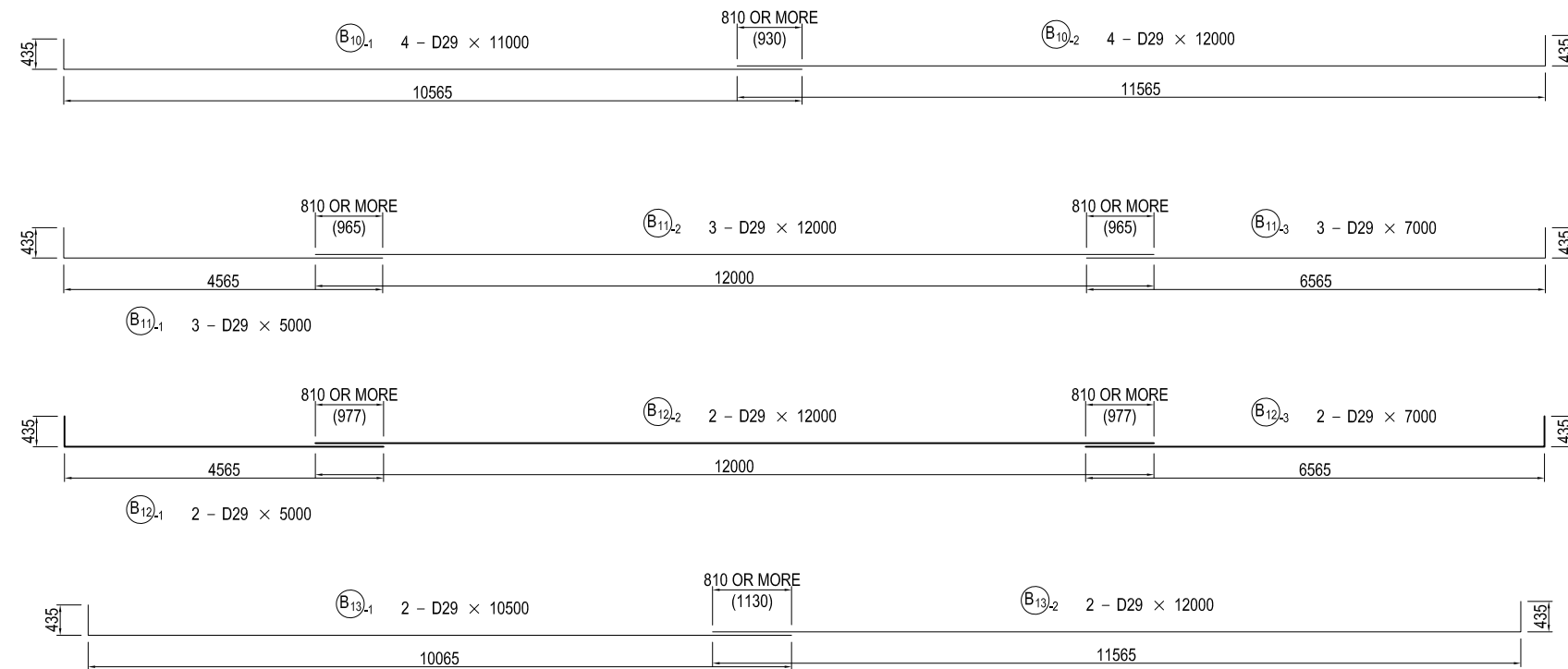
USE MATERIALS

	CONCRETE	BAR
BEAM • COLUMN	σ _{ck} = 30 N/mm ²	SD345

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE BAR ARRANGEMENT OF P6 PIER (6)	PACKAGE 1 DWG No. P1-SB-2008
				PREPARED BY	S. IMADA	27 Nov.2017		
				CHECKED BY	T. HAYAKAWA	28 Nov.2017		
				APPROVED BY	Y. SANO	29 Nov.2017		

BAR ARRANGEMENT OF P6 PIER (7) BEAM

S=1:100

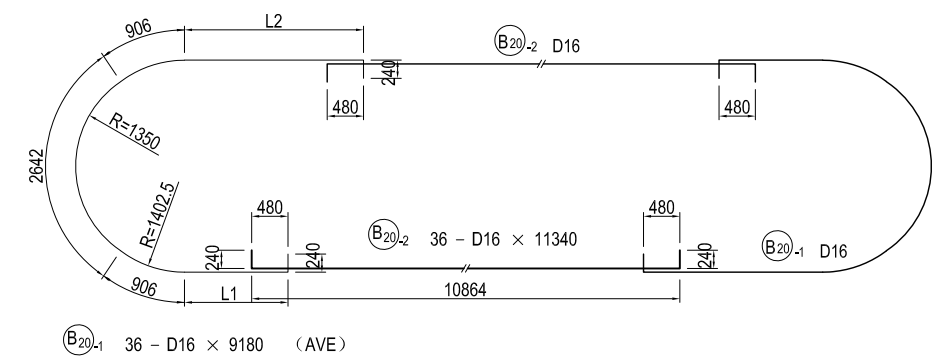
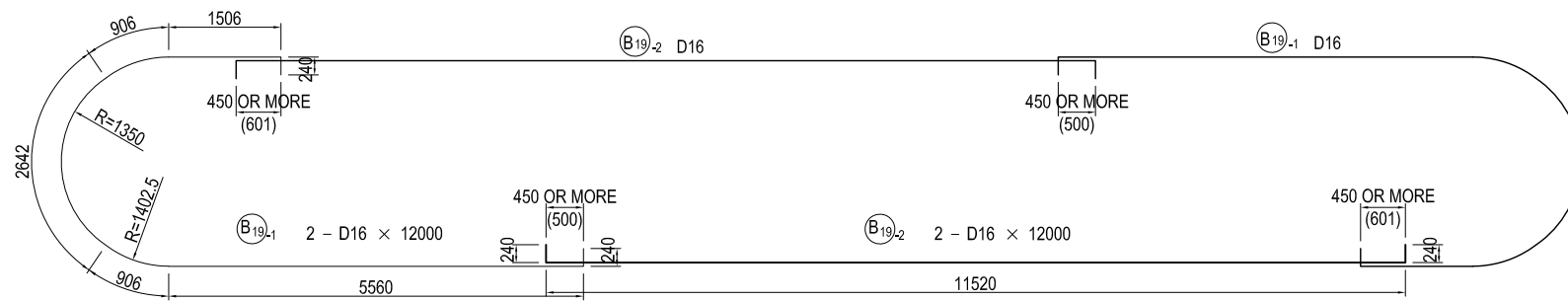
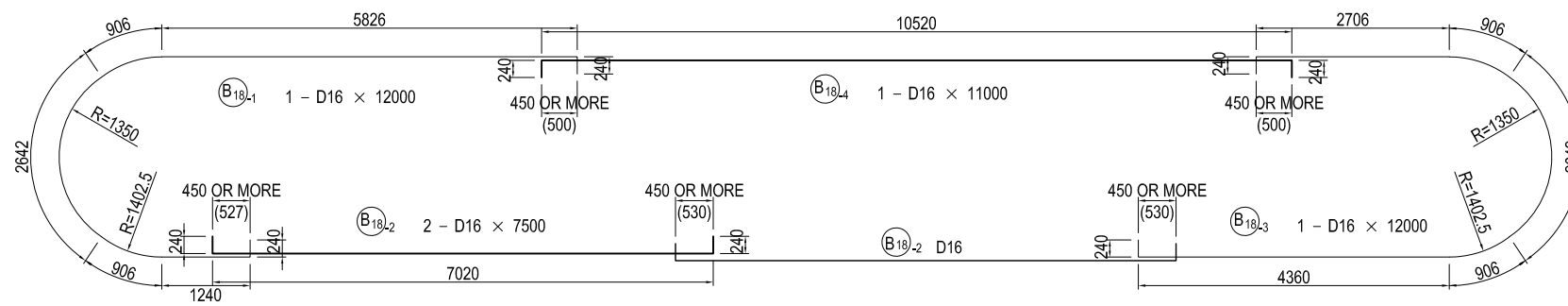
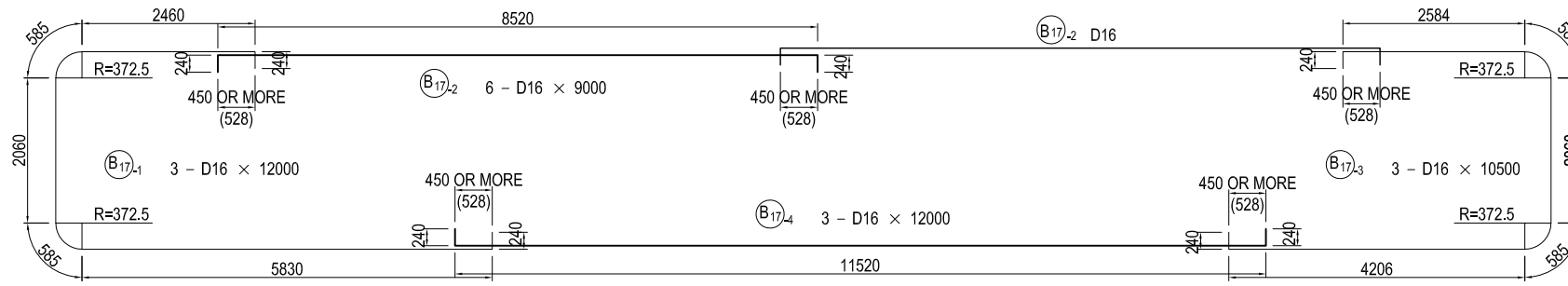


USE MATERIALS

	CONCRETE	BAR
BEAM-COLUMN	σck = 30 N/mm ²	SD345

BAR ARRANGEMENT OF P6 PIER (8) BEAM

S=1:100



MARKS	DIA.	NOS. OF BARS	LENGTH L1	LENGTH L2	TOTAL LENGTH ΣL
B20-1 1	D16	2	3028	4028	11990
2	"	2	2786	3786	11506
3	"	2	2562	3562	11058
4	"	2	2354	3354	10642
5	"	2	2162	3162	10258
6	"	2	1984	2984	9902
7	"	2	1820	2820	9574
8	"	2	1668	2668	9270
9	"	2	1529	2529	8992
10	"	2	1402	2402	8738
11	"	2	1285	2285	8504
12	"	2	1180	2180	8294
13	"	2	1084	2084	8102
14	"	2	999	1999	7932
15	"	2	924	1924	7782
16	"	2	858	1858	7650
17	"	2	802	1802	7538
18	"	2	770	1770	7474
AVE		36			9178

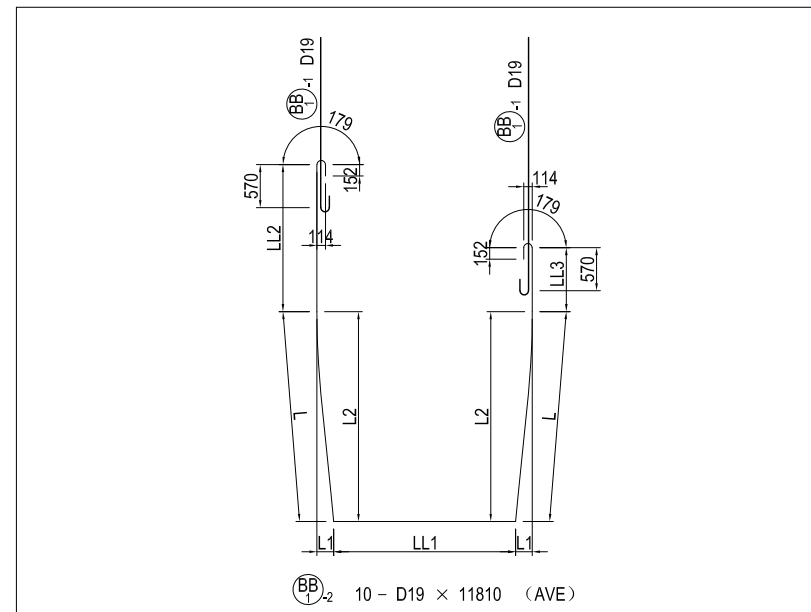
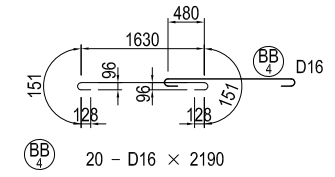
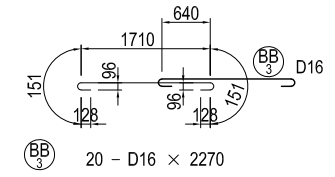
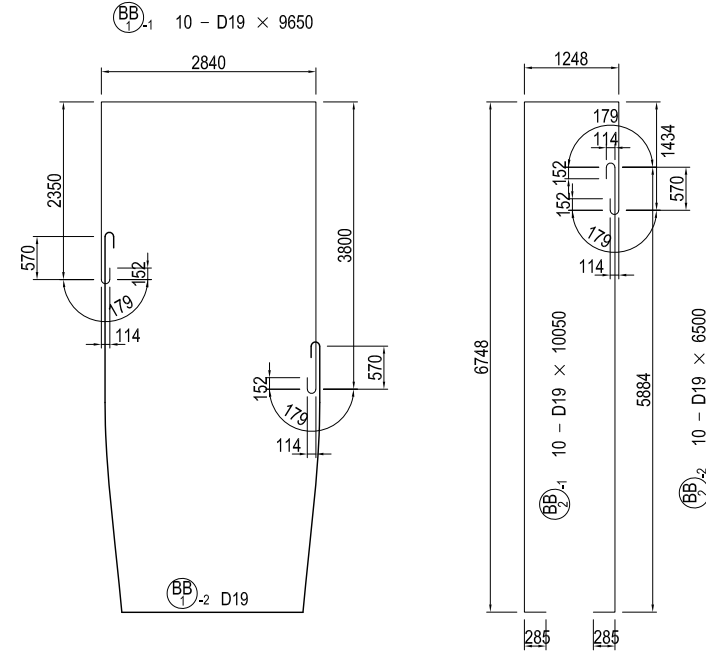
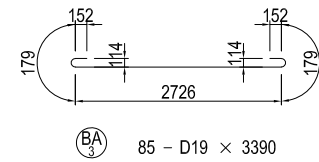
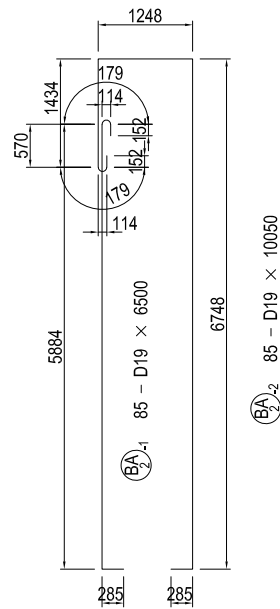
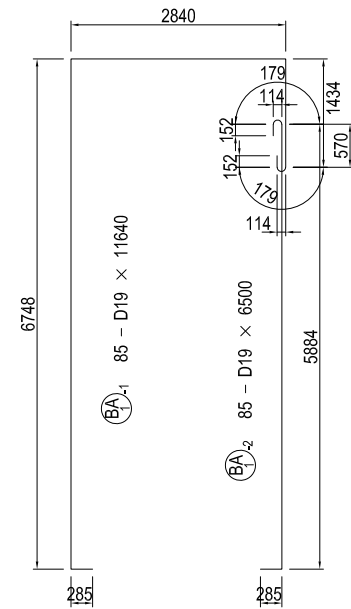
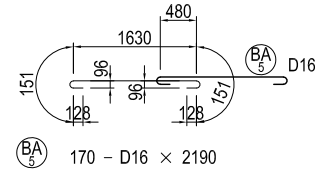
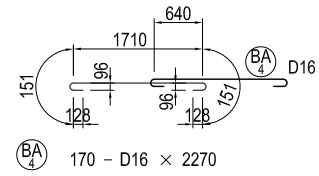
USE MATERIALS

	CONCRETE	BAR
BEAM • COLUMN	σ _{ck} = 30 N/mm ²	SD345

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE BAR ARRANGEMENT OF P6 PIER (8)	PACKAGE	
				PREPARED BY	S. IMADA			27 Nov.2017	1
				CHECKED BY	T. HAYAKAWA			28 Nov.2017	DWG No.
				APPROVED BY	Y. SANO			29 Nov.2017	P1-SB-2010

BAR ARRANGEMENT OF P6 PIER (9)

S=1:100
BEAM



MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL1	LENGTH LL2	LENGTH LL3	TOTAL LENGTH ΣL
BB1-2 1	D19	2	974	8	974	2824	3994	2544	11972
2	"	2	1574	33	1574	2774	3394	1944	11922
3	"	2	2176	76	2174	2689	2794	1344	11841
4	"	2	2478	137	2474	2566	2494	1044	11722
5	"	2	2784	220	2774	2399	2194	744	11567
AVE		10							11805

USE MATERIALS

	CONCRETE	BAR
BEAM • COLUMN	σ _{ck} = 30 N/mm ²	SD345

PROJECT NAME
DETAILED DESIGN ON
BAGO RIVER BRIDGE
CONSTRUCTION PROJECT

FINANCED BY
 JAPAN INTERNATIONAL
COOPERATION AGENCY

COUNTERPART
 REPUBLIC OF THE UNION OF MYANMAR
MINISTRY OF CONSTRUCTION
DEPARTMENT OF BRIDGE

JICA STUDY TEAM
 NIPPON KOEI CO., LTD.
ORIENTAL CONSULTANTS GLOBAL CO., LTD.
METROPOLITAN EXPRESSWAY COMPANY LIMITED
CHODAI CO., LTD.
NIPPON ENGINEERING CONSULTANTS CO., LTD.

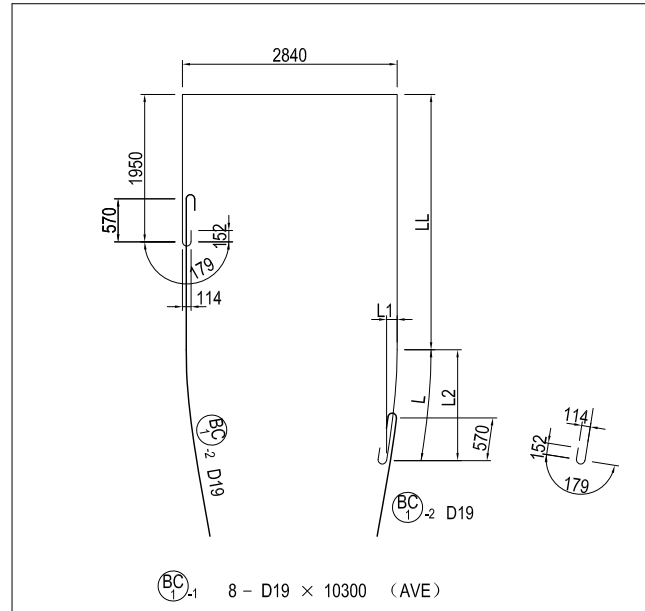
	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

DRAWING TITLE
BAR ARRANGEMENT OF P6 PIER (9)

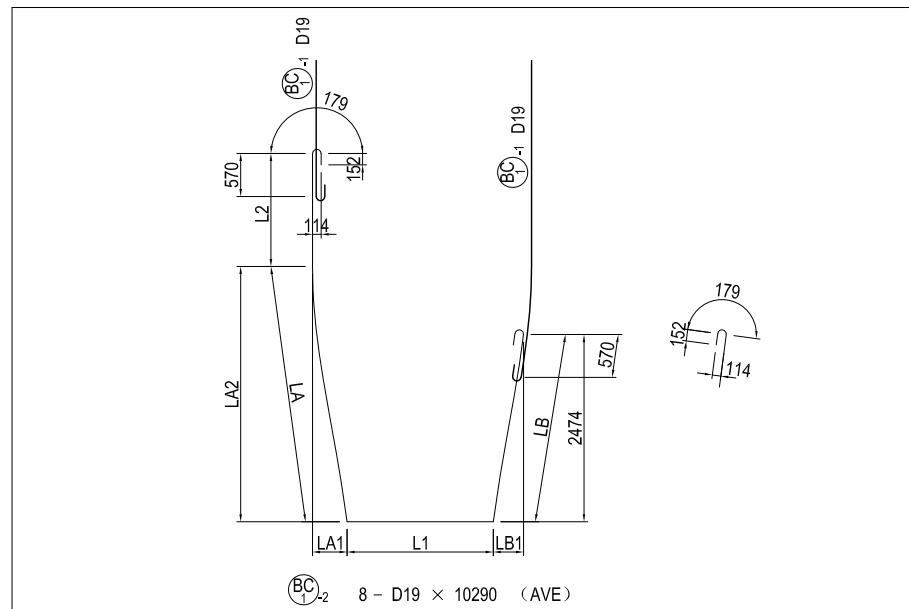
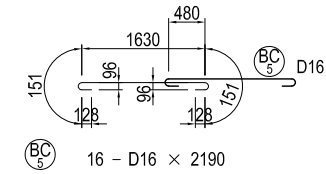
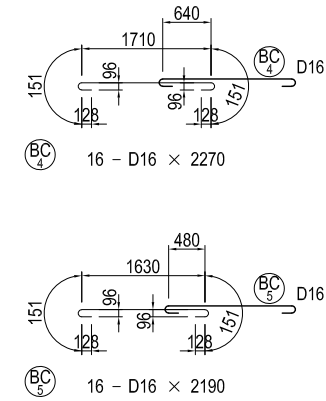
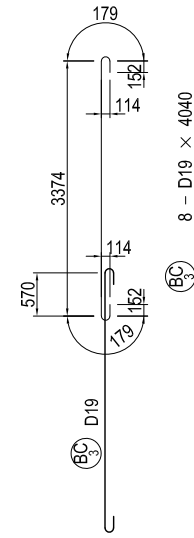
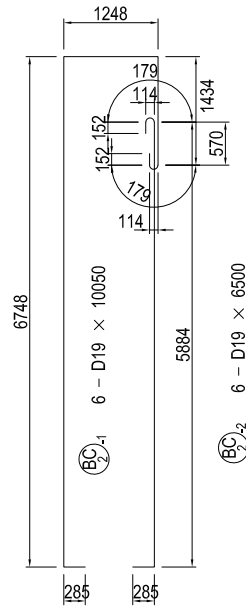
PACKAGE
1
DWG No.
P1-SB-2011

BAR ARRANGEMENT OF P6 PIER (10) BEAM

S=1:100



MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BC1-1 1	D19	2	1171	77	1167	3674	10297
2	"	2	1472	138	1464	3374	10298
3	"	2	1777	220	1759	3074	10303
4	"	2	2085	324	2053	2774	10311
AVE		8					10302

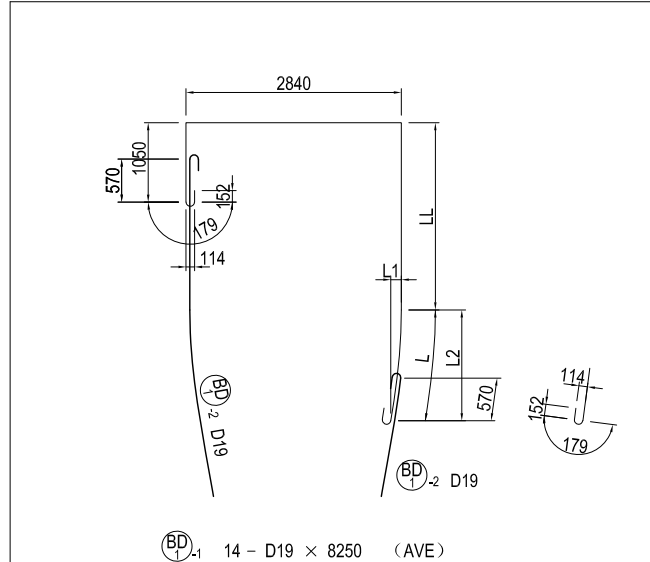


MARKS	DIA.	NOS. OF BARS	LENGTH LA	LENGTH LA1	LENGTH LA2	LENGTH LB	LENGTH LB1	LENGTH L1	LENGTH L2	TOTAL LENGTH ΣL
BC2-2 1	D19	2	3093	326	3074	2493	304	2189	2294	10731
2	"	2	3409	457	3374	2506	400	1925	1994	10496
3	"	2	3737	639	3674	2530	528	1562	1694	10185
4	"	2	4098	922	3974	2583	737	996	1394	9733
AVE		8								10286

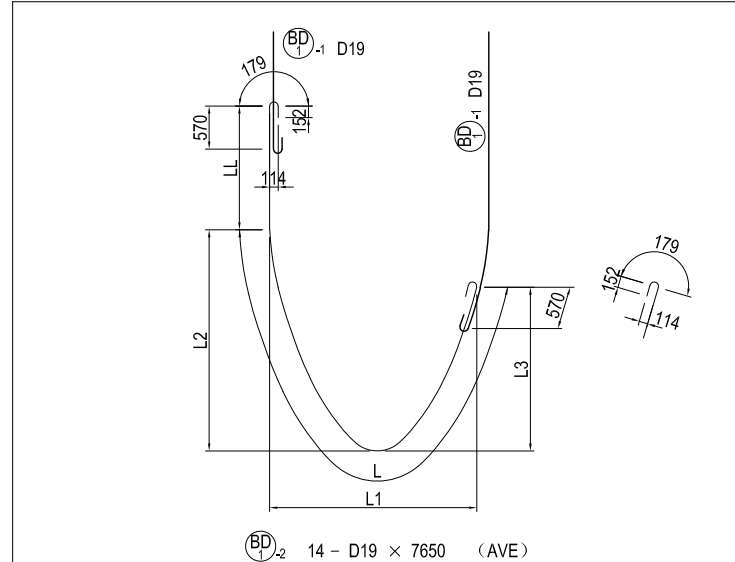
USE MATERIALS

	CONCRETE	BAR
BEAM • COLUMN	σ _{ck} = 30 N/mm ²	SD345

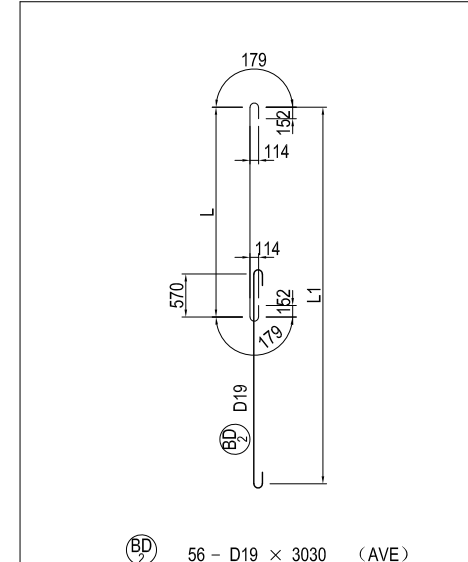
BAR ARRANGEMENT OF P6 PIER (11) S=1:100 BEAM



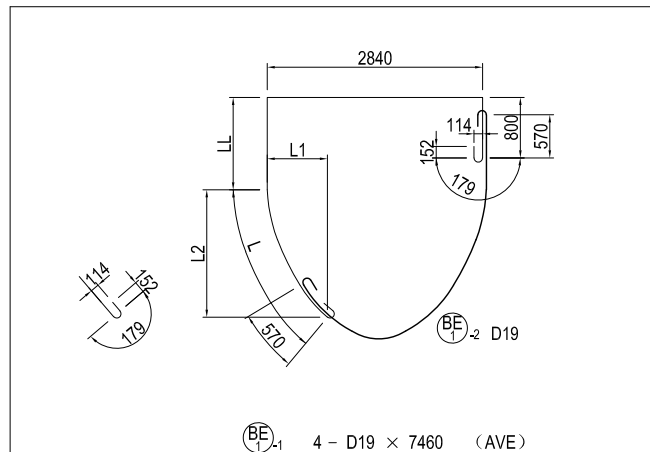
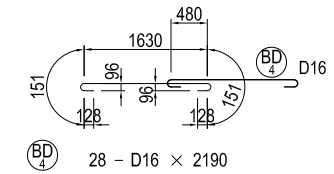
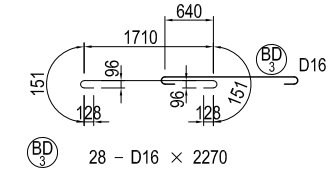
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BD1-1 1	D19	2	1171	118	1162	2474	8197
2	"	2	1204	191	1185	2444	8200
3	"	2	1338	272	1305	2315	8205
4	"	2	1562	367	1510	2100	8214
5	"	2	2012	675	1866	1695	8259
6	"	2	2189	869	2632	1553	8294
7	"	2	2392	1165	1976	1426	8370
AVE		14					8248



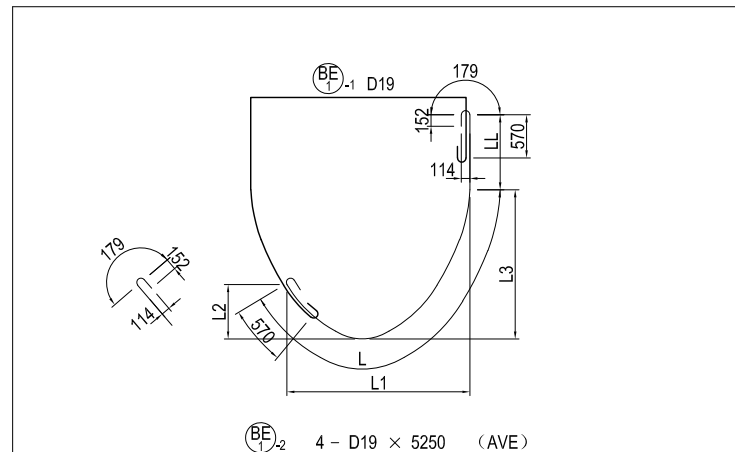
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH LL	TOTAL LENGTH ΣL
BD1-2 1	D19	2	8099	2815	3973	3373	1994	10755
2	"	2	6768	2778	3265	2634	1964	9394
3	"	2	6025	2731	2909	2150	1835	8522
4	"	2	5475	2668	2716	1742	1620	7757
5	"	2	4396	2460	2349	970	1215	6273
6	"	2	4002	2338	2216	694	1073	5737
7	"	2	3492	2138	2039	390	946	5100
AVE		14						7648



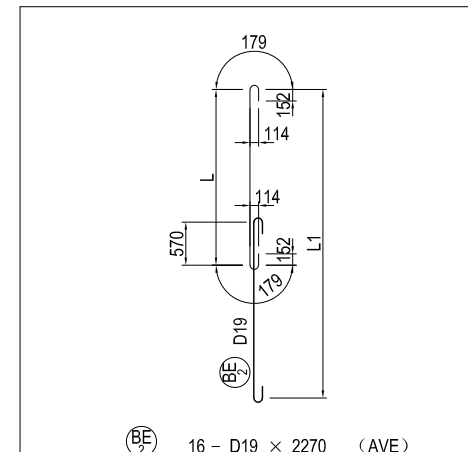
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BD2 1	D19	8	3030	5490	3692
2	"	8	2766	4962	3428
3	"	8	2572	4574	3234
4	"	8	2401	4231	3063
5	"	8	2062	3553	2724
6	"	8	1938	3305	2600
7	"	8	1799	3028	2461
AVE		56			3029



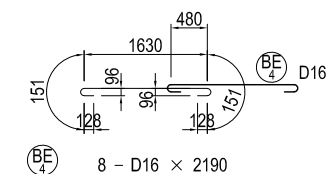
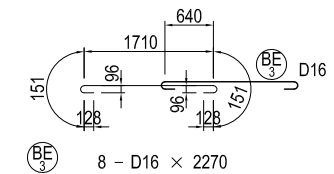
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BE1-1 1	D19	2	1909	799	1683	1221	7432
2	"	2	2173	1044	1806	1020	7495
AVE		4					7464



MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH LL	TOTAL LENGTH ΣL
BE1-2 1	D19	2	3868	2411	709	1962	991	5521
2	"	2	3528	2242	448	1903	790	4980
AVE		4						5251



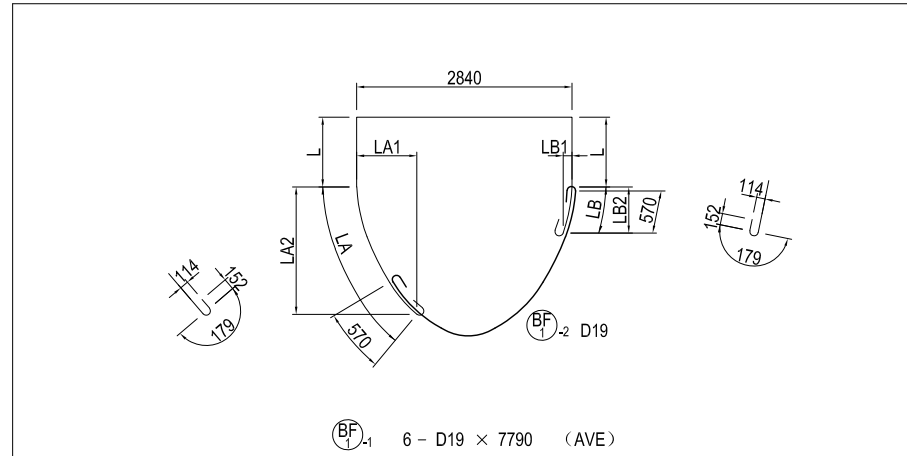
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BE2 1	D19	8	1670	2770	2332
2	"	8	1549	2528	2211
AVE		16			2272



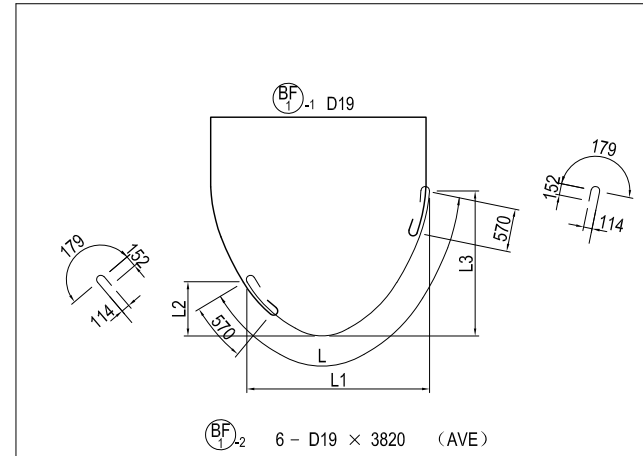
USE MATERIALS

	CONCRETE	BAR
BEAM-COLUMN	σ _{ck} = 30 N/mm ²	SD345

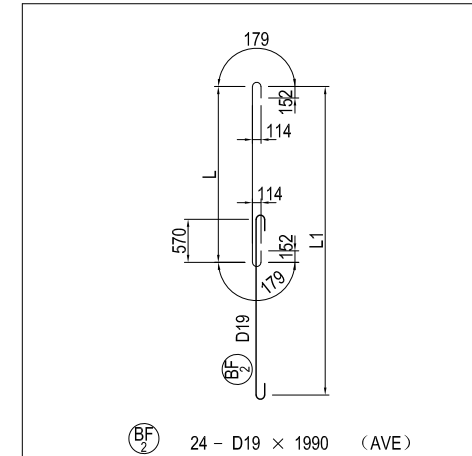
BAR ARRANGEMENT OF P6 PIER (12) S=1:100 BEAM



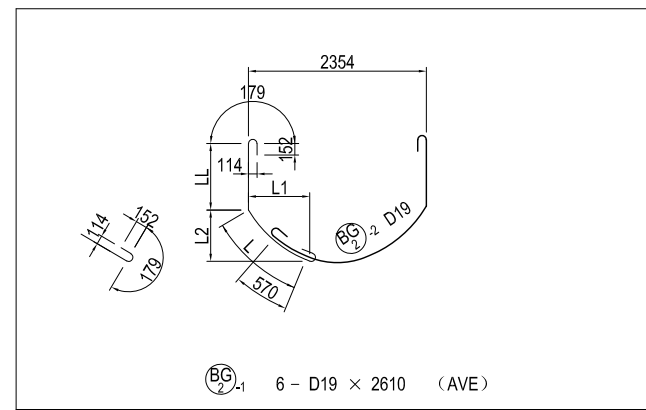
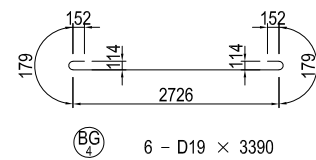
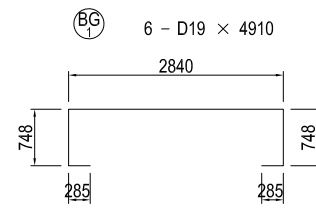
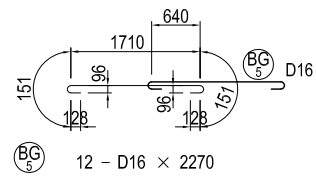
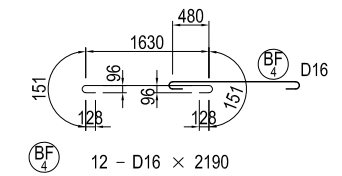
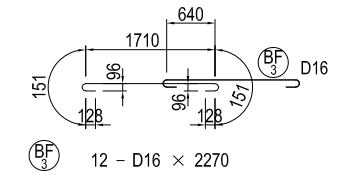
MARKS	DIA.	NOS. OF BARS	LENGTH LA	LENGTH LA1	LENGTH LA2	LENGTH LB	LENGTH LB1	LENGTH LB2	LENGTH L	TOTAL LENGTH ΣL
BF1-1 1	D19	2	1737	782	1500	623	140	604	921	7704
2	"	2	1903	1002	1538	729	214	692	817	7768
3	"	2	2097	1312	1482	812	302	748	740	7891
AVE		6								7788



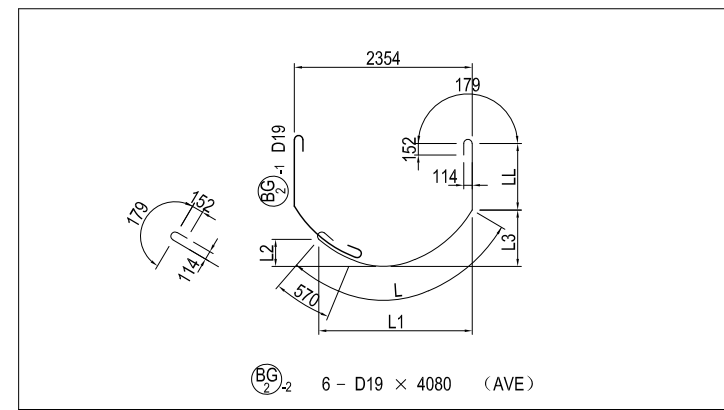
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	TOTAL LENGTH ΣL
BF1-2 1	D19	2	3660	2439	674	1704	4322
2	"	2	3177	2260	444	1474	3839
3	"	2	2642	1991	227	1257	3304
AVE		6					3822



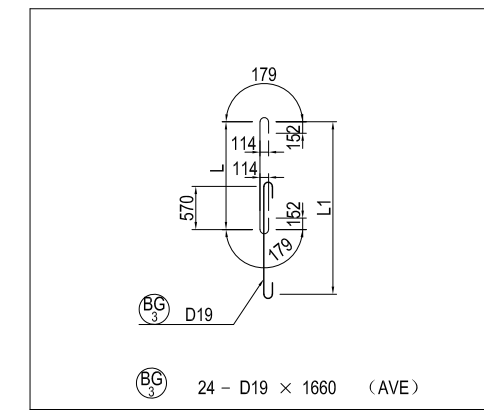
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BF2 1	D19	8	1435	2300	2097
2	"	8	1328	2085	1990
3	"	8	1226	1881	1888
AVE		24			1992



MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	TOTAL LENGTH ΣL
BG2-1 1	D19	2	661	421	505	1189	2512
2	"	2	1088	820	683	871	2621
3	"	2	1307	1033	725	740	2709
AVE		6					2614



MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH L4	TOTAL LENGTH ΣL
BG2-2 1	D19	2	2899	2307	735	812	1189	4750
2	"	2	2388	2023	351	747	871	3921
3	"	2	2165	1849	207	734	740	3567
AVE		6						4079

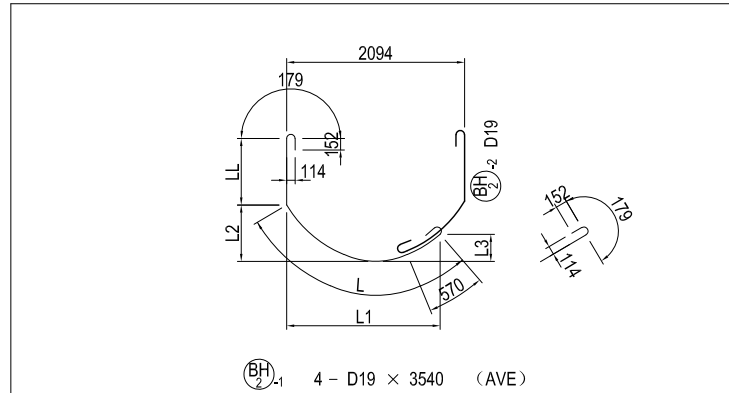
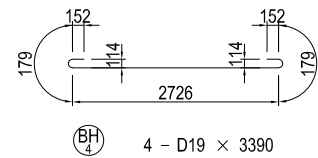
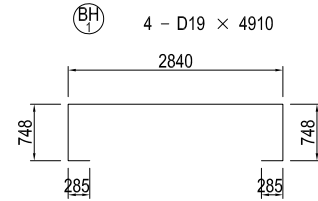
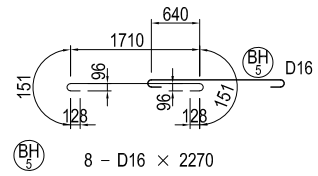


MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BG3 1	D19	8	1145	1719	1807
2	"	8	963	1356	1625
3	"	8	895	1219	1557
AVE		24			1663

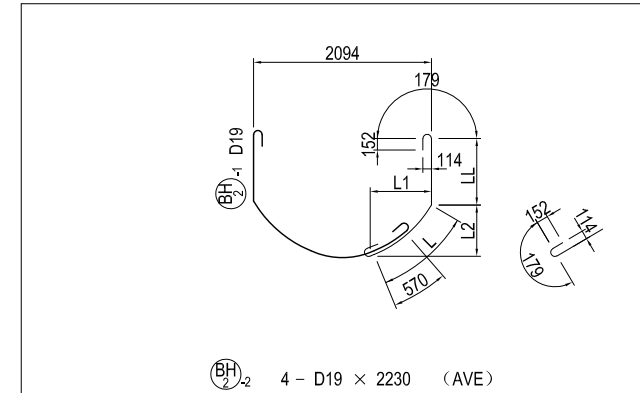
USE MATERIALS

	CONCRETE	BAR
BEAM • COLUMN	σ _{ck} = 30 N/mm ²	SD345

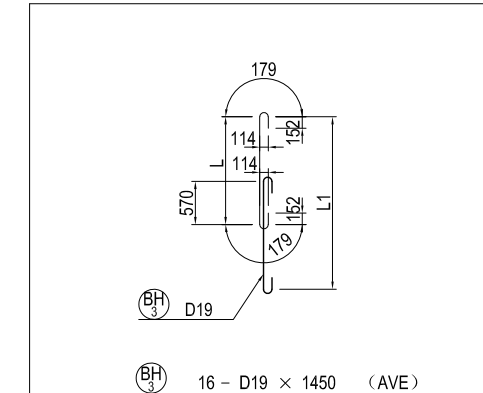
BAR ARRANGEMENT OF P6 PIER (13) S=1:100 BEAM



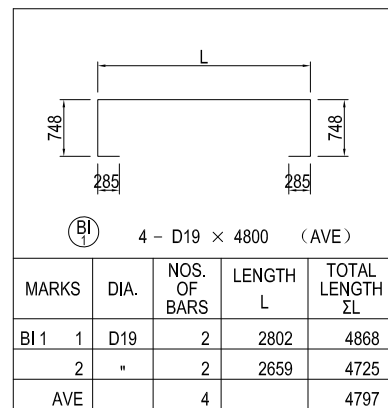
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH LL	TOTAL LENGTH ΣL
BH2-1	D19	2	2260	1987	529	407	796	3718
2	"	2	2062	1941	542	364	638	3362
AVE		4						3540



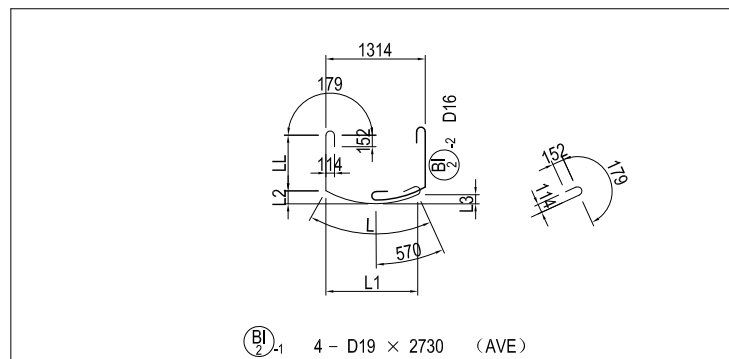
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BH2-2	D19	2	732	582	430	796	2190
2	"	2	959	782	515	638	2259
AVE		4					2225



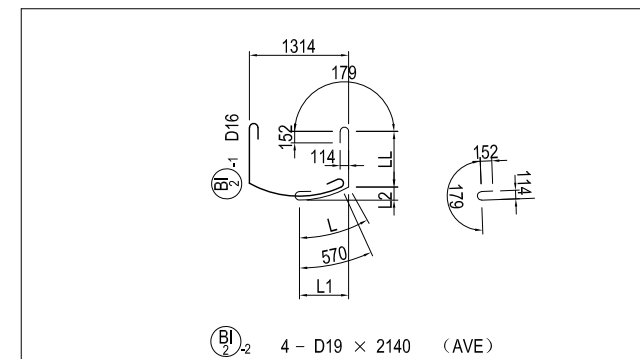
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BH3	D19	8	824	1077	1486
2	"	8	755	940	1417
AVE		16			1452



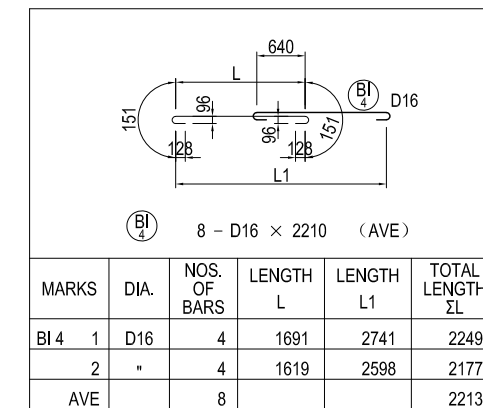
MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
BI 1	D19	2	2802	4868
2	"	2	2659	4725
AVE		4		4797



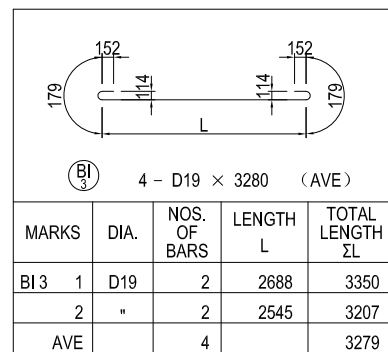
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH LL	TOTAL LENGTH ΣL
BI 2-1	D19	2	1278	1221	187	135	855	2795
2	"	2	1262	1215	172	122	736	2660
AVE		4						2728



MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BI 2-2	D19	2	677	641	187	855	2194
2	"	2	681	652	172	736	2079
AVE		4					2137



MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BI 4	D16	4	1691	2741	2249
2	"	4	1619	2598	2177
AVE		8			2213



MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
BI 3	D19	2	2688	3350
2	"	2	2545	3207
AVE		4		3279

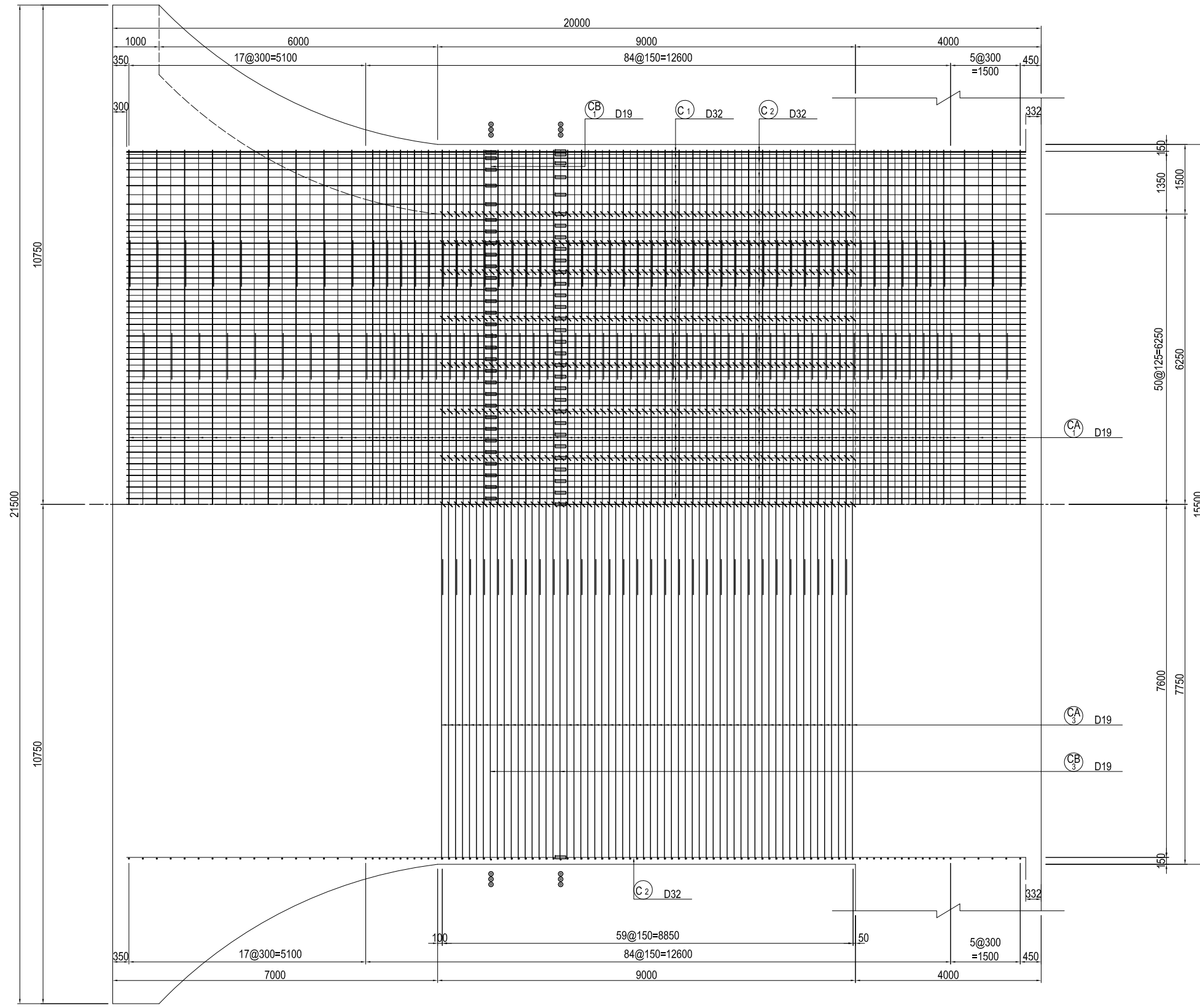
USE MATERIALS

	CONCRETE	BAR
BEAM • COLUMN	σ _{ck} = 30 N/mm ²	SD345

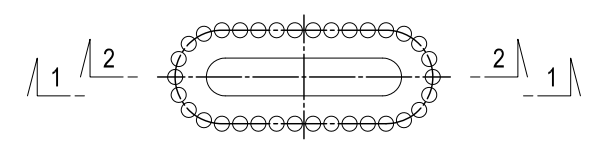
BAR ARRANGEMENT OF P6 PIER (14) S=1:100 COLUMN

FRONT ELEVATION
1-1

SECTION
2-2



MARKING DIAGRAM



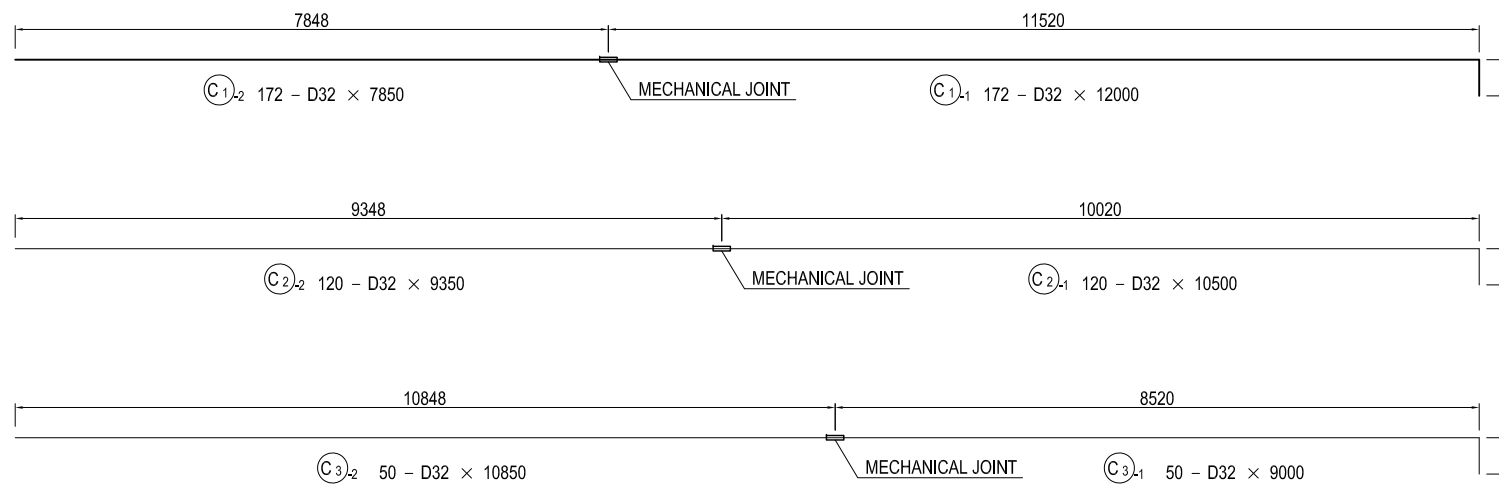
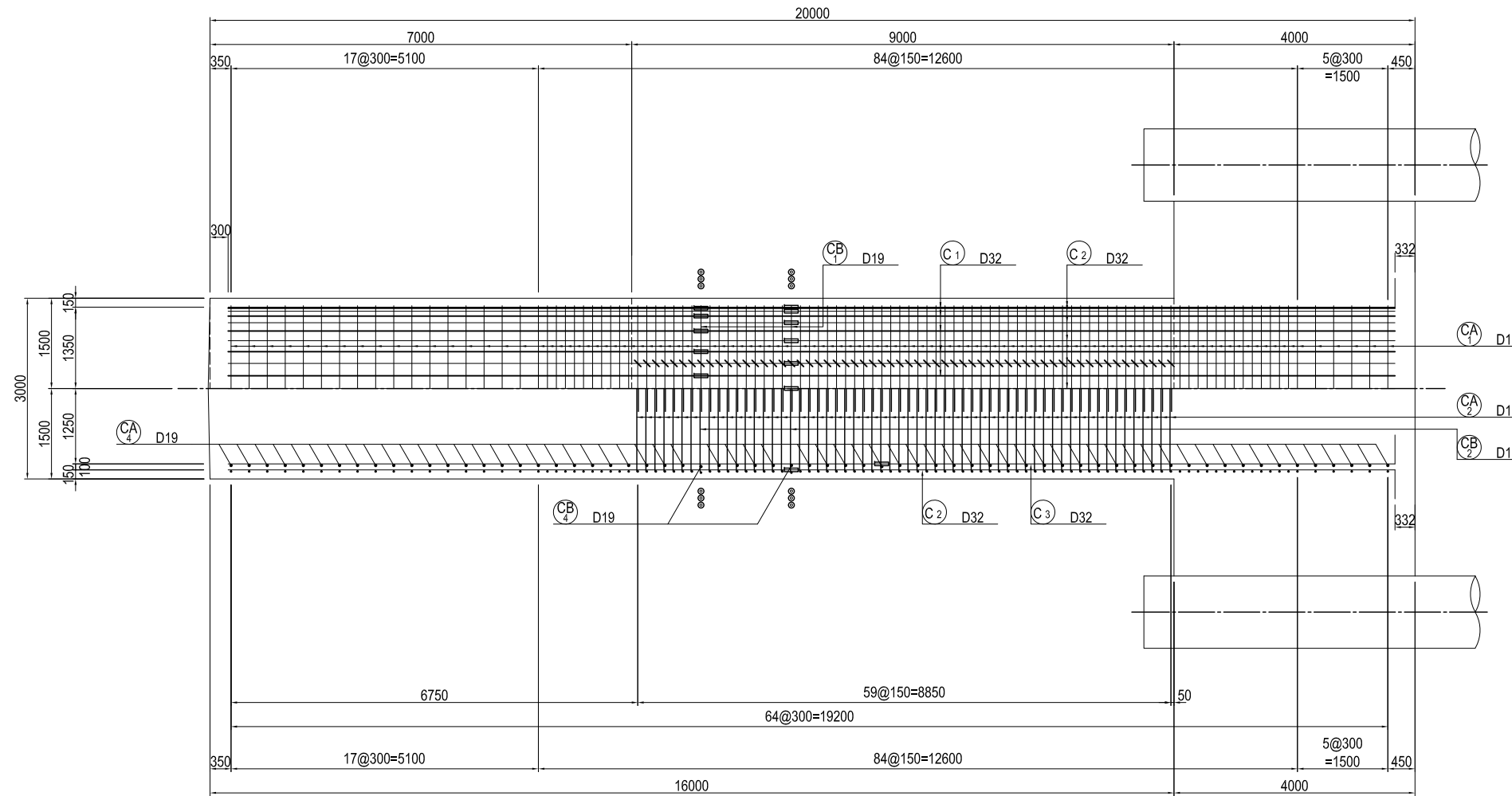
- Notes 1. : This mark indicates hoop arranged in the location of mechanical joint.
 2. : This mark indicates a mechanical joint.

USE MATERIALS

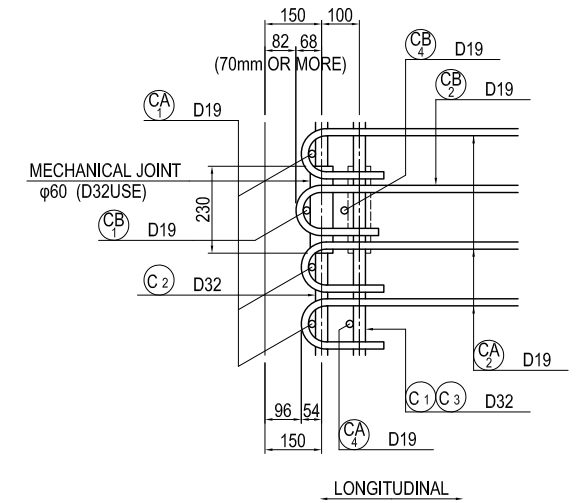
	CONCRETE	BAR
BEAM-COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

BAR ARRANGEMENT OF P6 PIER (15) S=1:100 COLUMN

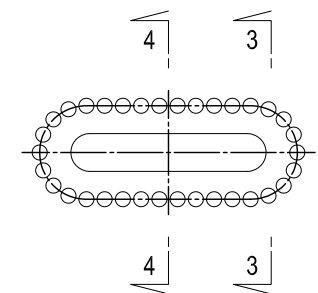
SECTION SIDE ELEVATION
4-4 3-3



DETAIL OF COLUMN S=1:20



MARKING DIAGRAM



Notes) 1. : This mark indicates hoop arranged in the location of mechanical joint.
2. : This mark indicates a mechanical joint.

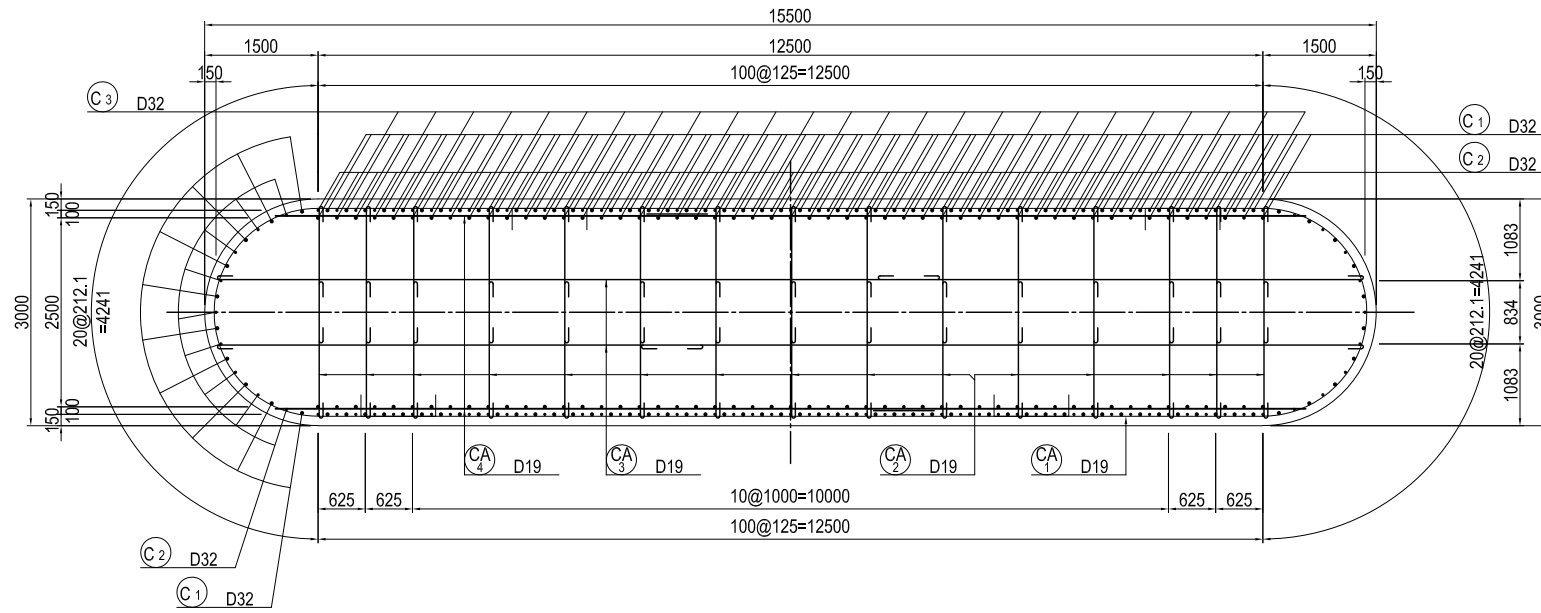
USE MATERIALS

	CONCRETE	BAR
BEAM-COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

BAR ARRANGEMENT OF P6 PIER (16) S=1:100

COLUMN

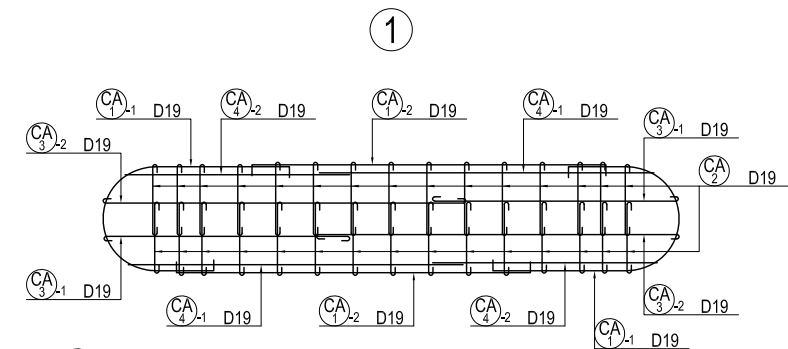
PLAN 5-5



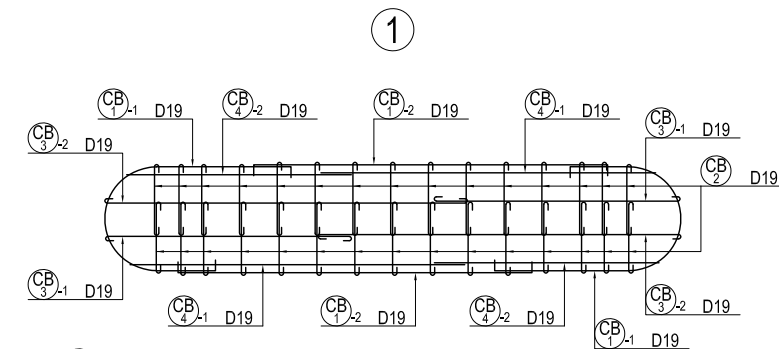
ASSEMBLY DRAWING OF HOOP
(c.t.c. 150)

【STANDARD PART】

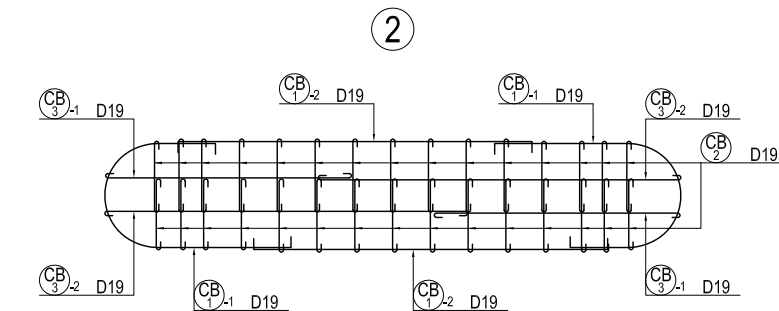
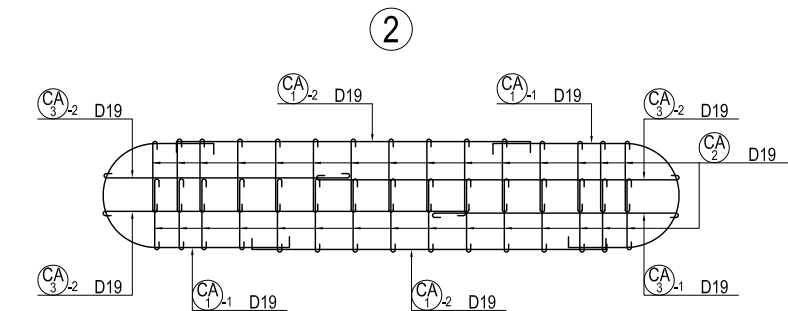
【MECHANICAL JOINT PART】



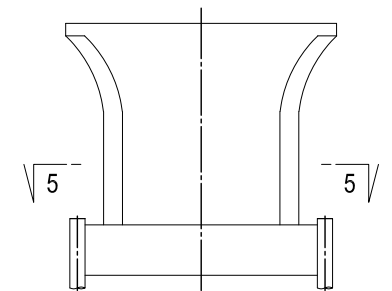
Note) CA : c.t.c. 300



Note) CB : c.t.c. 300



MARKING DIAGRAM



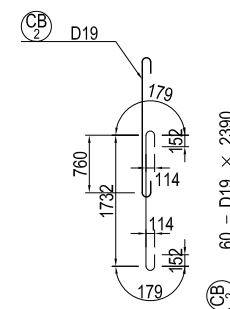
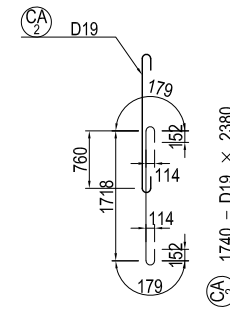
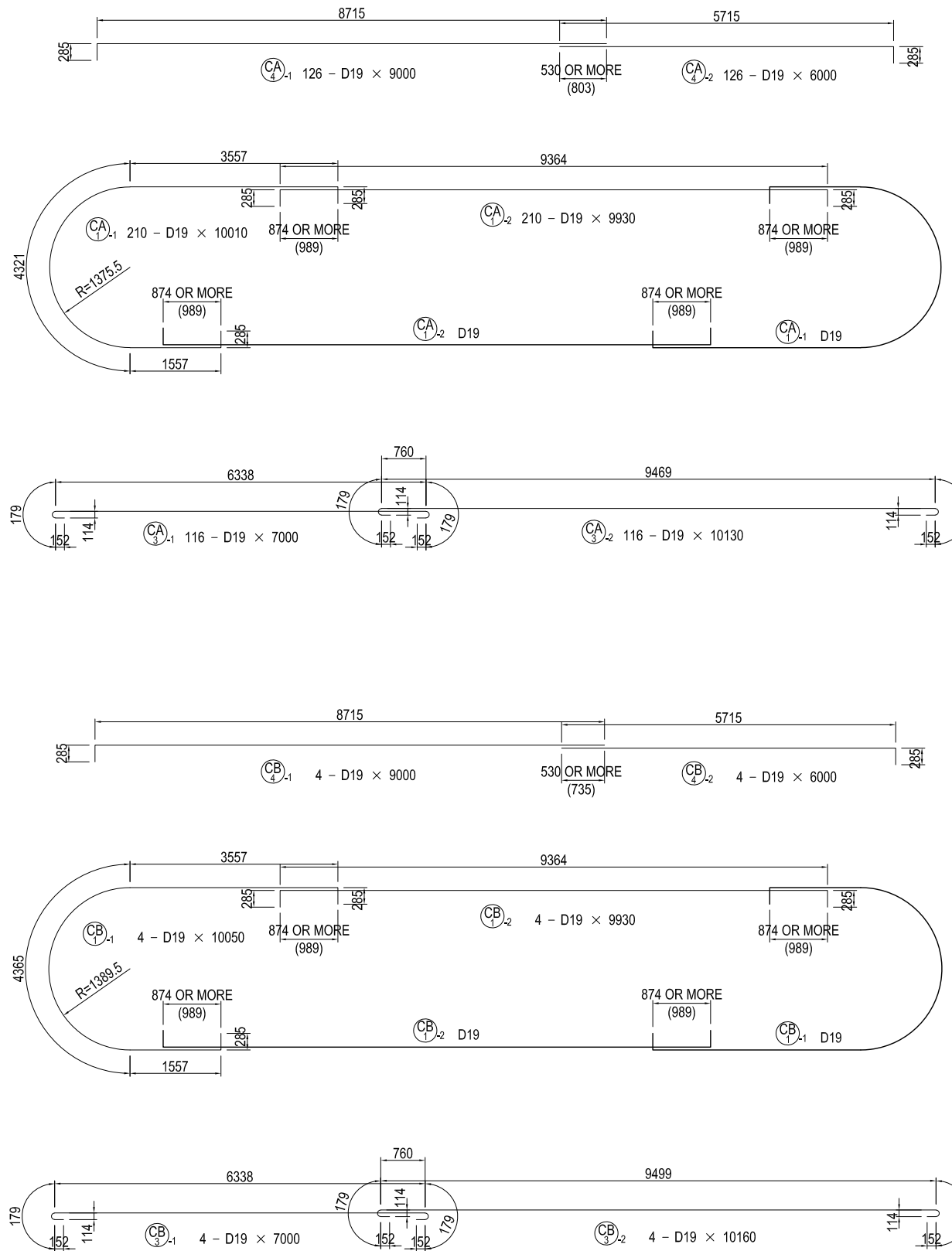
USE MATERIALS

	CONCRETE	BAR
BEAM-COLUMN	σ _{ck} = 30 N/mm ²	SD345

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE BAR ARRANGEMENT OF P6 PIER (16)	PACKAGE	
				PREPARED BY	S. IMADA			27 Nov.2017	1
				CHECKED BY	T. HAYAKAWA			28 Nov.2017	DWG No.
				APPROVED BY	Y. SANO			29 Nov.2017	P1-SB-2018

BAR ARRANGEMENT OF P6 PIER (17) S=1:100

COLUMN



LAP LENGTH LIST OF HOOP

DIA.	R	LAP LENGTH (40φ)	L
D13	39	520	598
D16	48	640	736
D19	57	760	874
D22	66	880	1012
D25	75	1000	1150
D29	87	1160	1334
D32	96	1280	1472

USE MATERIALS

	CONCRETE	BAR
BEAM-COLUMN	σ _{ck} = 30 N/mm ²	SD345

BAR ARRANGEMENT OF P6 PIER (18) NOT TO SCALE

BAR SCHEDULE

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
B 1-1	D29	11500	6	5.04	57.96	348	┌
1-2	"	12000	6	"	60.48	363	┐
2-1	"	5000	7	"	25.20	176	┌
2-2	"	12000	7	"	60.48	423	┐
2-3	"	7500	7	"	37.80	265	┐
3-1	"	11500	2	"	57.96	116	┌
3-2	"	12000	2	"	60.48	121	┐
4-1	"	5000	2	"	25.20	50	┌
4-2	"	12000	2	"	60.48	121	┐
4-3	"	7500	2	"	37.80	76	┐
5-1	"	11000	2	"	55.44	111	┌
5-2	"	12000	2	"	60.48	121	┐
6-1	"	11000	2	"	55.44	111	┌
6-2	"	12000	2	"	60.48	121	┐
7-1	"	8500	5	"	42.84	214	┌
7-2	"	10500	5	"	52.92	265	┐
7-3	"	5000	5	"	25.20	126	┐
8-1	"	8500	2	"	42.84	86	┌
8-2	"	10500	2	"	52.92	106	┐
8-3	"	5000	2	"	25.20	50	┐
9-1	"	5000	2	"	25.20	50	┌
9-2	"	10500	2	"	52.92	106	┐
9-3	"	8000	2	"	40.32	81	┐
10-1	"	11000	4	"	55.44	222	┌
10-2	"	12000	4	"	60.48	242	┐
11-1	"	5000	3	"	25.20	76	┌
11-2	"	12000	3	"	60.48	181	┐
11-3	"	7000	3	"	35.28	106	┐
12-1	"	5000	2	"	25.20	50	┌
12-2	"	12000	2	"	60.48	121	┐
12-3	"	7000	2	"	35.28	71	┐
13-1	"	10500	2	"	52.92	106	┌
13-2	"	12000	2	"	60.48	121	┐
14-1	"	9440	6	"	47.58	285	┌ (AVE)
14-2	"	10000	6	"	50.40	302	┐
14-3	"	11200	6	"	56.45	339	┐ (AVE)
15-1	"	10090	3	"	50.85	153	┌ (AVE)
15-2	"	10000	3	"	50.40	151	┐
15-3	"	11850	3	"	59.72	179	┐ (AVE)
16-1	"	12000	4	"	60.48	242	┌
16-2	"	5000	2	"	25.20	50	┐
17-1	D16	12000	3	1.56	18.72	56	┌
17-2	"	9000	6	"	14.04	84	┐
17-3	"	10500	3	"	16.38	49	┐
17-4	"	12000	3	"	18.72	56	┐
18-1	"	12000	1	"	18.72	19	┌
18-2	"	7500	2	"	11.70	23	┐
18-3	"	12000	1	"	18.72	19	┐
18-4	"	11000	1	"	17.16	17	┐

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
B 19-1	D16	12000	2	"	18.72	37	┌
19-2	"	12000	2	"	18.72	37	┐
20-1	"	9180	36	"	14.32	516	┌ (AVE)
20-2	"	11340	36	"	17.69	637	┐
SUBTOTAL						8154	kg
BA 1-1	D19	11640	85	2.25	26.19	2226	┌
1-2	"	6500	85	"	14.63	1244	┐
2-1	"	6500	85	"	14.63	1244	┐
2-2	"	10050	85	"	22.61	1922	┐
3	"	3390	85	"	7.63	649	┐
4	D16	2270	170	1.56	3.54	602	┐
5	"	2190	170	"	3.42	581	┐
SUBTOTAL						8468	kg
BB 1-1	D19	9650	10	2.25	21.71	217	┌
1-2	"	11810	10	"	26.57	266	┐ (AVE)
2-1	"	10050	10	"	22.61	226	┐
2-2	"	6500	10	"	14.63	146	┐
3	D16	2270	20	1.56	3.54	71	┐
4	"	2190	20	"	3.42	68	┐
SUBTOTAL						994	kg
BC 1-1	D19	10300	8	2.25	23.18	185	┌ (AVE)
1-2	"	10290	8	"	23.15	185	┐ (AVE)
2-1	"	10050	6	"	22.61	136	┐
2-2	"	6500	6	"	14.63	88	┐
3	"	4040	8	"	9.09	73	┐
4	D16	2270	16	1.56	3.54	57	┐
5	"	2190	16	"	3.42	55	┐
SUBTOTAL						779	kg
BD 1-1	D19	8250	14	2.25	18.56	260	┌ (AVE)
1-2	"	7650	14	"	17.21	241	┐ (AVE)
2	"	3030	56	"	6.82	382	┐ (AVE)
3	D16	2270	28	1.56	3.54	99	┐
4	"	2190	28	"	3.42	96	┐
SUBTOTAL						1078	kg
BE 1-1	D19	7460	4	2.25	16.79	67	┌ (AVE)
1-2	"	5250	4	"	11.81	47	┐ (AVE)
2	"	2270	16	"	5.11	82	┐ (AVE)
3	D16	2270	8	1.56	3.54	28	┐
4	"	2190	8	"	3.42	27	┐
SUBTOTAL						251	kg

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
BF 1-1	D19	7790	6	2.25	17.53	105	┌ (AVE)
1-2	"	3820	6	"	8.60	52	┐ (AVE)
2	"	1990	24	"	4.48	108	┐ (AVE)
3	D16	2270	12	1.56	3.54	42	┐
4	"	2190	12	"	3.42	41	┐
SUBTOTAL						384	kg
BG 1	D19	4910	6	2.25	11.05	66	┌
2-1	"	2610	6	"	5.87	35	┐ (AVE)
2-2	"	4080	6	"	9.18	55	┐ (AVE)
3	"	1660	24	"	3.74	90	┐ (AVE)
4	"	3390	6	"	7.63	46	┐
5	D16	2270	12	1.56	3.54	42	┐
SUBTOTAL						334	kg
BH 1	D19	4910	4	2.25	11.05	44	┌
2-1	"	3540	4	"	7.97	32	┐ (AVE)
2-2	"	2230	4	"	5.02	20	┐ (AVE)
3	"	1450	16	"	3.26	52	┐ (AVE)
4	"	3390	4	"	7.63	31	┐
5	D16	2270	8	1.56	3.54	28	┐
SUBTOTAL						207	kg
BI 1	D19	4800	4	2.25	10.80	43	┌
2-1	"	2730	4	"	6.14	25	┐
2-2	"	2140	4	"	4.82	19	┐
3	"	3280	4	"	7.38	30	┐
4	D16	2210	8	1.56	3.45	28	┐
SUBTOTAL						145	kg
HA 1	D16	2620	19	1.56	4.09	78	┌
2	"	3180	14	"	4.96	49	┐
3	"	7650	1	"	11.93	12	┐
SUBTOTAL						139	kg
HB 1	D16	3000	42	1.56	4.68	197	┌
2	"	3560	32	"	5.55	178	┐
3	"	8450	2	"	13.18	26	┐
SUBTOTAL						401	kg
HC 1	D16	2360	17	1.56	3.68	63	┌
2	"	2860	11	"	4.46	49	┐
3	"	7210	1	"	11.25	11	┐
SUBTOTAL						123	kg

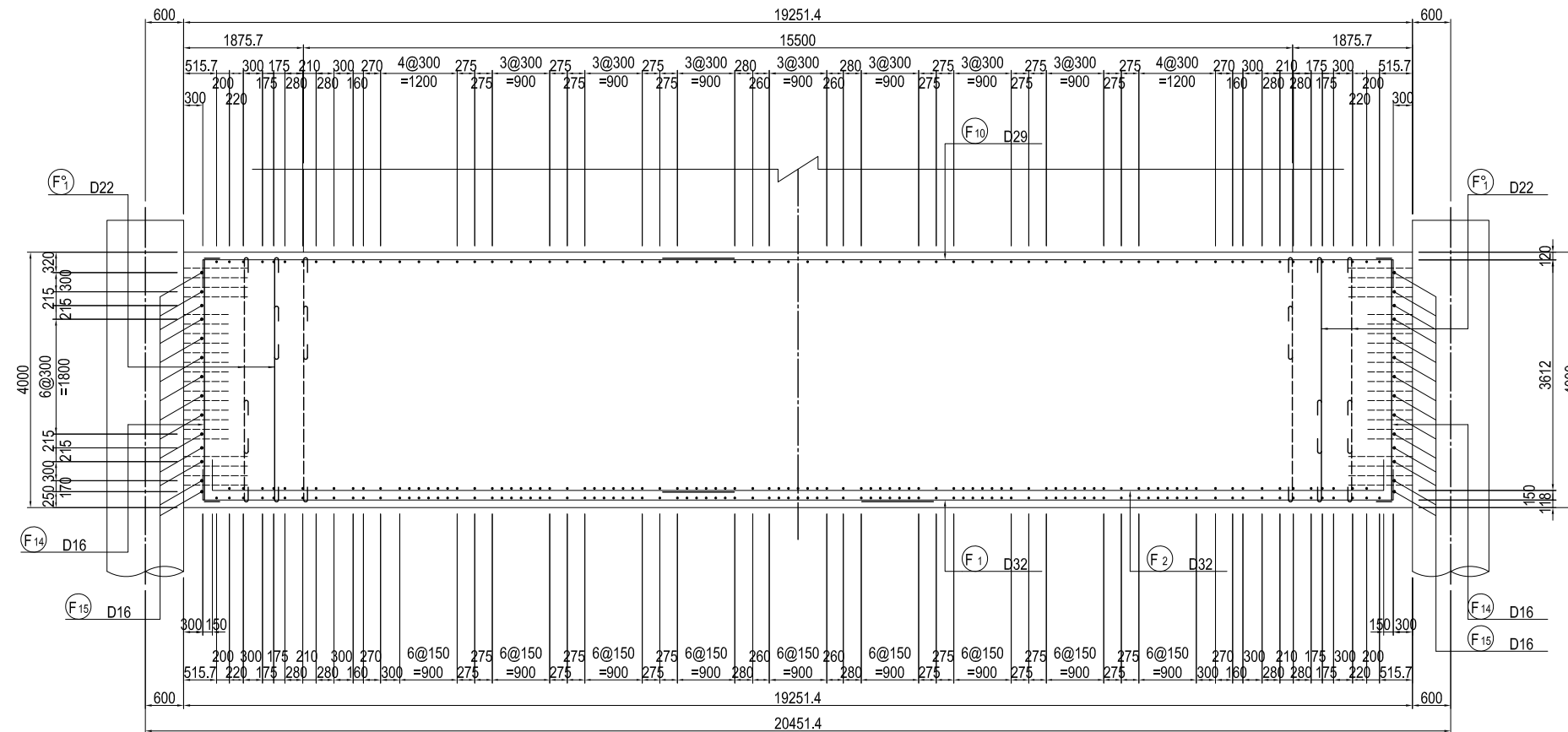
MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
C 1-1	D32	12000	172	6.23	74.76	12859	┌ (172)
1-2	"	7850	172	"	48.91	8413	┐
2-1	"	10500	120	"	65.42	7850	┐ (120)
2-2	"	9350	120	"	58.25	6990	┐
3-1	"	9000	50	"	56.07	2804	┐ (50)
3-2	"	10850	50	"	67.60	3380	┐
SUBTOTAL						42296	kg
CA 1-1	D19	10010	210	2.25	22.52	4729	┌
1-2	"	9930	210	"	22.34	4691	┐
2	"	2380	1740	"	5.36	9326	┐
3-1	"	7000	116	"	15.75	1827	┐
3-2	"	10130	116	"	22.79	2644	┐
4-1	"	9000	126	"	20.25	2552	┐
4-2	"	6000	126	"	13.50	1701	┐
SUBTOTAL						27470	kg
CB 1-1	D19	10050	4	2.25	22.61	90	┌
1-2	"	9930	4	"	22.34	89	┐
2	"	2390	60	"	5.38	323	┐
3-1	"	7000	4	"	15.75	63	┐
3-2	"	10160	4	"	22.86	91	┐
4-1	"	9000	4	"	20.25	81	┐
4-2	"	6000	4	"	13.50	54	┐
SUBTOTAL						791	kg
(MECHANICAL JOINT)							
					D32	42296	kg (342)
					D29	6604	"
					D19	39000	"
					D16	4078	"
TOTAL						91978	kg (342)

USE MATERIALS

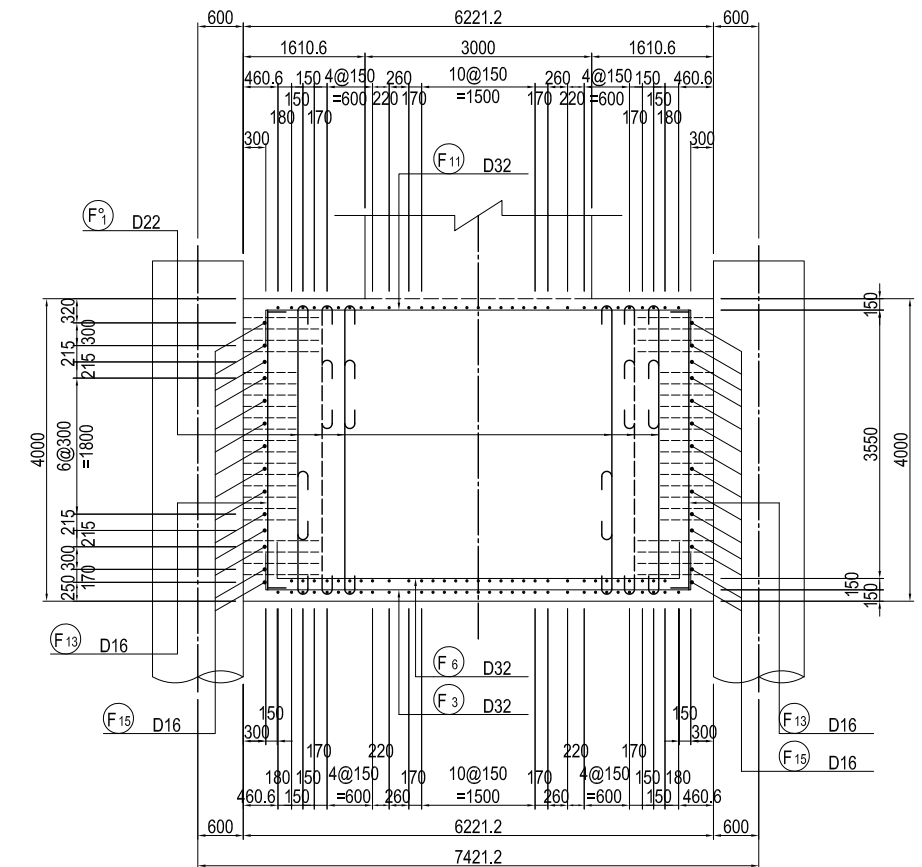
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BEAM-COLUMN	σ _{ck} = 30 N/mm ²	SD345

BAR ARRANGEMENT OF FOOTING FOR P6 PIER (1) S=1:100

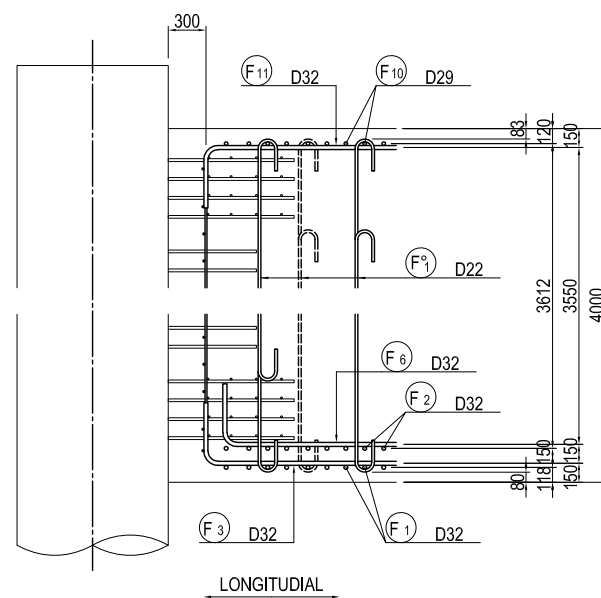
SECTION 1-1



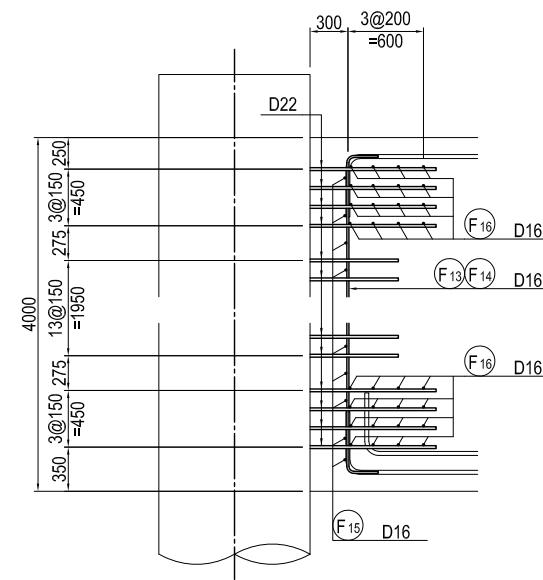
SECTION 2-2



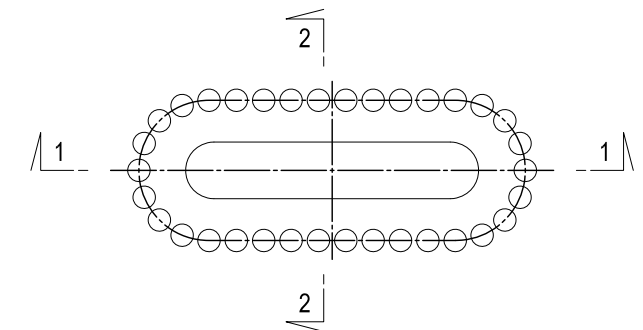
DETAIL OF PILE CAP S=1:60



DETAIL OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND FOOTING S=1:60



MARKING DIAGRAM



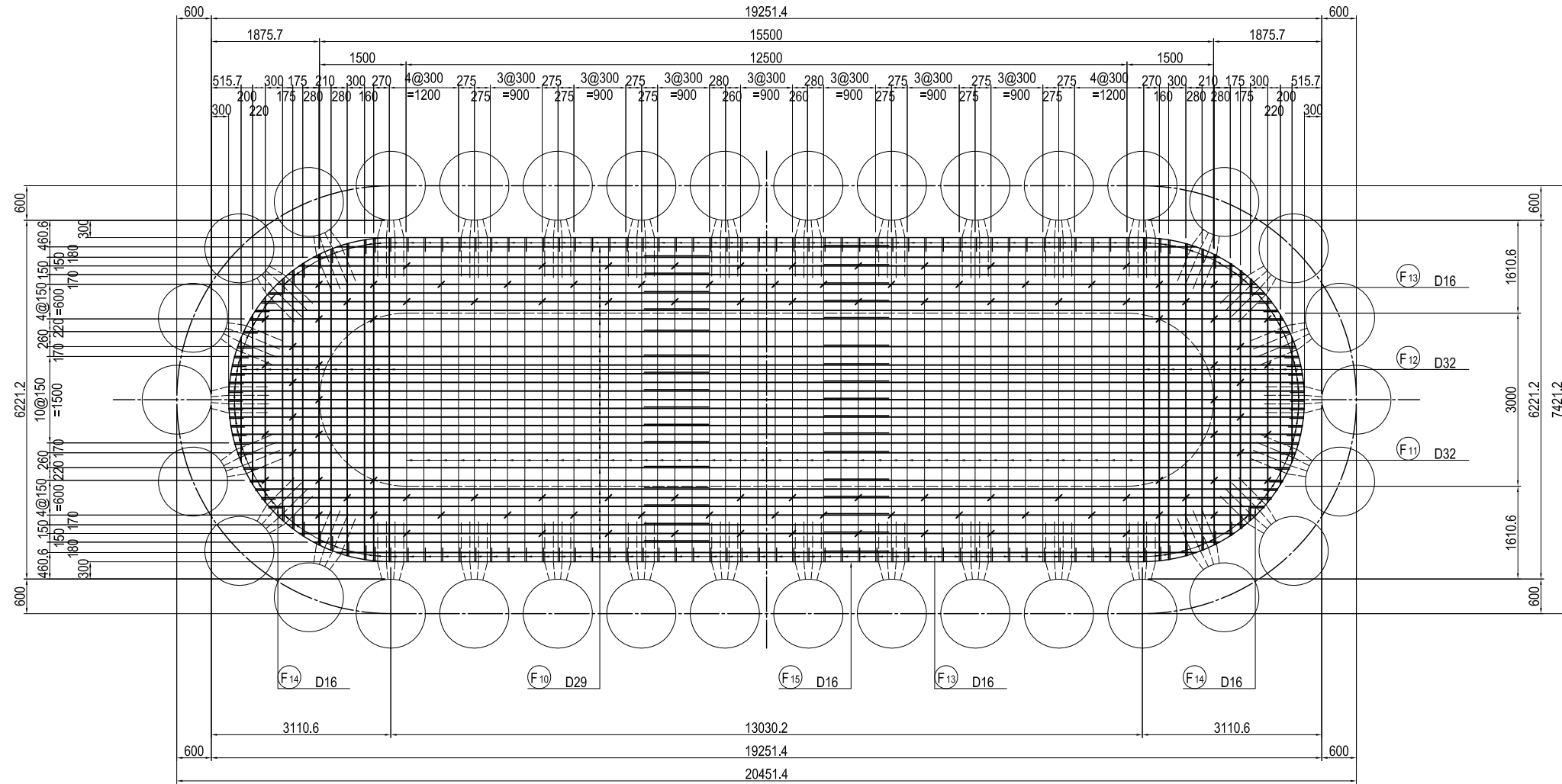
USE MATERIALS

	CONCRETE	BAR
FOOTING	σ _{ck} = 24 N/mm ²	SD345

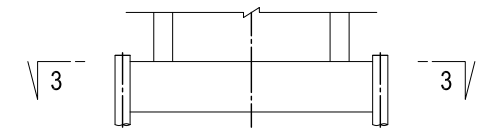
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME PREPARED BY S. IMADA CHECKED BY T. HAYAKAWA APPROVED BY Y. SANO	SIGNATURE 	DATE 27 Nov.2017 28 Nov.2017 29 Nov.2017	DRAWING TITLE BAR ARRANGEMENT OF FOOTING FOR P6 PIER (1)	PACKAGE 1 DWG No. P1-SB-2021
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BAR ARRANGEMENT OF FOOTING FOR P6 PIER (2) S=1:100

PLAN 3-3



MARKING DIAGRAM



USE MATERIALS

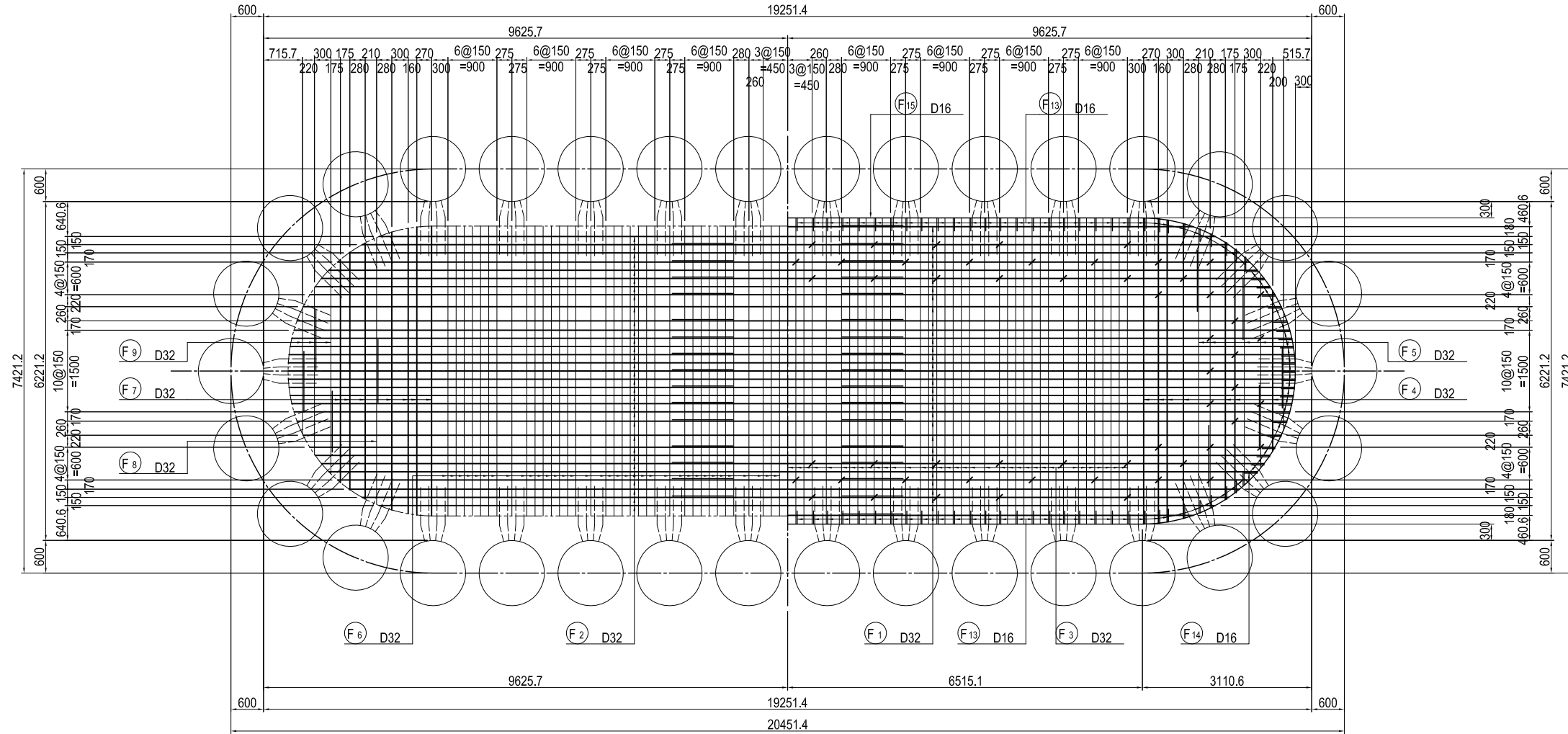
FOOTING	CONCRETE $\sigma_{ck} = 24 \text{ N/mm}^2$	BAR SD345

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">NAME</th> <th style="width: 15%;">SIGNATURE</th> <th style="width: 15%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY S. IMADA</td> <td></td> <td>27 Nov.2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>28 Nov.2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>29 Nov.2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY S. IMADA		27 Nov.2017	CHECKED BY T. HAYAKAWA		28 Nov.2017	APPROVED BY Y. SANO		29 Nov.2017	DRAWING TITLE BAR ARRANGEMENT OF FOOTING FOR P6 PIER (2)	PACKAGE 1 DWG No. P1-SB-2022
NAME	SIGNATURE	DATE																
PREPARED BY S. IMADA		27 Nov.2017																
CHECKED BY T. HAYAKAWA		28 Nov.2017																
APPROVED BY Y. SANO		29 Nov.2017																

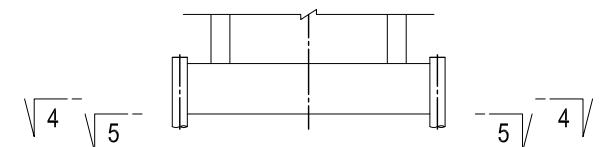
BAR ARRANGEMENT OF FOOTING FOR P6 PIER (3) S=1:100

PLAN
4 - 4

PLAN
5 - 5



MARKING DIAGRAM

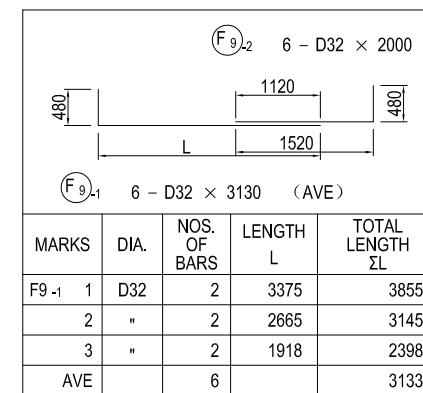
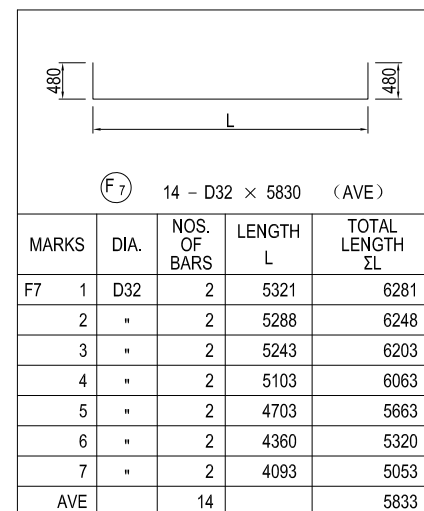
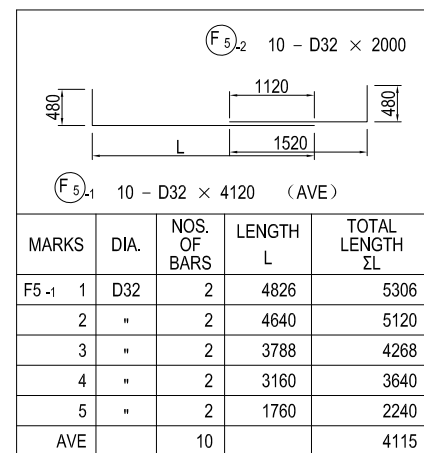
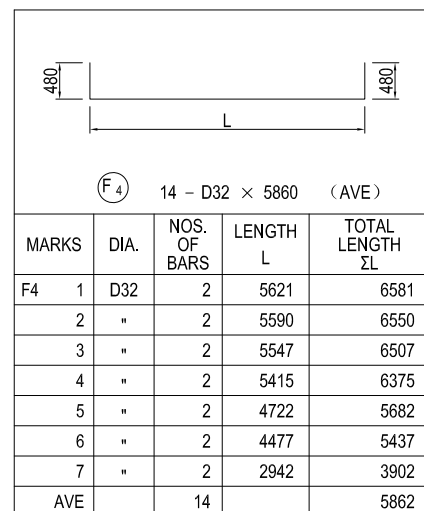
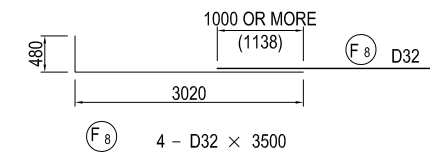
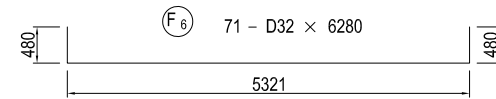
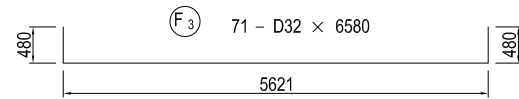
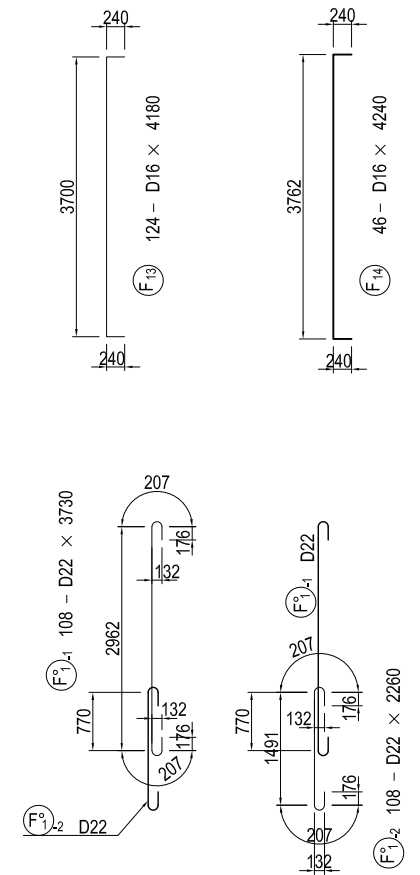
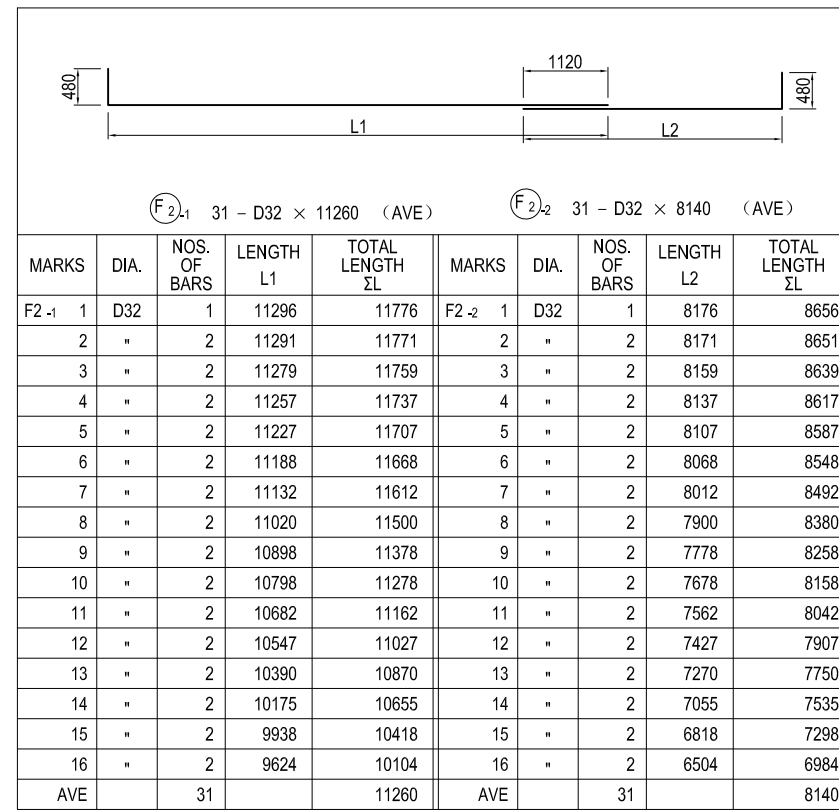
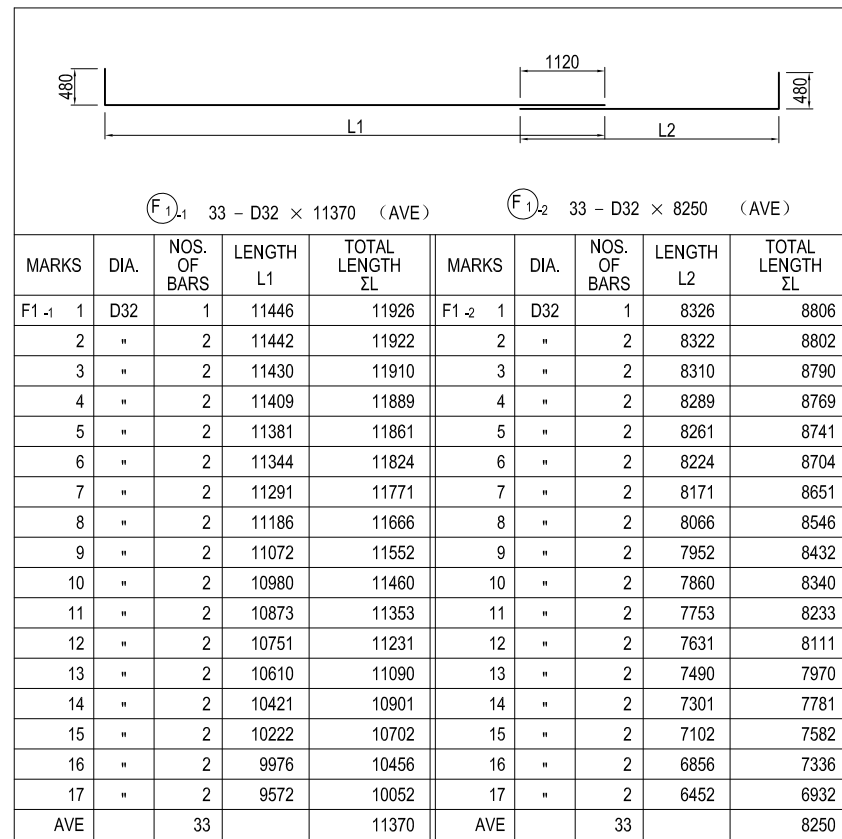


USE MATERIALS

	CONCRETE	BAR
FOOTING	σ _{ck} = 24 N/mm ²	SD345

<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 20%;">NAME</th> <th style="width: 20%;">SIGNATURE</th> <th style="width: 20%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>S. IMADA</td> <td></td> <td>27 Nov.2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td></td> <td>28 Nov.2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td></td> <td>29 Nov.2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	S. IMADA		27 Nov.2017	CHECKED BY	T. HAYAKAWA		28 Nov.2017	APPROVED BY	Y. SANO		29 Nov.2017	<small>DRAWING TITLE</small> BAR ARRANGEMENT OF FOOTING FOR P6 PIER (3)	<small>PACKAGE</small> 1 DWG No. P1-SB-2023
	NAME	SIGNATURE	DATE																			
PREPARED BY	S. IMADA		27 Nov.2017																			
CHECKED BY	T. HAYAKAWA		28 Nov.2017																			
APPROVED BY	Y. SANO		29 Nov.2017																			

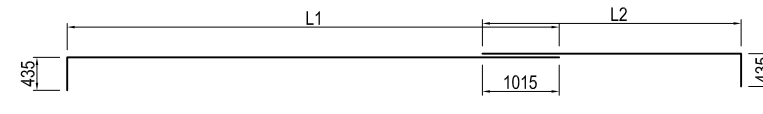
BAR ARRANGEMENT OF FOOTING FOR P6 PIER (4) S=1:100



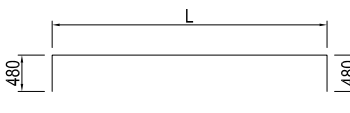
USE MATERIALS

	CONCRETE	BAR
FOOTING	σ _{ck} = 24 N/mm ²	SD345

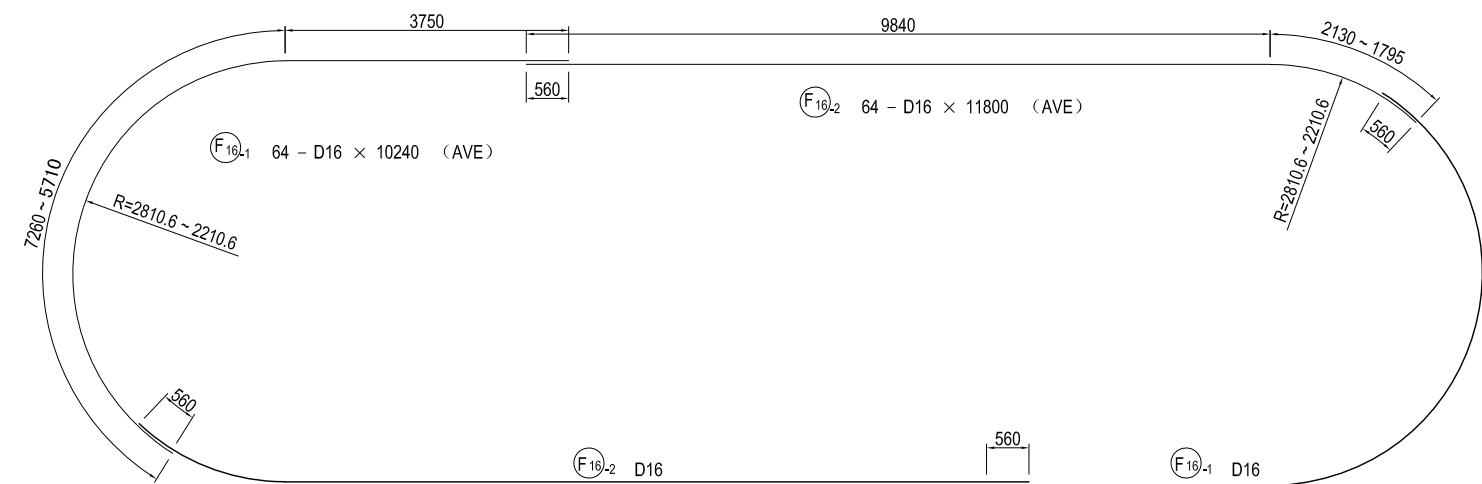
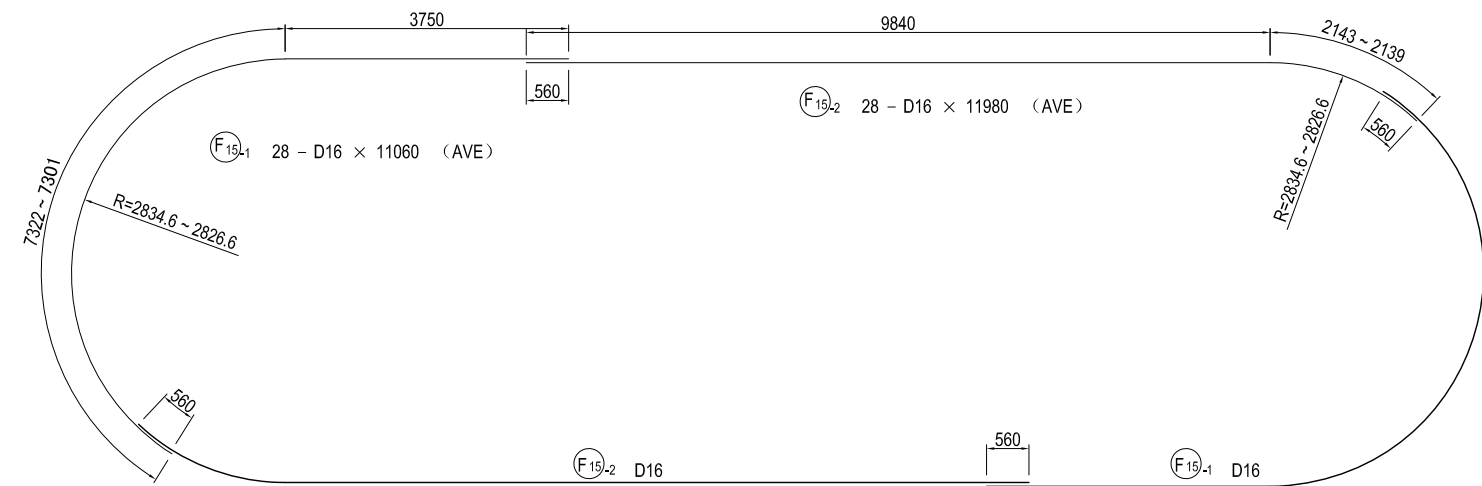
BAR ARRANGEMENT OF FOOTING FOR P6 PIER (5) S=1:100



F10-1					F10-2				
MARKS	DIA.	NOS. OF BARS	LENGTH L1	TOTAL LENGTH ΣL	MARKS	DIA.	NOS. OF BARS	LENGTH L2	TOTAL LENGTH ΣL
F10-1	D29	1	11341	11776	F10-2	D29	1	8326	8761
2	"	2	11337	11772	2	"	2	8322	8757
3	"	2	11325	11760	3	"	2	8310	8745
4	"	2	11304	11739	4	"	2	8289	8724
5	"	2	11276	11711	5	"	2	8261	8696
6	"	2	11239	11674	6	"	2	8224	8659
7	"	2	11186	11621	7	"	2	8171	8606
8	"	2	11081	11516	8	"	2	8066	8501
9	"	2	10967	11402	9	"	2	7952	8387
10	"	2	10875	11310	10	"	2	7860	8295
11	"	2	10768	11203	11	"	2	7753	8188
12	"	2	10646	11081	12	"	2	7631	8066
13	"	2	10505	10940	13	"	2	7490	7925
14	"	2	10316	10751	14	"	2	7301	7736
15	"	2	10117	10552	15	"	2	7102	7537
16	"	2	9871	10306	16	"	2	6856	7291
17	"	2	9467	9902	17	"	2	6452	6887
AVE		33		11220	AVE		33		8205

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F12	D32	2	5621	6581
2	"	2	5590	6550
3	"	2	5547	6507
4	"	2	5415	6375
5	"	2	5226	6186
6	"	2	5040	6000
7	"	2	4722	5682
8	"	2	4477	5437
9	"	2	4188	5148
10	"	2	3560	4520
11	"	2	2942	3902
12	"	2	2160	3120
AVE		24		5501



Note) The joint position of the reinforcing bars is reversed for each step.

USE MATERIALS

	CONCRETE	BAR
FOOTING	σ _{ck} = 24 N/mm ²	SD345

BAR ARRANGEMENT OF FOOTING FOR P6 PIER (6) NOT TO SCALE

BAR SCHEDULE

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
F	1-1	D32	11370	33	6.23	70.84	2338 (AVE)
	1-2	"	8250	33	"	51.40	1696 (AVE)
	2-1	"	11260	31	"	70.15	2175 (AVE)
	2-2	"	8140	31	"	50.71	1572 (AVE)
	3	"	6580	71	"	40.99	2910 (AVE)
	4	"	5860	14	"	36.51	511 (AVE)
	5-1	"	4120	10	"	25.67	257 (AVE)
	5-2	"	2000	10	"	12.46	125 (AVE)
	6	"	6280	71	"	39.12	2778 (AVE)
	7	"	5830	14	"	36.32	508 (AVE)
	8	"	3500	4	"	21.81	87 (AVE)
	9-1	"	3130	6	"	19.50	117 (AVE)
	9-2	"	2000	6	"	12.46	75 (AVE)
	10-1	D29	11220	33	5.04	56.55	1866 (AVE)
	10-2	"	8210	33	"	41.38	1366 (AVE)
	11	D32	6580	44	6.23	40.99	1804 (AVE)
	12	"	5500	24	"	34.27	822 (AVE)
	13	D16	4180	124	1.56	6.52	808 (AVE)
	14	"	4240	46	"	6.61	304 (AVE)
	15-1	"	11060	28	"	17.25	483 (AVE)
	15-2	"	11980	28	"	18.69	523 (AVE)
	16-1	"	10240	64	"	15.97	1022 (AVE)
	16-2	"	11800	64	"	18.41	1178 (AVE)
SUBTOTAL						25325	kg
F°	1-1	D22	3730	108	3.04	11.34	1225 (AVE)
	1-2	"	2260	108	"	6.87	742 (AVE)
SUBTOTAL						1967	kg
D32					17775	kg	
D29					3232	"	
D22					1967	"	
D16					4318	"	
TOTAL						27292	kg

USE MATERIALS

FOOTING	CONCRETE σ _{ck} = 24 N/mm ²	BAR SD345
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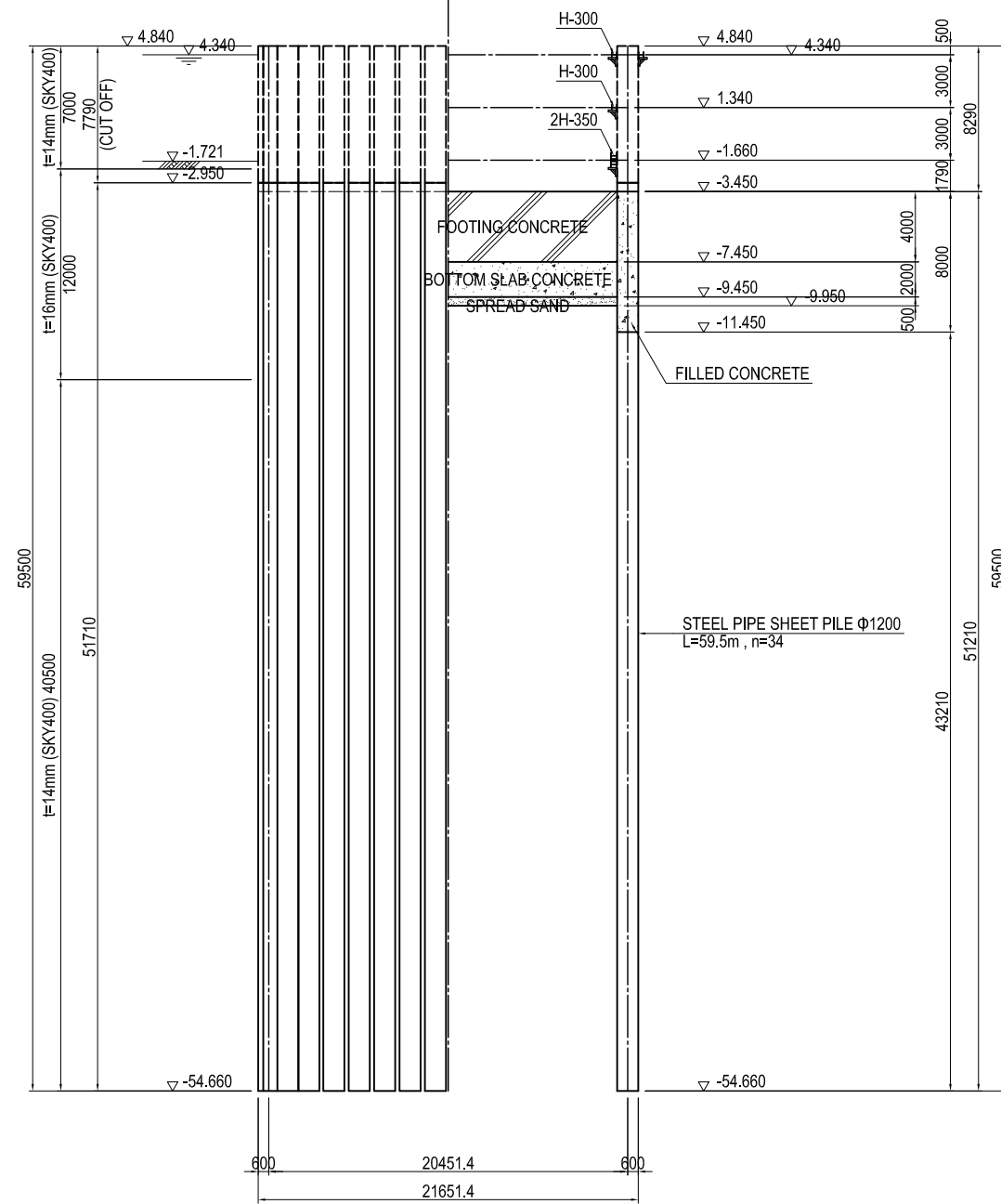
<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>NAME</th> <th>SIGNATURE</th> <th>DATE</th> </tr> <tr> <td>PREPARED BY</td> <td>S. IMADA</td> <td>27 Nov.2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td>28 Nov.2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td>29 Nov.2017</td> </tr> </table>	NAME	SIGNATURE	DATE	PREPARED BY	S. IMADA	27 Nov.2017	CHECKED BY	T. HAYAKAWA	28 Nov.2017	APPROVED BY	Y. SANO	29 Nov.2017	<small>DRAWING TITLE</small> BAR ARRANGEMENT OF FOOTING FOR P6 PIER (6)	<small>PACKAGE</small> 1 DWG No. P1-SB-2026
NAME	SIGNATURE	DATE																
PREPARED BY	S. IMADA	27 Nov.2017																
CHECKED BY	T. HAYAKAWA	28 Nov.2017																
APPROVED BY	Y. SANO	29 Nov.2017																

GENERAL VIEW OF STEEL PIPE SHEET PILE FOUNDATION OF P6 PIER

S=1:400

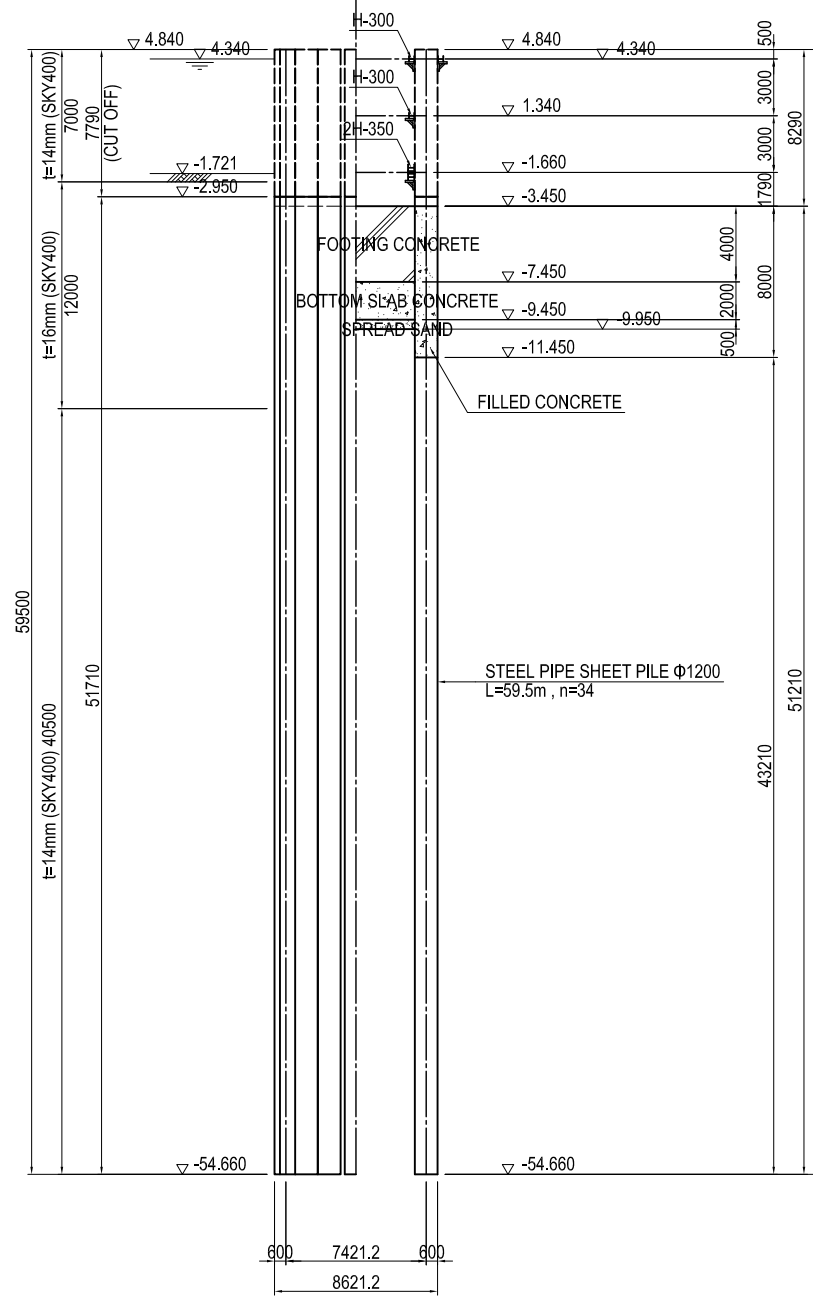
FRONT ELEVATION

1-1 2-2

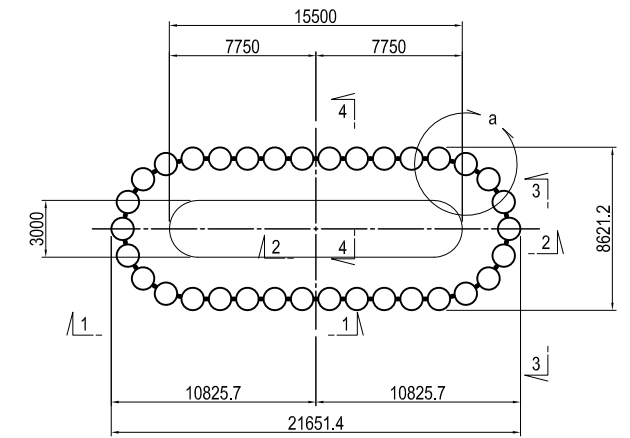


SIDE ELEVATION

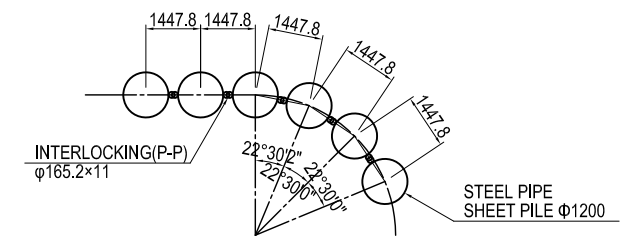
3-3 4-4



PLAN



DETAIL a S=1:200



USE MATERIALS

	CONCRETE	BAR
FOOTING	σ _{ck} = 24 N/mm ²	SD345

Note: Temporary support can be used for reference only.

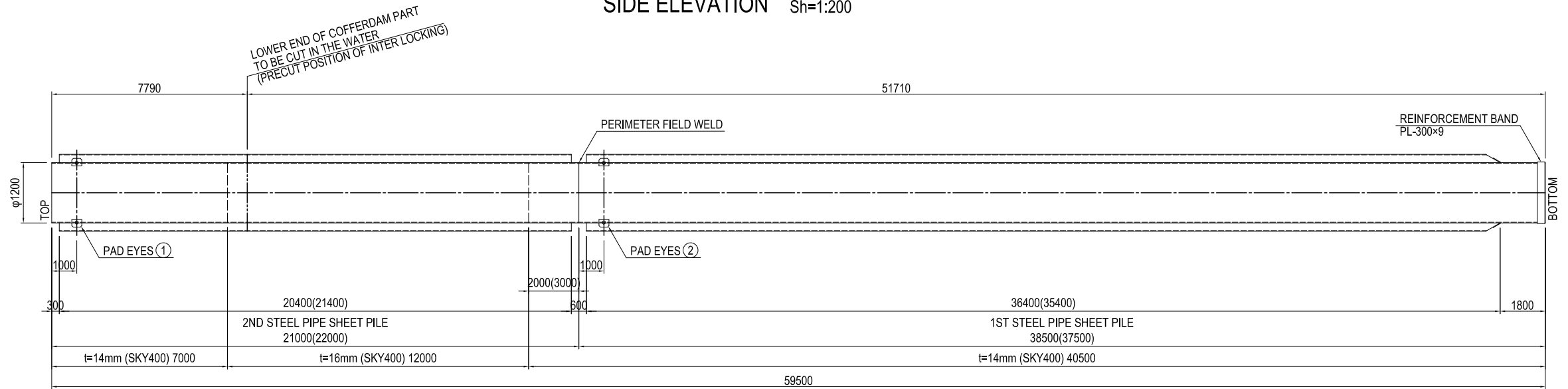
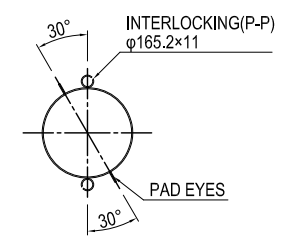
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY jica JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME S. IMADA T. HAYAKAWA Y. SANO	SIGNATURE <i>S. Imada</i> <i>T. Hayakawa</i> <i>Y. Sano</i>	DATE 27 Nov.2017 28 Nov.2017 29 Nov.2017	DRAWING TITLE GENERAL VIEW OF STEEL PIPE SHEET PILE FOUNDATION OF P6 PIER	PACKAGE 1 DWG No. P1-SB-2027
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DETAIL OF STEEL PIPE SHEET PILE OF P6 PIER (1)

CROSS SECTION S=1:200

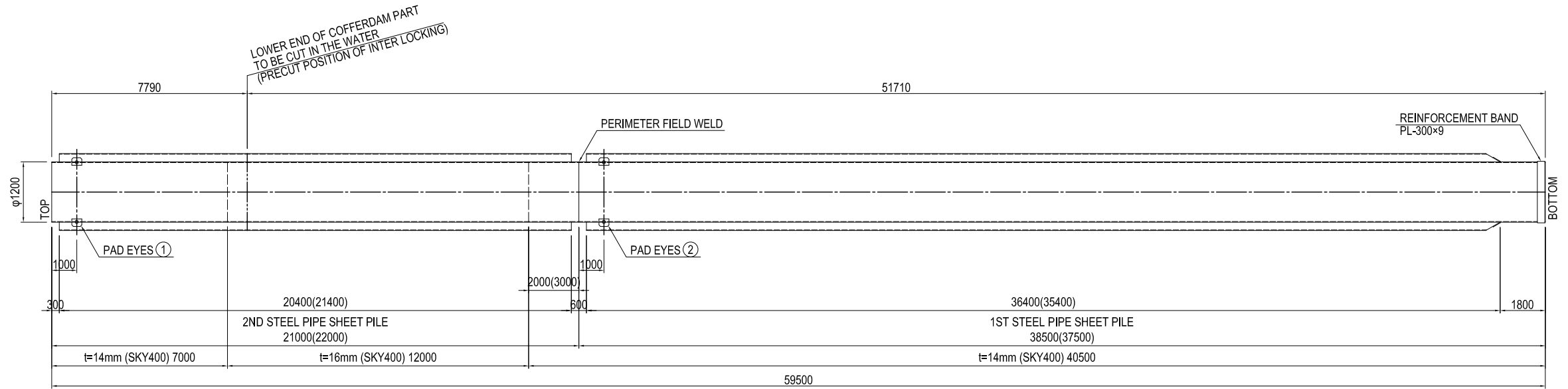
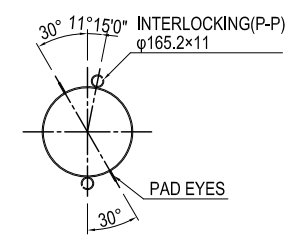
SIDE ELEVATION Sv=1:100
Sh=1:200

TYPE A
(TYPE B)

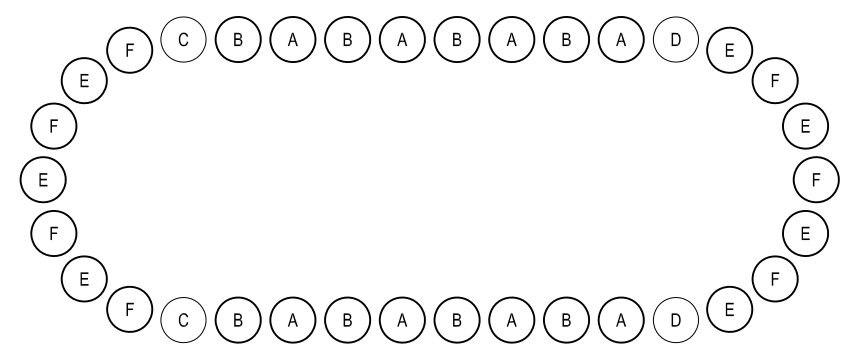


CROSS SECTION S=1:200

TYPE C
(TYPE D)



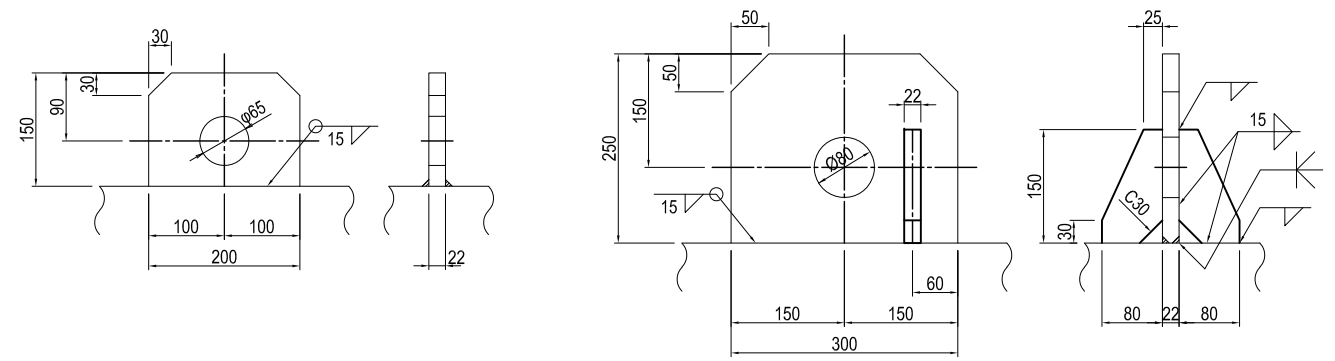
STEEL PIPE SHEET PILE TYPE AND POSITION



DETAIL OF EYES S=1:10

PAD EYES ① PL-200x150x22(SM490A)

PAD EYES ② PL-300x250x22(SM490A)



Note: Drawing of Pad Eye (metal fitting for hanging) and the position of perimeter field weld can be used for reference only.

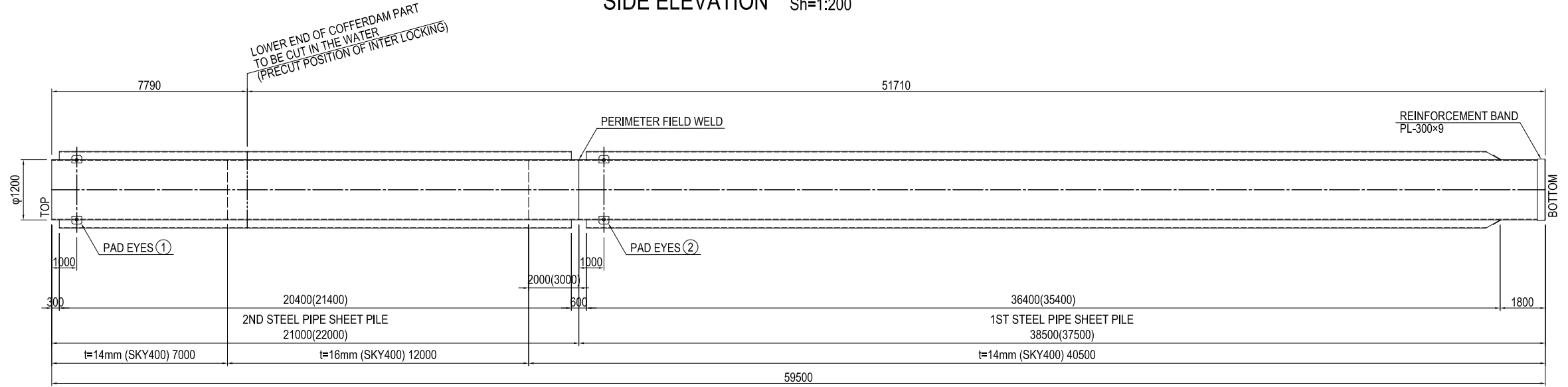
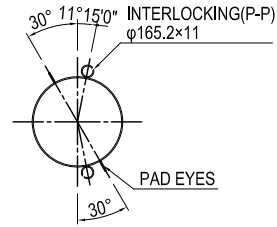
<p>PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT</p>	<p>FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY</p>	<p>COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE</p>	<p>JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">NAME</th> <th style="width: 10%;">SIGNATURE</th> <th style="width: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY S. IMADA</td> <td></td> <td>27 Nov.2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>28 Nov.2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>29 Nov.2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY S. IMADA		27 Nov.2017	CHECKED BY T. HAYAKAWA		28 Nov.2017	APPROVED BY Y. SANO		29 Nov.2017	<p style="text-align: center;">DRAWING TITLE</p> <p style="text-align: center;">DETAIL OF STEEL PIPE SHEET PILE OF P6 PIER (1)</p>	<p style="text-align: center;">PACKAGE</p> <p style="text-align: center;">1 DWG No. P1-SB-2028</p>
NAME	SIGNATURE	DATE																
PREPARED BY S. IMADA		27 Nov.2017																
CHECKED BY T. HAYAKAWA		28 Nov.2017																
APPROVED BY Y. SANO		29 Nov.2017																

DETAIL OF STEEL PIPE SHEET PILE OF P6 PIER (2)

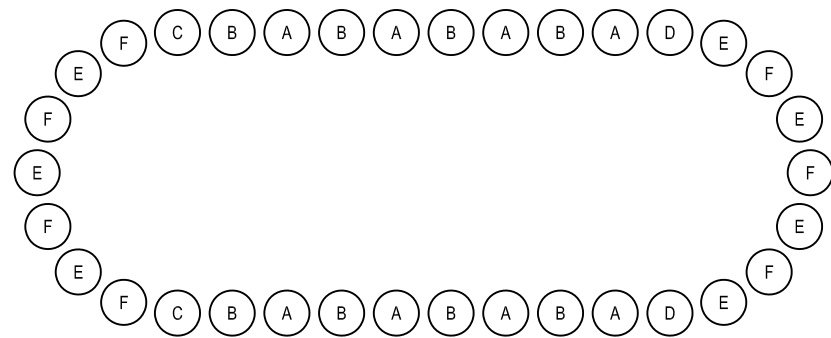
CROSS SECTION S=1:200

SIDE ELEVATION Sv=1:100
Sh=1:200

TYPE E
(TYPE F)



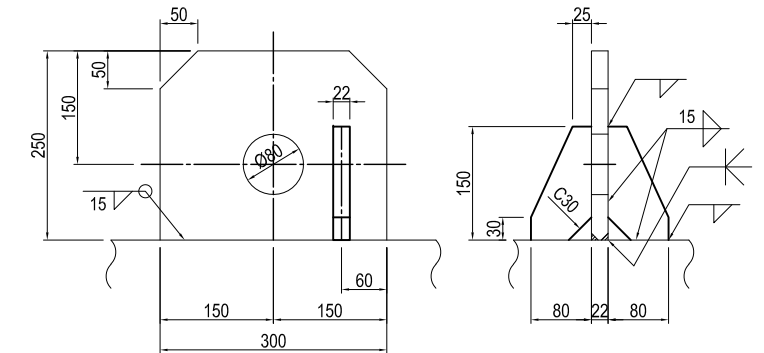
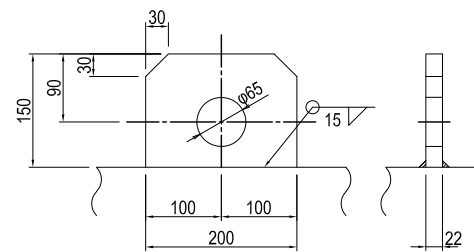
STEEL PIPE SHEET PILE TYPE AND POSITION



DETAIL OF EYES S=1:10

PAD EYES ① PL-200x150x22(SM490A)

PAD EYES ② PL-300x250x22(SM490A)

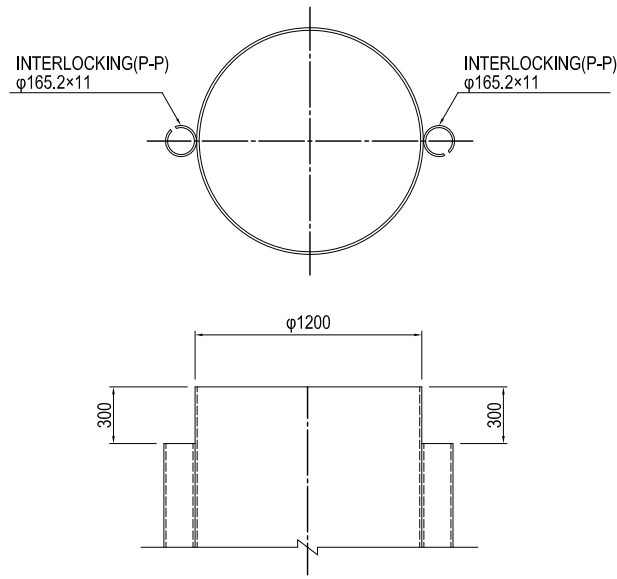


Note: Drawing of Pad Eye (metal fitting for hanging) and the position of perimeter field weld can be used for reference only.

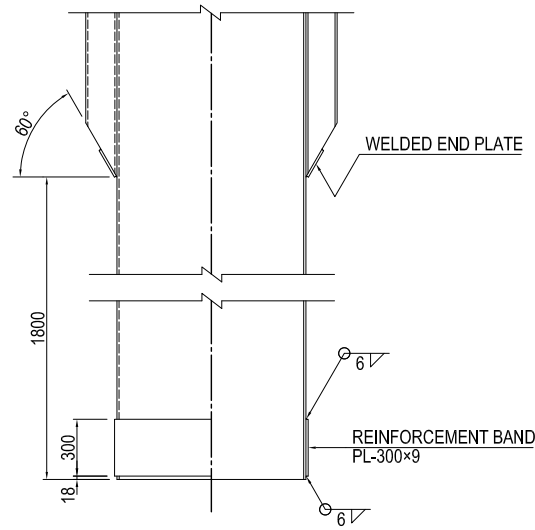
<p>PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT</p>	<p>FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY</p>	<p>COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE</p>	<p>JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">NAME</th> <th style="width: 10%;">SIGNATURE</th> <th style="width: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY S. IMADA</td> <td></td> <td>27 Nov.2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>28 Nov.2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>29 Nov.2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY S. IMADA		27 Nov.2017	CHECKED BY T. HAYAKAWA		28 Nov.2017	APPROVED BY Y. SANO		29 Nov.2017	<p>DRAWING TITLE DETAIL OF STEEL PIPE SHEET PILE OF P6 PIER (2)</p>	<p>PACKAGE 1 DWG No. P1-SB-2029</p>
NAME	SIGNATURE	DATE																
PREPARED BY S. IMADA		27 Nov.2017																
CHECKED BY T. HAYAKAWA		28 Nov.2017																
APPROVED BY Y. SANO		29 Nov.2017																

DETAIL OF INTERLOCKING OF STEEL PIPE SHEET PILE OF P6 PIER

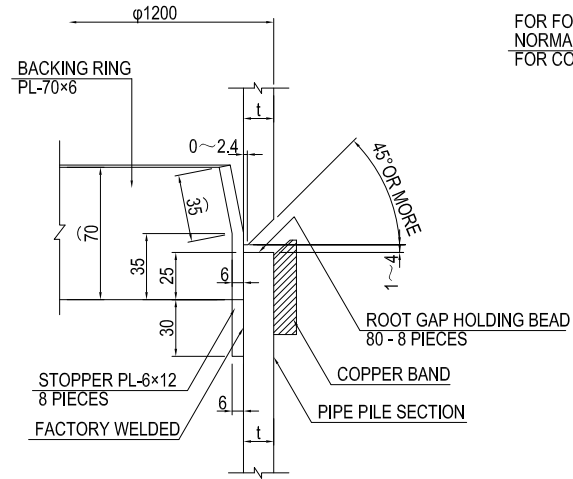
DETAIL OF STEEL PIPE SHEET PILE TOP S=1:40



DETAIL OF STEEL PIPE SHEET PILE TOE S=1:40

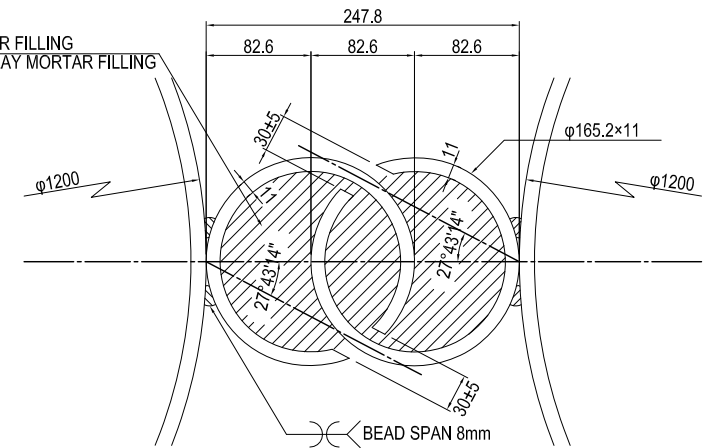


DETAIL OF PERIMETER FIELD WELDING OF STEEL PIPE SHEET PILE S=1:4



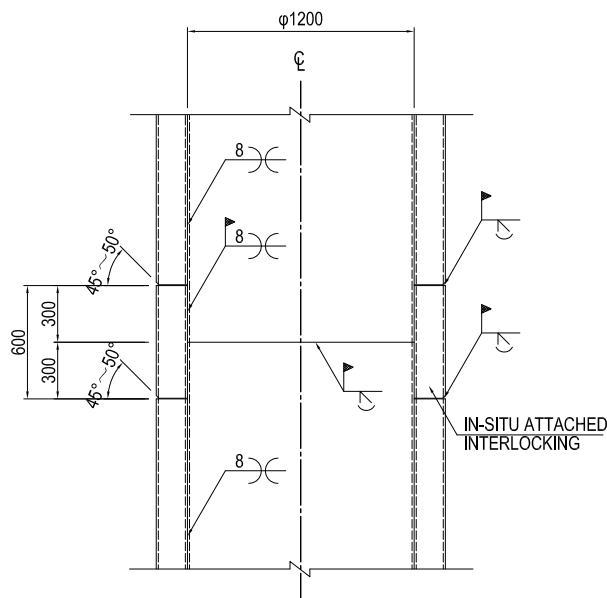
FOR FOUNDATION PART :
NORMAL STRENGTH MORTAR FILLING
FOR COFFERDAM PART : CLAY MORTAR FILLING

DETAIL OF CONNECTED INTERLOCKING(P-P) S=1:6

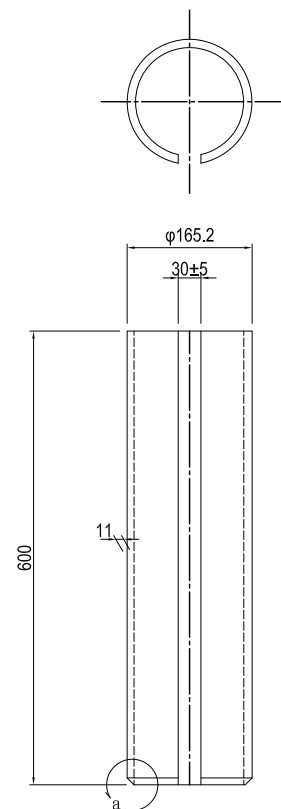


TREATMENT OF STEEL PIPE SHEET PILE INTERLOCKING

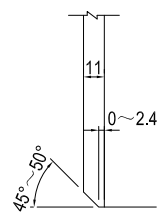
DETAIL OF IN-SITU LONGITUDINAL WELDING PART S=1:40



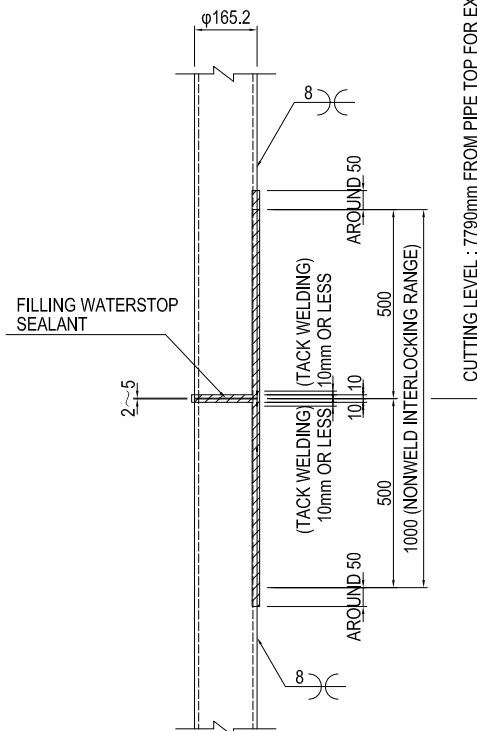
DETAIL OF IN-SITU ATTACHED INTERLOCKING S=1:10



DETAIL a

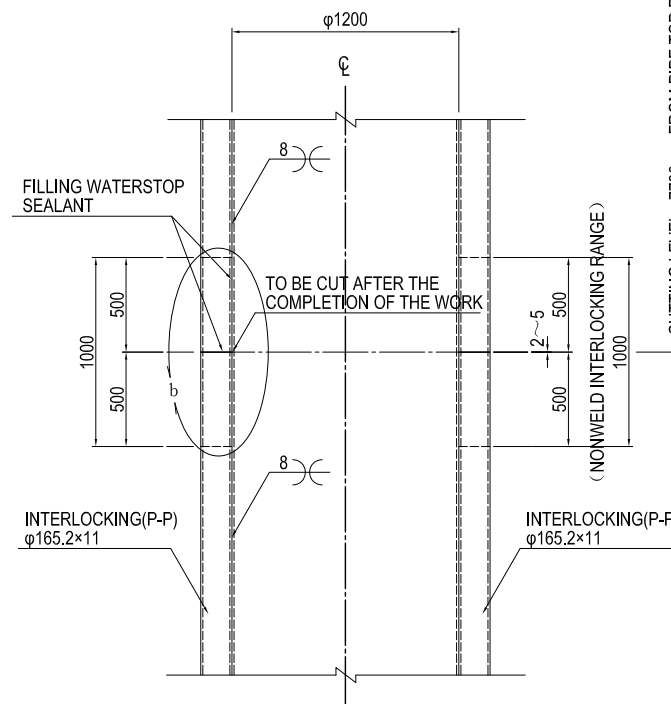


DETAIL b

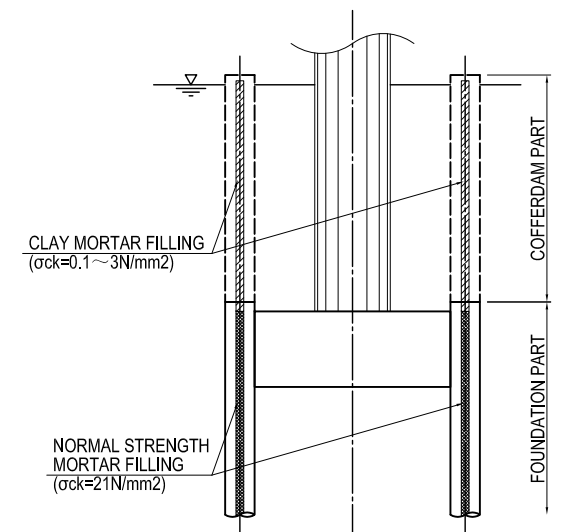


CUTTING LEVEL : 7790mm FROM PIPE TOP FOR EXTERNAL-WALL SHEET PILING

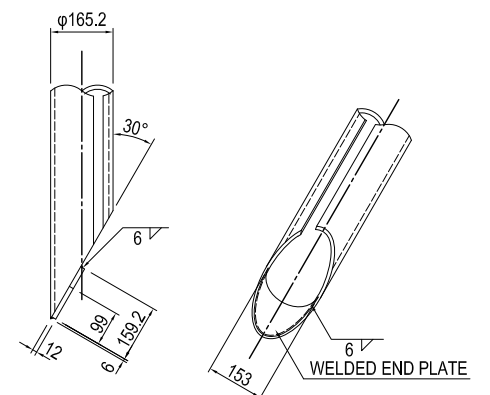
DETAIL OF PRECUT INTERLOCKING S=1:40



CUTTING LEVEL : 7790mm FROM PIPE TOP FOR EXTERNAL-WALL SHEET PILING



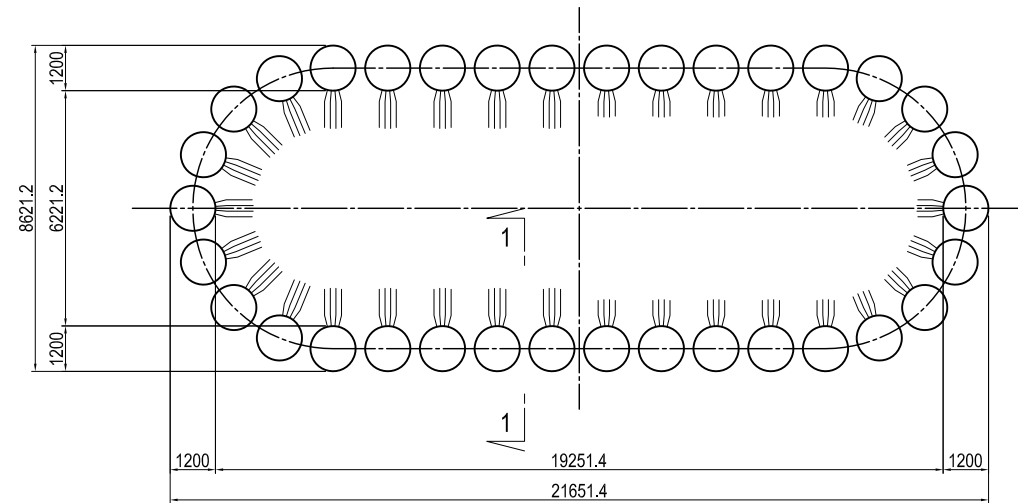
DETAIL OF INTERLOCKING TOE S=1:20



PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY jica JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE DETAIL OF INTERLOCKING OF STEEL PIPE SHEET PILE OF P6 PIER	PACKAGE 1 DWG No. P1-SB-2030
				PREPARED BY	S. IMADA	27 Nov.2017		
				CHECKED BY	T. HAYAKAWA	28 Nov.2017		
				APPROVED BY	Y. SANO	29 Nov.2017		

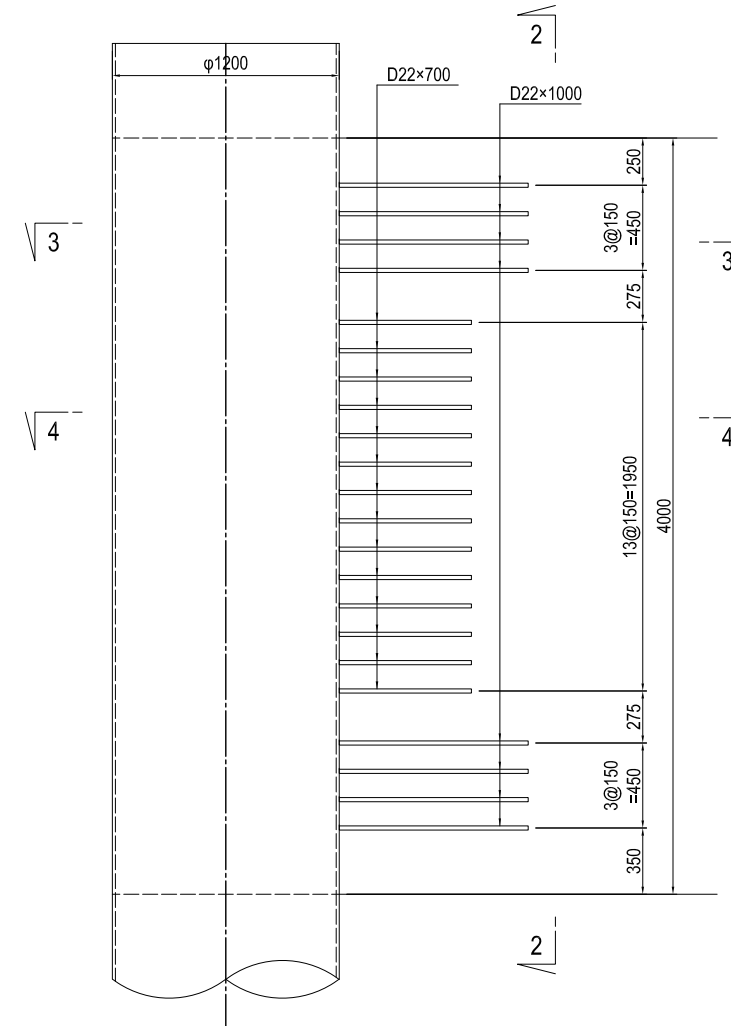
DETAIL OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND FOOTING OF P6 PIER

PLAN S=1:200

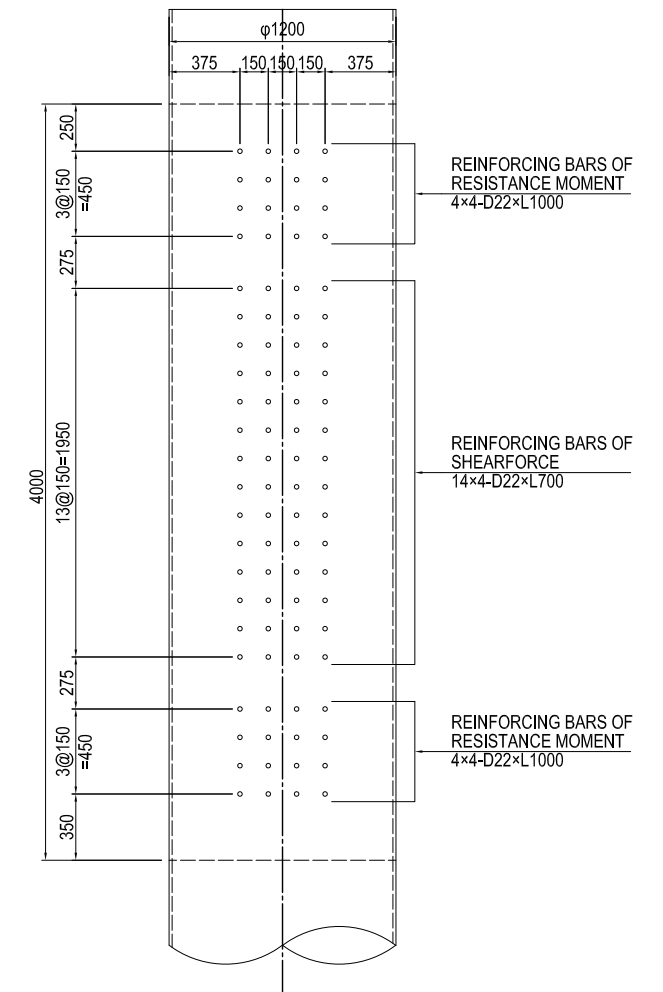


DETAIL OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND FOOTING S=1:40

1 - 1 CROSS SECTION



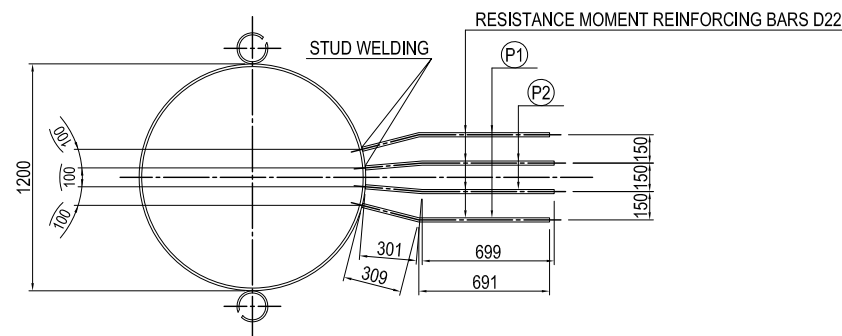
2 - 2 CROSS SECTION



CROSS SECTION OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND REINFORCING BARS S=1:40

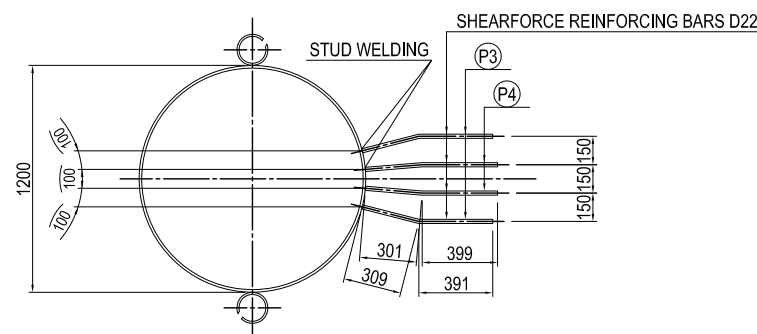
3 - 3 CROSS SECTION

(RESISTANCE MOMENT REINFORCING BARS CONNECTION PART)



4 - 4 CROSS SECTION

(SHEARFORCE REINFORCING BARS CONNECTION PART)



FABRICATION OF REINFORCING BARS S=1:40

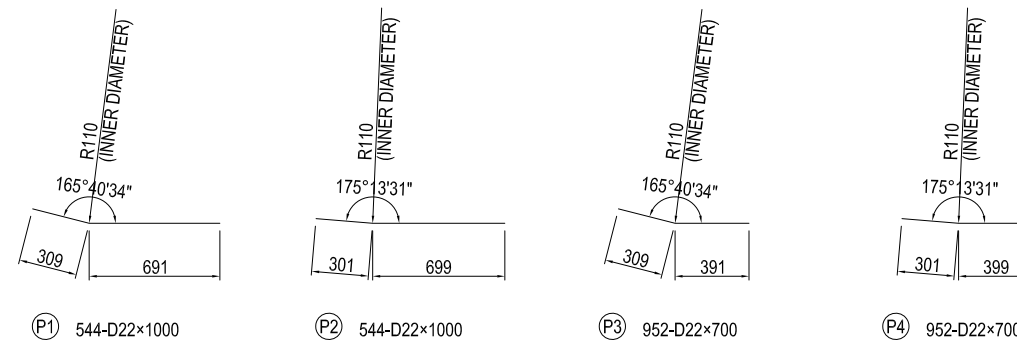
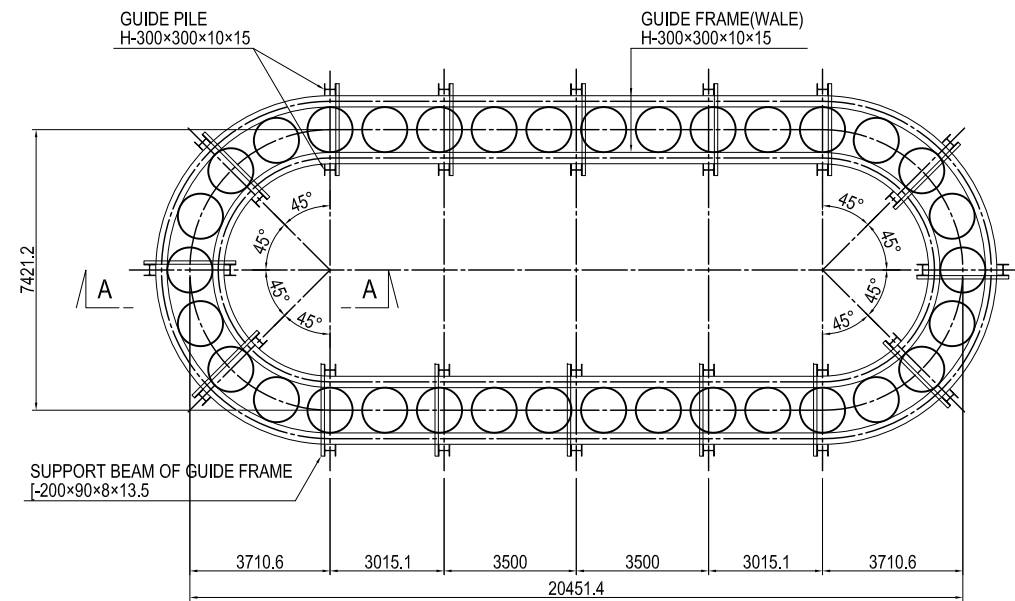


TABLE OF REINFORCING BARS

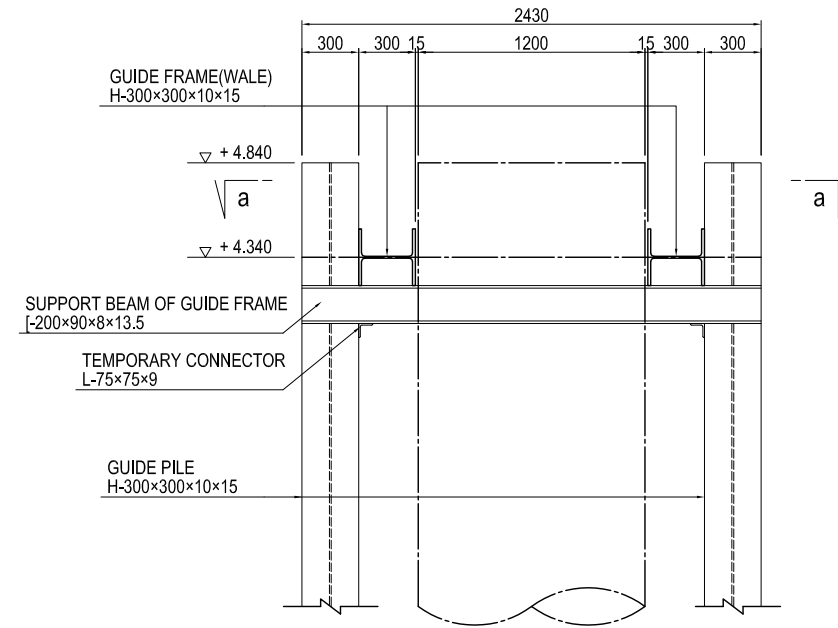
MARK	TYPE	LENGTH (mm)	PIECES (piece)	UNIT WEIGHT (kg/m)	UNIT WEIGHT (kg/piece)	WEIGHT (kg)	GRADE	MEMO
P1	D22	1000	544	3.04	3.04	1653.8	SD345 for STUD WELDING	—
P2	D22	1000	544	3.04	3.04	1653.8	SD345 for STUD WELDING	—
P3	D22	700	952	3.04	2.13	2027.8	SD345 for STUD WELDING	—
P4	D22	700	952	3.04	2.13	2027.8	SD345 for STUD WELDING	—
					D22	7363.2	kg	
TOTAL WEIGHT						7363.2	kg	

(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P6 PIER (1)

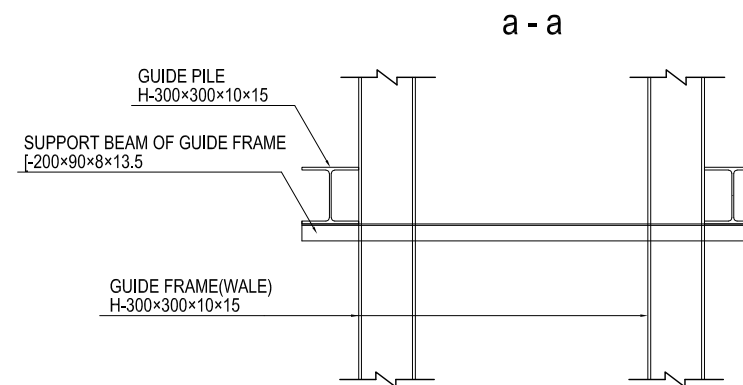
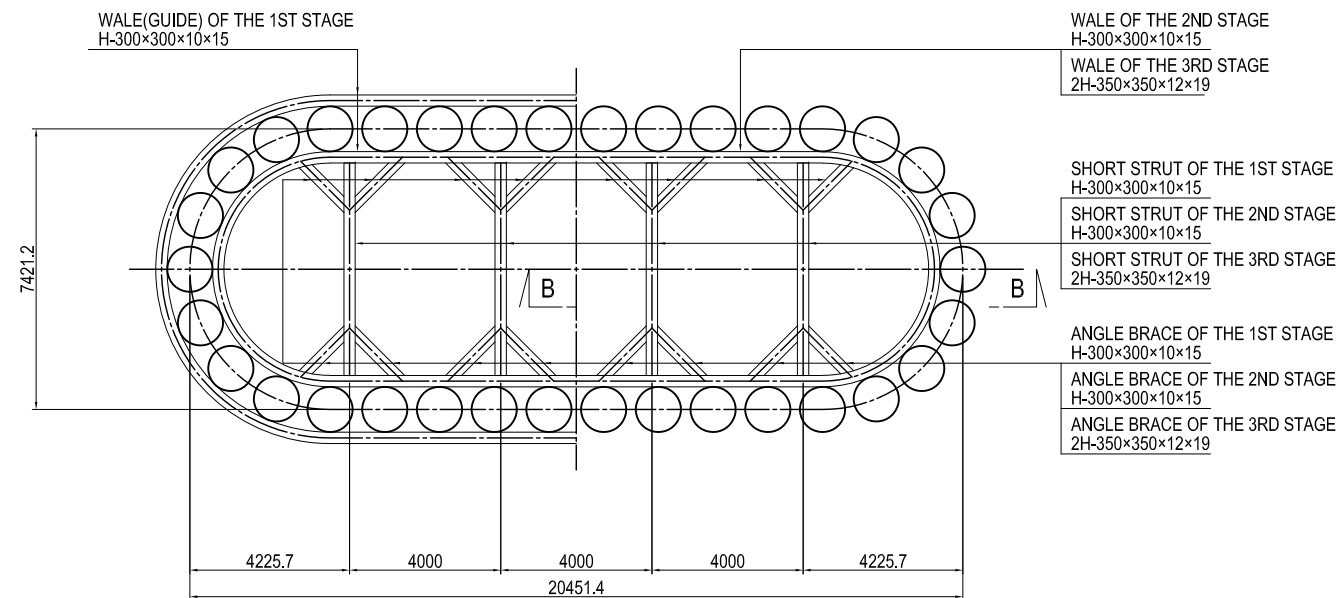
LAYOUT PLAN OF GUIDE FRAMES AND GUIDE PILES S=1:200



DETAIL OF ATTACHMENT OF GUIDE PILES AND GUIDE FRAMES S=1:40



LAYOUT PLAN OF STRUTS AND WALES S=1:200

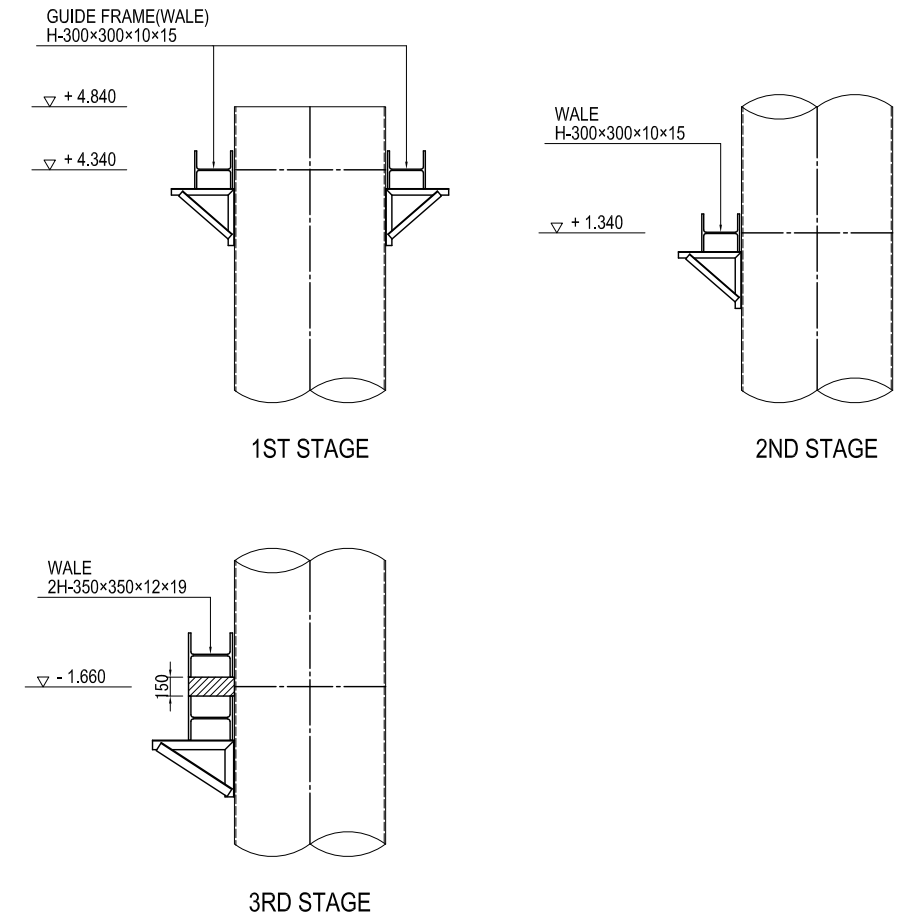
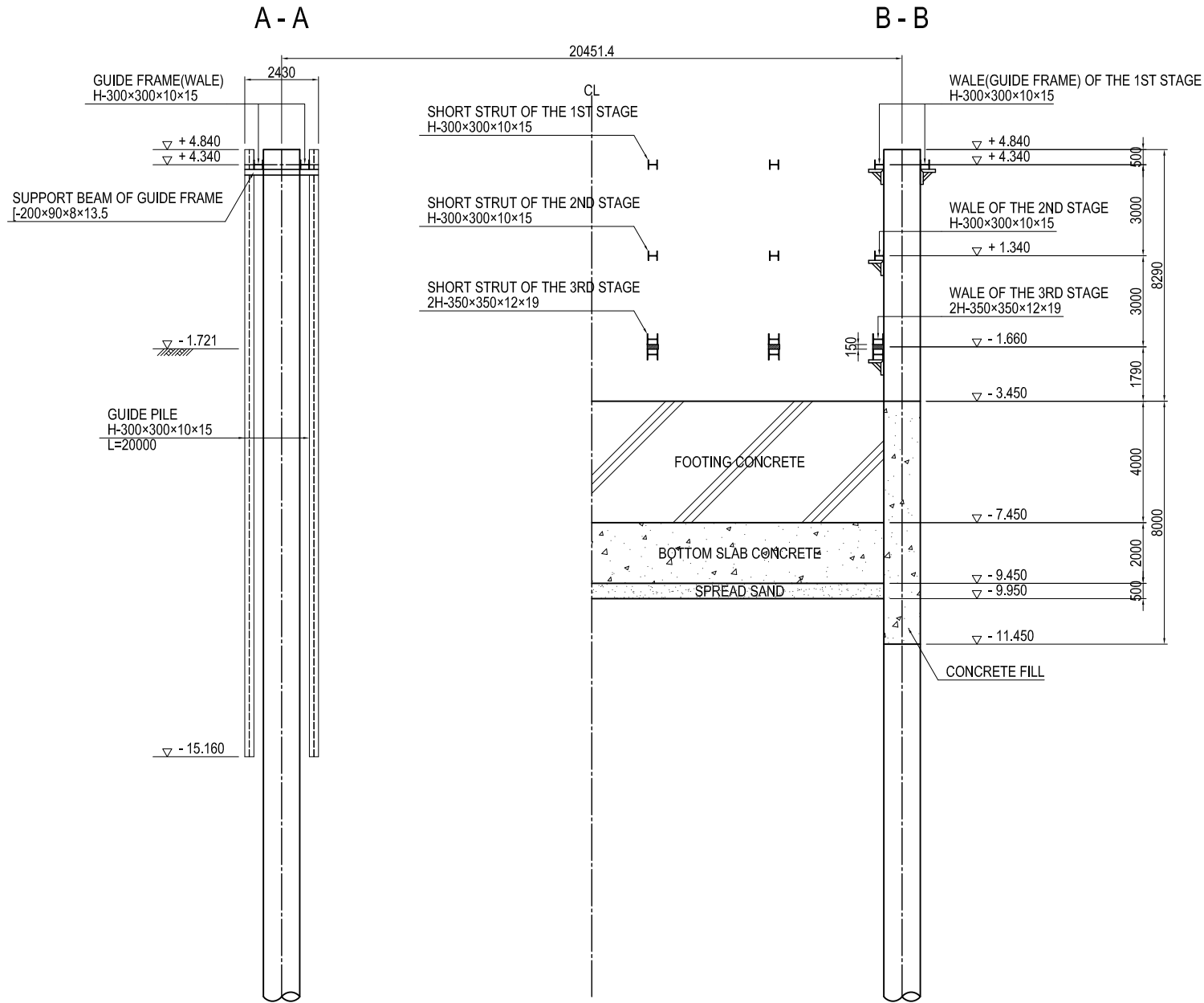


PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE (REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P6 PIER (1)	PACKAGE	
				PREPARED BY	S. IMADA			27 Nov.2017	1
				CHECKED BY	T. HAYAKAWA			28 Nov.2017	DWG No.
				APPROVED BY	Y. SANO			29 Nov.2017	P1-SB-2032

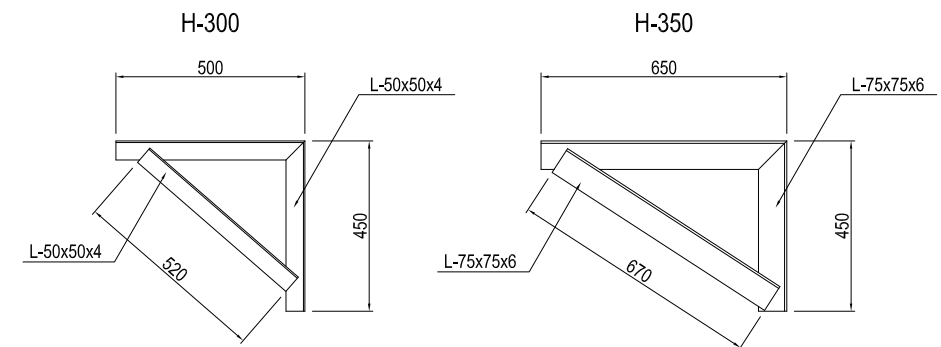
(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P6 PIER (2)

CROSS SECTION S=1:200

DETAIL OF ATTACHMENT OF WALE S=1:60



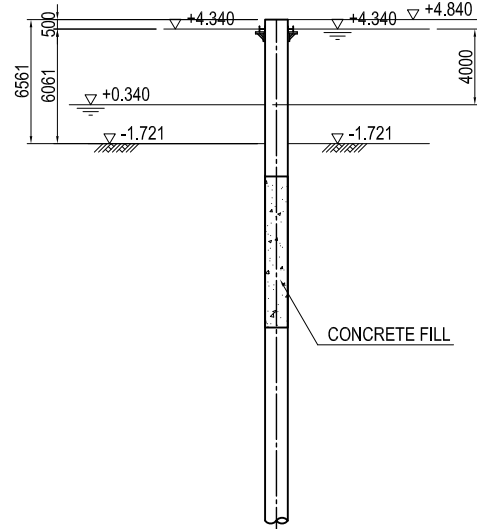
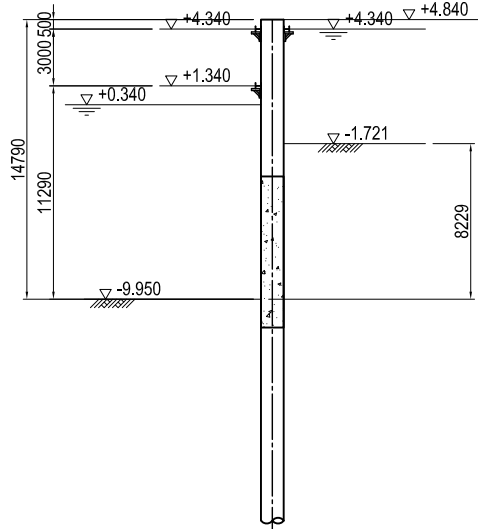
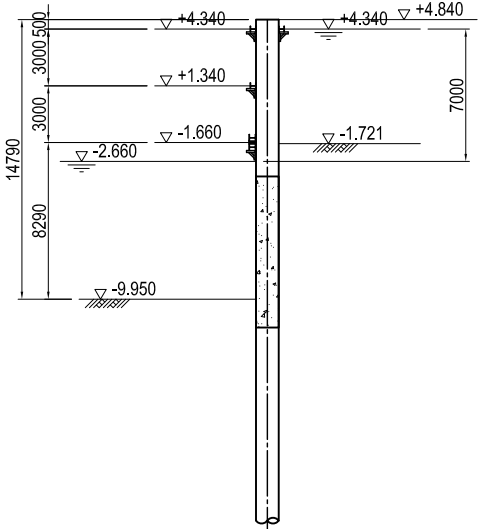
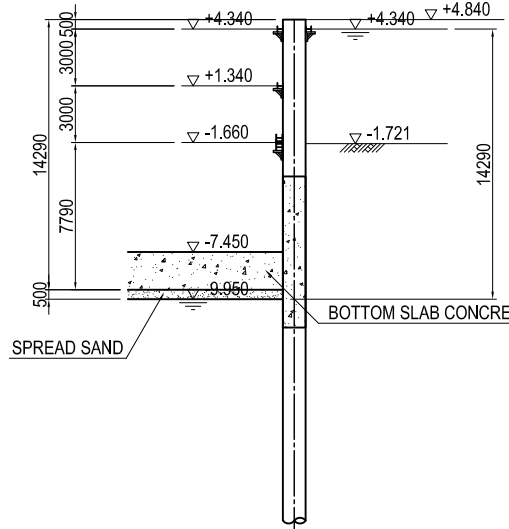
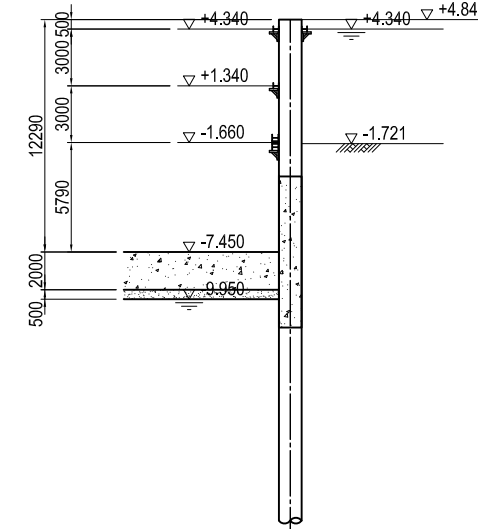
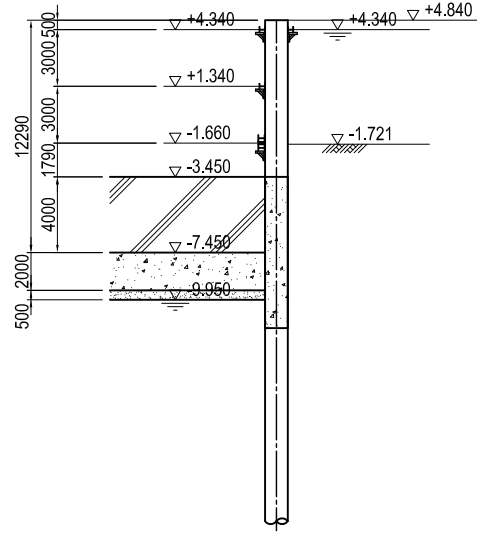
DETAIL OF BRACKET S=1:20



PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE (REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P6 PIER (2)	PACKAGE	
				PREPARED BY	S. IMADA			27 Nov.2017	1
				CHECKED BY	T. HAYAKAWA			28 Nov.2017	DWG No.
				APPROVED BY	Y. SANO			29 Nov.2017	P1-SB-2033

(REFERENCE) CONSTRUCTION PLAN OF STEEL PIPE SHEET PILE WORK OF P6 PIER

S=1:400

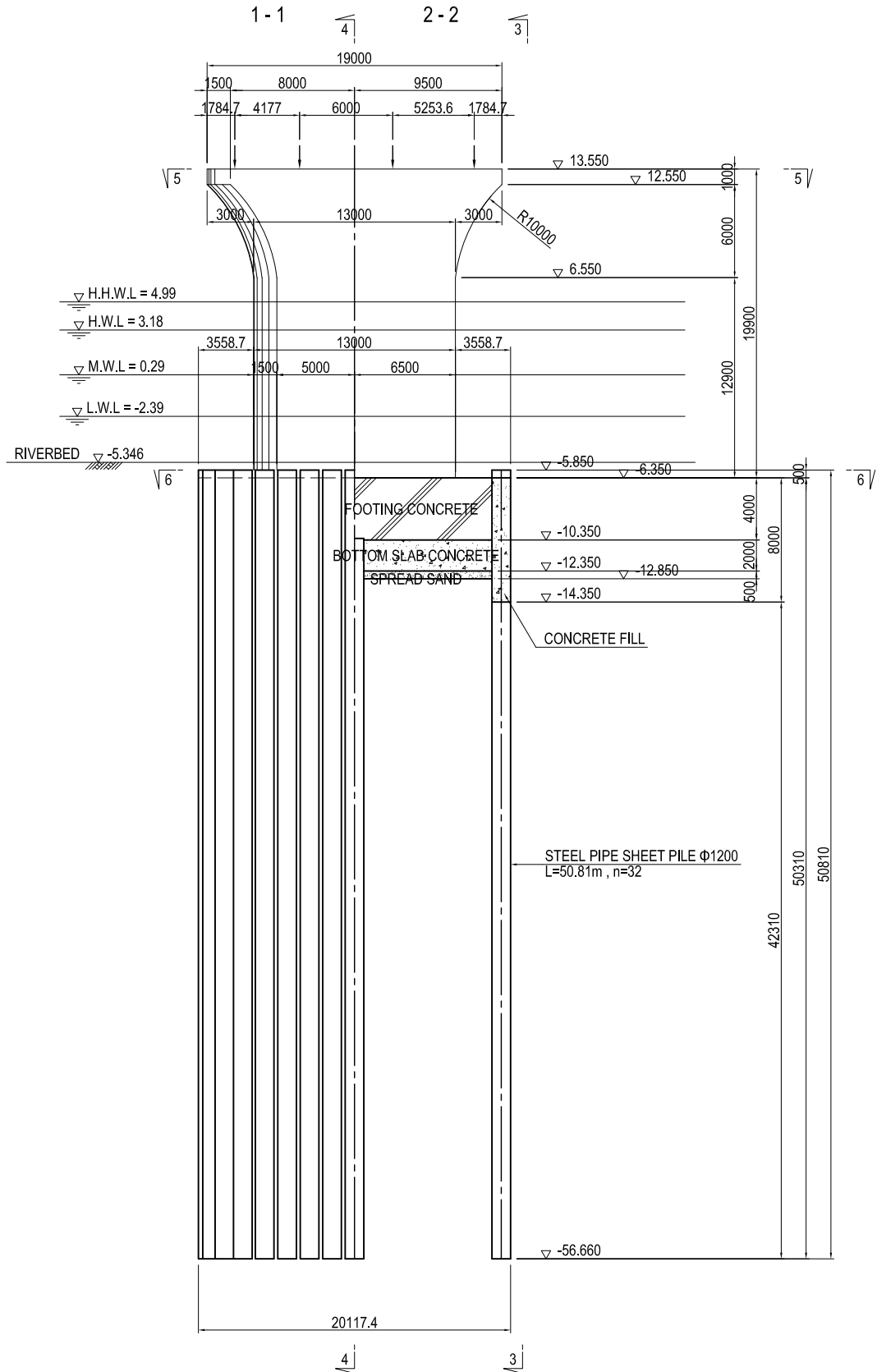
STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
				
<p>Excavate inside of exterior sheet piles and filled with concrete as shown. Draining the inside of cofferdam up to +0.340m level. The 1st support Installation.</p>	<p>The 2nd support Installation. Underwater excavation up to -9.950m level.</p>	<p>Draining the inside of cofferdam up to -2.660m level. The 3rd support Installation.</p>	<p>Draining the inside of cofferdam up to -9.950m level. Placement of spread sand followed by Casting underwater bottom slab concrete.</p>	<p>Dry up inside the cofferdam.</p>
STEP 6				
				
<p>Casting of footing concrete.</p>				

Note : This drawing can be used for reference only.

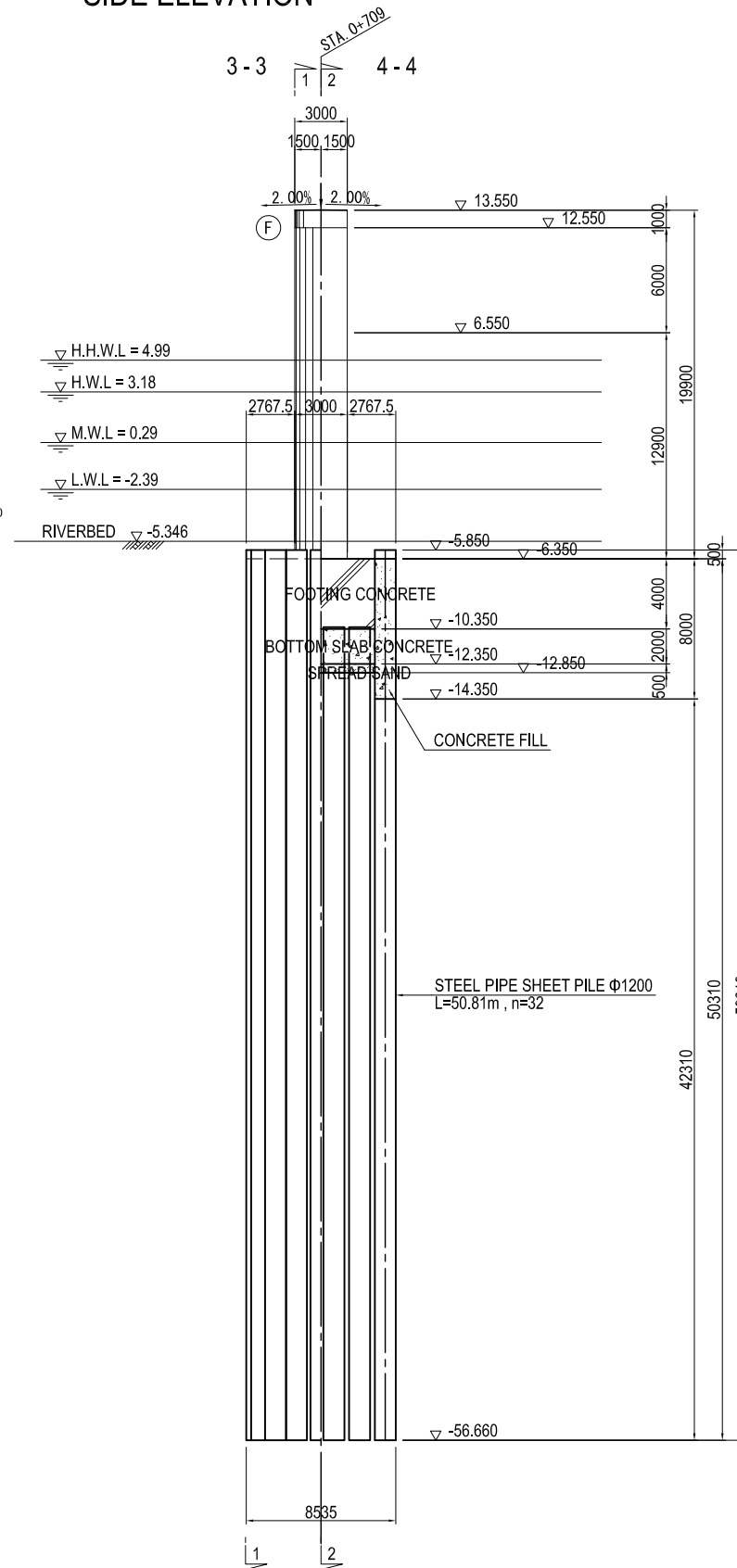
<p>PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT</p>	<p>FINANCED BY  JAPAN INTERNATIONAL COOPERATION AGENCY</p>	<p>COUNTERPART  REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE</p>	<p>JICA STUDY TEAM  NIPPON KOEI CO., LTD.  ORIENTAL CONSULTANTS GLOBAL CO., LTD.  METROPOLITAN EXPRESSWAY COMPANY LIMITED  CHODAI CO., LTD.  NIPPON ENGINEERING CONSULTANTS CO., LTD.</p>	<table border="1"> <thead> <tr> <th></th> <th>NAME</th> <th>SIGNATURE</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>S. IMADA</td> <td></td> <td>27 Nov.2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td></td> <td>28 Nov.2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td></td> <td>29 Nov.2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	S. IMADA		27 Nov.2017	CHECKED BY	T. HAYAKAWA		28 Nov.2017	APPROVED BY	Y. SANO		29 Nov.2017	<p>DRAWING TITLE (REFERENCE) CONSTRUCTION PLAN OF STEEL PIPE SHEET PILE WORK OF P6 PIER</p>	<p>PACKAGE 1 DWG No. P1-SB-2034</p>
	NAME	SIGNATURE	DATE																			
PREPARED BY	S. IMADA		27 Nov.2017																			
CHECKED BY	T. HAYAKAWA		28 Nov.2017																			
APPROVED BY	Y. SANO		29 Nov.2017																			

GENERAL VIEW OF P7 PIER (1) S=1:400

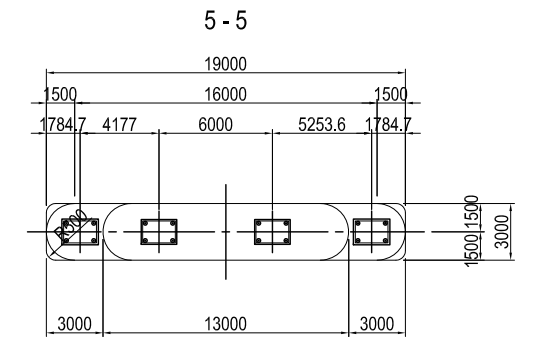
FRONT ELEVATION



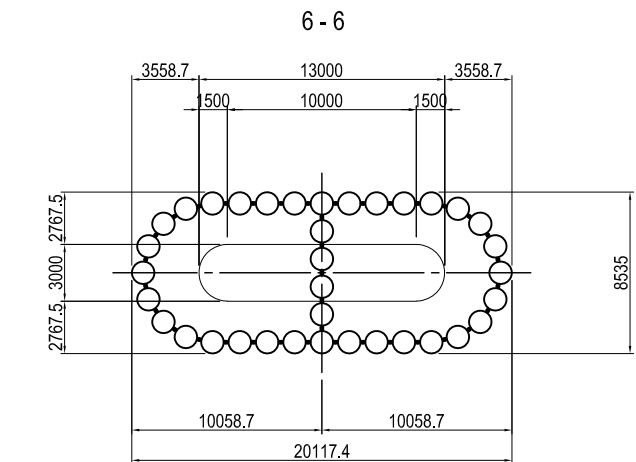
SIDE ELEVATION



PLAN



PLAN



USE MATERIALS

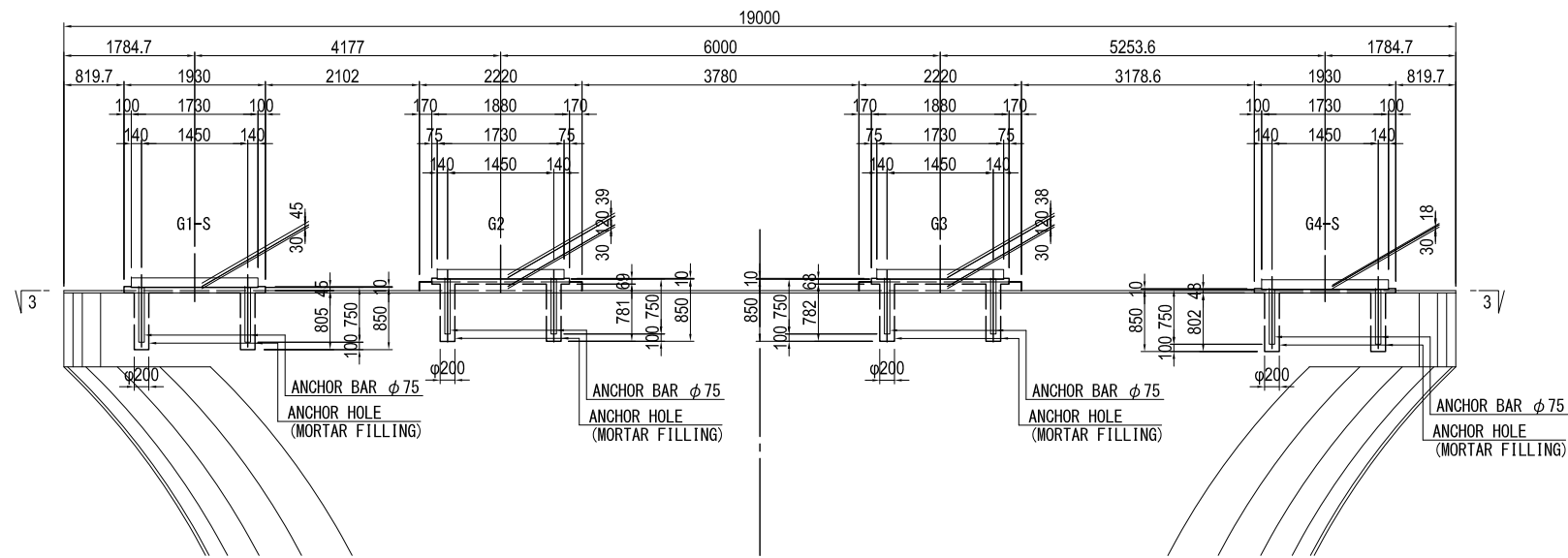
	CONCRETE	BAR
BEAM	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345
COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345
FOOTING	$\sigma_{ck} = 24 \text{ N/mm}^2$	SD345

GENERAL VIEW OF P7 PIER (2) S=1:100

DETAIL OF BEARING AND ANCHOR

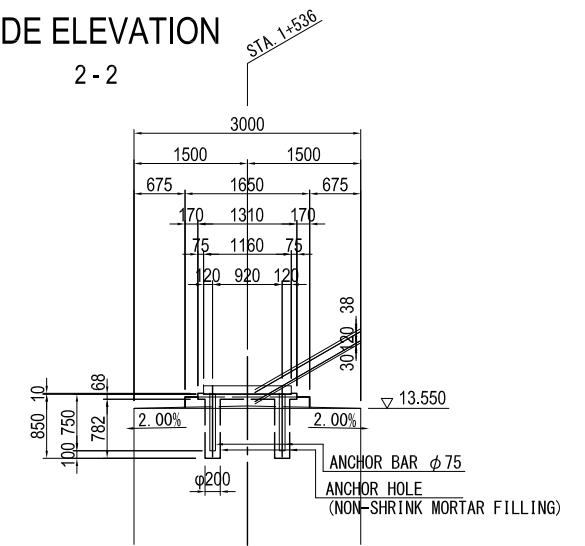
FRONT ELEVATION

1-1



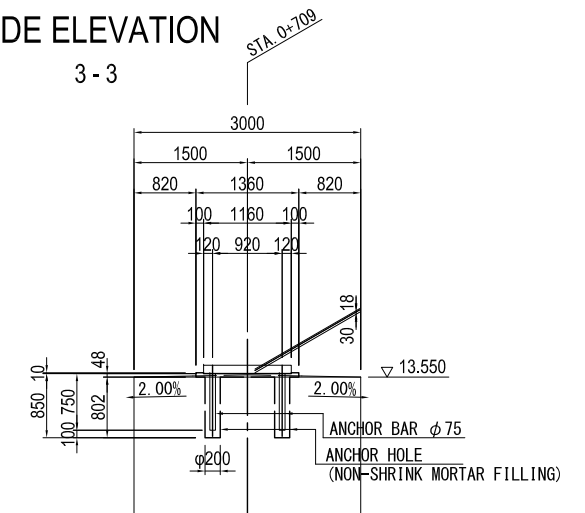
SIDE ELEVATION

2-2



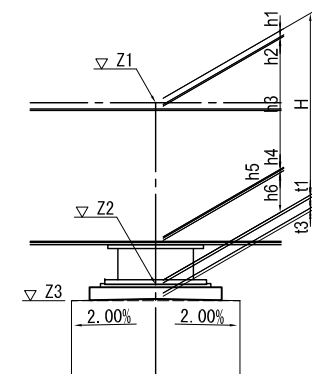
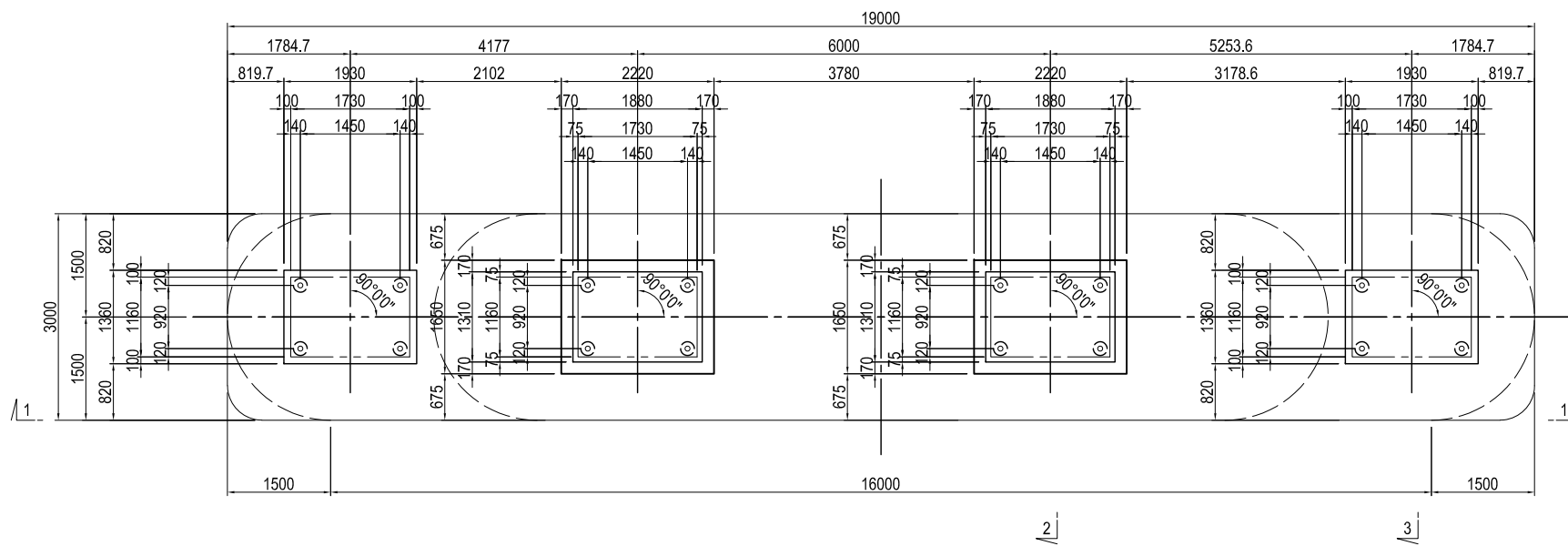
SIDE ELEVATION

3-3



PLAN

3-3



	P7 PIER				
	G1-S	G2	G3	G4-S	
PROPOSED HEIGHT	Z1	17.031	17.114	17.114	17.009
PAVEMENT	h1	0.080	0.080	0.080	0.080
UPPER FLANGE	h2	0.016	0.016	0.016	0.016
GIRDER	h3	2.706	2.700	2.700	2.706
BOTTOM FLANGE	h4	0.052	0.027	0.028	0.057
SOLE PLATE	h5	0.043	0.043	0.043	0.043
BEARING	h6	0.509	0.509	0.509	0.509
SUBTOTAL	H	3.406	3.375	3.376	3.411
ELEVATION OF BEARING BOTTOM	Z2	13.625	13.739	13.738	13.598
MORTAR	t1	0.045	0.039	0.038	0.018
BEARING BASE	t2	0.000	0.120	0.120	0.000
DRAINAGE INCLINE	t3	0.030	0.030	0.030	0.030
ELEVATION OF PIER TOP	Z3	13.550	13.550	13.550	13.550

PROJECT NAME
DETAILED DESIGN ON
BAGO RIVER BRIDGE
CONSTRUCTION PROJECT

FINANCED BY
 JAPAN INTERNATIONAL
COOPERATION AGENCY

COUNTERPART
 REPUBLIC OF THE UNION OF MYANMAR
MINISTRY OF CONSTRUCTION
DEPARTMENT OF BRIDGE

JICA STUDY TEAM
 NIPPON KOEI CO., LTD.
ORIENTAL CONSULTANTS GLOBAL CO., LTD.
METROPOLITAN EXPRESSWAY COMPANY LIMITED
CHODAI CO., LTD.
NIPPON ENGINEERING CONSULTANTS CO., LTD.

	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

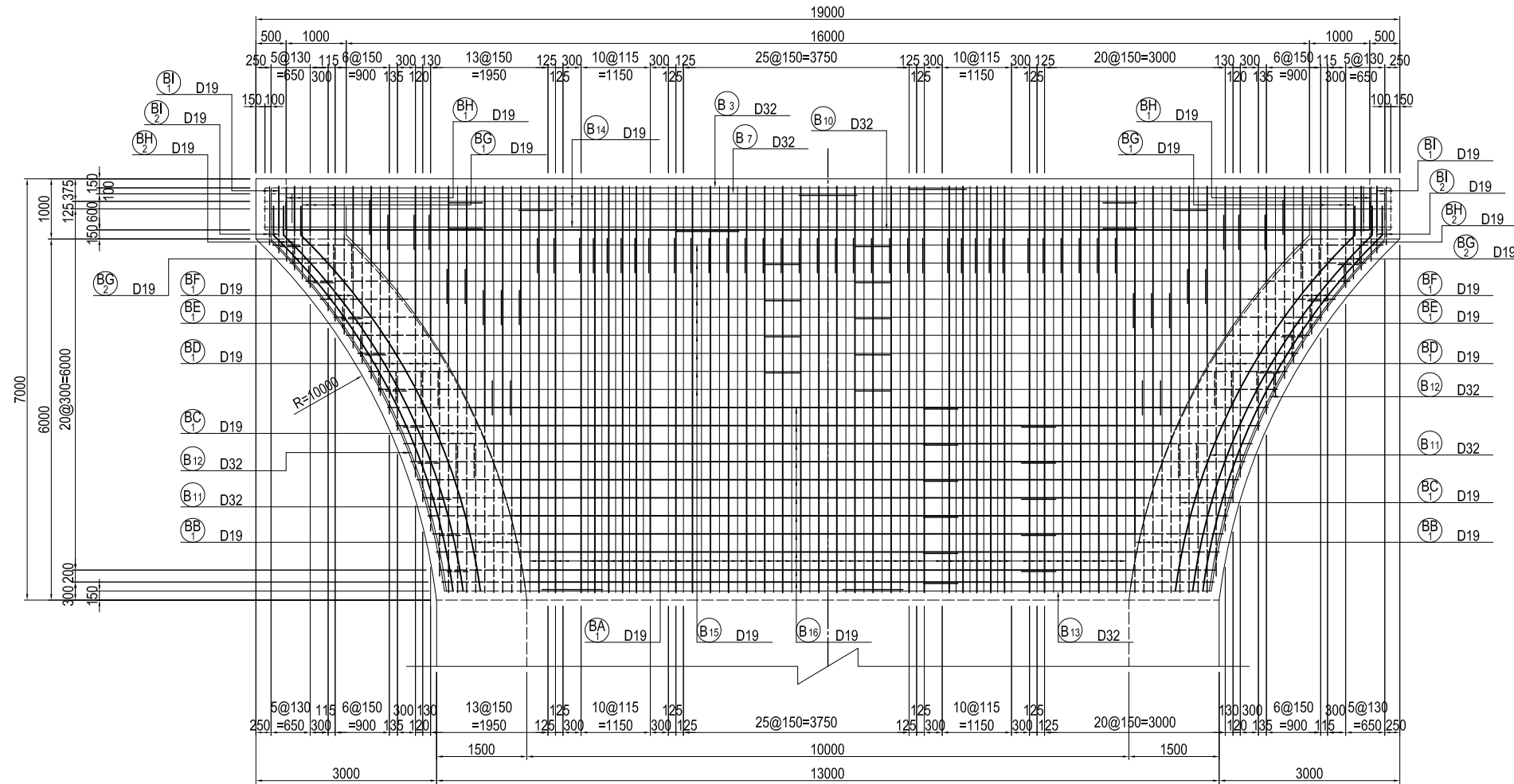
DRAWING TITLE
GENERAL VIEW OF P7 PIER (2)

PACKAGE
1
DWG No.
P1-SB-2102

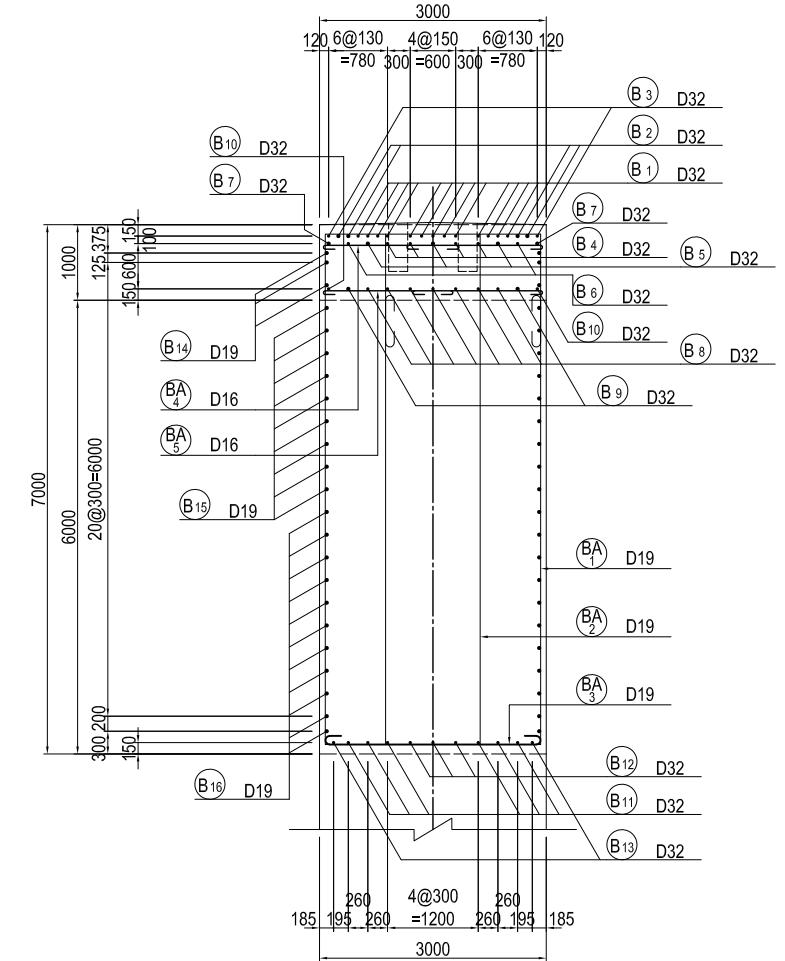
BAR ARRANGEMENT OF P7 PIER (1) S=1:100

BEAM

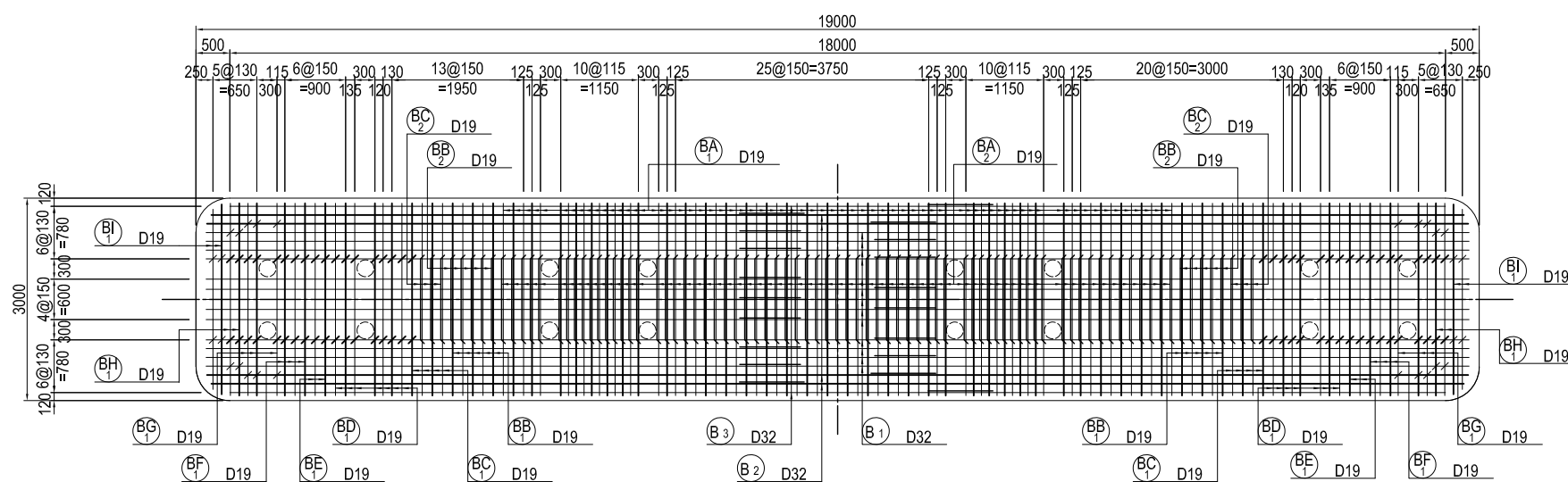
FRONT ELEVATION 1 - 1



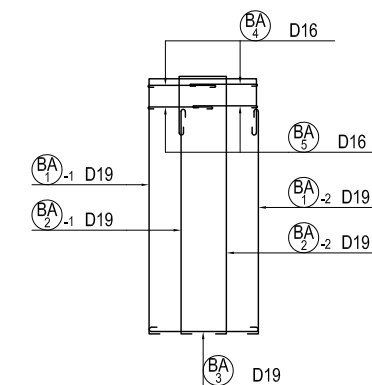
SECTION 3 - 3



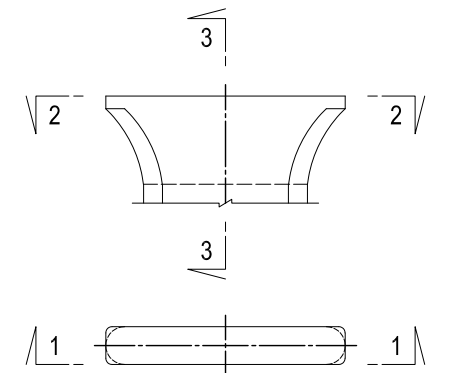
PLAN 2 - 2



ASSEMBLY DRAWING OF STIRRUP



MARKING DIAGRAM



USE MATERIALS

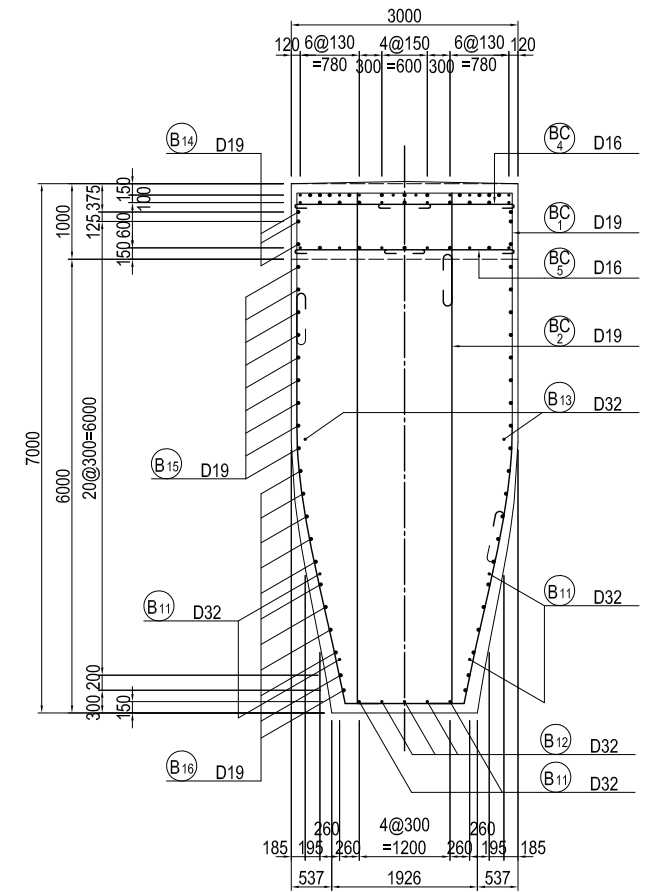
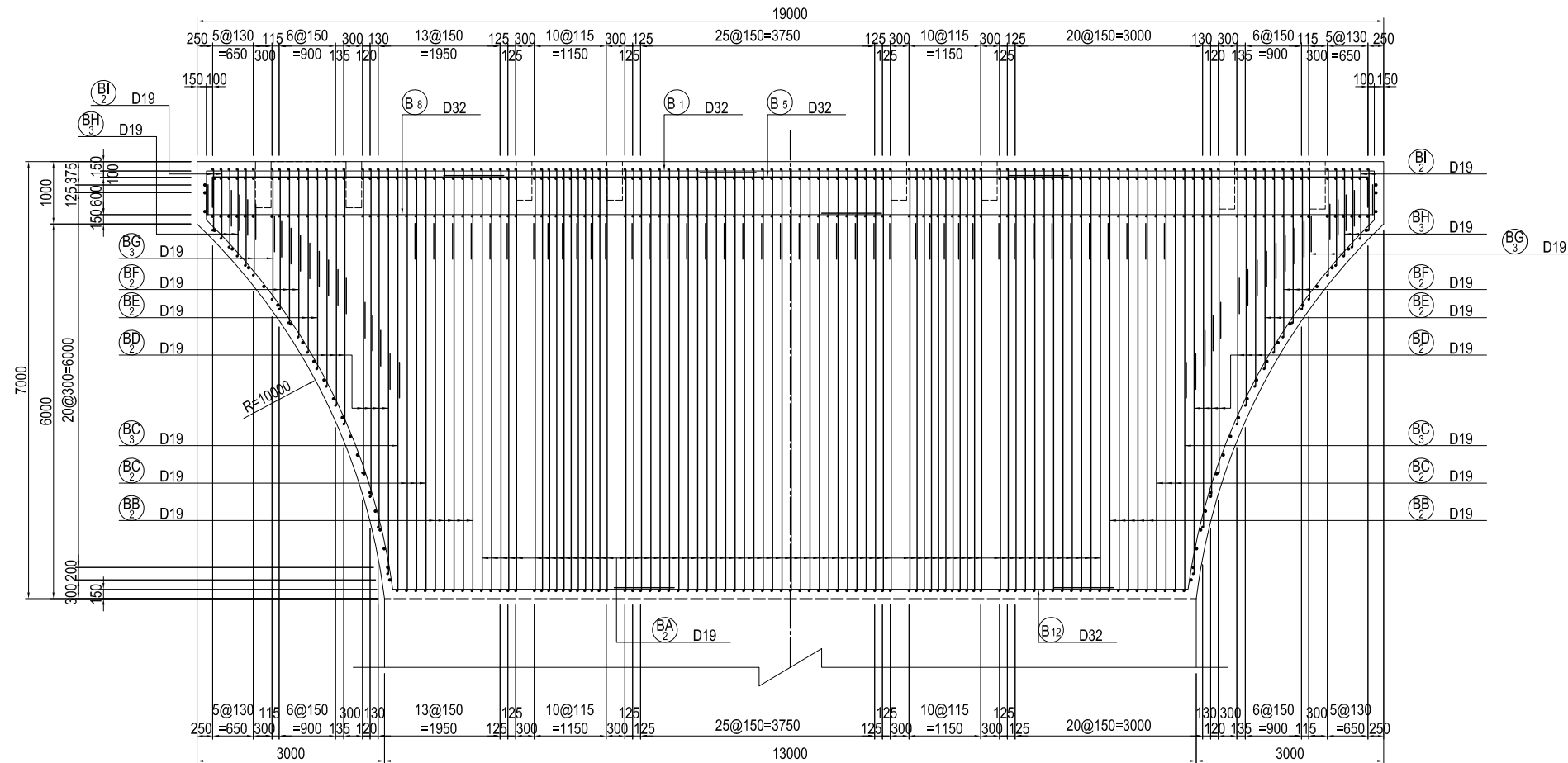
	CONCRETE	BAR
BEAM • COLUMN	σck = 30 N/mm ²	SD345

BAR ARRANGEMENT OF P7 PIER (2) S=1:100

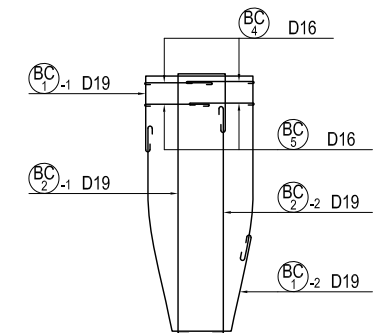
BEAM

SECTION 4 - 4

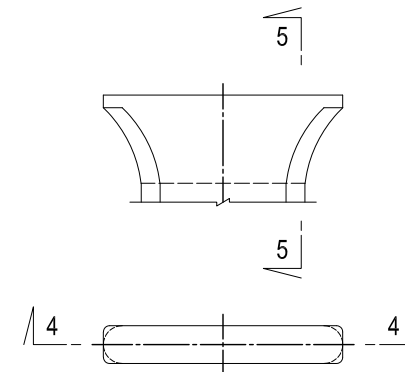
SECTION 5 - 5



ASSEMBLY DRAWING OF STIRRUP



MARKING DIAGRAM



USE MATERIALS

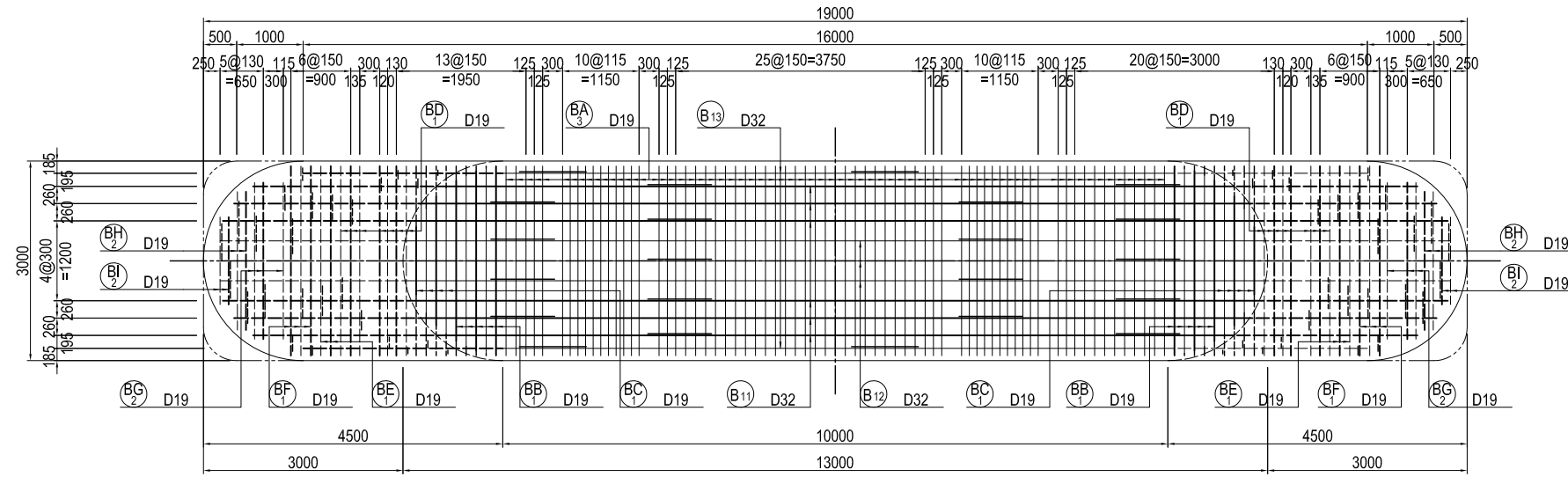
	CONCRETE	BAR
BEAM • COLUMN	σ _{ck} = 30 N/mm ²	SD345

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE BAR ARRANGEMENT OF P7 PIER (2)	PACKAGE 1 DWG No. P1-SB-2104	
				PREPARED BY	S. IMADA				27 Nov.2017
				CHECKED BY	T. HAYAKAWA				28 Nov.2017
				APPROVED BY	Y. SANO				29 Nov.2017

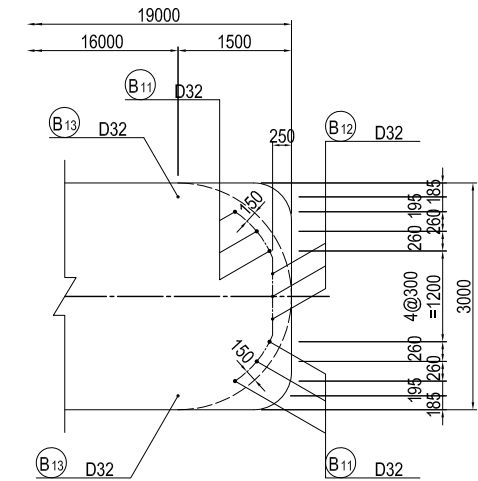
BAR ARRANGEMENT OF P7 PIER (3) S=1:100

BEAM

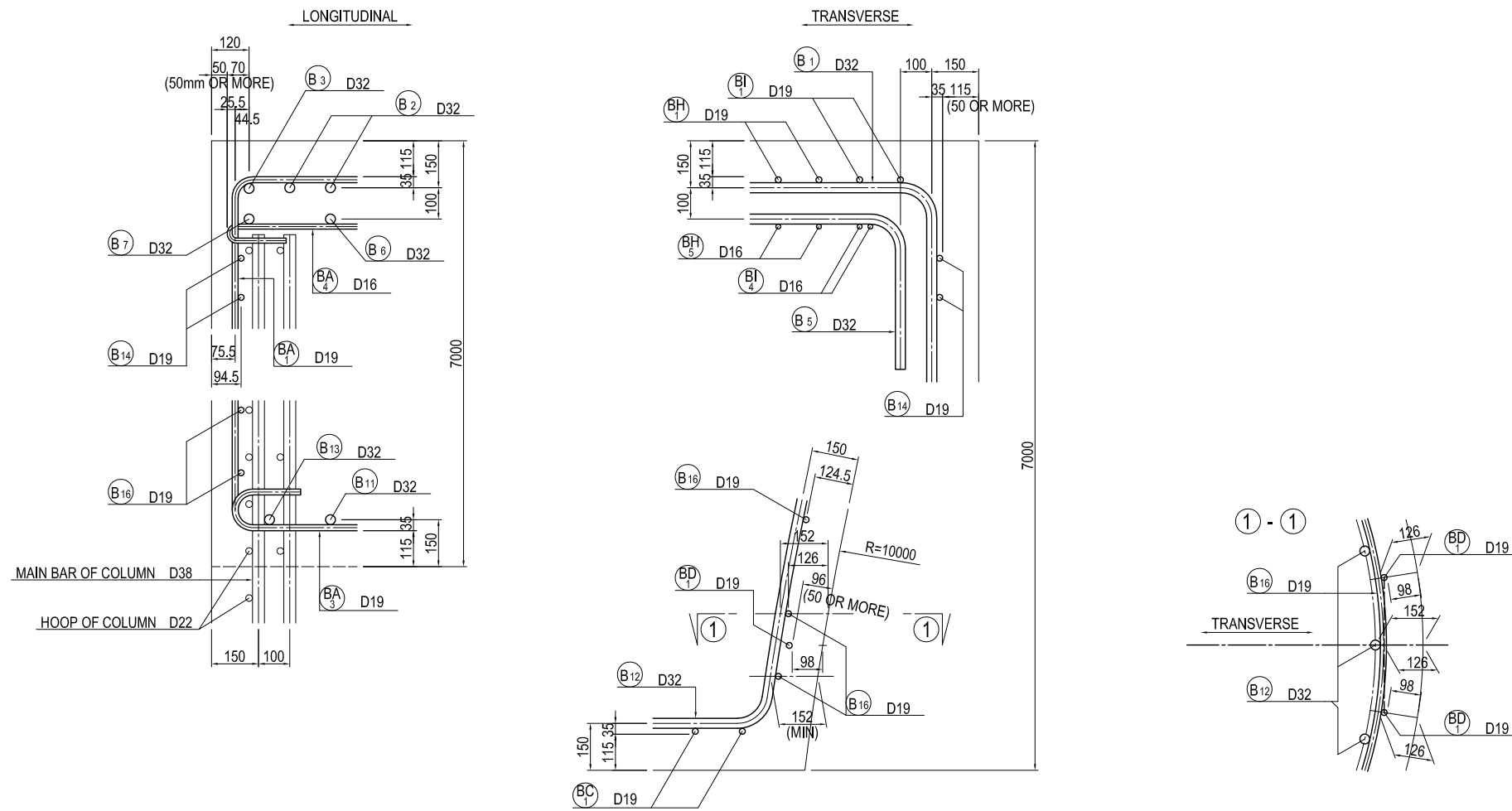
PLAN
6-6



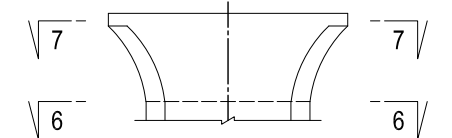
PLAN
7-7



DETAIL OF BEAM S=1:20



MARKING DIAGRAM



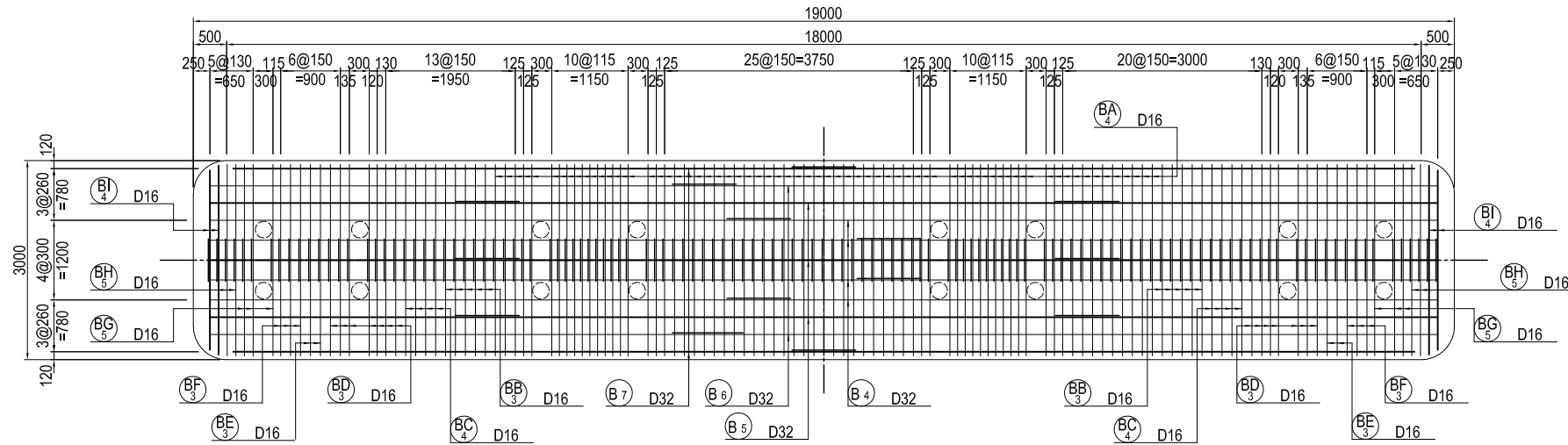
USE MATERIALS

	CONCRETE	BAR
BEAM • COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

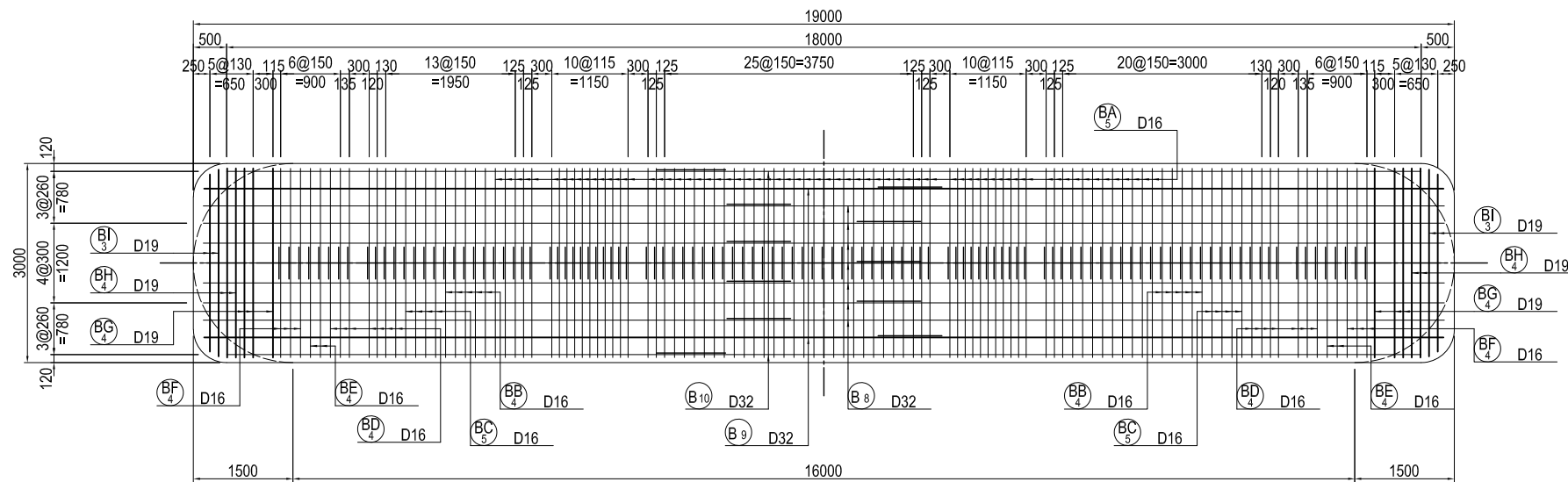
BAR ARRANGEMENT OF P7 PIER (4) S=1:100

BEAM

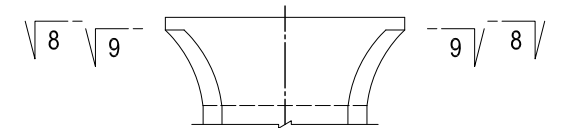
PLAN 8 - 8



PLAN 9 - 9



MARKING DIAGRAM



USE MATERIALS

	CONCRETE	BAR
BEAM • COLUMN	σ _{ck} = 30 N/mm ²	SD345

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 15%;">NAME</th> <th style="width: 15%;">SIGNATURE</th> <th style="width: 15%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>S. IMADA</td> <td></td> <td>27 Nov.2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td></td> <td>28 Nov.2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td></td> <td>29 Nov.2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	S. IMADA		27 Nov.2017	CHECKED BY	T. HAYAKAWA		28 Nov.2017	APPROVED BY	Y. SANO		29 Nov.2017	DRAWING TITLE <h2 style="text-align: center;">BAR ARRANGEMENT OF P7 PIER (4)</h2>	PACKAGE 1 DWG No. P1-SB-2106
	NAME	SIGNATURE	DATE																			
PREPARED BY	S. IMADA		27 Nov.2017																			
CHECKED BY	T. HAYAKAWA		28 Nov.2017																			
APPROVED BY	Y. SANO		29 Nov.2017																			

BAR ARRANGEMENT OF P7 PIER (5) S=1:100

BEAM

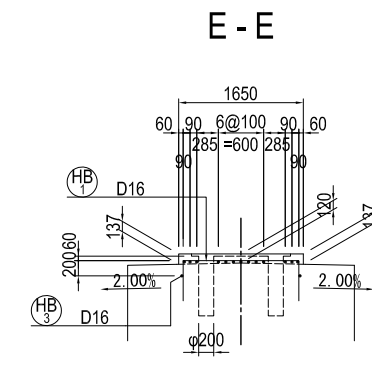
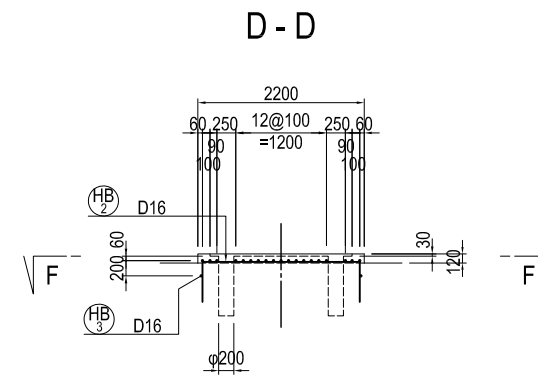
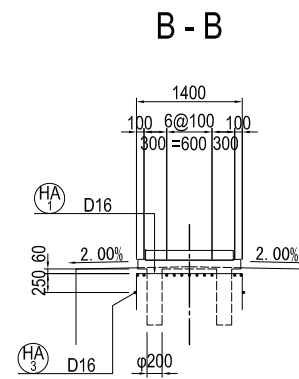
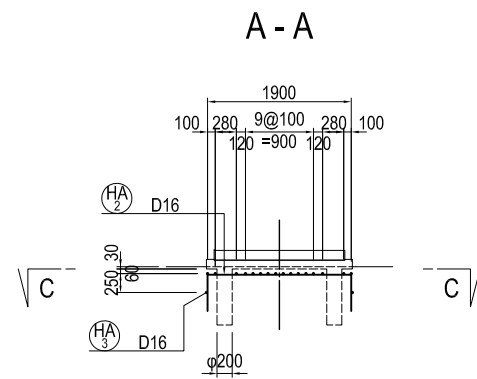
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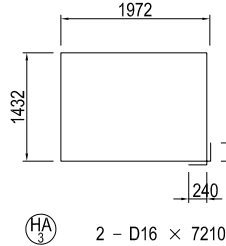
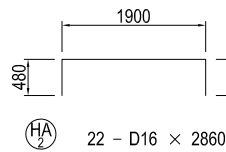
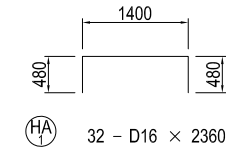
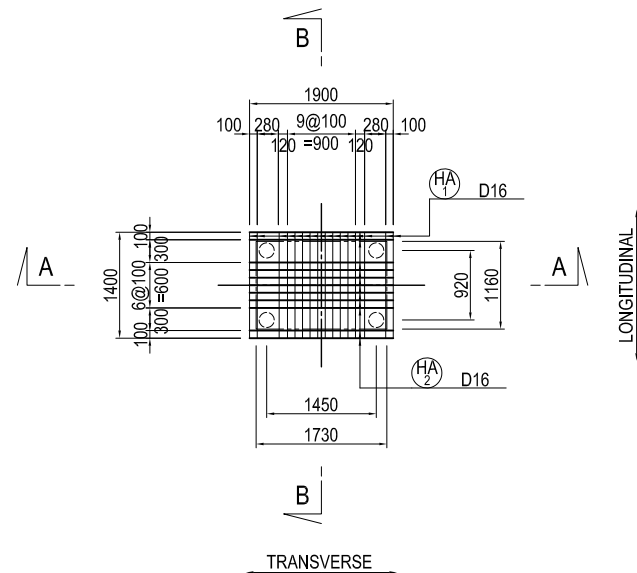
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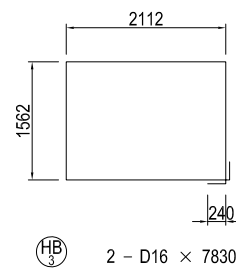
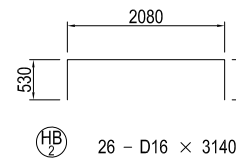
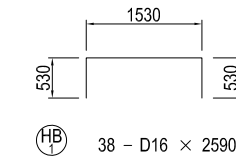
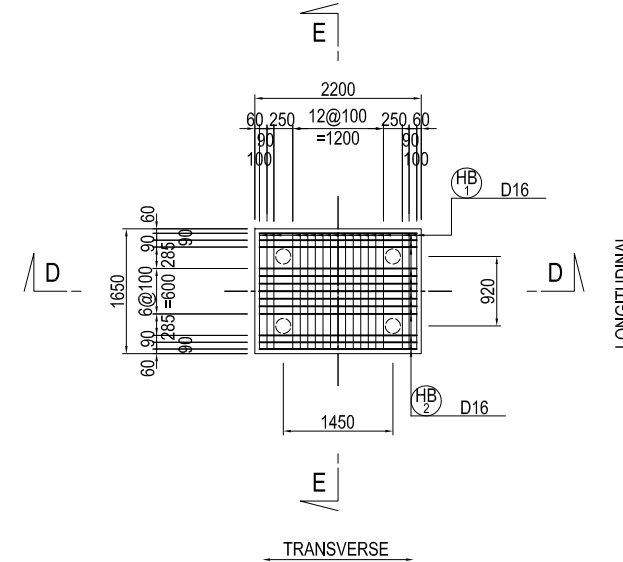
SECTION



PLAN
C - C



PLAN
F - F



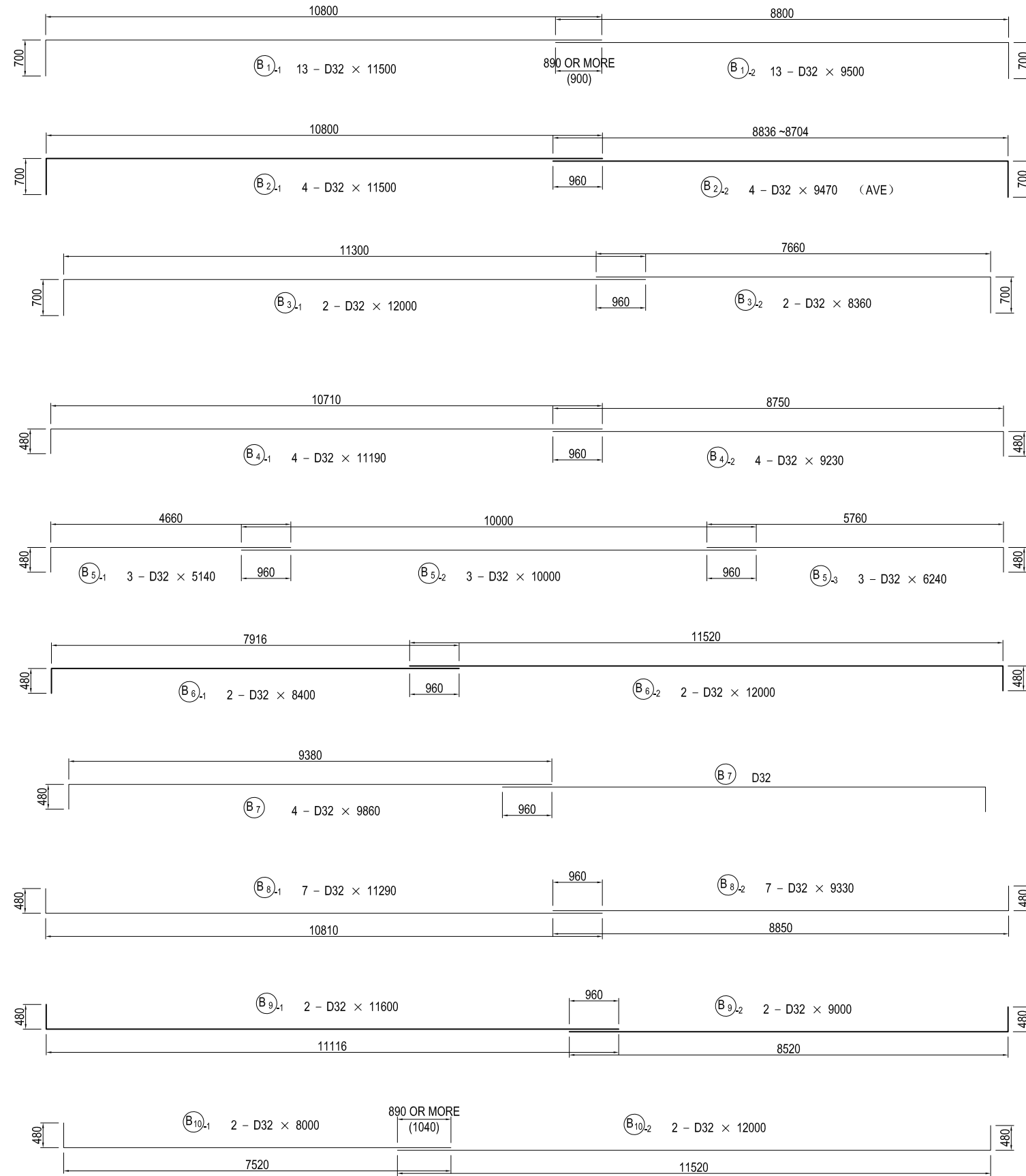
USE MATERIALS

	CONCRETE	BAR
BEAM • COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 20%;">NAME</th> <th style="width: 20%;">SIGNATURE</th> <th style="width: 20%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>S. IMADA</td> <td></td> <td>27 Nov.2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td></td> <td>28 Nov.2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td></td> <td>29 Nov.2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	S. IMADA		27 Nov.2017	CHECKED BY	T. HAYAKAWA		28 Nov.2017	APPROVED BY	Y. SANO		29 Nov.2017	<small>DRAWING TITLE</small> <h3 style="text-align: center;">BAR ARRANGEMENT OF P7 PIER (5)</h3>	<small>PACKAGE</small> 1 DWG No. P1-SB-2107
	NAME	SIGNATURE	DATE																			
PREPARED BY	S. IMADA		27 Nov.2017																			
CHECKED BY	T. HAYAKAWA		28 Nov.2017																			
APPROVED BY	Y. SANO		29 Nov.2017																			

BAR ARRANGEMENT OF P7 PIER (6) BEAM

S=1:100



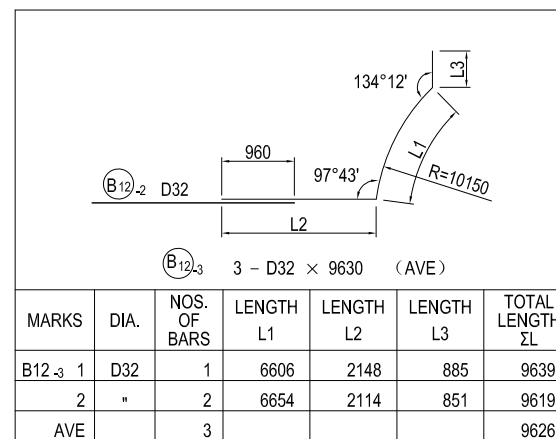
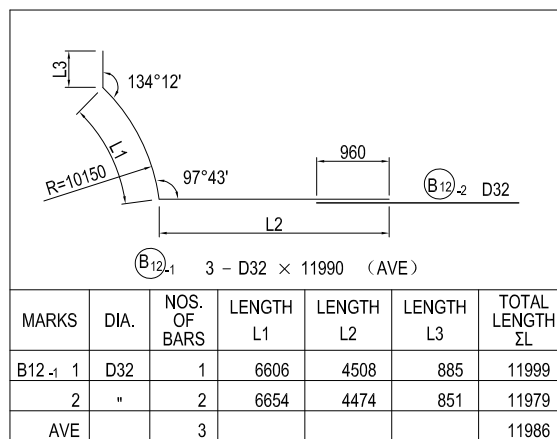
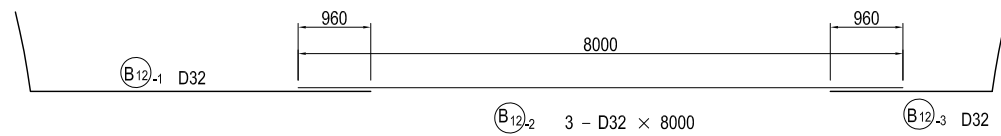
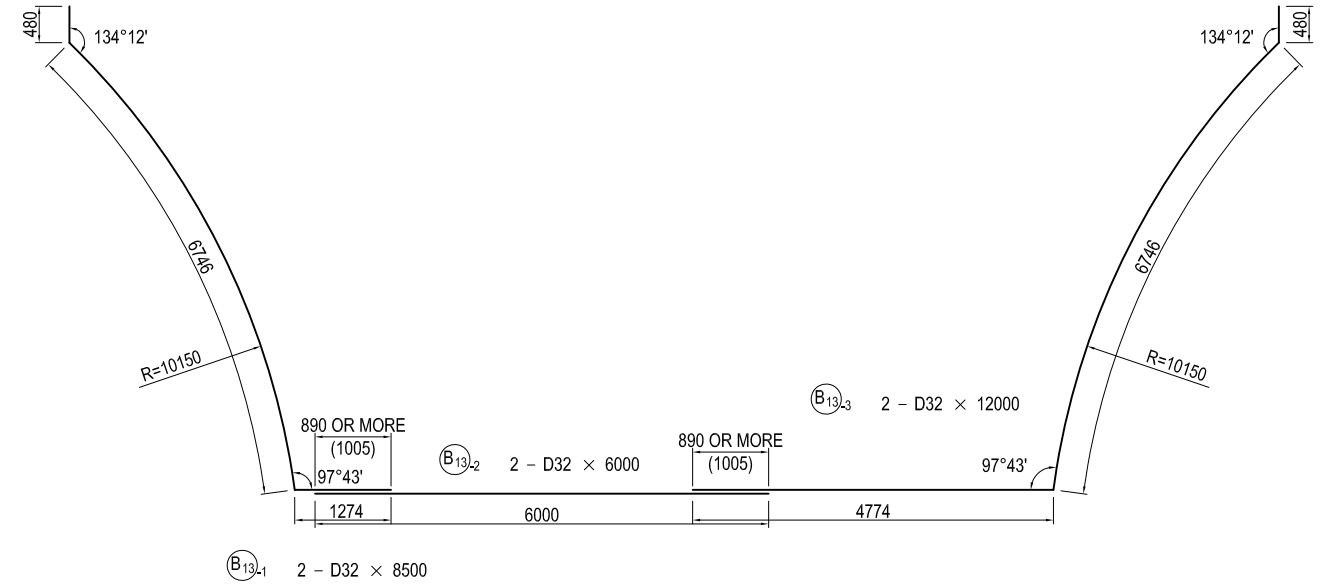
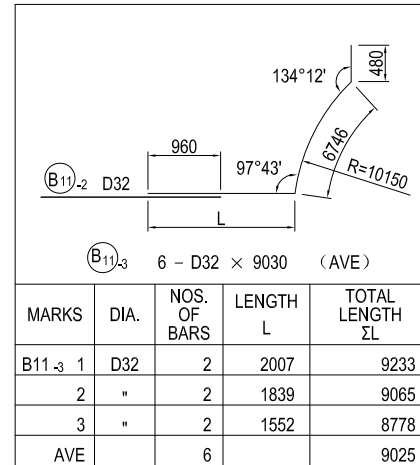
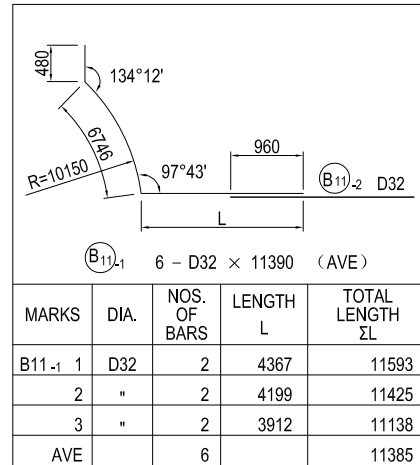
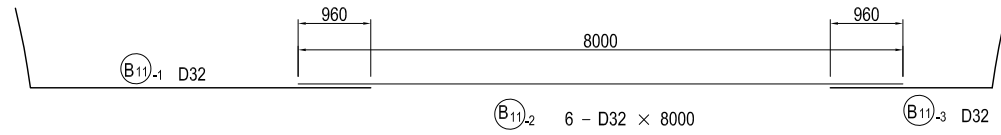
USE MATERIALS

	CONCRETE	BAR
BEAM	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE BAR ARRANGEMENT OF P7 PIER (6)	PACKAGE	
				PREPARED BY	S. IMADA			27 Nov.2017	1
				CHECKED BY	T. HAYAKAWA			28 Nov.2017	DWG No.
				APPROVED BY	Y. SANO			29 Nov.2017	P1-SB-2108

BAR ARRANGEMENT OF P7 PIER (7) S=1:100

BEAM



USE MATERIALS

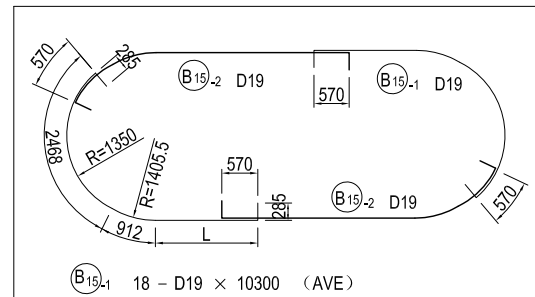
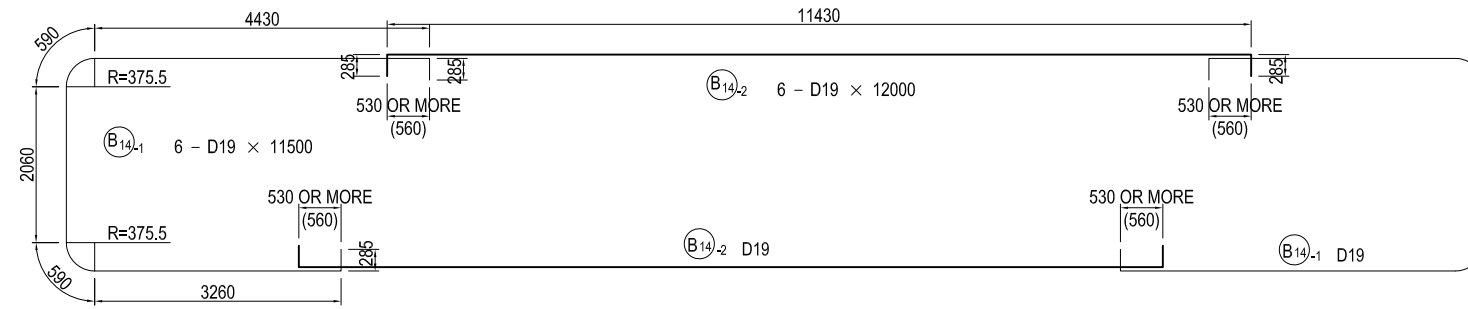
	CONCRETE	BAR
BEAM	σ _{ck} = 30 N/mm ²	SD345

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME PREPARED BY S. IMADA CHECKED BY T. HAYAKAWA APPROVED BY Y. SANO	SIGNATURE 	DATE 27 Nov.2017 28 Nov.2017 29 Nov.2017	DRAWING TITLE BAR ARRANGEMENT OF P7 PIER (7)	PACKAGE 1 DWG No. P1-SB-2109
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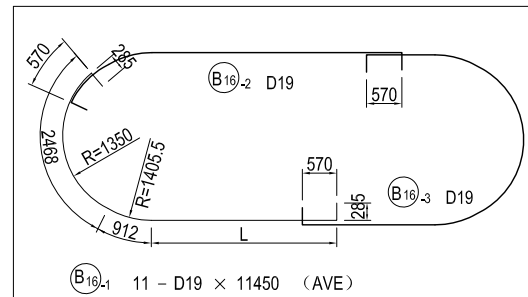
BAR ARRANGEMENT OF P7 PIER (8)

S=1:100

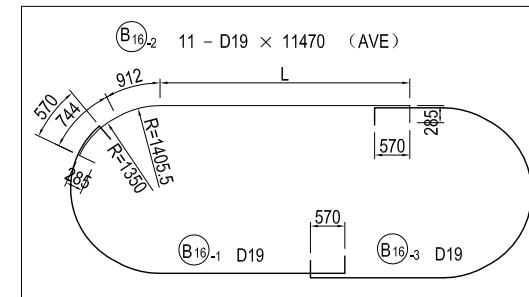
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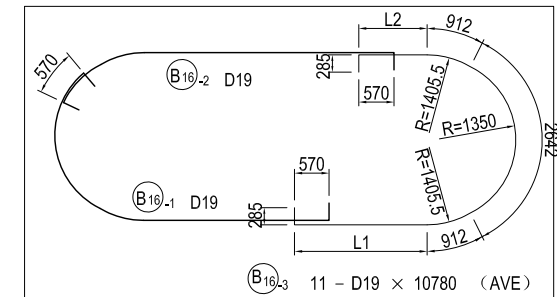
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2	"	2	7027	10977
3	"	2	6764	10714
4	"	2	6522	10472
5	"	2	6297	10247
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AVE		18		10304



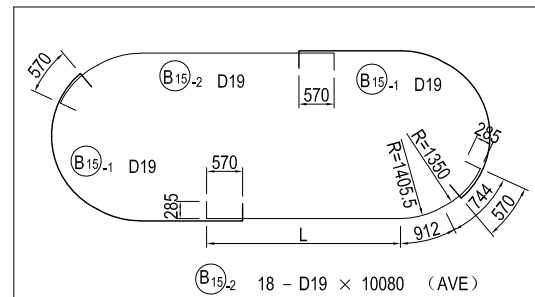
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B16-1 1	D19	1	8029	11979
2	"	1	7889	11839
3	"	1	7762	11712
4	"	1	7645	11595
5	"	1	7540	11490
6	"	1	7444	11394
7	"	1	7359	11309
8	"	1	7284	11234
9	"	1	7218	11168
10	"	1	7162	11112
11	"	1	7130	11080
AVE		11		11447



MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B16-2 1	D19	1	9774	12000
2	"	1	9634	11860
3	"	1	9507	11733
4	"	1	9390	11616
5	"	1	9285	11511
6	"	1	9189	11415
7	"	1	9104	11330
8	"	1	9029	11255
9	"	1	8963	11189
10	"	1	8907	11133
11	"	1	8875	11101
AVE		11		11468



MARKS	DIA.	NOS. OF BARS	LENGTH L1	LENGTH L2	TOTAL LENGTH ΣL
B16-3 1	D19	1	4279	2534	11849
2	"	1	4139	2394	11569
3	"	1	4012	2267	11315
4	"	1	3895	2150	11081
5	"	1	3790	2045	10871
6	"	1	3694	1949	10679
7	"	1	3609	1864	10509
8	"	1	3534	1789	10359
9	"	1	3468	1723	10227
10	"	1	3412	1667	10115
11	"	1	3380	1635	10051
AVE		11			10784



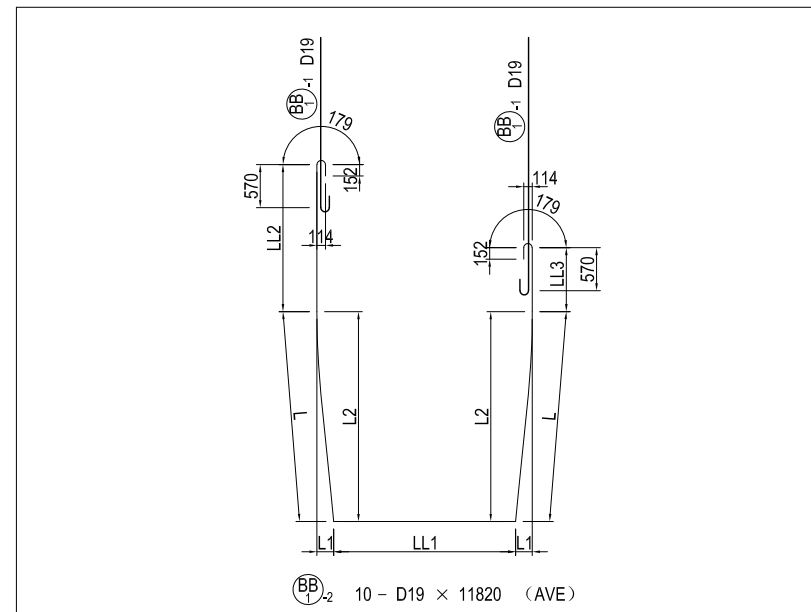
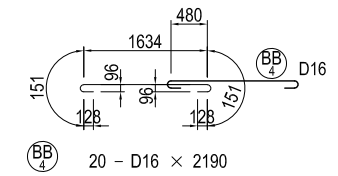
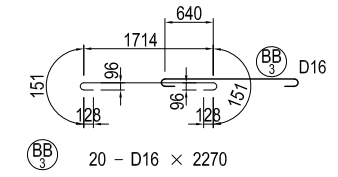
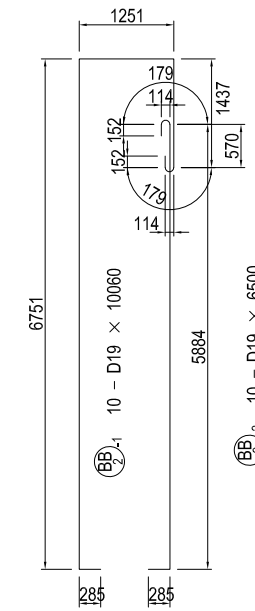
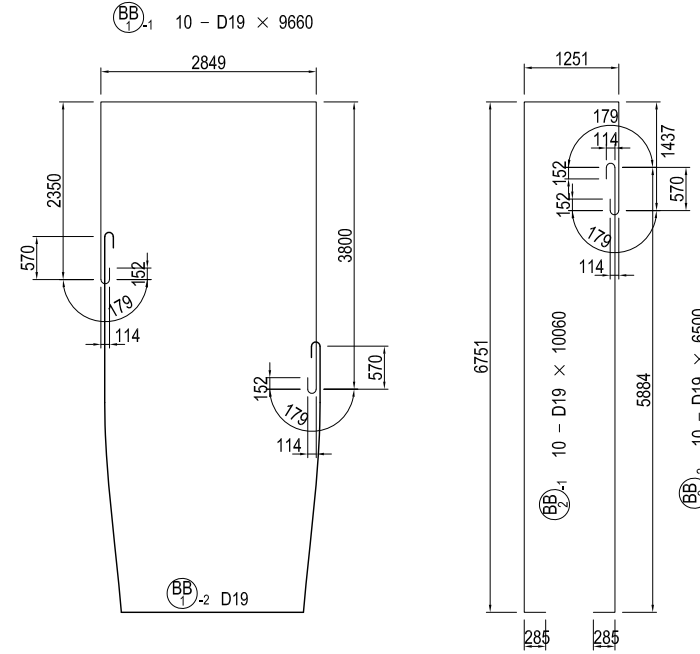
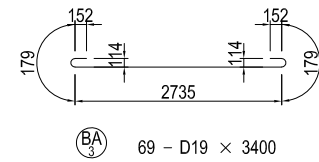
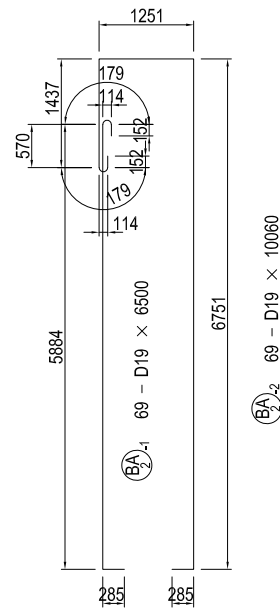
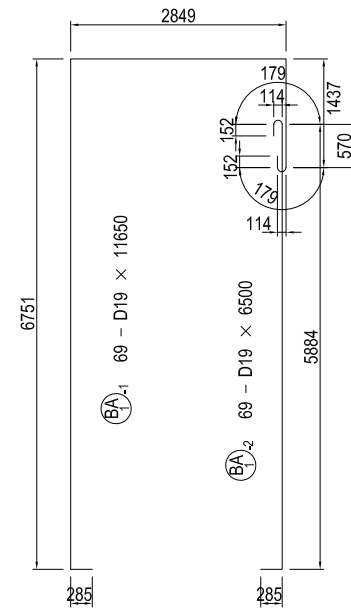
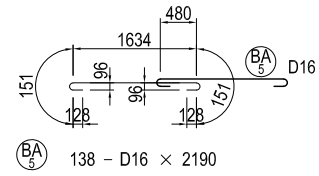
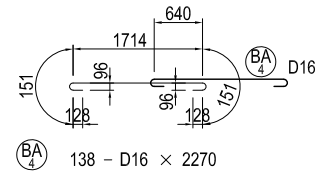
MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
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2	"	2	8527	10753
3	"	2	8264	10490
4	"	2	8022	10248
5	"	2	7797	10023
6	"	2	7590	9816
7	"	2	7397	9623
8	"	2	7219	9445
9	"	2	7055	9281
AVE		18		10080

USE MATERIALS

	CONCRETE	BAR
BEAM	σ _{ck} = 30 N/mm ²	SD345

BAR ARRANGEMENT OF P7 PIER (9) BEAM

S=1:100



MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL1	LENGTH LL2	LENGTH LL3	TOTAL LENGTH ΣL
BB1-2 1	D19	2	976	8	976	2833	3995	2545	11987
2	"	2	1576	34	1576	2781	3395	1945	11935
3	"	2	2177	76	2176	2697	2795	1345	11853
4	"	2	2480	138	2476	2573	2495	1045	11735
5	"	2	2785	221	2776	2407	2195	745	11579
AVE		10							11818

USE MATERIALS

	CONCRETE	BAR
BEAM	σ _{ck} = 30 N/mm ²	SD345

PROJECT NAME
DETAILED DESIGN ON
BAGO RIVER BRIDGE
CONSTRUCTION PROJECT

FINANCED BY
 JAPAN INTERNATIONAL
COOPERATION AGENCY

COUNTERPART
 REPUBLIC OF THE UNION OF MYANMAR
MINISTRY OF CONSTRUCTION
DEPARTMENT OF BRIDGE

JICA STUDY TEAM
 NIPPON KOEI CO., LTD.
ORIENTAL CONSULTANTS GLOBAL CO., LTD.
METROPOLITAN EXPRESSWAY COMPANY LIMITED
CHODAI CO., LTD.
NIPPON ENGINEERING CONSULTANTS CO., LTD.

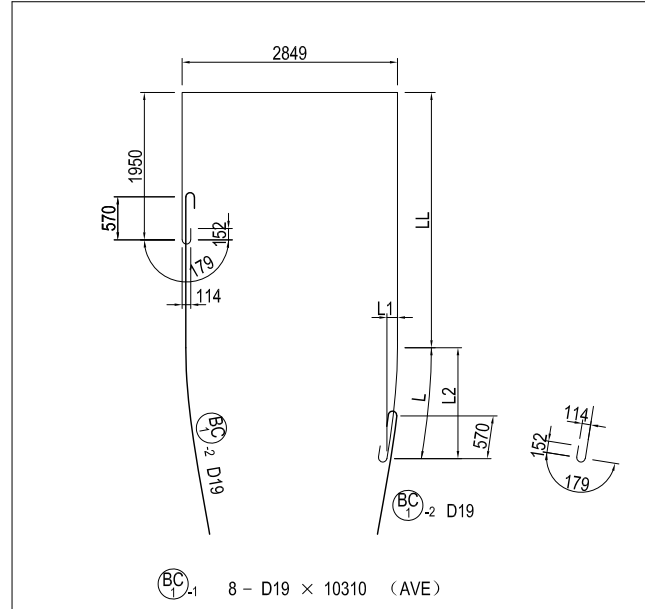
	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

DRAWING TITLE
BAR ARRANGEMENT OF P7 PIER (9)

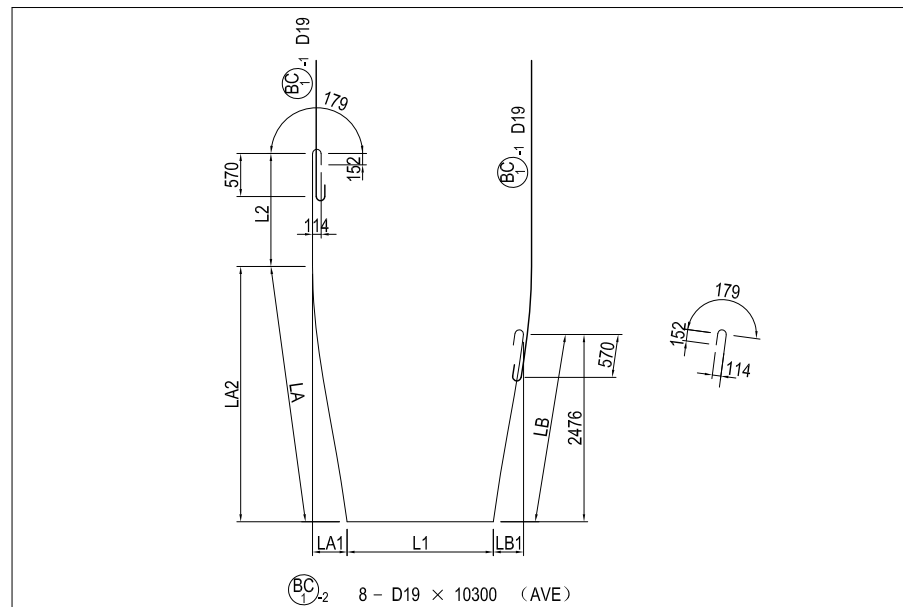
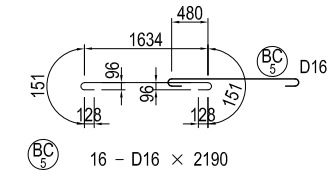
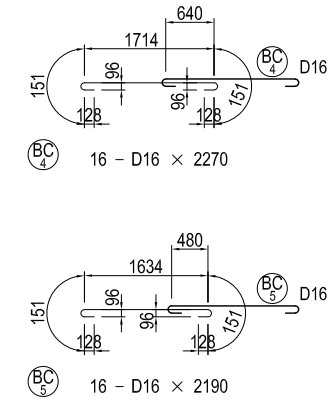
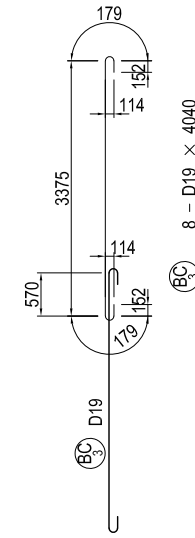
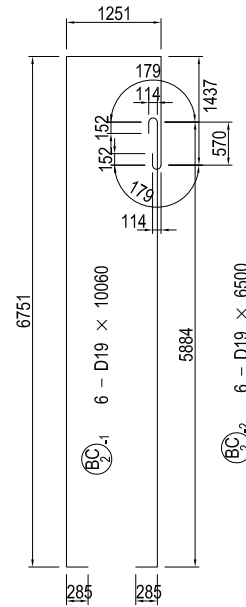
PACKAGE
1
DWG No.
P1-SB-2111

BAR ARRANGEMENT OF P7 PIER (10) S=1:100

BEAM



MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BC1-1 1	D19	2	1171	77	1167	3675	10307
2	"	2	1475	139	1466	3375	10311
3	"	2	1777	221	1759	3075	10313
4	"	2	2085	324	2053	2775	10321
AVE		8					10313



MARKS	DIA.	NOS. OF BARS	LENGTH LA	LENGTH LA1	LENGTH LA2	LENGTH LB	LENGTH LB1	LENGTH L1	LENGTH L2	TOTAL LENGTH ΣL
BC1-2 1	D19	2	3095	326	3076	2494	304	2198	2295	10744
2	"	2	3410	457	3376	2508	400	1934	1995	10509
3	"	2	3738	638	3676	2531	527	1573	1695	10199
4	"	2	4098	918	3976	2583	733	1013	1395	9751
AVE		8								10301

USE MATERIALS

	CONCRETE	BAR
BEAM	σ _{ck} = 30 N/mm ²	SD345

PROJECT NAME
DETAILED DESIGN ON
BAGO RIVER BRIDGE
CONSTRUCTION PROJECT

FINANCED BY
 JAPAN INTERNATIONAL
COOPERATION AGENCY

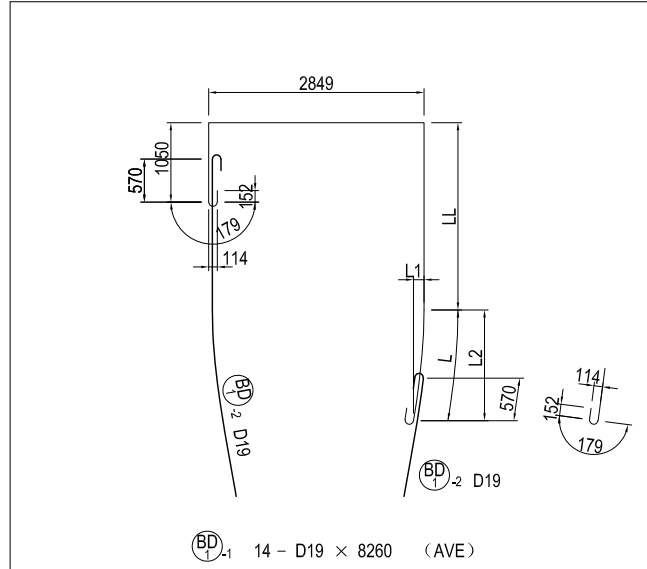
COUNTERPART
 REPUBLIC OF THE UNION OF MYANMAR
MINISTRY OF CONSTRUCTION
DEPARTMENT OF BRIDGE

JICA STUDY TEAM
 NIPPON KOEI CO., LTD.
ORIENTAL CONSULTANTS GLOBAL CO., LTD.
METROPOLITAN EXPRESSWAY COMPANY LIMITED
CHODAI CO., LTD.
NIPPON ENGINEERING CONSULTANTS CO., LTD.

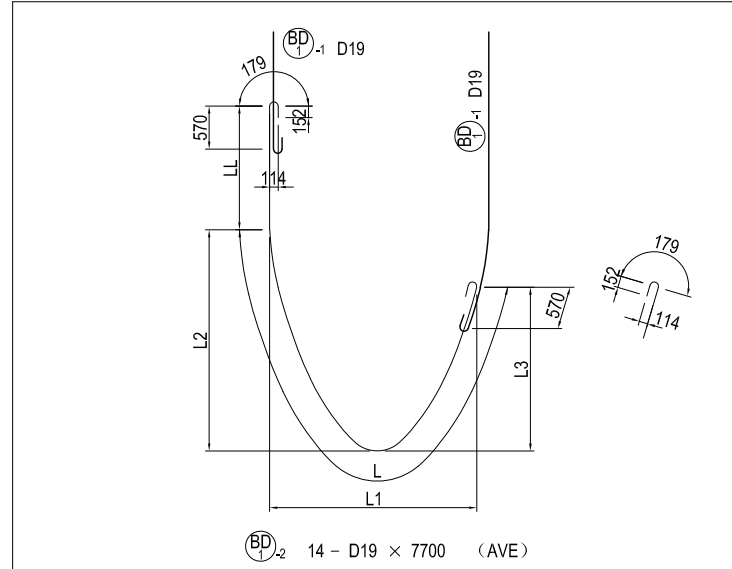
	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P7 PIER (10)	1
	DWG No.
	P1-SB-2112

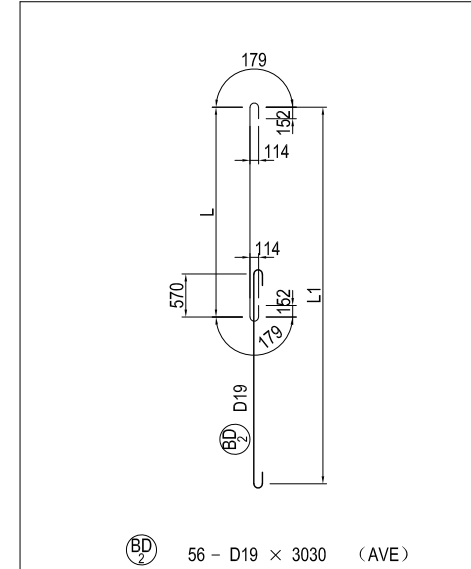
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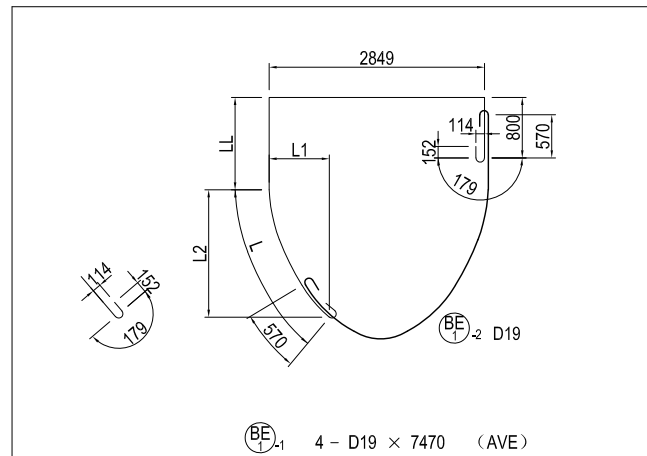
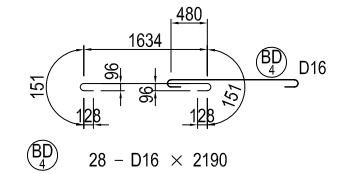
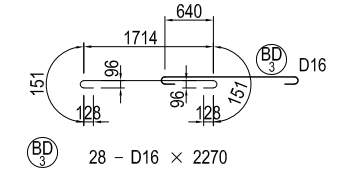
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2	"	2	1205	191	1187	2444	8210
3	"	2	1339	273	1306	2316	8216
4	"	2	1553	359	1502	2109	8223
5	"	2	1993	660	1853	1713	8267
6	"	2	2190	866	1956	1544	8295
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AVE		14					8257



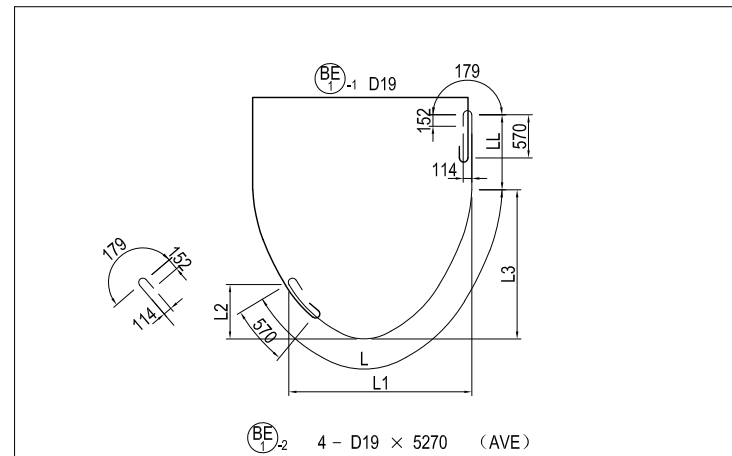
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BD1-2 1	D19	2	7888	2824	3737	3401	2260	10810
2	"	2	6806	2786	3285	2653	1964	9432
3	"	2	6057	2739	2926	2166	1836	8555
4	"	2	5546	2682	2751	1785	1629	7837
5	"	2	4453	2478	2367	1004	1233	6348
6	"	2	4025	2348	2227	705	1074	5761
7	"	2	3515	2150	2049	400	946	5123
AVE		14						7695



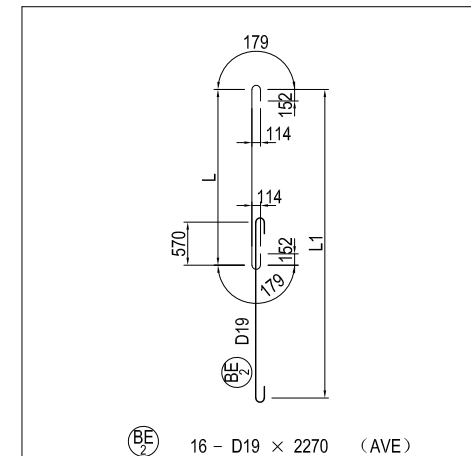
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3	"	8	2574	4577	3236
4	"	8	2415	4259	3077
5	"	8	2074	3577	2736
6	"	8	1939	3308	2601
7	"	8	1801	3031	2463
AVE		56			3034



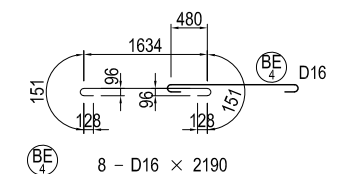
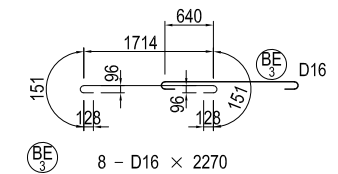
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BE1-1 1	D19	2	1909	796	1685	1222	7442
2	"	2	2173	1039	1811	1020	7504
AVE		4					7473



MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH LL	TOTAL LENGTH ΣL
BE1-2 1	D19	2	3888	2421	719	1972	992	5542
2	"	2	3550	2254	457	1913	790	5002
AVE		4						5272



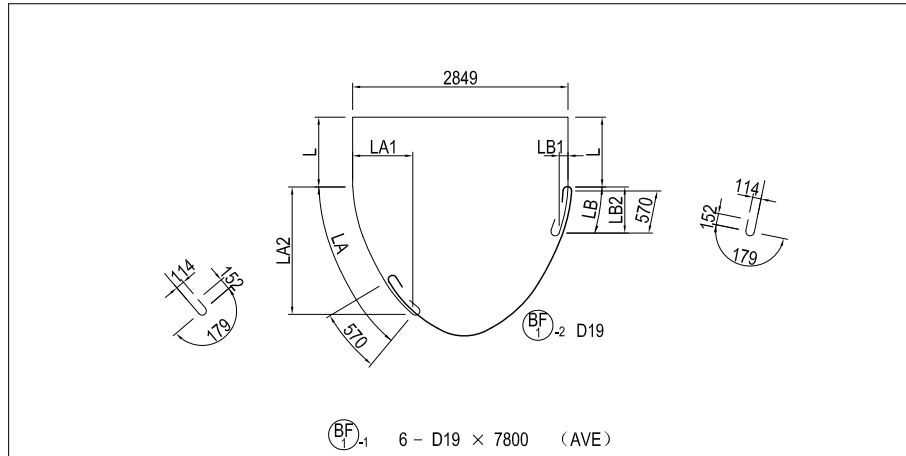
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BE2 1	D19	8	1672	2773	2334
2	"	8	1551	2531	2213
AVE		16			2274



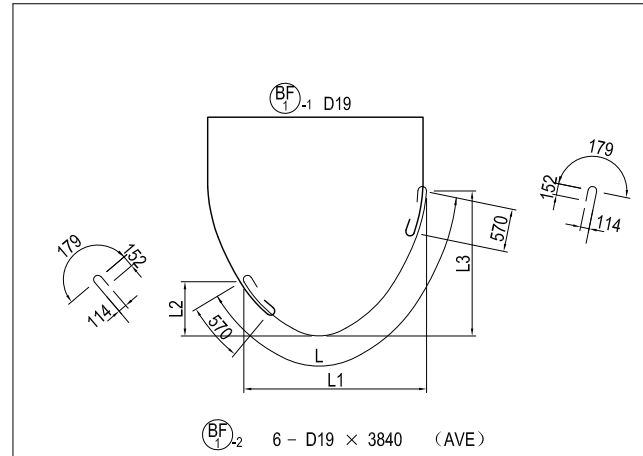
USE MATERIALS

	CONCRETE	BAR
BEAM	σ _{ck} = 30 N/mm ²	SD345

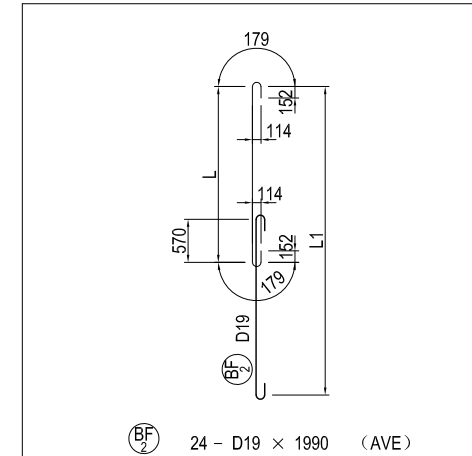
BAR ARRANGEMENT OF P7 PIER (12) S=1:100 BEAM



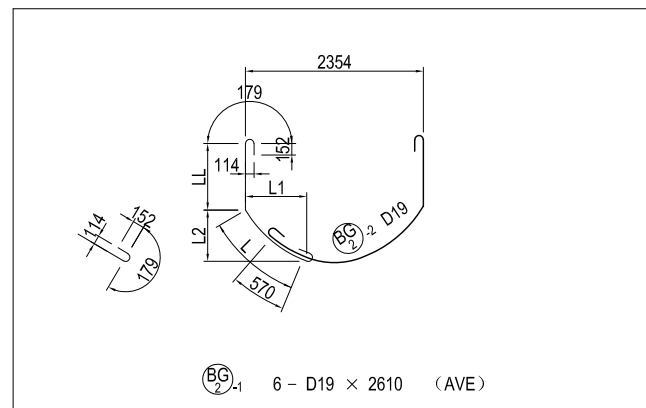
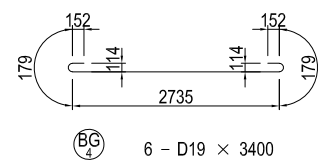
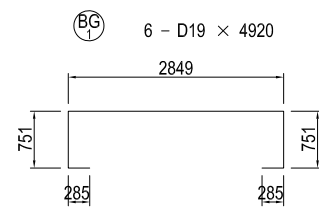
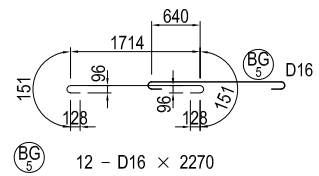
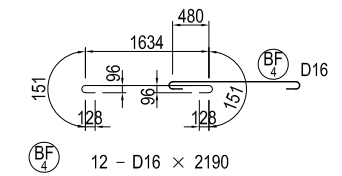
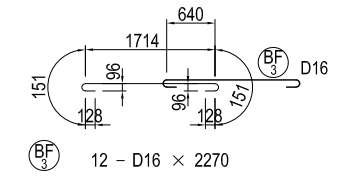
MARKS	DIA.	NOS. OF BARS	LENGTH LA	LENGTH LA1	LENGTH LA2	LENGTH LB	LENGTH LB1	LENGTH LB2	LENGTH L	TOTAL LENGTH ΣL
BF1-1 1	D19	2	1737	779	1502	624	140	605	922	7716
2	"	2	1902	997	1542	730	214	693	818	7779
3	"	2	2092	1304	1488	811	302	748	742	7898
AVE		6								7798



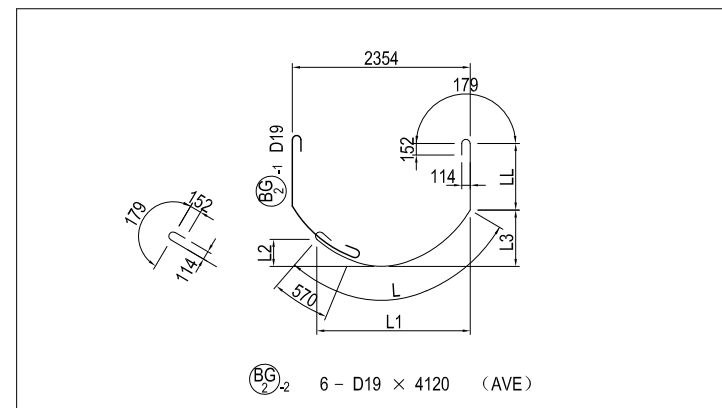
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	TOTAL LENGTH ΣL
BF1-2 1	D19	2	3679	2449	682	1712	4341
2	"	2	3196	2271	452	1482	3858
3	"	2	2664	2006	235	1265	3326
AVE		6					3842



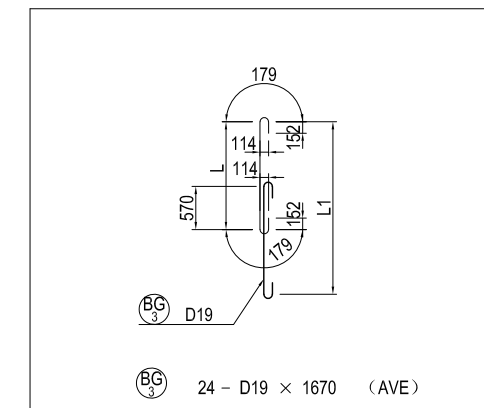
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BF2 1	D19	8	1437	2303	2099
2	"	8	1329	2088	1991
3	"	8	1227	1884	1889
AVE		24			1993



MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	TOTAL LENGTH ΣL
BG2-1 1	D19	2	638	403	490	1210	2510
2	"	2	1060	794	673	892	2614
3	"	2	1294	1021	723	750	2706
AVE		6					2610



MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH L4	TOTAL LENGTH ΣL
BG2-2 1	D19	2	2924	2319	756	814	1210	4796
2	"	2	2414	2043	370	746	892	3968
3	"	2	2176	1859	214	733	750	3588
AVE		6						4117

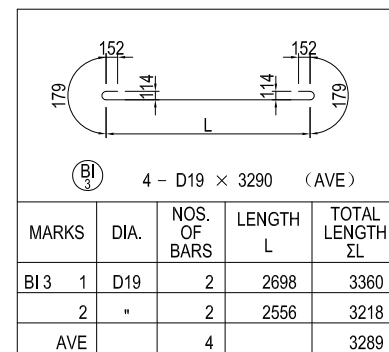
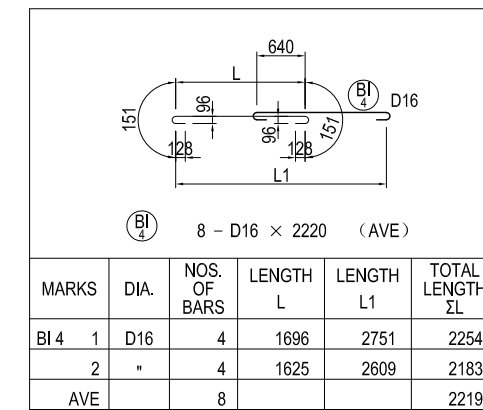
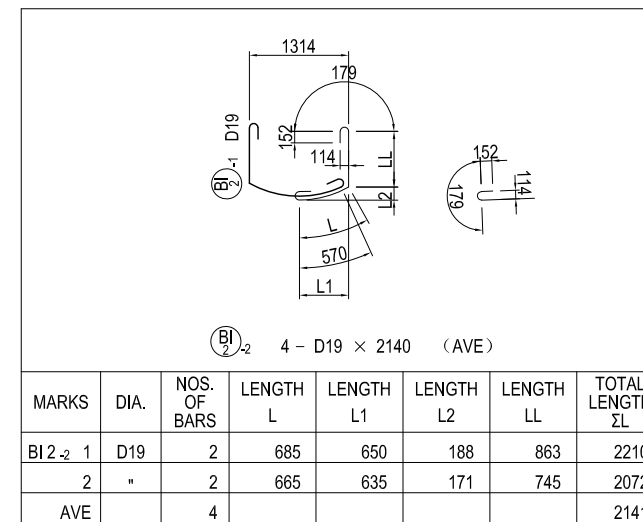
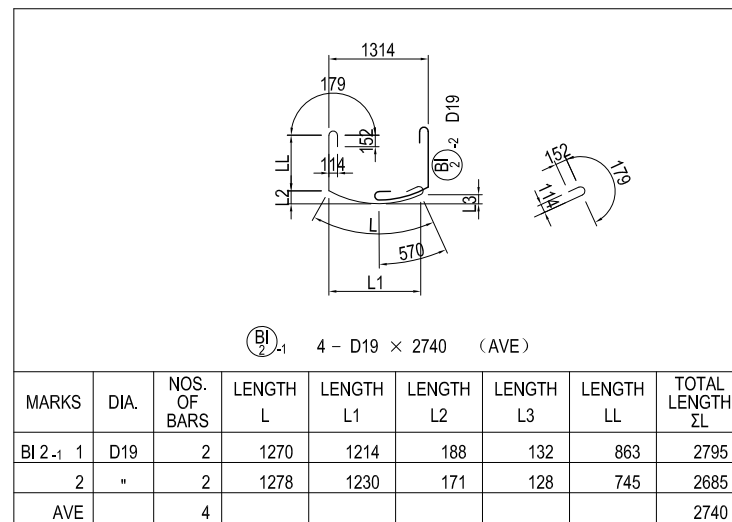
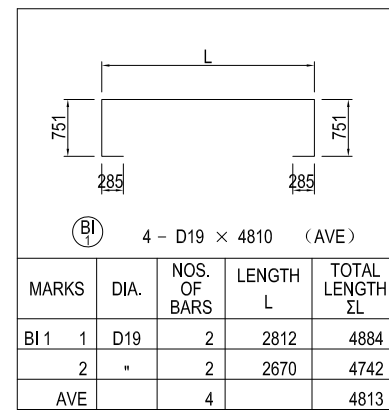
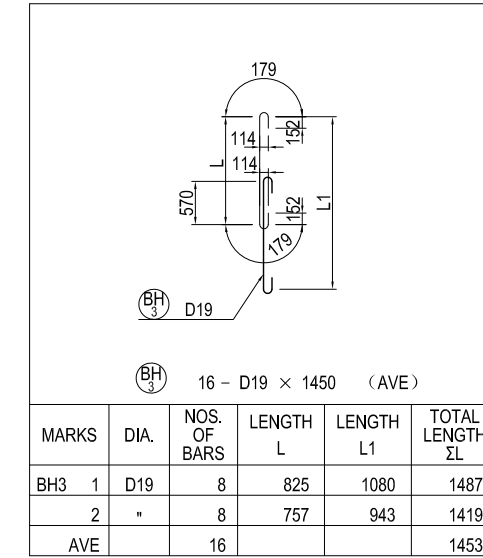
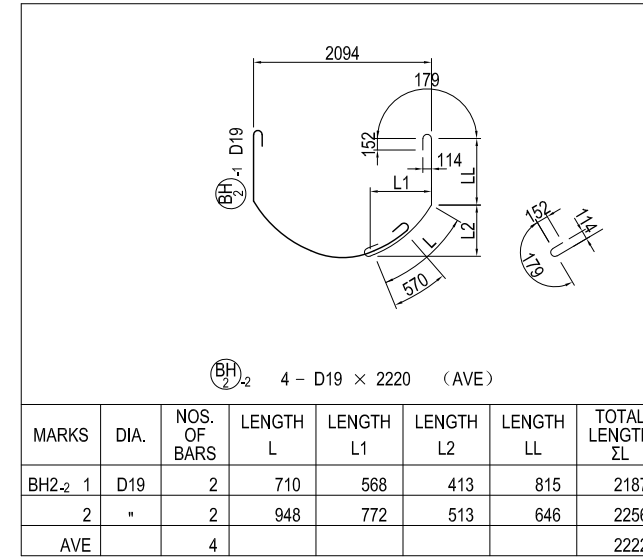
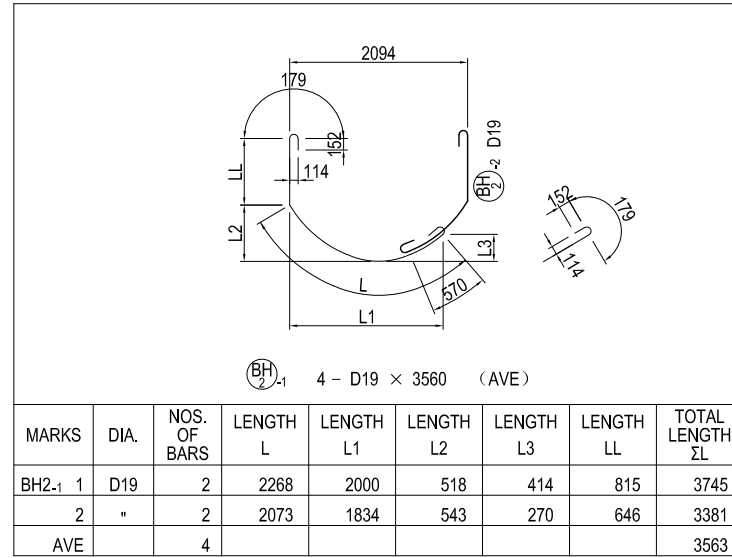
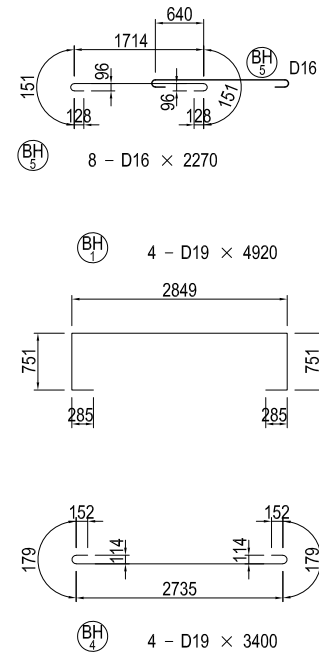


MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BG3 1	D19	8	1153	1735	1815
2	"	8	970	1370	1632
3	"	8	896	1222	1558
AVE		24			1668

USE MATERIALS

	CONCRETE	BAR
BEAM	σ _{ck} = 30 N/mm ²	SD345

BAR ARRANGEMENT OF P7 PIER (13) S=1:100 BEAM



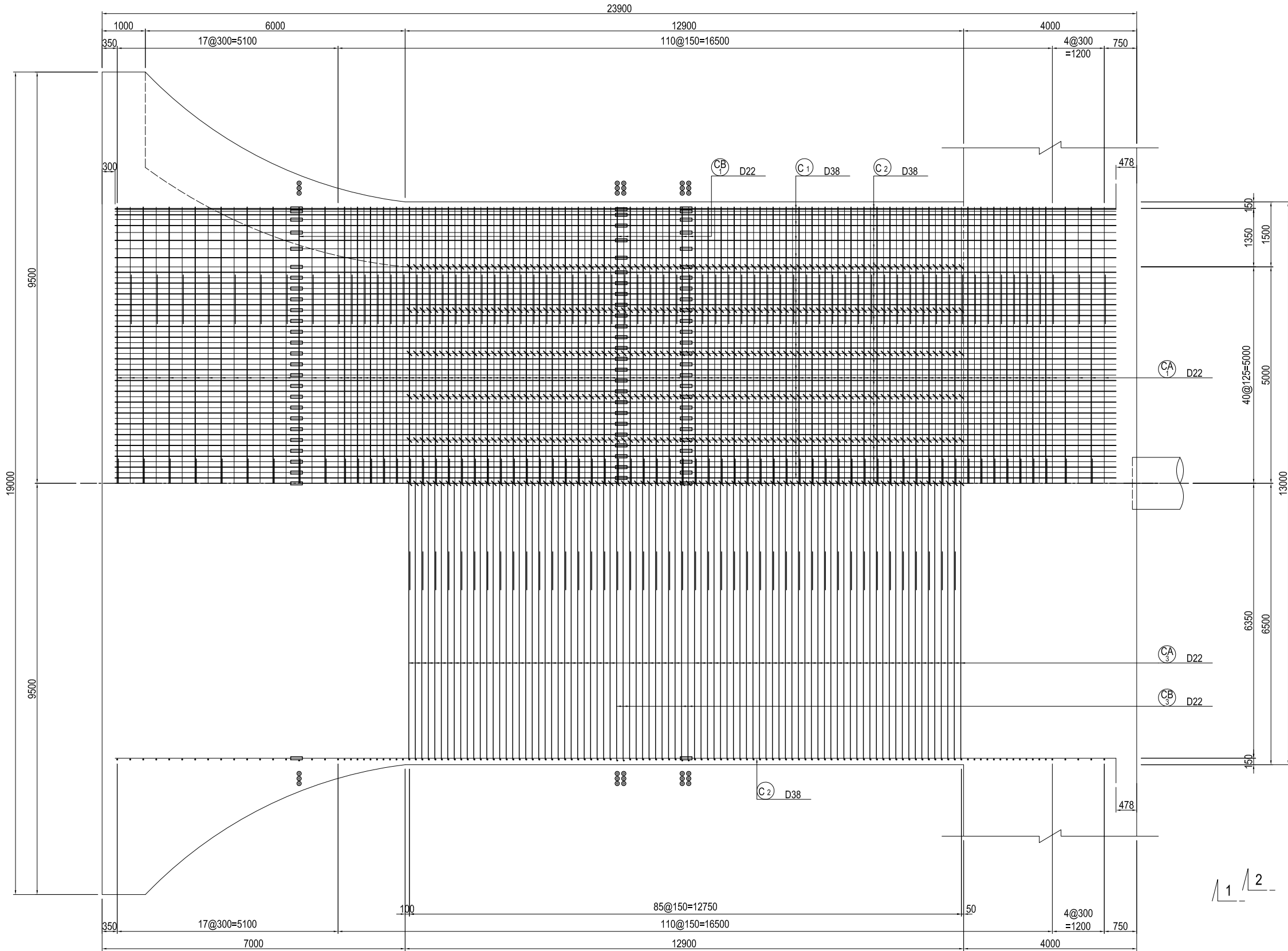
USE MATERIALS

	CONCRETE	BAR
BEAM	σ _{ck} = 30 N/mm ²	SD345

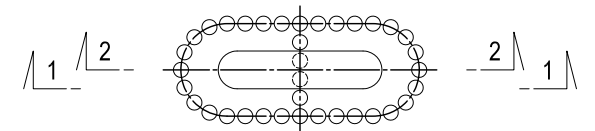
BAR ARRANGEMENT OF P7 PIER (14) S=1:100 COLUMN

FRONT ELEVATION
1-1

SECTION
2-2



MARKING DIAGRAM



USE MATERIALS

	CONCRETE	BAR
BEAM-COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

- Notes) 1. : This mark indicates hoop arranged in the location of mechanical joint.
2. : This mark indicates a mechanical joint.

PROJECT NAME
DETAILED DESIGN ON
BAGO RIVER BRIDGE
CONSTRUCTION PROJECT

FINANCED BY
 JAPAN INTERNATIONAL
COOPERATION AGENCY

COUNTERPART
 REPUBLIC OF THE UNION OF MYANMAR
MINISTRY OF CONSTRUCTION
DEPARTMENT OF BRIDGE

JICA STUDY TEAM
 NIPPON KOEI CO., LTD.
ORIENTAL CONSULTANTS GLOBAL CO., LTD.
METROPOLITAN EXPRESSWAY COMPANY LIMITED
CHODAI CO., LTD.
NIPPON ENGINEERING CONSULTANTS CO., LTD.

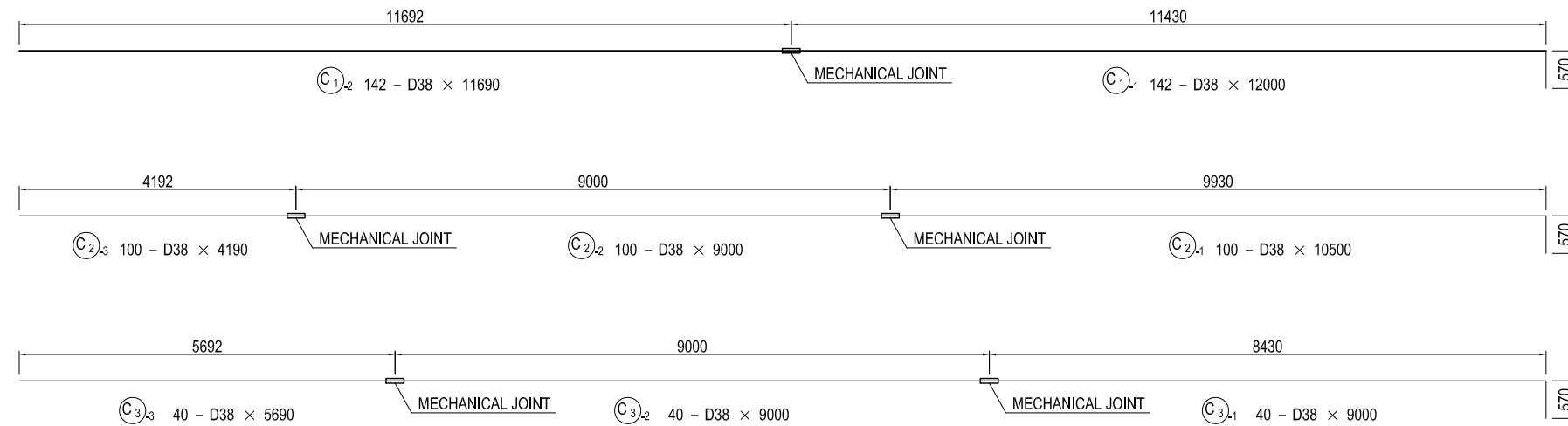
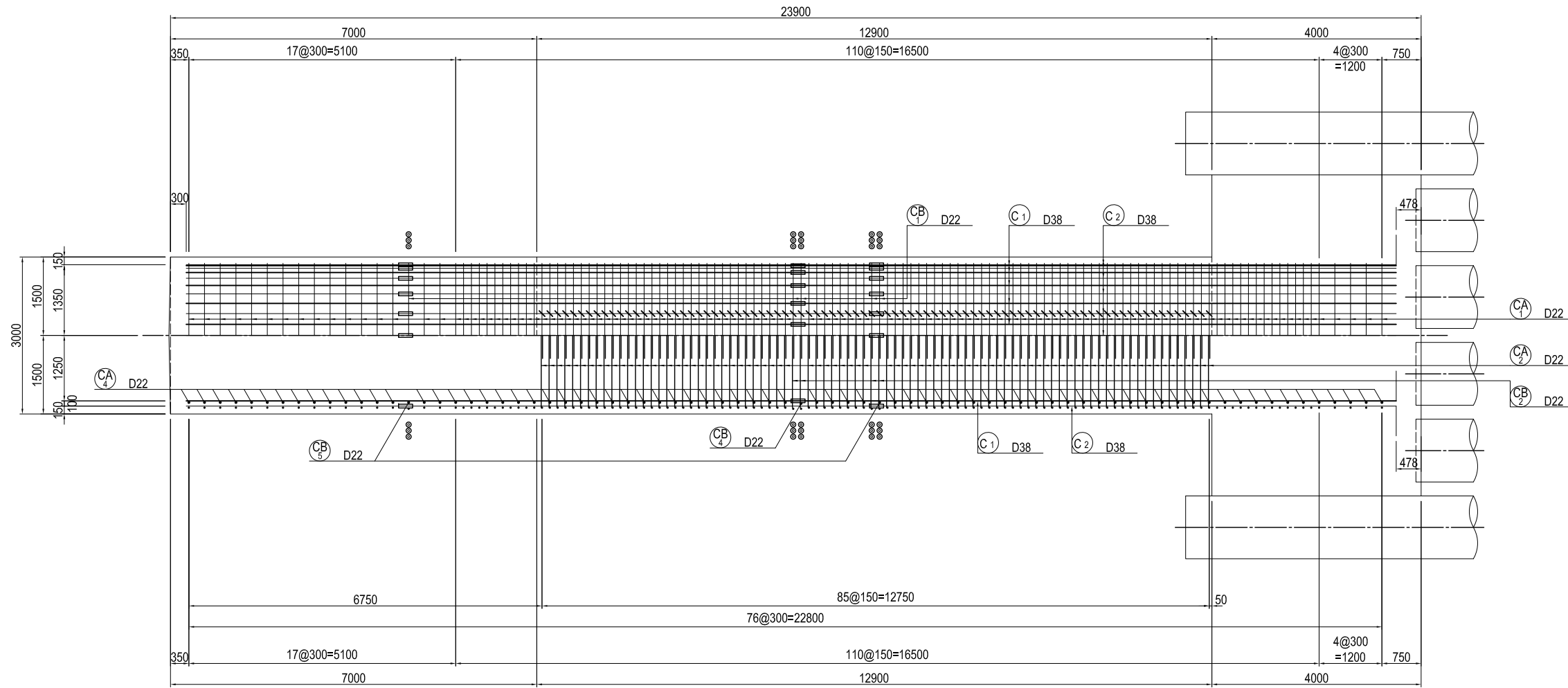
	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

DRAWING TITLE
BAR ARRANGEMENT OF P7 PIER (14)

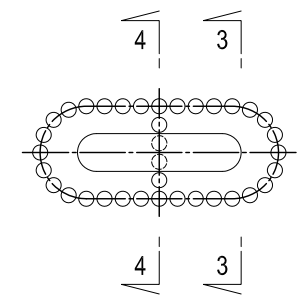
PACKAGE
1
DWG No.
P1-SB-2116

BAR ARRANGEMENT OF P7 PIER (15) S=1:100 COLUMN

SECTION SIDE ELEVATION
4-4 3-3



MARKING DIAGRAM



- Notes) 1. : This mark indicates hoop arranged in the location of mechanical joint.
2. : This mark indicates a mechanical joint.

USE MATERIALS

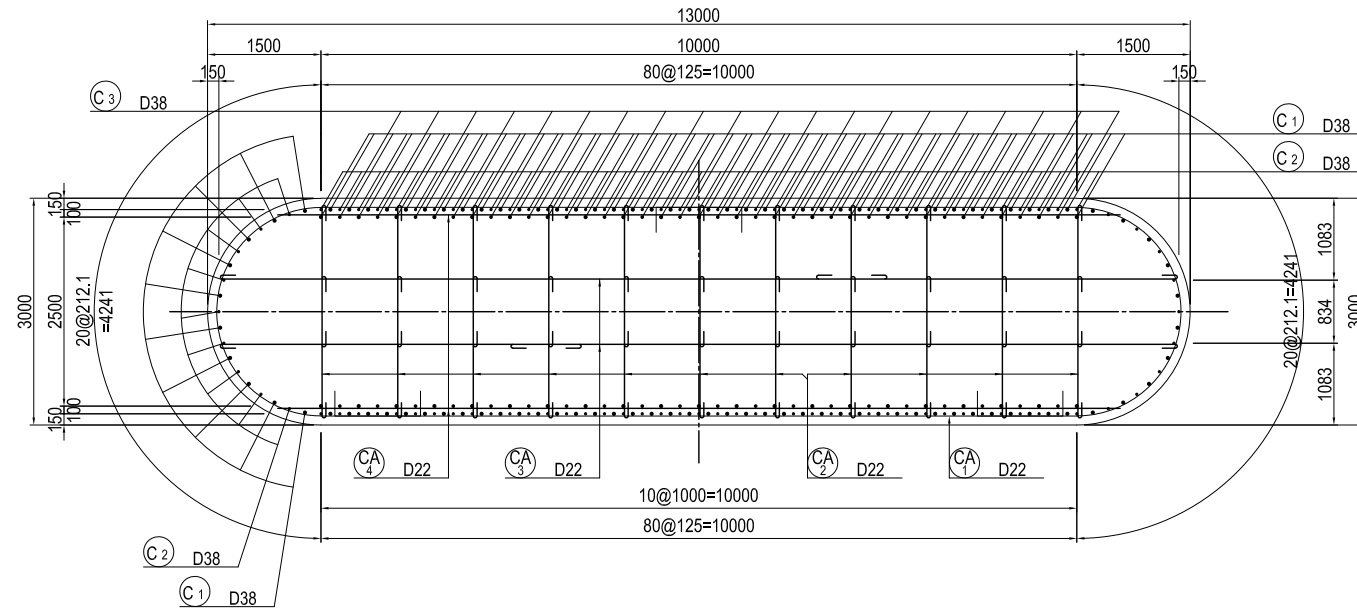
	CONCRETE	BAR
BEAM-COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE BAR ARRANGEMENT OF P7 PIER (15)	PACKAGE 1 DWG No. P1-SB-2117
				PREPARED BY	S. IMADA	27 Nov.2017		
				CHECKED BY	T. HAYAKAWA	28 Nov.2017		
				APPROVED BY	Y. SANO	29 Nov.2017		

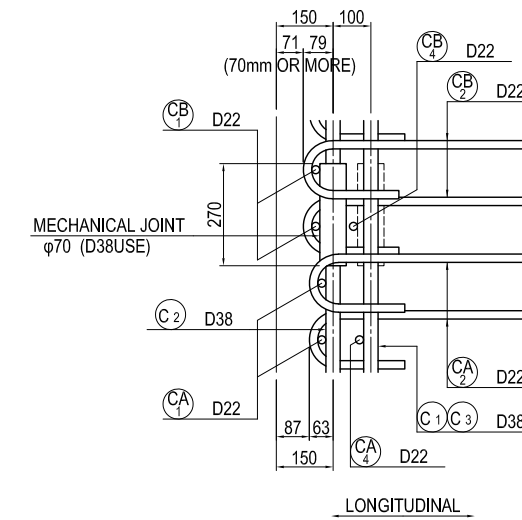
BAR ARRANGEMENT OF P7 PIER (16) COLUMN

S=1:100

PLAN 5-5

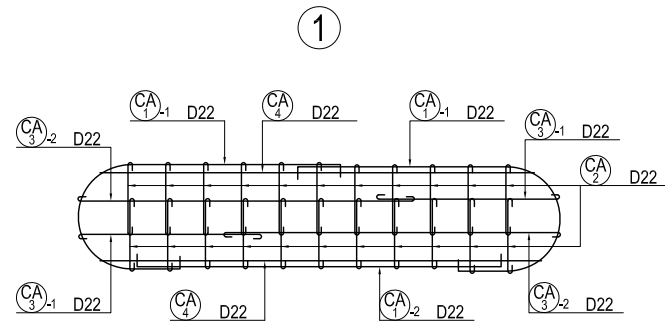


DETAIL OF COLUMN S=1:20



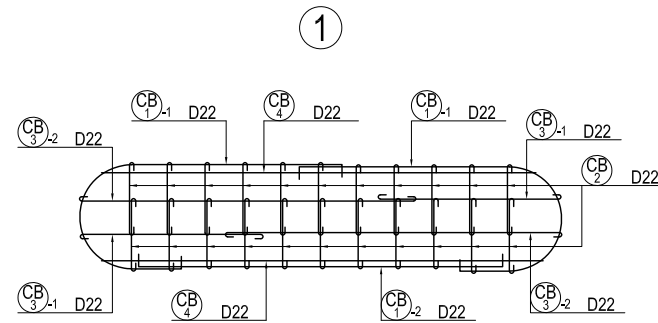
ASSEMBLY DRAWING OF HOOP (c.t.c. 150)

【STANDARD PART】



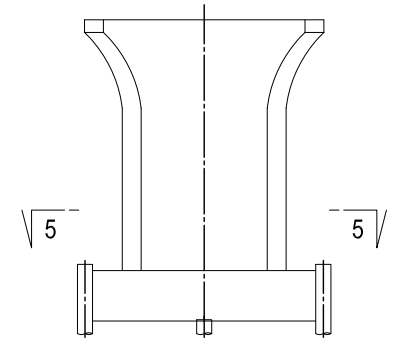
Note) CA4 : c.t.c. 300

【MECHANICAL JOINT PART】



Note) CB4 : c.t.c. 300

MARKING DIAGRAM



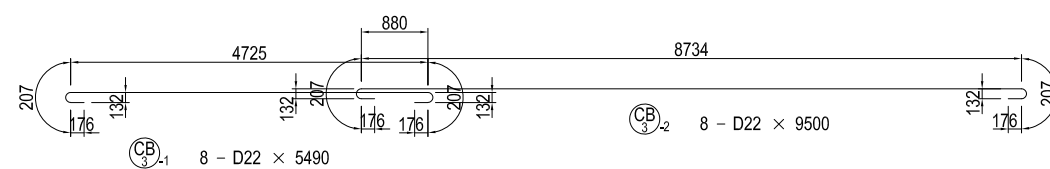
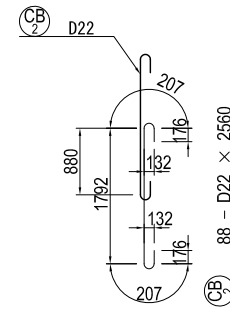
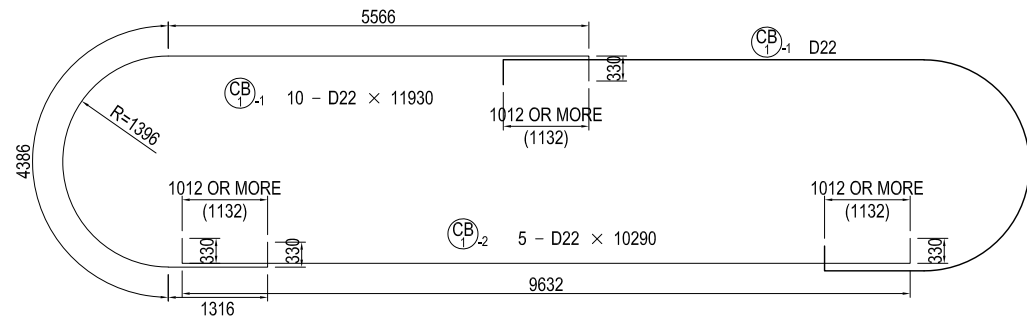
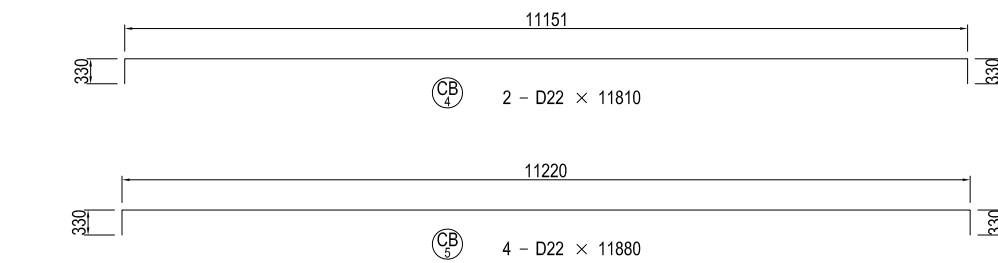
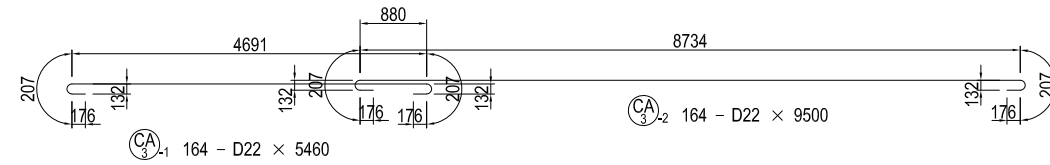
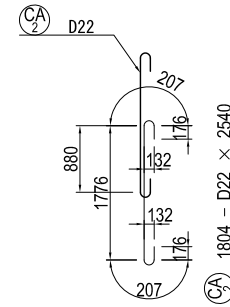
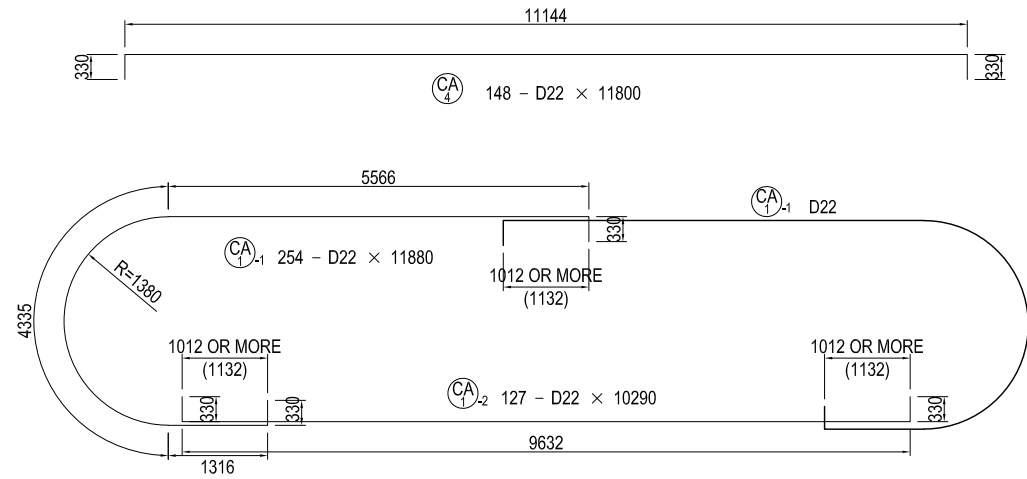
USE MATERIALS

	CONCRETE	BAR
BEAM-COLUMN	σ _{ck} = 30 N/mm ²	SD345

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME PREPARED BY S. IMADA CHECKED BY T. HAYAKAWA APPROVED BY Y. SANO	SIGNATURE DATE 27 Nov.2017 28 Nov.2017 29 Nov.2017	DRAWING TITLE BAR ARRANGEMENT OF P7 PIER (16)	PACKAGE 1 DWG No. P1-SB-2118
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BAR ARRANGEMENT OF P7 PIER (17) S=1:100

COLUMN



LAP LENGTH LIST OF HOOP

DIA.	R	LAP LENGTH (40φ)	L
D13	39	520	598
D16	48	640	736
D19	57	760	874
D22	66	880	1012
D25	75	1000	1150
D29	87	1160	1334
D32	96	1280	1472

USE MATERIALS

	CONCRETE	BAR
BEAM-COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

BAR ARRANGEMENT OF P7 PIER (18) NOT TO SCALE

BAR SCHEDULE

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
B 1-1	D32	11500	13	6.23	71.65	931	┌
1-2	"	9500	13	"	59.19	769	┐
2-1	"	11500	4	"	71.65	287	┌
2-2	"	9470	4	"	59.00	236	┐ (AVE)
3-1	"	12000	2	"	74.76	150	┌
3-2	"	8360	2	"	52.08	104	┐
4-1	"	11190	4	"	69.71	279	┌
4-2	"	9230	4	"	57.50	230	┐
5-1	"	5140	3	"	32.02	96	┌
5-2	"	10000	3	"	62.30	187	┐
5-3	"	6240	3	"	38.88	117	┐
6-1	"	8400	2	"	52.33	105	┌
6-2	"	12000	2	"	74.76	150	┐
7	"	9860	4	"	61.43	246	┌
8-1	"	11290	7	"	70.34	492	┌
8-2	"	9330	7	"	58.13	407	┐
9-1	"	11600	2	"	72.27	145	┌
9-2	"	9000	2	"	56.07	112	┐
10-1	"	8000	2	"	49.84	100	┌
10-2	"	12000	2	"	74.76	150	┐
11-1	"	11390	6	"	70.96	426	┌ (AVE)
11-2	"	8000	6	"	49.84	299	┐
11-3	"	9030	6	"	56.26	338	┐ (AVE)
12-1	"	11990	3	"	74.70	224	┌ (AVE)
12-2	"	8000	3	"	49.84	150	┐
12-3	"	9630	3	"	59.99	180	┐ (AVE)
13-1	"	8500	2	"	52.96	106	┌
13-2	"	6000	2	"	37.38	75	┐
13-3	"	12000	2	"	74.76	150	┐
14-1	D19	11500	6	2.25	25.88	155	┌
14-2	"	12000	6	"	27.00	162	┐
15-1	"	10300	18	"	23.18	417	┌ (AVE)
15-2	"	10080	18	"	22.68	408	┐ (AVE)
16-1	"	11450	11	"	25.76	283	┌ (AVE)
16-2	"	11470	11	"	25.81	284	┐ (AVE)
16-3	"	10780	11	"	24.26	267	┐ (AVE)
SUBTOTAL						9217	kg
BA 1-1	D19	11650	69	2.25	26.21	1808	┌
1-2	"	6500	69	"	14.63	1009	┐
2-1	"	6500	69	"	14.63	1009	┌
2-2	"	10060	69	"	22.64	1562	┐
3	"	3400	69	"	7.65	528	┐
4	D16	2270	138	1.56	3.54	489	┐
5	"	2190	138	"	3.42	472	┐
SUBTOTAL						6877	kg
BB 1-1	D19	9660	10	2.25	21.74	217	┌
1-2	"	11820	10	"	26.60	266	┐ (AVE)
2-1	"	10060	10	"	22.64	226	┌
2-2	"	6500	10	"	14.63	146	┐
3	D16	2270	20	1.56	3.54	71	┐
4	"	2190	20	"	3.42	68	┐
SUBTOTAL						994	kg

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
BC 1-1	D19	10310	8	2.25	23.20	186	┌ (AVE)
1-2	"	10300	8	"	23.18	185	┐ (AVE)
2-1	"	10060	6	"	22.64	136	┌
2-2	"	6500	6	"	14.63	88	┐
3	"	4040	8	"	9.09	73	┌
4	D16	2270	16	1.56	3.54	57	┐
5	"	2190	16	"	3.42	55	┐
SUBTOTAL						780	kg
BD 1-1	D19	8260	14	2.25	18.59	260	┌ (AVE)
1-2	"	7700	14	"	17.33	243	┐ (AVE)
2	"	3030	56	"	6.82	382	┌ (AVE)
3	D16	2270	28	1.56	3.54	99	┐
4	"	2190	28	"	3.42	96	┐
SUBTOTAL						1080	kg
BE 1-1	D19	7470	4	2.25	16.81	67	┌ (AVE)
1-2	"	5270	4	"	11.86	47	┐ (AVE)
2	"	2270	16	"	5.11	82	┌ (AVE)
3	D16	2270	8	1.56	3.54	28	┐
4	"	2190	8	"	3.42	27	┐
SUBTOTAL						251	kg
BF 1-1	D19	7800	6	2.25	17.55	105	┌ (AVE)
1-2	"	3840	6	"	8.64	52	┐ (AVE)
2	"	1990	24	"	4.48	108	┌ (AVE)
3	D16	2270	12	1.56	3.54	42	┐
4	"	2190	12	"	3.42	41	┐
SUBTOTAL						348	kg
BG 1	D19	4920	6	2.25	11.07	66	┌
2-1	"	2610	6	"	5.87	35	┐ (AVE)
2-2	"	4120	6	"	9.27	56	┐ (AVE)
3	"	1670	24	"	3.76	90	┌ (AVE)
4	"	3400	6	"	7.65	46	┐
5	D16	2270	12	1.56	3.54	42	┐
SUBTOTAL						335	kg
BH 1	D19	4920	4	2.25	11.07	44	┌
2-1	"	3560	4	"	8.01	32	┐ (AVE)
2-2	"	2220	4	"	5.00	20	┐ (AVE)
3	"	1450	16	"	3.26	52	┌ (AVE)
4	"	3400	4	"	7.65	31	┐
5	D16	2270	8	1.56	3.54	28	┐
SUBTOTAL						207	kg
BI 1	D19	4810	4	2.25	10.82	43	┌ (AVE)
2-1	"	2740	4	"	6.17	25	┐ (AVE)
2-2	"	2140	4	"	4.82	19	┐ (AVE)
3	"	3290	4	"	7.40	30	┐ (AVE)
4	D16	2220	8	1.56	3.46	28	┐ (AVE)
SUBTOTAL						145	kg

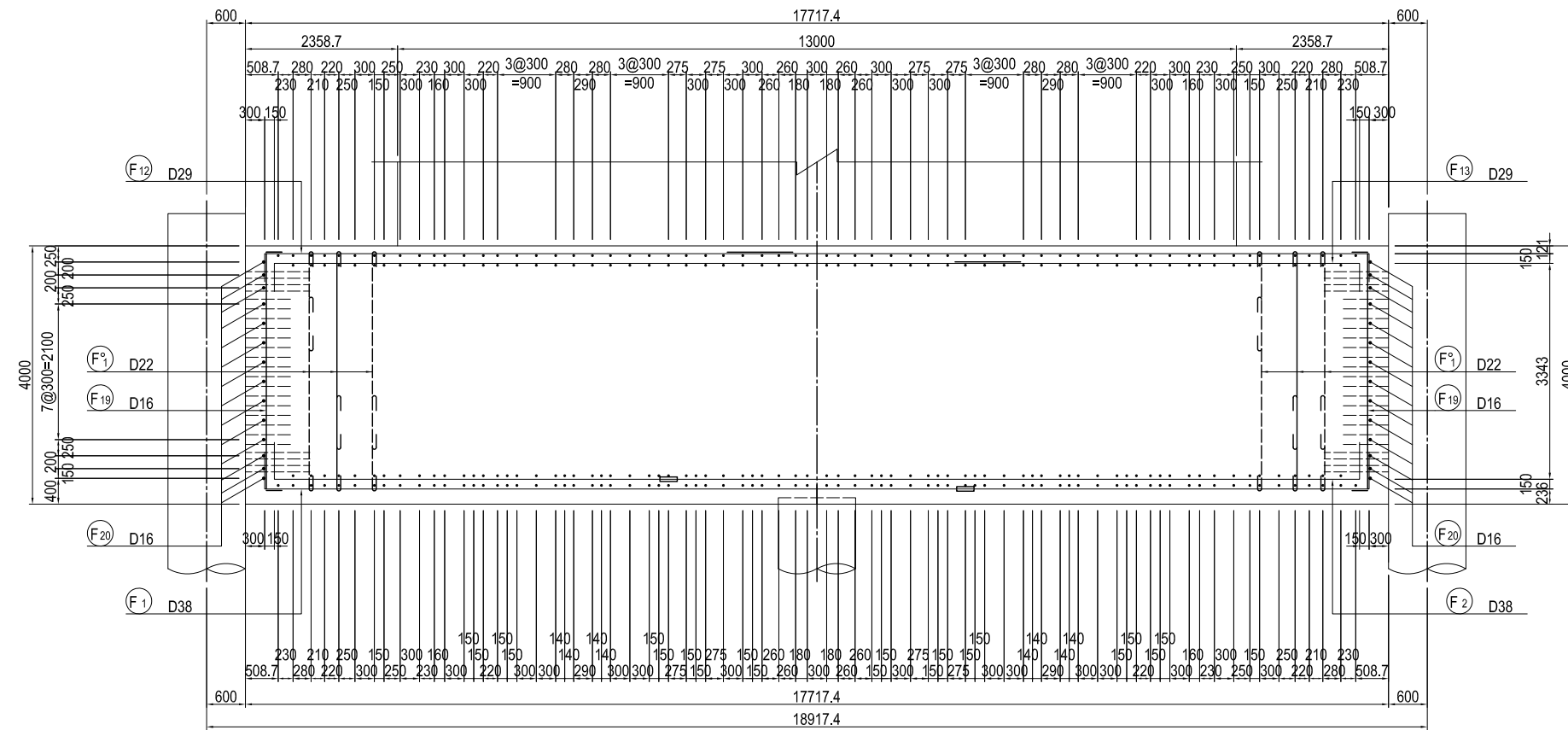
MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
HA 1	D16	2360	32	1.56	3.68	118	┌
2	"	2860	22	"	4.46	98	┐
3	"	7210	2	"	11.25	23	┐
SUBTOTAL						239	kg
HB 1	D16	2590	38	1.56	4.04	154	┌
2	"	3140	26	"	4.90	127	┐
3	"	7830	2	"	12.21	25	┐
SUBTOTAL						306	kg
C 1-1	D38	12000	142	8.95	107.40	15251	┐ (142)
1-2	"	11690	142	"	104.63	14857	┐
2-1	"	10500	100	"	93.98	9398	┐ (100)
2-2	"	9000	100	"	80.55	8055	┐ (100)
2-3	"	4190	100	"	37.50	3750	┐
3-1	"	9000	40	"	80.55	3222	┐ (40)
3-2	"	9000	40	"	80.55	3222	┐ (40)
3-3	"	5690	40	"	50.93	2037	┐
SUBTOTAL						59792	kg
CA 1-1	D22	11880	254	3.04	36.12	9174	┌
1-2	"	10290	127	"	31.28	3973	┐
2	"	2540	1804	"	7.72	13927	┌
3-1	"	5460	164	"	16.60	2722	┐
3-2	"	9500	164	"	28.88	4736	┐
4	"	11800	148	"	35.87	5309	┐
SUBTOTAL						39841	kg
CB 1-1	D22	11930	10	3.04	36.27	363	┌
1-2	"	10290	5	"	31.28	156	┐
2	"	2560	88	"	7.78	685	┌
3-1	"	5490	8	"	16.69	134	┐
3-2	"	9500	8	"	28.88	231	┐
4	"	11810	2	"	35.90	72	┐
5	"	11880	4	"	36.12	144	┐
SUBTOTAL						1785	kg
(MECHANICAL JOINT)							
				D38	59792	kg	(422)
				D32	7241	"	
				D22	41626	"	
				D19	11350	"	
				D16	2188	"	
TOTAL						122197	kg (422)

USE MATERIALS

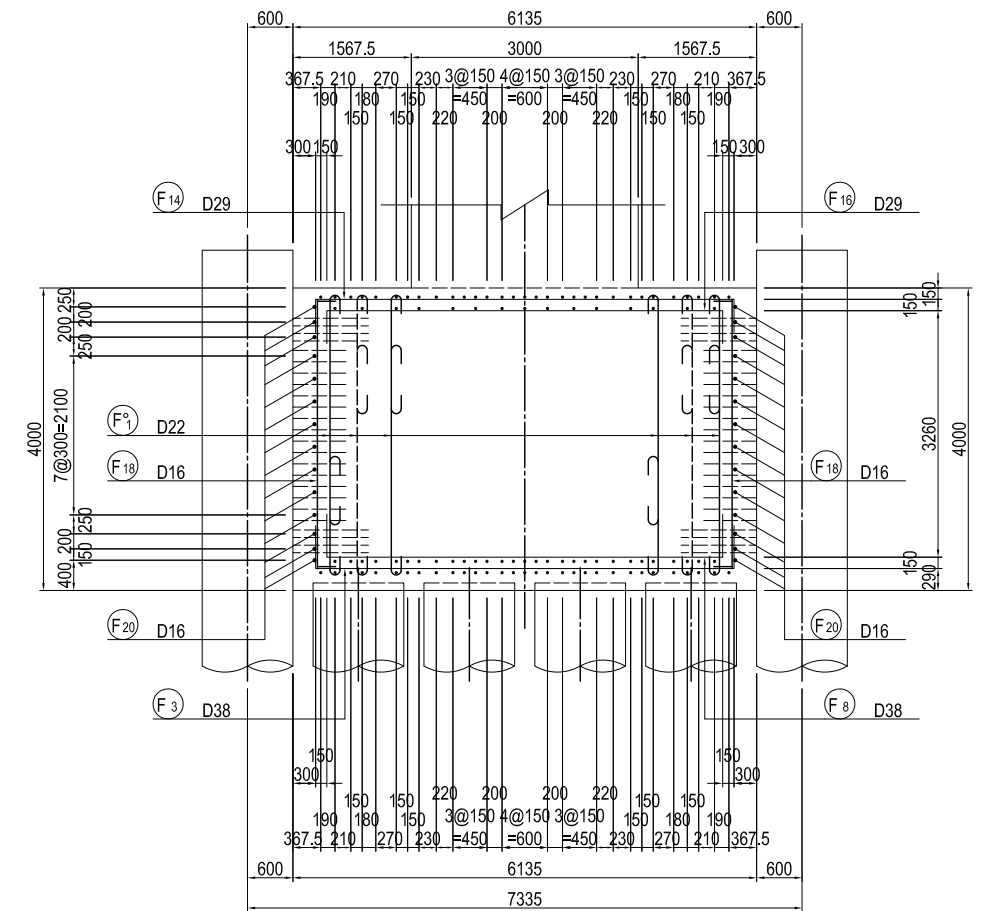
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BEAM-COLUMN	σ _{ck} = 30 N/mm ²	SD345

BAR ARRANGEMENT OF FOOTING FOR P7 PIER (1) S=1:100

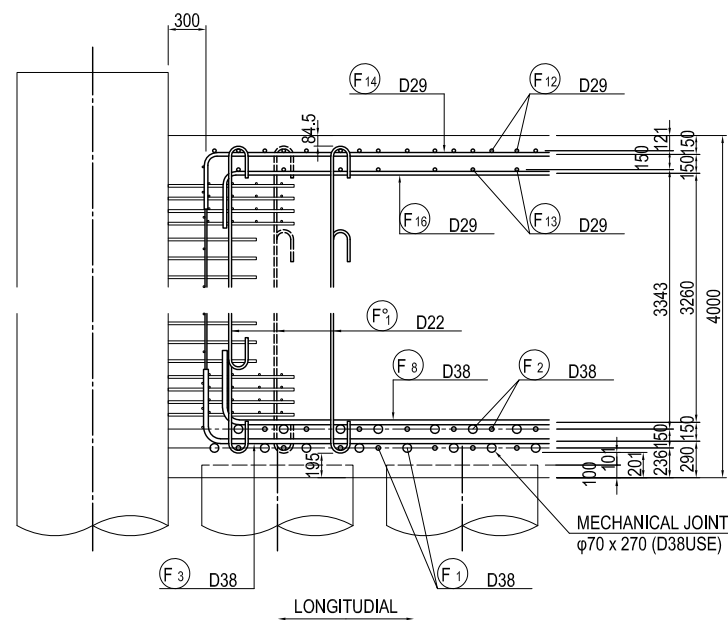
SECTION 1-1



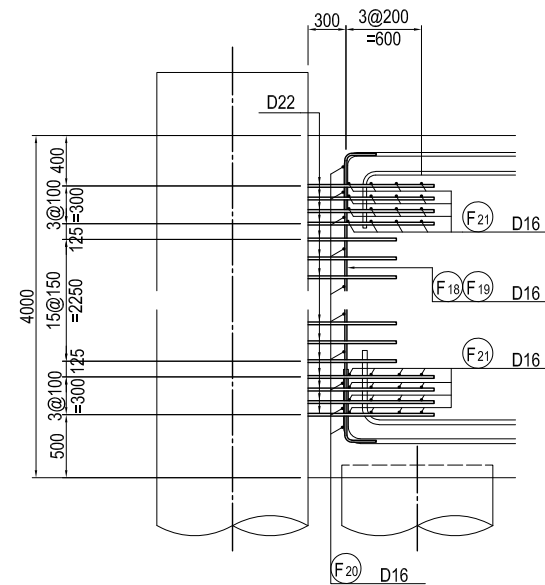
SECTION 2-2



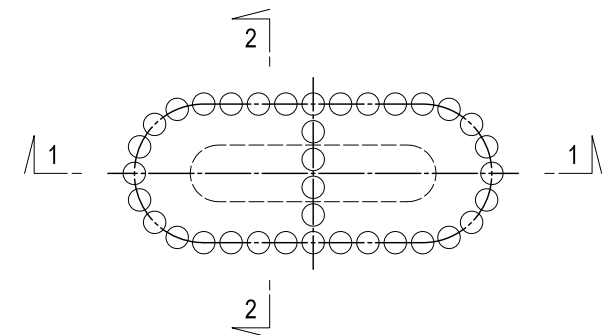
DETAIL OF PILE CAP S=1:60



DETAIL OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND FOOTING S=1:60



MARKING DIAGRAM



USE MATERIALS

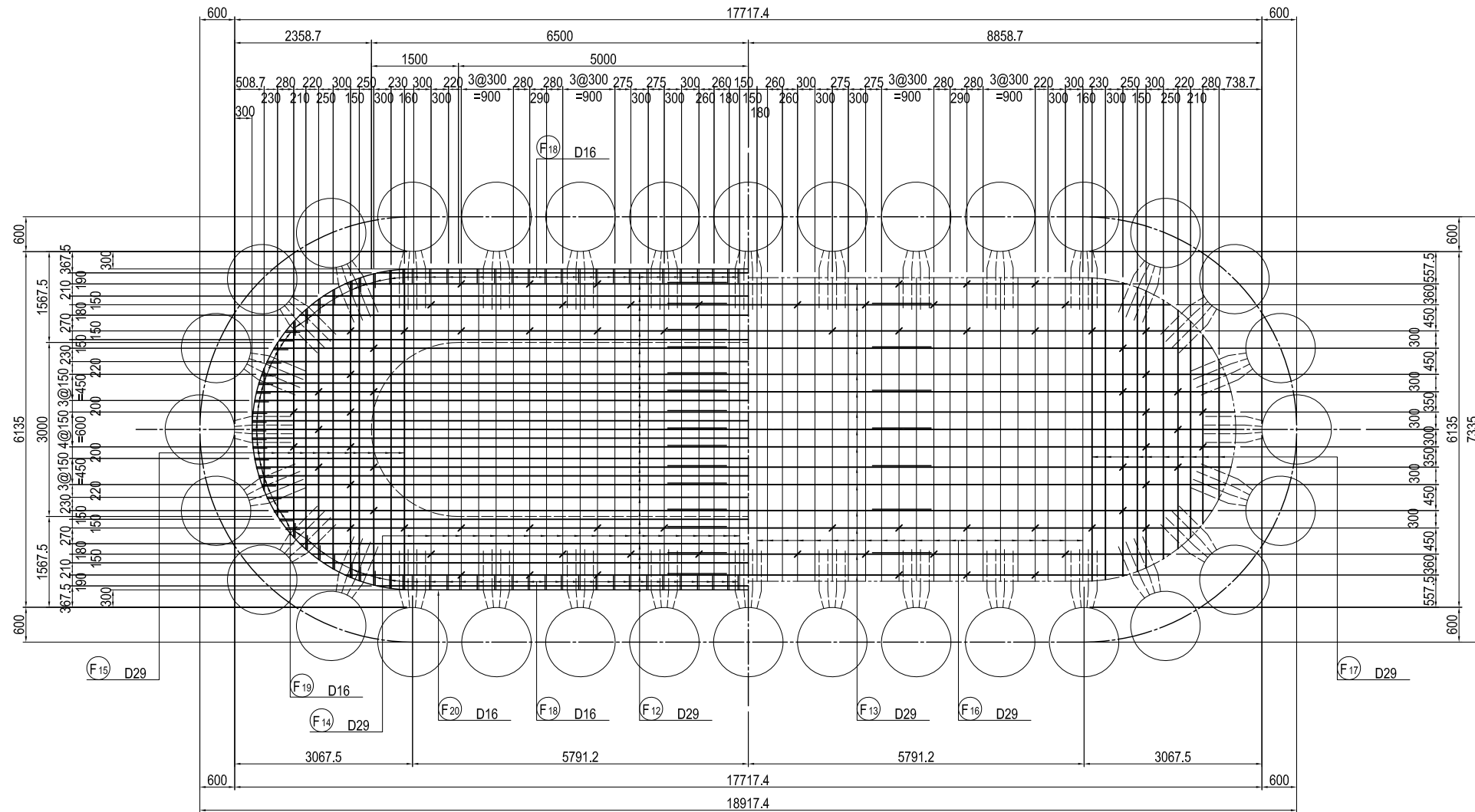
	CONCRETE	BAR
FOOTING	σ _{ck} = 24 N/mm ²	SD345

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME PREPARED BY S. IMADA CHECKED BY T. HAYAKAWA APPROVED BY Y. SANO	SIGNATURE 	DATE 27 Nov.2017 28 Nov.2017 29 Nov.2017	DRAWING TITLE BAR ARRANGEMENT OF FOOTING FOR P7 PIER (1)	PACKAGE 1 DWG No. P1-SB-2121
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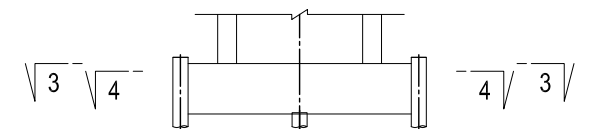
BAR ARRANGEMENT OF FOOTING FOR P7 PIER (2) S=1:100

PLAN
3-3

PLAN
4-4



MARKING DIAGRAM



USE MATERIALS

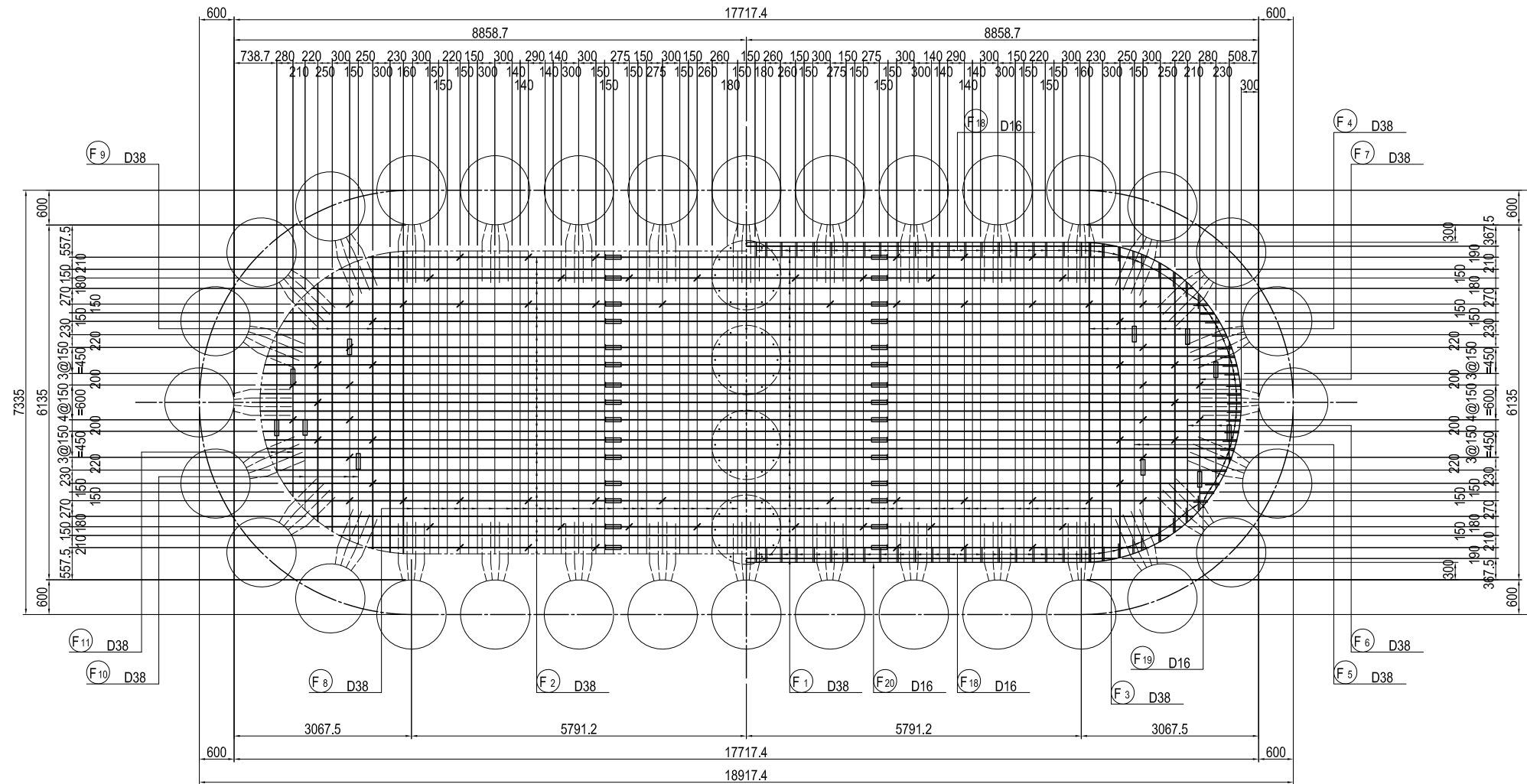
	CONCRETE	BAR
FOOTING	$\sigma_{ck} = 24 \text{ N/mm}^2$	SD345

<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 20%;">NAME</th> <th style="width: 20%;">SIGNATURE</th> <th style="width: 20%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>S. IMADA</td> <td></td> <td>27 Nov.2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td></td> <td>28 Nov.2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td></td> <td>29 Nov.2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	S. IMADA		27 Nov.2017	CHECKED BY	T. HAYAKAWA		28 Nov.2017	APPROVED BY	Y. SANO		29 Nov.2017	<small>DRAWING TITLE</small> BAR ARRANGEMENT OF FOOTING FOR P7 PIER (2)	<small>PACKAGE</small> 1 DWG No. P1-SB-2122
	NAME	SIGNATURE	DATE																			
PREPARED BY	S. IMADA		27 Nov.2017																			
CHECKED BY	T. HAYAKAWA		28 Nov.2017																			
APPROVED BY	Y. SANO		29 Nov.2017																			

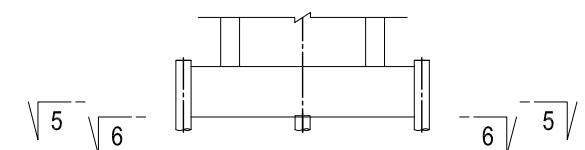
BAR ARRANGEMENT OF FOOTING FOR P7 PIER (3) S=1:100

PLAN
5-5

PLAN
6-6



MARKING DIAGRAM

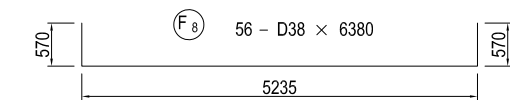
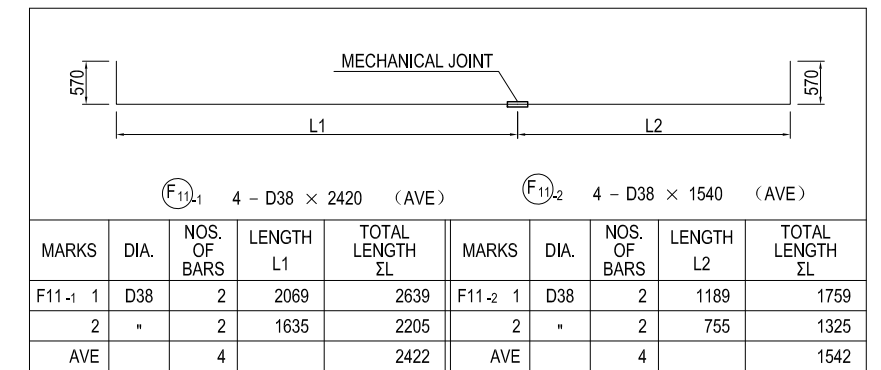
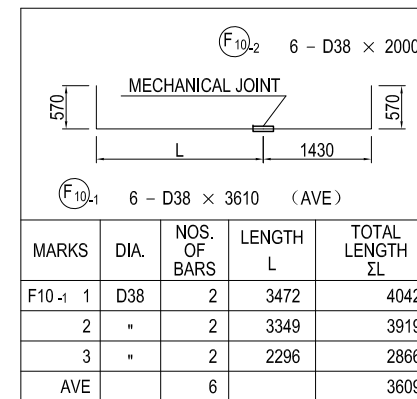
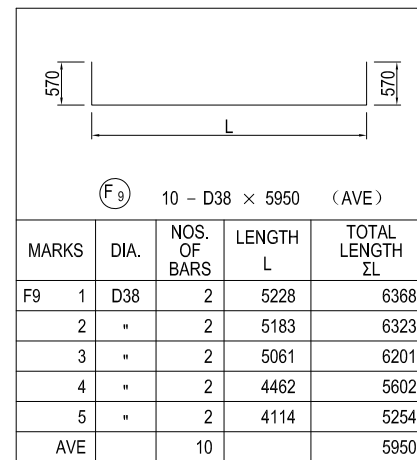
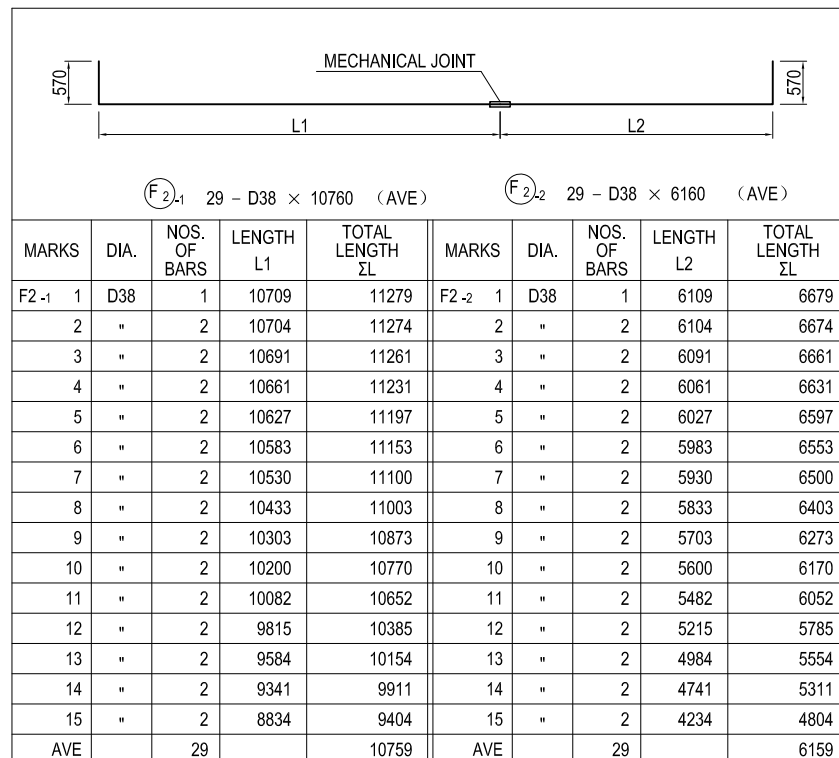
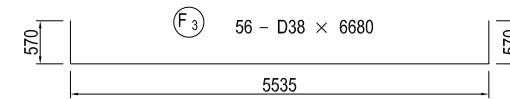
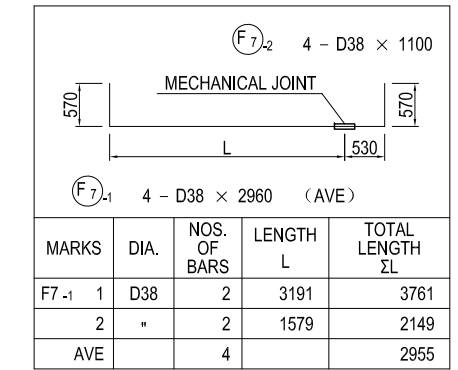
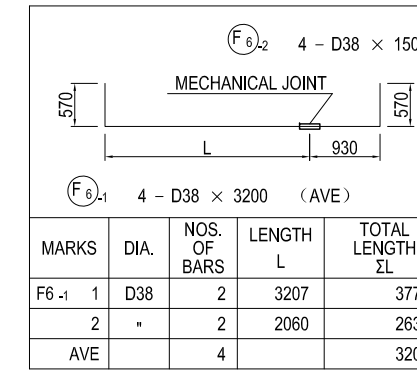
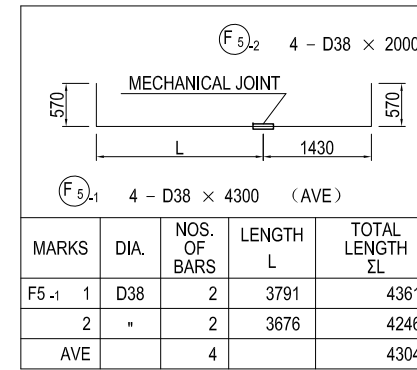
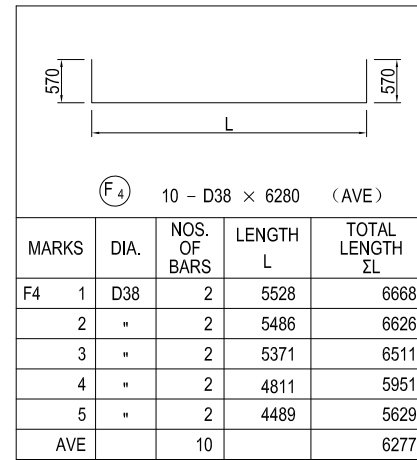
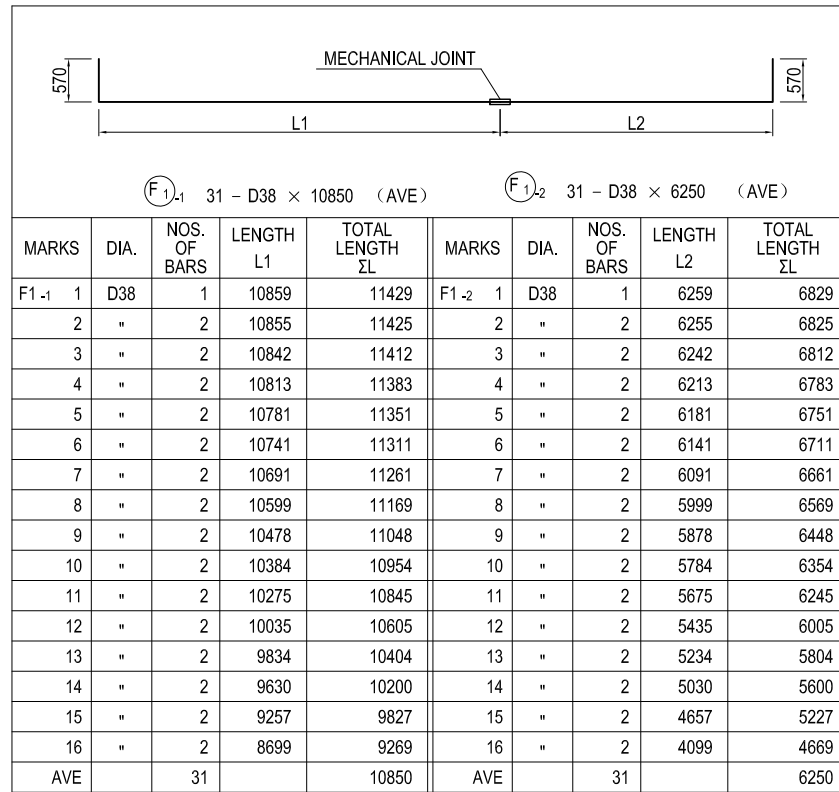


USE MATERIALS

	CONCRETE	BAR
FOOTING	$\sigma_{ck} = 24 \text{ N/mm}^2$	SD345

<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 20%;">NAME</th> <th style="width: 20%;">SIGNATURE</th> <th style="width: 20%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>S. IMADA</td> <td></td> <td>27 Nov.2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td></td> <td>28 Nov.2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td></td> <td>29 Nov.2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	S. IMADA		27 Nov.2017	CHECKED BY	T. HAYAKAWA		28 Nov.2017	APPROVED BY	Y. SANO		29 Nov.2017	<small>DRAWING TITLE</small> BAR ARRANGEMENT OF FOOTING FOR P7 PIER (3)	<small>PACKAGE</small> 1 DWG No. P1-SB-2123
	NAME	SIGNATURE	DATE																			
PREPARED BY	S. IMADA		27 Nov.2017																			
CHECKED BY	T. HAYAKAWA		28 Nov.2017																			
APPROVED BY	Y. SANO		29 Nov.2017																			

BAR ARRANGEMENT OF FOOTING FOR P7 PIER (4) S=1:100

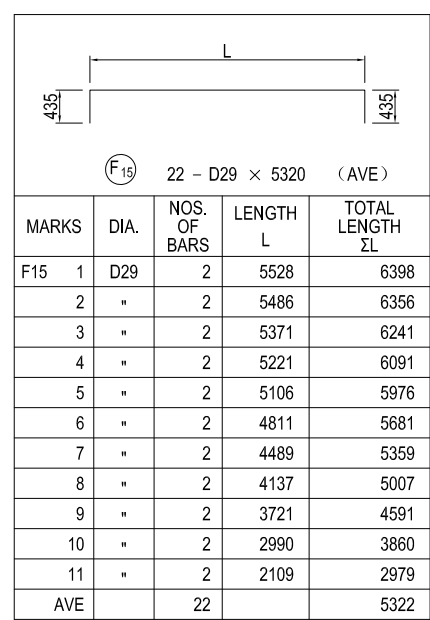
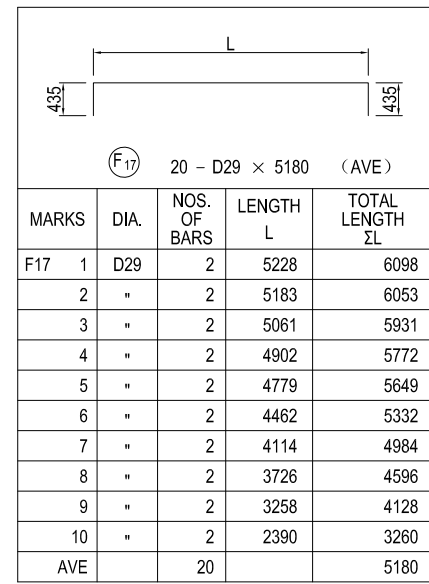
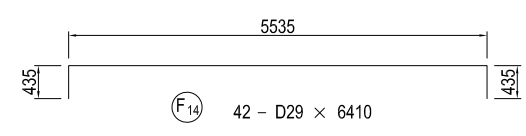
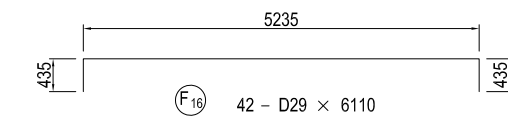
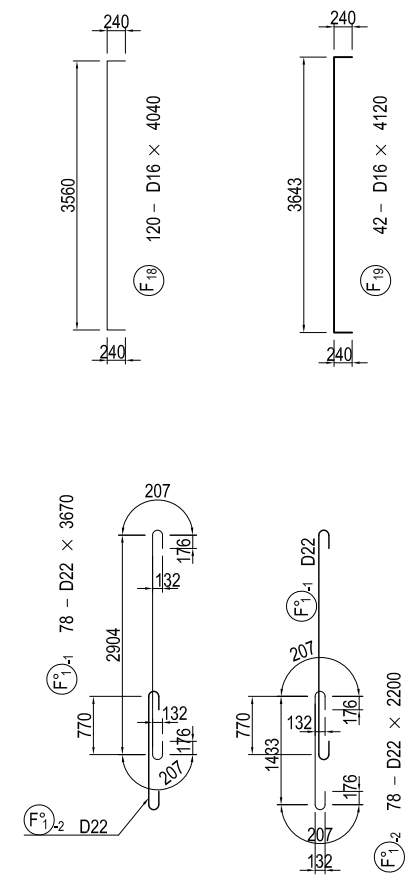
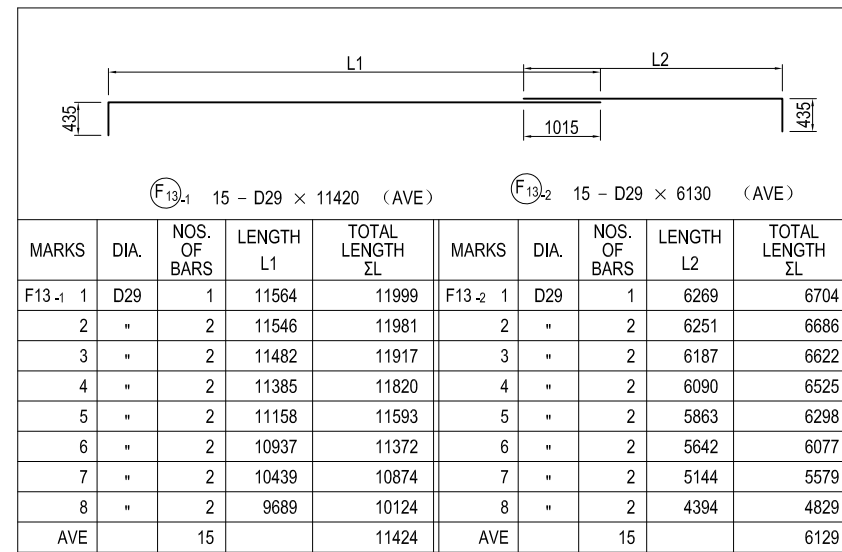
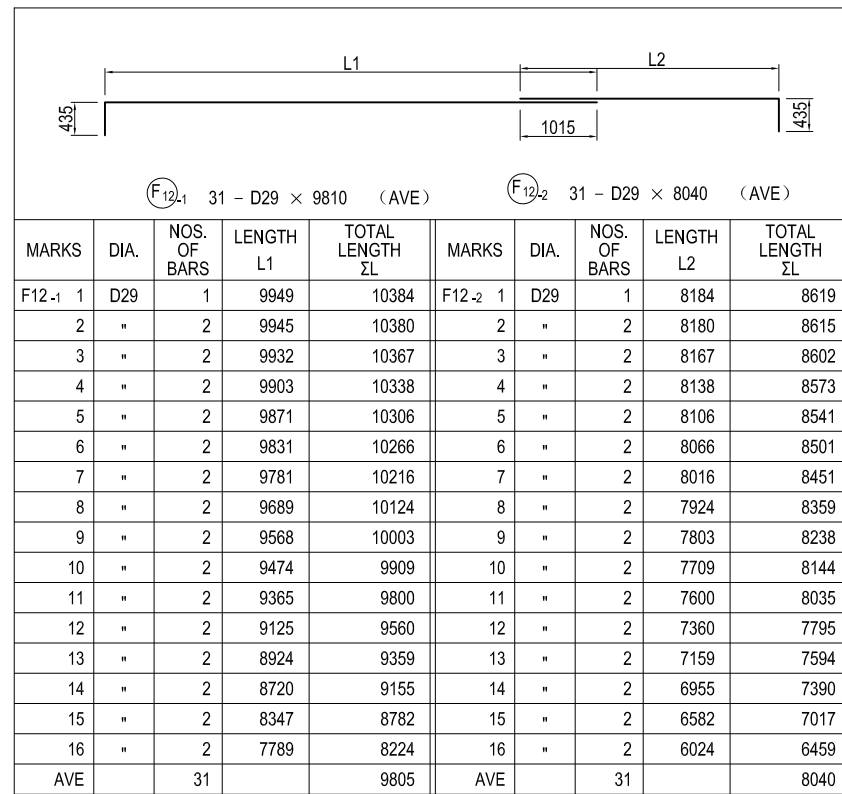


USE MATERIALS

	CONCRETE	BAR
FOOTING	σ _{ck} = 24 N/mm ²	SD345

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME S. IMADA T. HAYAKAWA Y. SANO	SIGNATURE 	DATE 27 Nov.2017 28 Nov.2017 29 Nov.2017	DRAWING TITLE BAR ARRANGEMENT OF FOOTING FOR P7 PIER (4)	PACKAGE 1 DWG No. P1-SB-2124
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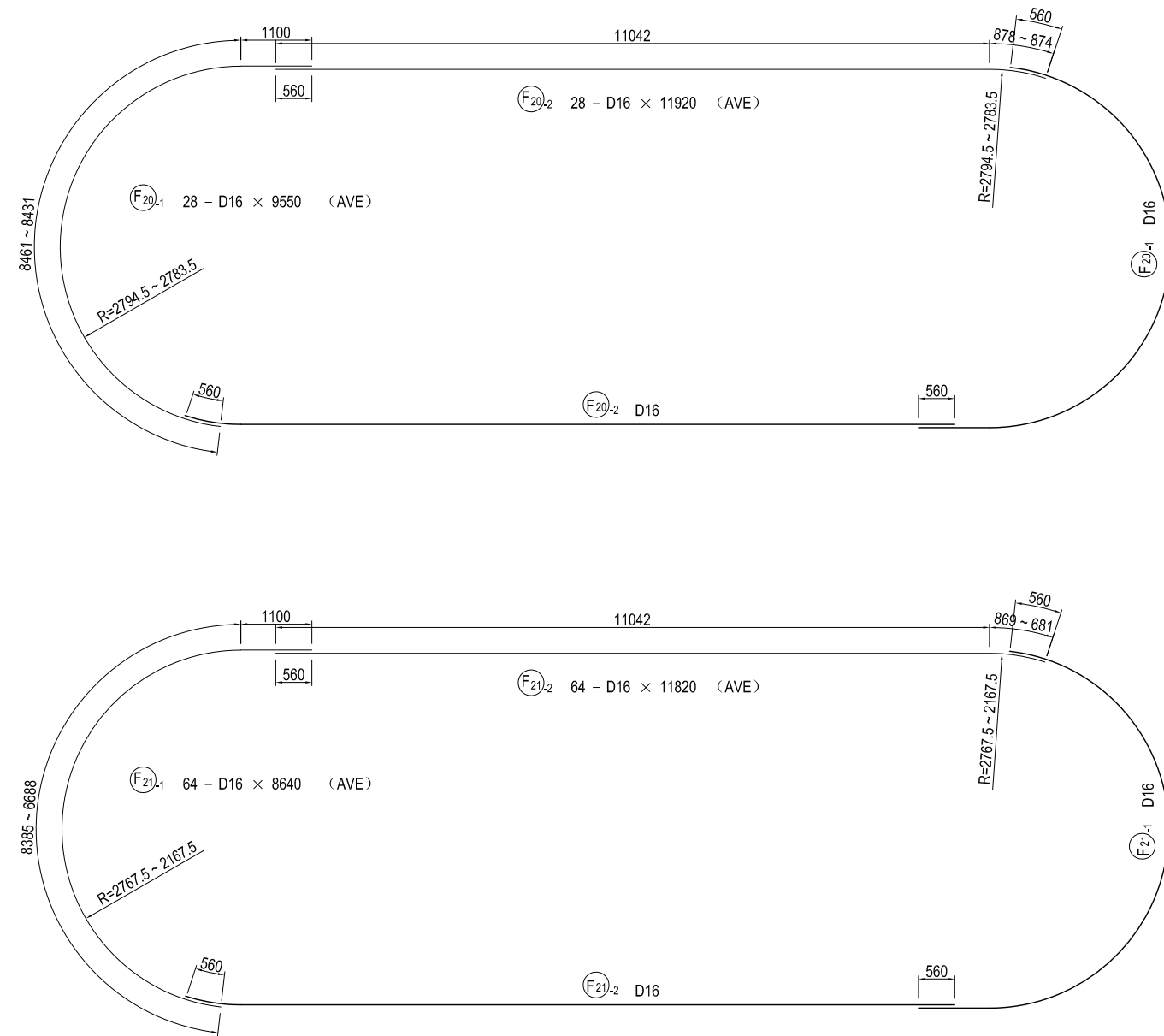
BAR ARRANGEMENT OF FOOTING FOR P7 PIER (5) S=1:100



USE MATERIALS

	CONCRETE	BAR
FOOTING	σck = 24 N/mm ²	SD345

BAR ARRANGEMENT OF FOOTING FOR P7 PIER (6) S=1:100



BAR SCHEDULE

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
F	1-1	D38	10850	31	8.95	97.11	3010 (31) (AVE)
	1-2	"	6250	31	"	55.94	1734 (AVE)
	2-1	"	10760	29	"	96.30	2793 (29) (AVE)
	2-2	"	6160	29	"	55.13	1599 (AVE)
	3	"	6680	56	"	59.79	3348
	4	"	6280	10	"	56.21	562 (AVE)
	5-1	"	4300	4	"	38.49	154 (4) (AVE)
	5-2	"	2000	4	"	17.90	72
	6-1	"	3200	4	"	28.64	115 (4) (AVE)
	6-2	"	1500	4	"	13.43	54
	7-1	"	2960	4	"	26.49	106 (4) (AVE)
	7-2	"	1100	4	"	9.85	39
	8	"	6380	56	"	57.10	3198
	9	"	5950	10	"	53.25	533 (AVE)
	10-1	"	3610	6	"	32.31	194 (6) (AVE)
	10-2	"	2000	6	"	17.90	107
	11-1	"	2420	4	"	21.66	87 (4) (AVE)
	11-2	"	1540	4	"	13.78	55 (AVE)
	12-1	D29	9810	31	5.04	49.44	1533 (AVE)
	12-2	"	8040	31	"	40.52	1256 (AVE)
	13-1	"	11420	15	"	57.56	863 (AVE)
	13-2	"	6130	15	"	30.90	464 (AVE)
	14	"	6410	42	"	32.31	1357
	15	"	5320	22	"	26.81	590 (AVE)
	16	"	6110	42	"	30.79	1293
	17	"	5180	20	"	26.11	522 (AVE)
	18	D16	4040	120	1.56	6.30	756
	19	"	4120	42	"	6.43	270
	20-1	"	9550	28	"	14.90	417 (AVE)
	20-2	"	11920	28	"	18.60	521 (AVE)
	21-1	"	8640	64	"	13.48	863 (AVE)
	21-2	"	11820	64	"	18.44	1180 (AVE)
SUBTOTAL						29645	kg
F°	1-1	D22	3670	78	3.04	11.16	870
	1-2	"	2200	78	"	6.69	522
SUBTOTAL						1392	kg
(MECHANICAL JOINT)							
					D38	17760	kg (82)
					D29	7878	"
					D22	1392	"
					D16	4007	"
					TOTAL	31037	kg (82)

Note) The joint position of the reinforcing bars is reversed for each step.

USE MATERIALS

	CONCRETE	BAR
FOOTING	σ _{ck} = 24 N/mm ²	SD345

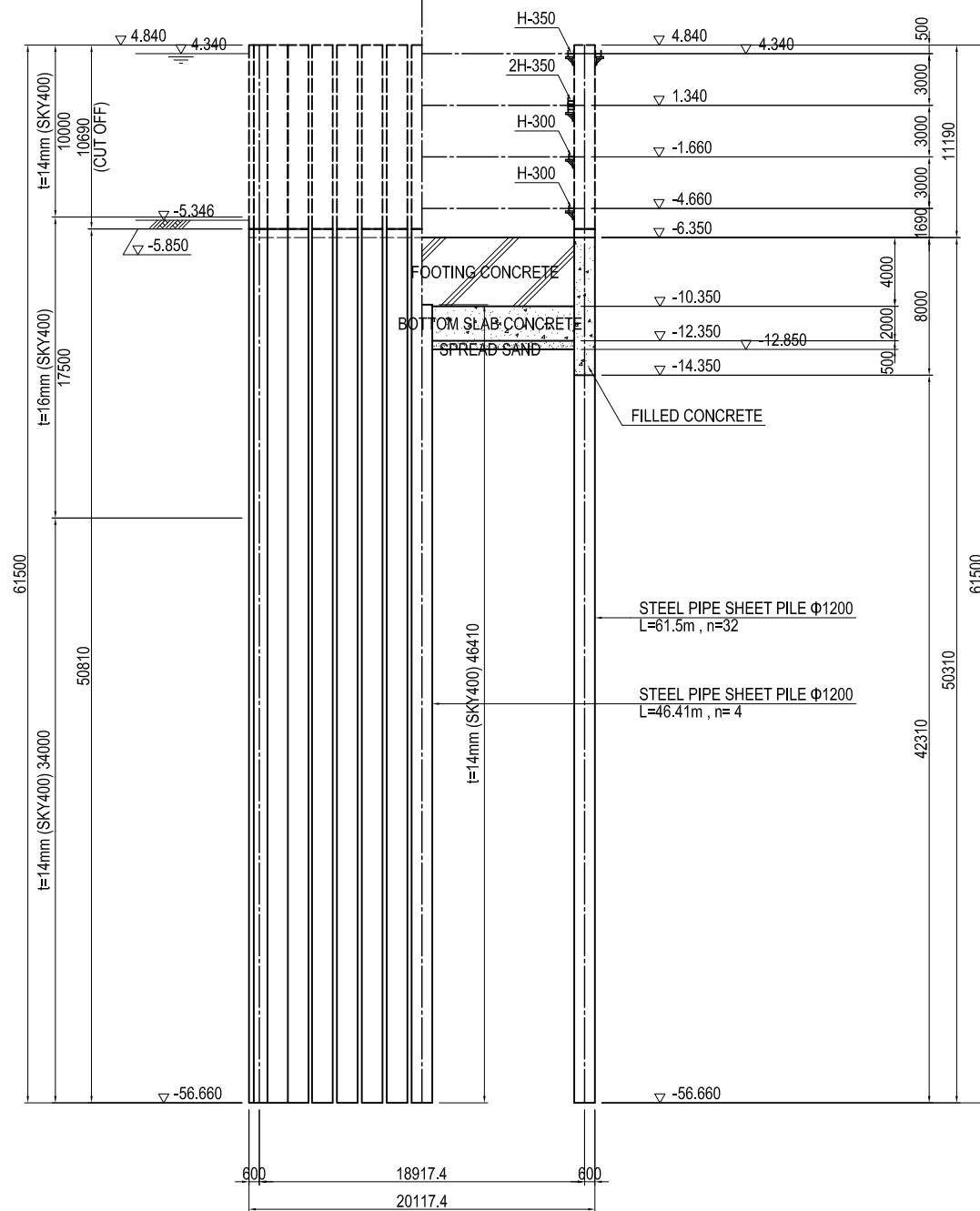
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	S. IMADA		27 Nov.2017	BAR ARRANGEMENT OF FOOTING FOR P7 PIER (6)	1
				T. HAYAKAWA		28 Nov.2017		DWG No.
				Y. SANO		29 Nov.2017		P1-SB-2126

GENERAL VIEW OF STEEL PIPE SHEET PILE FOUNDATION OF P7 PIER

S=1:400

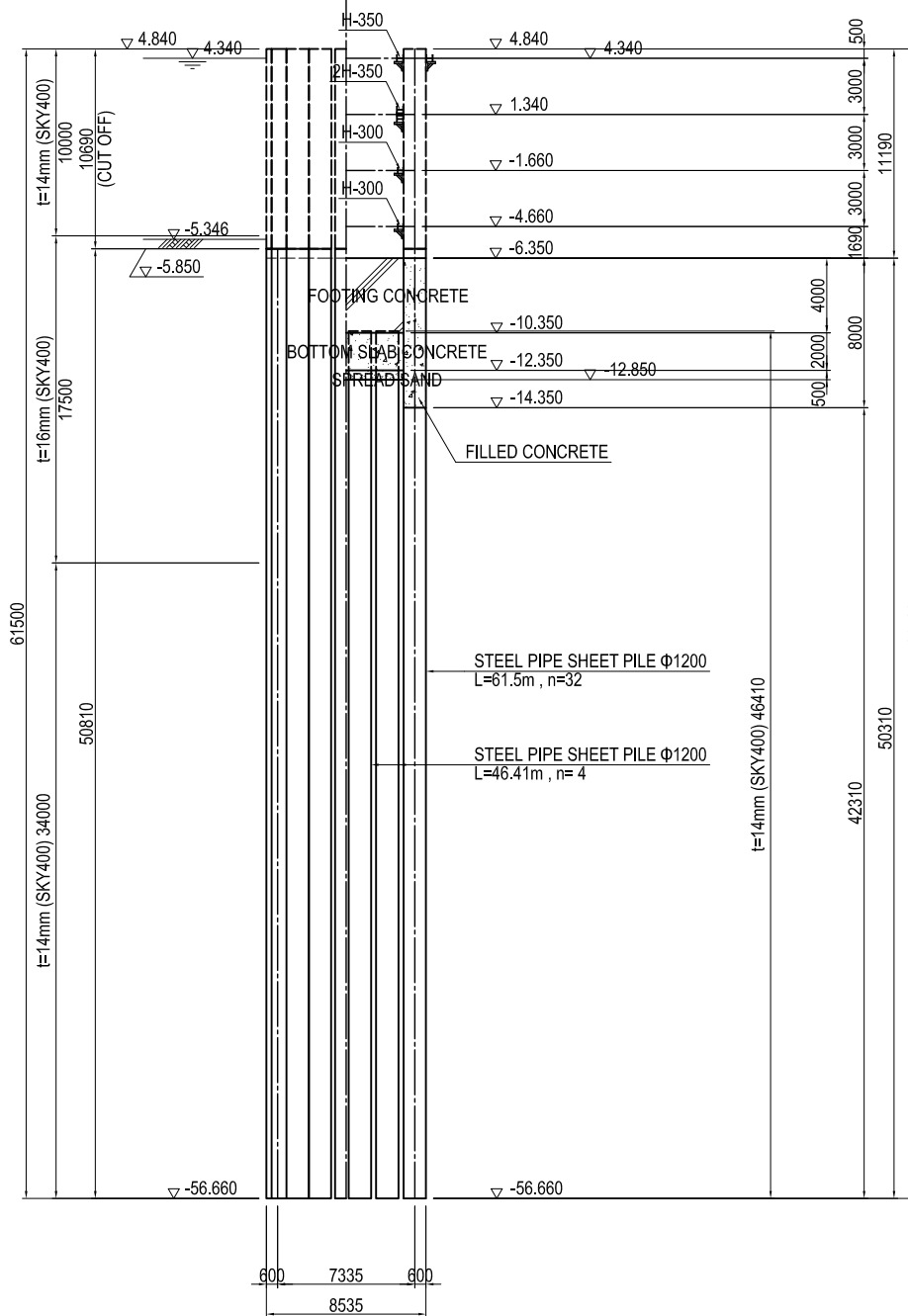
FRONT ELEVATION

1-1 2-2

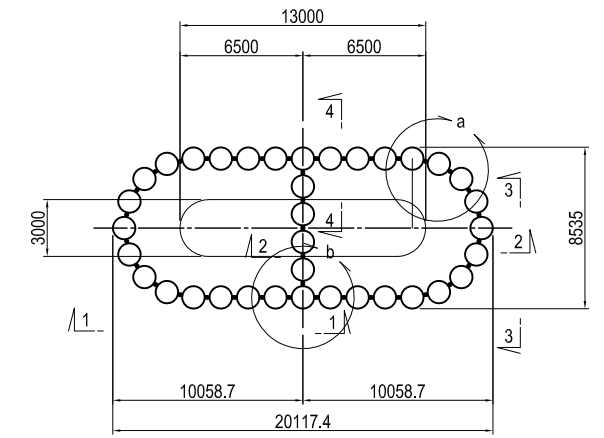


SIDE ELEVATION

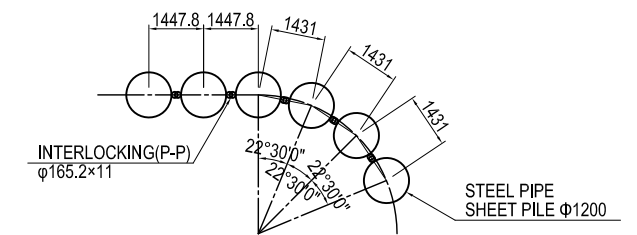
3-3 4-4



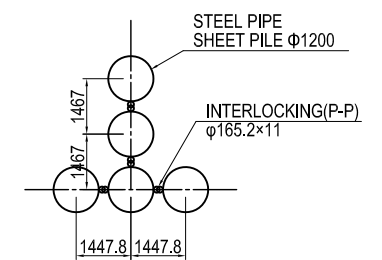
PLAN



DETAIL a S=1:200



DETAIL b S=1:200



USE MATERIALS

	CONCRETE	BAR
FOOTING	σ _{ck} = 24 N/mm ²	SD345

Note: Temporary support can be used for reference only.

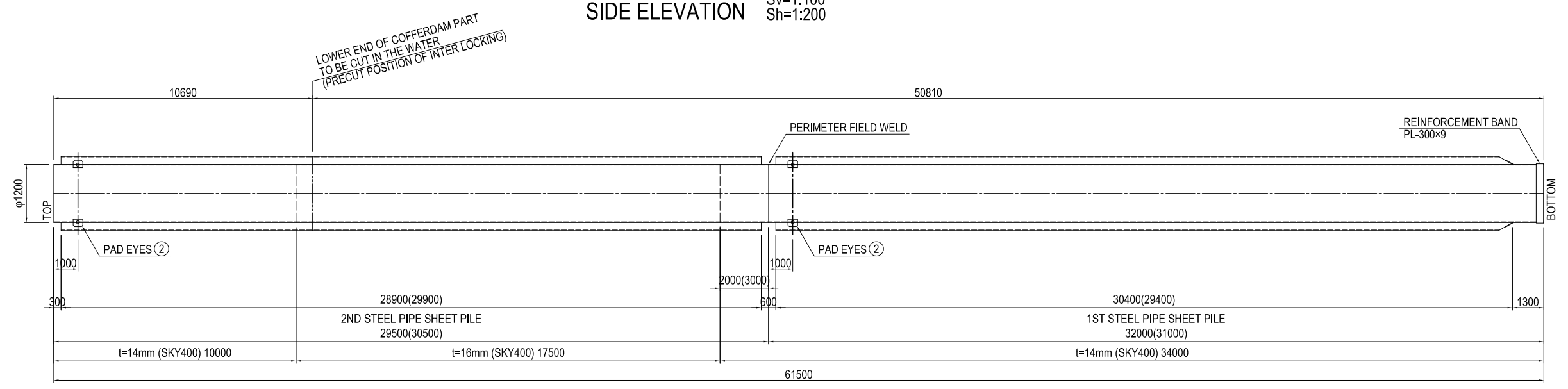
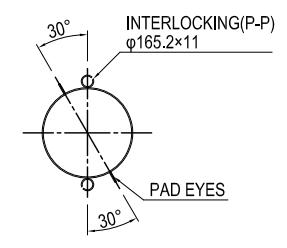
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE GENERAL VIEW OF STEEL PIPE SHEET PILE FOUNDATION OF P7 PIER	PACKAGE	
				PREPARED BY	S. IMADA			27 Nov.2017	1
				CHECKED BY	T. HAYAKAWA			28 Nov.2017	DWG No.
				APPROVED BY	Y. SANO			29 Nov.2017	P1-SB-2127

DETAIL OF STEEL PIPE SHEET PILE OF P7 PIER (1)

CROSS SECTION S=1:200

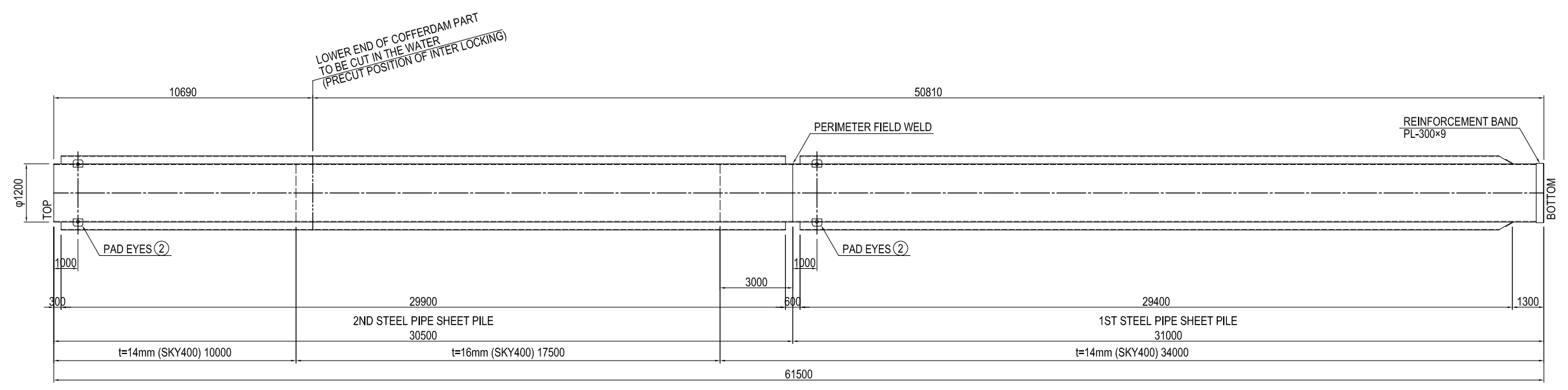
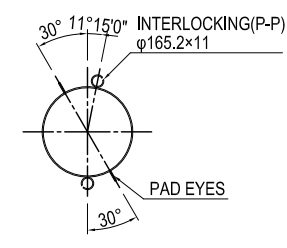
SIDE ELEVATION Sv=1:100
Sh=1:200

**TYPE A
(TYPE B)**

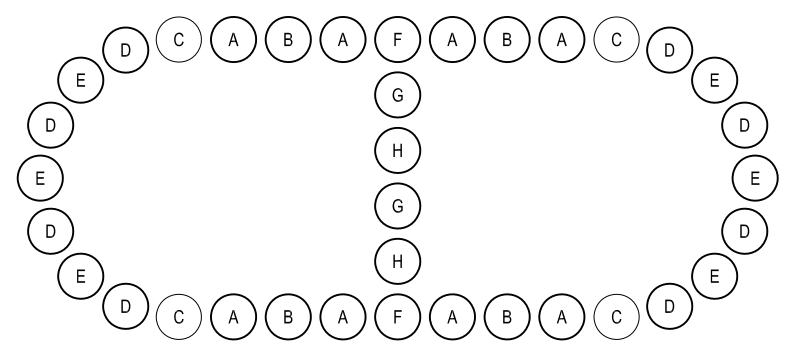


CROSS SECTION S=1:200

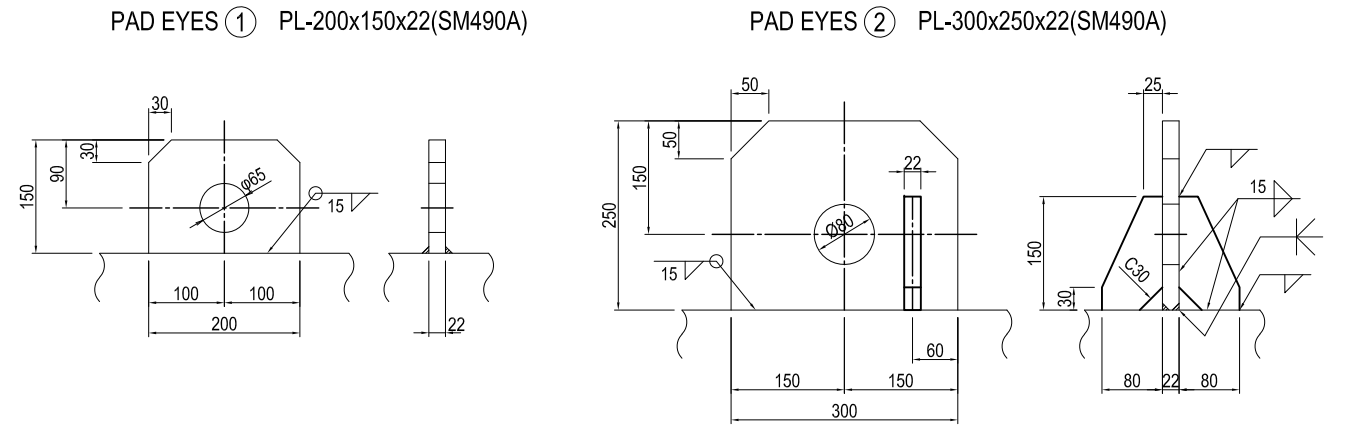
TYPE C



STEEL PIPE SHEET PILE TYPE AND POSITION



DETAIL OF EYES S=1:10



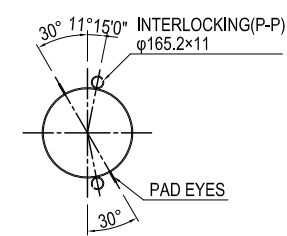
Note: Drawing of Pad Eye (metal fitting for hanging) and the position of perimeter field weld can be used for reference only.

<p>PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT</p>	<p>FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY</p>	<p>COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE</p>	<p>JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">NAME</th> <th style="width: 10%;">SIGNATURE</th> <th style="width: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>S. IMADA</td> <td>27 Nov.2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td>28 Nov.2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td>29 Nov.2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY	S. IMADA	27 Nov.2017	CHECKED BY	T. HAYAKAWA	28 Nov.2017	APPROVED BY	Y. SANO	29 Nov.2017	<p style="text-align: center;">DRAWING TITLE</p> <p style="text-align: center;">DETAIL OF STEEL PIPE SHEET PILE OF P7 PIER (1)</p>	<p style="text-align: center;">PACKAGE</p> <p style="text-align: center;">1 DWG No. P1-SB-2128</p>
NAME	SIGNATURE	DATE																
PREPARED BY	S. IMADA	27 Nov.2017																
CHECKED BY	T. HAYAKAWA	28 Nov.2017																
APPROVED BY	Y. SANO	29 Nov.2017																

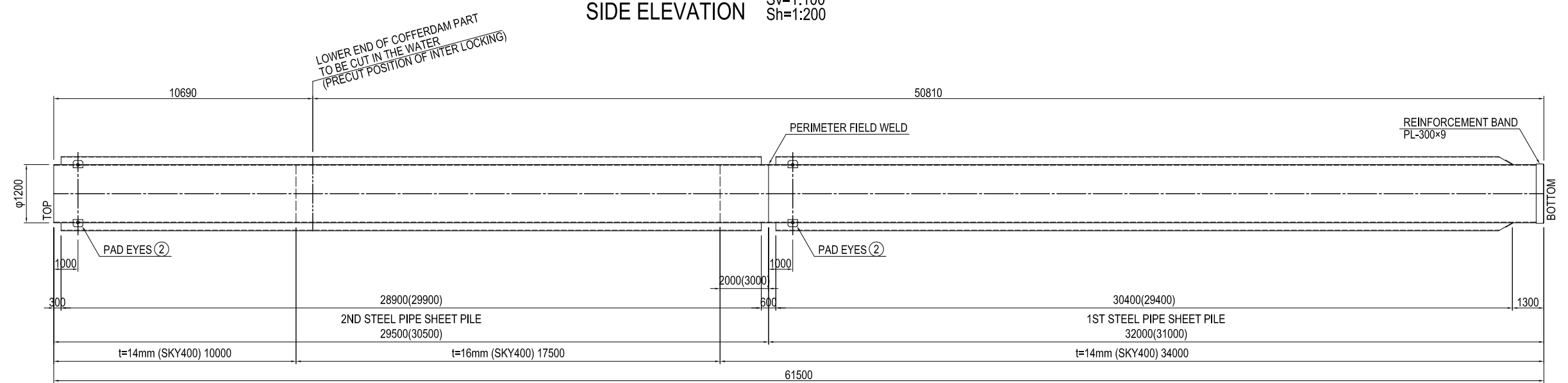
DETAIL OF STEEL PIPE SHEET PILE OF P7 PIER (2)

CROSS SECTION S=1:200

TYPE D
(TYPE E)

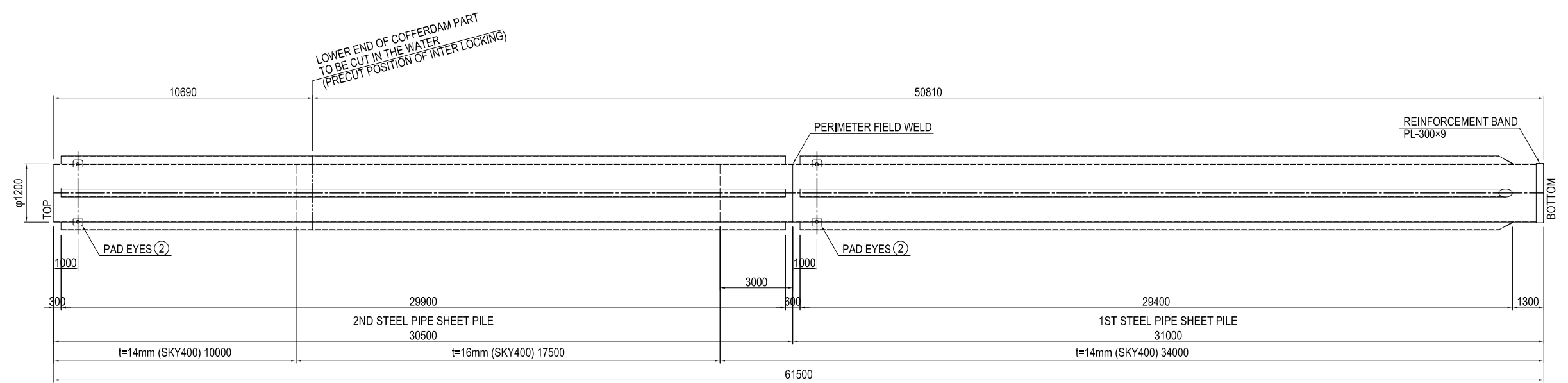
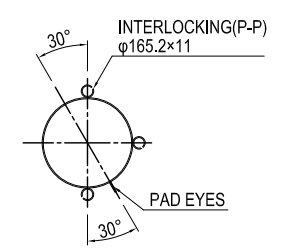


SIDE ELEVATION Sv=1:100 Sh=1:200



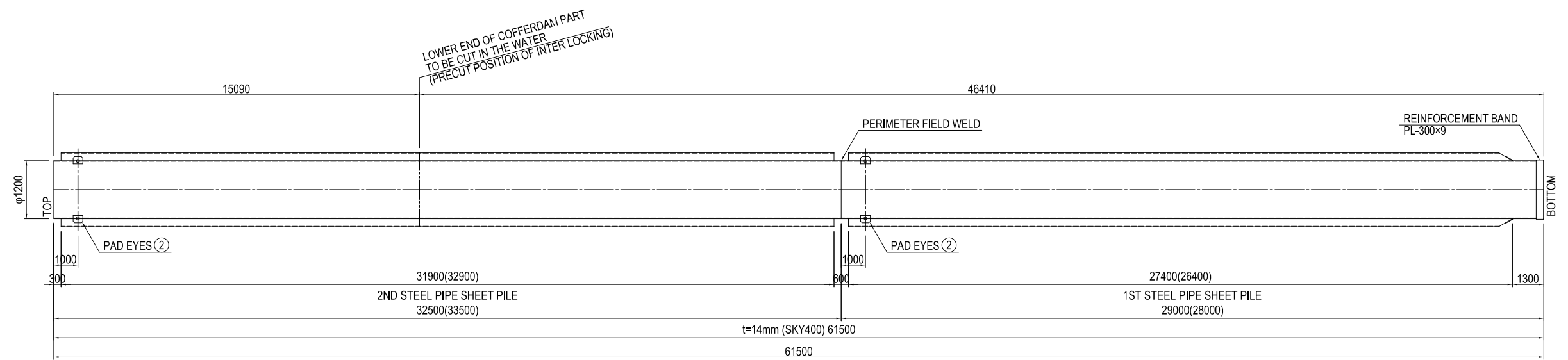
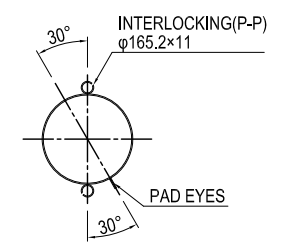
CROSS SECTION S=1:200

TYPE F



CROSS SECTION S=1:200

TYPE G
(TYPE H)

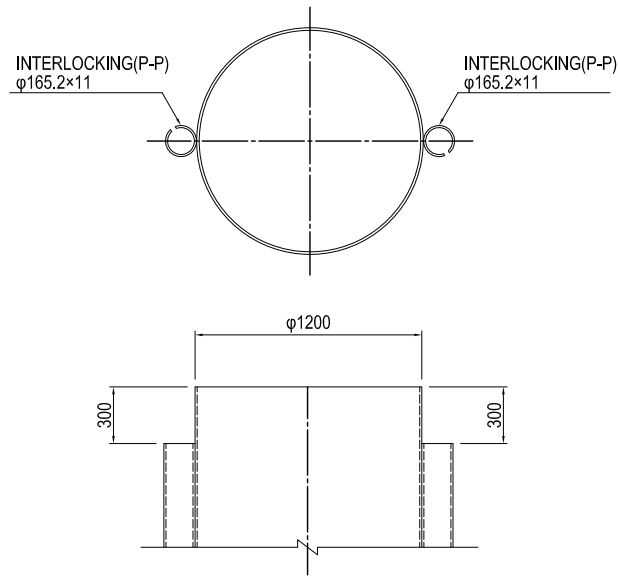


Note: Drawing of Pad Eye (metal fitting for hanging) and the position of perimeter field weld can be used for reference only.

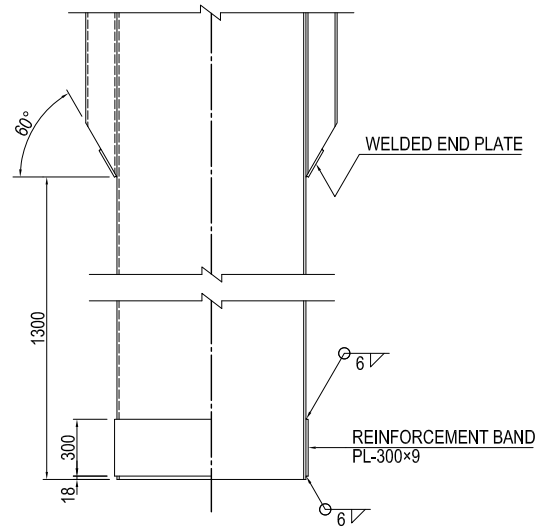
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JICA JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE DETAIL OF STEEL PIPE SHEET PILE OF P7 PIER (2)	PACKAGE
				PREPARED BY	S. IMADA	27 Nov.2017		1
				CHECKED BY	T. HAYAKAWA	28 Nov.2017		DWG No.
				APPROVED BY	Y. SANO	29 Nov.2017		P1-SB-2129

DETAIL OF INTERLOCKING OF STEEL PIPE SHEET PILE OF P7 PIER

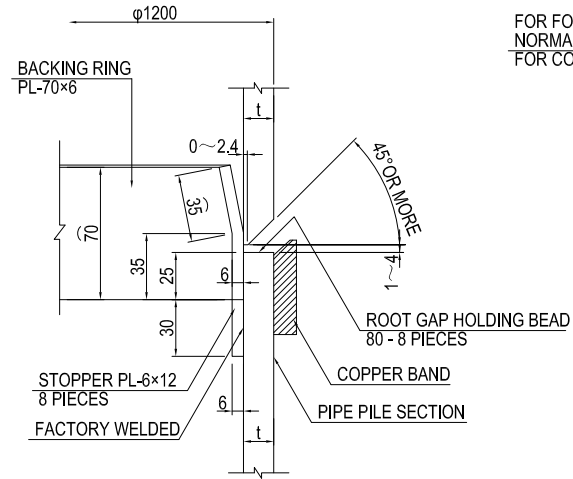
DETAIL OF STEEL PIPE SHEET PILE TOP S=1:40



DETAIL OF STEEL PIPE SHEET PILE TOE S=1:40

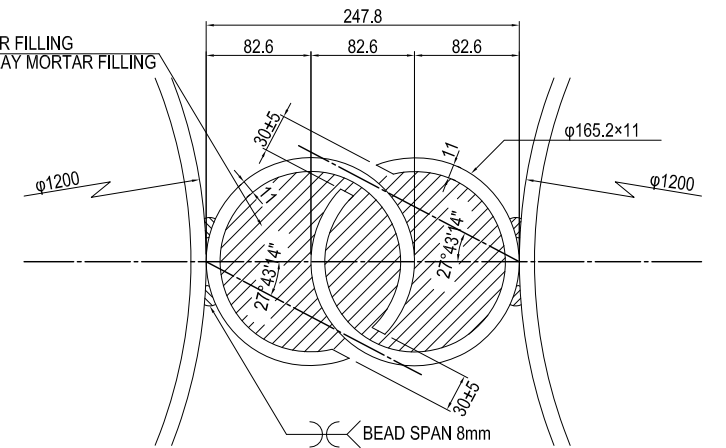


DETAIL OF PERIMETER FIELD WELDING OF STEEL PIPE SHEET PILE S=1:4



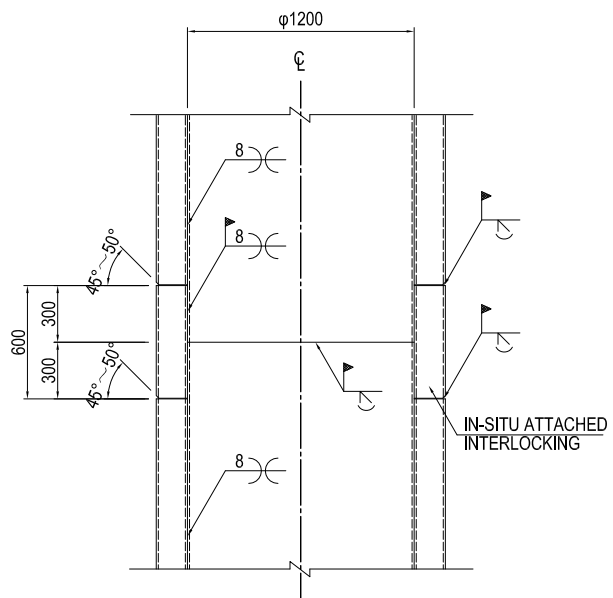
FOR FOUNDATION PART :
NORMAL STRENGTH MORTAR FILLING
FOR COFFERDAM PART : CLAY MORTAR FILLING

DETAIL OF CONNECTED INTERLOCKING(P-P) S=1:6

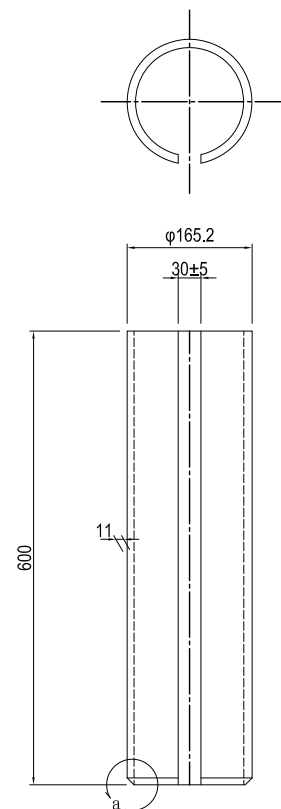


TREATMENT OF STEEL PIPE SHEET PILE INTERLOCKING

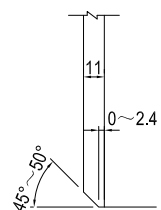
DETAIL OF IN-SITU LONGITUDINAL WELDING PART S=1:40



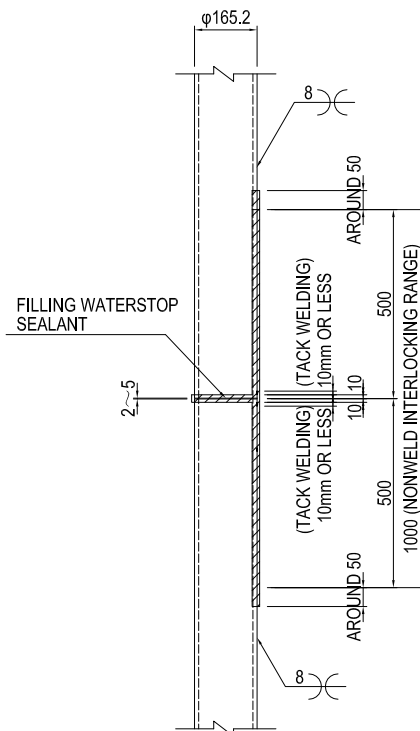
DETAIL OF IN-SITU ATTACHED INTERLOCKING S=1:10



DETAIL a

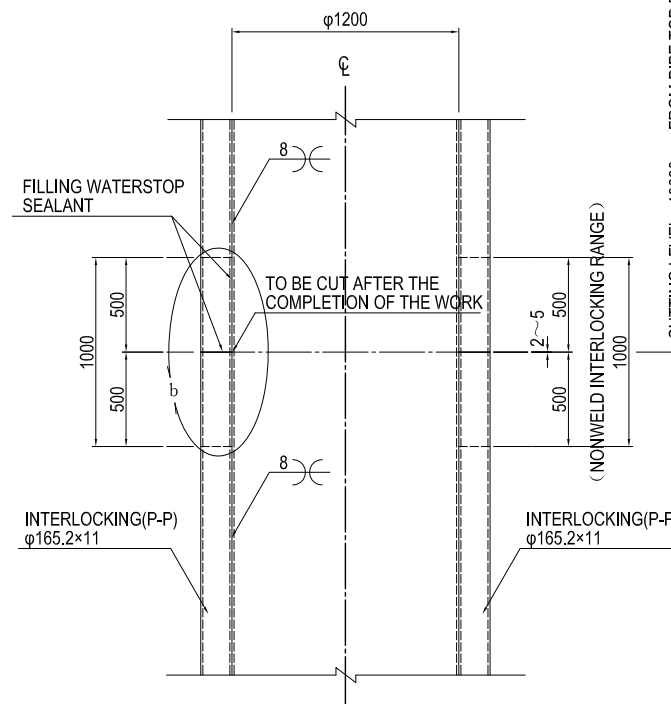


DETAIL b

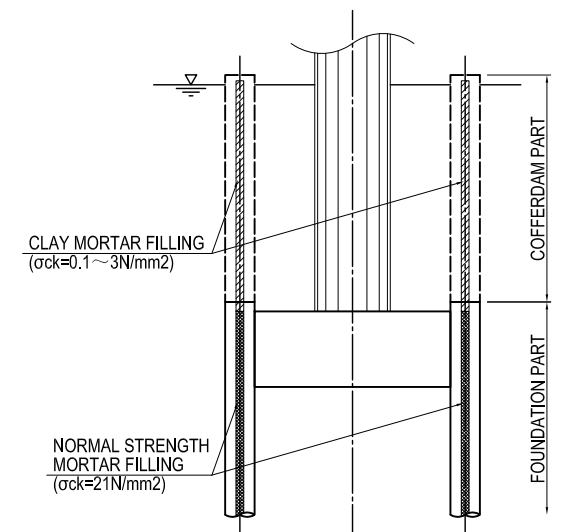


CUTTING LEVEL : 10690mm FROM PIPE TOP FOR EXTERNAL-WALL SHEET PILING.

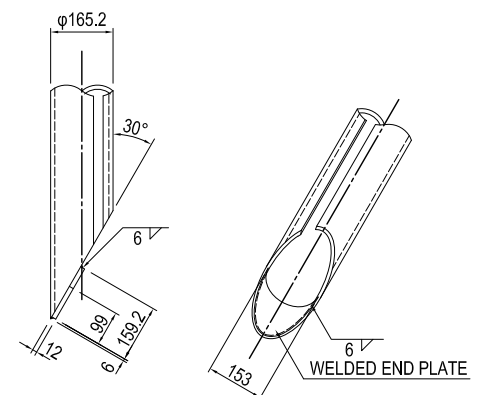
DETAIL OF PRECUT INTERLOCKING S=1:40



CUTTING LEVEL : 10690mm FROM PIPE TOP FOR EXTERNAL-WALL SHEET PILING.



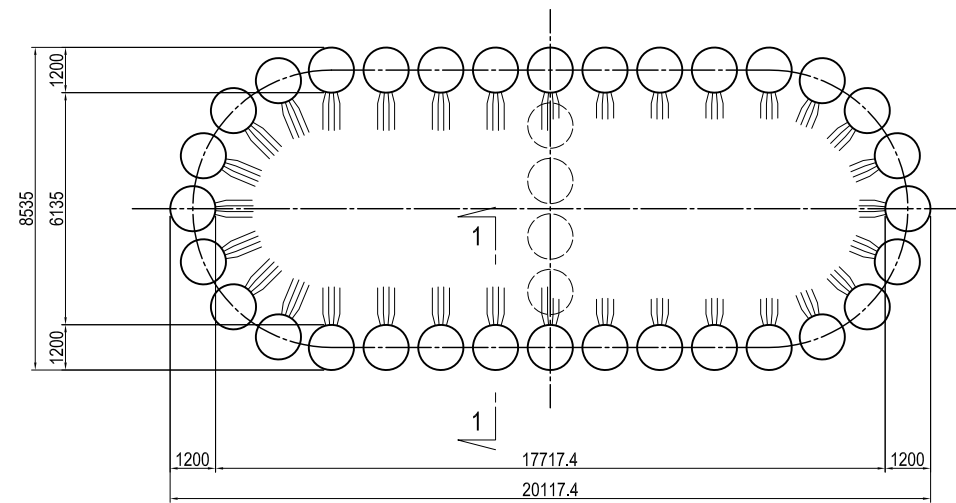
DETAIL OF INTERLOCKING TOE S=1:20



PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY jica JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE DETAIL OF INTERLOCKING OF STEEL PIPE SHEET PILE OF P7 PIER	PACKAGE 1 DWG No. P1-SB-2130
				PREPARED BY	S. IMADA	27 Nov.2017		
				CHECKED BY	T. HAYAKAWA	28 Nov.2017		
				APPROVED BY	Y. SANO	29 Nov.2017		

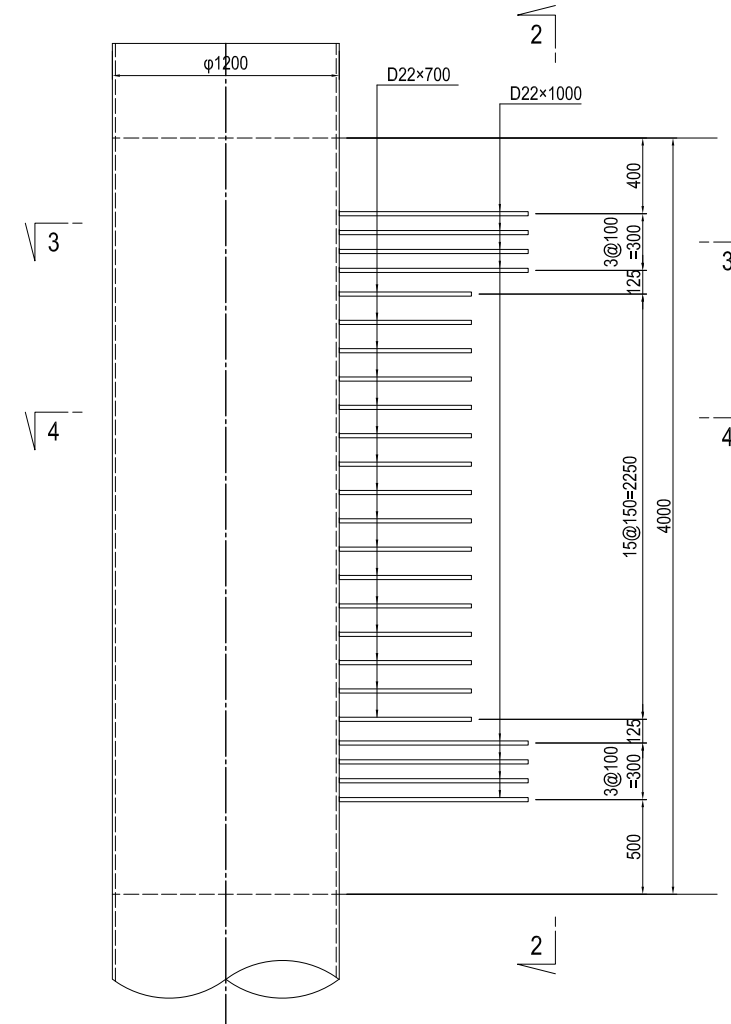
DETAIL OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND FOOTING OF P7 PIER

PLAN S=1:200

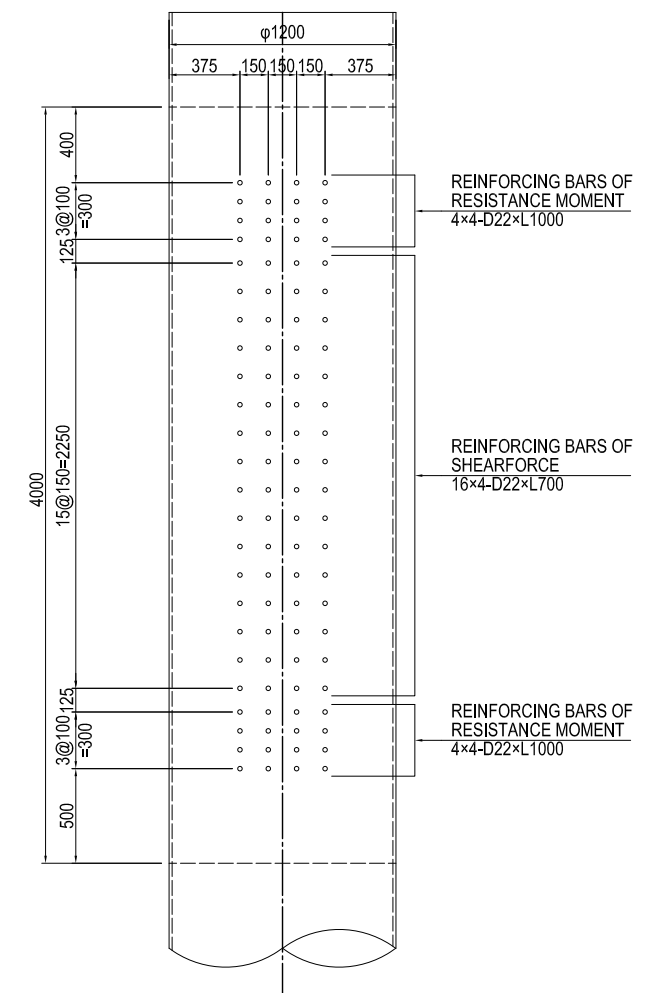


DETAIL OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND FOOTING S=1:40

1 - 1 CROSS SECTION



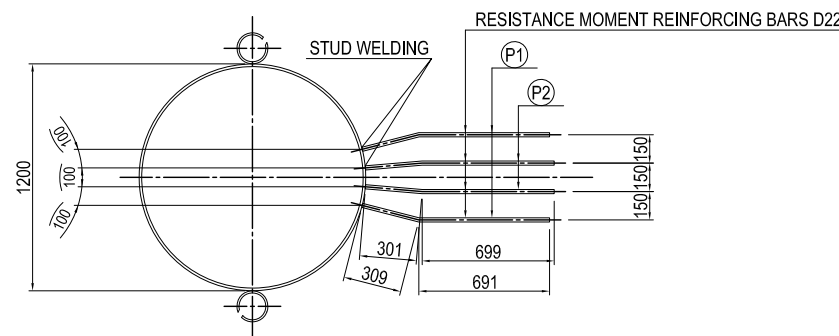
2 - 2 CROSS SECTION



CROSS SECTION OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND REINFORCING BARS S=1:40

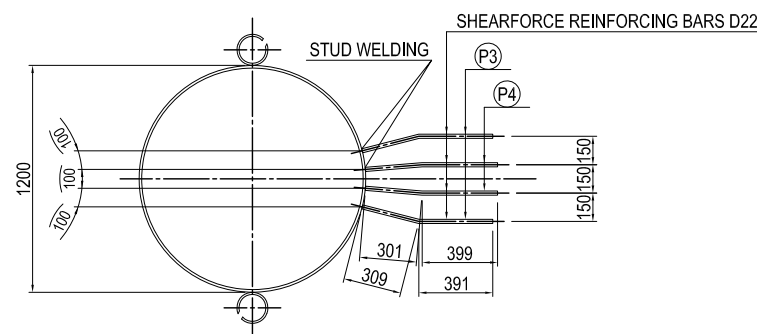
3 - 3 CROSS SECTION

(RESISTANCE MOMENT REINFORCING BARS CONNECTION PART)



4 - 4 CROSS SECTION

(SHEARFORCE REINFORCING BARS CONNECTION PART)



FABRICATION OF REINFORCING BARS S=1:40

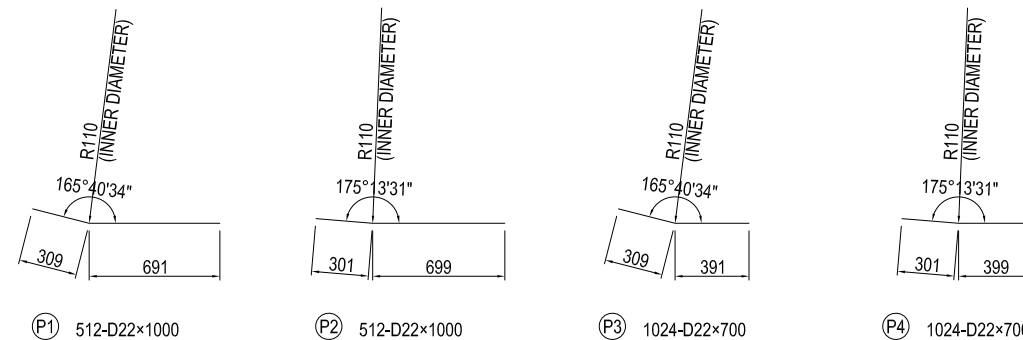
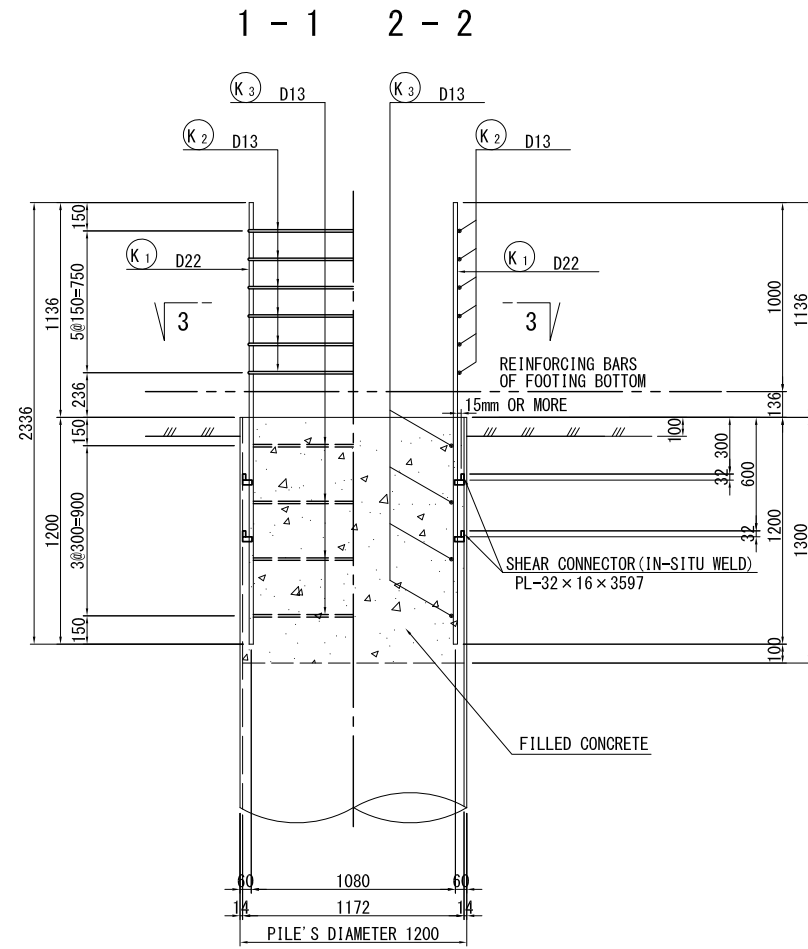


TABLE OF REINFORCING BARS

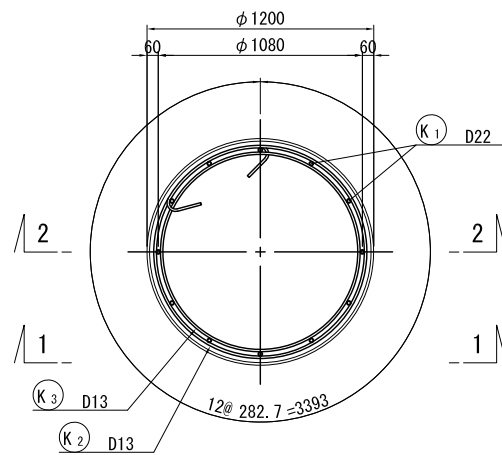
MARK	TYPE	LENGTH (mm)	PIECES (piece)	UNIT WEIGHT (kg/m)	UNIT WEIGHT (kg/piece)	WEIGHT (kg)	GRADE	MEMO
P1	D22	1000	512	3.04	3.04	1556.5	SD345 for STUD WELDING	—
P2	D22	1000	512	3.04	3.04	1556.5	SD345 for STUD WELDING	—
P3	D22	700	1024	3.04	2.13	2181.1	SD345 for STUD WELDING	—
P4	D22	700	1024	3.04	2.13	2181.1	SD345 for STUD WELDING	—
					D22	7475.2 kg		
					TOTAL WEIGHT	7475.2 kg		

DETAIL OF PILE TOP CONNECTION TO THE BASE CONCRETE OF P7 PIER S=1:40

DETAIL OF PILE TOP

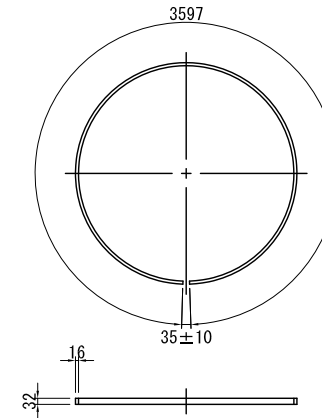


3 - 3

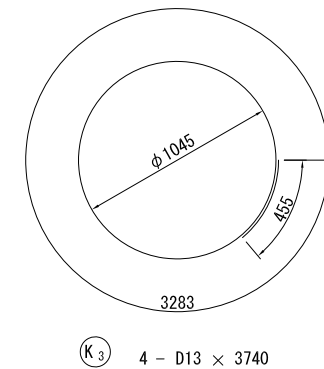
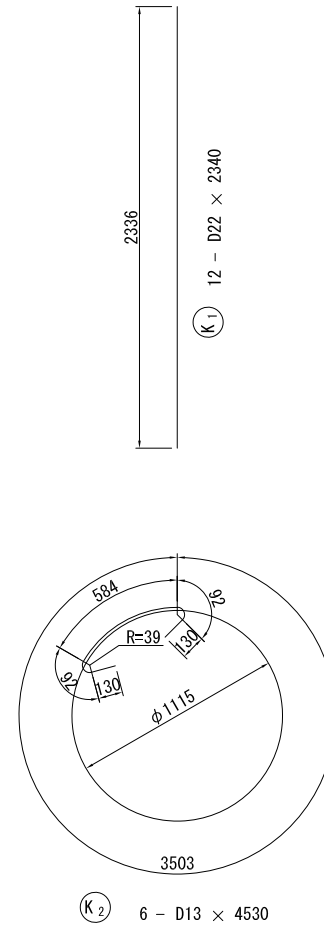
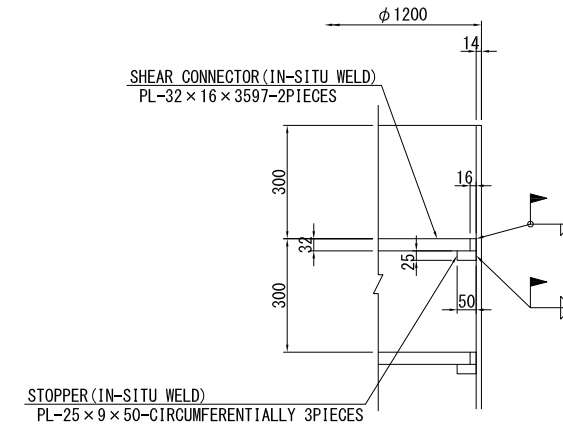


DETAIL OF ATTACHMENT OF SHEAR CONNECTOR

CENTER OF LENGTH



SETTING IN THE FIELD S=1:20



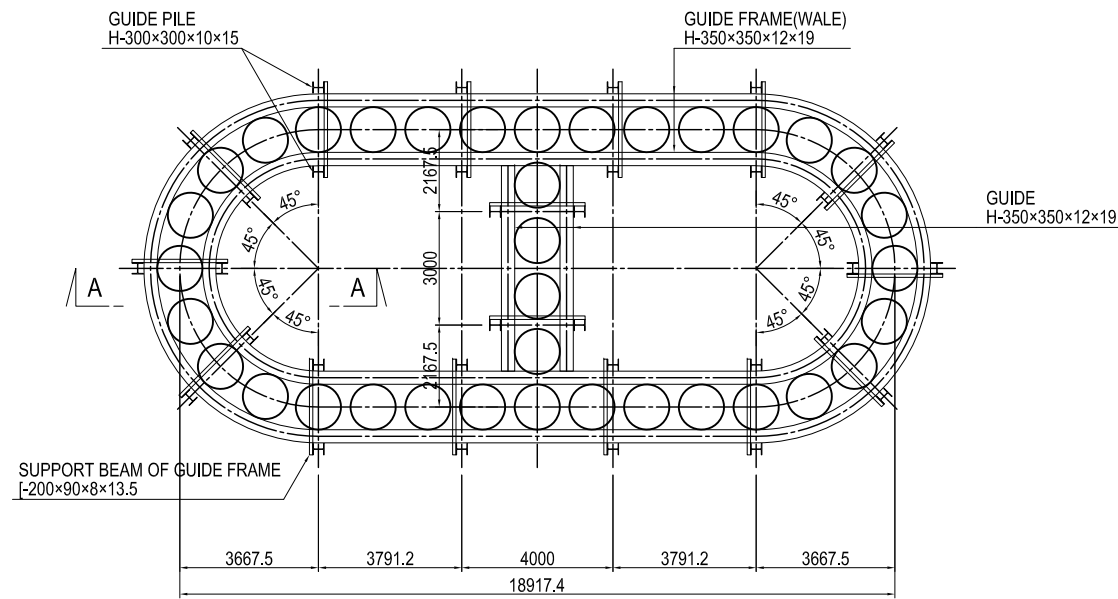
MATERIAL LIST

MARKS	SECTION SIZE	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	MATERIAL	REMARKS
PILE TOP ACCOMPANYING ITEMS								
PL	PL-32*16	3597	2	4.019	14.456	28.9	SS400	SHEAR CONNECTOR
PL	PL-25*9	50	6	1.766	0.088	0.5	SS400	STOPPER
REINFORCEMENT								
K1	D22	2340	12	3.04	7.11	85	SD345	
K2	D13	4530	6	0.995	4.51	27	SD345	○
K3	D13	3740	4	0.995	3.72	15	SD345	○
TOTAL						127		
FILLED CONCRETE ($\sigma_{ck} = 24 \text{ N/mm}^2$)								
$V = 1/4 \times \pi \times 1.172^2 \times 1.300 = 1.402 \text{ m}^3$								

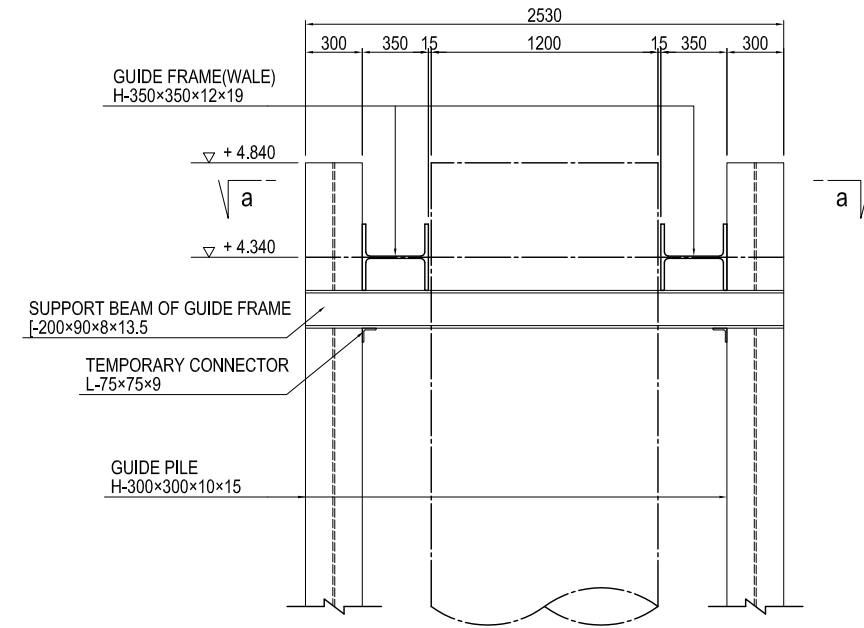
ITEM	DIVISION	UNIT CONTENT	WEIGHT/EA.	QUANTITY
NUMBER OF PILE		Number		4
PILE TOP	SS400	TOTAL	kg	29.4
REINFORCEMENT	SD345	D22	kg	85
		D13	kg	42
		TOTAL	kg	127
FILLED CONCRETE	$\sigma_{ck} = 24 \text{ N/mm}^2$	m^3	1.402	5.6

(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P7 PIER (1)

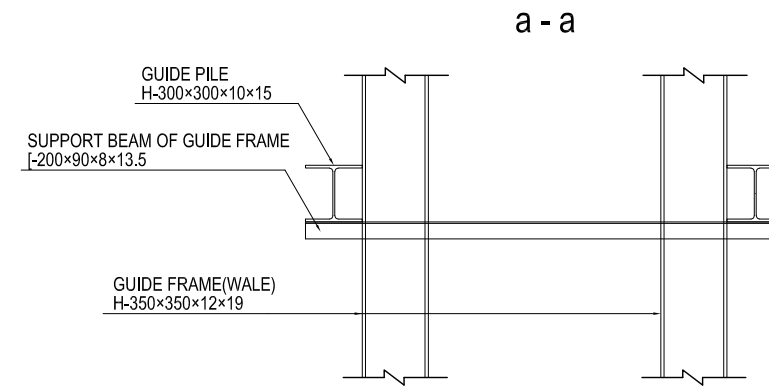
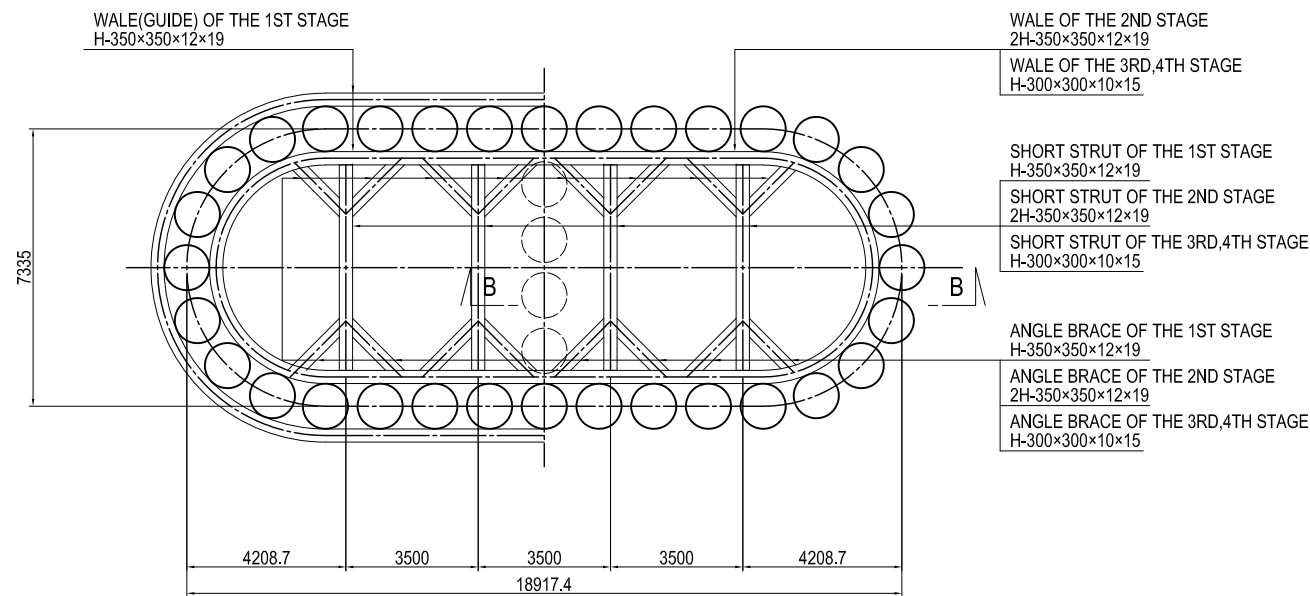
LAYOUT PLAN OF GUIDE FRAMES AND GUIDE PILES S=1:200



DETAIL OF ATTACHMENT OF GUIDE PILES AND GUIDE FRAMES S=1:40



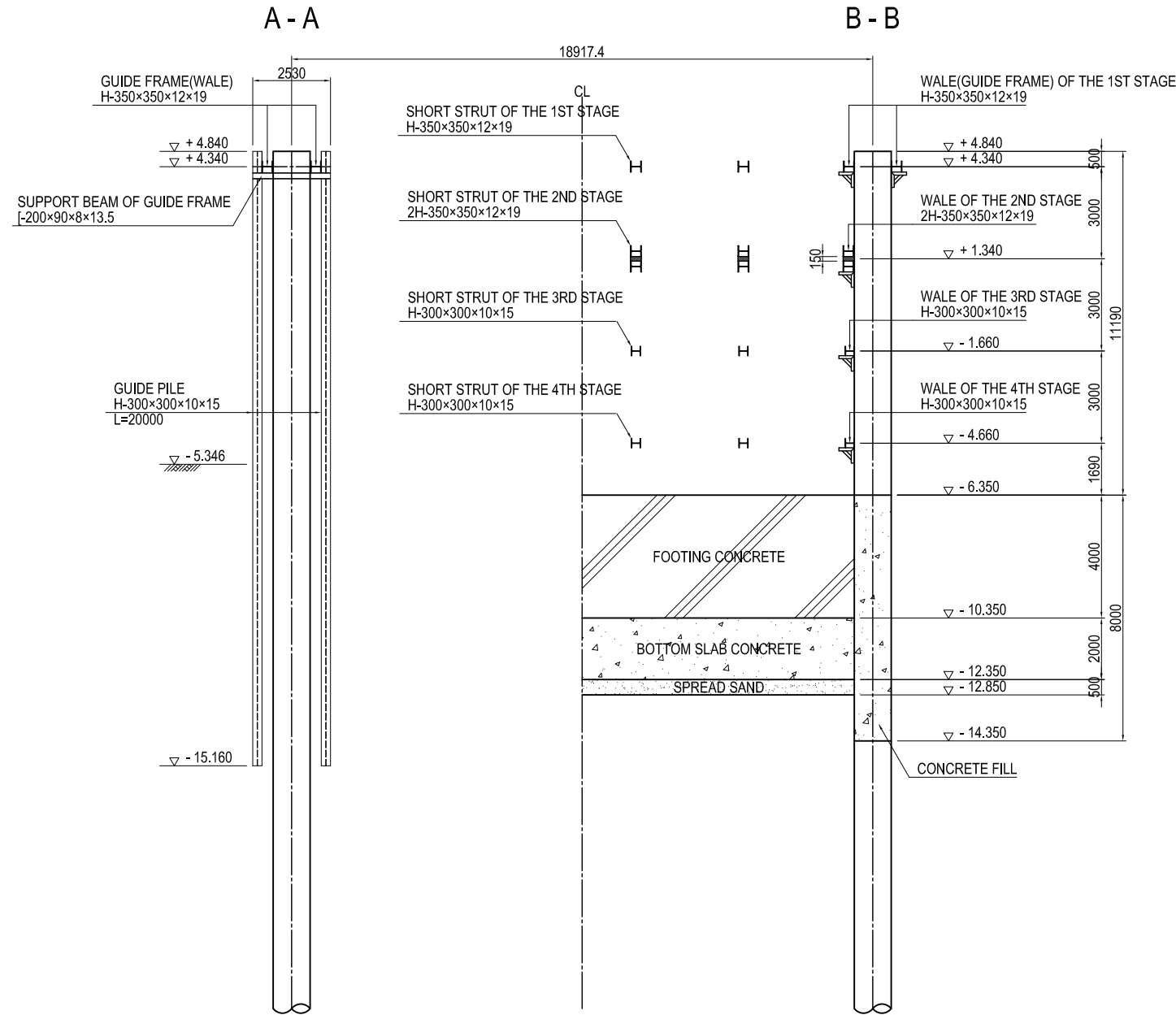
LAYOUT PLAN OF STRUTS AND WALES S=1:200



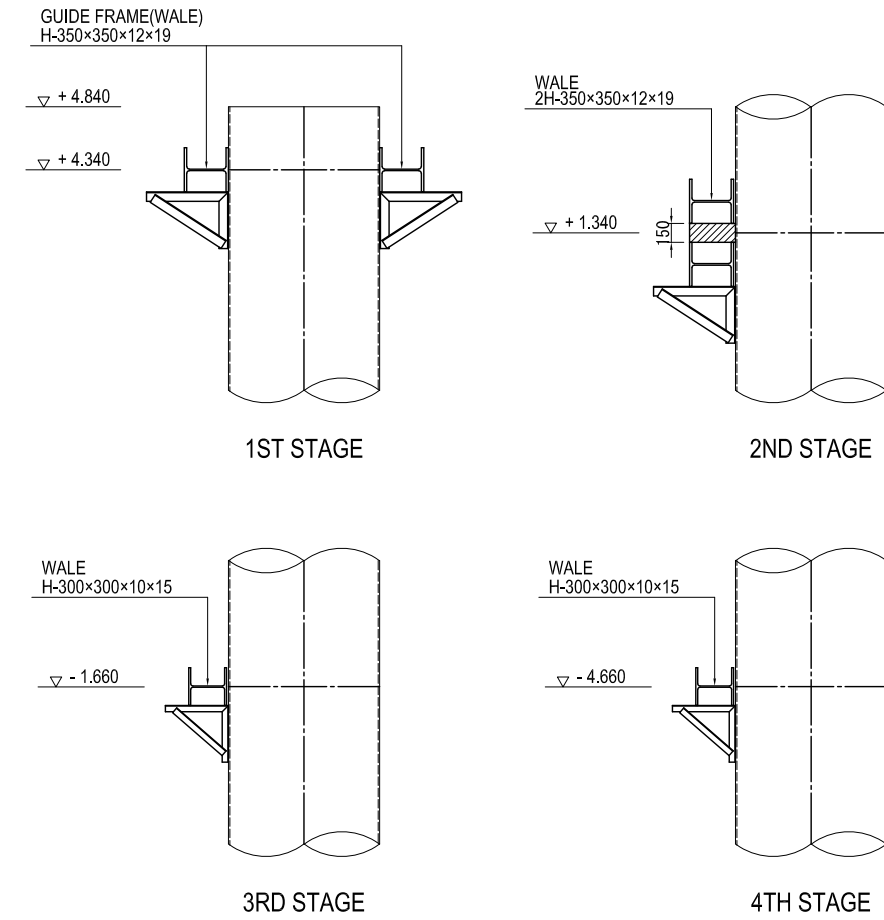
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE (REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P7 PIER (1)	PACKAGE	
				PREPARED BY	S. IMADA			27 Nov.2017	1
				CHECKED BY	T. HAYAKAWA			28 Nov.2017	DWG No.
				APPROVED BY	Y. SANO			29 Nov.2017	P1-SB-2133

(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P7 PIER (2)

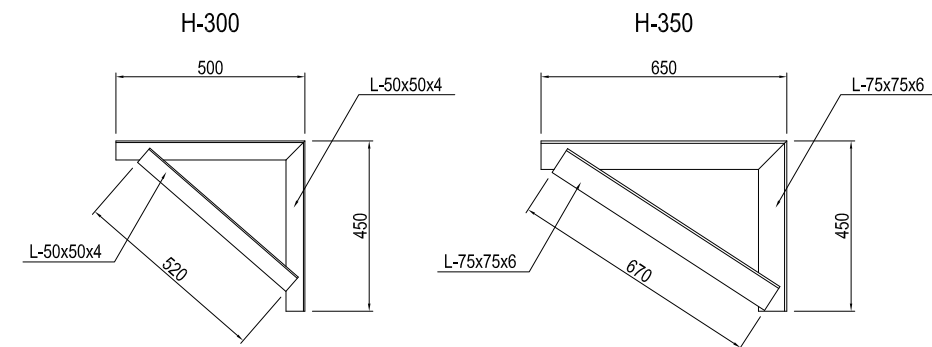
CROSS SECTION S=1:200



DETAIL OF ATTACHMENT OF WALE S=1:60



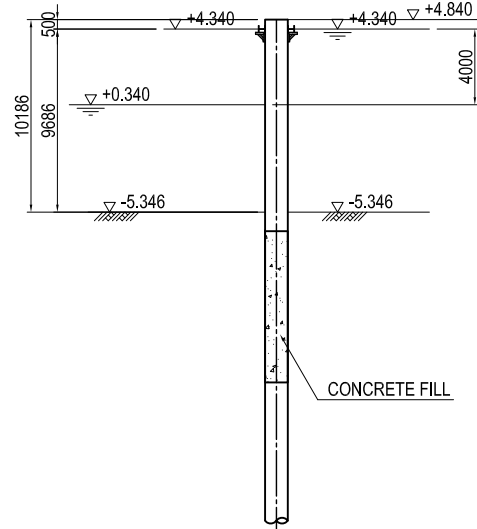
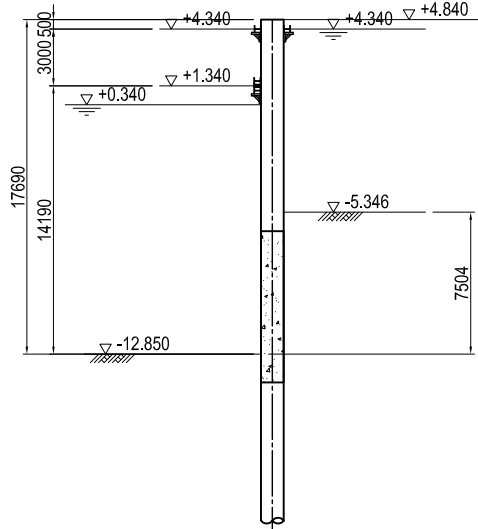
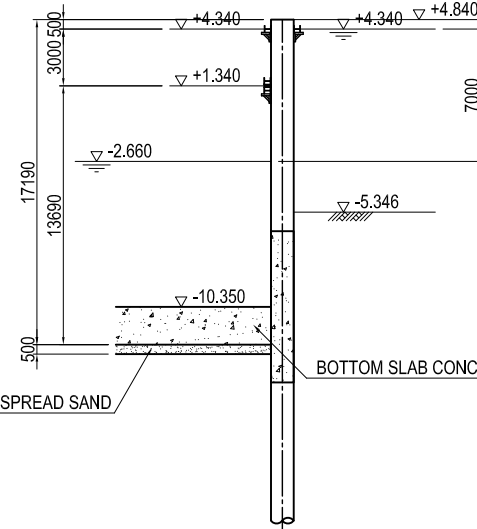
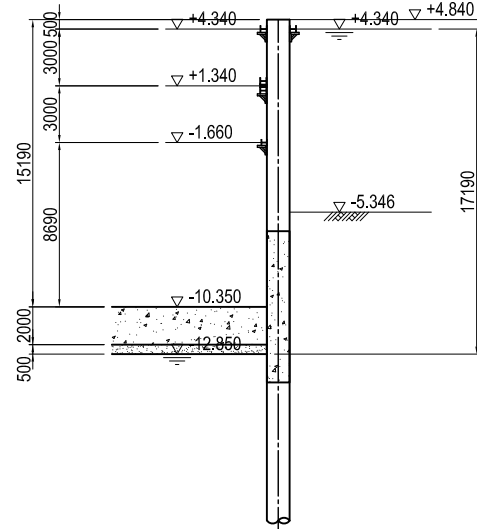
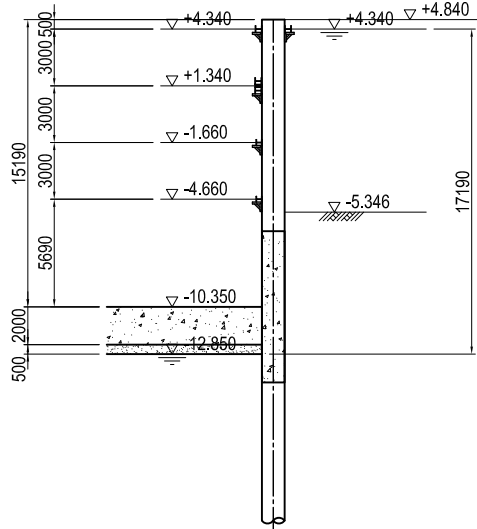
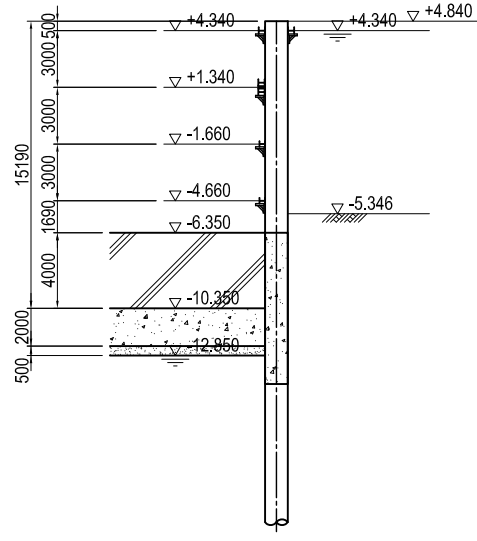
DETAIL OF BRACKET S=1:20



PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE (REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P7 PIER (2)	PACKAGE	
				PREPARED BY	S. IMADA			27 Nov.2017	1
				CHECKED BY	T. HAYAKAWA			28 Nov.2017	DWG No.
				APPROVED BY	Y. SANO			29 Nov.2017	P1-SB-2134

(REFERENCE) CONSTRUCTION PLAN OF STEEL PIPE SHEET PILE WORK OF P7 PIER

S=1:400

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
				
<p>Excavate inside of exterior sheet piles and filled with concrete as shown. draining the inside of cofferdam up to +0.340m level. the 1st support Installation.</p>	<p>The 2nd support Installation. underwater excavation up to -12.850m level.</p>	<p>Draining the inside of cofferdam up to -2.660m level. Placement of spread sand followed by Casting undewater bottom slab concrete.</p>	<p>The 3rd support Installation. Dry up inside the cofferdam.</p>	<p>The 4th support Installation.</p>
STEP 6				
				
<p>Casting of footing concrete.</p>				

Note : This drawing can be used for reference only.

<p>PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT</p>	<p>FINANCED BY  JAPAN INTERNATIONAL COOPERATION AGENCY</p>	<p>COUNTERPART  REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE</p>	<p>JICA STUDY TEAM  NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.</p>	<p>PREPARED BY CHECKED BY APPROVED BY</p>	<p>NAME S. IMADA T. HAYAKAWA Y. SANO</p>	<p>SIGNATURE DATE 27 Nov.2017 28 Nov.2017 29 Nov.2017</p>	<p>DRAWING TITLE (REFERENCE) CONSTRUCTION PLAN OF STEEL PIPE SHEET PILE WORK OF P7 PIER</p>	<p>PACKAGE 1 DWG No. P1-SB-2135</p>
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